



AGENDA
Water and Wastewater Financing Board

July 10, 2014
10:00 am
Room 31, Legislative Plaza
301 Sixth Avenue North
(6th Avenue between Charlotte Avenue and Union Street)
Nashville, Tennessee

Call to Order

Approval of Minutes

May 8, 2014

Cases:

City of Bluff City	Sullivan County
Town of Tennessee Ridge	Houston/Stewart Counties
Town of Rutledge	Grainger County
Town of Decatur	Meigs County
Town of Gainesboro	Jackson County
Town of Puryear	Henry County
Town of Bruceton	Carroll County
City of Bolivar	Hardeman County
City of Bradford	Gibson County

Status

Town of Atwood	Carroll County
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Cases – Water loss:

Town of Monteagle	Franklin County
Town of McLemoresville	Carroll County

Status – water loss:

Town of Sharon	Weakley County
City of Jellico	Campbell County

Miscellaneous:

Depreciation presentation	MTAS
Compliance reports	
Cases currently under WWFB jurisdiction	
Next meeting	

Open Discussion

Visitors to the Legislative Plaza are required to pass through a metal detector and must present photo identification. Individuals with disabilities who wish to participate in this meeting or to review filings should contact the Office of State and Local Finance to discuss any auxiliary aids or services need to facilitate such participation. Such contact may be in person or by writing, telephone or other means, and should be made prior to the scheduled meeting date to allow time to provide such aid or service. Contact the Office of State and Local Finance (Ms. Joyce Welborn) for further information.

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Nashville, TN 37243-1402
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Joyce.Welborn@cot.tn.gov

MINUTES
of the
WATER AND WASTEWATER FINANCING BOARD MEETING
May 8, 2014
10:05 a.m.

Chair Ann Butterworth opened the meeting of the Water and Wastewater Financing Board (WWFB) at Legislative Plaza, Room 31, in Nashville, Tennessee.

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

Ben Bolton, Representing Manufacturing Interests

Members absent:

Kenny Wiggins, Active Employee of a Municipal Water System

Tamika Parker, Representing Environmental Interests

Betsy Crossley, Representing Municipalities

VACANT, representing Government Finance

Staff present from the Office of the Comptroller of the Treasury:

Joyce Welborn

John Greer

Betsy Knotts

Chair Butterworth called the meeting to order and asked the members of the Board and staff to introduce themselves.

Approval of Minutes:

Ms. Butterworth noted that since the regular meeting scheduled for March 13, 2014 had been cancelled, the Board had the minutes of the November 14, 2013 for approval. Mr. Heidel moved approval of the minutes of November 14, 2013. Mr. Bolton seconded the motion. Motion was approved unanimously.

Cases – Financial distress:

Humphreys County Sewer System

Humphreys County Sewer System has had a negative change in net position for the previous five fiscal years. There is currently no growth in the System, but the potential of growth is present. The System is debt free, with three years of working capital in the bank. The City of Waverly provides water to the System. The System currently has six residential customers and sixteen customers in total. Over the

past three fiscal years, the rates have increased 5% annually as endorsed by the WWFB in 2012. The most serious problem in the sewer system is infiltration and inflow (“I & I”).

Jessie Wallace, Humphreys County Executive, and Lance Smith, Sewer Superintendent, were present. Mr. Wallace gave a brief history of the System, and an outlook for the future growth potential. With the current I & I problems corrected, the System is anticipated to come very close to breaking even by the 2018 fiscal year. The goal of the County is to allow the area to grow, while minimizing costs on the current customers. Mr. Smith presented the details of the system. Due to the size and structure of the system, the cost of equipment and maintenance are very low. The I & I issues started with the 2010 flood. Since then, the System washed every foot of line and ran a camera through every pipe. There were two manholes found in the system that were causing significant I & I problems. One manhole is directly next to a church, and the other is next to a giant culvert built with unstable materials. The two repairs have an estimated cost of \$68,000, and are projected to be done in the next year. During peak months, the sewer system is operating at 55% of its current capacity. The lagoon has a capacity of 100,000 gallons, and there can be an identical lagoon built if growth were to necessitate it.

Mr. Moss moved that the Board receive a written status report in one year from the Humphreys County Sewer System. Although the final 5% rate increase is scheduled for July 1, 2014, the Board requested a commitment from Mr. Wallace to increase the rates as necessary if the projections were not being met. Mr. Wilkins seconded the motion. Motion was approved unanimously.

City of Collinwood

The City of Collinwood had been reported to the Board as having at least two consecutive years with a negative change in net position in its water/sewer system. Ms. Welborn presented additional material supplied by the City after the package had been distributed to members, including the MTAS rate study. Multiple audits which had been filed within the past year were delayed due to two separate investigative audits. Rates had been increased from \$12.30 to \$18.45 for 2,000 gallons (inside city limits), from \$17.40 to \$26.10 (outside city limits), and a rate of \$8.10 for every 1,000 gallons above the minimum. Staff recommended the WWFB endorse the actions of the City and monitor until compliance is reached.

Mr. Bolton moved to endorse the actions of the City of Collinwood and receive an updated status at the next meeting after FY 2013 audit is filed with the Comptroller’s Office. Mr. Moss seconded the motion. Motion was approved unanimously.

Lauderdale County Water System

Lauderdale County Water System had been referred for two consecutive years of a negative change in net position. The last rate increase was in 1995. The System purchases roughly 10% of its water from the City of Ripley which serves the area that has 780 of the oldest meters in the system. Of the remaining meters, 50% are over 20 years old and a plan is being developed to replace them. Also, the System lost around 100 customers that permanently abandoned their homes after 2011 flooding. Staff recommended that the WWFB endorse the actions of LCWS and monitor.

Mr. Heidel moved that the WWFB accept the staff recommendation. Mr. Wilkins seconded the motion. The motion was approved unanimously.

City of Munford

The City of Munford had been referred to the Board has having two consecutive years with a negative change in net position in its water and sewer fund. As reflected in the MTAS rate study, the City increased its rates effective July 1, 2014, and included an annual cost of living increase. Staff recommended the WWFB endorse the actions taken by the City of Munford.

Mr. Bolton moved to endorse the actions taken by the City of Munford. Mr. Wilkins seconded the motion. The motion was approved unanimously.

Town of Huntland

The Town of Huntland had been referred to the Board has having two consecutive years with a negative change in net position. The last appearance before the Board in 2010 resulted in the last rate increase. The reasons for their negative change in net position include losing customers, decreased usage for irrigation, and plant maintenance. The Town increased its rates 25% effective July 1, 2014. Staff recommended the WWFB endorse the actions of the Town of Huntland.

Mr. Wilkins moved to endorse the actions of the Town of Huntland. Mr. Moss seconded the motion. The motion was approved unanimously.

Status Reports:

Status reports are presented simply to update the Board on certain matters specific to the entities involved. No action is taken unless specified by members. The entities will continue to be monitored by the Board.

Town of Sharon – a detailed water loss plan is requested. Also information about “public awareness” and “decrease in our monthly water loss” as stated in the submitted information.

Town of Atwood – a signed copy of the ordinance and information about the leak detection program were requested. The Town was also required to develop and implement a meter replacement policy and cautioned that the \$1.00 increase may not be sufficient.

