

JASON E. MUMPOWER Deputy Comptroller

Agenda Water and Wastewater Financing Board March 14, 2019 10:00 AM

- I. Call to Order
- II. Staff Update
- III. Approval of Minutes- page 4
- IV. Financial
 - a. Staff Recommended Action
 - i. City of Bethel Springs- page 18
 - ii. City of Chapel Hill- page 25
 - iii. City of Dunlap- page 29
 - iv. City of Friendship- page 34
 - v. Town of Greenfield- page 40
 - vi. Grundy County Wastewater- page 53
 - vii. City of Harrogate- page 65
 - viii. Town of Jasper- page 77
 - ix. Town of Kenton- page 88
 - x. City of Luttrell- page 96
 - xi. City of Mountain City- page 99
 - xii. Town of Oneida- page 114
 - xiii. City of South Fulton- page 136
 - xiv. City of Spencer- page 145
 - xv. Town of Spring City- page 157
 - xvi. City of Watertown- page 172
 - xvii. City of Woodland Mills- page 176
- V. Recommended for Release
 - a. Financial
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 - ii. Town of Cumberland Gap- page 188
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 - vi. Town of Monterey- page 200
 - vii. City of Munford- page 203
 - viii. City of Westmoreland- page 206
 - b. Water Loss

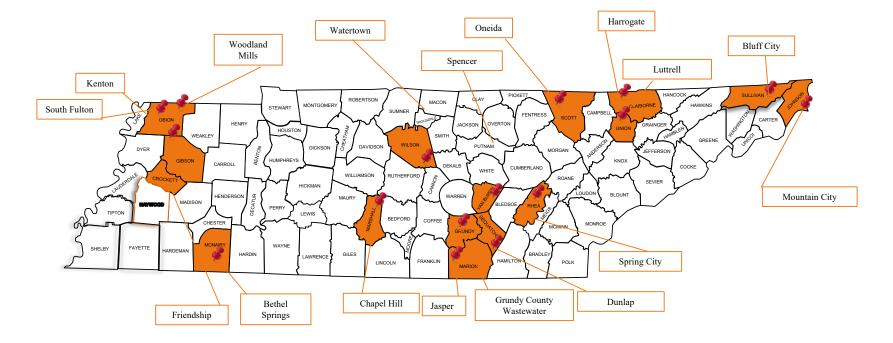
Ann Butterworth John Greer

- i. Non-Revenue Water
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 - 12. Town of Smyrna- page 254
- ii. Validity Score
 - 1. City of Bluff City- page 259
 - 2. Town of Estill Springs- page 263
 - 3. Lauderdale County Water System- page 267
 - 4. City of Loudon- page 271
 - 5. Town of Maynardville- page 275
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VI. Miscellaneous

- a. Referred for Missing Training- No Recommended Action- page 297
- b. Water Loss Update
- c. Kenneth Wiggins Resolution- page 301
- d. 2019 WWFB Meeting Schedule- page 303
- e. Member Discussion

WWFB March 14, 2019



Approval of Minutes

MINUTES of the WATER and WASTEWATER FINANCING BOARD MEETING November 15, 2018 10:00 am

Chair Ann Butterworth detected a quorum and called to order the meeting of the Water and Wastewater Financing Board (Board) in the Volunteer Conference Center in the Cordell Hull Building in Nashville, TN.

Board members present and constituting a quorum:

Ann Butterworth, Chair, Comptroller Designee Tom Moss, Department of Environment and Conservation (TDEC), Commissioner Designee Randy Wilkins, Representing Utility Districts Drexel Heidel, Active Employee of a Water Utility District Eugene Hampton, Representing Government Finance Jim Redwine, Environmental Interests Nick Newman, Active Employee of Municipal Water System

Members Absent:

Rick Graham, Representing Municipalities VACANT, Representing Manufacturing Interests

Staff Present:

John Greer, Comptroller's Office Lauren Cecil, Comptroller's Office

Counsel Present:

Rachel Buckley, Comptroller's Office

Approval of Minutes:

Ms. Butterworth presented the March 29, 2018 minutes for approval. Mr. Moss moved to approve, and Mr. Heidel seconded, that motion was approved unanimously.

Updates:

John Greer introduced the two new board members.

FINANCIAL DISTRESS

Town of Alamo

John Greer gave an update, but no action was taken.

City of Alexandria

The Board heard updates from Mr. Greer and Mayor Bennett Armstrong. Staff recommended the Board order the following:

- 1. The Town shall have the Municipal Technical Advisory Service ("MTAS"), the Tennessee Association of Utility Districts ("TAUD"), or another qualified expert perform an updated rate analysis to include the following:
 - a. a review of the \$6.00 depreciation charge and the 11% overage increase that the Town recently implemented;
 - b. a review of the cost of capital improvement projects and a rate structure to fund such projects;
 - c. creation of a capitalization policy;
 - d. creation of a five-year capital asset budget to be taken from the current capital asset list and to include future anticipated needs and a plan for implementing said budget; and
 - e. a review of the current leak adjustment policy.
- 2. The Town shall provide an update to Board staff with the updated rate analysis and an implemented or proposed plan of action by April 19, 2019.

Mr. Heidel moved to approve staff recommendation, and Mr. Hampton seconded it. The motion passed unanimously.

Town of Allardt

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The City shall have MTAS, the TAUD, or another qualified expert assist with the following:
 - a. creating and implementing a five-year capital asset budget to be taken from the current capital asset list and to include future anticipated needs; and
 - b. reviewing the leak adjustment policy.
- 2. The City shall provide an update to Board staff with the information required in paragraph 1 of this order by March 1, 2019.
- 3. The City shall provide a financial update to Board staff on or before March 1 and September 1 of each year beginning March 1, 2019, until the Board releases the City from its oversight.

Mr. Moss moved to approve staff recommendation, and Chair Butterworth seconded it. The motion passed unanimously.

Town of Atwood

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. By February 15, 2019, the Town shall send Board staff a comprehensive update to include the following:
 - a. the Town's progress on implementing the TAUD's recommendations;
 - b. the Town's progress on drilling an additional well, including an analysis of the feasibility of purchasing water from a neighboring utility;
 - c. a copy of the Town's five-year capital asset budget; and
 - d. a copy of meeting minutes at which the Town voted to adopt a leak adjustment policy.

Mr. Moss moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Bethel Springs

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The Town shall have MTAS, TAUD, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The Town shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

Mr. Redwine moved to approve staff recommendations, and Mr. Newman seconded it. The motionpassed unanimously.

City of Blaine

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The Town shall have MTAS, TAUD, or another qualified expert:
 - a. perform an updated rate study with audited or unaudited fiscal year 2018 numbers;
 - b. review well-user flat fees and determine whether increases in said fees are necessary;
 - c. create a five-year capital asset budget to be taken from the current capital asset list and to include future anticipated needs;
 - d. develop a plan of implementation of the foregoing capital asset budget; and
 - e. review the capitalization policy and notify the City of necessary changes.
- 2. The City shall adopt all recommendations of the updated rate study by February 28, 2019.
- 3. The City shall provide an update to Board staff to include the updated rate study and an implemented plan of action by April 19, 2019.

Mr. Moss moved to approve staff recommendations, and Mr. Redwine seconded it. The motion was passed unanimously.

City of Celina

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. By December 31, 2018, Town shall have MTAS, TAUD, or another qualified expert:
 - a. complete a rate analysis of the sewer system;
 - b. update the completed water rate analysis to include the four-tiered water rate structure that is currently in place;
 - c. create a capitalization policy and develop a plan of implementation of said policy;
 - d. create a capital asset list;
 - e. create a five-year capital asset budget and develop a plan of implementation of said budget; and
 - f. review the leak adjustment policy.
- 2. The City shall justify the higher rates for outside customers. If the higher rates cannot be justified, the City shall have one flat rate for all residential customers and one flat rate for all commercial customers.
- 3. The City shall implement the recommendations of both the updated water rate analysis and of the sewer rate analysis by February 28, 2019.

4. The City shall send financial updated to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the City from its oversight.

Mr. Heidel moved to approve staff recommendations, and Mr. Moss seconded it. The motion passed unanimously.

Cheatham County Water and Wastewater

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The Authority shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the Authority from its oversight.

Mr. Newman moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

Coffee County Water and Wastewater Treatment Authority

The Board heard updates from Mr. Greer. No action was needed to be taken.

City of Copperhill

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The City shall provide a financial update to Board staff by March 1, 2019.

Mr. Hampton moved to approve staff recommendation, and Chair Butterworth seconded it. The motion passed unanimously.

City of Dyer

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The City shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the City from its oversight.

Mr. Moss moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

City of Elkton

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The City shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the City from its oversight.

Mr. Newman moved to approve revised staff recommendations, and Mr. Butterworth seconded it. The motion was approved unanimously.

Gainesboro

The Board heard updates from Mr. Greer but took no action.

Graysville

The Board heard updates from Mr. Greer but took no action.

Town of Greenfield

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The Town shall have MTAS, TAUD, or another qualified expert to assist in completing the financial questionnaire previously sent by Board staff.
- 2. The Town shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

Mr. Moss moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Grundy County

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The County shall have the County Technical Assistance Service ("CTAS"), TAUD, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The County shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

Chair Butterworth moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

Town of Huntingdon

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The Town shall send financial updates to staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the Town from its oversight.

Mr. Heidel moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Town of Kenton

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. By December 31, 2018, Town shall have MTAS, TAUD, or another qualified expert perform a rate study to include:
 - a. a review of all water rates, including a justification for the differing rate classes;
 - b. a review of all sewer rates, including a justification for the differing rate classes; and
 - c. a proposed plan of action to remedy the Town's financially distressed condition.
- 2. The Town shall send the completed rate study, the proposed or implemented plan of action, and all supporting documentation to Board staff by February 15, 2019.

Mr. Moss moved to approve staff recommendations, and Chair Butterworth seconded it. The motion passed unanimously.

Town of La Grange

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the Town from its oversight.

Mr. Newman moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

City of Luttrell

The Board heard updates from Mr. Greer and Mr. Al Majors of MTAS, who indicated that MTAS could not complete the previously contemplated cost of service study. Upon hearing MTAS's update, staff retracted its recommendation listed in the Board's meeting packet. Mr. Heidel then moved to order the following:

- 1. The City shall require that all vendors contracted with the City's water and sewer system shall provide true documentation of their costs of services and transactions, including invoices and other proofs of payment.
- 2. The City shall hire a qualified expert to complete a comprehensive cost of service study of the City's water and sewer system. The qualified expert shall be pre-approved by Board staff. The City shall be under contract for said cost of service study by December 31, 2018.
- 3. The City shall provide an update to Board staff on the City's compliance with this order, including providing all supporting documentation provided in the cost of service study, by March 1, 2019.

Mr. Moss seconded the motion. The motion passed unanimously.

Metro Nashville

Board approved to go out of order to hear from Metro Nashville because it had representatives in attendance at the meeting. The Board heard updates from Mr. Greer, but took no action.

Maury City

The Board heard updates from Mr. Greer, but took no action.

McLemoresville

The Board heard updates from Mr. Greer. Staff recommended the Board direct staff to send a letter thanking the City for its proactive approach and to notify it that because it is not financially distressed, it is no longer under the Board's oversight.

Mr. Moss moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

Metro Moore County

The Board heard an update from Mr. Greer and Mark Butler from TAUD. Mr. Butler indicated that because the municipality had previously struggled with long-term plans, the Board should include in its order an updated capital asset list and to create a capital asset plan with a ten-year projection. Mr. Heidel then moved to order the following:

- 1. Metro Moore shall have MTAS, TAUD, CTAS, or another qualified expert aid with the following:
 - a. creating a water and sewer rate structure to include:
 - i. commercial, industrial, and residential classes;
 - ii. minimum monthly charges to recover fixed costs that vary with each class of user; and
 - iii. variable rates based on the costs of treating and distributing water and treating wastewater, including separate accounting for water and sewer and distinctions for customers having the largest impact on the water and wastewater treatment process;
 - b. creating a meter policy;
 - c. taking a meter inventory of the largest users, including type, size, and brand;
 - d. creating a meter replacement program based on the completed meter inventory; and
 - e. updating Metro Moore's capital asset list and creating a five-year capital asset plan with a 10-year projection.
- 2. By March 31, 2019, Metro Moore shall implement all recommendations of the rate study required by paragraph 1 of this order.
- 3. Metro Moore shall provide an update on all paragraphs of this order to Board staff by April 19, 2019.

Mr. Hampton seconded the motion, which passed unanimously.

Town of Michie

The Board heard updates from Mr. Greer and Mr. Butler of TAUD, who indicated that the Town should increase its rates by another 7% to become more financially sound. Given the updates from Mr. Butler, staff retracted its original recommendation that was contained in the Board's meeting packet. Mr. Moss moved that the Board order the following:

- 1. The Town shall hire an independent outside expert to perform a capital asset evaluation and create a 5-year plan based on the evaluation, to be completed by April 30, 2019. The Town shall be under contract with such expert by December 31, 2018.
- 2. The Town shall provide Board staff with an update on the capital asset evaluation and resulting 5-year plan by May 31, 2019.
- 3. The Town shall implement a 7% rate increase across all customer classes, by January 1, 2019.
- 4. By February 15, 2019, the Town shall provide Board staff with an update on the 7% rate increase, including the meeting minutes in which the Town voted to implement the increase and the notice of the increase.

Mr. Newman seconded the motion, which then passed unanimously.

Town of Mitchellville

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the Town from its oversight.

Mr. Newman moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

Town of Mountain City

The Board heard updates from Mr. Greer, who indicated that he received a letter from the Town that morning with updates. Given the last-minute update from the Town, Staff retracted its original recommendation contained in the Board's meeting packet. Mr. Heidel then made a motion that the Board order the following:

- 1. The Town shall hire a qualified expert to complete a comprehensive cost of service study of the Town's water and sewer system. The qualified expert shall be pre-approved by Board staff. The Town shall be under contract for said cost of service study by December 31, 2018, and shall notify Board staff of the contract by January 15, 2019.
- 2. If the Town does not provide Board staff with the information required in paragraph 1 by January 15, 2019, Counsel shall issue a subpoena for the attendance of the Town's Board of Mayor and Aldermen at the Board's March 14, 2019, meeting.
- 3. The Town shall submit the completed cost of service study and supporting documentation to Board staff by May 31, 2019.

Mr. Moss seconded the motion, which passed unanimously.

City of Munford

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The City shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the City from its oversight.

Mr. Newman moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Niota

The Board heard updates but took no official action. Chairman Butterworth suggested that staff send a letter thanking the City for its hard work.

Oakdale

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The Town shall increase rates by 30%, effective January 1, 2019.
- 2. The Town shall increase rates by an additional 25%, effective January 1, 2020.
- **3.** Beginning January 1, 2021, the Town shall increase rates annually by no less than 1%, effective January 1 of each year.
- 4. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the Town from its oversight.

Chair Butterworth moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

Obion

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The Town shall send a financial update to Board staff by December 31, 2018, which shall include the Town's actions taken in accordance with Ordinance 2017-02.
- 2. The Town shall provide a financial update to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the Town from its oversight.

Mr. Newman moved to approve staff recommendations, and Mr. Redwine seconded it. The motion passed unanimously.

Oneida

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The Town shall comply with all the directives of the Board's April 17, 2018 order by January 31, 2019.
- 2. If the Town fails to comply with this order, Board staff shall refer the Town to the Attorney General's Office to pursue enforcement proceedings.

Mr. Moss moved to approve staff recommendations, and Mr. Newman seconded it. The motion passed unanimously.

Pikeville

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The City shall comply with all the directives of the Board's April 17, 2018 order by January 31, 2019.
- 2. If the City fails to comply with this order, Board staff shall refer the City to the Attorney General's Office to pursue enforcement proceedings.

Mr. Moss moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Roane County

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The County shall bring in assistance from TAUD, CTAS, or another qualified expert to complete a rate study to include a detailed plan to cure the County of financially distressed status.
- 2. The County shall provide an update to Board staff with the completed rate study and implemented or proposed plan of action by April 19, 2019.

Mr. Newman moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Rocky Top

The Board heard updates from Mr. Greer, but took no action..

Town of Sneedville

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The Town shall have MTAS, TAUD, or another qualified expert to complete a rate study and assist with the following:
 - a. creating a new customer contract;
 - b. creating a 5-year capital asset budget to be taken from the current capital asset list and to include future anticipated needs and a plan for implementation of said budget;
 - c. creating a utility rate and fee policy to include procedures for notifying customers of rate or fee changes; and
 - d. creating a leak adjustment policy applying to sewer only.
- 2. The Town shall provide an update to Board staff with the completed rate study and an implemented or proposed plan of action by April 19, 2019.

Chair Butterworth moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Spencer

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The City shall have MTAS, TAUD, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

Mr. Newman moved to approve staff recommendations, and Mr. Heidel seconded it. The motion passed unanimously.

Stanton

The Board heard updates from Mr. Greer, but took no action.

Tracey City

The Board heard updates from Mr. Greer, but took no action.

Tusculum

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

1. The City shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2019, until the Board releases the City from its oversight.

Chair Butterworth moved to approve staff recommendations, and Mr. Hampton seconded it. The motion passed unanimously.

Woodland Mills

The Board heard updates from Mr. Greer. Staff recommended the Board order the following:

- 1. The City shall have MTAS, TAUD, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

Mr. Moss moved to approve staff recommendations, and Mr. Newman seconded it. The motion passed unanimously.

WATER LOSS

Benton

The Board heard updates from Mr. Greer. No action was needed to be taken

Bluff City

The Board heard updates from Mr. Greer. No action was needed to be taken

Byrdstown

The Board heard updates from Mr. Greer. No action was needed to be taken

Cowan

The Board heard updates from Mr. Greer. No action was needed to be taken

Dowell Town Liberty

The Board heard updates from Mr. Greer. No action was needed to be taken

Englewood

The Board heard updates from Mr. Greer. No action was needed to be taken

Henning

The Board heard updates from Mr. Greer. No action was needed to be taken

Parsons

The Board heard updates from Mr. Greer. No action was needed to be taken

Selmer

The Board heard updates from Mr. Greer. No action was needed to be taken

MISCELLANEOUS

2018 Meeting Resolution:

Mr. Greer presented the Board with the proposed 2019 meeting dates. Chair Butterworth moved to approve by resolution the recommended dates (March 14, September 19, November 21, 2019), and Mr. Heidel seconded it, which passed unanimously. The next meeting is set for March 14, 2019 at 10 a.m. (CST).

The Board discussed and approved a resolution to be created in honor of Mr. Kenny Wiggins's service while on the Board. Ms. Butterworth moved and Mr. Heidel seconded. It was passed unanimously.

Chair Butterworth adjourned the meeting at 1:13 pm.

Respectfully submitted,

Ann Butterworth Chair

Financial

City of Bethel Springs

Bethel Springs

		2017 Audit	2018 Audit
Water/Sewer Revenue \$354,0	045.00	\$402,597.00	\$0.00
Other Revenue \$0.00		\$0.00	\$0.00
Operating Revenue \$354,0	045.00	\$402,597.00	\$0.00
Operating Expenses \$351,4	456.00	\$348,053.00	\$0.00
Operating Income \$2,589	9.00	\$54,544.00	\$0.00
Non-Operating Revenue(Expenses) (\$81,5	72.00)	(\$91,400.00)	\$0.00
Net Change In Position (\$78,9	83.00)	(\$36,856.00)	\$0.00
Grant/Capital Contribution \$0.00		\$0.00	\$0.00



JASON E. MUMPOWER Chief of Staff

Case: Bethel Springs Water Department

Staff Summary:

On November 15, 2018 the Board ordered the following:

- 1. The Town shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The Town shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

No information has been received.

Staff Recommendation:

Order the following:

- 1. The Town shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert, as approved by Board staff, assist in completing the financial questionnaire previously sent by Board staff.
- 2. The Town shall send the completed financial questionnaire and all supporting documentation to Board staff by May 31, 2019.



STATE OF TENNESSEE Water & Wastewater Financing Board Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243 Phone (615) 747-5260 Fax (615) 741-1551

January 18, 2018

Bennie Moore Bethel Springs Water Department P.O. Box 214 Bethel Springs, TN 38315

Dear Mr. Moore,

The Tennessee Comptroller of the Treasury has referred Bethel Springs Water Department to the Water & Wastewater Financing Board (hereinafter "Board") pursuant to Tennessee Code Annotated § 68-221-1010(a).

Please fill out the attached questionnaire and return it and all supporting documentation to our office no later than February 28, 2018. Please submit this to either <u>utilities@cot.tn.gov</u>, and/or the following mailing address:

Water & Wastewater Financing Board ATTN: John Greer Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243

While we recognize that this questionnaire may be difficult to fill out, it is necessary to determine how we can help you achieve long-term financial success. After we receive your information, we will decide whether it is necessary for the City to (1) meet with our staff or (2) go directly before the Board.

If you need further assistance or have any questions, please feel free to contact me at (615) 747-5260 or <u>utilities@cot.tn.gov.</u>

Sincerely,

John Greer Utilities Specialist

Cc: Mayor Gary Bizzell, Jr.



JASON E. MUMPOWER Chief of Staff

MEMORANDUM

то:	Water and Wastewater Financing Board			
FROM:	Division of Local Government Audit - Municipalities and Utility Districts			
SUBJECT:	Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a)			

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number		Vendor Name				
1603	6	Bethel Springs			Compo	onent Unit
Report Year	Utility	/ Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Wate	er and Sewer	12/28/2017	1/4/2018	SRW	Not Yet Reviewed
FINANCIAL	DIST	RESS				
		eficit net position for t	he fiscal vear ended			
	1145 4		le fiscul yeur chaca			
⊠ B 1	Decre	ase in net position for t	two consecutive year	s.	Fiscal Year End	Decrease in NP
					6/30/2017	(\$36,856.00)
					6/30/2016	(\$78,983.00)
	Is in (default on certain outst	anding debt.			
		Holders of the Bonds	s, etc.	Principal	Inte	rest
WATER LO	SS					
$\square \mathbf{D}$	Wate	er Loss Referral				
	A	WWA water audit info				
	W	ater Loss Schedule - Status		AWWA Excel File		
[
						Validity Score
[V	alidity score below the an	nount established by th	e board		82
 	E	ccessive non-revenue wat	er % as established by	the board		Non-Rev Water %
		Non-Revenue Water as Percen	•			4.8
	Comr	nents:				
1	L					

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

BEFORE THE TENNESSEE WATER AND WASTEWATER FINANCING BOARD

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IN THE MATTER OF:

TOWN OF BETHEL SPRINGS

TENN. CODE ANN. § 68-221-1010 -FINANCIAL DISTRESS

ORDER

On November 15, 2018, the Tennessee Water and Wastewater Financing Board ("the Board") reviewed the financially distressed status of the Town of Bethel Springs ("the Town") pursuant to Tenn. Code Ann. § 68-221-1010. Based on the Town's continued financial deficiencies and failure to respond to Board staff, the Board hereby orders the following:

- 1. The Town shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The Town shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

ENTERED this day of November, 2018.

ANN V. BUTTERWORTH, Chair Water and Wastewater Financing Board

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served via certified mail return receipt requested to the following on this <u>at the</u> day of November, 2018:

Mayor Gary Bizzell, Jr. Ms. Deborah Sullivan, City Recorder Town of Bethel Springs 4066 Main Street P.O. Box 214 Bethel Springs, TN 38315

Ullif Rachel E. Buckley Counsel to the Board

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City of Chapel Hill

Chapel Hill

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$476,550.00	\$560,002.00	\$0.00
Other Revenue	\$128,816.00	\$12,324.00	\$0.00
Operating Revenue	\$605,366.00	\$572,326.00	\$0.00
Operating Expenses	\$640,652.00	\$717,350.00	\$0.00
Operating Income	(\$35,286.00)	(\$145,024.00)	\$0.00
Non-Operating Revenue(Expenses)	\$21,242.00	\$14,840.00	\$0.00
Net Change In Position	(\$14,044.00)	(\$130,184.00)	\$0.00
Grant/Capital Contribution	\$0.00	\$84,450.00	\$0.00



JASON E. MUMPOWER Chief of Staff

Case: City of Chapel Hill

Staff Summary:

Chapel Hill has been referred for financial distress. Staff requested the City fill out a financial questionnaire, but no information has been received.

Staff Recommendation:

Order the following:

- 1. The City shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert, as approved by Board staff, assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by May 31, 2019.



JASON E. MUMPOWER Chief of Staff

MEMORANDUM

TO:	Water and Wastewater Financing Board	
FROM:	Division of Local Government Audit - Municipalities and Utility	v Districts
SUBJECT:	Division of Local Government Audit Referral Pursuant to	TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	_	Vendor Name				
1626	5	Chapel Hill			Compo	onent Unit
Report Year	Utility	у Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Wat	er and Sewer	8/15/2018	9/5/2018	mlb	Not Yet Reviewed
FINANCIAL	DIST	RESS				
	Has d	eficit net position for t	he fiscal year ended.			
☑ B :	Statu	tory Decrease in net po	sition for two consec	eutive years.	Fiscal Year	Statutory
					End	Decrease in NP
					6/30/2017	(\$130,184.00)
					6/30/2016	(\$14,044.00)
	Is in	default on certain outs	anding debt.			
		Holders of the Bond	s, etc.	Principal	Inte	erest
WATER LO	SS					
\square D	Wate	er Loss Referral				
	Α	WWA water audit info				
	W	ater Loss Schedule - Status		AWWA Excel File		
						Validity Score
Validity score below the amount established by the board						80
	– F	voossivo non-rovonuo wot	or % as established by	the board		
Excessive non-revenue water % as established by the board (Non-Revenue Water as Percent by Cost of Operating System)						Non-Rev Water %
	,	ments:	e of cost of operating of s			0.0

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

City of Dunlap

Dunlap

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,794,466.00	\$1,919,789.00	\$2,007,586.00
Other Revenue	\$49,012.00	\$59,135.00	\$66,560.00
Operating Revenue	\$1,843,478.00	\$1,978,924.00	\$2,074,146.00
Operating Expenses	\$1,936,718.00	\$2,060,797.00	\$1,992,181.00
Operating Income	(\$93,240.00)	(\$81,873.00)	\$81,965.00
Non-Operating Revenue(Expenses)	(\$187,726.00)	(\$81,873.00)	(\$216,041.00)
Net Change In Position	(\$280,966.00)	(\$163,746.00)	(\$134,076.00)
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



JASON E. MUMPOWER Chief of Staff

Case: City of Dunlap

Staff Summary:

The City of Dunlap has been referred for financial distress. Staff requested the City fill out a financial questionnaire, but no information has been received.

Staff Recommendation:

Order the following:

- 1. The City shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by May 31, 2019.



JASON E. MUMPOWER Chief of Staff

MEMORANDUM

TO:	Water and Wastewater Financing Board	
FROM:	Division of Local Government Audit - Municipalities and Utilit	y Districts
SUBJECT:	Division of Local Government Audit Referral Pursuant to	TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	_	Vendor Name				_		
1663	Dunlap					Component Unit		
Report Year	Utility Type Date Received Date Referred				Reviewer	Report Status		
6/30/2017	Wate	er and Sewer	6/29/201	8 7/11/2	018	mlb	Not Yet Reviewed	
FINANCIAL	DIST	RESS						
	Has d	eficit net position for t	he fiscal year endec	l .				
	Statu	tory Decrease in net po	sition for two cons	ecutive years.		Fiscal Year	Statutory	
						End	Decrease in NP	
						6/30/2017	(\$225,811.00)	
						6/30/2016	(\$280,966.00)	
	Is in (default on certain outs	tanding debt.					
		Holders of the Bond	s, etc.	Principal		Inte	erest	
WATER LO	SS							
	Wate	er Loss Referral						
	A	WWA water audit info						
	W	ater Loss Schedule - Status		AWWA Excel File				
[
							Validity Score	
☐ Validity score below the amount established by the board						83		
	_ F.	voossivo non-revenue wat	or % as established h	v the hoard				
Excessive non-revenue water % as established by the board (Non-Revenue Water as Percent by Cost of Operating System)							Non-Rev Water %	
		ments:					1.5	

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243



JASON E. MUMPOWER Deputy Comptroller

MEMORANDUM

TO:	Water and Wastewater Financing Board	
FROM:	Division of Local Government Audit - Municipalities and Utilit	y Districts
SUBJECT:	Division of Local Government Audit Referral Pursuant to	TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

FINANCIAL DISTRESS □ A □ A ■ B Statutory Decrease in net position for two consecutive years. □ Fiscal Year 6/30/2017 6/30/2018 □ C Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Interest WATER LOSS Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File	it		_				Vendor Name		Jumber	
6/30/2018 Water and Sewer 2/25/2019 3/5/2019 MLB Not Ye TNANCIAL DISTRESS		Component U					Dunlap		1663	
INANCIAL DISTRESS A Has deficit net position for the fiscal year ended. B Statutory Decrease in net position for two consecutive years. Fiscal Year Stand 6/30/2017 6/30/2018 6/30/2018 6/30/2018 C Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Interest D Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Validit	tatus	er Report	Reviewer		Date Referred	Date Received	ity Type	Utility	ear	eport Y
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A Has deficit net position for the fiscal year ended. ✓ B Statutory Decrease in net position for two consecutive years. Fiscal Year Stand Decrease 6/30/2017							TDESS	דפוח	CIAL	TNAN
 B Statutory Decrease in net position for two consecutive years. Fiscal Year St End Decr G'30/2017 G'30/2018 C Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Interest WATER LOSS D Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Validition Validition	1					ha Gaaal waan an dad				
Price rear of the Bonds, etc. Principal Interest Solution D Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Solution Zolution						ne fiscal year ended.	deficit net position for t	1as u	AI	
G Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Interest Principal Interest	tatutory rease in NP				ıtive years.	sition for two consecu	utory Decrease in net po	statut	BS	✓
C Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Interest Image: Status Image: Status AWWA Excel File Water Loss Schedule - Status AWWA Excel File Image: Status	(\$225,811.00	0/2017	6/30/2							
Holders of the Bonds, etc. Principal Interest Holders of the Bonds, etc. Principal Interest MATER LOSS MATER LOSS D Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Kater Loss AWWA	(\$165,606.00	0/2018	6/30/2							
WATER LOSS D Water Loss Referral Water audit info Water Loss Schedule - Status Water Loss Schedule - St						tanding debt.	n default on certain outst	s in c	C I	
D Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Image: Control of the status AWWA Excel File Image: Control of the status Validition		Interest			Principal	s, etc.	Holders of the Bond			
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				File	AWWA Exce		Water Loss Schedule - Status	Wa		
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Excessive non-revenue water % as established by the board	Rev Water %	Nor			he board	er % as established by t	Excessive non-revenue wat	Ex		
(Non-Revenue Water as Percent by Cost of Operating System)	1.5				m)	t by Cost of Operating Syste	(Non-Revenue Water as Percen	(1	_	
Comments:							nments:	Comn		

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

City of Friendship

Friendship

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$303,684.00	\$299,372.00	\$0.00
Other Revenue	\$12,562.00	\$7,004.00	\$0.00
Operating Revenue	\$316,246.00	\$306,376.00	\$0.00
Operating Expenses	\$322,989.00	\$424,280.00	\$0.00
Operating Income	(\$6,743.00)	(\$117,904.00)	\$0.00
Non-Operating Revenue(Expenses)	(\$7,071.00)	(\$531,297.00)	\$0.00
Net Change In Position	(\$13,814.00)	(\$649,201.00)	\$0.00
Grant/Capital Contribution	\$43,476.00	\$1,265,929.00	\$0.00



JASON E. MUMPOWER Chief of Staff

Case: City of Friendship

Staff Summary:

The City of Friendship has been referred for financial distress, having excessive non-revenue water and a low validity score. Staff requested the City fill out three questionnaires, but no information has been received.

Staff Recommendation:

Order the following:

- 1. The City shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert, as approved by Board staff, assist in completing the questionnaires previously sent by Board staff.
- 2. The City shall send the completed questionnaires and all supporting documentation to Board staff by May 31, 2019.



JASON E. MUMPOWER Chief of Staff

September 12, 2018

The Honorable Casey Burnett City of Friendship 631 Main Street Friendship, TN 38034

Dear Mayor Burnett,

The City of Friendship has been reported to the Water & Wastewater Financing Board (hereinafter "Board") for having a validity score of 70. This is below the minimum of 75 as set by the Board.

Please fill out the enclosed questionnaire and return it and all supporting documentation, as well as a detailed plan for raising your low validity score, to our office no later than December 14, 2018. Please submit this to either utilities@cot.tn.gov, and/or the following mailing address:

Water and Wastewater Financing Board ATTN: John Greer Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243

While we recognize that this questionnaire may be arduous to fill out, it is necessary to determine how we can help you achieve long-term financial success. After we receive your information, we will decide whether it is necessary for the City to (1) meet with our staff or (2) go directly before the Board.

If you need further assistance or have any questions, please feel free to contact me at (615) 747-5260 or utilities@cot.tn.gov.

Sincerely,

John Greer

Technical Secretary

enclosure cc (w/out encl.): Mr. Joe Garrett

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243



JASON E. MUMPOWER Chief of Staff

September 12, 2018

The Honorable Casey Burnett City of Friendship 631 Main Street Friendship, TN 38034

Dear Mayor Burnett,

The City of Friendship has been reported to the Water & Wastewater Financing Board (hereinafter "Board") for having excessive non-revenue water of 23.5%. This is above the maximum of 20% as set by the Board.

Please fill out the enclosed questionnaire and return it and all supporting documentation, as well as a detailed plan for lowering your non-revenue water, to our office no later than December 14, 2018. Please submit this to either <u>utilities@cot.tn.gov</u>, and/or the following mailing address:

Water & Wastewater Financing Board Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243

While we recognize that this questionnaire may be arduous to fill out, it is necessary to determine how we can help you achieve long-term financial success. After we receive your information, we will decide whether it is necessary for the City to (1) meet with our staff or (2) go directly before the Board.

If you need further assistance or have any questions, please feel free to contact me at (615) 747-5260 or <u>utilities@cot.tn.gov</u>.

Sincerely,

Greer ohn

Technical Secretary

enclosure cc (w/out): Mr. Joe Garrett

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243



September 12, 2018

The Honorable Casey Burnett City of Friendship 631 Main Street Friendship, TN 38034

Dear Mayor Burnett,

The Tennessee Comptroller of the Treasury has referred City of Friendship to the Water & Wastewater Financing Board (hereinafter "Board") pursuant to Tennessee Code Annotated § 68-221-1010(a).

Please fill out the enclosed questionnaire and return it and all supporting documentation to our office no later than December 14, 2018. Please submit this to either utilities@cot.tn.gov, and/or the following mailing address:

Water & Wastewater Financing Board ATTN: John Greer Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243

While we recognize that this questionnaire may be difficult to fill out, it is necessary to determine how we can help you achieve long-term financial success. After we receive your information, we will decide whether it is necessary for the City to (1) meet with our staff or (2) go directly before the Board.

If you need further assistance or have any questions, please feel free to contact me at (615) 747-5260 or utilities@cot.tn.gov.

Sincerely,

John Greer Technical Secretary

enclosure cc (w/out encl.): Mr. Joe Garrett

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER Chief of Staff

Town of Greenfield

Greenfield

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$453,324.00	\$457,777.00	\$487,823.00
Other Revenue	\$26,824.00	\$29,812.00	\$9,577.00
Operating Revenue	\$480,148.00	\$487,589.00	\$497,400.00
Operating Expenses	\$535,398.00	\$554,179.00	\$567,507.00
Operating Income	(\$55,250.00)	(\$66,590.00)	(\$70,107.00)
Non-Operating Revenue(Expenses)	(\$1,341.00)	\$809.00	\$8,142.00
Net Change In Position	(\$56,591.00)	(\$65,781.00)	(\$61,965.00)
Grant/Capital Contribution	\$85,311.00	\$34,612.00	\$66,407.00



JASON E. MUMPOWER Chief of Staff

Case: Town of Greenfield

Staff Summary:

On November 15, 2018, the Board ordered Greenfield to complete the following:

- 1. The Town shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The Town shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

The Town has submitted all required information. The Town voted to remove the 3,000 gallons included for free in the minimum bill. The current rates are:

Monthly charge with 0 gallons: \$6.00

All usage per thousand: \$3.00

The Town is projecting a positive change in net position based on the rate increase.

Staff Recommendation:

Order the following:

1. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning September 1, 2019, until the Board releases the Town from its oversight.

BEFORE THE TENNESSEE WATER AND WASTEWATER FINANCING BOARD

)))

IN THE MATTER OF:

TOWN OF GREENFIELD

TENN. CODE ANN. § 68-221-1010 -FINANCIAL DISTRESS

ORDER

On November 15, 2018, the Tennessee Water and Wastewater Financing Board ("the Board") reviewed the financially distressed status of the Town of Greenfield ("the Town") pursuant to Tenn. Code Ann. § 68-221-1010. Based on the City's financial deficiencies and its failure to respond to Board staff, the Board hereby orders the following:

- 1. The Town shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert to assist in completing the financial questionnaire previously sent by Board staff.
- 2. The Town shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

ENTERED this 22 day of November, 2018.

ANN/V. BUTTERWORTH, Chair Water and Wastewater Financing Board

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served via certified mail return receipt requested to the following on this total day of November, 2018:

Mayor Cindy McAdams Ms. Callie Croom, City Recorder 222 North Front St. Greenfield, TN 38230

Rachel E. Buckley Counsel to the Board



JASON E. MUMPOWER Chief of Staff

WWFB Financial Questionnaire

ty of Greenfield Utility

Instructions: Please submit the following information

- 1. Five year history of your rates (all rate classes and types)
- 2. Five year history of all utility fees (include records of how you rationalized charges for: tap fees, reconnection fees, etc.)
- 3. The current customer contract used for new service accounts
- 4. Most current balance sheet and income statement (accounts must be broken out by water and sewer **if applicable**; you may need to estimate or use a percentage for each)
- 5. A copy of your debt management policy
- 6. A copy of your capitalization policy (by which you decide whether you capitalize versus expense items)

Instructions: Please respond to each question below with detailed answers

- Do you have a plan to remedy your financially distressed position?
 a. If so, please provide a detailed copy.
- 2. Who has the authority to set rates and fees? Do you have a board or committee separate from your local legislative body (board of mayor and aldermen, etc.)?
- 3. How many customers do you have currently? Please break out by metered, non-metered, billed and un-billed, and class (residential, commercial, etc.).
- 4. What percentage of your sales do the largest ten (10) customers (by volume and by revenue) represent on a yearly basis?
- 5. Do you have plans for a rate increase or decrease?
 - a. If yes, has your board voted on it?
 - i. Please attach the relevant minutes that show all discussion and votes.
 - b. If no, please attach the minutes where the relevant discussion and vote took place to not change the current rate structure.
- 6. What is the justification for the current structure of your rates?
- 7. Do you have written policies for rates and fees (how they are implemented and billed, including adjustments)?
 - a. If so, please provide a list of the applicable policies.
 - b. How often do you review these policies?
- 8. How do you make customers aware of the rates and fees you have in place?
 - a. Is this done at least annually? If not, please explain.
- 9. Do you have a capital asset plan/budget?
 - a. If so, how long does it forecast (5 year, 10 year, etc.)?
 - b. If you do not have a capital asset plan, please justify why you do not.

- 10. Do you review your capital asset list?
 - a. If so, please indicate the frequency it is reviewed (annually, semi-annually, etc.) and who reviews this list.
 - b. If you do not review your capital asset list, please justify why you do not.
- 11. Do you have any environmental issues currently or forthcoming that will put a financial burden on the system?
- 12. Do you have a leak adjustment policy?
 - a. If so, what is the average yearly amount adjusted in gallons, cost to produce (or purchase), and lost revenue?
 - b. Please attach a copy of the policy.
- 13. Have you already, or do you plan to incur any new debt during the current fiscal year?
 - a. If so, please provide a detailed explanation.
- 14. Have you already, or do you plan to receive any grants or capital contributions during the current fiscal year?
 - a. If so, please provide a detailed explanation.
- 15. Have you applied for grants that will be received over the next two years?
- a. If so, please provide a detailed explanation.
- 16. Do you produce or purchase your water supply?
 - a. If you produce your own water,
 - i. What is the cost per thousand to produce?
 - b. If you buy your water,
 - i. What is the cost per thousand?
 - ii. Do you have a long-term purchase contract in place?
- 17. Do you have any wholesale customers?
 - a. Do you have written contracts with those customers?
- 18. What is your current non-revenue water percentage?
 - a. Do you have any plans for improving your non-revenue water percentage?
 - b. If so, please provide a detailed explanation.
- 19. With respect to your governing board, how frequently do you meet and what is your practice of providing notice of your meetings?
- 20. Has your governing body met the applicable training requirements?
 - a. Please provide a list of Board members and their election/appointment dates.
 - b. Please review the training requirements at https://www.comptroller.tn.gov/WWFB/

I hereby certiff that the information provided is true and correct to the best of my knowledge Signature:

Please mail, e-mail, or fax copies of any documentation to:

Water & Wastewater Financing Board ATTN: John Greer Fourth Floor Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243 Phone: (615) 747-5260 Fax: (615) 741-1551 utilities@cot.tn.gov

CORDELL HULL BUILDING | 425 Fifth Avenue North | Nashville, Tennessee 37243

- 1. Yes, the Board of Mayor and Aldermen approved of an ordinance that will replace in entirety the current Water rates for the City of Greenfield. This will include a flat rate for a Water customer's base bill that shall be set at \$6.00 per month without any minimum volumes for Water sales included on a Water customer's monthly Water bill. The City of Greenfield, Tennessee Water billing rates shall be revised to provide that customers shall be charged \$3.00 per 1,000 gallons of Water used above and beyond their base bill (or \$0.30 per hundred gallons used). The Board of Mayor and Aldermen also approved of a one percent COLA increase to be effective at the beginning of every fiscal year (July 1). Please see Attachments C1 and C2.
- 2.) The Board of Mayor and Aldermen has the authority to set the rates and fees. The City of Greenfield does not have a board or committee separate from the Board of Mayor and Aldermen that sets rates and fees.
- 3.) See Attachment A.
- 4.) See Attachment B.
- 5.) Yes, the City of Greenfield Board of Mayor and Aldermen approved a rate increase on the third reading of an ordinance on January 22, 2019. Please find Attachment C1 and C2 for the appropriate ordinances and minutes.
- 6.) At this time The City of Greenfield is unsure of the justification for the current structure of rates since the prior City Recorder retired in March of 2018.
- 7.) Yes, the Board of Mayor and Alderman passed an ordinance on its third reading on January 15, 2019 that included all of the current fees and leak adjustment policy. Please find Attachment E and F. These policies and fees will be reviewed yearly by the Board of Mayor and Aldermen.
- 8.) In the past the City of Greenfield has not made customers aware of rate changes. The Board of Mayor and Aldermen voted on January 22, 2019 to begin informing the customers of any rate or fee changes in the newspaper, the City website, post it in City Hall, and a note placed on water bills. The City of Greenfield plans to inform the customers of any changes annually.
- 9.) Yes, the City of Greenfield's Capital Asset Plan is forecasted for five years. The current Capital Asset Plan was presented to the Board of Mayor and Aldermen on January 8, 2019. Please see Attachment G.
- 10.) Yes, the Capital Asset list is reviewed annually by department heads and turned in to the auditors yearly. See Attachment H.
- 11.) No, the City of Greenfield does not have any environmental issues that will put a financial burden on the City's water system.

- 12.) Yes, the Board of Mayor and Aldermen passed an ordinance on the third reading on January 15, 2019 that includes a current leak adjustment policy. Please see Attachment I. Please see Attachment J for the average yearly amount adjusted in revenue. The City of Greenfield will begin to keep a log of the gallons adjusted as well as the revenue adjusted.
- 13.) No, the City of Greenfield does not plan to incur any new debt during this current fiscal year.
- 14.) Yes, the City of Greenfield received the 2016 CDBG Water Line System improvement grant that will cost out in January 2019. This grant assisted in replacing approximately 4,000 feet of old cast iron water lines with 6 inch plastic lines. It also added 4 new fire hydrants and will help with water loss.
- 15.) The City of Greenfield has not applied for grants that will be received over the next two years. However, the City of Greenfield is applying for a pump station replacement through the 2019 CDBG grant.
- 16.) The City of Greenfield produces its own water supply. The cost per 1,000 gallons of water to produce is \$3.
- 17.) The City of Greenfield does not have any whole sale customers.
- 18.) At the end of fiscal year 2017/2018, our current non-revenue water percentage was 9.6%. The City of Greenfield does not have a lot of non-revenue water, but the City does meter any water used by the Highway Department or paving companies.
- 19.) Our governing board meets once a month on the second Tuesday of every month. The dates of the monthly meetings are published on the city's website at www.greenfieldtn.com
- 20.) Please see Attachment K for a list of the Greenfield Board of Mayor and Aldermen, their addresses, phone numbers, and next election dates. The Greenfield Board of Mayor and Aldermen will be attending a utility board training on February 28, 2019 and a training session in the spring that will be instructed by John Greer.

<u>2013-2014</u> <u>Service</u>		Inside		Outside
	\$ \$	6.00 6.00 \$3.	\$ 00 F	10.00 N/A per 1,000 gallons
Sewer (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons	\$ \$	19.70 19.70 \$3.	\$ 00	23.70 N/A per 1,000 gallons
<u>2014-2015</u> <u>Service</u>		<u>Inside</u>		Outside
Water (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons	\$ \$	6.00 6.00 \$3.	\$ 00	10.00 N/A per 1,000 gallons
Sewer (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons	\$ \$	23.70 23.70 \$3.	\$ 00	27.70 N/A per 1,000 gallons
<u>2015-2016</u> <u>Service</u>		Inside		Outside
	\$ \$	6.00 6.00	\$ 00	<u>Outside</u> 10.00 N/A per 1,000 gallons
<u>Service</u> Water (0 - 3,000 gallons) Residential Commerical		6.00 6.00 \$3. 23.70 23.70	00 \$	10.00 N/A
Service Water (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons Sewer (0 - 3,000 gallons) Residential Commerical	\$	6.00 6.00 \$3. 23.70 23.70	00 \$	10.00 N/A per 1,000 gallons 27.70 N/A
Service Water (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons Sewer (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons 2016-2017	\$	6.00 6.00 \$3. 23.70 23.70 \$3. Inside 6.00 6.00	00 \$ 00 \$	10.00 N/A per 1,000 gallons 27.70 N/A per 1,000 gallons

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49

<u>2017-2018</u> <u>Service</u>		Inside	Outside	
Water (0 - 3,000 gallons)				
Residential	\$	6.00	\$ 10.00	
Commerical	\$	6.00	N/A	
More than 3,000 gallons		\$3.0	00 per 1,000 gallons	
Sewer (0 - 3,000 gallons)				
Residential	\$	23.70	\$ 27.70	
Commerical	\$	23.70	N/A	
More than 3,000 gallons		\$3.00 per 1,000 gallons		
2018-2019			·	
<u>2018-2019</u> <u>Service</u>		Inside	Outside	
		Inside	Outside	
Service	\$	<u>Inside</u> 6.00	<u>Outside</u> \$ 10.00	
<u>Service</u> Water (0 - 3,000 gallons)				
<u>Service</u> Water (0 - 3,000 gallons) Residential	\$	6.00 6.00	\$ 10.00	
Service Water (0 - 3,000 gallons) Residential Commerical	\$	6.00 6.00	\$ 10.00 N/A	
Service Water (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons	\$	6.00 6.00	\$ 10.00 N/A	
Service Water (0 - 3,000 gallons) Residential Commerical More than 3,000 gallons Sewer (0 - 3,000 gallons)	\$ \$	6.00 6.00 \$3.0	\$ 10.00 N/A 00 per 1,000 gallons	

Greenfield Water Rate Potential Income-Estimate

December 12, 2018

As of 11/26, Greenfield has <u>961</u> water customers. The projection below is based upon the assumption that Greenfield will not sell all the water that was removed from the base bill. MTAS used an increase of 66.7% of the total potential increase as a means to be conservative in the estimate. Actual revenue change could be more or less.

No volumes on base bill If the city council passes an ordinance which removes all	Monthly gain	Yeariy gain
the volumes from the base bill it could generate a potential annual revenue increase of:	\$5,766.00	\$69,192.00
With 1,000 gallons on base bill 50	Monthly gain	Yearly gain
gallons on the base bill it could generate a potential annual revenue increase of:	\$2,883.00	\$34,596.00
With 2,000 gallons on base bill	Monthly gain	Yearly gain
If the city council passes an ordinance which left 2,000 gallons on the base bill it could generate a	gain	gan
potential annual revenue increase of:	\$1,441.50	\$17,298.00

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\$3.00

1,000 gallons

Greenfield Water Rate Comparsion

December 12, 2018

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Current Rates	per month
Base bill including 3,000 Gallons	\$6.00
Every 1,000 gallons above 3,000	\$3.00
Customer monthly bill under current rates	
Base bill with 3,000 gallons or less	\$6.00
4,000 gallons	\$9.00
5,000 gallons	\$12.00
6,000 gallons	\$15.00
7,000 gallons	\$18.00
Proposed new rates (3 examples)	
Base bill with no volumes included	\$6.00
1,00 gallons	\$9.00
2,000 gallons	\$12.00
3,000 gallons	\$15.00
4,000 gallons	\$18.00
5,000 gallons	\$21.00
6,000 gallons	\$24.00
7,000 gallons	\$27.00
Base bill 1,000 gallons included	\$6.00
2,000 gallons	\$9.00
3,000 gallons	\$12.00
4,000 gallons	\$15.00
5,000 gallons	\$18.00
6,000 gallons	\$21.00
7,000 gallons	\$24.00
Base bill 2,000 gallons included	\$6.00
3,000 gallons	\$9.00
4,000 gallons	\$12.00
5,000 gallons	\$15.00
6,000 gallons	\$18.00
7,000 gallons	\$21.00

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Grundy County Wastewater

Grundy County Wastewater

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$63,784.00	\$52,474.00	\$57,619.00
Other Revenue	\$0.00	\$0.00	\$0.00
Operating Revenue	\$63,784.00	\$52,474.00	\$57,619.00
Operating Expenses	\$111,085.00	\$113,140.00	\$127,254.00
Operating Income	(\$47,301.00)	(\$60,666.00)	(\$69,635.00)
Non-Operating Revenue(Expenses)	(\$11.00)	\$26.00	\$24.00
Net Change In Position	(\$47,312.00)	(\$60,640.00)	(\$69,611.00)
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



JASON E. MUMPOWER Chief of Staff

Case: Grundy County Wastewater

Staff Summary:

On November 15, 2018, the Board ordered Grundy County to complete the following:

- 1. The County shall have the County Technical Assistance Service, the Tennessee Association of Utility Districts, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The County shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

Grundy County has submitted the required information. The County believes the wastewater fund is not financially distressed, but the 2018 audit showed a negative change in net position of \$69,611.