Town of Englewood

Cases – water loss:

Cases of water loss are presented to the Board but no action is taken unless specifically requested by members. The cases will continue to be reviewed annually until they are in compliance. The following cases were presented:

City of Westmoreland

Town of Tiptonville

City of Jellico – additional information was requested for items 4-6 and 16 relative to “draft”, “update”, or “added in the future” being used. The Board also encouraged the development and implementation of a public relations program for reporting water loss.

City of McMinnville – requested written policies be in place within one year and submitted to the Board
Town of Tellico Plains

City of Hohenwald – Items 11 and 13 in the checklist are contradictory, Item 17 should be completed, Mr. Moss asked the age of the water lines. It was also requested that written policies be in place within one year.

Miscellaneous:

Compliance reports

Included in the packet were compliance reports for the cities of Decherd, Elizabethton, Greeneville, Harriman, Henry, Lake City, Lakeland, Lobelville, McKenzie, Michie, New Johnsonville, Niota, Spencer, Trezevant, Wartburg, Watertown, and Waverly; and the towns of Ashland City, Benton, Big Sandy, Carthage, Cumberland Gap, Decaturville, Hollow Rock, Hornbeak, Jasper, Jonesborough, Kimball, Monterey, Mosheim, Mountain City, Oliver Springs, Petersburg, Sardis, Wartrace, and Whiteville. Lincoln County Board of Public Utilities and Watauga River Regional Water Authority were also in compliance.

Jurisdiction List:

Ms. Welborn presented an updated schedule identifying all systems which were currently under the Board’s jurisdiction. A separate sheet was included for the systems dealing only with excessive water loss.

Town of Huntsville/Scott County Sewer System

Ms. Welborn stated that she had received an email from the County Attorney stating that the City and County were attempting to merge the two small sewer systems and the matter was to be on the agenda for each body at their next meetings.

Water Loss Report:

The annual report required of the Comptroller to be submitted to the General Assembly had been included in the packet. Rule 1740-01.03(5)(a) requires the Board to determine no less than annually the acceptable unaccounted for water loss percentage for public water systems. Noting that systems are still learning to complete the AWWA worksheet, Mr. Moss made a motion to affirm the graduated requirements established by the Board, in coordination with the Utility Management Review Board, in 2012. Mr. Bolton seconded the motion which was unanimously approved. The information will also be presented to the Utility Management Review Board at the June meeting.

New Legislation:

Ms. Welborn shared two new pieces of legislation. Public Chapter 543, Acts of 2014, extends the Water and Wastewater Financing Board until June 30, 2019. Public Chapter 628, Acts of 2014, eliminated

inconsistent language within the law regarding subsidies of tax dollars, required all water systems and wastewater facilities to operate as an enterprise fund by July 1, 2016, updated some accounting terminology, and deleted some obsolete verbiage.

Ms. Welborn also shared Attorney General Opinion No. 14-46 related to a City's water and sewer rates outside corporate limits.

The next regular meeting was scheduled for July 10, 2014, at 10:00 a.m.in the Legislative Plaza.

Meeting was adjourned at 11:35 a. m.

Respectfully submitted,

Ann Butterworth
Chair

Joyce Welborn
Utilities Board Manager

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: City of Bluff City, Sullivan County
Mayor: Irene Wells
Customers: 1,038 water, 664 sewer
Validity Score: 69
Non-revenue water: 16.9%

The City of Bluff City has been experiencing a negative change in net position for the last two fiscal years in its water and sewer system according to the information contained in audited financial statements. Attached is a financial and rate history.

When questioning city officials as to the reason for the negative changes, staff was told that two sinkholes opened in roads which created problems with the water and sewer lines.

Rates have increased annually since FY08. Water is furnished by wells that were drilled in the early 1920's when the system started. The city is connected to Bristol-Bluff City Utility District as a second source of water. There are only one or two sewer customers outside the city limits. All waste is sent to the City of Bristol for treatment at a cost of \$2.31 per thousand gallons.

As the result of an easement that was granted to the original property owners (and remains with the property for eternity even though the property may be sold), there are 20 customers that receive free water. City officials estimate that this amounts to approximately \$50,000 annually in lost water revenue. The City has tried multiple times to break the contract easements, but has not been able to do so.

The City was in discussion to annually increase water and sewer rates 15% each three years in order to solve the financial distress problems and to borrow funds necessary to build a water storage tank at the plant, add two sewer lift stations, replace some water and sewer lines and add to new sewer lines. During FY 15, the current water tank will require approximately \$100,000 in maintenance. Applications are being made to USDA – RDA for a \$1.7 million loan with a \$770,000 grant. The loan is estimated to be at a rate of 3.25% for 38 years.

At the June 2015 meeting, the City council adopted the FY15 budget which includes a 15% rate increase in both water and sewer and voted to adopted a second and third 15% in both FY 16 and FY 17.

Staff recommends the Board endorse the actions of the City. Staff will continue to monitor the situation until audited financial statements reflect compliance.

CITY OF BLUFF CITY						
HISTORY FILE						
	Audited	Audited	Audited	Audited	Audited	Audited
Fiscal year ending 6/30	2008	2009	2010	2011	2012	2013
Water and sewer revenues	\$ 452,635	\$ 426,492	\$ 456,959	\$ 509,777	\$ 540,616	\$ 562,632
Other revenues	\$ 691	\$ 175	\$ 960	\$ 1,032	\$ 1,315	\$ 1,140
Total Operating Revenues	\$ 453,326	\$ 426,667	\$ 457,919	\$ 510,809	\$ 541,931	\$ 563,772
Total Operating Expenses	\$ 525,146	\$ 461,764	\$ 506,298	\$ 421,066	\$ 531,799	\$ 607,036
Operating Income	\$ (71,820)	\$ (35,097)	\$ (48,379)	\$ 89,743	\$ 10,132	\$ (43,264)
Interest Expense	\$ 41,200	\$ 40,092	\$ 38,251	\$ 37,216	\$ 36,833	\$ 33,617
Transfer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in Net Assets	\$ (113,020)	\$ (75,189)	\$ (86,630)	\$ 52,527	\$ (26,701)	\$ (76,881)
<u>Supplemental Information</u>						
Principal payment	\$ 26,330	\$ 13,712	\$ 58,875	\$ 14,790	\$ 31,760	\$ 33,790
Depreciation	\$ 119,620	\$ 120,032	\$ 120,188	\$ 120,188	\$ 121,208	\$ 123,800
<u>Water rates</u>						
Inside						
First 2,000 gallons	\$ 8.06	\$ 8.14	\$ 8.47	\$ 9.32	\$ 10.25	\$ 11.25
All over	\$ 3.14	\$ 3.17	\$ 3.30	\$ 3.63	\$ 3.99	\$ 4.39
Outside						
First 2,000 gallons	\$ 14.65	\$ 14.79	\$ 15.39	\$ 16.93	\$ 18.62	\$ 20.48
All over	\$ 4.71	\$ 4.75	\$ 4.94	\$ 5.43	\$ 5.97	\$ 6.57
<u>Sewer rates</u>						
Inside						
First 2,000 gallons	\$ 10.23	\$ 10.33	\$ 10.75	\$ 11.83	\$ 13.01	\$ 14.31
All over	\$ 5.49	\$ 5.54	\$ 5.77	\$ 6.34	\$ 6.97	\$ 7.67
Outside						
First 2,000 gallons	\$ 15.48	\$ 15.63	\$ 16.26	\$ 17.89	\$ 19.68	\$ 21.65
All over	\$ 8.23	\$ 8.31	\$ 8.65	\$ 9.51	\$ 10.46	\$ 11.51
Water customers	1,040	1,042	1,046	1,050	1,047	1,038
Sewer customers	671	667	677	676	667	664
Water loss	43.06%	36.87%	33.63%	37.40%		
Validity Score					72	69
Non-revenue water as %					5.70%	16.90%

**CITY OF BLUFF CITY
CHANGES FOR THE BUDGET
FOR FISCAL YEAR ENDING JUNE 30, 2015**

WATER/SEWER FUND

1. Water Rate Increase of 15%
2. Sewer Rate Increase of 15%
3. Reconnect Fees – Increase from \$25.00 to \$50.00
4. Meter Installation increase from \$25.00 to \$150.00
5. Water Tap Fee increase from \$500.00 for inside city to \$750.00
6. Water Tap Fee increase from \$700.00 for outside city to \$900.00
7. Sewer Tap Fee increase from \$1,950.00 to \$2,500.00
8. Renters will be required to pay a \$200.00 deposit instead of \$100.00 which is refundable after the last bill is paid. Hopefully this will cover the cost of customers who move and do not pay their balance.
9. The city has always adjusted for water leaks now they will not adjust the water but they will adjust the sewer.

GENERAL FUND

1. Increased property tax from \$1.03 TO \$1.28 (.25 Increase)
2. Increased court costs from \$75.00 to \$100.00 (\$25.00 Increase)
3. Added a \$5.00 training fee per each citation written.

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: Town of Tennessee Ridge, Houston/Stewart Counties
Mayor: Stony Odom
Customers: 1,170 water, 176 sewer
Validity Score: 71
Water Loss: 14.7%

The Town of Tennessee Ridge has been reported to the Water and Wastewater Financing Board as being financially distressed based on a negative change in net position for two consecutive years in its water and sewer system. The financial and rate history is attached.

Approximately 20% (30,000 gallons per day) of the water is purchased from the City of Erin for \$1.95 per thousand gallons.

The Town recently spent \$500,000 on sewer to rework all the manholes in an effort to reduce the infiltration and inflow (I & I) plaguing the system.

A leak detection program is in the planning stages with the consulting engineer. A meter replacement program has been implemented replacing the oldest meters in the system first. A 15% rate increase was effective July 1, 2014. Several customer fees have also been adjusted. The usage allowance for the minimum bills was adjusted downward.

Staff recommends the Board endorse the actions of the Town of Tennessee Ridge. The Town will remain under the jurisdiction of the Board until an audit is received which reflects compliance.

TOWN OF TENNESSEE RIDGE				
HISTORY FILE				
	Audited	Audited	Audited	Audited
Fiscal Year 6/30	2010	2011	2012	2013
Water/sewer revenues	\$ 426,568	\$ 451,556	\$ 466,875	\$ 472,612
Other revenues	\$ 5,385	\$ 7,209	\$ 10,219	\$ 5,119
Capital Contributions		\$ 111,319	\$ 12,617	\$ 3,000
Total Rev.	\$ 431,953	\$ 570,084	\$ 489,711	\$ 480,731
Total Exp.	\$ 489,825	\$ 506,054	\$ 495,122	\$ 518,485
Operating Income	\$ (57,872)	\$ 64,030	\$ (5,411)	\$ (37,754)
Interest Expense	\$ 19,713	\$ 22,162	\$ 20,789	\$ 20,022
Change Net Position	\$ (77,585)	\$ 41,868	\$ (26,200)	\$ (57,776)
<u>Additional Info</u>				
Principal payment	\$ 44,982	\$ 57,119	\$ 58,258	\$ 59,498
Depreciation	\$ 146,823	\$ 163,783	\$ 167,739	\$ 167,858
<u>Water rates</u>				
<u>Non industrial - inside</u>				
First 2,000 gallons	\$ 14.50	\$ 15.50	\$ 16.50	\$ 17.75
All over	\$ 4.32	\$ 4.32	\$ 4.32	\$ 4.32
<u>Industrial - inside</u>				
First 20,000 gallons	\$ 35.50	\$ 36.50	\$ 37.50	\$ 38.75
All over	\$ 4.74	\$ 4.74	\$ 4.74	\$ 4.74
<u>Non industrial - outside</u>				
First 2,000 gallons	\$ 19.40	\$ 20.40	\$ 21.40	\$ 22.65
All over	\$ 5.40	\$ 5.40	\$ 5.40	\$ 5.40
<u>Industrial - outside</u>				
First 20,000 gallons	\$ 50.70	\$ 51.70	\$ 52.70	\$ 53.95
All over	\$ 6.13	\$ 6.13	\$ 6.13	\$ 6.13
<u>Sewer rates</u>				
	5/1/2003			
<u>Residential</u>				
First 2,000 gallons	\$ 16.38	\$ 17.38	\$ 18.38	\$ 18.38
All over	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85
<u>Industrial</u>				
First 2,000 gallons	\$ 31.40	\$ 32.40	\$ 33.40	\$ 33.40
All over	\$ 3.30	\$ 3.30	\$ 3.30	\$ 3.30
Water customers	1,169	1,158	1,152	1,170
Sewer customers	172	168	172	176
Water loss	31.96%	26.03%	34.34%	
Validity Score				71
Non-revenue water				14.70%

CITY OF TENNESSEE RIDGE

JUN 10 2014

June 4, 2014

Attn: Joyce Welborn
State of Tennessee
Water & Wastewater Financing Board
Suite 1500 James K Polk State Office Building
505 Deaderick Street
Nashville TN 37243-1402

RE: Plan of Action

Dear Joyce:

We are sending to you, what we feel is a good plan of action, to address our situation with the Water and Wastewater Board.

As discussed when we had our meeting, we had already started the implementation of the change out of meters on the oldest part of the system. We have adopted an ordinance to raise water and sewer rates that will go into effect 7-1-14 and have approved a plan with Rye Engineering for a water loss management plan. They will begin this plan starting tomorrow 6-5-14.

If you have any questions on any of the attached documents; please feel free to contact me at 931-721-3385. Also, please note our new address of P O Box 207 instead of 1435 North Main.

Sincerely,



Stony Odom, Mayor

P O BOX 207
TENNESSEE RIDGE
TN 37178
cotr@peoplestel.net

PHONE (931) 721-3385
TDD#202-720-6382
"THIS INSTITUTION IS AN EQUAL
OPPORTUNITY PROVIDER, AND EMPLOYER."

Water & Wastewater Financing Board

Plan of Action

1. We have already implemented a change out meter plan. We are changing out the older ones first.
2. We have raised water & sewer rates 15% on all residential and commercial customers and dropped the minimum down to 1,500 gallons and 15,000 gallons. We have raised the tap fees. We have added a transfer fee for customers. We have always been prudent in our cut-off policy; but we have raised the re-connect fee to \$40.00 during work hours and \$75.00 for after hours. We have also raised the returned check and draft fees to \$50.00 and \$53.00 respectively. I am enclosing a copy of the Ordinance that will go into effect on July 1, 2014 for your review.
3. We have contracted with Rye Engineering for Option No. 3 for full compliance on the Water Loss Management Plan. We have enclosed a copy of this for your review.