Staff Recommendation:

Order the following:

- 1. By April 15, 2019, the County shall contract with the County Technical Assistance Service, the Tennessee Association of Utility Districts or another qualified expert approved by Board staff to:
 - a. complete a rate analysis of the wastewater system with recommendations to correct the County's financial deficiencies;
 - b. create a customer contract;
 - c. create a rate and fee policy; and
 - d. create a five-year capital asset budget.
- 2. The County shall implement the recommendations, customer contract, rate and fee policy, and five-year capital asset budget as developed by the qualified expert by July 15, 2019.
- 3. The County shall send the completed rate analysis and accompanying recommendations, the customer contract, the rate and fee policy, the five-year capital asset budget, and all supporting documentation to Board staff by July 31, 2019.
- 4. Board staff is given the authority to grant one extension of the foregoing deadlines upon a showing of good cause by the County.

BEFORE THE TENNESSEE WATER AND WASTEWATER FINANCING BOARD

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IN THE MATTER OF:

GRUNDY COUNTY

TENN. CODE ANN. § 68-221-1010 -FINANCIAL DISTRESS

ORDER

On November 15, 2018, the Tennessee Water and Wastewater Financing Board ("the Board") reviewed the financially distressed status of Grundy County ("the County") pursuant to Tenn. Code Ann. § 68-221-1010. Based on the County's financial deficiencies and its failure to respond to Board staff, the Board hereby orders the following:

- 1. The County shall have the County Technical Assistance Service, the Tennessee Association of Utility Districts, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The County shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

ENTERED this and day of November, 2018.

ANN V. BUTTERWORTH, Chair Water and Wastewater Financing Board

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served via certified mail return receipt requested to the following on this 224 day of November, 2018:

Mayor Michael Brady Grundy County P.O. Box 177 Altamont, TN 37301

Rachel E. Buckley

Counsel to the Board

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JUSTIN P. WILSON Comptroller

JASON E. MUMPOWER Chief of Staff

WWFB Financial Questionnaire

Utility: Grundy Co. Sewer Dept.

Instructions: Please submit the following information

- 1. Five-year history of your rates (all rate classes and types)
- 2. Five-year history of all utility fees (include records of how you rationalized charges for: tap fees, reconnection fees, etc.)
- 3. The current customer contract used for new service accounts
- 4. Most current three-months of balance sheets and income statements (accounts must be broken out by water and sewer **if applicable**; you may need to estimate or use a percentage for each)
- 5. A copy of your debt management policy
- 6. A copy of your capitalization policy (by which you decide whether you capitalize versus expense items)

Instructions: Please respond to each question below with detailed answers

- 1. Do you have a plan to remedy your financially distressed position?
 - a. If so, please provide a detailed copy.
 - b. If not, please provide a detailed explanation.
- 2. Who has the authority to set rates and fees? Do you have a board or committee separate from your local legislative body (board of mayor and aldermen, etc.)?
- 3. How many customers do you have currently? Please break out by metered, non-metered, billed and un-billed, and class (residential, commercial, etc.).
- 4. What percentage of your sales do the largest ten (10) customers (by volume and by revenue) represent on a yearly basis?
- 5. Do you have plans for a rate increase or decrease?
 - a. If yes, has your board voted on it?
 - i. Please attach the relevant minutes that show all discussion and votes.
 - b. If no, please attach the minutes where the relevant discussion and vote took place to not change the current rate structure.
- 6. What is the justification for the current structure of your rates?
- 7. Do you have written policies for rates and fees (how they are implemented and billed, including adjustments)?
 - a. If so, please provide a list of the applicable policies.
 - b. How often do you review these policies?
- How do you make customers aware of the rates and fees you have in place?
 a. Is this done at least annually? If not, please explain.
- 9. Do you have a capital asset plan/budget?
 - a. If so, how long does it forecast (5-year, 10-year, etc.)?
 - b. If you do not have a capital asset plan/budget, please justify why you do not.

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

- 10. Do you review your capital asset list?
 - a. If so, please indicate the frequency it is reviewed (annually, semi-annually, etc.) and who reviews this list.
 - b. If you do not review your capital asset list, please justify why you do not.
- 11. Do you have any environmental issues currently or forthcoming that will put a financial burden on the system?
- 12. Do you have a leak adjustment policy?
 - a. If so, what is the average yearly amount adjusted in gallons, cost to produce (or purchase), and lost revenue?
 - b. Please attach a copy of the policy.
- 13. Have you already, or do you plan to incur any new debt during the current fiscal year?a. If so, please provide a detailed explanation.
- 14. Have you already, or do you plan to receive any grants or capital contributions during the current fiscal year?
 - a. If so, please provide a detailed explanation.
- 15. Have you applied for grants that will be received over the next two years?
 - a. If so, please provide a detailed explanation.
- 16. Do you produce or purchase your water supply?
 - a. If you produce your own water,
 - i. What is the cost per thousand to produce?
 - b. If you purchase your water,
 - i. What is the cost per thousand?
 - ii. Do you have a long-term purchase contract in place?
- 17. Do you have any wholesale customers?
 - a. Do you have written contracts with those customers?
- 18. What is your current non-revenue water percentage?
 - a. Do you have any plans for improving your non-revenue water percentage?
 - b. If so, please provide a detailed explanation.
- 19. With respect to your governing board, how frequently do you meet and what is your practice of providing notice of your meetings?
- 20. Has your governing body met the applicable training requirements?
 - a. Please provide a list of Board members and their election/appointment dates.
 - b. Please review the training requirements at https://www.comptroller.tn.gov/WWFB/

I hereby certify that the information provided is true and correct to the best of my knowledge.

Signature:	Title:	_Date:

Please mail, e-mail(preferred), or fax copies of any documentation to:

Water & Wastewater Financing Board ATTN: John Greer Fourth Floor Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243 Phone: (615) 747-5260 Fax: (615) 741-1551 utilities@cot.tn.gov

MEMORANDUM

TO:	John Greer,	Water &	Wastewater Final	ncing Board
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FROM: Michael Bradley, Grundy County Mayor

DATE: February 15, 2019

SUBJECT: WWFB Financial Questionnaire

Our responses to your questionnaire are below.

Information

- 1. The 5-year history of rates (Big Creek Utility) is attached
- 2. Grundy County Sewer Department only has a tap fee, therefore there is no history.
- 3. Grundy County does not use a customer contract
- 4. Current balance sheets are attached
- 5. A copy of the debt management policy is attached
- 6. A copy of the fixed assets policy is attached

Questions

1. As you can see from our balance sheets, we are not presently in a financially distressed condition. Our Waste Water Sewer Fund is in the black with positive cash flows and sustaining its own expenses.

2. At the present time the county's sewer rate is 100% of the water rate as set forth by Big Creek Utility.

TheGrundy County Legislative body is solely responsible for determining the sewer rate

3. Grundy County has the following number of customers:

- Metered 42
- Non-metered 4
- Billed 46
- Un-billed 0
- Residential 16
- Commercial 29
- Industrial –
- Government 1
- 4. Top Ten Customer Percentages
 - Grundy County Government (29.7%)
 - Methodist Assembly (17.0%)
 - Grundy County High School (10.9%)
 - Elk Meadow Apartments (7.6%)
 - Toyo Seat (7.4%)
 - Elk Meadow Apartments (6.8%)
 - Scruggs Car Wash (6.7%)
 - Elk Meadow Apartments (6.3%)
 - North Elementary (4.6%)
 - L & L Mart (3%)

MEMORANDUM

TO:John Greer, Water & Wastewater Financing BoardFROM:Michael Bradley, Grundy County MayorDATE:February 15, 2019Page 2Page 2

5. At the present time there are no plans to increase rates.

6. The county adopted the policy of the sewer bill being 100% of the water bill

7. The county does not have a written policy for rates and fees

8. The customer is notified when they come in to pay their tap fee.

9. The county does not have a capital improvements plan or budget

10. The county reviews the capital asset list annually.

11. The county is unaware of any environmental issues

12. Big Creek Utility has a leak adjustment policy. When the utility identifies a leak they send the information to the county and the county makes the adjustment to the customer's sewer bill

13. There are no plans to incur any sewer debt in FY 2019

14. There are no plans to receive any sewer related grants or capital contributions in FY 2019

15. The county has not applied for any sewer related grants

16. The county does not own the water supply. That source is owned by Big Creek Utility

17. Non-applicable

18. Non-applicable

19. The Grundy County Legislative Body meets the 4th Monday of every month. All meetings are advertised in the Grundy County Herald paper

20. Presently, Grundy County has not met the applicable training requirements.

I hereby certify that the information provided is true and correct to the best of my knowledge.

Signature: Muil By Title: County Mayor Date: 2/13/19

(FAX)9316922508

Rat	tes & Charges For
Big Cre	ek Utility District
	one: 931 / 692-2505
	931 / 692-2508
Home owners - Meter fee	
(¾")	\$50.00
(1")	\$80.00
(1½")	\$180.00
(2")	\$255.00
(3")	\$355.00
(4")	\$505.00
Renters - Meter Fee	\$80.00
Reactivation Fee Delinquent Fee (subject to disconnection) (Additional Charge for Overtime)	\$50.00 \$30.00
¼" inch commercial tap fee \$110 1 inch tap fee \$140 (Any additional cost incurred over the tap installed)	00.00, plus \$250.00 System Capacity Fee 00.00, plus \$250.00 System Capacity Fee 00.00, plus \$250.00 System Capacity Fee fee, shall be paid by the customer for whom the tap is being of labor and material + 20%, plus \$250.00 Capacity Fee
•	
All trailers, houses and busi	nesses must have their own tap and meter fee."

NOTE: Duplexes require two (2) water taps. Trailer Parks - Call Office

Fire Hydrant Rentals: \$100.00

Water Rates:

 Residential

 First 1,000 gallons (minimum)
 \$14.65

 1,001 – 7,999 gallons
 \$5.50 per 1,000 gallons

 8,000 – 14,999 gallons
 \$6.00 per 1,000 gallons

 Over 15,000 gallons
 \$6.75 per 1,000 gallons

Commercial

First 1,500 gallons (minimum)\$23.80Over 1,500 gallons\$5.50 per 1,000 gallons

(\$15.00 Service Charge for each returned check)

Commercial Classification

Any establishment in existence to make a profit whether publicly or privately, and any customer with a meter over 4" in size shall be subject to commercial rates as defined in the commercial rate schedule.

NEW RATES EFFECTIVE March 15, 2013

Big Cr Office Pl	tes & Charges For eek Utility District ione: 931 / 692-2505 : 931 / 692-2508
Home owners - Meter fee	
(3/4")	\$50.00
(1")	\$80.00
(1½")	\$180.00
(2")	\$255.00
(3")	\$355.00
(4")	\$505.00
Renters - Meter Fee	\$80.00
Reactivation Fee Delinquent Fee (subject to disconnection) (Additional Charge for Overtime)	\$50.00 \$30.00
Tap Fees:	
	00.00, plus \$250.00 System Capacity Fee
· · · · · · · · · · · · · · · · · · ·	00.00, plus \$250.00 System Capacity Fee
	00.00, plus \$250.00 System Capacity Fee
(Any additional cost incurred over the tap installed)	fee, shall be paid by the customer for whom the tap is being
2 inch tap fee cost	of labor and material + 20%, plus \$250.00 Capacity Fee
	inesses must have their own tap and meter fee."

NOTE: Duplexes require two (2) water taps. Trailer Parks - Call Office

Fire Hydrant Rentals: \$100.00

Water Rates:

Residential First 1,000 gallons (minimum) 1,001 – 7,999 gallons 8,000 – 14,999 gallons Over 15,000 gallons

Commercial

First 1,500 gallons (minimum) Over 1,500 gallons \$5.75 per 1,000 gallons \$6.25 per 1,000 gallons \$7.00 per 1,000 gallons

\$5.75 per 1,000 gallons

(\$15.00 Service Charge for each returned check)

\$23.80

\$14.65

Commercial Classification

Any establishment in existence to make a profit whether publicly or privately, and any customer with a meter over $\frac{3}{4}$ " in size shall be subject to commercial rates as defined in the commercial rate schedule.

NEW RATES EFFECTIVE April 15, 2015

Rates & Charges For Big Creek Utility District Office Phone: 931 / 692-2505 FAX: 931 / 692-2508

Home owners - Meter fee		
(¾")	\$50.00	
(1")	\$80.00	
(1½")	\$180.00	
(2")	\$255.00	
(3")	\$355.00	
(4")	\$505.00	
Renters - Meter Fee	\$80.00	
Reactivation Fee	\$50.00	
Delinquent Fee (subject to disconne (Additional Charge for Overtime)	xtion) \$30.00	
Tap Fees:		
34" inch tap fee	\$1000.00, plus \$250.00 System Capacity Fee	
%" inch commercial tap fee	\$1100.00, plus \$250.00 System Capacity Fee	
1 inch tap fee	\$1400.00, plus \$250.00 System Capacity Fee	
(Any additional cost incurred over t installed)	the tap fee, shall be paid by the customer for whom the tap is being	B
2 inch tap fee	cost of labor and material + 20%, plus \$250.00 Capacity Fee	
41 A 11 2 11 1		

"All trailers, houses and businesses must have their own tap and meter fee."

\$15.25

NOTE: Duplexes require two (2) water taps. Trailer Parks - Call Office

Fire Hydrant Rentals: \$100.00

Water Rates:

Residential First 1,000 gallons (minimum) 1,001 – 7,999 gallons 8,000 – 14,999 gallons Over 15,000 gallons

<u>Commercial</u>

First 1,500 gallons (minimum) Over 1,500 gallons \$7.50 per 1,000 gallons \$24.25

\$6.25 per 1,000 gallons

\$6.75 per 1,000 gallons

\$6.25 per 1,000 gallons

<u>Wholesale</u>

\$4.75 per 1,000 gallons

(\$15.00 Service Charge for each returned check)

Commercial Classification

Any establishment in existence to make a profit whether publicly or privately, and any customer with a meter over %" in size shall be subject to commercial rates as defined in the commercial rate schedule.

NEW RATES EFFECTIVE April 15, 2017

City of Harrogate

Harrogate



JASON E. MUMPOWER Chief of Staff

Case: City of Harrogate

Staff Summary:

The City of Harrogate has been referred for financial distress. The City is a sewer only system.

Staff Recommendation:

Order the following:

- 1. By April 15, 2019, the City shall contract with the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert approved by Board staff to:
 - a. complete a rate analysis of the wastewater system with recommendations to correct the City's financial deficiencies;
 - b. create a capitalization policy; and
 - c. create a five-year capital asset budget.
- 2. The City shall implement the recommendations, customer contract, rate and fee policy, and fiveyear capital asset budget as developed by the qualified expert by July 15, 2019.
- 3. The City shall send the completed rate analysis and accompanying recommendations, the customer contract, the rate and fee policy, the five-year capital asset budget, and all supporting documentation to Board staff by July 31, 2019.
- 4. Board staff is given the authority to grant one extension of the foregoing deadlines upon a showing of good cause by the City.

DETAILED QUESTIONS

- 1. Do you have a plan to remedy your financially distressed position?
 - a. If so, please provide a detailed copy.
 - b. If not, please provide a detailed explanation.

Recent adjustments in charges, fees, and overall spending in the sewer department, have made substantial improvements bringing down the "loss from operations" in 2016 from \$54,203, to only \$6658 in 2017. This was significant since the City began replacement of the main lift station on Patterson Road in October 2016 and finished in May 2017, at the total cost of \$466,668, paid totally with reserved funds.

The Utility Department carries no debt. The City has been fortunate in having grants that supply funding for extension projects, therefore limiting the City's cost of providing sewer to our community. With new requirements for utilities, the BMA will make adjustments as needed to offset rising costs in order to be self-supporting and plan for future improvements. One suggestion has been a small percentage increase each year to build funds for future needs. The Board relies heavily on the engineers who designed the system, our certified sewer operating tech, and the maintenance department staff to inform them when improvements and/or maintenance is or will be required, then plan accordingly.

- 2. Who has the authority to set rates and fees? Do you have a board or committee separate from your local legislative body (board of mayor and aldermen, etc.)? The Board of Mayor and Aldermen set the rates/ fees and also serve as the Utility Board.
- 3. How many customers do you have currently? 732 Customers billed last month Please break out by metered, non-metered, billed and un-billed, and class (residential, commercial, etc.).
 7 Unmetered, 725 Metered; All are billed; 679 Residential, 53 Commercial

4. What percentage of your sales do the largest ten (10) customers (by volume and by revenue) represent on a yearly basis?

Currently the top 10 customers make up 68% of our sales in revenue and volume

- 5. Do you have plans for a rate increase or decrease?
- a. If yes, has your board voted on it?
 - i. Please attach the relevant minutes that show all discussion and votes.
- b. If no, please attach the minutes where the relevant discussion and vote took place to not change the current rate structure.
 The BMA has approved increases in fees yearly since 2012, and will continue to adjust as needed.

SEE FOLLOWING DOCUMENTS

- 6. What is the justification for the current structure of your rates? To keep up with costs for transport and treatment to Claiborne Utility District, to offset potential loss from operations, to fund general utility maintenance and other projects as needed.
- 7. Do you have written policies for rates and fees (how they are implemented and billed, including adjustments)? Yes
- a. If so, please provide a list of the applicable policies. PLEASE SEE FOLLOWING DOCUMENTS
- b. How often do you review these policies? As needed

8. How do you make customers aware of the rates and fees you have in place?
On the invoice during public meetings, minutes nexted on our

On the invoice, during public meetings, minutes posted on our website

- a. Is this done at least annually? Yes; If not, please explain.
- 9. Do you have a capital asset plan/budget? No
- a. If so, how long does it forecast (5-year, 10-year, etc.)?
- b. If you do not have a capital asset plan/budget, please justify why you do not.

The Board plans according to advice from staff and engineers for future needs, budgeting as needed depending on the project. Funds are set aside for future expenditures.

10. Do you review your capital asset list?

Yes

- a. If so, please indicate the frequency it is reviewed (annually, semiannually, etc.) and who reviews this list.
 An asset list is kept and provided by our auditors and reviewed annually by the BMA
- b. If you do not review your capital asset list, please justify why you do not. N/A

11. Do you have any environmental issues currently or forthcoming that will put a financial burden on the system? No 12. Do you have a leak adjustment policy?

Yes

Arthur-Shawanee Utility District provides readings of water consumption for our sewer customers and lets us know when they have over read the meter, swimming pool credits, or the customer had a leak. If it is inside the home and goes into the sewer system, we don't adjust.

- a. If so, what is the average yearly amount adjusted in gallons, cost to produce (or purchase), and lost revenue? Last year ASUD advised us of 477,800 gallons of water adjustments, totaling \$6087.60. Included in that total, the local nursing home had an outside leak one month of 257,000 gallons of water, with an adjustment cost of \$3212.50. Since these were erroneous readings, outside leaks, or swimming pool credits, there was no loss to us in revenue from sales.
- b. Please attach a copy of the policy. ATTACHMENTS PROVIDED BELOW

13. Have you already, or do you plan to incur any new debt during the current fiscal year?

No

- a. If so, please provide a detailed explanation. No major needs have been identified
- 14. Have you already, or do you plan to receive any grants or capital contributions during the current fiscal year?

We just received A CDBG grant for a sewer extension

- a. If so, please provide a detailed explanation. See grant info provided
- 15. Have you applied for grants that will be received over the next two years? Noa. If so, please provide a detailed explanation. N/A
- 16. Doyou produce or purchase your water supply? We only provide sewer utility
 - a. If you produce your own water, N/A
 - i. What is the cost per thousand to produce?
 - b. If you purchase your water, N/A
 - i. What is the cost per thousand?
 - ii. Do you have a long-term purchase contract in place?
- 17. Do you have any wholesale customers? N/A
 - a. Do you have written contracts with those customers? N/A
- 18. What is your current non-revenue water percentage? N/A
 - a. Do you have any plans for improving your non-revenue water percentage?
 - b. If so, please provide a detailed explanation.
- 19. With respect to your governing board, how frequently do you meet and what is your practice of providing notice of your meetings?

The Board meets twice monthly. Meetings are advertised in the local newspaper and on our website.

- 20. Has your governing body met the applicable training requirements? Only the Mayor has completed the training, even though she technically didn't have to until 12 months after the November 2018 election.
 - a. Please provide a list of Board members and their election/appointment dates.

Gary Burchett –Alderman – Elected November 2016 for 4-year term Lieven Cox –Alderman – Elected November 2018 for 4-year term Linda Fultz – Mayor - Elected November 2018 for 4-year term Allen Hurst –Alderman – Elected November 2018 for 4 -year term Troy Poore –Alderman – Elected November 2018 for 4-year term

Please review the training requirements at https://www.comptroller.tn.gov/ WWFB/

I hereby certify that the information provided is true and correct to the best of my knowledge.

uland Title: CMLFO/Recorder Date: Signature:

Please mail, e-mail(preferred), or fax copies of any documentation to:

Water & Wastewater Financing Board ATTN: John Greer Fourth Floor Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243 Phone: (615) 747-5260 Fax: (615) 741-1551 utilities@cot.tn .gov

\$3,136		\$37,632.00			1							1				-	
								•			-						
	No. Customers			Current		Possible	1	Propos	ed	Monthly			Yearly			-	_
OPTION A				Rates	-	Increase		Rate		Revenue		1	Revenue				
For All Usage	650		Minimum	\$ 18.00		\$ 2.00		\$ 20.	00	1,300.00	12	\$	15,600.00			1	
Types	281	·	Over Minimum	\$ 10.50	1	\$ 3.60		\$ 14.	10 :	1,011.60	12	\$	12,139.20		-	1	
	275		Maintenance fees	\$ 5.00		\$ 3.00		\$ 8.	20 1	825.00	12	15	9,900.00				
	2		Dual Pump Maint. Fe	\$ 10.00	1	\$ 6.00		\$ 16.	0	12.00	12	\$	144.00		1		
								-			-	\$	37,783.20				
Someone who has	all three rates will	l have an incre	ase of \$8.60 or \$11.6	0 dependi	ng c	on the moi	inten	ance fe	e the	re charged							
											1	\$	37,783.20	Proposed	yearly reco	vered amoun	it
						-						\$	(37,632.00)	(Yearly as	nount need	ed to recover)
					1			1				\$		Overage			
															T		
OPTION B	No. Customers			Current		Possible		Propos	ed	Monthly			Yearly				
For Minimum				Rates		Increase		Rate		Revenue			Revenue				_
Only	650			\$ 18.00		\$ 5.00		\$ 23.	0	3,250.00	12	S	39,000.00				
						0						Ť					
					1							5	39,000.00	Proposed	vearly reco	vered amoun	it
	-				İ							5				ed to recover	
					1							5	1,368.00				
						-	11	1							İ		
OPTION C				1. The second se			i i		1						1		
or Above Minim	ım only									Monthly		-	Yearly				_
	Monthly Average,	Over Minim	Im Gallons			per 1000	gali	ons		Revenue			Revenue				_
	*2795983 0	Sallons	2010/01/02/01/02	Currently	0	\$ 10.50		2	1	29.357.82							_
Take into consid	eration that this ar	nount may flu	ctuate significantly t			\$12.50					\$5,591.96		\$67.103.52	Proposed	vearly reco	wered amoun	ıt
					-		H		Ť			\$				ed to recover	
							\mathbf{H}	1				-	\$29,471.52				<u> </u>
					-			-					,,			offset contra	ct
					-		ł				-	L				0113et Contra	

This was used by the BMA for consideration of increasing sewer fees, July 2017

1.Five-year history of your rates (all rate classes and types)

FIVE YEAR HISTORY OF RATES	CURRENT	2017	2016	2015	2014	
FIRST 2,000 GALLONS (minimum)	\$18.00	\$18.00	\$17.50	\$16.00	\$16.00	
OVER 2,000 GALLONS (per 1,000 gallons)	\$12.50	\$10.50	\$10.30	\$9.80	\$9.80	
NUMBER OF METERED CUSTOMERS	725	643	620	509	509	
NUMBER OF UNMETERED CUSTOMERS (charged at minimum)	7	7	7	7	7	
TOTAL CUSTOMERS	732	650	627	516	516	

2. Five-year history of all utility fees (include records of how you rationalized charges for: tap fees, reconnection fees, etc.)

FEES	CURRENT	2017	2016	2015	2014
APPLICATION FEE	\$25.00	\$0	\$0	\$0	\$0
SINGLE E-1 PUMP MAINTENANCE (per month)	\$10.00	\$5.00	\$5.00	\$5.00	\$5.00
DUAL E-1 PUMP MAINTENANCE FEE (per month)	\$20.00	\$10.00	\$10.00	\$10.00	\$10.00
RESIDENTIAL TAP FEES	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200
COMMERCIAL TAP FEES	Based on a	set fee sche	dule for the a	appropriate	business type
E-1 PUMPS AND INSTALLATION FEE	\$5,000	\$3,500	\$3,500	\$3,500	\$3,500
DUAL PUMP AND INSTALLATION FEE	\$15,000	\$10,000	\$10,000	\$10,000	\$10,000
RECONNECTION FEE	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00

3.The current customer contract used for new service accounts SEE ATTACHED APPLICATION BELOW

Town of Jasper

Jasper

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,566,646.00	\$1,671,671.00	\$0.00
Other Revenue	\$217,212.00	\$256,732.00	\$0.00
Operating Revenue	\$1,783,858.00	\$1,928,403.00	\$0.00
Operating Expenses	\$1,753,187.00	\$2,071,615.00	\$0.00
Operating Income	\$30,671.00	(\$143,212.00)	\$0.00
Non-Operating Revenue(Expenses)	(\$66,404.00)	(\$34,406.00)	\$0.00
Net Change In Position	(\$35,733.00)	(\$177,618.00)	\$0.00
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: Town of Jasper

Staff Summary:

The Town of Jasper has been referred for financial distress. The Town will show a profit in its 2018 audit (not yet received) according to the auditor. The outside minimum bill for water and sewer is over two times higher than the inside minimum bill.

Staff Recommendation:

Order the following:

- 1. By April 15, 2019, the Town shall contract with the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff to:
 - a. complete a rate analysis;
 - b. justify the disparity between the inside and outside minimum water and sewer rates; and
 - c. create a five-year capital asset budget.
- 2. The Town shall send the completed rate analysis, the justification for the differing rates, the five-year capital asset budget, and all supporting documentation to Board staff by July 31, 2019.
- 3. Board staff is given the authority to grant one extension of the foregoing deadlines upon a showing of good cause by the Town.
- 4. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2020, until the Board releases the Town from its oversight.



Certified Public Accountants

301 N. Market Chattanooga, TN 37405

Office: 423-756-1170 Fax: 423-756-1436 www.jmw-cpa.com

Members American Institute of Certified Public Accountants

Paul Johnson, III, CPA

Brian T. Wright, CPA

Karen Hutcherson, CPA

Marianne Greene, CPA

Jennifer Waycaster, CPA

December 14, 2018

Water & Wastewater Financing Board ATTN: John Greer Fourth Floor Cordell Hull Building 425 Fifth Avenue North Nashville, TN 37243

Dear Mr. Greer:

In addition to the information requested in the WWFB Financial Questionnaire, I would like to point out certain facts.

- The Town substantially increased the water rates June 1st, 2017, which did not help June 30, 2017, which had a loss of \$152,692 but did help June 30, 2018, which had a **PROFIT** of \$229,253 (after audit adjustments but before pension adjustment; not yet available).
- 2, Cash balances (in the water fund) at June 30, 2017 was \$2,033,398 and \$2,373,036 at June 30 2018, an increase in cash of \$339,638.
- 3, The June 30, 2018 Water fund debt of \$1,481,227 was on total fixed assets of \$12,202,588 (cost), \$7,043,885 (net of depreciation).

Based on these facts, it is my opinion that the water fund is not a financial distress and the town council takes their financial responsibilities seriously.

Yours truly,

Johnson The, CAA Haul,

Paul Johnson, III, CPA Johnson, Murphey & Wright, P.C.



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

WWFB Financial Questionnaire

Utility: JASPER

Instructions: Please submit the following information

- x 1. Five-year history of your rates (all rate classes and types)
- x 2. Five-year history of all utility fees (include records of how you rationalized charges for: tap fees, reconnection fees, etc.)
- x 3. The current customer contract used for new service accounts
- 4. Most current three-months of balance sheets and income statements (accounts must be broken out by water and sewer **if applicable**; you may need to estimate or use a percentage for each)
- $\hat{\mathbf{x}}$ 5. A copy of your debt management policy
- x 6. A copy of your capitalization policy (by which you decide whether you capitalize versus expense items)

Instructions: Please respond to each question below with detailed answers

- x 1. Do you have a plan to remedy your financially distressed position?
 - a. If so, please provide a detailed copy. See 4 above. Already profitable.
 - b. If not, please provide a detailed explanation.
- Board 2. Who has the authority to set rates and fees? Do you have a board or committee separate from your local legislative body (board of mayor and aldermen, etc.)? No
 - 3. How many customers do you have currently? Please break out by metered, non-metered, billed and un-billed, and class (residential, commercial, etc.).
- See 3 4. What percentage of your sales do the largest ten (10) customers (by volume and by revenue) represent on a yearly basis?
 - 5. Do you have plans for a rate increase or decrease? No already done
 - a. If yes, has your board voted on it? Yes June 1, 2017
 - i. Please attach the relevant minutes that show all discussion and votes.
 - b. If no, please attach the minutes where the relevant discussion and vote took place to not change the current rate structure.
 - 6. What is the justification for the current structure of your rates? We are profitable 6-30-2018
 - Yes 7. Do you have written policies for rates and fees (how they are implemented and billed, including adjustments)?
 - See (5) a. If so, please provide a list of the applicable policies.
 - Annually b. How often do you review these policies?
 - 8. How do you make customers aware of the rates and fees you have in place? Public notice
- a. Is this done at least annually? If not, please explain.Customers notified of any increases. No major capital Do you have a capital asset plan/budget?
 - a. If so, how long does it forecast (5-year, 10-year, etc.)?
- except if paid for b. If you do not have a capital asset plan/budget, please justify why you do not.
- by independent funding (grants)

assets planned

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

- N/A 10. Do you review your capital asset list?
 - a. If so, please indicate the frequency it is reviewed (annually, semi-annually, etc.) and who reviews this list.
 - b. If you do not review your capital asset list, please justify why you do not.
- No 11. Do you have any environmental issues currently or forthcoming that will put a financial burden on the system?
- Yes 12. Do you have a leak adjustment policy?
- See (12) a. If so, what is the average yearly amount adjusted in gallons, cost to produce (or purchase), and lost revenue?
 - b. Please attach a copy of the policy.
- No
 13. Have you already, or do you plan to incur any new debt during the current fiscal year?
 a. If so, please provide a detailed explanation.
- No 14. Have you already, or do you plan to receive any grants or capital contributions during the current fiscal year?
 - a. If so, please provide a detailed explanation.
- No 15. Have you applied for grants that will be received over the next two years?
 - a. If so, please provide a detailed explanation.
- Producto. Do you produce or purchase your water supply?
 - a. If you produce your own water, (See 12) i What is the cost per tho
 - i. What is the cost per thousand to produce?
- N/A b. If you purchase your water,
 - i. What is the cost per thousand?
 - ii. Do you have a long-term purchase contract in place?
- (See 3) 17. Do you have any wholesale customers?
 - Yes a. Do you have written contracts with those customers?
 - 18. What is your current non-revenue water percentage?
 ⁹ 5%
 - No a. Do you have any plans for improving your non-revenue water percentage?
 - b. If so, please provide a detailed explanation.
 - 19. With respect to your governing board, how frequently do you meet and what is your practice of providing notice of your meetings? Monthly public notice
 - Yes 20. Has your governing body met the applicable training requirements?
 - (14) a. Please provide a list of Board members and their election/appointment dates.
 - b. Please review the training requirements at <u>https://www.comptroller.tn.gov/WWFB/</u>

Please mail, e-mail(preferred), or fax copies of any documentation to:

Water & Wastewater Financing Board ATTN: John Greer Fourth Floor Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243 Phone: (615) 747-5260 Fax: (615) 741-1551 utilities@cot.tn.gov



Sanitation system

Rate: \$15.00 per month Number of customers: 1,520

Water works system

Rate inside Town:\$7.00 for 1-2,000 gallons\$3.00 for each 1,000 gallons over 2,000Rate outside Town:\$15.50 for 1-2,000 gallons\$4.25 for each 1,000 gallons over 2,000Number of customers:3,748

Waste water system

Rate: minimum \$9.00 for 1-1,000 gallons \$5.00 for each 1,000 gallons over 1,000 Rate for Whitwell and Shellmound areas: minimum \$17.00 for 1-1,000 gallons \$9.00 for each 1,000 gallons over 1,000 Number of customers: 1,273

Sanitation system

Rate: \$15.00 per month Number of customers: 1,503

Water works system

Rate inside Town:\$6.00 for 1-2,000 gallons\$3.00 for each 1,000 gallons over 2,000Rate outside Town:\$11.50 for 1-2,000 gallons\$4.25 for each 1,000 gallons over 2,000Number of customers:3,731

Waste water system

Rate: minimum \$9.00 for 1-1,000 gallons \$5.00 for each 1,000 gallons over 1,000 Rate for Whitwell and Shellmound areas: minimum \$17.00 for 1-1,000 gallons \$9.00 for each 1,000 gallons over 1,000 Number of customers: 1,275

Sanitation system

Rate: \$15.00 per month Number of customers: 1,503

Water works system

Rate inside Town: \$5.60 for 1-2,000 gallons \$2.50 for each 1,000 gallons over 2,000 Rate outside Town: \$11.00 for 1-2,000 gallons \$3.75 for each 1,000 gallons over 2,000 Number of customers: 3,752

Waste water system

Rate: minimum \$9.00 for 1-1,000 gallons \$5.00 for each 1,000 gallons over 1,000 Rate for Whitwell and Shellmound areas: minimum \$17.00 for 1-1,000 gallons \$9.00 for each 1,000 gallons over 1,000 Number of customers: 1,340

Sanitation system

Rate: \$15.00 per month Number of customers: 1,476

Water works system

Rate inside Town:\$5.60 for 1-2,000 gallons\$2.50 for each 1,000 gallons over 2,000Rate outside Town:\$11.00 for 1-2,000 gallons\$4.00 for each 1,000 gallons over 2,000Number of customers:3,736

Waste water system

Rate: minimum \$5.00 for 1-1,000 gallons \$9.00 for each 1,000 gallons over 1,000 Rate for Whitwell and Shellmound areas: minimum \$9.00 for 1-1,000 gallons \$5.00 for each 1,000 gallons over 1,000 Number of customers: 1,301 14

.....

Sanitation system

Rate: \$15.00 per month Number of customers: 2,500

Water works system

Rate: \$5.60 for 1-2,000 gallons \$2.50 for each 1,000 gallons over 2,000 Number of customers: 3,800

Waste water system

Rate: minimum \$9.00 for 1-1,000 gallons \$5.00 for each 1,000 gallons over 1,000 Number of customers: 1,300

Town of Kenton

Kenton

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$269,890.00	\$260,344.00	\$258,725.00
Other Revenue	\$46,589.00	\$15,442.00	\$69,738.00
Operating Revenue	\$316,479.00	\$275,786.00	\$328,463.00
Operating Expenses	\$323,682.00	\$313,125.00	\$338,980.00
Operating Income	(\$7,203.00)	(\$37,339.00)	(\$10,517.00)
Non-Operating Revenue(Expenses)	(\$21,604.00)	(\$19,402.00)	(\$19,015.00)
Net Change In Position	(\$28,807.00)	(\$56,741.00)	(\$29,532.00)
Grant/Capital Contribution	\$539,708.00	\$92,195.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: Town of Kenton

Staff Summary:

On November 15, 2018, the Board ordered Kenton to complete the following:

- 1. By December 31, 2018, Town shall have MTAS, TAUD, or another qualified expert perform a rate study to include:
 - a. a review of all water rates, including a justification for differing rate classes;
 - b. a review of all sewer rates, including a justification for the differing rate classes; and
 - c. a proposed plan of action to remedy the Town's financially distressed condition.
- 2. The Town shall send the completed rate study, the proposed or implemented plan of action, and all supporting documentation to Board staff by February 15, 2019

The Town has not completed the directives of the November Board order. The Mayor informed staff that he would not be willing to spend \$1,000 on a rate study from TAUD, and that the Town's auditor would be handling it. The Town's auditor has submitted a letter to the Board with hypothetical rate increases, but stated:

"Note that the information provided above has not be audited by our firm. This letter was generated to provide information only and not to attest to the future profitability of the City of Kenton's water department."

The Town discovered that all commercial accounts were not being billed for any usage over 2,000 gallons. Staff does not know if the Town is planning on billing for the past usage.

Staff Recommendation:

Order the following:

- 1. By April 15, 2019, the Town shall contract with the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff to:
 - a. complete a rate analysis; and
 - b. justify the disparity between the commercial and residential water and sewer rates.
- 2. The Town shall send the completed rate analysis, the justification for the differing rates and all supporting documentation to Board staff by July 31, 2019.
- 3. The Town shall recover legally available revenue not billed due to statement errors in consult with its attorney. The Town shall submit to Board staff an update of these efforts by July 31, 2019.
- 4. Board staff is given the authority to grant one extension of the foregoing deadlines upon a showing of good cause by the Town.

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JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

5. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning March 1, 2020, until the Board releases the Town from its oversight.

DANNY JOWERS, MAYOR CHARLES CROUSON, CITY JUDGE SHAYNA JACKSON, RECORDER CITY OF KENTON KENTON, TENNESSEE 38233 (731) 749-5767

ALDERPERSONS: DELORES AGEE JOHN MAUGHAN WADE SIMPSON LISA SKINNER SARAH SKINNER GLENN ZARECOR

March 4, 2019

Water and Wastewater Financing Board Attn: John Greer Cordell Hill Building 425 Fifth Avenue North Nashville, Tennessee 37243

Dear Mr. Greer,

After reviewing and auditing our current water accounts, we have found an error in our Local Government billing software for the commercial accounts. The software glitch was only billing the commercial accounts for 2000 gallons (minimum amount) and not billing water over the 2000 gallon minimum. The software was billing the correct amount for sewer. After auditing fourteen commercial accounts, we have determined that those accounts were underbilled approximately \$5,000.00 for a twelve month period. It appears this glitch in the billing software has existed for many years. We do not know how this occurred but as of the March billing cycle we hopefully have corrected the error.

We have underbilled at least \$5,000.00 for periods that are now under review by the Water and Wastewater Financing Board. Great strides will be taken to assure this will not happen again.

Sincerely,

Danny Jowers Mayor



Members: American Institute of Certified Public Accountants | Tennessee Society of Certified Public Accountants Governmental Audit Quality Center | Private Companies Practice Section www.crscpa.com

Water and Wastewater Financing Board Atten: John Green Cordell Hill Building 425 Fifth Avenue North Nashville, Tennessee 37243

To whom it may concern:

Cowart Reese Sargent, CPAs, P.C. serve as the auditors for the City of Kenton, Tennessee. We have been asked to prepare this letter to evidence our knowledge of various efforts that the City of Kenton has made to improve the profitability of the Water and Sewer Fund in the next year and years to follow.

 In recent years, the City has been liable for a large payment for water tank maintenance. The contract for the maintenance agreement has an increased amount for the first five years of the contract which began in 2016. The last large payment is scheduled to occur in December, 2019 in the amount of \$49,340. The payments will then drop to approximately \$24,000 through 2024.

At the time that the City entered into the contract, they attempted to cover the cost by passing it along to the customers through a "Water Tank Maintenance Fee". For the year ended June 30, 2018 the fee was \$5.50 per customer. During the year the revenue from the maintenance fee totaled \$38,050.

Although the payment for the contract will decrease, the income from the maintenance fee will continue perpetually. The effects of the increase in the fee and the decrease in the cost to the City should increase profits by approximately \$14,050 beginning in 2020.

- City management has indicated that a proposal of a sewer rate increase of approximately \$1.50 per minimum will be presented to the board to affect the fiscal year ending June 30, 2019. If approved by the board, this would generate additional revenue of approximately \$10,530.
- The City has also voted to include an "Equipment Fee" on each bill at a rate of \$2 per month. This will generate additional revenue for the year ended June 30, 2019, of approximately \$13,920.

4) According to City management, an analysis of sales at the midpoint of the June 30, 2019, fiscal year, indicates a projected 8% increase in overall department sales over the year ended June 30, 2018. This increase will approximate \$21,334 in additional revenue.

The references above could generate additional revenue for the year ending June 30, 2019, totaling \$45,784, which would allow the City to operate at a profitable level.

Note that the information provided above has not be audited by our firm. This letter was generated to provide information only and not to attest to the future profitability of the City of Kenton's water department.

Sincerely,

Conart Rease Surger

Cowart Reese Sargent, CPAs, P.C. February 19, 2019 Dyersburg, Tennessee

WATER & SEWER RATES

RESIDENTIAL WATER:	First 2000 gallons for \$15.94
SEWER:	2001 gallons and above at \$4.92 per 1000 gallons First 2000 gallons for \$9.45 2001 gallons and above at \$1.87 per 1000 gallons
COMMERCIAL	
WATER:	First 2000 gallons for \$23.10
SEWER:	2001 gailons and above at \$4.50 per 1000 gallons First 2000 gallons for \$15.40
	2001 gallons and above at \$2.37 per 1000 gallons
LIGHT INDUSTRI	AL

LIGHT INDUSTRIAL

WATER:	First 2000 gallons for \$225.00
:	2001 gallons and above at \$4.97 per 1000 gallons
SEWER:	First 2000 gallons for \$150.00
•	2001 gallons and above at \$2.03 per 1000 gallons

HEAVY INDUSTRIAL

WATER:	First 2000 gallons for \$450.00
	2001 gallons and above at \$4.97 per 1000 gallons
SEWER:	First 2000 gallons for \$300.00
	2001 gallons and above at \$2.03 per 1000 gallons

SAMPLE MINIMUM BILL 2000 GALLONS

RESIDENTIAL	OLD RATE	NEW RATE
WATER	\$13.66	\$15.94
SEWER	\$ 8.10	\$ 9.45
GARBAGE	\$13.50	\$11.50
WRM	\$ 4.50	\$ 5.50
EQUIP		\$ 2.00
TAX	\$ 1.53	\$ 1.75
TOTAL	\$38.59	\$46.14
COMMERCIAL	OLD RATE	NEW RATE
WATER	\$19.80	\$23.10
SEWER	\$13.20	\$15.40
GARBAGE	\$13.50	\$11.50
WRM	\$ 4.50	\$ 5.50
EQUIP		\$ 2.00
TAX	\$ 1.93	\$ 2.25
TOTAL	\$50.43	\$59.75

City of Luttrell

Luttrell

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$362,261.00	\$319,751.00	\$415,442.00
Other Revenue	\$17,741.00	\$32,276.00	\$33,764.00
Operating Revenue	\$380,002.00	\$352,027.00	\$449,206.00
Operating Expenses	\$573,500.00	\$515,304.00	\$560,333.00
Operating Income	(\$193,498.00)	(\$163,277.00)	(\$111,127.00)
Non-Operating Revenue(Expenses)	(\$10,300.00)	(\$5,473.00)	(\$9,354.00)
Net Change In Position	(\$203,798.00)	(\$168,750.00)	(\$120,481.00)
Grant/Capital Contribution	\$35,600.00	\$360,129.00	\$0.00
Non-Operating Revenue(Expenses) Net Change In Position	(\$10,300.00) (\$203,798.00)	(\$5,473.00) (\$168,750.00)	(\$9,354.00) (\$120,481.00)



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: City of Luttrell

Staff Summary:

On November 15, 2018, the Board ordered Luttrell to complete the following:

- 1. The City shall require that all vendors contracted with the City's water and sewer system shall provide true documentation of their costs of services and transactions, including invoices and other proofs of payment.
- 2. The City shall hire a qualified expert to complete a comprehensive cost of service study of the City's water and sewer system. The qualified expert shall be pre-approved by Board staff. The City shall be under contract for said cost of service study by December 31,2018.
- 3. The City shall provide an update to Board staff on the City's compliance with this order, including providing all supporting documentation provided in the cost of service study, by March 1, 2019.

Staff has received no documentation. Buddy Petty of Rate Studies Inc. was hired well after the December 31 deadline, but has not finished his cost of service study.

Staff Recommendation:

Order the following:

- 1. The City shall perform all requirements of the Board's November 28, 2018 order, by June 15, 2019.
- 2. The City shall provide an update to Board staff on the City's compliance with this order, including submitting all supporting documentation provided in the cost of service study by June 30, 2019.

City of Mountain City

Mountain City

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$2,710,285.00	\$3,029,833.00	\$0.00
Other Revenue	\$59,143.00	\$41,722.00	\$0.00
Operating Revenue	\$2,769,428.00	\$3,071,555.00	\$0.00
Operating Expenses	\$2,848,075.00	\$3,120,464.00	\$0.00
Operating Income	(\$78,647.00)	(\$48,909.00)	\$0.00
Non-Operating Revenue(Expenses)	(\$22,802.00)	(\$24,118.00)	\$0.00
Net Change In Position	(\$101,449.00)	(\$73,027.00)	\$0.00
Grant/Capital Contribution	\$596,629.00	\$0.00	\$0.00
Grant/Capital Contribution	\$596,629.00	\$0.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: Town of Mountain City

Staff Summary:

On November 15, 2018, the Board ordered Mountain City to complete the following:

- The Town shall hire a qualified expert to complete a comprehensive cost of service study of the Town's water and sewer system. The qualified expert shall be pre-approved by Board staff. The Town shall be under contract for said cost of service study by December 31, 2018, and shall notify Board staff of the contract by January 15, 2019.
- 2. If the Town does not provide Board staff with the information required in paragraph 1 by January 15, 2019, Counsel shall issue a subpoena for the attendance of the Town's Board of Mayor and Aldermen at the Board's March 14, 2019, meeting.
- 3. The Town shall submit the completed cost of service study and supporting documentation to Board staff by May 31, 2019.

Mountain City did not hire a qualified expert to complete a comprehensive cost of service study. The Town did pass the MTAS recommended rates in full. Counsel issued subpoenas for the Town's Board of Mayor and Aldermen on January 24, 2019 per the order.

Staff Recommendation:

Order the following:

1. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning September 1, 2019, until the Board releases the Town from its oversight.

ORDINANCE #1613

AN ORDINANCE AMENDING ORDINANCE #1603, AN ORDINANCE AMENDING ORDINANCE #1588, AN ORDINANCE OF THE TOWN OF MOUNTAIN CITY, TENNESSEE ADOPTING THE ANNUAL BUDGET, TAX RATE AND WATER AND SEWER RATES FOR THE FISCAL YEAR BEGINNING JULY 1, 2018 AND ENDING JUNE 30, 2019

BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE TOWN OF MOUNTAIN CITY, TENNESSEE AS FOLLOWS:

SECTION 9: AMENDED

The operation of the water and sewer fund is maintained through the levy of rates and charges imposed for the use of services rendered by such water works and/or sewage system to be paid by the beneficiary of the services. The water and sewer rates required to operate the water and sewer fund for the fiscal year are as follows:

WATER RATES: Amended as follows effective upon second and final reading of this amended ordinance:

CITY WATER RATES

First	2,000 gallons (minimum bill)	\$11.00				
All over	Per Thousand	\$5.00				
	PLEASANT VALLEY WATER RATES					
First	2,500 gallons (minimum bill)	\$22.00				
All over	Per Thousand	\$7.00				
	DRY RUN WATER RATES					
First	2,500 gallons (minimum bill)	\$22.00				
All over	Per Thousand	\$7.00				
	WHOLESALE WATER RATES					

NECC – At Cost	\$4.38 per 1,000 Gallons
I Itility Districts	
Utility Districts	\$4.38 per 1,000 Gallons

Minimum: The minimum bill shall be stated above of a standard meter for all water funds. All others shall be determined by the size of the meter servicing the account. The flat rate charge for large meters is as follows:

Page | 1

Small Commercial Inside 5/8" (including 2,000 min)	\$13.00
Small Commercial Outside 5/8" (including 2,500 min)	\$24.00
Large Commercial Inside/Outside 1" (flat rate)	\$25.00
Large Commercial Inside/Outside 2" (flat rate)	\$50.00
Large Commercial Inside/Outside 3" (flat rate)	\$75.00
Large Commercial Inside/Outside 4" (flat rate)	\$100.00
Large Commercial Inside/Outside 6" (flat rate)	\$150.00
Large Commercial Inside/Outside 8" (flat rate)	\$200.00
Large Commercial Inside/Outside 10" (flat rate)	\$250.00
Large Commercial Inside/Outside 12" (flat rate)	\$300.00
Above 12"	\$500.00

Footnote: All 1" and above taps will be considered commercial.

SEWER RATES: Amended as follows effective upon second and final reading of this amended ordinance:

CITY SEWER RATES

First 2,000 gallons (minimum)	\$8.00
All Over (per thousand)	\$4.00

PLEASANT VALLEY SEWER RATES

First 2,500 gallons (minimum)	\$16.00
All Over (per thousand)	\$7.00

WHOLESALE SEWER RATES

NECC – At Cost

\$5.47 per thousand Gallons

- SECTION 10: All other fees including water and sewer tap fees, subdivision fees, solid waste fees, building and sign permit fees, and any other additional miscellaneous fees for the fiscal year are listed in the detailed financial plan that is attached to the original Budget Ordinance #1588.
- SECTION 11: Any other charges not set forth in this budget or by standard city policy for the fiscal year shall remain the same with the exception of budget amendments by city ordinance, or policies as approved by the Board of Mayor and Aldermen through due process of the Town of Mountain City, Tennessee.
- SECTION 12: All ordinances or parts of ordinances in conflict with any provision of this ordinance are hereby repealed.

SECTION 13: This ordinance shall take effect February 1, 2019, the public welfare requiring it.

12-10-18

Passed First Reading

1-8-19

Passed Second and Final Reading

Vice T moyor don

Kevin Parsons, Mayor

ATTESTED:

D

Sheila Shaw, City Recorder

George T. Wright, City Attorney

MINUTES OF A REGULAR MEETING OF THE TOWN OF MOUNTAIN CITY BOARD OF MAYOR AND ALDERMEN, TUESDAY, DECEMBER 4, 2018

CALL TO ORDER 6:30 p.m. in the City Council Room by Mayor Kevin Parsons

ROLL CALL

Mayor Kevin Parsons - Present Vice Mayor Jerry Jordan - Present Alderman Bud Crosswhite - Not Present Alderman Lawrence Keeble - Present Alderman Bob Morrison - Present

INVOCATION

Vice Mayor Jerry Jordan

PLEDGE OF ALLEGIANCE TO THE AMERICAN FLAG Alderman Bob Morrison

PRESENTATIONS

None

PUBLIC HEARINGS

None

STATEMENT OF ORAL COMMUNICATIONS

Robert Wills was present to speak on behalf of the Johnson County Softball Boosters. He requested permission to hold a roadblock. Motion was made by Mayor Parsons to approve the roadblock. Alderman Morrison seconded the motion. The motion passed with all present members voting "aye ".