ORDINANCE #2014-169

AN ORDINANCE TO ADOPT WATER AND SEWER RATES
FOR THE CITY OF TENNESSEE RIDGE

WHEREAS: the City of Tennessee Ridge is empowered by its charter to establish water and sewer rates by appropriate ordinance or resolution; and

WHEREAS: the Board of Commissioners of the City of Tennessee Ridge has determined that it is necessary to establish a new rate for water and sewer due to the rising costs to produce potable water, and maintain the sewer system,

NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE CITY OF TENNESSEE RIDGE AS FOLLOWS:

SECTION ONE: That the following water and sewer rate schedule be and is hereby adopted for the City's water customers:

	<u>From</u>	<u>To</u>
Residential Inside	17.75	20.41
Per Thousand after minimum	4.37	5.03
Residential Outside	22.65	26.05
Per Thousand after minimum	5.45	6.27
Commercial Inside	38.75	44.56
Per Thousand after minimum	4.79	5.51
Commercial Outside	53.95	62.04
Per Thousand after minimum	6.18	7.11
Sewer Residential	18.38	21.14
Per Thousand after minimum	2.90	3.34
Sewer Commercial	33.40	38.41
Per Thousand after minimum	3.35	3.85

Section Two: That the minimum for residential users is 1,500 gallons and the

minimum for commercial users is 15,000 gallons. After minimum gallons are used the cost of water and sewer will be at the per thousand amount.

Section Three: Any customer, whether inside or outside of the city limits of the City of Tennessee Ridge, connected to the water system shall be charged a minimum bill each month regardless of whether there was any water usage or not; as the minimum is based on Zero gallons to 1,500 gallons.

Section Four: That a ¾ inch water tap will cost \$750.00 and a 1” water tap will cost \$900.00. Road bores will cost \$750.00. A sewer tap will cost \$750.00.

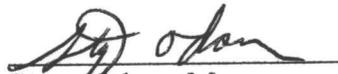
Section Five: Any customer that has not paid their bill by the 25th of the month will be cut off and will not be turned back on until the bill is paid with an additional \$40.00 reconnect fee during working hours; and a reconnect fee of \$75.00 if paid after hours. If the 25th falls on the weekend or a holiday, the cut off date will be the next business day.

Section Six: That the returned check fee will be \$50.00 on all returned checks and \$53.00 on all returned drafts.

Section Seven: There will be a \$10.00 transfer fee added to transfer service from one service address to another service address.

Section Eight: That all resolutions and ordinances of the City of Tennessee Ridge, which are in conflict with this ordinance, shall be and are hereby repealed insofar as they conflict.

Section Nine: That this ordinance shall take effect upon its final passage and adoption, the public welfare requiring it.


Stony Odom, Mayor


Woodrow Adams, Recorder

PASSED FIRST READING: 05-05-2014

PASSED SECOND READING: 04-22-2014

1: BACKGROUND

In March of 2014, The City of Tennessee Ridge (City) received notice from the State Comptroller's Office that it was being called before the Water and Wastewater Finance Board (WWFB) on May 8th, 2014 due to showing a negative operating income of approximately \$46,000 in the 2012-1013 fiscal year. As part of its overall plan to rectify this issue, the City desires to recover lost revenue due to water loss. According to its latest AWWA water audit (submitted with its annual financial audit to the Comptroller), the City is technically in compliance based on water loss, scoring a 71 validity score and a 14.7% non-revenue water as percentage of operating costs. However, according to the water audit, the city is losing approximately \$78,000 annually due to non-revenue water.

In order to recover this lost revenue, the City has asked Rye Engineering PLC to put together a proposal for a comprehensive Water Loss Management Program. This program should have three main goals: 1) Revenue Recovery, 2) Affordability, and 3) State Compliance.

1. **Revenue Recovery Goal:** *To recover a significant but realistic amount of non-revenue water.* As previously stated, the City is losing approximately \$78,000 per year as non-revenue water, however, it is unrealistic to recover this entire amount. In order to determine a realistic goal, we turn to the City's water audit which breaks down non-revenue water in terms of Real Losses (leakage, etc.) and Apparent Losses (meter inaccuracies, etc.). According to the audit, Real Losses are valued at approximately \$32,000 per year. However, the audit also indicates that \$12,000 per year of Real Losses are unavoidable, meaning that it is possible to recover about \$20,000 per year due to leakage by implementing a regular leak detection program.

Apparent Losses are valued at approximately \$46,000 per year, indicating that issues such as metering inaccuracies are likely contributing significantly to non-revenue water. According to the audit, an average 7% customer meter error is estimated. Through annual meter testing and subsequent meter replacement, it should be possible to reduce this error to below 4% over a period of years, which would result in revenue recovery approximately \$20,000.

So the Revenue Recovery goal of this program will be the sum of Real (\$20,000/yr.) and Apparent Losses (\$20,000/yr.) totaling \$40,000 per year. It is important to point out that it may take several years of active water loss management efforts to attain this goal and the goal should be re-evaluated each year as the City performs its annual AWWA water audit.

2. **Affordability Goal:** *To manage water loss with affordable and predictable costs.* By having a realistic Revenue Recovery goal, the City can choose a plan that is cost effective. While \$40,000 per year would be the break-even point, it is recommended that the City choose a water loss management program that costs approximately 50% of this break-even point or \$20,000 per year. The result being that the City could reduce its negative operating income by \$20,000 per year.

The annual costs of a water loss management program can be spread into monthly installments for ease of budgeting and cash flow purposes as required by the City.

3. **State Compliance Goal:** *Maintain a state compliant water audit under tightening regulations.* While currently in compliance with State water loss regulations, if water loss control efforts are not intensified, the City will likely fall out of compliance in 2015, because the regulations automatically tighten from a minimum validity score of 70 to a score of 75. Since the City's score was 71, with no improvements, its compliance will be short-lived. Any water loss management program implemented will have the goal of bringing the validity score to at least 75 by 2015 and then to 80 by 2017 in accordance with the State regulations.

2: SCOPE OF SERVICES

Tennessee Ridge Water Loss Management Program:

Due to the budget limitations of the City we have developed three options for a comprehensive water loss management program tailored to the unique needs of Tennessee Ridge. This program shall include only the **routine, service-based activities** necessary to promote continued compliance with Tennessee's ever-tightening water loss regulations and to recovery revenue that is currently being lost due to non-revenue water. (Please note that the City should consider other mid-range and long term projects to manage water loss as its budget may permit). This program shall consist of a plan to implement a combination at least the following water loss control techniques as selected by the City.

Routine Service-Based Activities

These and related activities should begin in the short-term and continue for the life of the water loss management program. They are largely service-based and labor intensive, but typically do not require large capital investments. These are the daily/weekly/monthly-type activities that are required to successfully manage water loss:

1. AWWA Water Auditing;
2. Master Meter Testing & Calibration;
3. Bulk Sales Meter Testing & Calibration;
4. Residential Meter Testing;
5. Acoustic Leak Detection;
6. Emergency Leak Detection;
7. Flow-based Leak Detection;
8. Step Testing Routines.

Figure 2 shown on page 6 illustrates the essential activities that compose a typical water loss management program. Please note that the activities in orange represent the routine service-based activities discussed above, blue activities are the mid-range activities, and the green items represent the long-term improvements that can be undertaken as funding permits at a later time.

3: COST PROPOSAL

We have developed three options for consideration by the City. Option 3 is the most comprehensive and the most likely to meet the Revenue Recovery Goal of reducing water loss by \$40,000 per year and the State Compliance goal of a validity score of 75 by 2015. Therefore Option 3 is recommended, however, we have provided two less expensive options that can be considered, but will not produce the same level of performance. Please find a detailed breakdown below.

April 1, 2014				
				
TENNESSEE RIDGE WATER LOSS MANAGEMENT PLAN - OPTIONS				
COST ESTIMATE				
Item No.	Description	Annual Cost	Monthly Cost	Per Customer
1	OPTION 1: BASE OPTION: 1) Biannual Acoustic Leak Survey; 2) Master Meter & Bulk Meter Testing (three Master Meters & Emergency Erin Connection Meter)	\$ 6,588	\$549	\$0.40
2	OPTION 2: INTERMEDIATE OPTION: 1) Biannual Acoustic Leak Survey; 2) Master Meter & Bulk Meter Testing (three Master Meters & Emergency Erin Connection Meter); 4) AWWA Water Audit; 5) Emergency Leak Detection 8 hrs estimated; 6) Flow Based Leak Detection as required for cross-country lines, etc.	\$ 11,538	\$962	\$0.70
3	OPTION 3: FULL COMPLIANCE OPTION : WATER AUDIT, COMPREHENSIVE LEAK DETECTION, MASTER METER TESTING/CALIBRATION, BULK SALES METER TESTING, RESIDENTIAL METER TESTING 1) Acoustic survey of all water services ANNUALLY; 2) Flow based leak detection & correlation of cross country mains, creek crossings, etc. as required; 3) Emergency on-call leak detection services included 8 hrs; 4) Annual Testing of Master Meters (3 Meters); 5) Annual Bulk Sales Meter Testing (1 Meters - Erin Meter); 6) Annual Compliance AWWA Water Audit. 7) Residential Meter Testing (50 Meters).	\$ 19,926	\$1,661	\$1.21

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: Town of Rutledge, Grainger County
Mayor: Danny Turley
Customers: 682 water, 302 sewer
Validity Score: 78
Water Loss: 519.7%

The Town of Rutledge has been reported to the Water and Wastewater Financing Board as being financially distressed based on a negative change in net position for two consecutive years in its water and sewer system. The financial and rate history is attached.

When asked what was causing the problems, staff was told that two pieces of equipment had to be replaced (approximately \$15,000), an entire road had to be repaved because of a leak resulting in the entire pipe on the road being replaced (approximately \$18,000), and a very deep leak at the school costing approximately \$30,000 for repairs. The expenses are typically non-recurring.

Water is sold to Bean Station Utility District for \$2.13 per thousand gallons.

Effective with the July 2014 billing cycle, the rates will be increased and all levels of usage will be billed at one rate per thousand gallons instead of the graduated rate currently in place.

The new rates and structure and the reduced expenses should result in a positive change in net position for the fiscal year ended June 30, 2014.

Staff recommends the Board endorse the actions of the Town of Rutledge. The Town will remain under the jurisdiction of the Board until an audit is received which reflects compliance.

Town of Rutledge

865-828-4513

POST OFFICE BOX 36
RUTLEDGE, TN 37861

Joyce Welborn
Utilities Board Manager
Water & Wastewater Financing Board
Suite 1500 James K. Polk State Office Building
505 Deaderick St.
Nashville, TN 37243-1402

JUN 12 2014

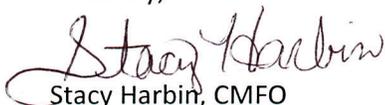
Dear Ms. Welborn:

Hope this letter finds you well. I have attached the City of Rutledge water/sewer financial projections and a copy of the proposed new rates for the water/sewer department that will go into effect starting with the July 2014 billing cycle. As you can see I took your suggestion to do a flat rate for anything over the minimum and the board agreed this is the best route to take. I have also included a copy of the May financial statements showing a strong revenues to expenses ratio. I have projected this year will end with a nice positive balance. Expenses were reduced greatly compared to the previous years. As you may recall, I explained to you at our meeting much of the expense for last year was due to the unexpected cost of some very expensive repairs and replacement parts that the department could not do without. We also had to pave an entire street due to having to replace water lines the entire length of that street. The cost for that was around \$18,000.00. I have discussed this with the water/sewer department employees and they don't foresee anything major as in the past the rest of this year or next year, but with the increase in the rates if anything does happen the additional revenue should cover the cost.

I'm also in the process of preparing new rates and fees for the cost associated with the water/sewer department such as connection charges, re-read charges, etc. Our water superintendent is also compiling a list of the cost of putting in a new tap so we can charge accordingly. I hope to present these to the board soon. (Copy attached)

I believe I have provided enough proof to convince you that we are on the right track and will end the year on a positive note. I would really like to avoid the extra expense of a trip to Nashville. If you should need any further information please contact me at (865) 828-4513 or email rut2003@frontiernet.net. Thank you in advance for your attention to this matter.

Sincerely,



Stacy Harbin, CMFO
City of Rutledge
Danny Turley, Mayor

TOWN OF RUTLEDGE
Financial Projections
JUNE 2014

	FISCAL YEAR 2013 AUDITED	FISCAL YEAR 2014 PROJECTED	FISCAL YEAR 2015 PROJECTED
OPERATING REVENUES			
Water and Sewer Sales	\$ 476,791	\$ 511,931	\$ 521,995
Other	28,594	26,887	25,450
Grant	-	-	-
Total Operating Revenues	505,385	538,818	547,445
OPERATING EXPENSES	541,805	519,836	523,758
OPERATING INCOME GAIN	(36,420)	18,982	23,687
Interest Expense	<u>(16,368)</u>	<u>(11,005)</u>	<u>(15,816)</u>
CHANGE IN NET POSITION	<u>(\$52,788)</u>	<u>\$7,977</u>	<u>\$7,871</u>

ORDINANCE NO. _____

AN OF THE TOWN OF RUTLEDGE, TENNESSEE, TO
AMEND ORDINANCE NO. ____ WATER AND SEWER RATES

WHEREAS, it is now incumbent upon the Town of Rutledge to increase the water and sewer usages charges to meet the financial requirements of the water and sewer system.