Harvey Burniston was present to ask permission to take out a traffic island that he believes is hazardous to people when exiting his business. He advised he had purchased the lots to the right of the Garden Barn, and there is an island at the exit of the property that is not visible when exiting. He requested permission to remove the island at his own expense. Mayor Parsons instructed Mr. Burniston to get with Public Works Director Gary Phillips and make sure to check with TDOT since it may be on the right of way. Mr. Phillips advised that he had spoken with them and he believes it is acceptable for Mr. Burniston to remove the island. Mayor Parsons made a motion to approve Mr. Burniston's request to remove the island. Vice Mayor Jerry Jordan seconded the motion. The motion passed with all present members voting "aye".

CONSENT CALENDAR

All matters listed on the consent calendar to be approved with one motion unless a member of council requests separate action on a specific item.

- 1. Approval of minutes: November 13, 2018 City Council Meeting
- Second and Final Reading of the following Budget Amendment Ordinance: # 1608 \$4,388.00 43100-400 STR/Red Light Maintenance

Alderman Bob Morrison made a motion to approve the Consent Calendar. Mayor Parsons seconded the motion. The motion passed with all present members voting "yes" on roll call vote.

COUNCIL MEMBER ITEMS OF CONCERN/COMMENTS

ALDERMAN LAWRENCE KEEBLE

Alderman Keeble thanked the people for his election to the City Council.

Alderman Keeble asked about an old policy to prohibit trucks on North Church Street. He would like for the Town to do all it can to enforce this policy. He advised that he had had some complaints and had not made any promises, but told the complainant he would check into it. He advised that the trucks cause damage to the road and that paving the road and future maintenance is not cheap.

Alderman Keeble also asked about the possibility of an inter-local agreement with the county regarding the hiring of police officers.

ALDERMAN BOB MORRISON

City Council Meeting December 4, 2018 Page 2

Alderman Morrison wanted to thank all employees who have been working during the holidays to keep everyone safe.

VICE MAYOR JERRY JORDAN

Vice Mayor Jordan stated he appreciated all the employees and wanted to wish everyone a Blessed and Merry Christmas.

Vice Mayor Jordan also stated the camper trailer on Fairview Avenue has been moved.

MAYOR KEVIN PARSONS

Mayor Parsons stated that he had to appoint an alderman to the planning commission and would like to have this as an item on next month's agenda.

CITY RECORDER SHEILA SHAW

City Recorder Shaw asked the Board to change the January City Council Meeting to Tuesday January 8, 2019 due to the first Tuesday of the month being New Year's Day. Vice Mayor Jerry Jordan made the motion to move the meeting to the second Tuesday January 8, 2019. Alderman Bob Morrison seconded the motion. The motion passed with all present Board members voting "aye ".

City Recorder Shaw reminded everyone the employee Christmas dinner will be December 12, 2018 at the Community Center at 12:00 p.m.

City Recorder Shaw advised the Board the Town had received a response from the Water and Wastewater Financing Board regarding their order from earlier in the year. Ms. Shaw stated the Water and Wastewater Financing Board did not accept the Town's steps being taken as a result of the order and have now issued the Town a new order. This order states the Town must have a cost of service study done by a qualified expert and there must be a contract for this study in place by December 31, 2018. If this study is not completed, the Board of Mayor and Aldermen will be subpoenaed to appear before the Water and Wastewater Financing Board in March of 2019.

After a lengthy discussion, Mayor Parsons suggested sending a letter to State Representative Timothy Hill and State Senator Jon Lundberg and explain our situation to them and see if they could help in any way. Mayor Parsons also suggested recessing this meeting and reconvening on December 18, 2018 and ask Representative Hill and Senator Lundberg to attend the meeting. The Board agreed to make a decision concerning the new order when this meeting reconvenes.

CITY ATTORNEY GEORGE WRIGHT

City Attorney George Wright advised he had nothing at this time, but was working on the ordinances to allow liquor and beer inside the city.

COLLECTION-DISTRIBUTION SUPERINTENDENT CHRIS HOOK

Collection-Distribution Superintendent Chris Hook had nothing at this time.

CHIEF OF POLICE DENVER CHURCH

Chief of Police Denver Church advised the Board that the Police Department was short one officer. He stated he had three applications he would like to consider before advertising for an officer. Vice Mayor Jerry Jordan expressed concern about looking at past records of applicants. He stated the Town does not need to hire officers who are going back and forth between departments.

BUILDING INSPECTOR JESSE COMPTON

Building Inspector Jesse Compton advised he has issued certificates of occupancy to Taco Bell and KFC. He also stated that he had received a complaint about a shed on Fairground Lane. City Recorder Shaw advised him that would need to go to the Planning Commission for review.

PARKS AND RECREATION DIRECTOR FLO BELLAMY

Parks and Recreation Director Flo Bellamy had nothing at this time.

PUBLIC WORKS DIRECTOR GARY PHILLIPS

Public Works Director Gary Phillips had nothing at this time.

City Council Meeting December 4, 2018 Page 3

At this time, Mayor Parsons asked everyone to visit the water plants.

NEW BUSINESS

1. Election/Selection of Vice Mayor for the Town of Mountain City for the next two years.

Mayor Parsons asked to table this item until the next meeting, due to Alderman Bud Crosswhite not being present.

2. Approve the hiring of Justin Johnson as Patrolman.

Mayor Parsons introduced Justin Johnson. Officer Johnson gave some background. Mayor Parsons congratulated him on doing a good job. Alderman Morrison made the motion to accept the hiring of Officer Johnson. Vice Mayor Jordan seconded the motion. The motion passed with all present members voting "aye".

3. Accept the resignation of Patrolman Richard Norris and discussion concerning his employment contract.

Mayor Parsons explained that Mr. Norris had resigned from his position as patrolman not even one year into his two year contract. Mayor Parsons stated that Mr. Norris should receive a bill for the school, travel pay, and pay while at the school. City Attorney George Wright advised that his wages could not be included, but uniforms and other expenses could be. City Recorder Shaw said that she had spoken with Mr. Norris and that he said he would pay if he had the money. City Attorney Wright advised that the city could sue and get a judgement and garnish his wages. There was a lengthy discussion about the option of payments and how long he should be given to pay. All Board members agreed to have City Recorder Shaw send Mr. Norris a bill for the amount owed to the Town. Vice Mayor Jordan then made a motion to add to the Town's employment contract with non-certified officers that they will also reimburse the Town for any attorney fees and court costs. Mayor Parsons seconded the motion. The motion passed with all members present voting "aye".

4. Approve the filing of a Hazard Mitigation Flood Grant through FEMA in conjunction with the Johnson County EMA.

Public Works Director Gary Phillips spoke of a \$200,000 grant to repair drainage issues in the Homar Subdivision. He stated it is a 75/25 grant. He also advised that the grant had been in the works for almost two years. He said he appreciated the Johnson County EMA for helping with the grant. Vice Mayor Jerry Jordan made the motion to approve the filing of a Hazard Mitigation Flood Grant. Mayor Parsons seconded the motion. The motion passed with all present members voting "yes" on roll call vote.

5. First Reading of the following Budget Amendment Ordinances:

#1609	\$398.00	44420-340	CC/Repairs to Ice Machine
2010/02/2010 02:00			
#1610	\$52,300.00	52100-338	WP/Telemetry
#1611	\$44,800.00	52200-340	WWTP/Sludge Spill
#1612	\$1,250.00	41520-252	CA/Ethics Complaint

Alderman Bob Morrison made a motion to approve Budget Amendment Ordinances #1609, #1610, #1611, and #1612. Mayor Parsons seconded the motion. Roll call vote was Mayor Parsons, yes; Vice Mayor Jordan, abstained due to the fact #1612 pertained to him; Alderman Keeble, yes; Alderman Morrison, yes. Motion carried.

ADJOURNMENT

At this time, Alderman Morrison made a motion to recess the meeting until Tuesday, December 18, 2018 at 5:00 p.m. Mayor Parsons seconded the motion. The meeting recessed at 7:43 p.m.

City Recorder Sheila Shaw

MINUTES OF THE RECONVENED MEETING OF THE TOWN OF MOUNTAIN CITY BOARD OF MAYOR AND ALDERMEN, TUESDAY, DECEMBER 18, 2018 AT 5:00 P.M.

CALL TO ORDER Mayor Kevin Parsons

ROLL CALL

Mayor Kevin Parsons – Present Vice Mayor Jerry Jordan – Present Alderman Bud Crosswhite – Present Alderman Lawrence Keeble – Present Alderman Bob Morrison – Present

Trish Burchette, Director of the ACTION Coalition, was present to address the Board concerning a grant. She had information about a grant called the HRSA Grant. She was requesting a letter from the City showing support for the ACTION Coalition. Mayor Parsons said that the ACTION Coalition could provide training to businesses on subjects such as liquor by the drink. Mayor Parsons made a motion to help the ACTION Coalition by sending the letter of support. Alderman Bob Morrison seconded the motion. The motion passed with all present Board members voting "aye".

At this time, the meeting was joined by State Comptroller Chief of Staff Jason Mumpower by telephone, along with State Senator Jon Lundberg. Also present by phone was John Greer, Utility Specialist, and John Dunn and Rachel Buckley with the Comptroller's Office. Mr. Mumpower explained that the Water and Wastewater Financing Board (WWFB) considered the Town non-compliant with the order they had issued in April of this year. Mr. Mumpower stated the Town had a couple of options. The first option was for the Town to comply with the WWFB's second order, that being to have a cost of service study done and a contract in place by December 31, 2018. The other option would be for the Town to adjust water and sewer rates at this meeting.

Mr. Mumpower suggested that the Town show a real meaningful and robust effort to comply with the rate changes and it might go a long way to correct the issue with the WWFB. He advised if the cost of service study isn't done, the Town will be non-compliant with the second order and the Board will be subpoenaed to appear before the WWFB in Nashville on March 14, 2019. Mr. Mumpower said that if the Town could show increase in revenue and sufficient rates that the WWFB might be more understanding. He advised the Town not to "tinker around the edges". Mayor Parsons asked Mr. Mumpower if the Town were to adjust the rates according to what MTAS recommended if the Board would still have to go to Nashville in March. Mr. Mumpower said yes. He said the WWFB can't rescind the order but it would give the Town a chance to explain and prove their efforts to remedy the situation. He said if the Town spent money on a rate study they would just end up raising the rates anyway.

Vice Mayor Jordan asked if the Town goes ahead and uses the rates from MTAS' recommendation, would it please the WWFB? John Greer, Utility Specialist, told Mr. Jordan that it would help if the Town of Mountain City had a couple of months proof to show the WWFB. City Recorder Shaw advised the Board changing the water and sewer rates would require two readings and a public hearing. She continued that if the Board approved the water and sewer rates changes on first reading at this meeting and the second and final at the January meeting, there would only be one month revenue to present to the WWFB in March. Mr. Mumpower also stated that if the Town went forward with the cost of service study as per the order then the Town would be compliant with the order and would not have to appear before the WWFB in Nashville in March.

Alderman Lawrence Keeble asked if the Town agreed to change the water and sewer rates according to MTAS' recommendation, would the WWFB be satisfied. Mr. Mumpower stated he believes they would be.

Alderman Keeble then made a motion to accept the MTAS water and sewer rate study and change water and sewer rates as recommended in that study and approve on first reading. Vice Mayor Jerry Jordan seconded the motion. The motion passed with all members voting "yes" on roll call vote.

Mr. Mumpower stated that the decision would be positive for both the business and residential customers and will help with the WWFB's actions. He advised the Board of Mayor and Aldermen to bring documented proof of rates and improvement to Nashville. Vice Mayor Jordan asked for confirmation that the Town can charge what they are presently charging until the second reading. John Greer confirmed that the rates from the MTAS study would go into effect after the second reading.

ADJOURNMENT

There being nothing further to discuss, Alderman Bob Morrison made the motion to adjourn, seconded by Mayor Parsons. The meeting adjourned at 5:31 p.m.

City Recorder Sheila Shaw

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MINUTES OF A REGULAR, BUT RESCHEDULED, MEETING OF THE TOWN OF MOUNTAIN CITY BOARD OF MAYOR AND ALDERMEN HELD, TUESDAY, JANUARY 8, 2019.

A regular, but rescheduled, meeting of the Town of Mountain City, City Council was called to order at 6:30 pm, by Vice Mayor Jerry Jordan, held in the city council room at the Town of Mountain City, 210 South Church Street, Mountain City, Tennessee.

Members present:

Vice Mayor Jerry Jordan Alderman Bud Crosswhite Alderman Lawrence Keeble Alderman Bob Morrison

INVOCATION

The invocation was given by Vice Mayor Jerry Jordan.

PLEDGE OF ALLEGIANCE TO THE AMERICAN FLAG: The Pledge of Allegiance was led by Alderman Bob Morrison.

PRESENTATIONS

Memorial Proclamation to the family of Mr. Bill Brookshire, who was a prominent figure in the business and civic community.

The Memorial Proclamation was presented by Alderman Bob Morrison.

PUBLIC HEARINGS

Public Hearing and Second and Final Reading of Ordinance #1613, an ordinance amending Ordinance #1603, an ordinance amending Ordinance #1588, an ordinance of the Town of Mountain City, Tennessee adopting the annual budget, tax rate and water and sewer rates for the fiscal year beginning July 1, 2018 and ending June 30, 2019.

Vice Mayor Jerry Jordan opened the floor for comments. None were put forth. Alderman Bob Morrison then made a motion to approve Ordinance #1613 on second and final reading. Alderman Bud Crosswhite seconded the motion. All members present voted yes on a roll call vote.

STATEMENT OF ORAL COMMUNICATION

The public may address the members of the City Council on any matters within the jurisdiction of the City Council. Speakers are requested to limit their comments to five minutes each. Speaker cards must be completed and are located at entrance to council room.

None

CONSENT CALENDAR

All matters listed on the consent calendar to be approved with one motion unless a member of council requests separate action on a specific item.

1. Approval of minutes: December 3, 2018 City Council Organizational Meeting December 4, 2018 City Council Recessed Meeting

December 18, 2018 City Council Reconvened Meeting

2	Second and	Final	Reading o	f the fo	lowing	Budget	Amendment	Ordinances:

#1609	\$398.00	44420-340	CC/Repairs to Ice Machine
#1610	\$52,300.00	52100-338	WP/Telemetry
#1611	\$44,800.00	52200-340	WWTP/Sludge Spill
#1612	\$1,250.00	41520-252	CA/Ethics Complaint

Alderman Lawrence Keeble made a motion to approve the consent calendar. Alderman Bud Crosswhite seconded the motion. All present members voted yes on a roll call vote.

END OF CONSENT CALENDAR

City Council Meeting January 8, 2019 Page 2

COUNCIL MEMBER ITEMS OF CONCERN/COMMENTS

 Vice Mayor Jerry Jordan stated Larry Hutchinson has asked for gravel for his driveway. He stated he let the City run a water line through it to service the house behind him. City Attorney George Wright suggested Mr. Hutchinson ask his neighbor to provide the gravel since his driveway is not a City street. Vice Mayor Jordan stated he would let Mr. Hutchinson know.

Vice Mayor Jordan asked about the AVL's for the police vehicles. City Recorder Sheila Shaw stated the AVL's had been installed and were working, but not able to go to 911 yet.

Vice Mayor Jordan stated the Mountain City Animal Shelter has a new 911 address.

- 2. Alderman Lawrence Keeble thanked all the Town employees.
- Alderman Bob Morrison stated he was impressed with all the police have been doing around the City lately. Alderman Morrison stated he was thankful and appreciative to all the Town employees.
- 4. Alderman Bud Crosswhite None
- 5. Mayor Kevin Parsons Not present

CITY RECORDER- SHEILA SHAW

City Recorder Sheila Shaw asked the Board about the possibility of putting a crosswalk across Main Street at the red light on Murphey and Main because so many children walk to the community center after school. Alderman Bob Morrison asked if there needed to be a crosswalk on College Street as well. Public Works Director Gary Phillips stated he would look into it and check with TDOT. Alderman Lawrence Keeble then made a motion to authorize the crosswalks. Alderman Bud Crosswhite seconded the motion. All members present voted yes by raising their right hands.

City Recorder Shaw informed the Board there would be a ribbon cutting at the Johnson County Library on January 25, 2019 at 1 pm.

CITY ATTORNEY- GEORGE WRIGHT

City Attorney George Wright stated he is still working on the alcohol and package store ordinances and will eventually need to have a work session.

City Attorney Wright stated he filed an objection to the Attorney General's Lawsuit on the opioid crisis.

DEPARTMENT SUPERVISOR REPORTS/COMMENTS

PUBLIC WORKS DIRECTOR-GARY PHILLIPS

Public Works Director Gary Phillips stated the main drainage ditch near John Icenhour's property has become a major issue for the entire Willow Circle area. The drainage ditch is on Sterling Carroll's property and he has agreed to purchase a new tile if the City will install it. Public Works Director Phillips stated the only issue is it is on private property, but by fixing the problem it would repair the issue for that entire area.

Alderman Bob Morrison stated he thought fixing the issue would be a good thing to do. Alderman Morrison made a motion to authorize the repair. City Attorney George Wright stated he felt it would not be a problem as long as it benefitted more residents other than the property owner. Alderman Bud Crosswhite seconded the motion. All members present voted yes by raising their right hands.

Public Works Director Gary Phillips stated there were multiple drainage problems on Shoun Street. His crews have used the jet rodder to try to clear the tiles but have been unable to do so. Mr. Phillips stated the tiles were operating on one-third capacity and that renting a sewer vac might help. Collection-Distribution Superintendent Chris Hook stated it would be better in the long run to purchase the piece

City Council Meeting January 8, 2019 Page 3

of equipment instead of renting it. Mr. Hook stated it could be used in multi departments. Mr. Hook asked the Board for permission to look into buying versus renting. Vice Mayor Jordan asked to see the different options and prices. Alderman Morrison asked for options and to table the subject until the next meeting.

Public Works Director Gary Phillips stated Bennie Campbell had slipped on ice and broken his hip. Mr. Phillips asked the Board for permission to hire a temporary employee until Mr. Campbell is able to return to work. City Recorder Sheila Shaw stated Mr. Campbell would be out of work at least six months.

Alderman Bob Morrison made a motion to authorize hiring a temporary employee. Alderman Bud Crosswhite seconded the motion. Motion carried with all members present saying "aye."

COLLECTION-DISTRIBUTION SUPERINTENDENT- CHRIS HOOK

Collection-Distribution Superintendent Chris Hook asked the Board to declare his old dump truck surplus so that it could be sold on Govdeals. Alderman Morrison made a motion to proceed. Alderman Bud Crosswhite seconded the motion. Motion carried with all members present saying "aye".

Vice Mayor Jerry Jordan asked for an update on the Pedro Shoun construction. Mr. Hook stated the water would be turned off on Thursday, January 10, 2019 so they could do the tie-ins.

PARKS AND RECREATION DIRECTOR- FLO BELLAMY

Parks and Recreation Director Flo Bellamy stated she would be having a prison crew coming to paint the Community Center, but they will be gone by the time the children get to the Center after school.

Parks and Recreation Director Flo Bellamy thanked the Board for agreeing to put in a crosswalk for the children walking to the center from the elementary school.

POLICE CHIEF- DENVER CHURCH

Police Chief Denver Church asked the Board for permission to use different lettering on the new patrol cars. Chief Church provided the Board members a copy of the new proposed lettering. Alderman Bob Morrison made a motion to change the lettering. Vice Mayor Jerry Jordan seconded the motion. Motion carried with all present members saying "aye."

FIRE CHIEF- GARY STOUT

None

BUILDING INSPECTOR- JESSE COMPTON

Building Inspector Jesse Compton informed the Board of the projects he had recently completed. Mr. Compton also stated he was working full time with another employer, but would still be able to fulfill his inspector duties.

NEW BUSINESS

1. Election/Selection of Vice Mayor for the Town of Mountain City for the next two years as tabled from last month's meeting.

Alderman Lawrence Keeble made a motion to have Bud Crosswhite the new Vice Mayor. Alderman Bob Morrison seconded the motion. Motion carried with all present members saying "aye."

2. Appoint a member to fill the alderman vacancy on the Mountain City Planning Commission.

Table item until next month.

 Discussion concerning a "No Thru Trucks" Policy for North Church Street and Divide Road.

Alderman Keeble asked about the possibility of adopting an ordinance to this affect. City Attorney George Wright stated an ordinance would have to be very specific. He felt the "No Thru Trucks" just needed to be enforced by law enforcement. After much City Council Meeting January 8, 2019 Page 4

discussion, City Attorney George Wright stated he would look into the issue and get the specific information for the next meeting.

4. Discussion from Bethany Anderson concerning the Johnson County Farmer's Market.

Bethany Anderson stated the Farmer's Market is now in its winter session and that it meets at the Welcome Center. Mrs. Anderson stated she hoped they would be able to come back to Ralph Stout Park in the spring and summer.

Mrs. Anderson formally asked to be able to use Ralph Stout Park starting in May and going through October. Alderman Bud Crosswhite stated the Farmer's Market could not rope off the parking lot like they had the previous year. Mrs. Anderson stated this year there would be no Tuesday market. It will be on Saturday mornings only. Alderman Bud Crosswhite also stated it would be a good idea for Mrs. Anderson to contact Dan Taylor at TNT Outdoors so the free fishing day in June wouldn't conflict with the Farmer's Market as it did last year.

Alderman Bob Morrison made a motion to allow the Farmer's Market to use Ralph Stout Park and for them to work with City Recorder Sheila Shaw and other events held at the park. Alderman Bud Crosswhite seconded the motion. Motion carried with all present members saying "aye."

5. First Reading of the following Budget Amendment Ordinances:

#1614	\$5,000.00	44420-329	CC/Donation
#1615	\$4,050.00	42100-332	PD/Vehicle Parts (Ins Pass Thru)
#1616	\$14,384.00	52100-338	WP/Telemetry
#1617	\$890.00	42200-340	FD/Other Repairs/Maint
#1618	\$518.00	43100-340	STR/Other Repairs/Maint
#1619	\$436.00	52100-340	WP/Other Repairs/Maint
#1620	\$588.00	52200-340	WWTP/Other Repairs/Maint
#1621	\$500.00	44143-251	AC/Donation
#1622	\$270.00	44143-300	AC/Donation
#1623	\$3,385.00	41990-146	OGGE/WC Insurance
	\$1,997.00	41990-511	OGGE/Insurance Buildings
#1624	\$317.00	44420-146	CC/WC Insurance
#1625	\$2,534.00	52100-146	WP/WC Insurance
#1626	\$534.00	52300-146	CD/WC Insurance

Alderman Bob Morrison made a motion to approve. Alderman Bud Crosswhite seconded the motion. All present members voted yes on a roll call vote.

ADJOURNMENT

Alderman Bob Morrison made a motion to adjourn the meeting at 7:36 pm. Vice Mayor Jerry Jordan seconded the motion. Meeting adjourned.

a.

City Recorder Sheila Shaw

mpc

Town of Oneida

Oneida

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$2,514,835.00	\$2,598,815.00	\$2,659,093.00
Other Revenue	\$197,954.00	\$208,092.00	(\$172,548.00)
Operating Revenue	\$2,712,789.00	\$2,806,907.00	\$2,831,641.00
Operating Expenses	\$2,618,865.00	\$2,362,923.00	\$2,593,825.00
Operating Income	\$93,924.00	(\$94,470.00)	\$237,816.00
Non-Operating Revenue(Expenses)	(\$96,343.00)	(\$82,763.00)	(\$82,247.00)
Net Change In Position	(\$2,419.00)	(\$177,233.00)	\$155,569.00
Grant/Capital Contribution	\$152,856.00	\$426,631.00	\$43,766.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: Town of Oneida

Staff Summary:

On March 29, 2018, the Board ordered Oneida to complete the following:

- 1. The Town shall bring in the Municipal Technical Advisory Service, Tennessee Association of Utility Districts or another qualified expert to complete a rate study or analysis and assist with the following:
 - a. Review of tap fees and the actual cost of installation;
 - b. Creating a new customer contract;
 - c. Creating/implementing a 5-year capital asset budget (to be taken from the current capital asset list and include future anticipated needs);
 - d. Review of inside/outside rates and the cost of serving outside of the corporate boundaries;
- 2. The Town shall provide an update to Board staff with the completed rate study and an implemented or proposed plan of action by August 31, 2018.

On November 15, 2018, the Board ordered Oneida to complete the following:

1. The Town shall comply with all the directives of the Board's April 17, 2018 order by January 31, 2019.

2. If the Town fails to comply with this order, Board staff shall refer the Town to the Attorney General's Office to pursue enforcement proceedings.

The Town has complied with all directives of the Board.

Staff Recommendation:

1. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning September 1, 2019, until the Board releases the Town from its oversight.

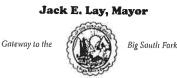
Alde	rmen
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Jeff Tibbals Linda Lay Mark Byrd Allison Mays

January 14, 2019

Town of Oneida

ONEIDA, TENNESSEE 37841



P. O. Box 4237

423-569-8300 423-569-4295 FAX 423-569-2990

Office of State and Local Finance/COT

FEB 0 4 2019

Water and Wastewater Financing Board Attn: John Greer Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243

Time Received

Dear John Greer:

This letter is a follow up to the request from Anna V. Butterworth, Chair Water and Wastewater Financing Board concerning deficiencies in the Town's Water and Wastewater fund.

A. Please find attached is the towns review of Tap Fees and actual cost of installation.

B. The Utility answered the question incorrectly in the letter dated February 28, 2018, concerning the use of new customer contracts. The Water and Sewer department has been using new customer contracts since 1995. Please see attached copy of an agreement signed 6-27-1995. The customer does get a copy of said contract.

C. Please find attached is a copy of the five year capital asset budget plan.

D. Please find attached is a review of inside / outside rates and cost of serving outside of corporate boundaries. Also attached is a copy of the response to Director order and LARR returning Oneida back into compliance with THM and Haa5. DBP reduction study, General System Assessment and more.

If you have any question, please feel free to contact me at (423) 569-4295 or Dennis E. Jeffers CPA, PC or Stephen T. Owens at (423) 569-4008.

Sincerely,

Jack E. Lay, Mayor Town Of Oneida

McCreary County Water District P.O. Box 488 Whitley City, KY 42653 (606) 376-2540

December 18, 2017

RE: Stephen T. Owens

To whom it may concern:

It is with great pleasure that I give recommendation for Stephen T. Owens. Stephen has always displayed a high degree of integrity, responsibility, and ambition. He is definitely a leader rather than a follower. In addition to his excellent management skills and accomplishments, he has proven his quick ability to excel in any job he has held in his thirty eight years of employment with McCreary County Water District. The District accredits over fifty two million dollars in construction projects to Stephen's leadership, along with the day to day responsibilities as Manager/Superintendent. He is recognized by his peers as an excellent Manager/Superintendent.

Stephen T. Owens was employed by the McCreary County Water District from 1979 to September 2017. His duties have included Line Foreman; Service Manager; and Assistant Manager from 1988 through January of 1990 when he became General Manager. Stephen holds Class IV A. Water Treatment Plant; Class IV Distribution; and Class III Wastewater Operator licenses. He also holds a Land Farm Operators license, Equipment Operators license; is a Certified Meter Tester; and is a graduate of the Utility Management Institute. In 2008 Stephen was nominated for the Meritorious Operator of the Year Award for the Ky/Tn Section of the American Water Works Association. He was elected to the KRWA Board of Directors in August 2007 and has served as President from 2014-2015 and continues to be active in various state and local activities.

He would be a good example for any water profession and I am happy to give him my wholehearted endorsement.

If you have any question, please feel free to call me at (606) 376-2540.

Sincerely,

Randy Kidd, Chairman McCreary County Water District

RK/kt

Executive summery

The following report details Old and New proposed rates for inside and outside rates and justification using several supporting documents including our water treatment study, specific Hydraulic issues with aged water combined with TOC concentrations and CL2 causing TTHM, HAA5 formation. A breakdown in customer inside and outside percentages, customer per mile and average distance between services in feet. Raw Water needs caused by added outside customers. Oneida has requested funding for a new raw water source. we are currently working with NRCS on a study funded by them to research our request and options. Ralph Smith with NRCS is in charge of the program and research.

This study is not to be considered a detailed rate study, but a general system assessment and recommendations to justify inside and outside rates with explanations in the General System Assessment. We are aware of discussions and opinions on inside and outside rates and have concluded in our case warrants different rate structures. The cost to produce our water is \$1.58 per thousand gallons and the cost to deliver to the outside areas is 45.4% higher cost. "Many of the Cities across the state have similar rates out of 228 cities with sewer systems, 87 of 89 that provide both water and sewer service charge a different rate to outside customers for one or both services. However, the most common markups are 40% to 50% more than the inside rate". This quote was taken from the January 2014 report on House bill 600.

YEAR	From	2017	То	2018	
Water Inside - (20 Per 1000	000 gal Min)	\$13.38 \$ 5.03		\$14.45 \$ 5.43	
Water Outside - (20 Per 1000	000 gal Min)	\$19.64 \$ 7.73		\$21.21 \$ 8.35	
Sewer Inside - (20 Per 1000	000 gal Min)	\$18.56 \$ 9.28		\$20.04 \$10.02	
Sewer Outside - (20 Per 1000	000 gal Min)	\$19.66 \$ 9.83		\$21.24 \$ 10.62	

Note: A Rate Increase that went into Effect June 30, 2018 provided a 7.4 % increase on the existing water and sewer rate structure.

Proposed New Water and Sewer Rate Increase Effective June 30, 2019

The Rate study showed a June 30, 2019 Proposed New Water increase of \$.42 cents per month minimum bill (2000 gal) for both Inside and Outside areas and a \$.25 cent per 1000 gal after the minimum for inside and outside customers.

A June 30, 2019 Proposed New Sewer increase of \$.42 cents per minimum bill (2000 gal) for both inside and outside areas and a \$.21 cent per 1000 gal after the minimum for inside and outside customers.

YEAR	From	2018	То	2019	
Water Inside - Per 1000	(2000 gal Min)	\$14.45 \$ 5.43		\$14.87 \$ 5.68	
Water Outside - Per 1000	(2000 gal Min)	\$21.21 \$ 8.35		\$21.63 \$ 8.60	
Sewer Inside - Per 1000	(2000 gal Min)	\$20.04 \$10.02		\$20.46 \$10.23	
Sewer Outside - Per 1000	(2000 gal Min)	\$21.24 \$10.62		\$21.66 \$10.83	

TOWN OF ONEIDA, TENNESSEE WATER AND SEWER DEPARTMENT STATEMENT OF NET POSITION For the Year Ended June

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		Audit 2015		Audit 2016		Audit 2017		Audit 2018		Projected 2019
ASSETS	-							2010	2	2017
Current Assets										
Cash on Hand and in Banks	\$	1,182,901	\$	1,326,829	\$	1,459,851	\$	1,645,129	\$	2,130,219
Accounts Receivable										
Net of Allowance for Doubtful Accounts		451,977		572,177		448,789		561,861		697,564
Utility Deposits		1,665		1,665		1,665		1,665		1,665
Inventory		202,104		171,707		169,200		176,622		160,000
Total Current Asset		1,838,647		2,072,378		2,079,505		2,385,277		2,989,448
Capital Assets										
Capital Assets Costs		29,384,707		29,633,301		30,207,207		30,409,093		30,439,093
Less: Accumulated Depreciation		(11,689,100)	((12,227,388)		(12,765,842)		(13,273,072)	((13,781,808)
Total Capital Assets Net Depreciation		17,695,607		17,405,913		17,441,365	·	17,136,021		16,657,285
Total Assets		19,534,254	_	19,478,291	_	19,520,870	_	19,521,298	_	19,646,733
LIABILITIES							5			
Current Liabilities (AP, Accrued, Current LTD)		310,579		317,200		327,251		349,058		350,000
Long Term Liabilities		3,335,000		3,140,000		2,940,000		2,735,000		2,525,000
Total Liabilities		3,645,579		3,457,200		3,267,251		3,084,058	-	2,875,000
Deferred inflow on bonds premium		150,299		132,278		115,408		99,688		99,688
Net Position										
Investment in Ca[ital Assets										
Net of Related Debt	\$	14,170,607	\$	14,070,913	\$	14,301,365	\$	14,196,021	\$	14,132,285
Unrestricted		1,567,769	_	1,817,900		1,836,846	·	2,141,531	-	2,539,760
Total New Position		15,738,376		15,888,813		16,138,211		16,337,552		16,672,045
Total Liabilities and Net Position		19,534,254	_	19,478,291		19,520,870		19,521,298	_	19,646,733
									-	Contraction of the local data and the local data an

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WATER AND SEWER DEPARTMENT STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

For the Year Ended June 30 Water Sewer Audit Audit Audit Audit Projected Projected Projected 2015 2016 2017 2018 2019 2019 2019 **OPERATING REVENUES** Water usage charges \$ 1,525,821 \$ 1,581,502 \$ 1,646,408 \$ 1,664,625 \$ 1,845,135 1,845,135 955,937 933,333 952.407 994.468 976,899 976,899 Sewer usage charges Water tap fees 15,400 15,050 15,000 19,050 15,000 15,000 4,425 4,399 3,350 3,400 4,000 4.000 Sewer tap fees 22,483 26,977 16,471 19,538 18,000 11,520 6,480 Installation charges 12.215 12,000 8,225 12,000 Water Testing 33,005 19,113 Insurance Recoveries 35,590 50,000 23,495 32,000 18,000 Sale of materials and supplies 54,415 Miscellaneous income 50,791 76,857 90,257 44,000 Penalties 37,763 40,080 40,709 43,818 28,160 15,840 TOTAL OPERATING REVENUES 2,712,789 2,831,641 2,965,034 1,943,815 1,021,219 2,635,040 2,806,907 **OPERATING EXPENSES** Procurement, Treatment and Supply 91,000 \$ Chemicals \$ 104,325 \$ 85,849 \$ 69,842 \$ 90,547 \$ 91,000 138,579 158,250 143,391 145,454 145,454 145,454 Power Labor 109,092 125,778 121,915 156,182 156,182 156,182 23,961 55,054 49,395 6,077 6,077 6,077 Repairs Equipment maintenance and repair 12,611 36,521 45,749 21,733 21,733 21,733 3,202 37,424 2,826 37.424 37,424 2.826 State maintenance 24,256 2,852 2,852 2,852 Materials and Supplies 22,131 2,263 39,830 Purchase Water Water samples and testing 6,737 8,515 12,725 17,639 17,639 17,639 1,308 2,559 2.559 Schools 1.910 1.565 2.559 Utilities 9,964 9,081 9,923 10,787 10,787 10,787 5,899 5,899 9,433 5.899 Sludge Disposal Miscellaneous 10,800 16,428 15,651 8,323 8,323 8,323 442,334 505,476 505,929 **Total Procurement, Treatment and Supply** 502,475 546,877 505,929 Transmission and distribution 18,625 25,659 22,621 \$ 22,621 \$ 22,621 Power \$ 17,616 \$ \$ \$ 76,555 76,555 109,486 76.555 Materials and supplies 75,569 70,691 284,889 287,326 272,298 290,830 290,830 290,830 Labor 37,872 11,304 11,304 11,304 Repairs 3,694 11,622 103 22,617 103 103 Meter Exchange Program 2.536 2.536 3,392 5,475 7.738 2,536 Miscellaneous State Maintenance Fees 2.826 2,852 2,852 2,852 2,852 2,827 Ś \$ 406,801 \$ 406,801 \$ 406,801 \$ 387.987 396,565 478,522 **Total Transmission and distribution** Sewer Treatment 36,748 36.303 s 36.584 s 36,584 36,584 Chemicals \$ 36,388 \$ \$ 12,891 12,340 12,340 12,340 Materials and Supplies 7,822 16,673 110,669 110,669 103,813 103,353 108,118 110,669 Labor 63,190 63,190 63,190 14,868 26,333 71,866 Repairs and Maintenance 16,518 16,518 State maintenance fees 3,610 3,285 3,110 16,518 3,610 3,610 4,889 3,610 Sludge Disposal 8,381 9,384 9.384 Lab testing 515 8,749 9,384 10,497 10,091 5,169 2,871 10,497 10,497 Other School . 85,494 85,222 77,715 1,208 1,208 1,208 Utilities 264,000 267,490 285,532 321,255 264,000 264,000 **Total Sewer Treatment** Sewer Collection \$ 33,172 \$ 35.912 \$ 35,912 35,912 \$ 34,626 s 34,878 Power 17,097 17,097 17,097 Materials and Supplies 21,081 50,567 24,877 . -Labor --1 . Other Utilities 18,657 18,657 18.657 44,653 62,966 54,574 Repairs and Maintenance 3,110 3,285 3,110 3,110 3,110 State Maintenance Fee 3.111

103,723

Total Sewer Collections

151,444

115,733

74,776

74,776

74,776

Administrative and general												
Salary	\$	125,080	\$ 166,984	\$	205,093	\$ 209,419	\$	209,419		4,028	7	75,391
Telephone		14,407	13,560		15,241	14,250		14,250		9,120		5,130
Insurance Casualty, theft, liability		76,869	84,492		68,499	64,411		64,411		1,223		23,188
Insurance Life and Employee		284,910	298,057		365,563	335,860		335,860		4,950	12	20,910
Office Supplies		9,230	7,606		16,869	10,406		10,406		6,660		3,746
Postage		18,089	20,521		17,960	18,537		18,537	10	1,864		6,673
Meter Reading		2,941	4,484		4,110	-		-				-
Repairs and Maintenance		(.	10 9 5		63,313	261		261		167		94
Dues and subscriptions		5,063	5,010		4,819	4,903		4,903	3	3,138		1,765
Payroll tax		47,861	57,831		45,346	58,248		58,248	3'	7,279	2	20,969
Bank Charges		1,097	1,309			14,920		14,920	(9,549		5,371
Retirement		20,159	17,735		18,306	20,582		20,582	12	3,172		7,410
Legal			6,555		1,000					•		3
Administrative expense		120	3,747		14,184	-		2		ŝ		a
Computer Software		4,650	4,970			14,565		14,565	9	9,322		5,243
Travel		4,696	2.4			÷		×		×		×
Other		2,861	:(=:			5,538		5,538	1	3,544		1,994
Audit		8,000	10,000		20,000	23,520		23,520	1:	5,053		8,467
Employee relations		3,294	2,336		2,931	 1,887		1,887		1,208		679
Total Administrative and General		629,327	\$ 705,197		863,234	797,307		797,307	51	0,276	28	87,031
Motor pool												
Gas, oil and diesel	\$	24,836	\$ 15,278	\$	16,864	\$ 20,152	\$	20,152	12	2,897		7,255
Repairs & Maintenance		20,280	24,085		20,438	18,083	_	18,083		1,573		6,510
Total Motor Pool	\$	45,116	\$ 39,363	\$	37,302	\$ 38,235	\$	38,235	\$ 24	4,470	\$ 1	3,765
TOTAL OPERATING EXPENSE		1,875,977	 2,080,576		2,362,923	 2,086,595	2	2,087,048	1,44	7,477	63	39,571
Operating income before depreciation	. <u> </u>	759,063	 632,213		443,984	 745,046		877,986	49(6,338	38	31,648
DEPRECIATION												
Depreciation expense		540,021	 538,289		538,454	 507,230		508,736	22	7,078	28	81,658
Net Income from operating activities		219,042	93,924		(94,470)	237,816		369,250	26	9,260	ģ	99,990
Capital Grants			152,856		426,631	43,766		100,000		5	10	00,000
Interest Income		501	706		17,199	172		2,000		1,280		720
Interest Expense		(113,277)	(115,070)		(116,832)	(98,313)		(88,741)	(8)	8,741)		9
Bond Costs										×		
Amortization		19,171	18,021		16,870	15,894		15,720	1	5,720		-
Change in Net Position	•	107 105	 1 - 0 10-	-	· · · · · · · · · · · · · · · · · · ·	 		200 200			01	
Change in Het I obtion		125,437	150,437		249,398	199,335		398,229	19	7,519	20	00,710

Cost and Expenses that are not assigned directly are allocated 64% to Water and 36% to Sewer Depreciation is assigned to either water and sewer by identification the remanining amount is allocated to water.

TOWN OF ONEIDA, TENNESSEE WATER AND SEWER DEPARTMENT STATEMENT OF CASH FLOWS For the Year Ended June 30

For the Year Ended June 30	Audit2015	Audit 2016	Audit	Audit	Projected 2019
INCOME FROM OPERATING INCOME	219,042	93,924	(94,470)	237,816	369,250
Adjustments to Reconcile Net Net Operating Income					
To Net Cash provided by Operating ActivitiesDepreciation	\$ 540,021	\$ 538,289	\$ 538,454	\$ 507,230	\$ 508,736
Amortization	-	18,021	16,870	15,894	15,720
Increase (Decrease) in current Liabilities	(15,059)	4,718	6,290	18,737	18,737
(Increase) Decrease in Invetories	(9,791)	30,394	2,508	(7,422)	(7,422)
(Increase) Decrease in Grants Receivable	<u>-</u>		-		
(Increase) Decrease in Iaccounts Receivable	(30,425)	(30,835)	5,982	(113,072)	(113,072)
	703,788	654,511	475,634	659,183	791,949
Net Cash Provided by Operating Activities					
Increase (Decrease) in Customer Deposits	(1,800)	(1,720)	(1,240)	(1,360)	(1,200)
Cash Flows from Non-Capital & Related Financing Activities					
Principal Increase (Decrease) in Bonds and Notes Payable	(120,000)	(190,000)	(195,000)	(200,000)	(205,000)
Interest Paid	(113,277)	(106,425)	(116,832)	(114,607)	(114,607)
Bond Costs		,			
Cash Flows from Investing Activities					
Capital Grants		35,449	544,037	43,776	43,776
Interest Income	502	706	329	172	172
Investment in General Fixed Assets	(806,033)	(248,593)	(573,906)	(201,886)	(30,000)
Net Increase (Decrease) in Cash	(336,820)	143,928	133,022	185,278	485,090
Cash - Beginning	1,519,721	1,182,901	1,326,829	1,459,851	1,645,129
Cash - Ending	\$ 1,182,901	\$ 1,326,829	\$ 1,459,851	\$ 1,645,129	\$ 2,130,219

The accompanying notes are an integral part of these financial statements.

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Town of Oneida Water and Wastewater Finance Board Response Report

BY

Stephen T. Owens Work (423) 569-4008 Cell (606) 310-9520 90sowens@gmail.com Section 1. A review of Tap Fees and actual cost of installation.

Section 2. Proof of Existing Customer Contract dated 6-26-1995, The question was answered incorrectly to WWFB. System does have and uses New customer contract since 1995 and continues to use same contract. please note the contract is a legal size document all on one page and has a carbon copy so the customer receives a copy. It is reduced in size for this report only.

Section 3. Asset Management Guide/ Reserve budget, system inventory work sheets / Book Asset Detail Depreciation schedule.

Section 4. Review of inside / outside rates and cost of serving outside corporate boundaries.

Supporting Documents : General System Assessment report, DBP reduction study and Accomplishments through 12-31-2018.

Oneida Water Department DBP Report that shows water age effects compliance levels because outside water age is proven to add cost to utility treatment and system delivery cost to protect the consumer and maintain compliance.

General Assessment Report discusses system cost for outside Rates. Customer inside and outside percentages and distance between connections. Outside fire department, dedicated 1,200,000 gallon storage, added flushing dead end lines and more.

Billing Information Usage, Demand Usage water and sewer inside and outside. Existing Rates Water and Sewer based on Test Year 1-1-2018 through 12-31-2018 report. Proposed New Rates Water and Sewer based on Test Year 1-1-2018 through 12-31-2018 report.

Five Year comparison Annual financial information. Proposed New Rate projection.

Section 5. USDA, NRCS New Raw Water study.

Final discussion, Oneida has made major improvements on its water system in the past year and will continue to improve, including assets management and planning. Rate analysis will be reviewed every year and a high priority will be given to reducing water loss as stated in the general system assessment. Section 4.

A review of Inside / Outside rates and cost of serving outside of the corporate boundaries.

General System Assessment

DBP reduction Accomplishments Letter.

DBP Reduction Report, Carbon (PAC) study.

General System Assessment

WATER TEATMENT PLANT

The water treatment plant serves both inside and outside City limits at a ratio of 37.09% inside to 62.91% outside for the fiscal year ending June 30, 2018. 348,336,000 gallons was produced in 2017- 2018 year. It is fare to assume the line leakage and meter water loss through the meter inaccuracies is split equally based on the percentages served. Oneida water treatment plant is in full compliance with TDEC (see Accomplish letter dated January 15, 2019)

A DBP study using carbon to reduce TOC, TTHM and HAA5 is attached something important to note: Time study shows the water age is critical to the formation of both THM and HAA5. Water passing through storage tanks and extended lines adds to the formation. Serving water in rural areas is more difficult and cost more per 1,000 gallons to serve outline areas. Our water system experienced increased treatment cost and distribution cost from further distances to each meter including more water for line flushing and tank turn over and more treatment and source expense to maintain compliance for DBP removal. Also increased raw water needs have caused Oneida to experience water shortages do to the higher demand for extending outside the City limits, again causing increased cost to its customers.

Tools

The water plant has the required tools for its operations. No deficiency

Pumps

Total of 3 High service pumps. 3 Raw basin pumps. Raw water pumps, 2- (Baker Lake) and 3- (Recreation park Lake). Backwash Pump 2. All pumps listed are in good working condition and routine maintenance are preformed as manufactures recommends.

Computer-hardware/software (SCADA, telemetry)

Is in good condition we have a service tech routine maintain system. The wonder ware operating program system needs up graded in the next few years. \$2,500

Generator (power)

Is in good working condition. Stowers (Cat Dealer) maintains generator

General structure (mechanics and building)

Treatment plant and appurtenances are now maintained in good condition

everyday when break downs occur problems are fixed in a timely manner. Including inspection and cleaning Basin, Clear well, Filters, clarifiers, Pumps, chemical fed pumps and lines ect... beginning December 2017.

Storage (chemicals & supplies)

Plant chemicals & supplies are all maintained in good order to provide adequate storage without interruptions.

Valves

The treatment plant has many inside air operated control valves and Two 4-20 milliamp electric control valves. Oneida had replaced several valves and plan to replace two more in the next 5 years, the estimated cost is less than \$10,000 and is considered O&M. Outside valves are operated and all are functioning in good condition.

DISTRIBUTION SYSTEM

Water loss

Oneida needs to aggressively reduce water loss. Items needing attention are as follows:

Meters age & replacement policy

Oneida in an effort to reduce water loss and upgrade Aging water meters chose to complete a (AMR) meter replacement project with new meters around 4 years ago. One problem was, NOT every account received a brand new meter. Accounts that had a existing Badger meter in place was retrofitted with a new top AMR dial. The issue with retrofitting and old meter is the old meter displacement chamber that measures the actual amount of water can be aged as much as 15 + years.

By using the old meter chambers water loss is suspected causing water loss and effecting both water and sewer revenue, because the sewer derives from the water meter readings. It is recommended to develop a replacement policy that replaces or test all meter every 10 years to insure accuracy, to better protect the utility from water loss due to slow meters not registering actual amount used by customer.

Leak detection devices & assessment The system has 2 listening devices, 2 metal detector and pressure chart recorder are all in working condition.

Pressure sensors: 4 pressure sensors all working condition. Pump Stations

Terry Hill - 1 hp Red Jacket installed 1988 replaced 4 years ago Strawberry Flats - 10 hp Aquauar installed 1989 replaced 5 year ago Keeton Lane - 1 hp Goulds installed 1992 replaced 5 years ago Eco point - .75 hp Hydrovar installed 2006 replaced 5 year ago Skyline - 1 hp Red Jacket installed 1989 replaced 4 year ago Juelda - 1 hp Goulds installed 1999 replaced 2 years ago Johnny King 1 hp Goulds installed 2001 replaced 8 months ago Adkins Trail 5 hp Aquarvar installed 2004 replaced 6 years ago Cook's 1 hp Goulds installed 1989 replaced 6 months ago Gum fork 1 hp Goulds installed 1988 replaced 2 years ago Grape Rough 7.5 hp Aquavar installed 2000 replaced 1.5 years ago Ross Cemetery 1 hp Aquavar installed 1990 replaced 4 years ago Bear Mt. 1 hp Red Jacket installed 2003 replaced 2 years ago Brewster Mt. 7.5 hp Goulds installed 1988 replaced 4 years ago Sand Cut 15 hp Goulds installed 1988 replaced 5 years ago Pine Hill 10 hp Goulds installed 1988 replaced 2 years ago

General hydraulics / Inside, Outside

Due to the topography within Oneida's service area all three water tanks are at different run over elevations. The city has one zone lower than the other two areas. The inside city is served by Eli 1,000,000 gal concrete ground tank. The outside areas are served by Grape Rough 1,000,000 gal concrete tank that is inside city limits. Pine hill 200,000 gal steel tank is outside city limits and is scheduled to be renovated this year using ARC grant monies \$400,000 dollars. Oneida maintains 16 booster pump stations to serve the outside city areas. 322 miles of lines ranging from 3/4" to 16"

80.7 miles of large diameter lines ranging 3/4" to 16" in the City Limits these lines also carry water to the outside areas with 4,425 total active customers.

Inside customers	1,641 = 37.09%
Outside customers	2,784 = 62.91%
Winfield customers are	included in outside.

Oneida has estimated the cost to serve the outside City areas is equal to 45.4% higher cost to the utility compared to Inside City rates. The miles of lines outside is 75% of the service area of 243.5 mile or 457.77 feet average per outside customer. The service area for inside is 80.7 miles or 259.6 feet average per customer. Also 1,200,000 gallons of storage is dedicated to the outside service area

Valves & Fire Hydrants

Oneida has 283 main line valves and 231 fire Hydrants. The outside area has its own fire department that uses water to provide fire protection to the outside area with no benefit to the inside City limits customers and the water used and lost by this department for fighting fire and flushing and training are and expense to the utility and are considered

GIS/GPS mapping

Oneida is planning on digital mapping in the next 5 years estimated cost \$15,000

OFFICE

Building structure (HVAC, roof, windows, appearance, etc.) Good condition Furniture Good condition

Computers (age of software and hardware/general integration with system)

All in good condition. Computers are upgraded as needed software is maintained and keep up to date by Modern Systems.

MAINTENANCE

All maintenance is performed by the servicemen distribution crews

Service vehicles Appear in good working order

Equipment Appear in good working order

Inventory

All inventory is managed by the Distribution supervisor. An adequate amount materials are keep in inventory and safeguarded from unauthorized use.

EMPLOYEES

Age of employees

Supervisors have more than 20 years service and are nearing retirement age.

Redundancy of workforce

Supervisors and Employees are encouraged to cross train and have redundancy in critical job positions.

It is estimated the increased cost to serve the outside areas are fair in comparison with the inside rate due to the general system assessment and in consideration that the City residents are also required to pay a city tax.

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The information provided in this report was obtained from Staff: Juelda Boyatt Office Manager, Stacy Chambers Office staff, Danny Douglas Distribution / Collection System Supervisor, Steve Boyatt assistant Distribution / Collection System operator and Stephen T. Owens Water Plant Manager. Section 6.

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Proposed New Raw Water source project.

Currently in planning stages.

Oneida Water Department

Mayor Jack Lay 965 West Third Avenue Oneida, Tennessee 37841 (423) 569-4008

July 23, 2018

USDA, NRCS Staff Ralph Smith, James Sims, Jenny Adkins, Andy Hartman, Carol Chandler

Re: New Reservoir site visit for the Town of Oneida, Tn.

This letter is a follow up to our meeting on July 12, 2018 and site visit for a possible new reservoir location.

Oneida has struggled for years to provide water to the Town due to the lack of Raw water, It currently has Baker Lake that was built in the 60's and most recently the Recreation Lake was built. Both lakes are shallow reservoirs that do not have enough water storage and are high in organics and have iron and manganese problems making the water harder to treat and maintain EPA/TDEC compliance. The town has tried for years to gain access to the free flowing river that flows through Scott County in the Big South Fork river with no success due to the BSFRRA creation that limited access to the river recreation area. The congressional creation of the BSFRRA act had unintentional consequences that limited this areas free flowing water and caused a real hardship on this area and especially to the Town by not having a good dependable Raw water source that would normally be available to them.

The Town has two neighboring utilities that are not adequate to provide Oneida with enough water to maintain service to its customers and would cost 8 to 10 million dollars to upgrade infrastructure to the nearest water system to be able to help Oneida's water reliably. This option is not practical.

Efforts to seek out a new Raw water source that has a big water shed area with good feeding streams or springs with a year around flow and within a reasonable distance from the Towns water treatment plant is challenging.

We have identified 3 possible locations Cordell creek, Phillips creek and West creek area. After our meeting and site visit West creek has been eliminated as a choice.

Preliminary basic water samples were pulled on July 23, 2018 after a rain event:

	Cordell	Phillips A	Phillips C
PH	7.09	7.24	6.98
ALK	19	32	28
Hardness	22	36	36
FE	2.65	1.01	2.16
FE D	0.34	0.14	0.26
Mn	0.353	0.171	0.379
Mn D	0.071	0.086	0.133
тос	5.24	6.88	16
Turbidity	204	34.3	134
Conductivi	ty 95.5	103.9	81.3

We plan on running another set of samples during normal flow. Also if a site looks positive we want to run a full set of Water analysis as required by TDEC as a new source requires.

I hope this information is helpful and look forward to working with all of you. If you have any questions, please feel free to contact me at (606) 310-9520 or (423) 569-4008.

Sincerely

Stephen T. Owens Water Treatment Plant Mgr.

Cc: Mayor Jack Lay, Town Of Oneida

City of South Fulton

South Fulton

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,151,893.00	\$1,222,688.00	\$0.00
Other Revenue	\$80,189.00	\$79,316.00	\$0.00
Operating Revenue	\$1,232,082.00	\$1,302,004.00	\$0.00
Operating Expenses	\$1,315,211.00	\$1,273,100.00	\$0.00
Operating Income	(\$83,129.00)	\$28,904.00	\$0.00
Non-Operating Revenue(Expenses)	(\$68,519.00)	(\$66,301.00)	\$0.00
Net Change In Position	(\$151,648.00)	(\$37,397.00)	\$0.00
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: City of South Fulton

Staff Summary:

South Fulton has been referred for financial distress. The City raised rates 3.7% in January 2019. The City has consulted with MTAS, but it does not appear they have had a rate study performed.

Staff Recommendation:

- 1. The Town shall have the Municipal Technical Advisory Service, Tennessee Association of Utility Districts or another qualified expert, as approved by Board staff, perform a rate study and assist with creating a leak adjustment policy.
- 2. The Town shall provide an update to Board staff with the completed rate study and an implemented or proposed plan of action by June 30, 2019.



Water and Wastewater Financing Board Attn. John Greer Fourth Floor Cordell Hull Building 425 Fifth Ave North Nashville, TN 37243

RE: South Fulton/WWFB Financial Questionnaire

Mr. Greer,

Please find the financial information requested in the WWFB financial questionnaire below.

- The water and sewer rates have been increased by 3.7% by ordinance (attached). The ordinance also provides for an annual cost of living adjustment, in addition to the approved rates, to be made annually. The increase was determined, in cooperation with MTAS, with data supplied on the AWWA Water Audit Reporting Software.
- 2. All utility rates would be set by the city Board of Mayor and Commissioners.
- 3. We currently have 1,005 residential, and 637 commercial water and sewer customers and 757 residential, 78 commercial and 9 industrial gas customers. All are metered and billed.
- 5. This discussion will be on the agenda for the December 2018 meeting of the board. A rate change was agreed upon as voted in favor unanimously on Ordinance #2018-09. This ordinance also calls for an annual adjustment of the water and sewer rates as well as the addition of a cost of living adjustment, also annually.
- 6. The previous rates were established by ordinance March 24, 2016 and August 28, 2014 prior to that. Our new rates were also accepted by ordinance, with public discussion and two readings.
- 7. We currently have no written policies other than our rate setting ordinances set by the Board of Mayor and Commissioners.
- Customers receive an orientation on rates and fees when they begin, stop or change services. This is done by our business office clerks.
- 9. We provide a capital asset budget every fiscal year with the annual budget.

THE CITY OF SOUTH FULTON 700 MILTON COUNCE ROAD SOUTH FULTON, TN 38527 WWW. SOUTHFULTONTN.ORG PH: 731-479-2151 FAX: 731-479-2144

- 10. The City Manager, our insurance agent and The Pool review our capital assets annually with the renewal of our property insurance.
- 11. We do have an environmental issue with wastewater collection after heavy rains. We are currently in the process of a wastewater rehabilitation program that has been provided to TDEC. Please let me know if you need additional information on this project.
- 12. Leak adjustment policy- There is no formal leak adjustment policy in effect currently. A new policy is being drafted to include a new shut-off policy that follows TCA.
- 13. We are financing two vehicles this year for a total of \$61,759.00. Form CT-0253 Report on debt Obligation was filed and accepted. The city is also paying grant expense on a CDBG for a current wastewater rehabilitation project already underway and will pay the "City Share" for a USDA/RD Grant for wastewater rehabilitation as well beginning in 2019.
- 14. We have received a CDBG for wastewater rehabilitation and was awarded the CDBG for wastewater rehab from Union City for a total of \$1,000,250.00. We do not anticipate any capital contributions.
- 15. Yes, we have received approval of a USDA grant mentioned in item 13. Our USDA representative has received closing instructions from their attorneys. Our plans and specs have been assigned for review to their engineers. Our initial Bond Resolution determining to issue \$1,101,000 in Sewer Revenue and Tax Bonds has bond counsel approval. However all action on this grant award is being delayed by the current "Government Shut-down".
- 16. The city produces its own water supply. The cost per thousand to produce is \$12.60.
- 17. +
- 18. The city does not have any wholesale customers currently.
- 19. Our current non-revenue water is 38.090 per MG/Yr.
- 20. Our governing board meets once a month. We publish our notice in the local papers along with the agenda a week ahead of time.
- 21. I have been advised by our Mayor that none of our commissioners have received the required training or maintained their continuing education. We will make this a priority.

I hereby certify that the information provided is true and correct to the best of my knowledge.

Davie Lande	Mayor	February 22, 2019

ORDINANCE 2018-09

AN ORDINANCE TO AMEND ORDINACE 2016-01 SHEDULE OF CAHRGES, FEES AND RATES FPR WATER AND WASTEWATER SERVICES WITH A NEW SCHEDULE OF RATES

BE IT ORDAINED BY THE MAYOR AND BOARD OF COMMISSIONERS OF THE CITY OF SOUTH FULTON, TENNESSEE:

Section 1: Ordinance 2016-01 is amended by placement of the following new water and wastewater (sewer) rate schedule as follows;

Weter Rates	City
Base Charge	\$19.60
Usage Charge per 1,000 gal.	\$2.35

Sewer Rates

Base Charge\$19.60Per 1,000 Gals.\$6.26

Section 2: Rates and charges are to be <u>readjusted annually</u> and include the Federal Cost of Living Adjustment (COLA) by amendment to this ordinance.

First Reading: December 20, 2018

Second Reading: January 17, 2019

ATTEST: City Recorder SEAL:

PPROVED BY: Mayor

<u>Rural</u> \$23.95 \$3.53 141

5

ORDINANCE 2016-01

AN ORDINANCE TO AMEND ORDINANCE 2014-05 SCHEDULE OF CHARGES, FEES AND RATES FOR WATER AND WASTEWATER SERVICES WITH A NEW SCHEDULE OF RATES

NOW THEREFORE BE IT ORDAINED BY THE MAYOR AND BOARD OF COMMISSIONERS OF THE CITY OF SOUTH FULTON, TENNESSEE:

Section 1: Ordinance 2014-05 is hereby amended by placement of a new water and wastewater rate schedule as follows:

<u>City</u>	<u>Rural</u>
\$18.90	\$23.10
2.27	3.40
	.90 04
	\$18.90 2.27 \$18

Section 2: Rates and charges are to be readjusted as necessary from time to time by amendment to the ordinance.

This amended ordinance shall be effective immediately upon its passage.

First Reading: 18 Fer 2016 Second Reading: 24 MAR Zolla

RECORDER

APPROVED AS TO FORM:

ATTEST:__

APPROVED BY:

MAYOR

1-19-16

RESOLUTION NO. 2013-09

A RESOLUTION OF THE SOUTH FULTON, TENNESSEE, CITY COMMISSION ADOPTING UTILITY BILLING POLICIES AND PROCEDURES

WHEREAS, consistent functions of the City of South Fulton water, wastewater and gas billing department ensures a better, more reliable service for customers.

WHEREAS, accurate accounting, billing, operational, and other records help city officials make sound operating decisions.

WHEREAS, The City of South Fulton has determined that the following policy is in the best interest of the municipality and its citizens.

NOW, THEREFORE, BE IT RESOLVED by the City of South Fulton that the following is hereby approved:

UTILITY BILLING POLICY

Requirement for new service:

- 1. A completed application
- 2. One (1) form of identification (must be a picture ID)
- 3. Owners must provide proof of ownership and renters must provide a lease agreement
- 4. Connection fee of \$15 per trip
- 5. Deposits: Homeowner Water...\$50, Gas...\$100 Renter – Water...\$100, Gas...\$200

Billing and collection procedures:

- 1. The utility bill includes charges for water, sewer, gas and refuse (garbage)
- 2. The water and gas meters are read and the utility account is billed <u>once</u> a month. The timing of your bill will be determined by the service location, either Rural or City:

	Mailing Date	Payment Due Date	Cut-off Date	If weekend or holiday
Rural		5 th of following month	12 th of month	Next business day
City	30 th of each month	12 th of following month	19 th of month	Next business day

- 3. Garbage collection service is billed by the City and provided by the waste management company contracted with the City.
- 4. All customary water customers are required to have garbage collection service.

Delinquency processing:

- 1. Non-receipt of the bill or delinquent notice does not release or diminish the customer's obligation to make payment for service rendered.
- 2. 10% penalty is assessed if payment is not received by the Payment Due Date.
- 3. If payment is not received, water service will be disconnected.

- 4. If meter reading changes after meter reading is documented and service is disconnected then the meter will be locked.
- 5. To restore service on disconnect day payment must be received by 3:00 pm. An additional charge of \$25.00 will be charged for reconnection after 3:00 pm.
- 6. Payment of past due bill and \$15.00 fee required to re-instate service after disconnection.

Methods of payment:

- 1. In person at City Hall
- 2. By mail Please allow 7-10 days for delivery by due date
- 3. Drop Box
 - Opened Monday Friday at 8:00 am only
 - Located by the drive thru window at City Hall
 - Any payment dropped on the due date is accepted as payment on the due date
- 4. ACH (Bank draft) the payment is drafted from your account on the day prior to the due date.

Additional information:

- To verify accuracy of the bill a customer may request to have the meter re-read. If it is determined that the reading is incorrect the bill will be corrected. If it is determined that the reading is correct a fee of \$15.00 will be charged to the customer's utility account.
- A payment extension on a bill may be allowed if the request is made prior to cut-off date. Request forms are available at City Hall.
- A customer who deems his account to have had an extraordinary increase may provide documented proof of a repaired leak.
- City gas department employees will not light pilot lights. Gas customers should contact a qualified expert to light the pilot light before using the gas appliance each season.

This resolution will take effect immediately upon its passage, the public welfare requiring it.

Approved this 19th day of September, 2013.

Mayor Ed Cassetty

Commissioner Tony Perry

Commissioner Thomas Pettigrew

Commissioner Thomas Pettigrew

Attest: City Recorder

Commissioner Beatrice Wilco

Just ellegoor

Commissioner Scott Ellegood

City of Spencer

Spencer

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,057,347.00	\$1,126,969.00	\$1,266,140.00
Other Revenue	\$52,320.00	\$58,793.00	\$92,527.00
Operating Revenue	\$1,109,667.00	\$1,185,762.00	\$1,358,667.00
Operating Expenses	\$1,372,224.00	\$1,460,805.00	\$1,366,327.00
Operating Income	(\$262,557.00)	(\$275,043.00)	(\$7,660.00)
Non-Operating Revenue(Expenses)	(\$77,768.00)	(\$81,199.00)	(\$97,617.00)
Net Change In Position	(\$340,325.00)	(\$356,242.00)	(\$105,277.00)
Grant/Capital Contribution	\$524,403.00	\$25,726.00	\$493,504.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: City of Spencer

Staff Summary:

On November 15, 2018, the Board ordered Spencer to complete the following:

- 1. The City shall have MTAS, TAUD, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

The City contracted with James C. Hailey and Co. and completed the required questionnaire. The City raised rates in 2017 and 2018 based on a study from its consulting engineer.

Staff Recommendation:

Order the following:

1. The Town shall send financial updates to Board staff by March 1 and September 1 of each year, beginning September 1, 2019, until the Board releases the Town from its oversight.

WWFB Financial Questionnaire

Utility: Spencer Utility Department

Instructions: Please submit the following information

1. Five-year history of your rates (all rate classes and types)

Please see attached "Ordinance 2006-5".

2. Five-year history of all utility fees (include records of how you rationalized charges for: tap fees, reconnection fees, etc.)

Please see attached "Ordinance 2006-5".

3. The current customer contract used for new service accounts

Please see attached "Customer Contract - Residential Service".

4. Most current three-months of balance sheets and income statements (accounts must be broken out by water and sewer **if applicable**; you may need to estimate or use a percentage for each)

Please see attached "Trial Balance".

5. A copy of your debt management policy

Please see attached "Debt Policy".

6. A copy of your capitalization policy (by which you decide whether you capitalize versus expense items)

Included in Annual Financial Audit (Please see attached.)

Instructions: Please respond to each question below with detailed answers

- 1. Do you have a plan to remedy your financially distressed position?
 - a. If so, please provide a detailed copy.

Yes, rate increases were approved for FY 2017 and FY 2018 that are projected to remedy the financially distressed position currently faced. A copy of these rates are included in the attached "ORDINANCE 2006-5".

b. If not, please provide a detailed explanation.

2. Who has the authority to set rates and fees? Do you have a board or committee separate from your local legislative body (board of mayor and aldermen, etc.)?

The Board of Mayor and Aldermen. There is no separate committee from the local legislative body.

3. How many customers do you have currently? Please break out by metered, non-metered, billed and un-billed, and class (residential, commercial, etc.).

Water - Inside City Residential:	614
Water - Outside City Residential:	1,176
Water - Inside City Commercial:	30

Water - Outside City Commercial:	7
Water - Tax-exempt Inside City:	42
Water - Tax-exempt Outside City:	25
Total Sewer:	652

4. What percentage of your sales do the largest ten (10) customers (by volume and by revenue) represent on a yearly basis?

<u>Water</u>	
By Volume:	8,972,219 gallons of 82,183,000 (approx) = 10.9%
By Revenue:	\$78,202.32 of \$948,955.40 (from 2018 Audit) = 8.2%
Sewer	
By Volume:	8,628,356 gallons of 29,244,763 (approx.) = 29.5%
By Revenue:	\$74,301.03 of \$317,185.04 (from 2018 Audit) = 23.4%

- 5. Do you have plans for a rate increase or decrease?
 - a. If yes, has your board voted on it?
 - i. Please attach the relevant minutes that show all discussion and votes.

City of Spencer's last rate increase was in 2018, as part of a two (2) – year plan to increase rates to remedy our financial deficiencies. This documentation is provided as an attachment to this questionnaire. Another rate increase is not yet planned for.

- b. If no, please attach the minutes where the relevant discussion and vote took place to not change the current rate structure.
- 6. What is the justification for the current structure of your rates?

Our consulting engineer, James C. Hailey & Company, assisted in reviewing our Operating Expenses. The most recent rate increases (2017 and 2018) were based on achieving a positive increase in net position without capital contributions.

- 7. Do you have written policies for rates and fees (how they are implemented and billed, including adjustments)?
 - a. If so, please provide a list of the applicable policies.

Yes. Our Customer Service Policy is provided an attachment.

b. How often do you review these policies?

These policies are reviewed yearly, or when problems/questions arise with respect to the intention of the policy.

- 8. How do you make customers aware of the rates and fees you have in place?
 - a. Is this done at least annually? If not, please explain.

When they are reviewed, rate and fee discussions take place during the monthly meeting of the Board of Mayor and Aldermen. In the past two (2) years (2017 and 2018), these were discussed each year.

- 9. Do you have a capital asset plan/budget?
 - a. If so, how long does it forecast (5-year, 10-year, etc.)?
 - b. If you do not have a capital asset plan/budget, please justify why you do not.

We are currently working with our consulting engineer, James C. Hailey and Company to establish a Capital Improvements Plan (CIP) as a part of a larger water study. This CIP is slated to improve sourcewater, treatment plant, and distribution system enhancements.

Do you review your capital asset list?

c. If so, please indicate the frequency it is reviewed (annually, semi-annually, etc.) and who reviews this list.

Yes. Our capital asset list is also our Depreciation Schedule. This list was recently reviewed by our engineering consultant, and we plan to review it again in 2019 with our financial auditor as well.

- d. If you do not review your capital asset list, please justify why you do not.
- 10. Do you have any environmental issues currently or forthcoming that will put a financial burden on the system?

Yes. We are having problems with disinfection byproducts in our system. As a part of our planning study, we are considering the implementation of pre-treatment measures at the Water Treatment Plant that will be costly.

- 11. Do you have a leak adjustment policy?
 - a. If so, what is the average yearly amount adjusted in gallons, cost to produce (or purchase), and lost revenue?

Our Leak Adjustment Policy is included in the Customer Service Policy attached (section 2.4 "Leak List"). We do not adjust water leaks, but allow customers with bills of \$1,500 or less a period of 12 months, and customers in excess of \$1,500 a period of 18 months to pay off their bill.

b. Please attach a copy of the policy.

See attached Customer Service Policy.

- 12. Have you already, or do you plan to incur any new debt during the current fiscal year?
 - a. If so, please provide a detailed explanation.

It is unknown at this time, but not anticipated within the current fiscal year.

- 13. Have you already, or do you plan to receive any grants or capital contributions during the current fiscal year?
 - a. If so, please provide a detailed explanation.

We anticipate receiving a grant of \$30,000 for the water planning study through USDA's Special Evaluation and Assistance for Rural Communities and Households (SEARCH) Grant.

- 14. Have you applied for grants that will be received over the next two years?
 - a. If so, please provide a detailed explanation.

We anticipate receiving a grant of \$30,000 for the water planning study through USDA's Special Evaluation and Assistance for Rural Communities and Households (SEARCH) Grant.

- 15. Do you produce or purchase your water supply?
 - a. If you produce your own water,
 - i. What is the cost per thousand to produce?

Yes. Approximately \$1.41 per 1,000 gallons.

- b. If you purchase your water,
 - i. What is the cost per thousand?

We have an emergency connection with Warren County Utility District and purchase water for \$5.00 per 1,000 gallons. This is only used in an emergency.

ii. Do you have a long-term purchase contract in place?

No.

- 16. Do you have any wholesale customers?
 - a. Do you have written contracts with those customers?

No.

- 17. What is your current non-revenue water percentage?
 - a. Do you have any plans for improving your non-revenue water percentage?

By Volume:	54.7%
By Cost of Operating System:	11.9%

b. If so, please provide a detailed explanation.

Yes, the City continues its efforts to reduce water loss. Over the next few months we will be installing new water meters at the water plant to ensure we accurately measure water leaving the plant, and in order to ensure that any water used at the plant is accounted for. Additionally, we have instituted zone meters in our system and monitor them regularly.

18. With respect to your governing board, how frequently do you meet and what is your practice of providing notice of your meetings?

Monthly meetings same time every month by Charter, unless other notice is given. Notice is typically given via news sources and posted at city hall.

19. Has your governing body met the applicable training requirements?

The governing body has not yet taken the training, but they are not out of compliance due to their election date being recent (November 2018). Spencer is currently seeking available training near the Town working with the Council's schedule.

a. Please provide a list of Board members and their election/appointment dates.

Mickey Robinson - Mayor (November 2018)

Bonnie Adcock – Alderman (November 2018) Jerry Blankenship – Alderman (November 2018) Drew Guy – Alderman (November 2016) Jody Hensley – Alderman (November 2018) Jeff Walling – Alderman (November 2016)

b. Please review the training requirements at <u>https://www.comptroller.tn.gov/WWFB/</u>

I hereby certify that the information provided is true and correct to the best of my knowledge.

Reda	Hillies		
Signature:	Title:	City Recorder	Date: 2-13-2019
I hereby certify that the information	on provided is true a	nd correct to the bes	st of my knowledge.
Muel M.	In		
Signature:	Title:	Engineer	Date: 2-13-2019

Please mail, e-mail(preferred), or fax copies of any documentation to:

Water & Wastewater Financing Board ATTN: John Greer Fourth Floor Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243 Phone: (615) 747-5260 Fax: (615) 741-1551 utilities@cot.tn.gov

ORDINANCE 2006-5

AMENDED SEPTEMBER 25, 2008 AMENDED MARCH 26, 2009 AMENDED SEPTEMBER 13, 2010 AMENDED JULY 26, 2012 AMENDED JULY 1, 2013 AMEMDED DECEMBER 17, 2015 AMENDED APRIL 28, 2016 AMENDED 2-24-17 VETO OVERRIDE OF VETO 4-27-17 RATE INCREASE

AN ORDINANCE OF THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF SPENCER, TENNESSEE, SETTING WATER AND SEWER RATES, AND RELATED SERVICES PROVIDED AND/OR FURNISHED BY THE SPENCER UTILITY DISTRICT TO CUSTOMERS OF THE SPENCER UTILITY DISTRICT.

WHEREAS, the Board of Mayor and Alderman of the City of Spencer find it necessary to the financial future of the Spencer Utility District, and

WHERAS, from time to time the Board is required to adjust the rates charged for water, sewer, and related services to reflect the costs of operation of the water department and sewer department, and capital improvements needed to keep the systems in proper working order; and

NOW THEREFORE, BE IT ORDAINED by Board of Mayor and Alderman of the City of Spencer that water and sewer rates, and related fees and service charges are established as follows:

TITLE 18, WATER AND SEWER, CHAPTER 2, OF THE CITY OF SPENCER MUNICIPAL CODE IS HEREBY ADOPTED.

CHAPTER 2

WATER AND SEWER RATES

SECTION

2

18-201. Purpose18-202. Water Rates.18-203. Sewer Rate18-204. Service and Tap Fee

18-201. <u>Purpose</u>. The following rate and fee structures are adopted so that safe and efficient water and sewer services may be provided to Spencer Utility District, and in other circumstances where services may be provided as have been or will be approved by the Spencer Board of Mayor and Aldermen.

		FY 06/07	Effective 09-13-10	Effective 08-1-12	Effective 7- 2-13	Effective 12-18-15	Effective 4-27-17	Effective 4-27-18
Inside City	Flat rate per meter	\$5.00	\$7.50	\$7.50	7.00	7.00	8.00	9.00
	Rate @100 gls	\$0.55	\$0.55	\$0.60	0.65	0.75	0.85	0.95
Outside City	Flat rate per meter	\$5.50	\$10.00	\$10.00	10.00	10.00	11.50	13.00
	Rate @100 gls	\$0.60	\$0.60	\$0.70	\$0.75	0.86	0.95	1.05

18-202. <u>Water Rates</u>. The following water rates shall apply for all user classification for the fiscal years indicated below:

18-203. Sewer Rates. The SEWER RATE shall be one hundred percent (100%) of the water bill.

18-204. <u>Service and Tap Fees</u>. The <u>ACTUAL</u> cost of road bore (if required) will be added to the cost Of water & sewer tap fee. The footage and cost will be determined by the utility department.

(1)	Water Service	Non-refundable Service Fee	\$ 50.00
	³ / ₄ inch water s		\$ 950.00
	Inside	City Limits	
	Outsid	e City Limits	\$1100.00
	1 inch water s	ervice	
	Inside	City Limits	\$1200.00
		e City Limits	\$1350.00
	2 inch water s	ervice	
	Inside	City Limits	\$2200.00
		-	\$2400.00
	Outsid	e City Limits	\$2400.00
	Over 2 inch		Determine by Utility Manager

Water customers will be billed the flat rate for <u>each</u> active multiple connection to one meter, plus consumption.

(2)	Sewer Service	
	Residential	\$4200.00
	Commercial (other than single family residential)	\$8500.00

(3) Water and sewer service (if available) will be provided to the customer's property line, or in the case of force main (grinder pump) to a suitable location on customer's property. The customer will be responsible from that point or from the meter (for water service).

(4) Tape fees for apartment buildings

(a) Individual Meters

Water tap	\$950.00 per unit $-\frac{3}{4}$ inch line
Sewer tap	\$4200.00 per unit.
Meters and service line to a	meters provided and install by utility department. Plans must be
approved by utility manager. Customer w	vill be billed a flat rate for each unit, plus consumption. (Ex:
Apartment complex with 4 units will be cl	harged \$3800.00 for water taps, and \$16800.00 for sewer taps.)
(b) Master Meter	
Water Tap	\$2200.00 plus \$50.00 per unit (6 inch line)
Meter is to be provided and	installed by owner.

(Ex: Apartment complex with 4 units will be charged \$2400.00 for water taps.

Sewer Tap Minimum \$5500.00 plus \$50.00 per unit

Collection system to be provided and installed by the owner. Plans must be approved by utility manager. Customer will be billed the flat rate for each unit, plus consumption. (Ex: Apartment complex will be charged a minimum \$5700.00 for a single commercial sewer tap. Capacity requirements beyond, plus additional costs based on capacity requirements)

This ordinance shall take effect upon final passage by the Board and Mayor of Aldermen, the public welfare requiring it.

PASSED 1ST READING: July 27, 2006 YEA 3 NAY 2 PASSED 2nd READING August 10, 2006 YEA 4 NAY 0

Mayor

Recorder

AMENDMENTS :

1

.

PASSED 1 ST READING : September 11, 2008 PASSED 2 nd READING : September 25, 2008	
PASSED 1 ST READING:October 30, 2008PASSED 2 ND READING:November 24, 2008Effective Date :November 25, 2008	
PASSED 1 ST READING : February 26,2009 PASSED 2 ND READING: March 26, 2009	Multiple Connections
PASSED 1 ST READING: August 26,2010 PASSED 2 ND READING: September 13, 201	10 Flat Rate Increase
PASSED 1 ST READING:June 29, 2012PASSED 2 ND READING:July 26, 2012	Increased Consumption Rate
PASSED 1 st READING June 27, 2013 PASSED 2 nd READING July 1, 2013 Reduced flat rate inside by .50 (water & sewe Inside and Outside.	r /total 1.00) & added .05 to usage
PASSED 1 st READING November 19 th , 2015 PASSED 2 nd READING December 17th 2015	15% Increase on water & sewer Consumption only. Flat rate to Remain the same.
PASSED 1st READING March 31, 2016	
	To add the <u>actual</u> cost of a road Bore to the tap fee for water and/ Or sewer tap. Footage & cost to to determined by the utility dept.
PASSED 1 ST READING January 26 th , 2017 C PASSED 2 nd READING February 24 th , 2017	Option "B" rate increase 2017& 2018inside flat rate8.009.00consumption.85.95
VETO BY MAYOR 3-30-17 VETO OVERRIDDEN BY BOARD 4-27-17 RATE INCREASED PASSED	outside flat rate11.5013.00consumption.951.05

Mayor Ki Nieud , Recorder eda \in

Spring City

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,396,054.00	\$1,421,623.00	\$1,430,175.00
Other Revenue	\$1,632.00	\$2,251.00	\$4,705.00
Operating Revenue	\$1,397,686.00	\$1,423,874.00	\$1,434,880.00
Operating Expenses	\$1,309,346.00	\$1,351,775.00	\$1,205,212.00
Operating Income	\$88,340.00	\$72,099.00	\$229,668.00
Non-Operating Revenue(Expenses)	(\$171,959.00)	(\$167,944.00)	(\$163,562.00)
Net Change In Position	(\$83,619.00)	(\$95,845.00)	\$66,106.00
Grant/Capital Contribution	\$351,484.00	\$0.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: Town of Spring City

Staff Summary:

Spring City has been referred for financial distress in the 2016 and 2017 fiscal years. The Town had a rate study performed by TAUD in 2017, but did not implement any of the recommendations. The Town showed a profit in 2018, but staff would like a rate study to confirm that it was not a one-time gain.

Staff Recommendation:

- 1. The Town shall have the Municipal Technical Advisory Service, Tennessee Association of Utility Districts or another qualified expert, as approved by Board staff, perform a rate study to include:
 - a. recommendations to remedy the Town's financially distressed position; and
 - b. justification for the higher rates on outside customers.
- 2. The Town shall provide an update to Board staff with the completed rate study and an implemented or proposed plan of action by June 30, 2019.

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Jody Bauer Commissioner – Max Douglas Commissioner – Bradley Collins City Mngr. – Stephania Motes City Recorder – Brenda Dodson Public Works – Jason Yuhas Police Chief – Jason Lawson Fire Chief – Jim Bolen

December 13, 2018

Water & Wastewater Financing Board Attn: John Greer Fourth Floor Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243

RE: WWFB Financial Questionnaire for the Town of Spring City, Tennessee

Dear Mr. Greer:

Enclosed herein you will find the following requested documents for the Town of Spring City in relation to the WWFB Financial Questionnaire.

- 1. Five-year history of our rates (all rate classes and types). (see attachment)
- 2. Five-year history of all utility fees (include records of how you rationalized charges for: tap fees, reconnection fees, etc.) (see Municipal Code)
- 3. The current customer contract used for new service accounts. (see attachment)
- 4. Most current three-months of balance sheets and income statements (accounts must be broken out by water and sewer if applicable; you may need to use a percentage for each). (Water represents approx. 44%; Sewer represents approx. 56%)
- 5. A copy of your debt management policy. (see attachment)
- 6. A copy of your capitalization policy (by which you decide whether you capitalize versus expense items). N/A City does not have a capitalization policy.

Also included are our responses to the questions, with detailed answers, that you sent for us to provide information for. Our responses are listed below in red.

Sincerely,

Stephania Motes City Manager

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Jody Bauer Commissioner – Max Douglas Commissioner – Bradley Collins City Mngr. – Stephania Motes City Recorder – Brenda Dodson Public Works – Jason Yuhas Police Chief – Jason Lawson Fire Chief – Jim Bolen

- 1. Do you have a plan to remedy your financially stressed position?
 - a. If so, please provide a detailed copy.
 - Currently, we are reviewing our water and sewer rates. Revenues have gone down since losing North Rhea Utility District. We currently are in negotiations to try and ga in them back as a customer again. The city is also working to recruit both industrial and other commercial businesses to Spring City in order to generate additional revenue. We are reassessing all fees to include the below items. It has been a long time since the fees were re-evaluated and are in need of updating. We are also working to put a policy in place for a standard fee structure for equipment being used to quantify those charges.
 - New service connection fees
 - Water and sewer tap fees
 - Meter test charges
 - Water leak and pool adjustments
 - Meter tampering fees
 - b. If not, please provide a detailed explanation.
- 2. Who has the authority to set rates and fees? Do you have a board or committee separate from your local legislative body (board of mayor and alderman, etc.)? Spring City Board of Commissioners has the authority to set the rates.
- How many customers do you have currently? 1033 water customers and 801 sewer customers. Please break out by metered, non-metered, billed and unbilled, and class (residential water 908; sewer 697, commercial water 119; sewer 98, etc.) (see enclosed)
- 4. What percentage of your sales do the largest ten (10) customers (by volume and by revenue) represent on a yearly basis? Revenue = 8-11%; Volume = 14-20%
- 5. Do you have plans for a rate increase or decrease? Yes, 3% every year by City Ordinance 2010-10 (see enclosed copy of ordinance and minutes)
 - a. If yes, has your board voted on it?
 - i. Please attach the minutes where the relevant discussion and vote took place to not change the current rate structure. (see enclosed)
- 6. What is the justification for the current structure of your rates? Ordinance 2010-10
- 7. Do you have written policies for rates and fees (how they are implemented and billed, including adjustments? (see Municipal Code)

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Jody Bauer Commissioner – Max Douglas Commissioner – Bradley Collins City Mngr. – Stephania Motes City Recorder – Brenda Dodson Public Works – Jason Yuhas Police Chief – Jason Lawson Fire Chief – Jim Bolen

- a. If so, please provide a list of applicable policies.
- b. How often do you review these policies?
- 8. How do you make customers aware of the rates and fees you have in place?
 - a. Is this done at least annually? Yes, we communicate it both in our monthly newsletter and on their bill. If not, please explain.
- 9. Do you have a capital asset plan/budget?
 - a. If so, how long does it forecast (year, 10-year, etc.)? We have a 5-year capital asset plan. If you do not have a capital asset plan/budget, please justify why you do not.
- 10. Do you review your capital asset list?
 - a. If so, please indicate the frequency it is reviewed (annually, semiannually, etc.) and who reviews the list. We update the city's 5-year plan during budget preparation for the upcoming year. We do individual workshops per department with the Mayor and Board of Commissioners to review the city's current and future needs. The Mayor and Board of Commissioners then vote to approve the updates before we start to prepare our budget for the upcoming year.
 - b. If you do not review your capital asset list, please justify why you do not.
- 11. Do you have any environmental issues currently or forthcoming that will put a financial burden on the system? Not that we are aware of.
- 12. Do you have a leak adjustment policy? See Municipal Code.
 - a. If so, what is the average yearly amount adjusted in gallons we cannot pull this data. Our system only tracks dollar amounts due to hour our adjustments work. Attached our AWWA report that will provide this information, cost to produce (or purchase) see attached cost per thousand to produce water attachment), and lost revenue \$8,832.06?
 - b. Please attach a copy of the policy.
- 13. Have you already, or do you plan to incur any new debt during the current fiscal year? We have no plans to incur debt.
 - a. If so, please provide a detailed explanation.
- 14. Have you already, or do you plan to receive any grants or capital contributions during the current fiscal year?
 - a. If so, please provide a detailed explanation. We have applied the past two years for a CDBG grant but was not awarded. We are applying for the 2019 CDBG grant. See attached document for details of what we are applying for.
- 15. Have you applied for grants that will be received over the next two years? No.
 - a. If so, please provide a detailed explanation.

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Jody Bauer Commissioner – Max Douglas Commissioner – Bradley Collins City Mngr. – Stephania Motes City Recorder – Brenda Dodson Public Works – Jason Yuhas Police Chief – Jason Lawson Fire Chief – Jim Bolen

- 16. Do you produce or purchase your water supply? Yes
 - a. If you produce your own water,
 - i. What is the cost per thousand to produce? (see attached)
 - b. If you purchase your water,
 - i. What is the cost per thousand?
 - ii. Do you have a long-term purchase contract in place?
- 17. Do you have any wholesale customers? No
 - a. Do you have written contracts with those customers?
- 18. What is your current non-revenue water percentage?
 - a. Do you have any plans for improving your non-revenue water percentage? Yes
 - b. If so, please provide a detailed explanation. We have GIS software that will help us in long-term planning regarding problem line locations that may need repairing. Currently, we are utilizing the software to verify waterline locations and to make corrections as we repair water lines. For future use, we plan to include specific water and sewer line data such as type of pipe, size of pipe, etc. We also will include data regarding any repairs that have been made so we can look at potential problem areas that may need to be replaced. We currently have alarms at both of our water tanks to prevent overflows and are better tracking water usage from internal source uses such as the Fire Department, line flushing, etc.
- 19. With respect to your governing body, how frequently do you meet and what is the practice of providing notice of your meetings? We have a workshop once per month and a commission meeting once per month. We post it on the front door at City Hall and the Audrey Pack Memorial Library, add the agenda to the city website, and include it on our monthly newsletter. We advertise it in the local paper if needed.
- 20. Has your governing body met the applicable training requirements? Commissioners Jody Bauer and Mac Douglas completed theirs in 2017. Mayor Billy Ray Patton, Vice-Mayor Reba Murphy, and Commissioner Brad Collins is in process of finding nearby training.
 - a. Please provide a list of Board members and their election dates. Mayor Billy Ray Patton – August 2016 election Vice Mayor Reba Murphy – August 2018 election Commissioner Max Douglas – August 2016 election Commissioner Jody Bauer – August 2018 election Commissioner Brad Collins – August 2018 election (seat is for 2 years and will end August 2020 before next election).

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Max Douglas Commissioner – Brad Collins Commissioner – Jody Bauer City Mngr. – Stephania Motes City Recorder – Missie Lytle Public Works – Jason Yuhas Police Chief – BJ Neal Fire Chief – Jim Bolen

WATER/SEWER RATE SCHEDULE

	D 1 7/2017	Rate
	Rate 7/2017	7/2018(3%)
Water Rates for Inside City Residential 3/4" Meter		CURRENT
First 2000 gallons	\$22.15	\$22.81
Per 1000 over	\$8.28	\$8.52
1" to 2" Meter Commercial		
First 2000 gallons	\$30.08	\$30.98
Per 1000 over	\$8.28	\$8.52
3" and Above Commercial		
First 2000 gallons	\$39.43	\$40.61
Per 1000 over	\$8.28	\$8.52
Water Rates for Outside City Residential 3/4" Meter		
First 2000	\$30.08	\$30.98
Per 1000 over	\$10.50	\$10.81
Sprinkler Water Rates In & Out-Res/Comm		
First 2000	\$37.60	\$38,72
Per 1000 over	\$8.28	\$8.52
Per Sprinkler Head	\$0.44	\$0.45
Watering and Irrigation		
First 2000	\$22.15	\$22.81
Per 1000 over	\$8.28	\$8.52
Mutual Aid for Neighboring Utilities		
Cost per 1000 Gallons	\$2.24	\$2.30
Cost per 1000 Gallons over 4.5 Million	\$2.73	\$2.81

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Max Douglas Commissioner – Brad Collins Commissioner – Jody Bauer City Mngr. – Stephania Motes City Recorder – Missie Lytle Public Works – Jason Yuhas Police Chief – BJ Neal Fire Chief – Jim Bolen

TVA Sewer Contract(Doesn't Change with Increase)	Rate 7/2017	Rate 7/2018(3%)
Per 1000 for first 500,000	\$4.00	\$4.00
Per 1000 over 500,000	\$3.00	\$3.00
Gravity Sewer Inside City Residential		
First 3000 gallons	\$37.60	\$38.72
Per 1000 over	\$7.07	\$7.28
Gravity Metered Sewer Commercial (SSM)		
First 2000 gallons	\$27.06	\$27.87
Per 1000 from 3000-498,000	\$5.94	\$6.11
Per 1000 for all metered sewer over 500,000	\$3.80	\$3.91
Force Main Sewer Inside City Residential		
First 3000 Gallons	\$37.60	\$38.72
Per 1000 over	\$7.07	\$7.28
Force Main Sewer Outside City Residential		
First 3000 gallons	\$43.87	\$45.18
Per 1000 over	\$5.63	\$5.79
Force Main Sewer Commercial Inside		
First 10,000 Gallons	\$66.43	\$68.42
Per 1000 over	\$5.63	\$5.79
Force Main Sewer Commercial Outside		
First 10000 Gallons	\$75.22	\$77.47
Per 1000 over	\$5.63	\$5.79
UNMETERED WATER	\$1.03	\$1.06

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Max Douglas Commissioner – Brad Collins Commissioner – Jody Bauer City Mngr. – Stephania Motes City Recorder – Missie Lytle Public Works – Jason Yuhas Police Chief – BJ Neal Fire Chief – Jim Bolen

WATER/SEWER RATE SCHEDULE

	Rate 7/2016	Rate 7/2017(3%)
Water Rates for Inside City Residential 3/4" Meter		CURRENT
First 2000 gallons	\$21.51	\$22.15
Per 1000 over	\$8.04	\$8.28
1" to 2" Meter Commercial		
First 2000 gallons	\$29.21	\$30.08
Per 1000 over	\$8.04	\$8.28
3" and Above Commercial		
First 2000 gallons	\$36.51	\$39.43
Per 1000 over	\$8.04	\$8.28
Water Rates for Outside City Residential 3/4" Meter		
First 2000	\$29.21	\$30.08
Per 1000 over	\$10.20	\$10.50
Sprinkler Water Rates In & Out-Res/Comm		
First 2000	\$36.51	\$37.60
Per 1000 over	\$8.04	\$8.28
Per Sprinkler Head	\$0.43	\$0.44
Watering and Irrigation		
First 2000	\$21.51	\$22.15
Per 1000 over	\$8.04	\$8.28
Mutual Aid for Neighboring Utilities		
Cost per 1000 Gallons	\$2.18	\$2.24
Cost per 1000 Gallons over 4.5 Million	\$2.66	\$2.73

Mayor Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Max Douglas Commissioner – Brad Collins Commissioner – Jody Bauer City Mngr. – Stephania Motes City Recorder – Missie Lytle Public Works – Jason Yuhas Police Chief – BJ Neal Fire Chief – Jim Bolen

TVA Sewer Contract(Doesn't Change with Increase)	Rate 7/2016	Rate 7/2017(3%)
Per 1000 for first 500,000	\$4.00	\$4.00
Per 1000 over 500,000	\$3.00	\$3.00
Gravity Sewer Inside City Residential		
First 3000 gallons	\$36.51	\$37.60
Per 1000 over	\$6.87	\$7.07
Gravity Metered Sewer Commercial (SSM)		
First 2000 gallons	\$26.28	\$27.06
Per 1000 from 3000-498,000	\$5.77	\$5.94
Per 1000 for all metered sewer over 500,000	\$3.69	\$3,80
Force Main Sewer Inside City Residential		
First 3000 Gallons	\$36.51	\$37.60
Per 1000 over	\$6.87	\$7.07
Force Main Sewer Outside City Residential		
First 3000 gallons	\$42.60	\$43.87
Per 1000 over	\$5.47	\$5.63
Force Main Sewer Commercial Inside		
First 10,000 Gallons	\$64.50	\$66.43
Per 1000 over	\$5.47	\$5.63
Force Main Sewer Commercial Outside		
First 10000 Gallons	\$73.03	\$75.22
Per 1000 over	\$5.47	\$5.63
UNMETERED WATER	\$1.00	\$1.03

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Max Douglas Commissioner – Jody Bauer Commissioner – Brad Collins

City Manager – Stephania Motes City Recorder – Melissa Lytle Public Works – Vernon Armstrong Police Chief – Jason Yuhas

WATER/SEWER RATE SCHEDULE

	Rate 7/2015	Rate 7/2016(3%)
Water Rates for Inside City Residential 3/4" Meter		CURRENT
First 2000 gallons	\$20.89	\$21.51
Per 1000 over	\$7.81	\$8.04
1" to 2" Meter Commercial		
First 2000 gallons	\$28.36	\$29.21
Per 1000 over	\$7.81	\$8.04
3" and Above Commercial		
First 2000 gallons	\$35.45	\$36.51
Per 1000 over	\$7.81	\$8.04
Water Rates for Outside City Residential 3/4" Meter		
First 2000	\$28.36	\$29.21
Per 1000 over	\$9.91	\$10.20
Sprinkler Water Rates In & Out-Res/Comm		
First 2000	\$35.45	\$36.51
Per 1000 over	\$7.81	\$8.04
Per Sprinkler Head	\$0.42	\$0.43
í		
Watering and Irrigation		
First 2000	\$20.89	\$21.51
Per 1000 over	\$781	\$8.04
Mutual Aid for Neighboring Utilities		
Cost per 1000 Gallons	\$2.12	\$2.18
Cost per 1000 Gallons over 4.5 Million	\$2.59	\$2.66
TVA Sewer Contract(Doesn't Change with ncrease)		
Per 1000 for first 500,000	\$4.00	\$4.00
Per 1000 over 500,000	\$3.00	\$3.00

Mayor – Billy Ray Patton Vice Mayor – Reba Murphy Commissioner – Max Douglas Commissioner – Jody Bauer Commissioner – Brad Collins City Manager – Stephania Motes City Recorder – Melissa Lytle Public Works – Vernon Armstrong Police Chief – Jason Yuhas

Gravity Sewer Inside City Residential		
First 3000 gallons	\$35.45	\$36.51
Per 1000 over	\$6.67	\$6.87
Gravity Metered Sewer Commercial (SSM)		
First 2000 gallons	\$25.52	\$26.28
Per 1000 from 3000-498,000	\$5.61	\$5.77
Per 1000 for all metered sewer over 500,000	\$3.59	\$3.69
Force Main Sewer Inside City Residential		
First 3000 Gallons	\$35.45	\$36.51
Per 1000 over	\$6.67	\$6.87
Force Main Sewer Outside City Residential		
First 3000 gallons	\$41.36	\$42.60
Per 1000 over	\$5.32	\$5.47
Force Main Sewer Commercial Inside		
First 10,000 Gallons	\$62.63	\$64.50
Per 1000 over	\$5.32	\$547
Force Main Sewer Commercial Outside		
First 10000 Gallons	\$70.91	\$73.03
Per 1000 over	\$5.32	\$5.47

Mayor - Billy Ray Patton Vice Mayor - Reba Murphy Commissioner - Max Douglas Commissioner - Jody Bauer Commissioner - Brad Collins City Manager – Stephania Motes City Recorder – Melissa Lytle Public Works – Vernon Armstrong Police Chief – Jason Yuhas

WATER/SEWER RATE SCHEDULE

	Rate 7/2014	Rate 7/2015(3%)
Water Rates for Inside City Residential 3/4" Meter		CURRENT
First 2000 gallons	\$19.70	\$20.89
Per 1000 over	\$7.59	\$7.81
1" to 2" Meter Commercial		
First 2000 gallons	\$27.54	\$28.36
Per 1000 over	\$7.59	\$7.81
3" and Above Commercial		
First 2000 gallons	\$34.42	\$35.45
Per 1000 over	\$7.59	\$7.81
Water Rates for Outside City Residential 3/4" Meter		
First 2000	\$28.36	\$28.36
Per 1000 over	\$9.91	\$9.91
Sprinkler Water Rates In & Out-Res/Comm		
First 2000	\$34.42	\$35.45
Per 1000 over	\$7.59	\$7.81
Per Sprinkler Head	\$0.35	\$0.42
Watering and Irrigation		
First 2000	\$20.29	\$20.89
Per 1000 over	\$7.59	\$7.81
Mutual Aid for Neighboring Utilities		
Cost per 1000 Gallons	\$2.06	\$2.12
Cost per 1000 Gallons over 4.5 Million	\$2.52	\$2.59
TVA Sewer Contract(Doesn't Change with Increase)		
Per 1000 for first 500,000	\$4.00	\$4.00
Per 1000 over 500,000	\$3.00	\$3.00

Mayor - Billy Ray Patton Vice Mayor - Reba Murphy Commissioner - Max Douglas Commissioner - Jody Bauer Commissioner - Brad Collins City Manager – Stephania Motes City Recorder – Melissa Lytle Public Works – Vernon Armstrong Police Chief – Jason Yuhas

Gravity Sewer Inside City Residential		
First 3000 gallons	\$33.42	\$35.45
Per 1000 over	\$6.47	\$6.67
Gravity Metered Sewer Commercial (SSM)		
First 2000 gallons	\$24.78	\$25.52
Per 1000 from 3000-498,000	\$5.44	\$5.61
Per 1000 for all metered sewer over 500,000	\$3.49	\$3.59
Force Main Sewer Inside City Residential		
First 3000 Gallons	\$34.42	\$35.45
Per 1000 over	\$6.47	\$6.67
Force Main Sewer Outside City Residential		
First 3000 gallons	\$40.15	\$41.36
Per 1000 over	\$5.17	\$5.32
Force Main Sewer Commercial Inside		
First 10,000 Gallons	\$60.81	\$62.63
Per 1000 over	\$5.17	\$5.32
Force Main Sewer Commercial Outside		
First 10000 Gallons	\$68.84	\$70.91
Per 1000 over	\$5.17	\$5.32

City of Watertown

Watertown

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$520,736.00	\$524,384.00	\$521,795.00
Other Revenue	\$47,598.00	\$44,504.00	\$54,289.00
Operating Revenue	\$568,334.00	\$568,888.00	\$576,084.00
Operating Expenses	\$568,735.00	\$579,003.00	\$503,643.00
Operating Income	(\$401.00)	(\$10,115.00)	\$72,441.00
Non-Operating Revenue(Expenses)	(\$7,096.00)	\$4,331.00	\$946.00
Net Change In Position	(\$7,497.00)	(\$5,784.00)	\$73,387.00
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: City of Watertown

Staff Summary:

The City of Watertown has been referred for financial distress. Staff requested the City fill out a financial questionnaire, but no information has been received.

Staff Recommendation:

Order the following:

- 1. The City shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts or another qualified expert, as approved by Board staff, assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by May 31, 2019.



JUSTIN P. WILSON Comptroller

September 14, 2018

The Honorable Mike Jennings City of Watertown 8630 Sparta Pike Watertown, TN 37184

Dear Mayor Jennings,

The Tennessee Comptroller of the Treasury has referred City of Watertown to the Water & Wastewater Financing Board (hereinafter "Board") pursuant to Tennessee Code Annotated § 68-221-1010(a).