NOW THEREFORE, BE IT ORRDAINED by the Board of Mayor and Alderman of the Town of Rutledge, Tennessee as follows:

Section 1: The following water usage charges shall be and hereby are, adopted to replace all water usage charges heretofore adopted by the Board of Mayor and Alderman on behalf of the town of Rutledge, Tennessee:

Residential Rates

First 2,000 Gallons	\$17.46 (Minimum)
Over 2,000 Gallons	\$6.00 per 1,000

Commercial Rates

First 2,000 Gallons	\$18.61 (Minimum)
Over 2,000 Gallons	\$6.75 per 1,000

Section 2: The following sewer usage charges shall be and hereby are, adopted to replace all sewer usage charges heretofore adopted by the Board of Mayor and Alderman on behalf of the Town of Rutledge, Tennessee:

Residential Rates

First 2,000 Gallons	\$21.57 (Minimum)
Over 2,000 Gallons	\$7.20 per 1,000

Commercial Rates

First 2,000 Gallons	\$23.01 (Minimum)
Over 2,000 Gallons	\$7.40 per 1,000

TOWN OF RUTLEDGE
Summary Financial Statement
MAY 31, 2014
FlexGen4(7.0U) Page: 4
Fiscal Year Time Lapse: 91.66

Account	Description	Budget Estimate	Year-To-Date Actual	Percent of Budget	Estimate Avg/Mth	MAY Actual	Percent of Avg
35300	CHARGE FOR CUSTOMER RETURNED CHECKS	0.00	275.00	0.0	0.00	25.00	0.0
36100	INTEREST EARNINGS	3,500.00	2,267.19	63.0	300.00	30.03	10.0
37110	METERED WATER SALES	296,000.00	280,806.52	94.9	24,666.87	458.93	103.2
37130	FIRE SERVICE AND HYDRANT RENTALS	4,200.00	3,887.95	92.6	350.00	353.45	101.0
37191	FORFEITED DISCOUNTS AND PENALTIES	7,400.00	7,057.94	95.4	616.67	564.35	91.5
37192	CUSTOMER SERVICE CHARGE - WATER	3,500.00	3,800.00	105.5	300.00	390.00	116.7
37193	SERVICING CUSTOMER INSTALLATIONS	400.00	839.63	209.9	32.33	75.00	225.0
37196	WATER TAP FEES	1,500.00	500.00	33.3	128.00	0.00	0.0
37198	BACK FLOW INSPECTION FEES	3,400.00	3,200.00	94.1	283.33	0.00	0.0
37199	MISCELLANEOUS	0.00	687.19	0.0	0.00	0.00	0.0
37210	SEWER SERVICE CHARGES	197,600.00	191,570.57	96.9	16,466.67	17,783.95	108.0
37240	SERVICE TO OTHER UTILITIES	0.00	260.00	0.0	0.00	0.00	0.0
37292	CUSTOMER SERVICE CHARGE- SEWER	2,400.00	2,000.00	83.3	200.00	300.00	150.0
37295	SEWER TAP FEES	0.00	500.00	0.0	0.00	0.00	0.0
	Total REVENUES	520,100.00	497,631.99	95.7	43,341.67	44,940.71	103.7
	EXPENDITURES						
52100	WATER UTILITIES	205,941.00	198,888.14	96.6	17,161.74	12,948.05	75.4
52200	SEWER	136,286.00	146,614.59	93.8	13,023.83	11,762.23	90.3
52317	ADMINISTRATIVE & GENERAL EXPENSES	154,154.00	125,675.04	81.5	12,846.17	9,361.17	72.9
	Total EXPENDITURES	516,381.00	471,177.77	91.2	43,031.74	34,074.45	79.2
	Total WATER AND SEWER	3,719.00	26,454.22	711.3	309.93	10,666.26	3506.0
	G/L Month: 05 MAY						
	Beginning Fund: 110						
	Ending Fund: 413						
	Beginning Function: ZZZZZ						
	Ending Function: ZZZZZ						
	* End of Report: CITY OF RUTLEDGE *						

PROPOSED FEE CHANGES FOR WATER/SEWER DEPT.

1. RE-READ METER 1ST TIME WITHIN A YEAR NO CHARGE ANY AFTER \$15.00 PER TIME.
2. SERVICE CHARGE NEW CUSTOMERS:
WATER ONLY:
HOMEOWNERS - 55.00 TAX 5.36 TOTAL 60.36
RENTAL PROPERTY - 100.00 TAX 9.75 TOTAL 109.75
WATER/SEWER:
HOMEOWNERS - 110.00 TAX 10.73 TOTAL 120.73
RENTAL PROPERTY - 200.00 TAX 19.50 TOTAL 219.50
3. TRANSFER FEE – ONE APARTMENT TO ANOTHER IN SAME COMPLEX OR MOBILE HOME PARK:
UP TO SIX MONTHS 50.00 TAX 4.88 TOTAL 54.88
OVER SIX MONTHS SAME AS NEW CUSTOMER SERVICE CHARGE
IN DIFFERENT COMPLEX OR AREA SAME AS NEW CUSTOMER CHARGE
4. TAP FEES – WATER 650.00 SEWER 650.00
BOTH 1250.00
5. RETURN CHECK FEE 30.00 NO EXCEPTIONS

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: City of Decatur
Mayor: Bill James
Customers: Water 2,265; Sewer 529
Validity Score: 77
Non-Revenue Water: 5.70%

The City of Decatur has been reported to the Board as having two consecutive years with a negative change in net position as of June 30, 2013. The financial and rate history is attached.

Depreciation has not been properly budgeted for in previous years, but that oversight was corrected in the FY 15 budget. The City is also starting to include depreciation on its monthly reports to the City Council.

In October of 2013, Decatur raised its water rates 40% and sewer rates 30%. These increases were based on a study prepared by MTAS. Current projections from the City show the water and sewer rate increases will lead to a positive change in net position for the fiscal year ending June 30, 2014.

Staff recommends the Board endorse the actions of the City of Decatur. The City will remain under the jurisdiction of the WWFB until an audit is received which reflects compliance.

TOWN OF DECATUR				
HISTORY FILE				
	Audited	Audited	Audited	Audited
FYE 6/30	2010	2011	2012	2013
Water/sewer revenues	\$ 1,222,650	\$ 1,175,343	\$ 1,144,488	\$ 1,158,088
Other revenues	\$ 72,406	\$ 76,847	\$ 34,826	\$ 39,868
Grant income	\$ 77,320	\$ 305,895		
Capital contributions	\$ 500,849		\$ 130,533	\$ 381,853
Total revenues	\$ 1,873,225	\$ 1,558,085	\$ 1,309,847	\$ 1,579,809
Total exp	\$ 1,216,486	\$ 1,347,978	\$ 1,351,541	\$ 1,326,357
Operating Income	\$ 656,739	\$ 210,107	\$ (41,694)	\$ 253,452
Interest Expense	\$ 144,853	\$ 148,171	\$ 150,854	\$ 130,735
Loss on sale of assets	\$ 21,989			\$ 163,127
Change in Net assets	\$ 489,897	\$ 61,936	\$ (192,548)	\$ (40,410)
<u>Supplemental Information</u>				
Principal payment	\$ 150,416	\$ 158,829	\$ 193,722	\$ 111,349
Depreciation	\$ 416,425	\$ 438,525	\$ 445,119	\$ 439,682
<u>Water Rates</u>				
<u>Inside with sewer</u>				
Up to 2,000 gallons	\$ 14.00	\$ 14.00	\$ 14.00	\$ 14.00
all over	\$ 3.90	\$ 3.90	\$ 3.90	\$ 3.90
<u>inside without sewer</u>				
Up to 2,000 gallons	\$ 14.00	\$ 14.00	\$ 14.00	\$ 14.00
all over	\$ 4.37	\$ 4.37	\$ 4.37	\$ 4.37
<u>outside</u>				
Up to 2,000 gallons	\$ 16.10	\$ 16.10	\$ 16.10	\$ 16.10
all over	\$ 4.90	\$ 4.90	\$ 4.90	\$ 4.90
<u>Sewer Rates</u>				
<u>Inside with sewer</u>				
Up to 2,000 gallons	\$ 9.19	\$ 9.19	\$ 9.19	\$ 11.19
all over	\$ 2.95	\$ 2.95	\$ 2.95	\$ 3.95
<u>outside</u>				
Up to 2,000 gallons	\$ 11.81	\$ 11.81	\$ 11.81	\$ 13.81
all over	\$ 3.36	\$ 3.36	\$ 3.36	\$ 4.36
Water customers	2,215	2,230	2,239	2,265
Sewer customers	523	520	532	529
Water loss	23.51%	28.39%		
Validity score			75	77
Non-revenue water			9.10%	5.70%



Laura Smith
PO Box 188
Decatur, TN 37322

June 17, 2014

Joyce Welborn
WWFB & UMRB
Comptroller of the Treasury
Office of State Local Finance
505 Deaderick Street, Suite 1600
Nashville, TN 37243

Dear Ms. Welborn:

Thank you for meeting with me last month to discuss the WWFB's concern about the financial losses our system has recorded for the past couple of fiscal years. Your input was very helpful and is appreciated.