Please fill out the enclosed questionnaire and return it and all supporting documentation to our office no later than December 14, 2018. Please submit this to either utilities@cot.tn.gov, and/or the following mailing address:

Water & Wastewater Financing Board ATTN: John Greer Cordell Hull Building 425 Fifth Avenue North Nashville, Tennessee 37243

While we recognize that this questionnaire may be difficult to fill out, it is necessary to determine how we can help you achieve long-term financial success. After we receive your information, we will decide whether it is necessary for the City to (1) meet with our staff or (2) go directly before the Board.

If you need further assistance or have any questions, please feel free to contact me at (615) 747-5260 or utilities@cot.tn.gov.

Sincerely,

hn Greer

Technical Secretary

enclosure cc (w/out encl.): Mr. Randy Gwaltney cc (w/out encl.): Ms. April Lamberson

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER Chief of Staff

City of Woodland Mills

Woodland Mills

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$42,290.00	\$33,446.00	\$44,682.00
Other Revenue	\$158,367.00	\$174,473.00	\$188,603.00
Operating Revenue	\$200,657.00	\$207,919.00	\$233,285.00
Operating Expenses	\$205,127.00	\$208,356.00	\$236,002.00
Operating Income	(\$4,470.00)	(\$437.00)	(\$2,717.00)
Non-Operating Revenue(Expenses)	(\$3,755.00)	(\$4,891.00)	(\$2,717.00)
Net Change In Position	(\$8,225.00)	(\$5,328.00)	(\$5,434.00)
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

Case: City of Woodland Mills

Staff Summary:

On November 15, 2018, the Board ordered Woodland Mills to complete the following:

- 1. The City shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

No information has been received.

Staff Recommendation:

Order the following:

- 1. The City shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts or another qualified expert, as approved by Board staff, assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by May 31, 2019.

BEFORE THE TENNESSEE WATER AND WASTEWATER FINANCING BOARD

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IN THE MATTER OF: CITY OF WOODLAND MILLS

TENN. CODE ANN. § 68-221-1010 -FINANCIAL DISTRESS

ORDER

On November 15, 2018, the Tennessee Water and Wastewater Financing Board ("the Board") reviewed the financially distressed status of the City of Woodland Mills ("the City") pursuant to Tenn. Code Ann. § 68-221-1010. Based on the City's financial deficiencies, the Board hereby orders the following:

- 1. The City shall have the Municipal Technical Advisory Service, the Tennessee Association of Utility Districts, or another qualified expert assist in completing the financial questionnaire previously sent by Board staff.
- 2. The City shall send the completed financial questionnaire and all supporting documentation to Board staff by February 15, 2019.

ENTERED this Zahday of November, 2018.

ANN V. BUTTERWORTH, Chair Water and Wastewater Financing Board

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been served via certified mail return receipt requested to the following on this 27+1 day of November, 2018:

Mayor Wade Carrington Ms. Norma Fowler, City Recorder City of Woodland Mills 201 Cannon Moore Dr. P.O. Box 153 Woodland Mills, TN 38271

Rachel E. Buckley

Counsel to the Board

Recommended for Release

- I. Recommended for Release
 - a. Financial
 - i. Town of Cumberland Gap
 - ii. Town of Englewood
 - iii. Town of Gainesboro
 - iv. Town of Gleason
 - v. Town of Mitchellville
 - vi. Town of Monterey
 - vii. City of Munford
 - viii. City of Westmoreland
 - b. Water Loss
 - i. Non-Revenue Water
 - 1. City of Bluff City
 - 2. City of Brentwood
 - 3. Town of Byrdstown
 - 4. City of Cowan
 - 5. Dowelltown-Liberty Waterworks
 - 6. Town of Kenton
 - 7. City of La Vergne
 - 8. City of Lebanon
 - 9. Town of Maury City
 - 10. City of Red Boiling Springs
 - 11. Town of Signal Mountain
 - 12. Town of Smyrna
 - ii. Validity Score
 - 1. City of Bluff City
 - 2. Town of Estill Springs
 - 3. Lauderdale County Water System
 - 4. City of Loudon
 - 5. Town of Maynardville
 - 6. Town of McLemoresville
 - 7. City of Millington
 - 8. City of Smithville
 - 9. Town of Tiptonville

Financial Release

Bluff City

Bluff City

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$761,294.00	\$837,707.00	\$870,506.00
Other Revenue	\$16,218.00	\$1,580.00	\$2,365.00
Operating Revenue	\$777,512.00	\$839,287.00	\$872,871.00
Operating Expenses	\$622,422.00	\$566,493.00	\$645,530.00
Operating Income	\$155,090.00	\$272,794.00	\$227,341.00
Non-Operating Revenue(Expenses)	\$0.00	(\$44,896.00)	(\$46,996.00)
Net Change In Position	\$155,090.00	\$227,898.00	\$180,345.00
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



Comptroller of the Treasury

MEMORANDUM

Justin P. Wilson

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

	er	Vendor Name			_	
160	06	Bluff City			Comp	oonent Unit
Report Year	Utility	/ Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/201	5 Wat	ter and Sewer	4/7/2010	5/3/2016	MEF	Not Yet Reviewed
FINANCIAI		RESS				
	-	deficit net position for	or the fiscal year e	nded.		
		-	-			
✓ B	Decr	ease in net position	for two consecutiv	/e years.	Fiscal Year End	Decrease in NP
					6/30/2015	(\$64,233.00)
					6/30/2014	(\$116,182.00)
	ls in	default on certain ou	ıtstanding debt			
	10 111	Holders of the Bond	•	Principal	Inte	rest
WATER LO	วรร			1		
		er Loss Referral				
	A	WWA water audit info				
		WWA water audit info /ater Loss Schedule - Statu	s	AWWA Excel File		
			s	AWWA Excel File		
			s	AWWA Excel File		Validity Score
	W					Validity Score
	w □ [□ v	ater Loss Schedule - Statu	e amount established	l by the board		
	w _ V E	ater Loss Schedule - Statu alidity score below the xcessive non-revenue	e amount established water % as establish	by the board by the board		75 Non-Rev Water %
	W U V E (Vater Loss Schedule - Statu Validity score below the xcessive non-revenue Non-Revenue Water as Pe	e amount established water % as establish	by the board by the board		75
	W U V E (ater Loss Schedule - Statu alidity score below the xcessive non-revenue	e amount established water % as establish	by the board by the board		75 Non-Rev Water %



MEMORANDUM

Comptroller of the Treasury

Justin P. Wilson

TO:	Water and Wastewater Financing Board
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FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numbe	r	Vendor Name					
160	6	Bluff City					ponent Unit
Report Year	Utilit	у Туре	Date Received		Date Referred	Reviewer	Report Status
6/30/2016	8 Wa	ter and Sewer	9/20/20	17	9/25/2017	irh	Not Yet Reviewed
FINANCIAL	DIS	TRESS					
□ A	_	deficit net position	for the fiscal year	And	ed		
	1103		for the fiscal year	CIIC	cu.		
□ B	Deci	rease in net positio	n for two consecut	tive	years.	Fiscal Year End	Decrease in NP
	ls in	default on certain	_		Drineinel	Inte	reat
		Holders of the Bo	nas, etc.		Principal	Inte	erest
WATER LC	ss						
✓ D	Wat	er Loss Referral					
	ļ	AWWA water audit inf	0				
	V	Vater Loss Schedule - Sta	tus		AWWA Excel File		
							Validity Score
	✓ \	/alidity score below t	he amount establish	ed b	y the board		70
	V E	Excessive non-revenu	e water % as establi	shec	l by the board		Non-Rev Water %
		(Non-Revenue Water as F			-		22.5
	Corr	nments:					

Town of Cumberland Gap

Cumberland Gap

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$253,463.00	\$299,228.00	\$278,265.00
Other Revenue	\$6,635.00	\$7,860.00	\$9,256.00
Operating Revenue	\$260,098.00	\$307,088.00	\$287,521.00
Operating Expenses	\$291,660.00	\$254,428.00	\$260,842.00
Operating Income	(\$31,562.00)	\$52,660.00	\$26,679.00
Non-Operating Revenue(Expenses)	(\$16,128.00)	(\$13,153.00)	(\$12,972.00)
Net Change In Position	(\$47,690.00)	\$39,507.00	\$13,707.00
Grant/Capital Contribution	\$0.00	\$0.00	\$166,993.00



Justin P. Wilson Comptroller of the Treasury

MEMORANDUM

TO:	Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a) & (d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numbe		Vendor Name			_	
165	1	Cumberland Gap				oonent Unit
Report Year	Utility	/ Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2016	6 Wat	er and Sewer	3/1/2017	3/6/2017	irh	Not Yet Reviewed
FINANCIAL	. DIST	RESS				
	Has o	deficit net position fo	r the fiscal year er	nded.		
✓ B	Decr	ease in net position f	or two consecutiv	e years.	Fiscal Year End	Decrease in NP
					6/30/2016	(\$47,691.00)
					6/30/2015	(\$73,241.00)
	Is in	default on certain ou	tstanding debt.			
		Holders of the Bonds	s, etc.	Principal	Inte	rest
WATER LC	DSS					
✓ D	Wate	er Loss Referral				
	Α	WWA water audit info				
	W	ater Loss Schedule - Status	i	AWWA Excel File		
						Validity Score
		alidity score below the	amount established	by the board		79
	E E	xcessive non-revenue v	vater % as establish	ed by the board		Non-Rev Water %
	<u> </u>	Non-Revenue Water as Per		-		20.7
		ments:		-		

Form Revised March 2017

Town of Englewood

Englewood

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$899,276.00	\$959,186.00	\$0.00
Other Revenue	\$37,959.00	\$14,321.00	\$0.00
Operating Revenue	\$937,235.00	\$973,507.00	\$0.00
Operating Expenses	\$809,184.00	\$905,174.00	\$0.00
Operating Income	\$128,051.00	\$68,333.00	\$0.00
Non-Operating Revenue(Expenses)	(\$22,247.00)	(\$22,285.00)	\$0.00
Net Change In Position	\$105,804.00	\$46,048.00	\$0.00
Grant/Capital Contribution	\$0.00	\$232,500.00	\$0.00



MEMORANDUM

Comptroller of the Treasury

Justin P. Wilson

TO: Water and Wastewater Financing Board FROM: Division of Local Government Audit - Municipalities and Utility Districts SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a) & (d) In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above. Record Number Vendor Name Component Unit 1671 Englewood Report Year Utility Type Date Received Date Referred Reviewer **Report Status** Not Yet Reviewed 6/30/2015 Water and Sewer 4/11/2016 5/3/2016 MEF **FINANCIAL DISTRESS** Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive years. Fiscal Decrease in NP Year End 6/30/2015 (\$1,874.00) 6/30/2014 (\$82,688.00) \square С Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Interest

W	ATE	RL	oss
	✓	D	Wate

	733	
D	Water Loss Referral	
	AWWA water audit info	
	Water Loss Schedule - Status AWWA Excel File	
		Validity Score
	□ Validity score below the amount established by the board	82
	✓ Excessive non-revenue water % as established by the board	Non-Rev Water %
	(Non-Revenue Water as Percent by Cost of Operating System)	26.5
	Comments:	

Town of Gainesboro

Gainesboro

		2017 Audit	2018 Audit
Water/Sewer Revenue \$784,	216.00	\$920,292.00	\$899,141.00
Other Revenue \$6,73	0.00	\$12,723.00	\$14,016.00
Operating Revenue \$790,	946.00	\$933,015.00	\$913,157.00
Operating Expenses \$794,	956.00	\$779,022.00	\$788,550.00
Operating Income (\$4,02	10.00)	\$153,993.00	\$124,607.00
Non-Operating Revenue(Expenses) (\$51,9	920.00)	(\$51,402.00)	(\$51,008.00)
Net Change In Position (\$55,5	930.00)	\$102,591.00	\$73,599.00
Grant/Capital Contribution \$0.00		\$45,106.00	\$376,621.00



Justin P. Wilson Comptroller of the

MEMORANDUM

то:	Water and Wastewater Financing Board
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FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numb	er	Vendor Name				_	
168	37	Gainesboro				Comp	oonent Uni
Report Year	Utility	/ Туре	Date Received		Date Referred	Reviewer	Report Status
6/30/201	6/30/2016 Water and Sewer		12/29/2	016	1/4/2017	ТМН	Not Yet Reviewed
FINANCIAL	. DIST	RESS					
	Has	deficit net position fo	or the fiscal year	r enc	led.		
		-	-				
⋈ B	Decr	ease in net position f	or two consecu	itive	years.	Fiscal Year End	Decrease in NP
						6/30/2016	(\$55,930.00)
						6/30/2015	(\$51,955.00)
□ C	ls in	default on certain ou	tstanding debt.				
		Holders of the Bond	s, etc.		Principal	Inte	rest
WATER LO	DSS						
	Wate	er Loss Referral					
	Α	WWA water audit info					
	W	ater Loss Schedule - Statu	S		AWWA Excel File		
							Validity Score
	□ V	alidity score below the	amount establis	hed k	by the board		84
	E	xcessive non-revenue	water % as estab	lishe	d by the board		Non-Rev Water %
	(Non-Revenue Water as Per	rcent by Cost of Ope	rating	System)		19.6
	Com	ments:					

Town of Mitchellville

Mitchellville

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$41,398.00	\$55,913.00	\$64,665.00
Other Revenue	\$0.00	\$0.00	\$0.00
Operating Revenue	\$41,398.00	\$55,913.00	\$64,665.00
Operating Expenses	\$71,976.00	\$69,014.00	\$60,902.00
Operating Income	(\$30,578.00)	(\$13,101.00)	\$3,763.00
Non-Operating Revenue(Expenses)	(\$3,811.00)	(\$3,736.00)	(\$3,639.00)
Net Change In Position	(\$34,389.00)	(\$16,837.00)	\$124.00
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

MEMORANDUM

то:	Water and Wastewater Financing Board
FROM:	Division of Local Government Audit - Municipalities and Utility Districts
SUBJECT:	Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number		Vendor Name				
1782	2	Mitchellville				onent Unit
Report Year	Utilit	у Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Sew	er	12/27/2017	7 1/4/2018	TMH	Not Yet Reviewed
FINANCIAL	DIST	rress				
	Has d	leficit net position for t	ne fiscal year ended	•		
⊻ B 1	Decre	ease in net position for t	two consecutive year	rs.	Fiscal Year End	Decrease in NP
					6/30/2017	(\$16,837.00)
					6/30/2016	(\$34,389.00)
	Is in	default on certain outst	tanding debt.			
		Holders of the Bond	s, etc.	Principal	Inte	rest
WATER LO	SS					
\Box D	Wate	er Loss Referral				
	A	WWA water audit info				
	W	ater Loss Schedule - Status		AWWA Excel File		
[
						Validity Score
[V	alidity score below the an	nount established by t	he board		
	F	xcessive non-revenue wat	er % as established by	the board		N. D. W. (0/
l		Non-Revenue Water as Percen	-			Non-Rev Water %
		ments:	t by cost of operating by:	(ent)		

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

Town of Monterey

Monterey

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,985,008.00	\$1,980,247.00	\$2,198,077.00
Other Revenue	\$29,191.00	\$35,218.00	\$35,718.00
Operating Revenue	\$2,014,199.00	\$2,015,465.00	\$2,233,795.00
Operating Expenses	\$1,938,684.00	\$1,829,940.00	\$1,831,650.00
Operating Income	\$75,515.00	\$185,525.00	\$402,145.00
Non-Operating Revenue(Expenses)	(\$122,346.00)	(\$120,323.00)	(\$123,860.00)
Net Change In Position	(\$46,831.00)	\$65,202.00	\$278,285.00
Grant/Capital Contribution	\$0.00	\$0.00	\$0.00



Justin P. Wilson Comptroller of the

MEMORANDUM

то:	Water and Wastewater Financing Board
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FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number		Vendor Name					
1784	ŀ	Monterey				Comp	onent Uni
Report Year	Utility	/ Туре	Date Received		Date Referred	Reviewer	Report Status
6/30/2016	Wat	ter and Sewer	12/28/2	016	12/29/2016	ТМН	Not Yet Reviewed
	DIST	RESS					
	Has d	deficit net position fo	or the fiscal vea	r end	led.		
_			-				
✓ B I	Decr	ease in net position	for two consecu	itive	years.	Fiscal Year End	Decrease in NP
						6/30/2016	(\$46,831.00)
						6/30/2015	(\$197,661.00)
□ C I	s in	default on certain ou	itstanding debt.				
		Holders of the Bonc	ls, etc.		Principal	Inte	rest
WATER LOS	SS						
\Box D	Wate	er Loss Referral					
	Α	WWA water audit info					
	W	ater Loss Schedule - Statu	IS		AWWA Excel File		
[
							Validity Score
[V	alidity score below the	amount establis	hed b	by the board		82
[_ E:	xcessive non-revenue	water % as estab	lishe	d by the board		Non-Rev Water %
	(Non-Revenue Water as Pe	rcent by Cost of Ope	rating	System)		19.8
	Com	ments:					

City of Munford

Munford

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,634,970.00	\$1,662,810.00	\$1,929,462.00
Other Revenue	\$162,020.00	\$174,358.00	\$186,190.00
Operating Revenue	\$1,796,990.00	\$1,837,168.00	\$2,115,652.00
Operating Expenses	\$1,907,910.00	\$1,899,020.00	\$1,878,777.00
Operating Income	(\$110,920.00)	(\$61,852.00)	\$236,875.00
Non-Operating Revenue(Expenses)	(\$65,842.00)	(\$52,360.00)	(\$59,172.00)
Net Change In Position	(\$176,762.00)	(\$114,212.00)	\$177,703.00
Grant/Capital Contribution	\$0.00	\$19,060.00	\$0.00



JUSTIN P. WILSON Comptroller JASON E. MUMPOWER Chief of Staff

MEMORANDUM

TO:	Water and Wastewater Financing Board	
FROM:	Division of Local Government Audit - Municipalities and Utilit	y Districts
SUBJECT:	Division of Local Government Audit Referral Pursuant to	TCA 68-221-1010(a)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Vendor Name				
3 Munford			Comp	oonent Unit
Utility Type	Date Received	Date Referred	Reviewer	Report Status
Water and Sewer	3/2/2018	3/6/2018	SRW	Not Yet Reviewed
DISTRESS				
Has deficit net position for t	he fiscal year ended.			
Decrease in net position for	two consecutive year	s.	Fiscal Year End	Decrease in NP
			6/30/2017	7 (\$155,799.00)
			6/30/2016	5 (\$176,762.00)
Is in default on certain outs	tanding debt			
	-	Principal	Int	erest
	5, 66.	Timeipai		ciest
Water Loss Referral				
AWWA water audit info				
Water Loss Schedule - Status		AWWA Excel File		
				Validity Score
Validity score below the ar	nount established by th	e board		82
	•			Non-Rev Water %
	it by Cost of Operating Syst	em)		4.0
Comments:				
	Munford Utility Type Water and Sewer DISTRESS Has deficit net position for t Decrease in net position for Is in default on certain outs: Holders of the Bond SS Water Loss Referral AWWA water audit info Water Loss Schedule - Status Validity score below the ar Excessive non-revenue wat	Munford Utility Type Date Received Water and Sewer 3/2/2018 DISTRESS Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive year Is in default on certain outstanding debt. Holders of the Bonds, etc. SS Water Loss Referral AWWA water audit info Water Loss Schedule - Status Validity score below the amount established by th Excessive non-revenue water % as established by (Non-Revenue Water as Percent by Cost of Operating System)	3 Munford Utility Type Date Received Date Referred Water and Sewer 3/2/2018 3/6/2018 DISTRESS Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive years. Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal SS Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Validity score below the amount established by the board (Non-Revenue Water as Percent by Cost of Operating System)	3 Munford Comp Utility Type Date Received Date Referred Reviewer Water and Sewer 3/2/2018 3/6/2018 SRW DISTRESS Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive years. Fiscal Year End End 6/30/2012 Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Int Image: Sign colspan="2">SS Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Image: Sign colspan="2">Validity score below the amount established by the board Image: Sign colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"Colspa="2"Colspa="2"Colspan="2"Colspa="2"Colspan="2"Colspa="2"

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

City of Westmoreland

Westmoreland

	2016 Audit	2017 Audit	2018 Audit
Water/Sewer Revenue	\$1,537,701.00	\$1,808,688.00	\$2,005,261.00
Other Revenue	\$76,587.00	\$46,693.00	\$78,555.00
	<u>.</u>	<u>Å4 055 004 00</u>	<u> </u>
Operating Revenue	\$1,614,288.00	\$1,855,381.00	\$2,083,816.00
Operating Expenses	\$1,528,475.00	\$1,603,633.00	\$1,790,951.00
Operating Income	\$85,813.00	\$251,748.00	\$292,865.00
Non-Operating Revenue(Expenses)	(\$45,425.00)	(\$61,101.00)	(\$47,303.00)
Net Change In Position	\$40,388.00	\$190,647.00	\$245,562.00
Grant/Capital Contribution	\$0.00	\$268,120.00	\$90,739.00

Non-Revenue Water Release

City of Bluff City



MEMORANDUM

Comptroller of the Treasury

Justin P. Wilson

TO: Wate	r and	Wastewater	Financing	Board
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FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numbe	ər	Vendor Name			_	
160	6	Bluff City			Con	nponent Unit
Report Year	Utilit	ty Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/201	6 Wa	ter and Sewer	9/20/201	9/25/2017	lirh	Not Yet Reviewe
	DIS.	TRESS				
			n for the fiscal year e	ndod		
	паз	dench net positio	n for the listal year e	nueu.		
□ B	Deci	rease in net position	on for two consecutiv	ve years.	Fiscal Year End	Decrease in NP
□ C	le in	default on certain	outstanding debt.		L	
	13 111	Holders of the B	-	Principal	Ini	erest
	1					
	Ì					
NATER LO	oss					
✓ D	Wat	ter Loss Referral				
		WWA water audit ir	ıfo			
	v	Vater Loss Schedule - S	tatus	AWWA Excel File		
]		
						Validity Score
		/alidity score below	the amount established	l by the board		70
		waasaiya nan rayan	uo wator % ae oetabliek	ad by the beard		
	Excessive non-revenue water % as established by the board (Non-Revenue Water as Percent by Cost of Operating System)					Non-Rev Water % 22.5
		iments:		.g e,e.e,		22.0
		intento.				

Form Revised March 2017

CITY OF BLUFF CITY, TENNESSEE Schedule of Unaccounted for Water (Unaudited) June 30, 2018

	Free Water Audit S teporting Workshei		W American Water We Dosynghi & 2014 All R	AS v5.0 xks Associatio
Click to access definition Water Audit Report for: City of E Click to add a comment Reporting Year: 2017	luff City (00000061)]		
Please enter data in the white cells below. Where available, metered values should be use input data by grading each component (n/a or 1-10) using the drop-down list to the left of the tothe left of the second	e input cell. Hover the mouse o	ver the cell to obtain a description		
	entered as: MILLION GAL	LONS (US) PER YEAR		-
To select lhe correct data grading for each input, determi the utility meets or exceeds <u>all</u> criteria for that gr			Master Meter and Supply Error Adjustme	ents
WATER SUPPLIED		in column 'E' and 'J'	Pont: Value;	
Volume from own sources:	9 68.300	MG/Yr	3 00	MG/Yr
Water Imported:	1 33.000	MG/Yr	2 00	MG/Yr
Water exported:	n/a	MG/Yr	Enter negative % or value for under-regis	MG/Yr
WATER SUPPLIED:	101.300	MG/Yr	Enter positive % or value for over-registra	
				-
AUTHORIZED CONSUMPTION Billed metered:	9 64,100	MG/Yr	Click here:	
Billed unmetered: 📰 📶	n/a	MG/Yr	buttons below	
Unbilled metered:	9 5.350	MG/Yr	Pont: Value:	-
Unbilled unmetered:	Canada Canada Canada Canada Canada Canada Canada Canada Canada Canada Canada Canada Canada Canada Canada Canada	MG/Yr	1.25% 🖲 🔾	MG/Yr
Default option selected for Unbilled unmetered			Use bullons to selec	t
AUTHORIZED CONSUMPTION: 2	70.716	MG/Yr	percentage of water supplied OR	
WATER LOSSES (Water Supplied - Authorized Consumption)	30.584	MG/Yr	value	
Apparent Losses			Pont: Value:	
Unauthorized consumption:	0.253	MG/Yr	0,25% 🔘 🔿	MG/Yr
Default option selected for unauthorized consumption	- a grading of 5 is applied	but not displayed		
Customer metering inaccuracies:		MG/Yr	1.50% 🔍 🔾	MG/Yr
Systematic data handling errors:		MG/Yr	0.25% ()	MG/Yr
Default option selected for Systematic data handlin Apparent Losses:	and the second se			
Apparent Losses:	1.471	MG/Yr		
Real Losses (Current Annual Real Losses or CARL)				
Real Losses = Water Losses - Apparent Losses:	29.113	MG/Yr		
WATER LOSSES:				
WATER LUSSES.	30.584	WG/TI		-
NON-REVENUE WATER NON-REVENUE WATER:	37.200	MG/Yr		
= Water Losses + Unbilled Metered + Unbilled Unmetered				
				_
SYSTEM DATA				-
SYSTEM DATA Length of mains: • • • • • • • • • • • • • • • • • • •	7 34.1 8 1,159 34	miles conn./mile main		-
Length of mains: • 2 Number of <u>active AND inactive</u> service connections: • 2 Service connection density: • 3	8 1,159 34			-
Length of mains: Length of mains:	8 1,159	conn./mile main (length of service line	beyond the property	_
Length of mains: • 2 Number of <u>active AND inactive</u> service connections: • 2 Service connection density: • 3	8 1,159 34 Yes	conn./mile main (length of service line boundary, that is the	<u>beyond</u> the property esponsibility of the utility)	
Length of mains:	8 1,159 34 Yes o and a data grading score	conn./mile main (langth of service line boundary, that is the of 10 has been applied	<u>bayond</u> the property esponsibility of the utility)	-
Length of mains: • 2 Number of <u>active AND inactive</u> service connections: • 2 Service connection density: • 3 Are customer meters typically located at the curbstop or property line? <u>Average</u> length of customer service line has been set to zero	8 1,159 34 Yes o and a data grading score	conn./mile main (langth of service line boundary, that is the of 10 has been applied	, <u>bayond</u> the property esponsibility of the utility)	_
Length of mains: • • • • • • • • • • • • • • • • • • •	8 1,159 34 Yes o and a data grading score	conn./mile main (length of service line boundary, that is the of 10 has been applied psi	, <u>beyond</u> the property esponsibility of the utility)	_
Length of mains: • 2 Number of <u>active AND inactive</u> service connections: • 2 Service connection density: • 2 Are customer meters typically located at the curbstop or property line? <u>Average</u> length of customer service line has been set to zer Average operating pressure: • 12 COST DATA Total annual cost of operating water system: • 12 Customer retail unit cost (applied to Apparent Losses): • 12	8 1,159 34 Υes ο and a data grading score 7 70.0 9 \$667.739 9 \$25.29	conn./mile main (length of service line boundary, that is the of 10 has been applied psi \$/Year \$/Year \$/1000 gallons (US)	bayond the property esponsibility of the utility)	_
Length of mains: • • • • • • • • • • • • • • • • • • •	8 1,159 34 Υes ο and a data grading score 7 70.0 9 \$667.739 9 \$25.29	conn./mile main (length of service line boundary, that is the of 10 has been applied psi \$/Year \$/1000 gallons (US)	beyond the property esponsibility of the utility) tomer Retail Unit Cost to value real losses	-
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Length of mains: Length of mains:	8 1,159 34 34 Yes 34 0 and a data grading score 7 7 70.0 9 \$667,739 9 \$25.29 8 \$1.258.21	conn./mile main (length of service line boundary, that is the of 10 has been applied psi S/Year [\$/1000 gallons (US) S/Million gallons US	esponsibility of the utility) tomer Retail Unit Cost to value real losses	-
Length of mains: • 2 Number of <u>active AND inactive</u> service connections: • 3 Service connection density: • 3 Are customer meters typically located at the curbstop or property line? <u>Average length of customer service line has been set to zer</u> Average length of customer service line has been set to zer Average operating pressure: • 12 COST DATA Total annual cost of operating water system: • 12 Customer retail unit cost (applied to Real Losses): • 12 WATER AUDIT DATA VALIDITY SCORE:	8 1,159 34 34 Yes 34 0 and a data grading score 7 7 70.0 9 \$667,739 9 \$25.29 8 \$1.258.21	conn./mile main (length of service line boundary, that is the of 10 has been applied psi S/Year [\$/1000 gallons (US) S/Million gallons US	esponsibility of the utility) tomer Retail Unit Cost to value real losses	_
Length of mains: Length of mains:	8 1,159 34 34 Yes 34 0 and a data grading score 7 7 70.0 9 \$667,739 9 \$25.29 8 \$1.258.21	conn./mile main (length of service line boundary, that is the of 10 has been applied psi S/Year [\$/1000 gallons (US) S/Million gallons US	esponsibility of the utility) tomer Retail Unit Cost to value real losses	-
Length of mains: Length of mains: Number of active AND inactive service connections: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to zer Average length of customer service line has been set to zer Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): WATER AUDIT DATA VALIDITY SCORE: Key YOUR A weighted scale for the components of consumption and PRIORITY AREAS FOR ATTENTION:	8 1,159 34 34 Yes 34 9 \$667,739 9 \$25.29 8 \$1,258.21 SCORE IS: 81 out of 100 ** water loss is included in the ca	conn./mile main (length of service line boundary, that is the of 10 has been applied psi S/Year [\$/1000 gallons (US) S/Million gallons US	esponsibility of the utility) tomer Retail Unit Cost to value real losses	_
Length of mains:	8 1,159 34 34 Yes 34 9 \$667,739 9 \$25.29 8 \$1,258.21 SCORE IS: 81 out of 100 ** water loss is included in the ca	conn./mile main (length of service line boundary, that is the of 10 has been applied psi S/Year [\$/1000 gallons (US) S/Million gallons US	esponsibility of the utility) tomer Retail Unit Cost to value real losses	-
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CITY OF BLUFF CITY, TENNESSEE Schedule of Unaccounted for Water (Unaudited) (Continued)

	oystell Autiputes and Periornance indicators	Indicators Copyright © 2014, All Rights Reserved.
	Water Audit Report for: City of Bluff City (0000061) Reporting Year: 2017 7/2017 - 6/2018	
Suctom Attribution.	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 81 out of 100 ***	IS: 81 out of 100 ***
	Apparent Losses:	1.471 MG/Yr
	+ Real Losses: = Water Losses:	29.113 MG/Yr 30.584 MG/Yr
	2 Unavoidable Annual Real Losses (UARL): See limits in definition	See limits in definition MG/Yr
	Annual cost of Apparent Losses:	\$37,204
	Annual cost of Real Losses:	\$36,630 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption
Performance Indicators:		-
Einonciol.	Non-revenue water as percent by volume of Water Supplied:	36.7%
	Non-revenue water as percent by cost of operating system:	12.3% Real Losses valued at Variable Production Cost
1		
	Apparent Losses per service connection per day:	3.48 gallons/connection/day
Oncretional Efficiency:	Real Losses per service connection per day:	68.82 gallons/connection/day
	Real Losses per length of main per day*:	NA
	Real Losses per service connection per day per psi pressure:	0.98 gallons/connection/day/psi
Ē	From Above, Real Losses = Current Annual Real Losses (CARL):	29.11 million gallons/year
	Infrastructure Leakage Index (ILI) [CARL/UARL]:	
* This performance indicator applies for systems with	ms with a low service connection density of less than 32 service connections/mile of pipeline	connections/mile of pipeline

AWWA Free Water Audit Software v5.0

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City of Brentwood



JUSTIN P. WILMON Compiraller

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	_	Vendor Name				
113	7	Brentwood			Com	ponent Unit
Report Year	Utilit	ty Type	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	7 Wa	ter and Sewer	12/29/2017	1/5/2018	ТМН	Not Yet Reviewed
FINANCIAI	DIS	TRESS				
		deficit net position for t	he fiscal year ended.			
B		ease in net position for t		ş.	Fiscal Year End	Decrease in NP
□ C	Is in	default on certain outst	anding debt.			
		Holders of the Bonds	s, etc.	Principa!	In	terest
	<u> </u>					
	-					
WATER LO	DSS					
✓ D	Wat	er Loss Referral				
	A	WWA water audit info				
	W	/ater Loss Schedule - Status		AWWA Excel File		
	□ v	alidity score below the an	iount established by th	e board		Validity Score
		xcessive non-revenue wate				Non-Rev Water %
		Non-Revenue Water as Percen	t by Cost of Operating Syste	em)		24.4
	Com	ments:				1

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

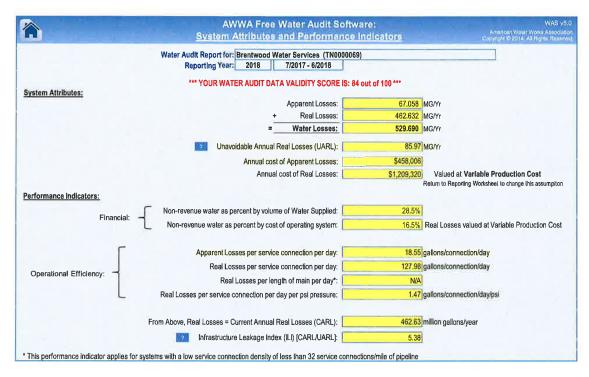
JASON E. MUMPOWER

Chief of Staff

CITY OF BRENTWOOD, TENNESSEE AWWA WATER SCHEDULE - UNAUDITED IUNE 30, 2018

JUNE	50, 2010					-
AWWA Free Wa	ter Audit Softwar	e:			WAS	
Reporting	Worksheet			Ame Gepies	incon Weter Werke i Inco 2016, All right	A SOCIE
Citck to access definition Water Audit Report for: Brentwood Water S Citck to add a comment Reporting Year: 2018 7/	ervices (TN0000069) 2017 - 6/2018					
Please enter data in the white cells below. Where available, metered values should be used; if metered	values are unavailable plea	se estimate a value. In	dicate your cont	idence in the	accuracy of the	
Input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell- All volumes to be entered as			on of the grades			
To select the correct data grading for each input, determine the higher						
the utility meets or exceeds all criteria for that grade and all g	rades below it. Enter grading in columi		Ponl:		rror Adjustments alue:	5
Volume from own sources:	0.000 MG/Yr			• •		MG/Y
Water imported: 101 9.	1,995.091 MG/Yr	+ 2				MGIY
Water exported:	0.000 MG/Yr			¢ ¢ _		MG/Y
WATER SUPPLIED:	1,996.091 MG/Yr				or under-registra r over-registratio	
	1,000.001) 100/11				1000	
AUTHORIZED CONSUMPTION	4 407 400 400			Click h	iere: 🔽	
Billed metered: 10 9 Billed unmetered: 10 10	1,427.100 MG/Yr 0.000 MG/Yr			for nei button	p using option s below	
Unbilled metered: 📰 🛐	14.350 MG/Yr		Pont:		alue:	
Unbilled unmetered:	24.951 MG/Yr		1.25%	* 0		MG/Yı
Default option selected for Unbilled unmetered - a grading	of 5 is applied but not d	splayed		A Lieght	utions to select	
	1,466.401 MG/Yr			perce	ntage of water supplied OR value	
NATER LOSSES (Water Supplied - Authorized Consumption)	529.690 MG/Yr			1	Value	
Apparent Losses			Pont:	Va	alue:	
Unauthorized consumption:	4.990 MG/Yr		0.25%	0 0	P	MG/Yr
Default option selected for unauthorized consumption - a grading	of 5 is applied but not	displayed				
Customer metering Inaccuracles:	58-500 MG/Yr			¢ 🐵 58		MGM
Pustometic data bandling arrars	3.568 MG/Yr		0.25%	A 0		
	a grading of 5 is applied 67.058 MG/Yr	but not displayed	LISTANGOL.		,	MGIYI
Default option selected for Systematic data handling errors - Apparent Losses: 171 Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: 121	a grading of 5 is applied 67.058 MG/Yr 462.632 MG/Yr	but not displayed	LINGUAR OF L			MG/Yi
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CITY OF BRENTWOOD, TENNESSEE AWWA WATER SCHEDULE - CONTINUED - UNAUDITED JUNE 30, 2018



Town of Byrdstown



JUSTIN B WILKON Compiraller

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	_	Vendor Name				
1618	8	Byrdstown			Comp	ponent Unit
Report Year	Utilit	у Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Wat	er and Sewer	2/1/2018	2/13/2018	TMH	Not Yet Reviewed
FINANCIAL	DIST	PFSS				
			ha Gaaal waan andad			
	nas u	leficit net position for t	ne fiscal year ended.			
	Decre	ease in net position for	two consecutive year	8.	Fiscal Year End	Decrease in NP
	Is in	default on certain outs	anding debt.			
		Holders of the Bond	s, etc.	Principal	Int	erest
	<u> </u>					
WATER LO	SS					
✓ D	Wate	er Loss Referral				
	Α	WWA water audit info				
	W	ater Loss Schedule - Status		AWWA Excel File		
		alidity score below the an	10unt established by th	e board		Validity Score
	V Ex	ccessive non-revenue wat	ar % as established by	the board		
	<u> </u>	Non-Revenue Water as Percen				Non-Rev Water %
		nents:	,			

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

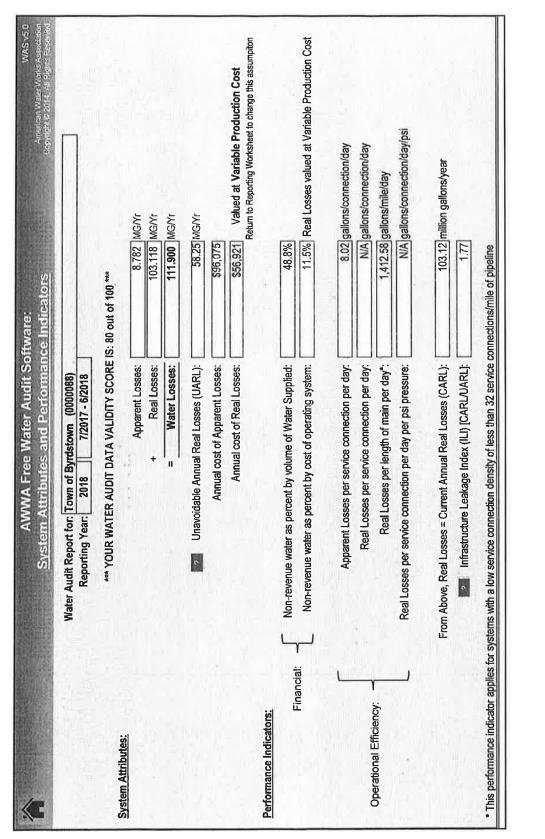
JASON E. MUMPOWER

Chief of Scaff

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Click to access definition Click to add a comment	Water Audit Report for: Tow Reporting Year:		n (0000088) /2017 - 6/2018				
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			111.900 MG				
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NON-REVENUE WATER	NON-REVENUE WATER:		117.500 MG	Yr			
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AWWA Free Water Audit Software v5.0 53



Performance Indicators 1

AWWA Free Water Audit Software v5.0

220

City of Cowan



JUSTIN P. WILMON Comprealler

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	Vendor Name				
1646	Cowan			Comp	onent Unit
Report Year Utilit	ty Type	Date Received	Date Referred	Reviewer	Report Status
6/30/2017 Wat	ter and Sewer	2/21/2018	2/23/2018	mlb	Not Yet Reviewed
FINANCIAL DIS	TDESS				
, p					
A Has o	deficit net position for t	he fiscal year ended.		L	
🗆 B Decr	ease in net position for t	two consecutive years		Fiscal Year End	Decrease in NP
C Is in	default on certain outst	anding debt.			
	Holders of the Bonds	s, etc.	Principal	Inte	erest
WATER LOSS					
D Wat	er Loss Referral				
A	WWA water audit info				
W	Vater Loss Schedule - Status		AWWA Excel File		
	alidity score below the an	nount established by the	board		Validity Score
V E	Excessive non-revenue wat	er % as established by t	he board		Non-Rev Water %
	(Non-Revenue Water as Percen	t by Cost of Operating Syste	m)		22.3
Com	iments:				

Form Revised March 2017

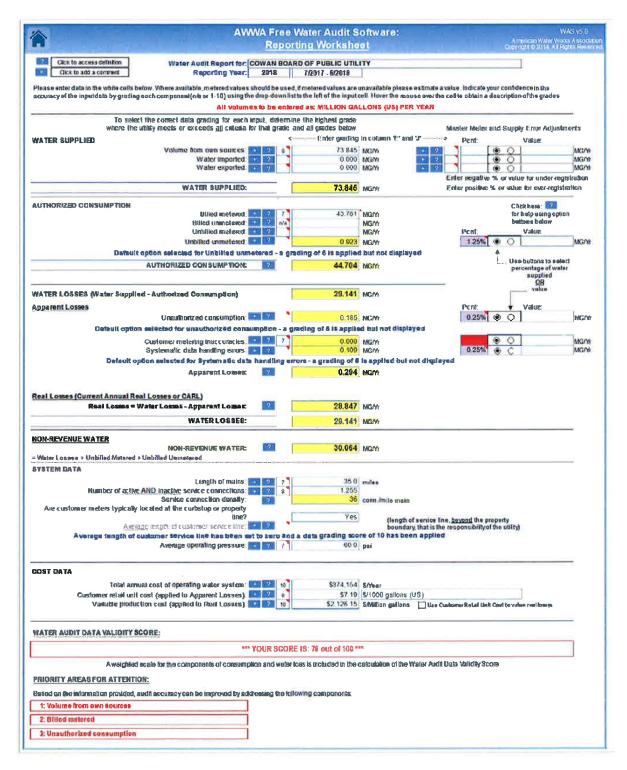
CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER

Chief of Staff

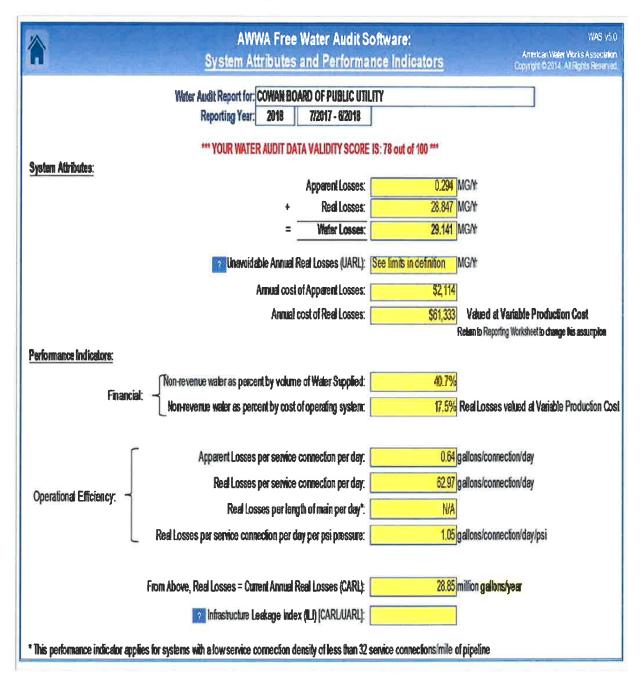
CITY OF COWAN OTHER SUPPLEMENTARY INFORMATION June 30, 2018

REPORTING WORKSHEET - UNAUDITED



CITY OF COWAN OTHER SUPPLEMENTARY INFORMATION June 30, 2018

PERFORMANCE INDICATORS - UNAUDITED



Dowelltown-Liberty Waterworks



JUSTIN P. WILMON Comprodler

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

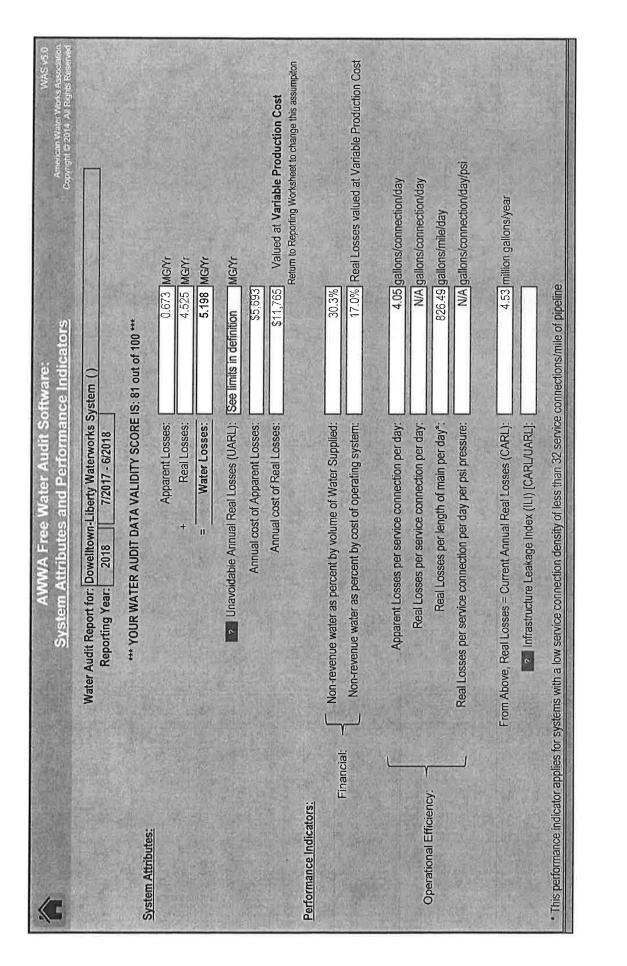
Record Number		Vendor Name				
2878		Dowelltown-Liberty W	aterworks		Comp	oonent Unit
Report Year	Utility	/ Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Wate	er	12/26/2017	1/3/2018	mlb	Not Yet Reviewed
FINANCIAL	DIST	RESS				
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🗆 В г	Decre	ase in net position for	two consecutive years		Fiscal Year	
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C I	Is in o	default on certain outst	anding debt.			
		Holders of the Bonds	s, etc.	Principal	Int	erest
					ļ	
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WATER LOS	SS					
	Wate	er Loss Referral				
	A	WWA water audit info				
0	W	ater Loss Schedule - Status		AWWA Excel File		
1						
						Validity Score
[[V	alidity score below the an	ount established by the	e board		81
	E E	ccessive non-revenue wat	er % as established by (he board		Non-Rev Water %
	-	Non-Revenue Water as Percen				20.6
	Comr	nents:				

Form Revised March 2017

CORDELL HULL BUILDING | 425 Fifth Avenue North | Nashville, Tennessee 37243

JASON E. MUMPOWER Chief of Seaff

	/ater Audit Software: n <u>g Worksheet</u>	WAS (5:0 Ámetica) Water Works Association Cobyrgit 5 2014: All Rights Ruserved
Click to access definition Water Audit Report for: Dowelltown-Libe Reporting Year: 2018		
Please enter data in the while cells below. Where available, metered values should be used; if meter input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input ca All volumes to be entered		
To select the correct data grading for each input, determine the hig the utility meets or exceeds all criteria for that grade and a	The second	er Meter and Supply Error Adjustments
		Pont: Value:
Volume from own sources:	20.635 MG/Yr MG/Yr	O MG/Yr MG/Yr
Water exported:	MG/Yr Enter	O MG/Yr negative % or value for under-registration
WATER SUPPLIED:	Contraction of the second seco	positive % or value for over-registration
AUTHORIZED CONSUMPTION		Click here:
Billed metered:	14,389 MG/Yr MG/Yr	for help using option buttons below
Unbilled metered; 1 2 8 Unbilled unmetered; 2 8	0.500 MG/Yr 0.548 MG/Yr	Pont: Value: O
Unbilled Unmetered volume entered is greater than		
AUTHORIZED CONSUMPTION:	15.437 MG/Yr	Use bullons to select percentage of water supplied
	5.198 MG/Yr	OR value
WATER LOSSES (Water Supplied - Authorized Consumption)	the second second second second second second second second second second second second second second second se	Pont: Value:
Unauthorized consumption:	0.052 MG/Yr	0.25% O MG/Y
Default option selected for unauthorized consumption - a grad	0,620 MG/Yr	4.00% O MG/Yr
Systematic data handling errors:	0.001 MG/Yr	0 0 0.001 MG/Yr
Apparent Losses:	0.673 MG/Yr	
Real Losses (Current Annual Real Losses or CARL)		
Real Losses = Water Losses - Apparent Losses:	4.525 MG/Yr	
WATER LOSSES:	5.198 MG/Yr	
NON-REVENUE WATER NON-REVENUE WATER:	6.246 MG/Yr	
= Weter Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA	A REAL PROPERTY AND A REAL	
Longih of mains: 22 20	15.0 miles	
Number of active AND Inactive service connections: 10 10 Service connection density: 10	455 30 conn./mile.main	A CONTRACT OF THE REAL OF THE
Are customer maters typically located at the curbstop or property line?	Yes (length of service line, beyo	nd the property
Average length of customer survice line tas been set to zero and a d	boundary, that is the respon	
Average operating pressure:	60.0 ps/	
COST DATA Total annual cost of operating water system:	\$118,441 \$Wear	
Customer, retail unit cost (applied to Apparent Losses):	\$8.46 \$/1000 gallons (US)	
Variable production cost (applied to Real Losses):	\$2,600.00 \$/Million gallons	Retail Unit Cost to value real losses
WATER AUDIT DATA VALIDITY SCORE:		医心理学 法规律的 化
*** YOUR SCORE IS	S: 81 out of 100 ***	
A weighted scale for the components of consumption and water loss	Is included in the calculation of the Water Audit Data Vallo	fily Score
PRIORITY AREAS FOR ATTENTION:		
Based on the information provided, audit accuracy can be improved by addressing the following con	nponents:	
1: Volume from own sources	and the second sec	
2: Unauthorized consumption 3: Billed meterad		



Performance Indicators 19

AWWA Free Water Audit Software v5.0

Town of Kenton

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STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

MEMORANDUM

Complroller of the Treasury

Justin P. Wilson

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numb	er	Vendor Name				
173	32	Kenton			Com	ponent Unit
Report Year	Utility	у Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/201	6 Wat	ter and Sewer	1/26/201	7 1/30/2017	SRW	Not Yet Reviewed
FINANCIA	L DIST	RESS				
	Has	deficit net position	for the fiscal year e	nded.		
□ B	Decr	ease in net position	for two consecutiv	ve years.	Fiscal Year End	Decrease in NP
□ C	ls in	default on certain o Holders of the Bon	-	Principal	Inte	erest
WATER LO	OSS					
		er Loss Referral				
	Wate	er Loss Referral WWA water audit info				
	Wate			AWWA Excel File		
WATER LO	Wate	WWA water audit info		AWWA Excel File		
	Wate A W	WWA water audit info	JS			Validity Score
	Wate A W V V V E	WWA water audit info	e amount established water % as establish	by the board by the board		
	Wate A W V V V E: ()	WWA water audit info /ater Loss Schedule - Stat alidity score below th xcessive non-revenue	e amount established water % as establish	by the board by the board		74 Non-Rev Water %

Form Revised February 2013

CITY OF KENTON, TENNESSEE AWWA SCHEDULE - UNAUDITED

June 30, 2018

					American Water Copyright © 2014./	a region to
Click to access definition Water Audit Report for: Click to add a comment Reporting Year: 2017	nton (0000347) 7/2017 - 6/2018	1		-		
Please enter data in the white cells below. Where available, metered values should be used; nput data by grading each component (n/a or 1-10) using the drop-down list to the left of the	If metered values are unavail	able please estima	te a value. Indicate	your confidence in	the accuracy of t	he
	antered as: MILLION GAL			e graues	-	
To select the correct data grading for each input, determine	the highest grade where		March	- Malan and Our	al . France Ardhurtz	
the utility meets or exceeds all criteria for that grad	——————————————————————————————————————	umn 'E' and 'J'	>	er Meter and Sup Pont:	Value:	nents
Volume from own sources: 🔤 🌃			2 3	-15.00% 0 0		MG
Water imported: 🔝 💷	va 0.000	MG/Yr	1 1		Σ	MG
Water exported:	va 0.000	MG/Yr				MG
WATER SUPPLIED:	35.749	MG/Yr		negative % or va positive % or val		
AUTHORIZED CONSUMPTION						_
	8 25.491	MG/Yr			Click here:	
Blited unmetered:	Va 0.000	MG/Yr			bultons below	
	1.153	MG/Yr		Pont:	Value:	
	5 0.447	MG/Yr		1.25%		MG
Default option selected for Unbilled unmetered - a grading of 5 is applied b				1	Use buttons to se	elect
AUTHORIZED CONSUMPTION:	27.091	MG/Yr		here	percentage of w	ater
					supplied OR	
VATER LOSSES (Water Supplied - Authorized Consumption)	8.658	MG/Yr		1	value	
Apparent Losses				Pont:	Value:	
Jnauthorized consumption:	0.000	MG/Yr		0.25%		MG
FALSE						
Customer metering Inaccuracles:	8 0.824	MG/Yr	1	3.00%		MG
Systematic data handling errors: 🔝 🕅		MG/Yr		0.25%		MG
Apparent Losses:	0.888	MG/Yr				
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses:	7.770	MG/Yr				
Real Losses (Current Annual Real Losses or CARL)		MG/Yr				
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: ION-REVENUE WATER NON-REVENUE WATER:	7.770	MG/Yr MG/Yr				_
Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: ON-REVENUE WATER ON-REVENUE WATER: Vater Losses + Unbilled Metered + Unbilled Unmetered	7.770	MG/Yr MG/Yr				
Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: ION-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered WATER LOSSES: Water Losses + Unbilled Metered + Unbilled Unmetered WATER LOSSES:	7.770 8.658 10.258	MG/Yr MG/Yr MG/Yr				_
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: ION-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmatered IVSTEM DATA	7,770 8,659 10,258	MG/Yr MG/Yr				_
teal Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: ION-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered VSTEM DATA Length of mains: 1 00 Number of active AND inactive service connections: 1 07	7.770 8.658 10.258	MG/Yr MG/Yr MG/Yr				-
Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: ION-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered Water Losses + Unbilled Metered + Unbilled Unmetered VSTEM DATA Length of mains: Number of active service connection density: Service connection density:	7,770 8,659 10,258	MG/Yr MG/Yr MG/Yr				-
Real Losses or CARL) Real Losses = Water Losses: Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: UON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered System DATA Length of mains: Number of active AND Inactive service connections: Service connection density: Yer customer meters typically located at the curbstop or property line?	7.770 8.658 10.258	MG/Yr MG/Yr MG/Yr miles conn/mile main	ví service line, bevo	nd line property box	undary.	
Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: MON-REVENUE WATER: Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Service connection density: Quergage length of customer service line: Average length of customer service line:	7.770 8.658 10.258 5 7 15.4 7 7 7 47 47 47 9 47	MG/Yr MG/Yr MG/Yr miles conn/mile mein (length s that is	f service line, <u>bevo</u> r e responsibility of tr	<u>ni</u> lhe property bou e utility)	undary,	_
Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: ION-REVENUE WATER: Water Losses + Unbilded Metered + Unbilded Unmetered Vorget of mains: Service connections: Number of active AND Inactive service connections: Number of active AND Inactive service connection density: O Average length of customer service line: Average length of customer service line: O Average length of customer service line: Colspan="2">O	7,770 8,658 10,258 5 15,4 7 7,17 47 7 47 Yes	MG/Yr MG/Yr MG/Yr miles conn./mile main (length o that is th that is th	f service line, <u>bevo</u> r e responsibility of th	<u>tá</u> lhe property bou le utility)	undary,	
Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: ION-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered Water Losses + Unbilled Metered + Unbilled Unmetered VSTEM DATA Service connection density: Service connection density: Service connection density: Vater customer meters typically located at the curbstop or property line? Average length of customer service line:	7,770 8,658 10,258 5 15,4 7 7,17 47 7 47 Yes	MG/Yr MG/Yr MG/Yr miles conn./mile main (length o that is th that is th	f service îne, <u>bevo</u> i e responsibility of th	<u>18</u> (he property box e utility)	undary,	
Real Losses or CARL) Real Losses = Water Losses: Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: UON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered Service connections: © 00 Service connection density: © 00 Service connection density: © 00 Service connection density: © 00 Average length of customer service line: © 00 Average length of customer service line to zero and a data gradit Average operating pressure: © 00	7,770 8,658 10,258 5 15,4 7 7,17 47 7 47 Yes	MG/Yr MG/Yr MG/Yr miles conn./mile main (length o that is th that is th	f service fine, <u>bevo</u> e responsibility of th	<u>st</u> the property box ie utility)	undary,	
Real Losses or CARL) Real Losses = Water Losses: 4 WATER LOSSES: WATER LOSSES: UON-REVENUE WATER WATER Losses + Unbilled Metered + Unbilled Unmetered Water Losses + Unbilled Metered + Unbilled Unmetered System DATA Length of mains: 1000 System DATA Length of mains: 1000 Number of active AND Inactive service connections: 1000 Service connection density: 100 Service connection density: 100 Average length of customer service line: 1000 Average length of customer service line inse been set to zero and a data grader Average length of customer service line has been set to zero and a data grader Average operating pressure: 1000 COST DATA	7.770 8.658 10.258 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	MG/Yr MG/Yr MG/Yr miles conn./mile main that is th ppilod psi	f service line, <u>bavo</u> e responsibility of th	<u>të</u> lhe property bor le ulility)	undary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: 2 WATER LOSSES: WATER LOSSES: ION-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered 2 SYSTEM DATA Length of mains: 2 Number of active service connection density: 2 Service connection density: 2 Average length of customer service line: 2 Average length of customer service line: 2 COST DATA Total annual cost of operating water system:	7.770 8.658 10.258 5 15.4 7 47.7 7 7 9 9 9 9 10 \$46.0 10 \$65,146	MG/Yr MG/Yr MG/Yr miles conn./mile mein conn./mile mein bet is th psi	e responsibility of th	<u>nd</u> the property box le utility)	undary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: Image: Comparison of Comparis	7.770 8.658 10.258 5 15.4 7 7 47 Yes ng score of 10 has been 1 3 48.0 0 \$65,146 9	MG/Yr MG/Yr MG/Yr miles conn./mile main periled pei \$/Year \$/1000 gallons (t	e responsibility of th	1월 lhe property bou e ullility)	undary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: Image: Comparison of Comparis	7.770 8.658 10.258 5 15.4 7 7 47 Yes ng score of 10 has been 1 3 48.0 0 \$65,146 9	MG/Yr MG/Yr MG/Yr miles conn./mile mein conn./mile mein bet is th psi	e responsibility of th	<u>nd</u> the property bou e utility)	undary,	
Real Losses or CARL) Real Losses = Water Losses: Apparent Losses: WATER LOSSES: WATER LOSSES: UON-REVENUE WATER UNREVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND Inactive service connection of earliers SYSTEM DATA Length of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of mains: OP Connection of active connections: OP Connection of connections: OP Connection of customer service line: OP Connection op connection op connection Average operating pressure: OP Connection op connection	7.770 8.658 10.258 5 15.4 7 7 47 Yes ng score of 10 has been 1 3 48.0 0 \$65,146 9	MG/Yr MG/Yr MG/Yr miles conn./mile main periled pei \$/Year \$/1000 gallons (t	e responsibility of th	nd the property bouter utility)	ındary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: Image: Comparison of Comparis	7.770 8.658 10.258 5 15.4 7 7 47 Yes ng score of 10 has been 1 3 48.0 0 \$65,146 9	MG/Yr MG/Yr MG/Yr miles conn./mile main periled pei \$/Year \$/1000 gallons (t	e responsibility of th	ng the property bou e utility)	ındary,	
Real Losses or CARL) Real Losses - Apparent Losses: Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: NON-REVENUE WATER: Water Losses + Unbilled Metered + Unbilled Unmetered Sty Tem DATA Length of mains: Sty Cell Connections: Number of active AND inactive service connections: Service connections: Number of active AND inactive service connections: Service connections: Average length of customer service line: Cost DATA Total annual cost of operating water system: Cost DATA WATER AUDIT DATA VALIDITY SCORE: WATER AUDIT DATA VALIDITY SCORE: * YOUR SCORE IS: 79 out of 100 ***	7.770 8.658 10.258 5 15.4 7 47.7 Yes 9 53.44 9 53.44 0 \$466.45	MG/Yr MG/Yr MG/Yr miles conn/mile mein conn/mile mein that is th pplied stylear \$/Year \$/Year \$/Year	e responsibility of th	tid the property bou e utility)	ındary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses:	7.770 8.658 10.258 5 15.4 7 47.7 Yes 9 53.44 9 53.44 0 \$466.45	MG/Yr MG/Yr MG/Yr miles conn/mile mein conn/mile mein that is th pplied stylear \$/Year \$/Year \$/Year	e responsibility of th	to the property bour	undary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: 2	7.770 8.658 10.258 5 15.4 7 47.7 Yes 9 53.44 9 53.44 0 \$466.45	MG/Yr MG/Yr MG/Yr miles conn/mile mein conn/mile mein that is th pplied s/Year \$/Year \$/Year \$/Year	e responsibility of th	ng the property bourse utility)	Indary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses:	7.770 8.658 10.258 5 15.4 7 47.7 Yes 9 53.44 9 53.44 0 \$466.45	MG/Yr MG/Yr MG/Yr miles conn/mile mein conn/mile mein that is th pplied s/Year \$/Year \$/Year \$/Year	e responsibility of th	<u>18</u> (he property bound in the utility)	Indary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses:	7.770 8.658 10.258 5 15.4 7 47.7 Yes 9 53.44 9 53.44 0 \$466.45	MG/Yr MG/Yr MG/Yr miles conn/mile mein conn/mile mein that is th pplied s/Year \$/Year \$/Year \$/Year	e responsibility of th	the property box	Indary,	
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: Image: Comparison of Comparis	7.770 8.658 10.258 5 15.4 7 47.7 Yes 9 53.44 9 53.44 0 \$466.45	MG/Yr MG/Yr MG/Yr miles conn/mile mein conn/mile mein that is th pplied s/Year \$/Year \$/Year \$/Year	e responsibility of th	nd the property bour the utility)	undary,	

See Independent Auditor's Report.

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CITY OF KENTON, TENNESSEE **AWWA SCHEDULE - UNAUDITED** June 30, 2018

	AWWA Free Water Audit S System Attributes and Performa	
	Water Audit Report for: City of Kenton (0000347) Reporting Year: 2017 7/2017 - 6/2018	
	*** YOUR WATER AUDIT DATA VALIDITY SCORE	E IS: 79 out of 100 ***
system Attributes:	Apportable	0.977 MG/Yr
	Apparent Losses: + Real Losses;	7.681 MG/Yr
	= Water Losses:	8.659 MG/Yr
	Unavoidable Annual Real Losses (UARL):	See limits in definition MG/Yr
	Annual cost of Apparent Losses:	\$3,361
	Annual cost of Real Losses:	\$3,583 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption
erformance Indicators:		
	Non-revenue water as percent by volume of Water Supplied:	28.7%
Financial:	Non-revenue water as percent by cost of operating system:	11.8% Real Losses valued at Variable Production Cos
L	Apparent Losses per service connection per day:	3.73 gallons/connection/day
	Real Losses per service connection per day:	29.35 gallons/connection/day
Operational Efficiency:	Real Losses per length of main per day*:	N/A
L	Real Losses per service connection per day per psi pressure:	0.61 gallons/connection/day/psi
	From Above, Real Losses = Current Annual Real Losses (CARL):	7.68 million gallons/year
	Infrastructure Leakage Index (ILI) [CARL/UARL]:	
This performance indicator applies f	or systems with a low service connection density of less than 32 servi	co connections/mile of pipeling

See Independent Auditor's Report.

City of La Vergne



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

Justin P. Wilson Comptroller of the

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

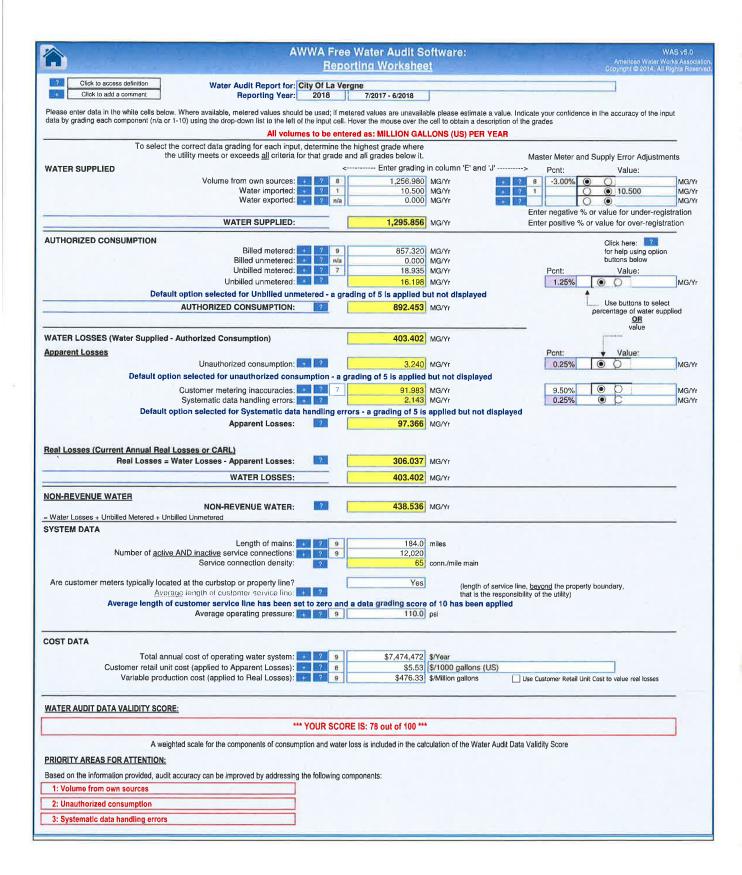
SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

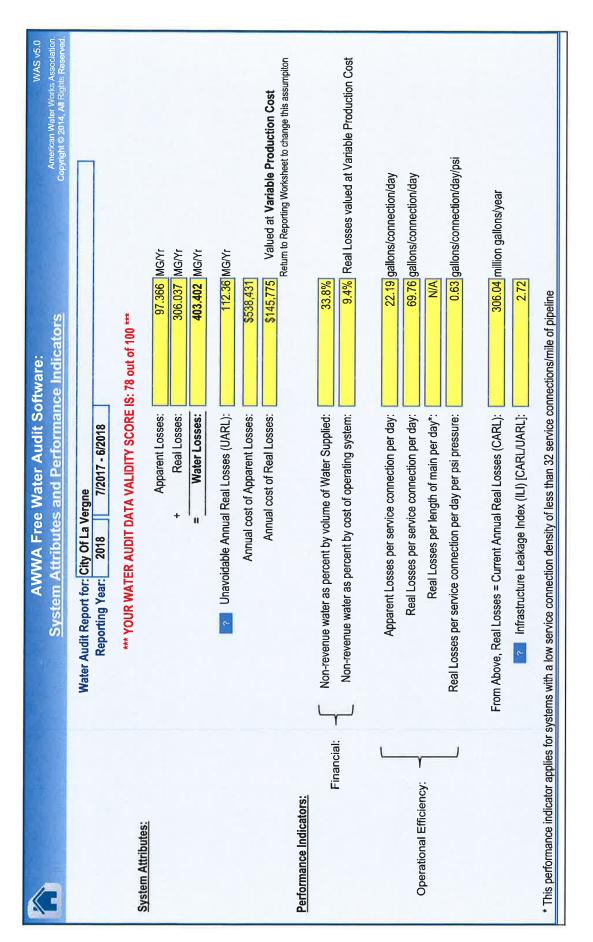
Record Number		Vendor Name					
1745	5	LaVergne				Com	ponent Uni
Report Year	Utility	Туре	Date Received		Date Referred	Reviewer	Report Status
6/30/2016	Wate	er and Sewer	12/21/20	016	1/4/2017	mlb	Not Yet Reviewed
FINANCIAL	DIST	RESS					4
_			or the field war		أمط		
	nas u	leficit net position f	or the liscal year	enc	ieu.		
□ B ।	Decre	ease in net position	for two consecu	tive	years.	Fiscal Year End	Decrease in NP
						[
							i — — — — — — — — — — — — — — — — — — —
□ C I	s in c	default on certain o	-				
3		Holders of the Bond	ls, etc.		Principal	Inte	rest
WATER LO	SS						
D	Wate	er Loss Referral					
	A۱	WWA water audit info					
	Wa	ater Loss Schedule - Statu	S		AWWA Excel File		
[
							Validity Score
[Va	alidity score below the	e amount establish	ed b	y the board		79
ſ		cessive non-revenue	water % as establi	ebor	hy the board		
Ľ	•	Non-Revenue Water as Pe			•		Non-Rev Water % 42.0
	Comn				- # · · · /		72.0
		161113.					ĺ

Form Revised February 2013

AWWA Reporting Worksheet (Unaudited)



AWWA Reporting Worksheet (Unaudited)



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City of Lebanon

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STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

MEMORANDUM

Comptroller of the Treasury

Justin P. Wilson

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numbe	r Vendor Name				
174	7 Lebanon			Con	nponent Unit
leport Year	Utility ⊤ype	Date Received	Date Referred	Reviewer	Report Status
6/30/2016	Water and Sewer	3/25/2017	3/28/2017	тмн	Not Yet Reviewe
INANCIAL	DISTRESS				
		on for the fiscal year en	dod		
	has denot het positio	on for the instal year en	ueu.		
□ B	Decrease in net posit	ion for two consecutive	e years.	Fiscal Year End	Decrease in NP
	ls in default on certai				
	Holders of the	Bonds, etc.	Principal	Int	erest
				[
	L				
VATER LO	SS				
✓ D	Water Loss Referral				
	AWWA water audit	info			
	Water Loss Schedule -	Status	AWWA Excel File		
					Validity Score
	Validity score below	v the amount established	by the board		79
	Excessive non-reve	nue water % as establish	ad by the board		
		as Percent by Cost of Operatin	•		Non-Rev Water % 22.3
	Comments:		····		

Form Revised March 2017

	Nater Audit Se ing Workshee			American Water V Copyright & 2014, Alt	WAS v5 0 Vocks Association
Click to access definition Water Audit Report for: City of Lebanor Clack to add a comment Reporting Year: 2018					
Please enter data in the white cells below. Where available, matered values should be used; if met input data by grading each component (r/a or 1-10) using the drop-down list to the left of the input	ered values are unavai	able please estima over the cell to obtai	te a value indicate your confidence in a description of the grades	e in the accuracy of t	he
All volumes to be entere	All a second second second second second	LONS (US) PER	YEAR	Level Hurt 174	<u>al pointe</u>
To select the correct data grading for each input, datermine the h the utility meets or exceeds all criteria for that grade and	all grades balow it.		Master Meter and S	Supply Error Adjustr	nents
WATER SUPPLIED <	Enter grading	In column 'E' and '		Value;	
Volume from own sources:	2,194.204	and the second sec	5 2.00%	0	MG/Yr
Water imported: 1 2 n/a Water exported: 2 8	0.000	MG/Yr MG/Yr	• 7 5 0	2.003	MG/Yr MG/Yr
	12181 310			r value for under-re	
WATER SUPPLIED:	1,693.810	MG/Yr	Enter positive % or	value for over-regis	alration
AUTHORIZED CONSUMPTION		at a spin		Click here:	
Billed metered: 7 Billed unmetered: 7	1,157.639	MG/Yr MG/Yr		for help using optic builtons below	ก
Unbilled metered: 12 1/4	0.000	MG/Yr	Pont:	Value:	1.1.1
Unbilled unmetered;	23.943	MG/Yr		23.943	MG/Yr
Unbilled Unmetered volume entered is greater that	n lhe recommended	default value		The second second	Setter in
AUTHORIZED CONSUMPTION:	1,181.582	MG/Yr	Station - Charles -	 Use buttons to sell percentage of wall 	
				supplied OR	「「「「」」
WATER LOSSES (Water Supplied - Authorized Consumption)	512.228	MGMr	A REAL PROPERTY OF	value	
Apparent Losses	THE AVERAGE	Tre la la la	Pont:	Value:	
Unauthorized consumption:	4.235	MG/Yr	0.25%	O	MGAY
Default option selected for unauthorized consumption - a gra	ding of 5 is applied	but not displaye	d	States and the state	
Customer metering inaccuracies:	35.803	MG/Yr	3.00%	0	MGAY
Systematic data handling errors:	31.897	MG/Yr	The c	(0 31.897	MG/Yr
Apparent Losses:	71.935		る存在した日本		123
Real Losses (Current Annual Real Losses or CARL)			据表16-		
Real Losses = Water Losses - Apparent Losses:	440.294	have been in the		Contraction of the	
WATER LOSSES:	512.228	MG/Yr			
NON-REVENUE WATER					
NON-REVENUE WATER:	536.171	MG/Yr	编程是E 机制度 1997 192	一 時代 時間	
Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA	Contraction of the second	210000000000	ALC: NO DE LA COMPANY	1000	
	000.0			Part and the	
Length of mains: 12 8 Number of <u>active AND Inactive</u> service connections: 12 8 Service connection density: 2	256.2 11,460 45	miles conn./mile main	nesion Second a subsection		
Are customer meters typically located at the curbstop or property line?	Yes			무 입지 12년	
Average length of customer service line:	104	(lengin of boundary	service line, <u>beyond</u> the property , that is the responsibility of the ut	tilly)	
Average length of customer service line has been set to zero and a		of 10 has been		A. Berley	的历史
Average operating pressure:	60.0	psi			
			and the second second	-	
COST DATA					
Total annual cost of operating water system:	\$7,128,625			- And the second second	
Customer retail unit cost (applied to Apparent Losses); 6		\$/1000 gallons (\$/Million gallons			
Variable production cost (applied to Real Losses):	\$052.10	s/million galions	Use Customer Retail Unit Cost to	value real losses	
WATER AUDIT DATA VALIDITY SCORE:					
*** YOUR SCORE	IS: 79 out of 100 **				
A weighted scale for the components of consumption and water lo	The second second second second second second second second second second second second second second second s	the same of the	ler Audit Data Validily Score	and a stand	
			ior right balls validity outra		ALL ST
PRIORITY AREAS FOR ATTENTION: Besed on the information provided, audit accuracy can be improved by addressing the following of	components:				
1: Billed metered		ARE STORES			
2: Customer retail unit cost (applied to Apparent Losses)				A Brail Store	
3: Unauthorized consumption		- New York		Configuration (1)	214

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	System Attributes and Performance Indicators	Idicators Copyight © 2014, All Rights Reserved
	Water Audit Report for: City of Lebanon Reporting Year: 2018 7/2017 - 6/2018	
Summer Sector	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 79 out of 100 ***	out of 100 **
<u>System Aurioutes:</u>	Apparent Losses:	71.935 MGYr
	+ Real Losses:	440.294 MG/Yr
	= Water Losses:	512.228 MG/Yr
	7 Unavoidable Annual Real Losses (UARL):	68.00]MG/Yr
	Annual cost of Apparent Losses:	\$1,037,300
	Annual cost of Real Losses:	\$287,115 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption
Performance Indicators:		unidument en afinisio el trategio de Bundes (al 1998)
	Non-revenue water as percent by volume of Water Supplied:	31.7%
	Non-revenue water as percent by cost of operating system:	18.8% Real Losses valued at Variable Production Cost
	Apparent Losses per service connection per day:	17.20 loallons/connection/day
二、本の時間になってない。 いたかな	Real Losses per service connection per day:	105.26 gallons/connection/day
Operational Efficiency:	Real Losses per length of main per day*.	NIA
	Real Losses per service connection per day per psi pressure:	1.75 gallons/connection/day/psi
Fig.	From Above, Real Losses = Current Annual Real Losses (CARL):	440.29 million gallons/year
	Infrastructure Leakage Index (ILI) [CARL/UARL]:	6.47
* This performance indicator applies for systematic	 This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline 	ctions/mile of pipeline

Performance Indicators 1

AWWA Free Water Audit Software v5.0

135

Town of Maury City



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

Justin P. Wilson Comptroller of the

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

nent Uni Report Status Not Yet Reviewe Decrease in NP
Not Yet Reviewe
Decrease in NP
st
Validity Score
75
Non-Rev Water %
30.9
30.9

Form Revised February 2013



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

Justin P. Wilson Comptroller of the

MEMORANDUM

то:

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	Vendor Name				ponent Uni		
1766	6 Maury City	Maury City					
Report Year	Utility Type	Date Received	Date Referred	Reviewer	Report Status		
6/30/2014	Water and Sewer	6/22/2016	6/27/2016	SRW	Not Yet Reviewed		
	DISTRESS						
_	Has deficit net positio	n for the fiscal year en	ded.				
_		-					
□ B	Decrease in net position	on for two consecutive	years.	Fiscal Year End	Decrease in NP		
	ls in default on certain	outstanding debt.					
	Holders of the B	onds, etc.	Principal	Inte	erest		
NATER LO	SS						
D	Water Loss Referral						
	AWWA water audit in	fo					
	Water Loss Schedule - St	atus	AWWA Excel File				
	54 (4				Validity Score		
	Validity score below	the amount established b	by the board		75		
	Excessive non-reven	ue water % as establishe	d by the board				
1		Percent by Cost of Operating	-		Non-Rev Water %		
	Comments:	,,,,,,,			L		
	Comments.				1		

Form Revised February 2013

TOWN OF MAURY CITY, TENNESSEE SCHEDULE OF UNACCOUNTED FOR WATER - UNAUDITED

Check is add a comment Check is add a comment Water Audit Report for: Construction Construction Water Audit Report for: Construction Constructi			June	30, 2018					
Image: The second data part of the second data		AWWA			oftware:	22	1	Pantoka wilita Capatajari 2019	1969 W.L. W.L. (U E.L. WALLET, Parmers H V. PHELS Hard Stream
arcuns of the type die by gending sex non-particle (11-19) picting hearing, down is to be a finded and disc (11) pictors (12) pictors (1			_	
No select the council data gaining for each larget, determine the high gains being Matter Matter and Supply Error Adjustments WA TER SUPPLIED 	Please enter data in the white cells belo accuracy of the input data by grading ea	ach component (n/a or 1-10) using the drop	o-down list to	the left of the input i	cell. Hover the mouse a	verthe cell	: Indicale you o obtain a de	r confidence in the scription of the gra	e Ides
where the utily meets or exceeds all of the to the grade to data block Matter Market Supple End Aussinettis End Aussinettis Supple End Aussinettis End Aussinettis Supple End Aussinett					LLONS (US) PER YE	AR			
Value form on source: 0	where the uti			all grades below	in column 'E' and 'J' -	Mas			djustments
Wate exported 0.00 Monty Ender negative, % or value for under-registration MUT-DRIZED CONSUMPTION Billed underteed 0.00 Monty Ender negative, % or value for under-registration MUT-DRIZED CONSUMPTION Billed underteed 0.00 Monty Underteed to the postable % or value for under-registration MUT-DRIZED CONSUMPTION Billed underteed 0.00 Monty Underteed to the postable % or value for under-registration MUT-DRIZED CONSUMPTION Billed underteed 0.00 Monty Underteed to the postable % or value for under-registration MATER LOSSES (Water: Supplied - Authorized Consumption 7.246 Monty Underteed value Spatement Losses Monty 0.000 Monty Underteed value Spatement Losses Monty 0.000 <t< td=""><td></td><td></td><td>9</td><td>27.154</td><td>MG/Yr</td><td>7</td><td></td><td></td><td>MG/Yr</td></t<>			9	27.154	MG/Yr	7			MG/Yr
WATER SUPPLIED: 26.835 Worv Effer registre & crudice consumption UIT-ORIZED CONSUMPTION Billed metered 1									MG/Yr
WATER SUPPLIED: 28.353 Mon Enter pointe % or water for one-regaration UIT-ORZED CONSUMPTION Billed metalend Image: Supplied Consumption Citation:		water exported:	0/2	0.000	MG/TF	Ente			10.000
Billed meleration and a set of the set of th		WATER SUPPLIED:		26,363	MG/Yr				
Billed meleration and a set of the set of th									
Billed umsteerd Billed ums	OTHORIZED CONSUMP HOM	Billed metered:	9	18.418	MG/Yr				
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Unbilled Unmetered volume entered is greater than the recommended default value Unbilled Unmetered volume entered is greater than the recommended default value Use televisions is set: AUTHORIZED CONSUMPTION: 19.117 AVATHORIZED CONSUMPTION: 19.117 AUTHORIZED CONSUMPTION: 19.117 APA TER LOSSES (Water Supplied - Authorized Consumption - a grading of 5 is applied but not displayed 0.000 Default option ablected for unauthorized consumption - a grading of 5 is applied but not displayed 0.000 Castomer metering inaccuracies: 0 0.050 Object option ablected for systematic data handing errors - a grading of 5 is applied but not displayed 0.000 Applied To Systematic data handing errors - a grading of 5 is applied but not displayed 0.000 Applied To Systematic data handing errors - a grading of 5 is applied but not displayed 0.000 Applied To Systematic data handing errors - a grading of 5 is applied but not displayed 0.000 Applied To Systematic data handing errors - a grading of 5 is applied but not displayed 0.000 Applied To Systematic data handing errors - a grading of 5 is applied but not displayed 0.000 Marce Costom Component Costs = is 0.000 0.000 Water Losses = Costom 0.000 Water Losses = Costom		and the second se					Pent		
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AUTRUCED CONSUMPTION:		and the second se	greater that				1.2.3	Usebutionst	oselect
ATER LOSSES (Water Supplied - Authonized Consumption) 7.246 Morr partent Losses Unauthorized consumption 9 7.246 Morr Value Customer metering inaccuracies 0 0.000 Morr Default option selected for unauthorized consumption - e grading of 5 is applied but not displayed Customer metering inaccuracies 0 0.000 Morr Default option selected for systematic data handing errors - e grading of 5 is applied but not displayed Customer metering inaccuracies 0 0.000 Morr Default option selected for Systematic data handing errors - e grading of 5 is applied but not displayed Apparent Losses 0 0.000 Morr Default option selected for Systematic data handing errors - e grading of 5 is applied but not displayed Apparent Losses - 0.655 Morr Real Losses - Water Losses - Apparent Losses 0 0.655 Morr WATER NON-REVENUE WATER NON-REVENUE WATER NON-REVENUE WATER NON-REVENUE WATER NON-REVENUE WATER NON-REVENUE WATER Non-Revenue Water Yes 0 contained main Accesses - Unbied Webred + Unbied Unmetered Yes Average length of customer service line 1 and 1				19.117	MGAYr			percentageo supplie	ofwater
Unable of a consumption Image: Source of a consumption Default option selected for unauthorized consumption Image: Source of a consumption Castomer meteming inaccuracies: Image: Source of Consumption Systematic data handling errors: Image: Source of Consumption Default option selected for Systematic data handling errors: Image: Source of Consumption Castomer meteming inaccuracies: Image: Source of Consumption Apparent Losses: Image: Source of Consumption Apparent Losses: Image: Source of Consumption MATER LOSSES: 7.246 Mater Losses: Image: Consumption ON-REVENUE WATER Image: Consumption NUMPER VENUE Image: Consumption Venter Losses: Image: Consumption Mater	ATER LOSSES (Water Supplied	- Authorized Consumption)		7.246	MG/Yr	- 10			
Unauthorized consumption: Image: Section S	pparent Losses	State The skilled					Pent	Value:	
Customer metering inaccuracies: 1 Systematic data handing errors - a grading of 6 is applied but not displayed Apparent Losses: 0.680 MGYr 0.025 Bell Losses of CARE) Real Losses of CARE) Real Losses of CARE) WATER LOSSES: 7.246 MGYr WATER LOSSES: 7.246 MGYr Water Losses - Apparent Losses: 8 0.045 MGYr WATER LOSSES: 7.246 MGYr Water Losses - Unbild Mebred + Unbilded Limetered YSTEM DATA Lergth of mains: 1007 Service connection density: 1010 Service connection density: 1011 Average length of customer service line has been arbit for zonomer service line backen arbit for zonomer service line has been applied Average length of customer service line has been arbit for zonomer service line has been applied to Auding storm Variable production cost (applied to Real Losses): 1025 1026 1027 1028 1029 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 10200 102000 <	Constant State State State	Unauthorized consumption:		0.066	MG/Yr		CONTRACTOR OF A DECISIONO OF A DECISIONO OF A		MGM
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Default option selected for Systematic data handling arrora - a grading of 5 is applied but not displayed Apparent Losses : Intel 0.652 MG/rr ead Losses = (Uurrent Annual Real Losses or CAR.) Real Losses = Water Losses - Apparent Losses : Intel 6.555 MG/rr WATER LOSSES : 7.246 MG/rr ONLREVENUE WATER NUMEEVENUE WATER NON-REVENUE WATER: Intel 7.446 MG/rr Water Losses + Unbilded Uum elered YSTEM DATA Length of mains: Intel 7 Store Service connections Intel 7 Store Service connections Intel 7 Store Service connections Intel 7 Store Service connections Intel 7 Store Service connections Intel 7 Store Number of active AND inacche service Non-Revenue and a data grading acore of 10 has been applied Average length of customer service Intel Service Intel S	(Sustomer metering inaccuracies; 🎫 🖁	7	0.570	MG/Yr		3.00%		MGAY
Apparent Losses Image: 0.682 aal Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: Image: Control of Losses = Water Losses: WATER LOSSES: 7.246 Marrier ON-REVENUE WATER NON-REVENUE Water Consection: Water Losses + Unbilled Waterd + Unbilled Unmetered YSTEM DATA Length of mains: Nervice connection density: Service connection density: Nervice water here: Yes: Marcage length of customer service line has been set to zero and a data grading score of 10 has been applied Average coreating pressure: Yes: Customer relation and cost of operating water system: Yes: Yater AuDT DATA Customer relation cost of operating water system: Yes: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score: Your Score				0.046	MG/Yr				MG/Yr
Itel Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: Watter Losses: VATER LOSSES: 7.246 MON-REVENUE WATER NON-REVENUE WATER Number of active AND inactive service connections Service connection density: Service connection density: Marror Marror Are customer meters typically of customer service inc. Marror Areage operating pressure: Marror Customer retail unit cost (applied to Real Losses): Variable production cost (applied to Real Losses): Marror Marro	Default option	on selected for Systematic data han	dling error	s - a grading of 5	le applied but not d	Isplayed			
AON-REVENUE WATER T,945 MG/Yr Water Losses + Unbilled Metered + Unbilled Ummetered T,945 MG/Yr System DATA Length of mains: T,7 50,0 miles Number of active AND inactive serve connections: T,7 400 miles Service connection density: T,7 400 miles Are customer meters typically located at the curbstop or property Trigoto service line, layond the property Bunnshigh data is the mesponstative fille using Average length of customer service line has been set to zero and a data grading score of 10 has been applied Average operating pressure: T,7 500 psi Cost DATA Total annual cost of operating water system: T,7 5281.062 \$YPear Customer retail unit cost (applied to Apparent Losses): T,7 5281.062 \$YPear Customer retail unit cost (applied to Real Losses): T,7 510.000 \$Information gailons Line Customer Retail that Custe value water MATER_AUDIT DATA/VALIDITY_SCORE: ** YOUR SCORE IS: 81 out of 100 *** Into customer provide y addressing the following components: ** YOUR SCORE IS: 81 out of 100 *** *** YOUR SCORE IS: 81 out of 100 *** Into customer provide y addressing the following components:		iter Losses - Apparent Losses:							
NONREVENUE WATER: Image: Total annual cest of operating water system: Total annual cest of operating water system:		WATER LUSSES:		7,246	MG/Yr	01			in the second
SYSTEM DATA Length of mains: Image: Number of active AND inactive service connections: Image: Service connection density: Image: Service connection density: Image: Are customer meters typically located at the curbstop or property Image: Average length of customer service line Image: Average length of customer service line has been set to zero and a data grading score of 10 has been applied Average operating pressure: Image: COST DATA Total annual cost of operating water system: Image: Customer retail unit cost (applied to Apparent Losses): Image: Image: Variable production cost (applied to Real Losses): Image: Image: Image: Variable production cost (applied to Real Losses): Image: Image: Image: Image: Variable production cost (applied to Real Losses): Image: Image: <t< td=""><td></td><td></td><td></td><td>7.945</td><td>MG/Yr</td><td></td><td></td><td></td><td></td></t<>				7.945	MG/Yr				
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Number of active AND inactive service connections: Image: Time of the connection density: Image: Time of timage: Time of the connection density:	STSTEM DATA		_	1.1.2.2					
Service connection density: 10 conn /mile main Are customer meters typically located at the curtos top or property line? Yes (length of service line, beyond the property boundary, that is the nesponsibility of the udiny) Average length of customer service line has been set to zero and a data grading score of 10 has been applied Average length of customer service line has been set to zero and a data grading score of 10 has been applied Average operating pressure: 7 50.0 psi COST DATA Total annual cost of operating water system: 9 7 50.0 psi Customer retail unit cost (applied to Apparent Losses): 9 9 5825.40 Srivear Customer retail unit cost (applied to Real Losses): 9 9 5825.40 Smillion gallons (US) Variable production cost (applied to Real Losses): 9 9 9 5825.40 Smillion gallons (US) Variable production cost (applied to Real Losses): 9 9 9 5825.40 Smillion gallons (US) Variable production cost (applied to Real Losses): 9 9 9 5825.40 Smillion gallons (US) NATER AUDIT DATA VALIDITY SCORE: *** YOUR SCORE IS: 81 out of 100 *** Aveighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score PRIORITY AREAS FOR ATTENTION Based on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources 2: Unauthorized consumption	Number of active A		7		miles				
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Average operating pressure: Image: The second s				data grading sco			onsibilityof ih	ie ublity)	
Total annual cost of operating water system: Image: Customer retail unit cost (applied to Apparent Losses): Image: System: System: Customer retail unit cost (applied to Apparent Losses): Image: System: Image: System: System: Variable production cost (applied to Real Losses): Image: System: Image: System: System: Image: System: Image: System: System: Image: System:	Anonago rengui er eu.					spired			
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Customer retail unit cost (applied to Apparent Losses): S (S (S 10.00) (S 10	OST DATA								
Variable production cost (applied to Real Losses):			7		press and a second second second second second second second second second second second second second second s		1.00		
WATER AUDIT DATA VALIDITY SCORE; WYOUR SCORE IS: 81 out of 100 *** Aweighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data ValidityScore RECORTLY AREAS FOR ATTENTION assed on the information provided, audit accuracy can be improved by addressing the following components: Volume from own sources Unauthorized consumption							_		
YOUR SCORE IS: 81 out of 100 *** Aweighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data ValidityScore RECORTY AREAS FOR ATTENTION: Assed on the information provided, audit accuracy can be improved by addressing the following components: Volume from own sources Cunauthorized consumption	variable productio	n cost (applied to Real Losses):		\$825.40	S/Million gallons	Use Cu	stomer Retail U	init Cost to value rea	1000
Aweighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data ValidityScore	VATER AUDIT DATA VALIDITY SCO	DRE:		1.	1.1.1.2			1000	
A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data ValidityScore PRIORITY AREAS FOR ATTENTION: Based on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources 2: Unauthorized consumption		*** YOU	R SCORE IS	S: 81 out of 100 **	•	-	Same	-	
PRIORITY AREAS FOR ATTENTION. lassed on the information provided, audit accuracycan be improved by addressing the following components: 1: Volume from own sources 2: Unauthorized consumption	Aweighted sc.		_	the second second second second second second second second second second second second second second second s		Audit Data	Validity Score	a	
1: Valume from own sources 2: Unauthorized consumption									
1: Valume from own sources 2: Unauthorized consumption			ng the followi	ng components:					
2: Unauthorized consumption									
3) Systematic data handling errors									
	a; ayatematic data handling error	3							

TOWN OF MAURY CITY, TENNESSEE SCHEDULE OF UNACCOUNTED FOR WATER - UNAUDITED June 30, 2018

	AWWA Free Water Aut System Attributes and Perfo		1997. S veri Marstraam 1964 in 1990 de Arrene Bilion De Gerrica de Ann A, Milt Spille Branserson
	Water Audit Report for: Town of Maury City (00004 Reporting Year: 2018 7/2017 - 6/20		
	** YOUR WATER AUDIT DATA VALIDITY S	ORE IS: 81 out of 100 ***	
System Attributes:	Apparent Los	0.693	MGIYr
	+ Real Los		MGNr
	= Water Los		MG/Yr
	Unavoidable Annual Real Losses (U/	RL): [See limits in definition	MG/Yr
	Annual cost of Apparent Los	ses: 56,81	6
	Annual cost of Real Los	and the second se	
			Return to Reporting Worksheet to change this assumption
Performance Indicators:			
Financia	Non-revenue water as percent by volume of Water Supp		
	Non-revenue water as percent by cost of operating sys	iem: [4.69	Real Losses valued at Variable Production Cos
	Apparent Losses per service connection per	dav: 38	9 gallons/connection/day
	Real Losses per service connection per		allons/connection/day
Operational Efficiency:	Real Losses per length of main per c	ay*: 359.7	0 gallons/mile/day
	Real Losses per service connection per day per psi press	ure: N/	A gallons/connection/day/psi
	From Above, Real Losses = Current Annual Real Losses (CA	RL): 6.5	6 million gallons/year
	infrastructure Leakage Index (ILI) [CARL/UA	RU1	

City of Red Boiling Springs



JUNTIN P. WILSON Comptroller

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

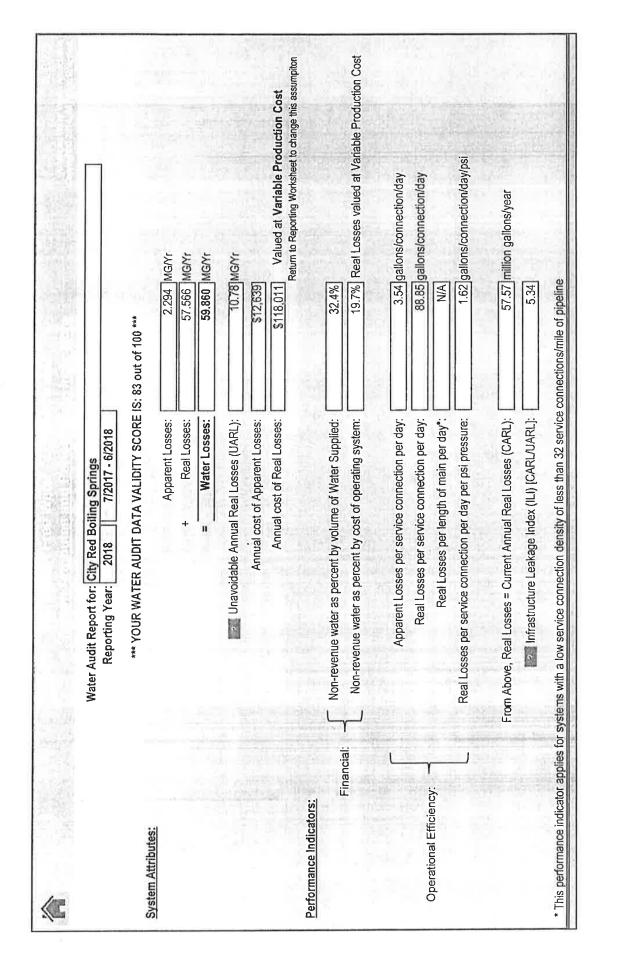
Record Number		Vendor Name				
180	4	Red Boiling Springs			Comp	oonent Unit
Report Year	Utility	у Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Wat	er and Sewer	1/23/2018	2/1/2018	ТМН	Not Yet Reviewed
FINANCIAL	DIST	DESS				
- ·					[
	Has d	eficit net position for t	ne fiscal year ended.			
B	Decre	ease in net position for t	two consecutive years	i.	Fiscal Year End	Decrease in NP
□ C	Is in (default on certain outst	anding debt.			
		Holders of the Bonds	s, etc.	Principal	Inte	erest
WATER LC	DSS					
☑ D	Wate	er Loss Referral				
	A	WWA water audit info				
	w	ater Loss Schedule - Status		AWWA Excel File		
						Validity Score
	V	alidity score below the an	nount established by the	e board		84
	E:	cessive non-revenue wat	n 9/ as astablished by t	ha hoord		N
		Non-Revenue Water as Percen				Non-Rev Water %
		nents:		,		22.2

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER Chief of Staff

Length of mains: 0 50.0 millos Number of active AND inactive service connections: 0 1.775 conn./mile main Are customer meters typically located at the curbstop or property line? Yes (length of sorvice line, beyond the property boundary, that is the responsibility of the utility) Average length of customer service line has been set to zero and a data grading score of 10 has been applied Average operating pressure: 0 55.0 pst	谷	a voi tota S		tar Andhrei a Werkshia				ere average	
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Contrast products and produ	To select the co	rrect data grading for each input, determi	ne the high	est grade where	INC. INC.	Autom			7
Value from own purces Image: 1 Image: 1 </td <td></td> <td>y meets of exceeds all criteria for that gr</td> <td></td> <td></td> <td>in column 'E' ar</td> <td></td> <td></td> <td></td> <td>ents</td>		y meets of exceeds all criteria for that gr			in column 'E' ar				ents
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WATER SUPPLIED: 202.897 MOn Enter positive % or value for our-regulation AUTHORIZED CONSUMPTION Billed matered: 1000 1000 Conterner		Water exported:	9	36.943	MG/Yr	Beneral Revised		A	1100000000
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Billed meterede Billed Billed		- Alter to				1.1		Olisk kans, 109	-
Unbilled meterses 0.033 WGWY Pett Valuer AUTHORIZED CONSUMPTION: 142.997 MGWY Image: Consumption and the select proceedings of select proc	AG THORIZED CONSUMPTION		9		MG/Yr			for help using option	
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Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed 1.00% ©	NEW COLUMN CONSER	Unauthorized consumption:		0,507	MG/Yr		Party and a state of the second state of the s	the second second second second second second second second second second second second second second second s	MG/Yr
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Apparent Losses: 2.294 MGYY Real Losses or CARLJ Real Losses = Water Losses : Apparent Losses: 57.566 MGYY WATER LOSSES: 59.860 MGYY NON-REVENUE WATER 65.805 MGYY NON-REVENUE WATER 65.805 MGYY NON-REVENUE WATER 65.805 MGYY Water Losses + Unbilded Matered + Unbilded Unmotered 9 65.805 MGYY SYSTEM DATA Length of mains: 6 60.00 miles Number of active AND inactive service connections: 80 6 1,775 Service connection density: 3 6 0 1,775 Service connection density: 3 6 1,775 500 miles Service connection density: 3 6 1,775 500 miles 6 50.0 psi 6 6 50.0 psi 6 6 50.0 psi 6 6 5 5 5 50.0 psi 6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5							0.25%	0	MG/Yr
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PRIORITY AREAS FOR ATTENTION: Based on the information provided, audit accuracy can be improved by addressing the following components: 1: Volume from own sources 2: Unauthorized consumption	A weighted so	ale for the components of consumption and	vater loss is	included in the cal	culation of the W	aler Audil Data Va	lidity Score	1440	
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1: Volume from own sources 2: Unauthorized consumption									
2: Unauthorized consumption	and the second se	uracy can be improved by addressing the folle	owing compo	onents:					
3: Systematic data handling errors	2: Unauthorized consumption								
	3: Systematic data handling errors								



Performance Indicators 50

AWWA Free Water Audit Software v5.0

Town of Signal Mountain



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

Comptroller of the Treasury

Justin P. Wilson

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

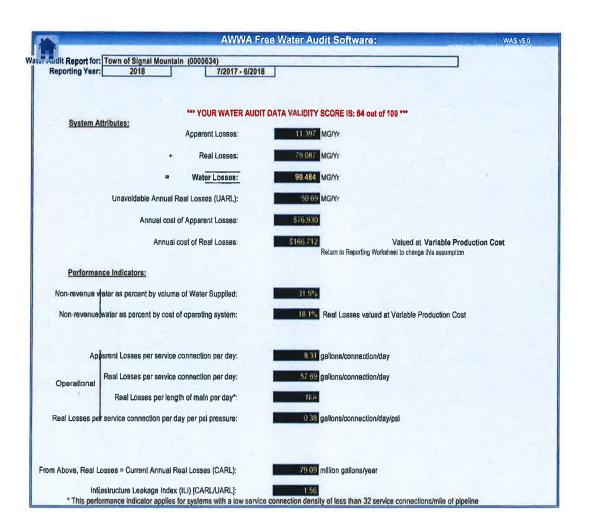
Record Numb	-	Vendor Name				
185	55	Signal Mountain				ponent Unit
eport Year	Utility	Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/201	7 Wat	er	12/12/2017	7 12/13/2017	MEF	Not Yet Reviewe
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□ B	Decre	ease in net position	for two consecutiv	ve years.	Fiscal Year End	Decrease in NP
	ls in e	default on certain ou	•			
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ATER LO						
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	A	WWA water audit info				
	W	ater Loss Schedule - Statu	3	AWWA Excel File		
]		
						Validity Score
	🗌 Va	alidity score below the	amount established	by the board		84
	E)	cessive non-revenue	wator % as ostablish	ed by the board		
	•	Non-Revenue Water as Per				Non-Rev Water % 13902.2
		nents:	, ,			10002.2
		nonto.				