As we discussed in our meeting, our Board of Alderman takes the financial condition of our water and sewer system very seriously and is committed to preventing future financial losses. While we have consistently spent less actual cash than we have brought in on an annual basis, depreciation did catch up with us in the past couple of years. We have not listed depreciation as an expense line item in our annual budget in the past, but that has changed as of FY2015.

When our Board saw that our current revenue levels were not financially sustaining our system any longer, they hired MTAS to conduct a Water and Sewer Rate Study. Brad Harris, Finance and Accounting Consultant, completed the study and presented his analysis to the board. In October 2013, our board took the step of increasing water rates by an average of 30% across all rate codes and 40% across all sewer rate codes. Accordingly, in the months following the increase, revenue has come in significantly higher. In fact, because of our increased revenue levels, this month our board passed a FY2015 budget that is balanced, *including* the full funding of depreciation expenses.

In addition to the rate increases, we are going to take a look at the current interest rates on our loans/bonds and determine if refinancing to acquire a lower rate is possible.

June 17, 2014

Page 2

Finally, our board has expressed that they do not intend to let our rate levels fall behind what is needed to sustain our system again. Rather than waiting until large increases are required, as was done this recent time, they have discussed the intention to make incremental increases on a regular basis in the future.

Thank you for your time and assistance in this matter. If you or any of the WWFB members have any further questions or comments, please contact me.

Sincerely,



Laura Smith
City Recorder
Town of Decatur

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: Town of Gainesboro, Jackson County
Mayor: John R. Fox
Customers: 655 water; 475 sewer
Validity score: 83
Non-revenue water: 25.1%

The Town of Gainesboro has been experiencing a negative change in net position in its water and sewer system for the last two fiscal years according to the information contained in audited financial statements. A financial and rate history is attached. With the exception of grant funds received in FY 11, the Town would have experienced five consecutive years with a negative change.

When asked what created the financial problems, town officials stated, “leaks,” cold weather caused a fire line at a factory to break, and there were problems with a nursing home sprinkler system. Since the fire line and the sprinkler system are not metered, the problem was not quickly apparent.

Approximately 30% of the water produced by the Town is sold to Jackson County Utility District via four meters in various locations. Those meters are in the process of being replaced. A leak specialist has been hired to assist in locating leaks in the system. The leak survey was done during the month of April which discovered five leaks. Nine major water users have had new meters installed. All these changes caused the tanks to maintain the necessary water levels without unknown losses.

Staff suggested the following to assist the Town:

1. review the possibility of eliminating some of the levels in their rate structure;
2. review the fixed asset records to determine if depreciation needs to be adjusted;
3. review the possibility of metering fire line to detect any water usage or losses;
4. adjust the sewer rates to actual cost – not necessarily 100% of water;
5. determine the actual cost to produce water to ensure that no one is getting water for less than production costs;
6. contact MTAS regarding a rate study; and,
7. adjust the minimum bills to less than 2,000 gallons.

Effective October 1, 2013, the rates were increased by 10% across the board. Staff projections, however, reflect that increase closer to 54% is required. Based on the rate study prepared by MTAS in May 2014, the Town voted on June 5, 2014, to increase rates 10% on July 1 of both 2014 and 2015.

Staff recommends the Board endorse the actions of the Town but continue to monitor the financial situation until an audit is received which reflects compliance.

**TOWN OF GAINESBORO
HISTORY FILE**

	Audited 2007	Audited 2008	Audited 2009	Audited 2010	Audited 2011	Audited 2012	Audited 2013
Fiscal Year 6/30							
Water/sewer revenues	\$ 516,827	\$ 528,160	\$ 336,793	\$ 510,603	\$ 502,525	\$ 567,742	\$ 580,622
Other revenues	\$ 44,202	\$ 41,217	\$ 189,487	\$ 29,263	\$ 65,211	\$ 26,922	\$ 15,353
Capital Contributions		\$ 504,301	\$ 96,200		\$ 474,920	\$ 69,077	\$ 31,894
Total Rev.	\$ 561,029	\$ 1,073,678	\$ 622,480	\$ 539,866	\$ 1,042,656	\$ 663,741	\$ 627,869
Total Exp.	\$ 602,192	\$ 646,563	\$ 644,480	\$ 635,751	\$ 676,175	\$ 719,866	\$ 727,238
Operating Income	\$ (41,163)	\$ 427,115	\$ (22,000)	\$ (95,885)	\$ 366,481	\$ (56,125)	\$ (99,369)
Interest Expense	\$ 81,941	\$ 88,794	\$ 84,285	\$ 100,103	\$ 83,148	\$ 80,903	\$ 77,080
Change Net Position	\$ (123,104)	\$ 338,321	\$ (106,285)	\$ (195,988)	\$ 283,333	\$ (137,028)	\$ (176,449)
<u>Additional Info</u>							
Principal payment	\$ 27,586	\$ 28,700	\$ 37,619	\$ 34,807	\$ 36,147	\$ 36,126	\$ 38,908
Depreciation	\$ 185,164	\$ 214,954	\$ 203,840	\$ 202,029	\$ 219,002	\$ 226,287	\$ 223,748
Water inside rates							
First 2,000 gallons	\$ 10.45	\$ 10.45	\$ 10.45	\$ 10.45	\$ 13.16	\$ 13.16	\$ 13.16
2,001 -2,500 gallons	\$ 4.83	\$ 4.83	\$ 4.83	\$ 4.83	\$ 6.08	\$ 6.08	\$ 6.08
2,501 - 3,000 gallons	\$ 4.46	\$ 4.46	\$ 4.46	\$ 4.46	\$ 5.61	\$ 5.61	\$ 5.61
2,001 - 10,000 gallons	\$ 3.97	\$ 3.97	\$ 3.97	\$ 3.97	\$ 4.99	\$ 4.99	\$ 4.99
10,001 - 20,000 gallons	\$ 3.45	\$ 3.45	\$ 3.45	\$ 3.45	\$ 4.74	\$ 4.74	\$ 4.74
20,001 - 30,000 gallons	\$ 2.95	\$ 2.95	\$ 2.95	\$ 2.95	\$ 3.70	\$ 3.70	\$ 3.70
All over	\$ 2.08	\$ 2.08	\$ 2.08	\$ 2.08	\$ 2.61	\$ 2.61	\$ 2.61
Water outside rates							
First 2,000 gallons	\$ 12.86	\$ 12.86	\$ 12.86	\$ 12.86	\$ 16.20	\$ 16.20	\$ 16.20
2,001 -2,500 gallons	\$ 7.20	\$ 7.20	\$ 7.20	\$ 7.20	\$ 9.07	\$ 9.07	\$ 9.07
2,501 - 3,000 gallons	\$ 6.68	\$ 6.68	\$ 6.68	\$ 6.68	\$ 8.41	\$ 8.41	\$ 8.41
2,001 - 10,000 gallons	\$ 4.66	\$ 4.66	\$ 4.66	\$ 4.66	\$ 5.86	\$ 5.86	\$ 5.86
10,001 - 20,000 gallons	\$ 3.98	\$ 3.98	\$ 3.98	\$ 3.98	\$ 5.00	\$ 5.00	\$ 5.00
20,001 - 30,000 gallons	\$ 3.22	\$ 3.22	\$ 3.22	\$ 3.22	\$ 4.05	\$ 4.05	\$ 4.05
All over	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40	\$ 3.02	\$ 3.02	\$ 3.02
Utility districts per 1,000	\$ 1.85	\$ 1.85	\$ 1.85	\$ 1.85	\$ 2.82	\$ 2.82	\$ 2.82
Sewer is 100% of water							
Water customers	649	653	651	651	650	650	655
Sewer customers	468	469	467	467	470	470	475
Water loss		35%	34%	34%	33%	31%	
Validity Score							83
Non-revenue water							not given