Form Revised March 2017

TOWN OF SIGNAL MOUNTAIN, TENNESSEE Schedule of Unaccounted for Water June 30, 2018

AWV		ater Audit S Ig Workshe				1.1		
Water Audit Report for: To Reporting Year:	wn of Signal M 2018		4) _					
All volumes	to be entered a	IS: MILLION GAI	LONS (US) PER YEAR					
WATER SUPPLIED	۲	Enter grading	in column 'E' and 'J'	Master Meter and	Master Meter and Supply Error Adjustments			
Volume from own sources: Water imported: Water exported;	9	297 548	MG/Yr MG/Yr MG/Yr		Value:	MG/Yr MG/Yr MG/Yr		
WATER SUPPLIED:		297.548			or value for under- or value for over-re	registration		
Billed metered: Billed unmetered: Unbilled metered:	7 5 10	203.679	MG/Yr MG/Yr	Pont:	Value:			
Unbilited unmetered: AUTHORIZED CONSUMPTION:		3.382 207.064	MG/Yr MG/Yr		13.302	MG/Ye		
WATER LOSSES (Water Supplied - Authorized Consumption)		90,484	MG/Yr	-				
Apparent Losses Unauthorized consumption:	7	0.676	MG/Yr	Pont	Value: 0.676	MG/Yr		
Customer metering inaccuracies: Systematic data handling errore:	7	10.720 0.001	MG/Yr MG/Yr	5.00%	0.001	MG/Yi MG/Yi		
Apparent Losses:		11.397	MG/Yr					
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses:		79.087						
WATER LOSSES:		90.484	MG/Yr	and the				
NON-REVENUE WATER NON-REVENUE WATER: = Water Losses + Unbilled Metered + Unbilled Unmatered	-	93.869	MG/Yr					
SYSTEM DATA								
Length of maine: Number of <u>active AND inactive</u> service connections: Service connection density:	7	67.0 3,756 56	miles com,/mile main					
Are customer meters typically located at the curbstop or property line? <u>Average</u> length of customer service line: Average langth of customer service line has been set t	o zero and a da	Yes Ita grading score	e of 10 has been applied					
Average operating pressure:	7	150.0	psi					
COST DATA								
Total annual cost of operating water system: Customer retail unit cost (spplied to Apparent Losses): Variable production cost (applied to Real Losses):	10 9 10		S/Year S/1000 gallons (US) \$/Million gallons					
WATER AUDIT DATA VALIDITY SCORE:								
••• γ(OUR SCORE IS:	84 out of 100 ***						
A weighted scale for the components of consumption PRIORITY AREAS FOR ATTENTION;	n and water loss is	s included in the ca	culation of the Water Audit D	ata Validity Score				
Based on the information provided, audit accuracy can be improved by addressing the	he following comp	onents:						
1: Unbilled meterod								
2: Water imported 3: Billed metered								

TOWN OF SIGNAL MOUNTAIN, TENNESSEE Schedule of Unaccounted for Water June 30, 2018



Town of Smyrna



JUSTIN P. WILSON Compiraller

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	Vendor Name				
1860	Smyrna			Comp	onent Unit
Report Year	Utility Type	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Water and Sewer	12/21/2017	1/2/2018	mlb	Not Yet Reviewed
FINANCIAL	DISTRESS				
	Has deficit net position for the	ha fiscal year anded			
	tas deficit net position for th	it fiscal year chucu.		1	
	Decrease in net position for t	two consecutive years		Fiscal Year End	Decrease in NP
	ls in default on certain outst	anding debt.			
	Holders of the Bonds	s, etc.	Principal	Inte	erest
3				L	
WATER LOS	SS				
	Water Loss Referral				
	AWWA water audit info				
	Water Loss Schedule - Status		AWWA Excel File		
[
					Validity Score
	Validity score below the an	ount established by the	board		92
	Excessive non-revenue wate	er % as established by th	he board		Non-Rev Water %
	(Non-Revenue Water as Percent				22.0
	Comments:				

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER Chief of Staff

AWWA Reporting Worksheet (Unaudited)



A		ee Water Audit So orting Workshee			WA American Water Work Copyright © 2014, All Fig	S v5.0 ks Association
Click to access definition Click to add a comment Click to add a com		yrna Water System (00 7/2017 - 6/2018	000639)			CONTRACTOR OF COMPACT
Please enter data in the white cells below. Where available, metered values shi input data by grading each component (n/a or 1-10) using the drop-down list to	the left of the in	nput cell. Hover the mouse	over the cell to obtain a descr	 Indicate your confidence ription of the grades 	e in the accuracy of the	
To select the correct data grading for each input the utility meets or exceeds all criteria i	t, determine t	he highest grade where	LONS (US) PER YEAR	Master Motor and C	unalis Favor Adiustana	-
WATER SUPPLIED	ior triat grade	0	in column 'E' and 'J'		upply Error Adjustmer Value:	Its
Volume from own sources:	+ 2 10	17 /	N	9 0.00% 0		MG/Yr
Water imported: Water exported:					0	MG/Yr
water exported.		990.765		the second	O value for under-regist	MG/Yr ration
WATER SUPPLIED:		2,781.624	MG/Yr	-	value for over-registra	
AUTHORIZED CONSUMPTION					Click here:	7
Billed metered: Billed unmetered:		1,946.358			for help using option buttons below	
Unbilled metered.				Pont:	Value:	
Unbilled unmetered:	2 8	178.913		0	I78.913	MG/Yr
Unbilled Unmetered volume enter	ered is greater	than the recommended	default value	+		
AUTHORIZED CONSUMPTION:	2	2,150.438	MG/Yr	1	Use buttons to select percentage of water	
					supplied	
WATER LOSSES (Water Supplied - Authorized Consumption)		631.186	MG/Yr	_	value	
Apparent Losses		N		Pont:	 Value: 	
Unauthorized consumption:	+ 2	6.954	MG/Yr	Print Contraction of	0	MG/Yr
Default option selected for unauthorized con	sumption - a	grading of 5 is applied	but not displayed			17
Customer metering inaccuracies:	6 2 9	9.907	MG/Yr	0.50%	0	MG/Yr
Systematic data handling errors:	9	3.100	MG/Yr	0	3.100	MG/Yr
Apparent Losses:	2	19.961	MG/Yr			
Real Losses (Current Annual Real Losses or CARL)	-					
Real Losses = Water Losses - Apparent Losses:	2	611.224	MG/Yr			
WATER LOSSES:		631.186	MG/Yr			-
NON-REVENUE WATER NON-REVENUE WATER:	2	835.266	MG/Yr			
= Water Losses + Unbilled Metered + Unbilled Unmetered						-
SYSTEM DATA						
Length of mains: Number of <u>active AND inactive</u> service connections: Service connection density:	+ 2 10	10,957	miles conn./mile main			
Are customer meters typically located at the curbstop or property line? <u>Average</u> length of customer service line:		Yes		ne, <u>beyond</u> the property re responsibility of the util	ilv)	
Average length of customer service line has been	set to zero an		of 10 has been applied			
Average operating pressure:	+ 5 9	65.0	psi			
COST DATA						-
		10.101.001				
Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses):			\$/Year \$/1000 gallons (US)			
Variable production cost (applied to Real Losses):				Customer Retail Unit Cost to	value real losses	
	a an					-
WATER AUDIT DATA VALIDITY SCORE:						
•	** YOUR SCO	ORE IS: 93 out of 100 **	A			1
A weighted scale for the components of consun				ata Validity Score		2
PRIORITY AREAS FOR ATTENTION:						
Based on the information provided, audit accuracy can be improved by address	sing the following	a components.				
1: Unauthorized consumption		a oomponento.				
2: Billed metered						
3: Customer metering inaccuracies						

AWWA REPORTING WORKSHEET (Unaudited)

	AWWA Free Water Audit Software: System Attributes and Performance Indicators	Iftware: WAS v5.0 Water Works Association. Copyright @ 2014, All Rights Reserved.
	Water Audit Report for: Town of Smyrna Water System (0000639) Reporting Year: 2018 7/2017 - 6/2018	00639)
Svetem Attributes:	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 93 out of 100 ***	S: 93 out of 100 ***
-company under to	Apparent Losses: + Real Losses:	19.961 MG/Yr 611.224 MG/Yr
	= Water Losses:	631.186 MG/Yr
	Unavoidable Annual Real Losses (UARL):	70.95 MG/Yr
	Annual cost of Apparent Losses:	\$96,413
	Annual cost of Real Losses:	\$1,225,163 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption
Performance Indicators:		
Financial.	Non-revenue water as percent by volume of Water Supplied:	30.0%
	Non-revenue water as percent by cost of operating system:	18.4% Real Losses valued at Variable Production Cost
	Apparent Losses per service connection per day:	4.99 gallons/connection/day
Onorotional Efficiance	Real Losses per service connection per day:	152.83 gallons/connection/day
	Real Losses per length of main per day*:	N/A
	Real Losses per service connection per day per psi pressure:	2.35 gallons/connection/day/psi
	Erom Abrah Daria - Current Annual Darial States (CADI V.	C44 90 mailling activities
	I TUILI MUUNE, NEAL LUSSES - CUITETIL MITINAI NEAL LUSSES (CANL).	011.22 IIIIIIIUI galloris/year
	Infrastructure Leakage Index (ILI) [CARL/UARL]:	8.61
* This performance indicator applies for	* This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline	nnections/mile of pipeline

Validity Score Release

City of Bluff City



JUSTIN P. WILSON Comptroller

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number		Vendor Name				
1606		Bluff City			Comp	onent Unit
Report Year	Utility	/ Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	Wate	er and Sewer	2/1/2018	2/6/2018	irh	Not Yet Reviewed
FINANCIAL	DIST	RESS				
	Has d	eficit net position for t	he fiscal year ended.			
□Вп	Decre	ase in net position for t	wo consecutive years		Fiscal Year End	Decrease in NP
C I	ls in d	lefault on certain outst	anding debt.			
		Holders of the Bonds	, etc.	Principal	Inte	erest
]	L	
					L	
WATER LOS	SS					
D	Wate	r Loss Referral				
	A	WWA water audit info				
L C	Wa	ater Loss Schedule - Status		AWWA Excel File		
	V Vi	alidity score below the am	ount established by the	board		Validity Score
	_	cessive non-revenue wate	•			Non-Rev Water %
		Ion-Revenue Water as Percent	by Cost of Operating Syste	m)		19.7
1	Comn	nents:				

Form Revised March 2017

CORDELL HULL BUILDING | 425 Fifth Avenue North | Nashville, Tennessee 37243

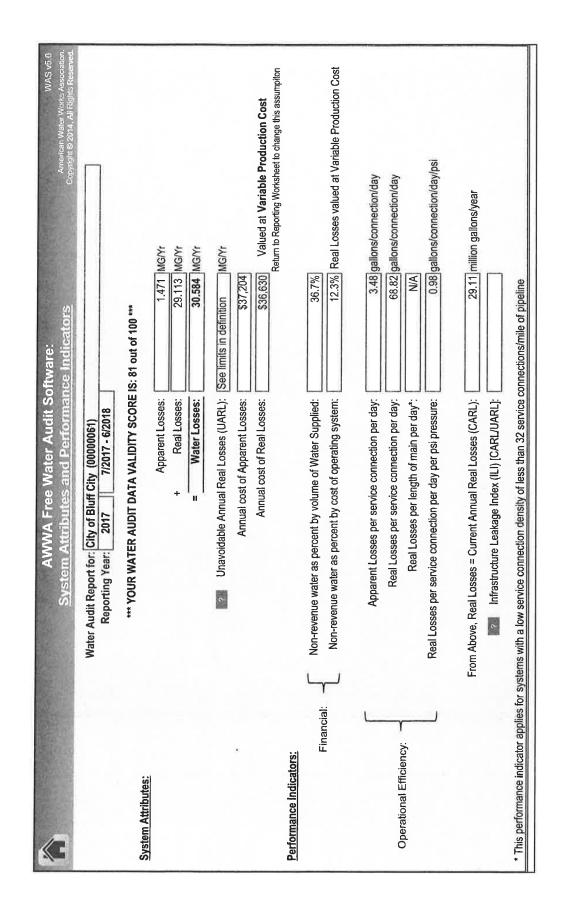
JASON E. MUNIPOWER

Chief of Staff

CITY OF BLUFF CITY, TENNESSEE Schedule of Unaccounted for Water (Unaudited) June 30, 2018

	A Free Water Audit <u>Reporting Worksh</u>		WAS v5 American Water Webs As Copyright © 2014, AlfRights F
Click to access definition Water Audit Report for: City City Click to add a comment Reporting Year: 2	of Bluff City (00000061) 2017 7/2017 - 6/2018		
Please enter data in the white cells below. Where available, metered values should be input data by grading each component (n/a or 1-10) using the drop-down list to the left.	used; if metered values are unav of the Input cell. Hover the mous o be entered as; MILLION G	e over the cell to obtain a descri	Indicate your confidence in the accuracy of the plion of the grades
To select the correct data grading for each input, dete		· · ·	
the utility meets or exceeds all criteria for tha	at grade and all grades below	lt.	Master Meter and Supply Error Adjustments
WATER SUPPLIED	< Enter gradi	ng in column 'E' and 'J'	> Pont: Value:
Volume from own sources:	9 68.30	C.C. Bringerson and	
Water imported: Water exported:	7 33.00 n/a	0 MG/Yr MG/Yr	
			Enter negative % or value for under-registration
WATER SUPPLIED:	101.30	MG/Yr	Enter positive % or value for over-registration
AUTHORIZED CONSUMPTION			Click here:
Billed metered:		00 MG/Yr	for help using option
Billed unmetered:	2 n/a 2 9 5.35	MG/Yr 50 MG/Yr	Pont: Value:
	UPSNU	66 MG/Yr	1.25% O O
Default option selected for Unbilled unmetere			<u>+</u>
A second s Second second se Second second s Second second seco	and the second s	6 MG/Yr	Use buttons to select percentage of water
			supplied
WATER LOSSES (Water Supplied - Authorized Consumption)	30.55	4 MG/Yr	- OR value
Apparent Losses	00.00	MONT	Popti - Voluei
Unauthorized consumption:	0.25	3 MG/Yr	Pont: Value:
Default option selected for unauthorized consumpl			Justing as a second second second second second second second second second second second second second second
Customer metering inaccuracles:		8 MG/Yr	1.50% O
Systematic data handling errors:		MG/Yr	0.25% O C MC
Default option selected for Systematic data hand			d
Apparent Losses:	1.47	1 MG/Yr	
Real Losses (Current Annual Real Losses or CARL)			
Real Losses = Water Losses - Apparent Losses	20.11	2 MON-	
Real Losses = Water Losses - Apparent Losses:		3 MG/Yr	
Real Losses ≃ Water Losses - Apparent Losses: ■ WATER LOSSES:		3 MG/Yr 4 MG/Yr	
WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER:		100	
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered		4 MG/Yr	
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA	2 30.58	4 MG/Yr 0 MG/Yr	
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Image of active AND inactive service connections: Image of active service service connections: Image of active service service service connections: Image of active service	2 30.58 2 37.20 2 7 34 2 8 1,15	MG/Yr MG/Yr miles	
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Length of mains: Service connections: Service connection density:	2 30.58 37.20 37.20 37.20 34 34 1,15 3 3	MG/Yr MG/Yr miles conn./mlle main	
WATER LOSSES: NON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Service connections: Service connection density: Are customer meters typically located at the curbstop or property line?	2 30.58 2 37.20 2 7 34 2 8 1,15 3 3 2 7 3 4 7 7 3 4 7 7 3 4 7 7 3 4 7 7 3 7 2 7 3 7 2 7 3 7 2 7 3 7 2 7 3 7 2 7 3 7 2 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3	MG/Yr MG/Yr MG/Yr miles conn./mile main (length of service li	ne, <u>beyond</u> the property
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Avorage length of customer services ince	2 30.58 2 37.20 2 7 34 2 8 1,15 3 3 7 7 34 7 34 7 7 34 7 34 7 7 34 7 7 34 7 7 34 7 7 34 7 7 34 7 7 34 7 7 34 7 7 7 7 7 7 7 7 7 7 7 7 7	MG/Yr MG/Yr miles conn./mlle main (length of service li boundary, that is ti	ne, <u>beyond</u> lite property le responsibility of the utility)
WATER LOSSES: NON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Service connections: Service connection density: Are customer meters typically located at the curbstop or property line?	30.68 37.20 7 34 8 1,15 3 3 9 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 35 7 36 7 37 38 78 29 20 21 22 33 34 35 36 37 38 39 39 30 31 <td>MG/Yr MG/Yr miles conn./mlle main (length of service li boundary, that is ti</td> <td></td>	MG/Yr MG/Yr miles conn./mlle main (length of service li boundary, that is ti	
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a	30.68 37.20 7 34 8 1,15 3 3 9 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 34 7 35 7 36 7 37 38 78 29 20 21 22 33 34 35 36 37 38 39 39 30 31 <td>MG/Yr MG/Yr MG/Yr miles conn./mile main (length of service il boundary, that is th re of 10 has been applied</td> <td></td>	MG/Yr MG/Yr MG/Yr miles conn./mile main (length of service il boundary, that is th re of 10 has been applied	
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to Average length of customer service line has been set to Average operating pressure:	30.58 37.20 7 34 8 1,15 3 9 2ero and a data grading scc 7 7	MG/Yr MG/Yr MG/Yr miles conn./mlle main (length of service il boundary, that is th re of 10 has been applied psi	
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WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average operating pressure: COST DATA Total annual cost of operating water system:	30.58 37.20 7 34 8 1,15 33 Ye 2 7 34 9 20 7 34 9 \$667,73 9 \$667,73 9 \$2672,20	MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is ti re of 10 has been applied psi S/Year S/Year S/1000 gallons (US)	
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WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a Average length of customer service line has been set to a Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses);	30.58 37.20 7 34 8 1,15 33 Ye 2 7 34 9 20 7 34 9 \$667,73 9 \$667,73 9 \$2672,20	MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is ti re of 10 has been applied psi S/Year S/Year S/1000 gallons (US)	re responsibility of the utility)
WATER LOSSES: NON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Water Auduit DATA VALIDITY SCORE:	30.58 37.20 38 39 30.58	4 MG/Yr 0 MG/Yr 1 miles 9 Conn-/mile main 1 boundary, that is the theorem of 10 has been applied 0 psi 9 \$/Year 9 \$/Year 9 \$/Million gallons (US) 1 \$/Million gallons	re responsibility of the utility)
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered System Data Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer retail unit cost (applied to Apparent Losses); COST DATA Mater Audit DATA VALIDITY SCORE: WATER AUDIT DATA VALIDITY SCORE:	30.58 37.20 </td <td>4 MG/Yr 0 MG/Yr 1 miles 9 conn./mile main 1 boundary, that is the boundary, that is the boundary, that is the of 10 has been applied 0 psi 9 \$/Year 9 \$/Year 9 \$/Million gallons (US) 1 \$/Million gallons</td> <td>re responsibility of the utility)</td>	4 MG/Yr 0 MG/Yr 1 miles 9 conn./mile main 1 boundary, that is the boundary, that is the boundary, that is the of 10 has been applied 0 psi 9 \$/Year 9 \$/Year 9 \$/Million gallons (US) 1 \$/Million gallons	re responsibility of the utility)
WATER LOSSES: NON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a Average length of customer service line has been set to a Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): WATER AUDIT DATA VALIDITY SCORE: *** YOL A weighted scale for the components of consumption at the components of consumption and the components of consumption at the components of consumption	30.58 37.20 </td <td>4 MG/Yr 0 MG/Yr 1 miles 9 conn./mile main 1 boundary, that is the boundary, that is the boundary, that is the of 10 has been applied 0 psi 9 \$/Year 9 \$/Year 9 \$/Million gallons (US) 1 \$/Million gallons</td> <td>re responsibility of the utility)</td>	4 MG/Yr 0 MG/Yr 1 miles 9 conn./mile main 1 boundary, that is the boundary, that is the boundary, that is the of 10 has been applied 0 psi 9 \$/Year 9 \$/Year 9 \$/Million gallons (US) 1 \$/Million gallons	re responsibility of the utility)
WATER LOSSES: NON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a Average length of customer service line has been set to a Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): WATER AUDIT DATA VALIDITY SCORE:	30.58 37.20 </td <td>4 MG/Yr 0 MG/Yr 1 miles 9 conn./mile main 1 boundary, that is the boundary, that is the boundary, that is the of 10 has been applied 0 psi 9 \$/Year 9 \$/Year 9 \$/Million gallons (US) 1 \$/Million gallons</td> <td>re responsibility of the utility)</td>	4 MG/Yr 0 MG/Yr 1 miles 9 conn./mile main 1 boundary, that is the boundary, that is the boundary, that is the of 10 has been applied 0 psi 9 \$/Year 9 \$/Year 9 \$/Million gallons (US) 1 \$/Million gallons	re responsibility of the utility)
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered System Data Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer service line has been set to a Average length of customer retail unit cost (applied to Apparent Losses); COST DATA Water AuDit DATA VALIDITY SCORE: *** YOL A weighted scale for the components of consumption and service line has been set to a Average length of annual cost of operating water system:	30.58 37.20 </td <td>MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is th re of 10 has been applied psi S/Year S/Year S/Year S/Million gallons (US) Use</td> <td>re responsibility of the utility)</td>	MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is th re of 10 has been applied psi S/Year S/Year S/Year S/Million gallons (US) Use	re responsibility of the utility)
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered System Data Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to a Average length of customer service line has been set to a Average operating pressure: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): WATER AUDIT DATA VALIDITY SCORE: *** YOL A weighted scale for the components of consumption a PRIORITY AREAS FOR ATTENTION;	30.58 37.20 </td <td>MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is th re of 10 has been applied psi S/Year S/Year S/Year S/Million gallons (US) Use</td> <td>re responsibility of the utility)</td>	MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is th re of 10 has been applied psi S/Year S/Year S/Year S/Million gallons (US) Use	re responsibility of the utility)
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WATER LOSSES: NON-REVENUE WATER Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average length of customer service line has been set to : Average operating mater system: COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): Variable scale for the components of consumption a PRIORITY AREAS FOR ATTENTION; Based on the information provided,	30.58 37.20 </td <td>MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is th re of 10 has been applied psi S/Year S/Year S/Year S/Million gallons (US) Use</td> <td>re responsibility of the utility)</td>	MG/Yr MG/Yr MG/Yr miles (length of service il boundary, that is th re of 10 has been applied psi S/Year S/Year S/Year S/Million gallons (US) Use	re responsibility of the utility)

AWWA Free Water Audit Software v5.0



Schedule of Unaccounted for Water (Unaudited) (Continued)

CITY OF BLUFF CITY, TENNESSEE

56

262

Town of Estill Springs



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

MEMORANDUM

Comptroller of the Treasury

Justin P. Wilson

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

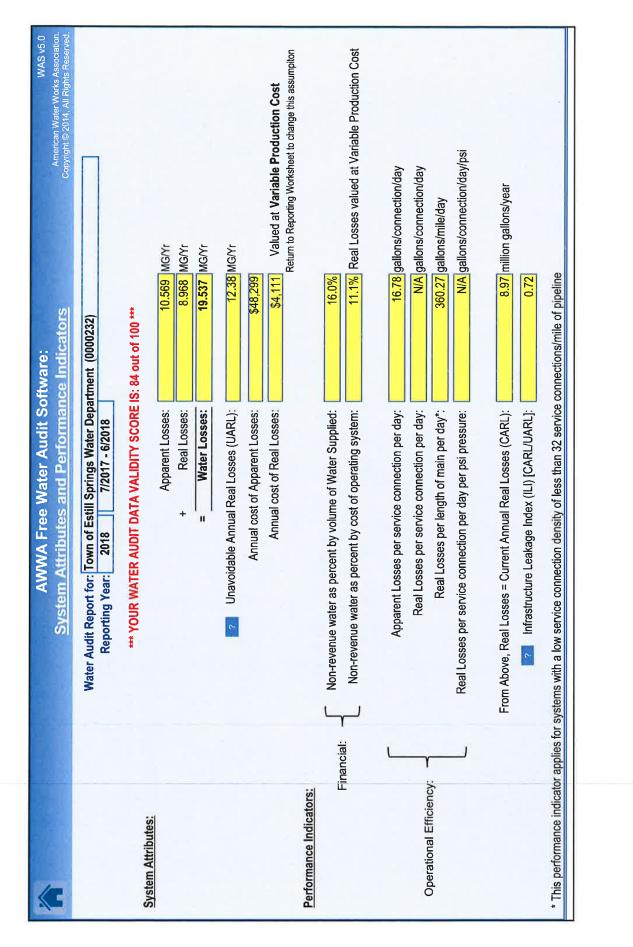
SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Number	Vendor Name				
1675	Estill Springs			Con	ponent Unit
Report Year	Utility Type	Date Received	Date Referred	Reviewer	Report Status
6/30/2016	Water	12/20/201	6 1/5/2017	mlb	Not Yet Reviewed
_					
ПАн	las deficit net pos	ition for the fiscal year e	naea.		
	ecrease in net po	sition for two consecutiv	/e years.	Fiscal Year End	Decrease in NP
	s in default on cer	ain outstanding debt.			
-	Holders of t	ne Bonds, etc.	Principal	Int	erest
WATER LOS	S				
	Nater Loss Referra	al			
	AWWA water aud	it info			
	Water Loss Schedule	- Status	AWWA Excel File		
[3		1		
					Validity Score
	Validity score bel	ow the amount established	l by the board		70
	Valiancy Score Bei		by the bound		10
	Excessive non-re	venue water % as establish	ed by the board		Non-Rev Water %
	(Non-Revenue Wate	er as Percent by Cost of Operatir	ng System)		6.1
	Comments:				
					1

Form Revised February 2013

AWI	NA Free Water Reporting Wo		e:		W American Water Wa Copyright © 2014, All F	/AS v5:0 rks As≤ociation lights Reserved.
Click to access definition Click to add a comment Click to add a comment		/ater Department (0 - 6/2018	0000232)			
Please enter data in the white cells below. Where available, metered values should input data by grading each component (n/a or 1-10) using the drop-down list to the l					ce in the accuracy of the	
All volumes	to be entered as: MII	LION GALLONS (U	S) PER YEAR			
To select the correct data grading for each input, de the utility meets or exceeds all criteria for th					Dunalis Franci Adiusta	
WATER SUPPLIED		er grading in column		Pont:	Supply Error Adjustm Value:	ents
Volume from own sources:	2 9	123.365 MG/Yr	* 2 N	1	O Value.	MG/Yr
Water imported:	Contractory and and a second s	0.000 MG/Yr	+ 2	۲	0	MG/Yr
Water exported:	? n/a	0.000 MG/Yr	1 + 1 ? _	eter negative % c	O or value for under-regi	MG/Yr
WATER SUPPLIED:		123.365 MG/Yr		Ŷ	value for over-regist	
AUTHORIZED CONSUMPTION					Click here:	-
Billed metered:	2 7	103.641 MG/Yr			for help using option	
Billed unmetered:	2 n/a	0.000 MG/Yr		Dente	buttons below	
Unbilled metered:		0.000 MG/Yr 0.187 MG/Yr		Pont:	Value:	MG/Yr
		0.107 MG/11			0.187	ING/TI
AUTHORIZED CONSUMPTION:	2	103.828 MG/Yr		1	Use buttons to select percentage of wate supplied	
		40 507			OR value	
WATER LOSSES (Water Supplied - Authorized Consumption)		19.537 MG/Yr		-		
Apparent Losses Unauthorized consumption:	12	0.308 MG/Yr		Pont: 0.25%	Value:	MG/Yr
Default option selected for unauthorized consumption.			displayed	0.23%		JWG/ H
Customer metering inaccuracies:	I means I	10.250 MG/Yr		9.00%	$\overline{\Omega}$	MG/Yr
Systematic data handling errors:		0.010 MG/Yr			(0.010	MG/Yr
Apparent Losses:	?	10.569 MG/Yr				
<u>Real Losses (Current Annual Real Losses or CARL)</u> Real Losses = Water Losses - Apparent Losses:	0	8.968 MG/Yr				
WATER LOSSES		19.537 MG/Yr				
WATER LOSSES.		19.337 WG/H				
NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered	2	19.724 MG/Yr				
SYSTEM DATA						-
Length of mains:	2 7	68.2 miles				
Number of <u>active AND inactive</u> service connections: Service connection density:		1,726 25 conn /mile	e main			
Are customer meters typically located at the curbstop or property line?		Yes				
Average length of customer service line:	2		(length of service line, be boundary, that is the res			
Average length of customer service line has been set Average operating pressure:		ding score of 10 ha 54.0 psi	is been applied			
COST DATA						-
Total annual cost of operating water system:	2 10	\$471,937 \$/Year				
Customer retail unit cost (applied to Apparent Losses):	2 9	\$4.57 \$/1000 g				
Variable production cost (applied to Real Losses):	2 10	\$458.36 \$/Million g	gallons Use Custom	er Retail Unit Cost to	value real losses	
						-
WATER AUDIT DATA VALIDITY SCORE:						-
	OUR SCORE IS: 84 or					
A weighted scale for the components of consumption	n and water loss is includ	ed in the calculation of	r the Water Audit Data V	alidity_Score		
PRIORITY AREAS FOR ATTENTION:						
Based on the information provided, audit accuracy can be improved by addressing	the following components					
1: Volume from own sources						
2: Billed metered						
3: Unauthorized consumption						



Performance Indicators 2

AWWA Free Water Audit Software v5.0

Lauderdale County Water System



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

MEMORANDUM

Justin P. Wilson Comptroller of the

TO: Water and Wastewater Financing Board

FROM: Division of Local Governmentl Audit - County Entities

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

3 Lauderdale County V	Vater System		Com	ponent Uni
Utility Type	Date Received	Date Referred	Reviewer	Report Status
Water	12/9/2016	12/15/2016	LWB	Not Yet Reviewed
DISTRESS				
	or the fiscal year on	had		1
has denote net position in	in the histori year en	deu.	L	
Decrease in net position	for two consecutive	years.	Fiscal Year End	Decrease in NP
ls in default on certain or	utstanding debt.	2		
	-	Principal	Inte	erest
SS				
Water Loss Referral				
AWWA water audit info				
Water Loss Schedule - Statu	S	AWWA Excel File		
5				
				Validity Score
✓ Validity score below the	amount established t	by the board		Validity Score 68
✓ Validity score below the □ Excessive non-revenue				68
	water % as establishe	d by the board		
Excessive non-revenue	water % as establishe	d by the board		68 Non-Rev Water %
	B Lauderdale County V Utility Type Water DISTRESS Has deficit net position for Decrease in net position Holders of the Bond SS Water Loss Referral AWWA water audit info	B Lauderdale County Water System Utility Type Date Received Water 12/9/2016 DISTRESS Has deficit net position for the fiscal year end Decrease in net position for two consecutive Is in default on certain outstanding debt. Holders of the Bonds, etc. SS Water Loss Referral	B Lauderdale County Water System Utility Type Date Received Date Received Date Referred Water 12/9/2016 12/15/2016 DISTRESS Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive years. Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal SS SS Water Loss Referral AWWA water audit info	B Lauderdale County Water System Utility Type Date Received Water 12/9/2016 12/15/2016 LWB DISTRESS Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive years. Fiscal Year End Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal Integration SS Water Loss Referral AWWA water audit info

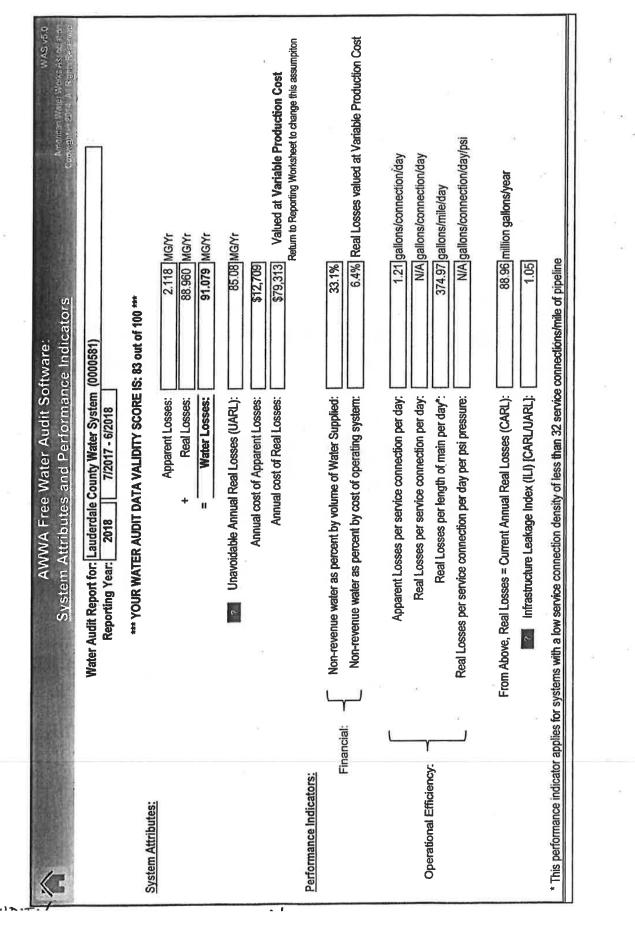
Form Revised February 2013

AWWA F	Free Water Audit S	Software:		AS
Construction of the second se second second sec	eporting Worksho		An encounter of the second s	
Click to access definition Click to add a comment Click to add a comment Reporting Year: 2018		(0000581)		
Please enter data in the while cells below. Where available, metered values should be used Input data by grading each component (n/s or 1-10) using the drop-down list to the left of th	d; if metered values are unav te input cell. Hover the moust	allable please estimate a val a over the cell to obtain a det	ue, indicate your confidence in the accuracy of the scription of the grades	
	entered as: MILLION GA			_
To select the correct data grading for each input, determine the utility meets or exceeds all criteria for that grad	e the highest grade where de and all grades below it.		Master Meter and Supply Error Adjustme	nto
WATER SUPPLIED	< Enter grading	in column 'E' and 'J'	> Pont: Value:	ins.
	9 241.418		7 0.00% 🖲 🔿	MGryr
	9 39.361 n/a 0.000		5 -1.00% O Enter negative % or value for under-registed	MG/Yr MG/Yr
WATER SUPPLIED:	281.177	MG/Yr	Enter positive % or value for over-registra	tion
AUTHORIZED CONSUMPTION	- 11		Click here	-
unite interior.	9 187.986 n/a 0.000		for help using option buttons below	
	9 0.114		Pont: Value:	
Unbilled unmetered;	7 1.998	MG/Yr	1.998	MG/Yr
AUTHORIZED CONSUMPTION:	190.098	MG/Yr	Use buttons to select percentage of water supplied	
WATER LOSSES (Water Supplied - Authorized Consumption)	91.079	MG/Yr	- value	
Apparent Losses Unauthorized consumption:	0.700	1.000	Pont Value.	1
Default option selected for unauthorized consumption -		MG/Yr	0.25%	MG/Yr
Customer metering inaccuracies:	the second second second second second second second second second second second second second second second se	MG/Yr	0.50%	1
Systematic data handling errors:	0.470	MG/Yr	0.50%	MG/Yr MG/Yr
Default option selected for Systematic data handling	errors - a grading of 5 is	applied but not displaye	ed	Junce II
Apparent Losses:	2.118	MG/Yr		
Real Losses (Current Annual Real Losses or CARL)	00.000			
WATER LOSSES:	91.079	MG/Yr		
NON-REVENUE WATER NON-REVENUE WATER:	93.191	MG/Yr	2	
= Water Losses + Unbilled Metered + Unbilled Unmetered				
SYSTEM DATA	-)[]			
Length of malnes to 7 Number of <u>active AND inactive</u> service connections 7 Service connection density:	4.810	miles conn./mile main		
An automatic to to the balance of th				
Are customer meters typically located at the curbstop or property line? Average length of customer service line:	Yes	(length of service li	e. beyond the property	
Average length of customer service line has been set to zero a	nd a data grading score	of 10 has been applied	e responsibility of the utility)	
Average operating pressure:	55.0			
and the second se				
	\$1,478,201	5/Year		
COST DATA Total annual cost of operating water system: SS 22 9 Customer retail unit cost (applied to Apparent Losses): SS 20 10	\$6.00	\$/1000 gallons (US)		
COST DATA Total annual cost of operating water system: 🔝 🜌 🧕	\$6.00	\$/1000 gallons (US)	stomer Retail Unit Cost to value real losses	
COST DATA Total annual cost of operating water system: Solve 10 Customer retail unit cost (applied to Apparent Losses): 10 Variable production cost (applied to Real Losses): 7	\$6.00	\$/1000 gallons (US)	stomer Retail Unit Cost to value real losses	
COST DATA Total annual cost of operating water system: Solve 10 Customer retail unit cost (applied to Apparent Losses): 10 Variable production cost (applied to Real Losses): 7	\$6.00	\$/1000 gallons (US)	stomer Retail Unit Cost to value real iosses	
COST DATA Total annual cost of operating water system: 9 Customer retail unit cost (applied to Apparent Losses): 10 Variable production cost (applied to Reat Losses): 17 WATER AUDIT DATA VALIDITY SCORE:	\$6.00	\$/1000 gallons (US)	stomer Retail Unit Cost to value real iosses	
COST DATA Total annual cost of operating water system: 9 Customer retail unit cost (applied to Apparent Losses): 2 Variable production cost (applied to Real Losses): 2 WATER AUDIT DATA VALIDITY SCORE: *** YOUR SCO	\$6.00 \$891.55	\$/1000 gallons (US) \$/Million gallonsJise Cu		
COST DATA Total annual cost of operating water system: S 9 Customer retail unit cost (applied to Apparent Losses): P 9 Variable production cost (applied to Real Losses): 7 WATER AUDIT DATA VALIDITY SCORE: *** YOUR SCC - A weighted scale for the components of consumption and water	\$6.00 \$891.55	\$/1000 gallons (US) \$/Million gallonsJise Cu		
COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): WATER AUDIT DATA VALIDITY SCORE; *** YOUR SCC A weighted scale for the components of consumption and wate PRIORITY AREAS FOR ATTENTION:	DRE IS: 83 out of 100 ***	\$/1000 gallons (US) \$/Million gallonsJise Cu		
COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Reat Losse	DRE IS: 83 out of 100 ***	\$/1000 gallons (US) \$/Million gallonsJise Cu		
COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Reat Losse	DRE IS: 83 out of 100 ***	\$/1000 gallons (US) \$/Million gallonsJise Cu		
COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Reat Losses	DRE IS: 83 out of 100 ***	\$/1000 gallons (US) \$/Million gallonsJise Cu		
COST DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Reat Losse	DRE IS: 83 out of 100 ***	\$/1000 gallons (US) \$/Million gallonsJise Cu		

UNAUDITEd

25

AWWA Free Water Audit Software v5.0



Performance Indicators

AWWA Free Water Audit Software v5.0

City of Loudon



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

MEMORANDUM

Comptroller of the Treasury

Justin P. Wilson

TO: Both

Both Water and Wastewater and Utility Mgt Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(a), 7-82-401(h)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

	1757	Loudon			Con	nponent Unit
Report Y		Utility Type	Date Received	Date Referred	Reviewer	Report Status
6/30/	2016	Water and Sewer	3/31/20	17 4/5/2017	MEF	Not Yet Reviewed
		DISTRESS				
	_				· · · · · ·	
	A I	las deficit net positior	for the fiscal year	ended.		
	B					
		Decrease in net positio	on for two consecut	ive years.	Fiscal	Decrease in NP
					Year End	Decrease in NF
	CI	s in default on certain	outstanding dabt			
			-			
		Holders of the B	onds, etc.	Principal	Int	erest
	l					
	[
NATE		s				
	_	-				
✓	U	Water Loss Referral				
		AWWA water audit in	fo			
		Water Loss Schedule - St	atus	AWWA Excel File		
	E					
						Validity Score
	Г	Validity score below 1	the amount establish	ad by the board		75
	Ŀ	Validity Score below	ine amount establish	eu by the board		15
	Г	Excessive non-reven	ue water % as establi	shed by the board		Non-Rev Water %
			Percent by Cost of Opera			15.8
		Comments:	5			1

Form Revised March 2017

CITY OF LOUDON, TENNESSEE AWWA FREE WATER AUDIT SOFTWARE REPORTIONG WORKSHEET JUNE 30, 2018

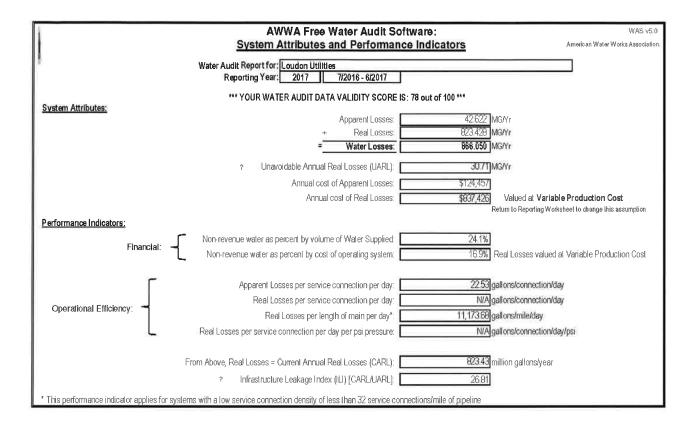
Â	1	E	Rep	e Water Audit So orting Workshee						American Wi	ler Works	
7	Click to access diversion Water Audit Report for:	Loudon	Unit	ties					-			
•	Click to and a comment Reporting Year:	201	8	7/2017 - 6/2018								
Ploa	te enter data in the white cells below. Where available, meterod values sho	id be unn	d: e m	stand when an unavaila	the cleate estimate a value, lod	icate :	iour confid	ance r	the e	ocuradu di i	he incut	
data	by grading each component (n/a or 1-10) using the drop down list to the left	of the HID	ut cel	. Hover the mouse over the	e cell to obtain a description of th	ie gra	des .		1010 3	DCDraby Or		
	All volu	mes to b	е ел	pred as: MILLION GAL	LONS (US) PER YEAR	_						
	To select the correct data grading for each input, d	otormine	the h	chest and where the								
WAT					in column 'E' and 'J'			and S	upply	Error Ada	Istment	<u>s</u>
WAI	ER SUPPLIED Volume from own sources.	. 7				8	Pcnt: -0.25%		10.0	Value:		MG/Yr
	Water imported		10	0.000	340.04		-0.25%		5	-		MG/Yr
	Water experied		10	364.011	MG/Yr ?	9	0.12%	۲	0			MG/Yr
										o for under		
	WATER SUPPLIED			3,438.460	MG/Yr	Ente	r positive	% or 1	value	for over-re	gistrati	n
AUT	HORIZED CONSUMPTION								Clic	k here:		
	Billed meterod	1.1	8	2,777.890					for	belp using a ons below	ption	
	Biled unmetered Unbilled metered	1	n'a		MG/Yr MG/Yr		Pont	-	044	Value:		
	Unbilled unmetored	1 2	17	1.440	MG/Yr		1.25%	0	•	1.440		MG/Yr
			a di camada	1				+			- 20.00	
	AUTHORIZED CONSUMPTION:	7		2,779.330	MG/Yr			0	ercert	acto of wat	r suppli	d
								_		<u>.08</u>		
WAT	ER LOSSES (Water Supplied - Authorized Consumption)		-	659.130	MG/W			-	14			
	Henri Losses		=	053.130	2004/11		Pont;	<u> </u>	-	Value:	_	
- CRE	Unauthorized consumption:	. 2	6	8 506	MG/Yr		0.25%		*	8.500		MG/Yr
	Default option selected for unauthorized con		1.8			_	0 20 %		-	0.000	_	
	Customer metering inaccuracies:	2	17	28.059		-	1.00%	. (6)	Ō			MG/Yr
-	Systematic data handling errors	1 7	6		MG/Yr		0.25%	_		5.000		MGrVt
								_				
	Apparent Losses:	7		41.656	MG/Yr							
								_			_	
Real	Losses (Current Annual Real Losses or CARL)		-						_		_	
	Real Losses = Water Losses - Apparent Losses:				MG/Yi	-			_			
	WATER LOSSES			659.130							-	
NON	WATER LOSSES:			659.130	MG/Yr							
	WATER LOSSES	7			MG/Yr							
- Wa	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Metered + Unbilled Unmelered			659.130	MG/Yr							
- Wa	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Metered + Unbilled Unmetered rEM DATA	7		659.130 660.570	MGM							
- Wa	WATER LOSSES: REVENUE WATER In Losses + Unbilled Matered + Unbilled Unmelered If Losses + Unbilled Matered + Unbilled Unmelered If EM DATA Longth of mains:	• . 2	8	659.130 660.570 201.9	MGM							
- Wa	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Metered + Unbilled Unmetered rEM DATA	• . 2	8	659.130 660.570	MGM							
- WA	WATER LOSSES: REVENUE WATER In Losses + Urbitled Metered + Urbitled Unmetered If Losses + Urbitled Metered + Urbitled Unmetered If EM DATA Longth of mains: Number of active AND inactive service connections Service connection density:	• . 2		659.130 660.570 201.9 5,184 26	MG/Yr MG/Yr milea conn/mile main							
- WA	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Metered + Unbilled Unmetered TEM DATA Longth of mains: Number of active AND inactive service connection density. Service connection density. o customer moters typically located at the curbstop or properly line?	* ? ? 2		659.130 660.570 201.9 5,184	MG/Yr MG/Yr milea conn/mile main		od the cro	oecty.b	ouote	4		
- WA	WATER LOSSES: REVENUE WATER In Losses + Urbitled Metered + Urbitled Unmetered If Losses + Urbitled Metered + Urbitled Unmetered If EM DATA Longth of mains: Number of active AND inactive service connections Service connection density:	272	5	659.130 660.570 201.0 5.184 26 Yos	MG/Yr MG/Yr miles sonn/mile main dength of senoce lion b that is the responsibil		nd the pro	oerty h	auate	4		
- WA	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Matered + Unbilled Unmeiered TEM DATA Longth of mains: Number of active AND inactive service connection density: customer molers typically located at the curbstop or property line? Average length of customer service line:	2 + 7 2 + 7 2 0 0 to zer	5	659.130 660.570 201.9 5,184 26 Yos d a data grading score	MG/Yr MG/Yr mies conn/mile main dargth of senoice line in that is the responsed		sd the pro	outy b	inunte	q		
- WA	WATER LOSSES: REVENUE WATER NON-REVENUE WATER for Losses + Urbitled Matered + Urbitled Unmelered TEM DATA Longth of mains: Number of active AND inactive service connections Service connection density; o customer molers typically located at the curbstop or property line? Average length of customer service line has been in Average length of customer service line has been in	2 + 7 2 + 7 2 0 0 to zer	5 S	659.130 660.570 201.9 5,184 26 Yes d a data grading score	MG/Yr MG/Yr mies conn/mile main dargth of senoice line in that is the responsed		od tha pro	secty.b	auat	<i>q.</i>		
- Wa SYS Arc	WATER LOSSES: REVENUE WATER NON-REVENUE WATER for Losses + Urbitled Matered + Urbitled Unmelered TEM DATA Longth of mains: Number of active AND inactive service connections Service connection density; o customer molers typically located at the curbstop or property line? Average length of customer service line has been in Average length of customer service line has been a	2 + 7 2 + 7 2 0 0 to zer	5 S	659.130 660.570 201.9 5,184 26 Yes d a data grading score	MG/Yr MG/Yr mies conn/mile main dargth of senoice line in that is the responsed		od the pro	outy b	in of	q		
- Wa SYS Arc	WATER LOSSES: REVENUE WATER NON-REVENUE WATER for Losses + Unbilled Metered + Unbilled Unmelered TEM DATA Length of mains: Number of active AND inactive service connection density Service connection density of customer melers typically located at the curbstop or property line? Average length of customer service line has been in Average length of customer service line has been in Average operating pressure	2 + 7 2 + 7 2 0 0 to zer	5 S	659.130 660.570 201.9 5,184 26 Yes d a data grading score	MGYr MGYr miles com/mile main dargth of service line in the response? of 10 has been applied psi	20	od the pro	Sectly It	aat	q		
- Wa SYS Arc	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Matered + Unbilled Unmeiered TEM DATA Longth of mains: Number of active AND inactive service connection density, service connection density, secusiomer molers typically located at the curbstop or properly line? Average length of customer service line: Average length of customer service line: Average length of customer service line: Average operating pressure Average operating pressure T DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses)	2 + 7 2 + 7 2 0 0 to zer	6 5 6 10 9	659.130 660.570 201.9 5,184 26 Y05 d a data grading score 45.0 45.0 5,985,985,987 \$2,92	MGVr MGVr mies conc/mile main (langth of section los in this is the responsible of 10 has been applied psi V Year \$ 1000 gallons (US)							
- Wa SYS Arc	WATER LOSSES: REVENUE WATER In Cases + Unbilled Matered + Unbilled Unmeiered If Losses + Unbilled Matered + Unbilled Unmeiered If EM DATA Longth of mains: Number of active AND inactive service connection density: customer mellers typically located at the curbstop or properly line? Average length of customer service line has been in Average length of customer service line. Average length of customer service line has been in Average length of customer service line has been in Average operating pressure: T DATA Total annual cost of operating water system:	2 + 7 2 + 7 2 0 0 to zer	6 5 6 10	659.130 660.570 201.9 5,184 26 Y05 d a data grading score 45.0 45.0 5,985,985,987 \$2,92	MGYr MGYr mies oom/mile main dargth of second log of 10 has been applied psi Vear S/100 gallons (US)		od the pro be utity) Retail Unit (
- Wa SYS Arc	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Matered + Unbilled Unmeiered TEM DATA Longth of mains: Number of active AND inactive service connection density, service connection density, secusiomer molers typically located at the curbstop or properly line? Average length of customer service line: Average length of customer service line: Average length of customer service line: Average operating pressure Average operating pressure T DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses)	2 + 7 2 + 7 2 0 0 to zer	6 5 6 10 9	659.130 660.570 201.9 5,184 26 Y05 d a data grading score 45.0 45.0 5,985,985,987 \$2,92	MGVr MGVr mies conc/mile main (langth of section los in this is the responsible of 10 has been applied psi V Year \$ 1000 gallons (US)							
Arc	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: for Losses + Unbilled Matered + Unbilled Unmeiered TEM DATA Longth of mains: Number of active AND inactive service connection density, service connection density, secusiomer molers typically located at the curbstop or properly line? Average length of customer service line: Average length of customer service line: Average length of customer service line: Average operating pressure Average operating pressure T DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses)	2 + 7 2 + 7 2 0 0 to zer	6 5 6 10 9	659.130 660.570 201.9 5,184 26 Y05 d a data grading score 45.0 45.0 5,985,985,987 \$2,92	MGVr MGVr mies conc/mile main (langth of section los in this is the responsible of 10 has been applied psi V Year \$ 1000 gallons (US)							
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Arc	WATER LOSSES: REVENUE WATER NON-REVENUE WATER for Losses + Unbilled Matered + Unbilled Unmelered TEM DATA Length of mains: Number of active AND inactive service connection density. Service connection density. Service connection density. e customer molers typically located at the curbetop or properly line? <u>Average length of customer service line has been in</u> Average length of customer service line has been in Average length of customer service line has been in Average operating pressure T DATA Total annual cost of operating water system: Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): ER AUDIT DATA VALIDITY SCORE:	* 2 * 7 * 7 * 7 * 7 * 7 * 7 * 7 * 7	6 5 10 10 8 8 8 8 8 8	659.130 660.570 201.0 5,184 266 Yos d a data grading score 45.0 55.985.987 \$2.92 \$1,017.00 RE IS: 85 out of 100 **	MGYr MGYr mies oonn/mile main dangth of secole los of 10 has been applied pril V Year S'1000 gallons (US) S'1000 gallons (US)	tomer	Retal Unit C					
	WATER LOSSES: REVENUE WATER NON-REVENUE WATER International States of the service connection of the service connection density. Service connection density. Service connection density. Service connection density. Average length of customer service line: Average length of customer service line: Average length of customer service line: Average length of customer service line. Average length of customer service line has been a Average length of customer service line has been a Average length of customer service line has been a Average length of customer service line has been a Average length of customer service line has been a Average length of customer service line has been a Average operating water system. Customer retail unit cost of operating water system. Customer retail unit cost (applied to Apparent Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): ER AUDIT DATA VALIDITY SCORE: A weighted scale for the components of costu	* 2 * 7 * 7 * 7 * 7 * 7 * 7 * 7 * 7	6 5 10 10 8 8 8 8 8 8	659.130 660.570 201.0 5,184 266 Yos d a data grading score 45.0 55.985.987 \$2.92 \$1,017.00 RE IS: 85 out of 100 **	MGYr MGYr mies oonn/mile main dangth of secole los of 10 has been applied pril V Year S'1000 gallons (US) S'1000 gallons (US)	tomer	Retal Unit C					
	WATER LOSSES: REVENUE WATER NON-REVENUE WATER Intervenue Watered + Unbilled Unmelered Tell Data Length of mains: Number of active AND inactive service connection density: Service connection density: Service connection density: Average length of customer service line has been Average length of customer service line has been Average length of customer service line has been Average operating water system: Customer retail unit cost of operating water system: Customer retail unit cost (applied to Real Losses): Variable production cost (applied to Real Losses): Variable production cost (applied to Real Losses): ER AUDIT DATA YALIDITY SCORE: A weighted scale for the components of consul RITY AREAS FOR ATTENTION;	* ? * ? * ? * ? * ? * ? * ? * ?	6 5 10 10 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	659.130 660.570 201.0 5,184 266 Yes d a data grading score 45.0 \$5,985,987 \$2.92 \$1,017.00 RE IS: 85 out of 100 *** rices is included in the cat	MGYr MGYr mies oonn/mile main dangth of secole los of 10 has been applied pril V Year S'1000 gallons (US) S'1000 gallons (US)	tomer	Retal Unit C					
- Wa SYS Arc COS WAT	WATER LOSSES: REVENUE WATER NON-REVENUE WATER International sectors International sectorsectorsectors International secoreacements Internated sec	* ? * ? * ? * ? * ? * ? * ? * ?	6 5 10 10 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	659.130 660.570 201.0 5,184 266 Yes d a data grading score 45.0 \$5,985,987 \$2.92 \$1,017.00 RE IS: 85 out of 100 *** rices is included in the cat	MGYr MGYr mies oonn/mile main dangth of secole los of 10 has been applied pril V Year S'1000 gallons (US) S'1000 gallons (US)	tomer	Retal Unit C					
- Wa SYS Arc COS WAT	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: International sectors of constant of the sector of	* ? * ? * ? * ? * ? * ? * ? * ?	6 5 10 10 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	659.130 660.570 201.0 5,184 266 Yes d a data grading score 45.0 \$5,985,987 \$2.92 \$1,017.00 RE IS: 85 out of 100 *** rices is included in the cat	MGYr MGYr mies oonn/mile main dangth of secole los of 10 has been applied pril V Year S'1000 gallons (US) S'1000 gallons (US)	tomer	Retal Unit C					
- Wa SYS Arc COS WAT	WATER LOSSES: REVENUE WATER NON-REVENUE WATER International sectors International sectorsectorsectors International secoreacements Internated sec	* ? * ? * ? * ? * ? * ? * ? * ?	6 5 10 10 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	659.130 660.570 201.0 5,184 266 Yes d a data grading score 45.0 \$5,985,987 \$2.92 \$1,017.00 RE IS: 85 out of 100 *** rices is included in the cal	MGYr MGYr mies oonn/mile main dangth of secole los of 10 has been applied pril V Year S'1000 gallons (US) S'1000 gallons (US)	tomer	Retal Unit C					
- Wa SYS Arc COS YWAT PRIO Base 1: 2:	WATER LOSSES: REVENUE WATER NON-REVENUE WATER: International sectors of constant of the sector of	* ? * ? * ? * ? * ? * ? * ? * ?	6 5 10 10 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	659.130 660.570 201.0 5,184 266 Yes d a data grading score 45.0 \$5,985,987 \$2.92 \$1,017.00 RE IS: 85 out of 100 *** rices is included in the cal	MGYr MGYr mies oonn/mile main dangth of secole los of 10 has been applied pril V Year S'1000 gallons (US) S'1000 gallons (US)	tomer	Retal Unit C					

AWWA Free Water Audit Software v5.0

Reporting Worksheet 2

CITY OF LOUDON, TENNESSEE SYSTEM ATTRIBUTES AND PERFORMANCE INDICATORS

JUNE 30, 2018



Town of Maynardville



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

Comptroller of the Treasury

Justin P. Wilson

MEMORANDUM

TO: Utility Management Review Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

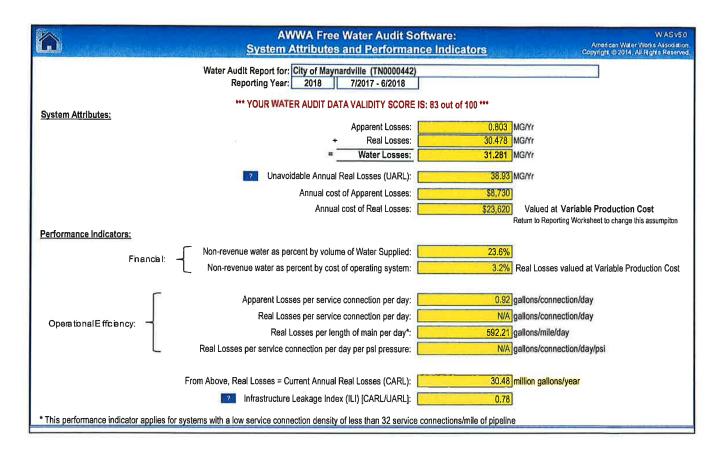
In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

er Vendor Name				
67 Maynardville			Cor	nponent Unit
Utility Type	Date Received	Date Referred	Reviewer	Report Status
6 Water and Sewer	1/25/	2017	lirh	Not Yet Reviewed
DISTRESS				
				17
Has denot net positio	on for the fiscal yea	ar ended.		
		-	Fiscal Year End	Decrease in NP
	-		In	terest
			1	1
1				
		l		
Water Loss Referral				
AWWA water audit i	nfo			
Water Loss Schedule - S	Status	AWWA Excel File		
1		N		Validity Score
✓ Validity score below	the amount establis	shed by the board		75
				Non-Rev Water %
(Non-Revenue Water as	s Percent by Cost of Ope	erating System)		11.7
Comments:				
	Utility Type 6 Water and Sewer DISTRESS Has deficit net position Decrease in net position Decrease in net position Is in default on certain Holders of the I Holders of the I Holders Schedule - S Water Loss Schedule - S Validity score below Excessive non-rever	Utility Type Date Received 6 Water and Sewer 1/25/ DISTRESS Has deficit net position for the fiscal year Decrease in net position for two consect Is in default on certain outstanding debric Holders of the Bonds, etc. DSS Water Loss Referral AWWA water audit info Water Loss Schedule - Status Validity score below the amount establist Excessive non-revenue water % as estables	Utility Type Date Received Date Referred 6 Water and Sewer 1/25/2017 - DISTRESS Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive years. Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal SS Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Validity score below the amount established by the board	Utility Type Date Received Date Referred Reviewer 6 Water and Sewer 1/25/2017 irh DISTRESS Has deficit net position for the fiscal year ended. Decrease in net position for two consecutive years. Is in default on certain outstanding debt. Holders of the Bonds, etc. Principal In Holders of the Bonds, etc. Principal In SSS Water Loss Referral AWWA water audit info Water Loss Schedule - Status AWWA Excel File Validity score below the amount established by the board Xuer Schedule - Status AWWA Excel File

Form Revised February 2013

	AWV	VA Free Water Audit So	oftware:	W	ASv50
	and the second second second second second second second second second second second second second second second	Reporting Workshee	and the second s	American Witer W Copyright @ 2014, All	orka Associal
Click to access definition Click to add a comment		of Maynardville (TN0000442) 2018 7/2017 - 6/2018			
Please en terdata in the white cells below h put data by grading each component (r	v.Where available,metered values should b Maor1-10) using the drop-down list bo the b	be used; ifm ele red values are un avai	able please estimate a value	e. Indicate your confidence hilh e accuracy of th cription of the grades	e
	All volumes	to be entered as: MILLION GAL			_
	comectidata gradhig foreach hiput, dei tillitym eets orexceeds <u>all</u> criterta for th	atgrade and all grades bebwlt.	n column 'E' and 'J'	Master Meter and Supply Error Adjustm> Pont; Value;	ents
	Volume from own sources: Water Imported: Water exported:	9 15,145	MG/Yr MG/Yr MG/Yr MG/Yr		MG/Yr MG/Yr MG/Yr
	WATER SUPPLIED:	159.443	MG/Yr	Enter negative % or value for under-reg Enter positive % or value for over-regis	
AUTHORIZED CONSUMPTION	-			Click here:	
	Billed metered: Billed unmetered: Unbilled metered: Unbilled unmetered:	10 0.000 10 4.362	MG/Yr	forheb ushgoptbr buttonsbebw Pont: Value:	MG/Yr
Default	option selected for Unbilled unmete			+	
	AUTHORIZED CONSUMPTION:	128.162	MG/Yr	Usebuttonstosse percentagesofwate suppled SUP	
WATER LOSSES (Water Supplied	- Authorized Consumption)	31.281	MG/Yr	value	
Apparent Losses Default ontio	Unauthorized consumption: 🔤 n selected for unauthorized consum			Pcnt: Value:	MG/Yr
Denain optio	Customer metering inaccuracies;	7 0.100	MG/Yr	0.25% () 0.100	MG/Yr MG/Yr
Default op	otion selected for Systematic data handling errors:		applied but not display	the second second second second second second second second second second second second second second second s	MG/T
	Apparent Losses;	0.803	MG/T		
Real Losses (Current Annual Real Real Losses = W	Losses or CARL) /ater Losses - Apparent Losses:	30.478	MG/Yr		
	WATER LOSSES:	31.281	MG/Yr		
NON-REVENUE WATER	NON-REVENUE WATER:	7 37.636	MG/Yr		_
Water Losses + Unbilled Metered + Unt SYSTEM DATA					-
Number of active	Length of mains: <u>AND inactive</u> service connections: Service connection density:	2,400	miles conn./mile main		
	d at the curbstop or property line? all length of customer service line: customer service line has been set to Average operating pressure:	o zero and a data grading score	boundary, that is t of 10 has been applied	ihe, <u>beyond</u> he property he responebility of he utility) t	
COST DATA					
Customer retail unit e	al cost of operating water system: cost (applied to Apparent Losses): tion cost (applied to Real Losses):	9 \$10.87	\$/1000 gallons (US)	Customer Retail Unit Cost to value real losses	
WATER AUDIT DATA VALIDITY SCOR	<u>E:</u>				
	*** 'Yi	OUR SCORE IS: 83 out of 100 ***			-
	ed scale for the components of consumption	n and water loss is included in the cal	culation of the Water Audit I	Data Validity Score	
PRIORITY AREAS FOR ATTENTION:					
Based on the Information provided, audit 1: Volume from own sources	accuracy can be improved by addressing the	ne following components:			
2: Billed metered					
3: Unauthorized consumption					
			i i i i i i i i i i i i i i i i i i i		

See the accompanying independent accountants' audit report.



See the accompanying independent accountants' audit report.

Town of McLemoresville



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

MEMORANDUM

Comptroller of the Treasury

Justin P. Wilson

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numb	er	Vendor Name					
177	70	McLemoresville					nponent Unit
Report Year	Utili	ty Туре	Date Received		Date Referred	Reviewer	Report Status
6/30/201	6 Wa	iter	2/15/2	017	2/15/2017	SRW	Not Yet Reviewed
FINANCIAL	_ DIS	TRESS					
	Has	deficit net position fo	or the fiscal yea	r end	ed.		1
			-				
	Dec	rease in net position i	for two consecu	utive	years.	Fiscal	Decrease in NP
						Year End	
- 84						l	-
	ls in	default on certain ou	itstanding debt.				
		Holders of the Bond	s, etc.	·	Principal	Int	erest
						[
WATER LO							
✓ D	Wat	er Loss Referral					
	1	WWA water audit info					
	V	Vater Loss Schedule - Status	61	F	AWWA Excel File		
							Validity Score
	\	/alidity score below the	amount establis	hed by	y the board		70
		Excessive non-revenue	water % as establ	ished	by the board		Non-Rev Water %
		(Non-Revenue Water as Per	cent by Cost of Oper	rating S	System)		6.1
	Corr	iments:					
	L						

Form Revised February 2013

CITY OF MCLEMORESVILLE, TENNESSEE WATER LOSS SCHEDULES - UNAUDITED

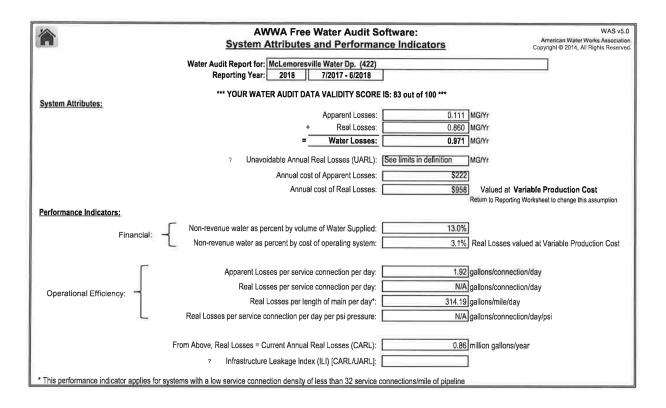
For the Year Ended June 30, 2018

AWWA Free Water Aud Reporting Works	American Water Morks Association
Click to access definition Water Audit Report for: McLemoresville Water Dp. (42 Click to add a comment Reporting Year: 2018 7/2017 - 6/201	(2)
Please enter data in the white cells below. Where available, metered values should be used; if metered values are u input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the m	inavailable please estimate a value. Indicate your confidence in the accuracy of the ouse over the cell to obtain a description of the grades
All volumes to be entered as: MILLION	
To select the correct data grading for each input, determine the highest grade wh the utility meets or exceeds <u>all</u> criteria for that grade and all grades below	w it. Master Meter and Supply Error Adjustments
	ding in column 'E' and 'J'> Pcnt: Value: 474 MG/Yr + 7 2.75% Image: Column Colu
Water imported: + ? n/a 0	000 MG/Yr + ? 000 MG/Yr + ? Enter negative % or value for under-registration
WATER SUPPLIED: 8.	247 MG/Yr Enter positive % or value for over-registration
AUTHORIZED CONSUMPTION	Click here: ?
Billed unmetered: * ? n/a 0	173 MG/Yr for help using option 000 MG/Yr buttons below
	000 MG/Yr Pont: Value: 103 MG/Yr 1.25% (O) MG/Yr
Default option selected for Unbilled unmetered - a grading of 5 is appl	lise buttons to select
AUTHORIZED CONSUMPTION: ? 7.	276 MG/Yr percentage of water supplied
WATER LOSSES (Water Supplied - Authorized Consumption) 0.	971 MG/Yr value
Apparent Losses	Pont: Value:
Unauthorized consumption: * ?	021 MG/Yr 0.25% () () MG/Yr
Default option selected for unauthorized consumption - a grading of 5 is app Customer metering inaccuracies: + ? 7 0	01ed but not displayed
Systematic dala handling errors: + ?	018 MG/Yr 0.25% (C (MG/Yr
Default option selected for Systematic data handling errors - a grading o Apparent Losses: ? 0.	f 5 is applied but not displayed 111 MG/Yr
Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: 2 0.	860 MG/Yr
	971 MG/Yr
NON-REVENUE WATER	
NON-REVENUE WATER: 2 1.	074 MG/Yr
_ = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA	
Length of mains: + ? 7 Number of <u>active AND inactive</u> service connections: + ? 9	7.5 miles
Service connection density: ?	21 conn./mile main
Are customer meters typically located at the curbstop or property line?	Yes (length of service line, beyond the property
Average length of customer service line: + ? Average length of customer service line has been set to zero and a data grading s	ft boundary, that is the responsibility of the utility) score of 10 has been applied
	56.0 psi
COST DATA	
Total annual cost of operating water system: + ? 9 \$42	307 \$/Year
Customer retail unit cost (applied to Apparent Losses): + ?	2.00 \$/1000 gallons (US)
Variable production cost (applied to Real Losses): * ? 10 \$1,11:	3.99 \$/Million gallons Ustomer Retail Unit Cost to value real losses
WATER AUDIT DATA VALIDITY SCORE:	
*** YOUR SCORE IS: 83 out of 1	00 ***
A weighted scale for the components of consumption and water loss is included in t	he calculation of the Water Audit Data Validity Score
PRIORITY AREAS FOR ATTENTION:	
Based on the information provided, audit accuracy can be improved by addressing the following components:	
1: Volume from own sources 2: Unauthorized consumption	
2: Unautriorized consumption 3: Systematic data handling errors	

See independent auditor's report

CITY OF MCLEMORESVILLE, TENNESSEE WATER LOSS SCHEDULES - UNAUDITED

For the Year Ended June 30, 2018



City of Millington



JUNES R WILSON Comproller

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

lecord Number		Vendor Name				
178	0	Millington				oonent Unit
eport Year	Utility	/ Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/2017	7 Wate	er	12/27/2017	1/4/2018	SRW	Not Yet Reviewed
NANCIAL	DIST	RESS			1.10.9	
		eficit net position for t	he fiscal vear ended.]
_		-			l	
$\square \mathbf{B}$	Decre	ase in net position for	two consecutive years		Fiscal Year End	Decrease in NP
					Enu	
					[
□ C	Is in a	default on certain outs	anding debt			
	15 111 0	Holders of the Bond	-	Principal	Int	erest
	[Totals of the Bond	,	Tinopa		
	1				[
VATER LC	DSS					
D	Wate	er Loss Referral				
	A	WWA water audit info				
	W	ater Loss Schedule - Status		AWWA Excel File		
						Validity Score
	V:	alidity score below the an	nount established by the	board		65
	E E	cessive non-revenue wat	er % as established by t	he board		Non-Rev Water %
		Non-Revenue Water as Percen				6.6
	Comr	nents:				

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER

Chief of Staff

CITY OF MILLINGTON, TENNESSEE SCHEDULE OF UNACCOUNTED FOR WATER

For the Year Ended June 30, 2018

	ter Audit Softwar g Worksheet	Θ:	WA Americ ao Water Works Capyright © 2014, At Righ	S VG 0 Annoch
Citk b access definition Water Audit Report for: City of Millington	······			al cont
Cick to add a comment Reporting Year: 2018 7 Please enter data in the while cells below. Where available, metered values should be used: If m	2017 - 6/2018 j	a please estimate a value (pd)	aste vour oonfidence in lite	
reaction of the input data by grading each component (n/aron 1-10) using the drop-down list but All volumes to be entered a	e left of the input cell. Hover	the mouse over the cell to obt		
To select the correct data grading for each input, determine th				
where the utility meets or exceeds <u>all</u> criteria for that grade and a VATER SUPPLIED <	al grades below Enter grading in column		leter and Supply Error Adjustme t: Value	ents
Volume from own sources:	348.482 MG/Yr		○ ● -6.000	MG/Yr
Water imported:	0.000 MG/Yr			MG/Yr
Water exported:	0.000 MG/Yr			MG/Yr
WATER SUPPLIED:	354.482 MG/Yr		gative % or value for under-regist silive % or value for over-registra	
	304.402 MG/11	Lanter por		-
AUTHORIZED CONSUMPTION			Click here:	
Billed metered: 7	303.394 MG/Yr MG/Yr		for help using option buttons below	
Unbilled metered:	MG/Yr	Рсл		
Unbilled unmetered: IIII III 9	21.595 MG/Yr	[0 (1) 21.595	MG/Yr
Unbilled Unmetered volume entered is greater than	he recommended default v	alue	*	
AUTHORIZED CONSUMPTION:	324.989 MG/Yr		Use buttons to select percentage of water	
			supplied	
	20.402		value	
VATER LOSSES (Water Supplied - Authorized Consumption)	29.493 MG/Yr			
Apparent Losses		Pcn	and the second sec	1
Unauthorized consumption	0.886 MG/Yr	A COLORADO	25%	jMG/Y
Default option selected for unauthorized consumption - a gradil			100	
		1.50	0% • •	
Customer metering inaccuracies:	15.968 MG/Yr			MG/Y
Systematic data handling errors: I III III IIII Systematic data handling errors Default option selected for Systematic data handling errors Apparent Losses: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	0.758 MG/Yr a grading of 5 is applie 17.613 MG/Yr	0.3	85% ® C	
Systematic data handling errors: I I I I I I I I I I I I I I I I I I I	0.758 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr	0.3		MG/Yr MG/Yr
Systematic data handling errors: Default option selected for Systematic data handling errors Apparent Losses: Real Losses (Gurrent Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LossES:	0.758 MG/Yr a grading of 5 is applie 17.613 MG/Yr	0.3		
Systematic data handling errors: Systematic data handling errors: Default option selected for Systematic data handling errors Apparent Losses: P Real Losses (Gurrent Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER:	0.758 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr	0.3		
Systematic data handling errors: Systematic data handling errors: Default option selected for Systematic data handling errors Apparent Losses: Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER: Water Losses + Unbilled Metered + Unbilled Unmetered	0.756 MG/rr a grading of 5 is applie 17.613 MG/r 11.880 MG/rr 29.493 MG/rr	0.3		
Systematic data handling errors: Systematic data handling errors: Default option selected for Systematic data handling errors Apparent Losses: Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER: Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA	0.756 MG/rr a grading of 5 is applie 17.613 MG/rr 11.880 MG/rr 29.493 MG/rr 51.088 MG/rr	0.3		
Systematic data bandling errors: Default option selected for Systematic data handling errors Apparent Losses: Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: WATER LOSSES: Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: 20 6	0.756 MG/rr a grading of 5 is applie 17.613 MG/rr 11.880 MG/rr 29.493 MG/rr 51.088 MG/rr	0.3		
Systematic data handling errors: Systematic data handling errors: Default option selected for Systematic data handling errors Apparent Losses: Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER LOSSES: WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER: Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA	0.756 MG/rr a grading of 5 is applie 17.613 MG/rr 11.880 MG/rr 29.493 MG/rr 51.088 MG/rr	d but not displayed		
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 51.088 conn /miles 4.318 conn /mile	d but not displayed		
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4,316 77 conn./mile Yes	e main kenga of service line, beyond	Une property	
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 53.88 miles 4.318 77 conn.mile Yes	e main kengin of service line, <u>beyond</u>	Une property	
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 53.88 miles 4.318 77 conn.mile Yes	e main kengin of service line, <u>beyond</u>	Une property	
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.860 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 11.850 MG/Yr 51.088 MG/Yr 51.08	e main kengin of service line, <u>beyond</u>	Une property	
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.860 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 55.8 miles 4.318 77 conn /mile Yes ats grading score of 10 h 65.0 psl	e main kengin of service line, <u>beyond</u>	Une property	
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 53.08 miles 4.318 77 conn /mile Yes ats grading score of 10 h 65.0 psi 51.124.348 \$/Year	e main kengs of service life, <u>beyond</u> soundary, that is the responst as been applied	Une property	
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4.310 77 conn.mile Yes ats grading score of 10 h 65.0 psl 51.124.348 S/Year \$3.97 S/1000 g	e main kength of service line, <u>beyond</u> soundary, that is the response as been applied	the property ality of the utility)	
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4.310 77 conn.mile Yes ats grading score of 10 h 65.0 psl 51.124.348 S/Year \$3.97 S/1000 g	e main kengs of service life, <u>beyond</u> soundary, that is the responst as been applied	the property ality of the utility)	
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4.310 77 conn.mile Yes ats grading score of 10 h 65.0 psl 51.124.348 S/Year \$3.97 S/1000 g	e main kength of service line, <u>beyond</u> soundary, that is the response as been applied	the property ality of the utility)	
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 51.088 MG/Yr 53.08 miles 4.310 77 conn.mile Yes ata grading score of 10 h 65.0 psl 51.124.348 S/Year \$1.124.348 S/Year \$1.000 g. \$7/000 g. \$7/0000 g. \$7/0000 g. \$7/00000 g. \$7/0000 g. \$7/00000 g. \$7/00000 g. \$7/000000 g. \$7/000000000000000000000000000000000000	e main kength of service line, <u>beyond</u> soundary, that is the response as been applied	the property ality of the utility)	
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4.316 77 conn./mile 55.8 miles 4.316 77 conn./mile 55.0 psi 51.124.348 S3.97 S1.124.348 S3.97 S1.124.348 S3.97 S1.124.348 S3.97 S1.000 g S499.20 S.Million g	e main length of service life, beyond youndary, that is the response las been applied alions (US) jallons Use Customer Retz	The property ilityof the utility)	
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4,318 77 conn./mile 77 conn./mile 4,318 77 conn./mile 55.8 miles 4,318 77 conn./mile 55.0 psi 51.124.348 SY@ar 51.124.348 SY@ar 51.000 gs 51.124.348 SY@ar 51.100 gs 51.124.348 SY@ar 51.100 gs 51.100 gs 51.100 gs 51.100 gs 51.100 gs 51.100 gs	e main length of service life, beyond youndary, that is the response las been applied alions (US) jallons Use Customer Retz	The property ilityof the utility)	
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4,318 77 conn./mile 77 conn./mile 4,318 77 conn./mile 55.8 miles 4,318 77 conn./mile 55.0 psi 51.124.348 SY@ar 51.124.348 SY@ar 51.000 gs 51.124.348 SY@ar 51.100 gs 51.124.348 SY@ar 51.100 gs 51.100 gs 51.100 gs 51.100 gs 51.100 gs 51.100 gs	e main length of service life, beyond youndary, that is the response las been applied alions (US) jallons Use Customer Retz	The property ilityof the utility)	
Systematic data bandling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4,318 77 conn./mile 77 conn./mile 4,318 77 conn./mile 55.8 miles 4,318 77 conn./mile 55.0 psi 51.124.348 SY@ar 51.124.348 SY@ar 51.000 gs 51.124.348 SY@ar 51.100 gs 51.124.348 SY@ar 51.100 gs 51.100 gs 51.1	e main length of service life, beyond youndary, that is the response las been applied alions (US) jallons Use Customer Retz	The property ilityof the utility)	
Systematic data handling errors: Default option selected for Systematic data handling errors Apparent Losses: Real Losses (Current Annual Real Losses or CARL) Real Losses = Water Losses - Apparent Losses: WATER Los	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4,318 77 conn./mile 77 conn./mile 4,318 77 conn./mile 55.8 miles 4,318 77 conn./mile 55.0 psi 51.124.348 SY@ar 51.124.348 SY@ar 51.000 gs 51.124.348 SY@ar 51.100 gs 51.124.348 SY@ar 51.100 gs 51.100 gs 51.1	e main length of service life, beyond youndary, that is the response las been applied alions (US) jallons Use Customer Retz	The property ilityof the utility)	
Systematic data handling errors:	0.756 MG/Yr a grading of 5 is applie 17.613 MG/Yr 11.880 MG/Yr 29.493 MG/Yr 51.088 MG/Yr 55.8 miles 4,318 77 conn./mile 77 conn./mile 4,318 77 conn./mile 55.8 miles 4,318 77 conn./mile 55.0 psi 51.124.348 SY@ar 51.124.348 SY@ar 51.000 gs 51.124.348 SY@ar 51.100 gs 51.124.348 SY@ar 51.100 gs 51.100 gs 51.1	e main length of service life, beyond youndary, that is the response las been applied alions (US) jallons Use Customer Retz	The property ilityof the utility)	

(CONTINUED ON NEXT PAGE)

CITY OF MILLINGTON, TENNESSEE SCHEDULE OF UNACCOUNTED FOR WATER

For the Year Ended June 30, 2018

^	AWWA Free Water Audit Softv System Attributes and Performance	
	Water Audit Report for: City of Millington Reporting Year: 2018 7/2017 - 6/2018	
a	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 8	12 out of 100 ***
System Attributes:	Apparent Losses:	17.613 MG/Yr
	+ Real Losses:	11.880 MG/Yr
	= Water Lossee:	29.493 MG/Yr
	Unavoidable Annuai Real Losses (UARL):	22.53 MG/Yr
	Annual cost of Apparent Losses:	\$69,923
	Annual cost of Real Losses:	\$5,932 Valued at Variable Production Cost
Performance Indicators:		Return to Reporting Worksheet to change this assumption
enominates indicators.	Non-revenue water as percent by volume of Water Supplied:	14.4%
Financia	I: Non-revenue water as percent by cost of operating system:	7.7% Real Losses valued at Variable Production Co
r	Apparent Losses per service connection per day:	11.18 gallons/connection/day
	Real Losses per service connection per day:	7.54 gallons/connection/day
Operational Efficiency:	Real Losses per length of main per day*:	N/A]
	Real Losses per service connection per day per psi pressure:	0.12 gallons/connection/day/psi
	From Above, Real Losses = Current Annual Real Losses (CARL):	11.88 millon gallons/year
	Infrastructure Leakage Index (ILI) [CARL/UARL]:	0.53

286

City of Smithville



JUSTIN P. WUMON Comprediler

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

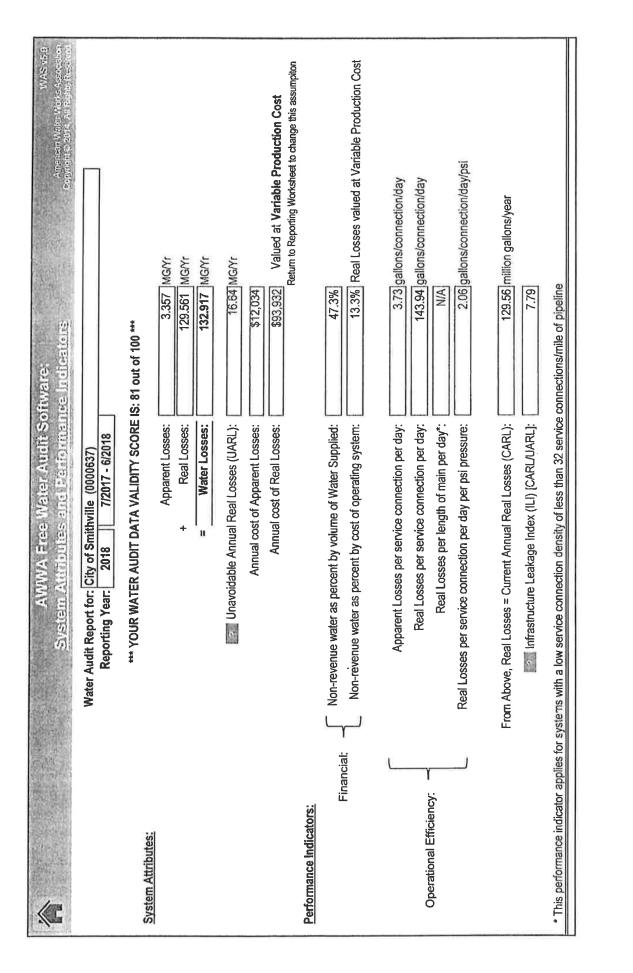
Record Number		Vendor Name				
185	59	Smithville			Comj	ponent Unit
Report Year	Utilit	у Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/201	7 Wat	er and Sewer	12/27/2017	1/4/2018	mlb	Not Yet Reviewed
FINANCIAI	L DIST	FRESS				
		leficit net position for 1	the fiscal year anded		[
	1145 0	tenent net position for	ine fiscal year endeu.		<u>.</u>	
□ B	Decre	ease in net position for	two consecutive year	8.	Fiscal Year End	Decrease in NP
□ C	Is in	default on certain outs	tanding debt.			
		Holders of the Bonc	ls, etc.	Principal	Int	terest
]
WATER LO	OSS					
D D	Wate	er Loss Referral				
	А	WWA water audit info				
	w	ater Loss Schedule - Status		AWWA Excel File		
	V V	alidity score below the a	mount established by th	e board		Validity Score
	- F.	xcessive non-revenue wat	an 9/ as astablished by	the beaud		
	<u> </u>	Non-Revenue Water as Percer	•			Non-Rev Water %
		ments:	,	- ,		

Form Revised March 2017

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER Chief of Staff

(合)	and the summer of the second	ee Water Autilit S perting Workelie	A DESCRIPTION OF THE REAL PROPERTY OF THE REAL PROP	WAR on or inclusion of a state of the state of the state of the state of the state of the state of the state of the state of the state of the
Click to access definition Click to add a comment	Water Audit Report for: City of Sm Reporting Year: 2018	ithville (0000637)]	
Please enter data in the white cells below. V Input data by grading each component (n/a	Vhere available, metered values should be used; or 1-10) using the drop-down list to the left of the	Input cell. Hover the mouse	over the cell to obtain a descri	Indicate your confidence in the accuracy of the ption of the grades
		ntered as: MILLION GAL	LONS (US) PER YEAR	
To select the co	rrect data grading for each input, determine ty meets or exceeds <u>all</u> criteria for that grad	the highest grade where		Mades Males and Durally Error Adjustments
WATER SUPPLIED	ty moots of exceeds an emona for mar grad	-	In column 'E' and 'J'	Master Meter and Supply Error Adjustments -> Pcnt: Value:
WATER SUPPLIED	Volume from own sources:			
	Water imported:	ta 0.000	MG/Yr 100 100	MG/Yr
	WATER SUPPLIED:	340.714	MG/Yr	Enter negative % or value for under-registration Enter positive % or value for over-registration
AUTHORIZED CONSUMPTION		·····		Click here:
	Billed metered:	179.564		for help using option
	Billed unmetered;		MG/Yr	bullons below Pcnt; Value;
	Unbilled unmetered:		MG/Yr	1.25% (() () MG/Yr
Default or	otion selected for Unbilled unmetered - a	and the second s		<u>,</u> ,
		207.797		Use buttons to select percentage of water
				supplied OR
WATER LOSSES (Water Supplied - Au	uthorized Consumption)	132.917	MG/Yr	value
Apparent Losses				Pont: Value:
	Unauthorized consumption:		MG/Yr	0.25% () () MG/Yr
	elected for unauthorized consumption -		MG/Yr	1.00% (C) MG/Yr
	systematic data handling errors;		MG/Yr MG/Yr	0.25% (C) MG/YF
	in selected for Systematic data handling	the second		d
	Apparent Losses:	3.357	MG/Yr	· ·
Real Losses (Current Annual Real Los		400 504	1100	
		129,561	MG/Yr	
	WATER LOSSES:	132.917	MG/Yr	
NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbille		161.150	MG/Yr	
SYSTEM DATA				
	Length of mains:	52.0	miles	
Number of active AN	D inactive service connections:	2,466		
	Service connection density:	47	conn /mile main	
Are customer meters typically located a	t the curbstop or property line? ength of customer service line:	Yes		e, bevond the property
	itomer service line has been set to zero a	nd a data grading score		e responsibility of the utility)
······································	Average operating pressure:			
•				
COST DATA				
	coal of operating water system: 10 10 11		S/Year	
	t (applied to Apparent Losses):		\$/1000 gallons (US)	whomes Retail Light Cost to up to any larger
vanable production	cost (applied to Real Losses):	JI\$/25.00	\$/Million gallons Duse Cu	istomer Retail Unit Cost to value real losses
WATER AUDIT DATA VALIDITY SCORE;				
	*** YOUR SC	ORE IS: 81 out of 100 **	•	
A weighted s	cale for the components of consumption and wa	er loss is included in the ca	culation of the Waler Audit Da	ata Validity Score
PRIORITY AREAS FOR ATTENTION:				
	uracy can be improved by addressing the follow	ing components:		
1: Volume from own sources				
2: Unauthorized consumption				
3: Systematic data handling errors				



Performance Indicators 65

AWWA Free Water Audit Software v5.0

Town of Tiptonville



STATE OF TENNESSEE COMPTROLLER OF THE TREASURY DEPARTMENT OF AUDIT DIVISION OF LOCAL GOVERNMENT AUDIT

Justin P. Wilson Comptroller of the

MEMORANDUM

TO: Water and Wastewater Financing Board

FROM: Division of Local Government Audit - Municipalities and Utility Districts

SUBJECT: Division of Local Government Audit Referral Pursuant to TCA 68-221-1010(d)

In accordance with the requirements of Tennessee Code Annotated, we are hereby filing the following vendor with the board(s) noted above.

Record Numb	ber	Vendor Name				
18	79	Tiptonville			Com	ponent Uni
Report Year		у Туре	Date Received	Date Referred	Reviewer	Report Status
6/30/201	6 Wa	ter and Sewer	12/13/2016	12/14/2016	SRW	Not Yet Reviewed
INANCIA	L DIST	RESS				
	Has	deficit net position fo	or the fiscal year en	ded.		
□ B	Decr	ease in net position	for two consecutive	e years.	Fiscal Year End	Decrease in NP
□ C	ls in	default on certain ou	tstanding debt.			
		Holders of the Bond	•	Principal	Inte	rest
]
	oss					
✓ D	Wate	er Loss Referral				
	A	WWA water audit info				
	w	/ater Loss Schedule - Status	6	AWWA Excel File		
	v v	alidity score below the	amount established	by the board		Validity Score
	E	xcessive non-revenue v	water % as establishe	d by the board		Non-Rev Water %
		xcessive non-revenue v Non-Revenue Water as Per		-		Non-Rev Water % 8.1
	(-		

Form Revised February 2013

TOWN OF TIPTONVILLE, TENNESSEE UNAUDITED WATER LOSS SCHEDULE - AWWA REPORTING MODEL For the Year Ended June 30, 2018

	ree Water Audit S		WAS v5.0
	porting Workshee	<u>it</u>	American Water Works Associat C. lapyright © 2014, All Rephis Reserv
C lick to access definition C lick to add a comment C lick to add a comment]	
Please enter data in the white cells below. Where available, metered values should be used; data by grading each component (n/a or 1-10) using the drop-down list to the left of the input of the state	cell. Hover the mouse over the	e cell to obtain a description of t	dicate your confidence in the accuracy of the input he grades
	entered as: MILLION GAL	LONS (US) PER YEAR	
To select the correct data grading for each input, determine th utility meets or exceeds <u>alt</u> criteria for that gra			Master Motor and Rupply Error Adjustments
WATER SUPPLIED		in column 'E' and 'J'	Master Meter and Supply Error Adjustments Pont: Value:
(manufacture) (m	9 232.149	MG/Yr	7 -1.85% (•) () MG/Yr
		MG/Yr	(0) () MG/Yr
Water exported:	n/a 0.000	MG/Yr	Enter negative % or value for under-registration
WATER SUPPLIED:	236.525	MG/Yr	Enter positive % or value for over-registration
AUTHORIZED CONSUMPTION			C lick here:
	9 187.673		for help using option
And And And And And And And And And And	n/a 0.000 n/a 0.000	MG/Yr MG/Yr	buttons below Pont: Value:
Unbilled unmetered:	and a second sec	MG/Yr	1,25% O MG/Yr
Default option selected for Unbilled unmetered - a			A
AUTHORIZED CONSUMPTION: 7	190.630		Use bultons to select percentage of water supplied OR
WATER LOSSES (Water Supplied - Authorized Consumption)	45.895	MG/Yr	- value
Apparent Losses			Pont: Value:
Unauthorized consumption:	0.591	MG/Yr	0.25% O MG/Yr
Default option selected for unauthorized consumption -	a grading of 5 is applied	but not displayed	
		MG/Yr	1.50% O MG/Yr
Systematic data handling errors:	the second secon	MG/Yr	0.25% C MG/Yr
Default option selected for Systematic data handling Apparent Losses:		MG/Yr	
Apparent cosses.	5.310		
Real Losses (Current Annual Real Losses or CARL)			
Real Losses = Water Losses - Apparent Losses:	41.977	MG/Yr	
Real Losses = Water Losses - Apparent Losses: WATER LOSSES:	41.977 45.895		
	-	MG/Yr	
WATER LOSSES: NON-REVENUE WATER NON-REVENUE WATER: Water Losses + Unbilled Metered + Unbilled Unmetered	45.895	MG/Yr	
WATER LOSSES: NON-REVENUE WATER SYSTEM DATA	45.895	MG/Yr MG/Yr	
WATER LOSSES: NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: • ? Number of active AND inactive service connections: • ?	45.895 48.852 7 50.0 7 1,028	MG/Yr MG/Yr miles	
WATER LOSSES: NON-REVENUE WATER: ? Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density:	45.895 48.852 7 50.0 1,028 21	MG/Yr MG/Yr	
WATER LOSSES: NON-REVENUE WATER: * Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Yater Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Yater Losses + Unbilled Metered + Unbilled Unmetered System DATA Length of mains: Yater Losses + Unbilled Metered + Unbilled Unmetered System DATA Length of mains: Yater Losses + Unbilled Metered + Unbilled Unmetered System DATA Length of mains: Yater Losses + Unbilled Metered + Unbilled Unmetered Service connection for mains: Yater Losses + Unbilled Metered + Unbilled Unmetered Service connection density: Yater Losses + Unbilled Metered + Unbilled Unmetered Service connection density: Yater Losses + Unbilled Metered + Unbilled Unmetered Service connection density: Yater Losses + Unbilled Metered + Unbilled Unmetered <td>45.895 48.852 7 50.0 7 1,028</td> <td>MG/Yr MG/Yr miles conn./mile main (length of service line</td> <td>a, <u>beyond</u> the property boundary,</td>	45.895 48.852 7 50.0 7 1,028	MG/Yr MG/Yr miles conn./mile main (length of service line	a, <u>beyond</u> the property boundary,
WATER LOSSES: NON-REVENUE WATER: ? Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connection density:	45.895 48.852 7 50.0 1,028 21 Yes	MG/Yr MG/Yr miles conn./mile main (length of service line that is the responsibi	s, <u>beyond</u> the property boundary, lity of the utility)
WATER LOSSES: NON-REVENUE WATER: • Water Losses + Unbilled Metered + Unbilled Unmetered SYSTEM DATA Length of mains: Number of active AND inactive service connections: Service connections: Service connection density: Are customer meters typically located at the curbstop or property line? Average length of customer service line:	45.895 48.852 7 50.0 7 1,028 21 Yes and a data grading score	MG/Yr MG/Yr miles conn./mile main (length of service line that is the responsibi of 10 has been applied	a, <u>beyond</u> the property boundary, lity of the utility)
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TOWN OF TIPTONVILLE, TENNESSEE UNAUDITED WATER LOSS SCHEDULE - AWWA REPORTING MODEL For the Year Ended June 30, 2018

	AWWA Free Water Audit Software: System Attributes and Performance Indicators	ftware: WAS v5.0 American Water Works Association. C opyright © 2014. All Rights Reserved.
	Water Audit Report for: Tiptonville Water System (0000700) Reporting Year: 2018 7/2017 - 6/2018	
Svetam Attributas:	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 82 out of 100 ***	S: 82 out of 100 ***
	Apparent Losses: + Real Losses: = Water Losses:	3.918 MG/Yr 41.977 MG/Yr 45.895 MG/Yr
	 Unavoidable Annual Real Losses (UARL): See limits in definition Annual cost of Apparent Losses: \$2 Annual cost of Real Losses: \$33 	See limits in definition MG/Yr \$23,315 Valued at Variable Production Cost Return to Reporting Worksheet to change this assumption
Performance Indicators: Financial:	Non-revenue water as percent by volume of Water Supplied: Non-revenue water as percent by cost of operating system:	20.7% 6.3% Real Losses valued at Variable Production Cost
Operational Efficiency:	Apparent Losses per service connection per day: Real Losses per service connection per day: Real Losses per length of main per day*: Real Losses per service connection per day per psi pressure:	10.44 gallons/connection/day N/A gallons/connection/day 2,300.09 gallons/mile/day N/A gallons/connection/day/psi
* This performance indicator applies for	 From Above, Real Losses = Current Annual Real Losses (CARL): 41.5 A1.6 <	41.98 million gallons/year
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See independent auditor's report - 46 -

Miscellaneous

Missed Training Referrals



JASON E. MUMPOWER Deputy Comptroller

The following entities have been referred for officials failing to meet training requirements. All officials have now completed the required training, and Board staff recommends no action.

- 1. Henning
- 2. Murfreesboro
- 3. Winchester



July 19, 2018

Doug Swann Assistant Director- Finance & Administration Murfreesboro Water Resources Department 300 NW Broad St. Murfreesboro, TN 37130

Dear Mr. Swann:

Thank you for submitting Ms. Kathy Nobles' request for an extension to receive her utility training, required by Tenn. Code Ann. § 7-34-115(j). The statute requires that such an extension can only "be granted upon a reasonable showing of substantial compliance" with the training requirements. Tenn. Code Ann. § 7-34-115(j)(6). Ms. Nobles completed zero out of twelve required training hours, and she has not indicated that she attempted to receive such training. Because the foregoing does not amount to "a reasonable showing of substantial compliance" as required by law, we cannot grant Ms. Nobles' request for an extension of her training.

As such, Ms. Nobles has not met the training and continuing education requirements before the end of the continuing education period. Therefore, please be aware that pursuant to Tenn. Code Ann. § 7-34-115(k), the Water and Wastewater Financing Board "shall have full discretion to order reasonable sanctions against the municipality, including, but not limited to, the municipality being ineligible to receive assistance from the Tennessee local development authority under § 68-221-1206(a)(3)."

Please do not hesitate to contact John Greer or me should you have further questions.

Sincerely,

Rachel E. Buckley

Counsel to the Water and Wastewater Financing Board

JASON E. MUMPOWER Chief of Staff

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243



October 8, 2018

Jeff Mathews Human Resources Manager Winchester Utilities 219 2nd Ave. NW Winchester, TN 37398

Dear Mr. Mathews:

Thank you for submitting Ms. Jennifer Kilgore's and Mr. Bruce Spencer's requests for an extension to receive their utility training, which is required by Tenn. Code Ann. § 7-34-115(j). The statute requires that such an extension can only "be granted upon a reasonable showing of substantial compliance" with the training requirements. Tenn. Code Ann. § 7-34-115(j)(6). Ms. Kilgore and Mr. Spencer each completed zero out of twelve required training hours, and generally cite travel and coordination with employers as reasons for not receiving such training, without further detail. Because the foregoing does not amount to "a reasonable showing of substantial compliance" as required by law, we cannot grant Mr. Spencer's or Ms. Kilgore's requests for an extension of their training.

As such, Mr. Spencer and Ms. Kilgore have not met the training and continuing education requirements before the end of the continuing education period. Therefore, please be aware that pursuant to Tenn. Code Ann. § 7-34-115(k), the Water and Wastewater Financing Board "shall have full discretion to order reasonable sanctions against the municipality, including, but not limited to, the municipality being ineligible to receive assistance from the Tennessee local development authority under § 68-221-1206(a)(3)."

Please do not hesitate to contact John Greer or me should you have further questions.

Sincerely,

Rachel E. Buckley Counsel to the Water and Wastewater Financing Board

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

JASON E. MUMPOWER Chief of Staff



JASON E. MUMPOWER Chief of Staff

October 31, 2018

Baris Douglas Mayor, Town of Henning 260 N. Main Street Henning, TN 38041

Dear Mr. Douglas:

Thank you for submitting your request, along with the requests of all the members of the Henning Board of Alderman, for an extension to receive utility training, required by Tenn. Code Ann. § 7-34-115(j). The statute requires that such an extension can only "be granted upon a reasonable showing of substantial compliance" with the training requirements. Tenn. Code Ann. § 7-34-115(j)(6). Each extension request indicates that the Town attempted to coordinate a training with other municipalities, but you later abandoned such efforts, believing that classes would be online in the future. Ultimately, each member of the Board and you completed zero out of twelve required training hours. Because the foregoing does not amount to "a reasonable showing of substantial compliance" as required by law, we cannot grant your request for an extension of your training, nor can we grant the requests of the other members of the Board of Aldermen.

As such, the Board has not met the training and continuing education requirements before the end of the continuing education period. Therefore, please be aware that pursuant to Tenn. Code Ann. § 7-34-115(k), the Water and Wastewater Financing Board "shall have full discretion to order reasonable sanctions against the municipality, including, but not limited to, the municipality being ineligible to receive assistance from the Tennessee local development authority under § 68-221-1206(a)(3)."

Please do not hesitate to contact John Greer or me should you have further questions.

Sincerely,

Rachel E. Buckley Counsel to the Water and Wastewater Financing Board

CORDELL HULL BUILDING 425 Fifth Avenue North Nashville, Tennessee 37243

Resolution



TENNESSEE WATER AND WASTEWATER FINANCING BOARD RESOLUTION

A RESOLUTION to honor and to thank Kenneth D. Wiggins.

WHEREAS, it is fitting that members of this Board should honor and commend those persons who have served the Board, this State, and local utilities; and

WHEREAS, Kenneth D. Wiggins served for twenty years as a member of this Tennessee Water and Wastewater Financing Board; and

WHEREAS, Board members, staff, and entities appearing before the Board benefitted from his insight, wisdom and sense of humor; now, therefore,

BE IT RESOLVED BY THE WATER AND WASTEWATER FINANCING BOARD OF THE STATE OF TENNESSEE, that we hereby honor and thank Kenneth D. Wiggins for his twenty years of service on the Board and extend to him our best wishes.

day of, 2019
TOM MOSS, Vice Chair
EUGENE S. HAMPTON, II
NICK NEWMAN
RANDY WILKINS

2019 WWFB Meeting Schedule



BEFORE THE TENNESSEE WATER AND WASTEWATER FINANCING BOARD

IN RE:

CALENDAR YEAR 2019 REGULAR MEETING SCHEDULE

RESOLUTION

The Tennessee Water and Wastewater Financing Board ("WWFB") met on November 15, 2018, and unanimously endorsed by resolution the following regular meeting schedule for calendar year 2019, with all meetings to begin at 10 a.m. CT:

March 14

September 19

November 21

Entered this <u>4</u>th day of January 2019.

Ann V. Butterworth, Chair Water and Wastewater Financing Board