May 23, 2014

Mayor John R. Fox
Town of Gainesboro
P.O. Box 594
Gainesboro, Tennessee 38562

JUN 10 2014

RE: Water Rate Projections for State Compliance

Dear Mayor Fox:

Attached are several Exhibits for the Water Fund showing the effects of a recent rate increase, proposed rate increases, other revenue increases and expense reductions. Exhibit A projects the operating financial statements thru FY2017.

Exhibits B and B-1 show the effects of two 10% rate increases on the inside and outside rates.

Exhibits C and C-1 show the effects of two 10% rate increases and the increasing by \$1.00 of the lowest rate tier in the rate structure, except for J.U.D.

Several financial items have been implemented by the Town and others are projected in Exhibit A:

- ✓ A 10% rate increase has been implemented with a full year's revenue projected in FY2014 at \$58,062
- ✓ A fire hydrant rental of \$25,000 annually begins FY 2015
- ✓ 9/11 large water meters were replaced in 2014 with new revenues projected at \$25,000 annually beginning in FY2015
- ✓ Operating expenses were reduced by \$11,000 annually via refiguring allocations to the General Fund. Operating expenses were projected to increase by 1% in FY2014 and 2% in subsequent years
- A 10% rate increase is projected beginning 7/01/2014 creating \$66,400 in FY2015 and subsequent years

- Another 10% rate increase is projected beginning 7/01/2015 creating \$73,050 in FY2016 and subsequent years

The results of these changes create a net income in FY2016 and FY2017.

Sincerely,



Alan Major
Utility Finance Consultant

Attachments

**Town of Gainsboro
Financial Projections with Two Rate Increases
May 23, 2014**

EXHIBIT A

10% 10%

	FISCAL YEAR 2013	FISCAL YEAR 2014	FISCAL YEAR 2015	FISCAL YEAR 2016	FISCAL YEAR 2017
	AUDITED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
OPERATING REVENUES					
Water and Sewer Sales	\$ 580,622	\$ 638,684	\$ 664,000	\$ 664,000	\$ 664,000
Fire Hydrant Rentals			\$ 25,000	\$ 25,000	\$ 25,000
Interest income	15,353	15,353	15,353	15,353	15,353
Operating Revenues	595,975	654,037	704,353	704,353	704,353
Rate Increase 7/01/14			66,400	66,500	66,500
Rate Increase 7/01/15				73,050	73,500
Total Operating Revenues		770,753	843,903		844,353
OPERATING EXPENSES					
	727,238	723,510	737,981	752,740	767,795
OPERATING INCOME (LOSS)					
	(\$131,263)	(\$69,473)	32,772	91,163	76,558
Interest Expense	(77,080)	(\$77,391)	(75,431)	(73,374)	(71,216)
NET INCOME (LOSS)					
	(\$208,343)	(\$146,864)	(\$42,659)	\$17,789	\$5,342

Increase in Revenues 10% 10% 10% 10%
 Increase in Expenses 1% 2% 2% 2%

**Town of Gainsboro
Water Rates
Two 10% Increases And
Raise last rate tier \$1.00**

Inside Rates

EXHIBIT C

WATER

First 2,000 gallons
2,001-2,500
2,501-3,000
3,001-10,000
10,000-20,000
20,001-30,000
over 30,001

	Current Rate	10% Rate INCREASE	NEW RATES 7/1/14	10% Rate INCREASE	NEW RATES 7/1/15
	\$14.48	\$1.45 =	\$15.93	\$1.59	\$17.52
	\$6.69	\$0.67 =	\$7.36	\$0.74	\$8.09
	\$6.17	\$0.62 =	\$6.79	\$0.68	\$7.47
	\$5.49	\$0.55 =	\$6.04	\$0.60	\$6.64
	\$4.77	\$0.48 =	\$5.25	\$0.52	\$5.77
	\$4.07	\$0.41 =	\$4.48	\$0.45	\$4.92
	\$2.87	\$1.00 =	\$3.87	\$0.39	\$4.26

Outside Rates

EXHIBIT C-1

WATER

First 2,000 gallons
2,001-2,500
2,501-3,000
3,001-10,000
10,000-20,000
20,001-30,000
over 30,001
Jackson U.D

	Current Rate	10% Rate INCREASE	NEW RATES 7/1/14	10% Rate INCREASE	NEW RATES 7/1/15
	\$17.82	\$1.78 =	\$19.60	\$1.96	\$21.56
	\$9.98	\$1.00 =	\$10.98	\$1.10	\$12.08
	\$9.25	\$0.93 =	\$10.18	\$1.02	\$11.19
	\$6.45	\$0.65 =	\$7.10	\$0.71	\$7.80
	\$5.50	\$0.55 =	\$6.05	\$0.61	\$6.66
	\$4.46	\$0.45 =	\$4.91	\$0.49	\$5.40
	\$3.32	\$1.00 =	\$4.32	\$0.43	\$4.75
	\$3.10	\$0.31 =	\$3.41	\$0.34	\$3.75

TOWN OF GAINESBORO

CHANGED MASTER METERS

- 1) Roaring River Park
- 2) Big Bottom
- 3) Hill Crest
- 4) Cumberland River- up by Crotty
- 5) Mabry Health Care
- 6) Gainesboro Elementary
- 7) Dairy Queen
- 8) Nelson x 2 (Factory)

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: City of Puryear, Henry County
Mayor: David Vaarner
Customers: 360 water, 335 sewer
Validity score: 70
Non-revenue water: 10.1%

The City of Puryear has been experiencing a negative change in net assets in its water and sewer system for six consecutive fiscal years according to the information contained in audited financial statements. A financial and rate history is attached.

The last two rate increases occurred in October 2001 and July 2010. The latter was prompted by a referral to the Board. There are approximately thirty outside water customers and no outside sewer customers.

A rate study prepared by MTAS in 2010 resulted in a rate increase at the time, but no adjustments have been made since then.

Leak surveys have been done twice, but nothing major was found.

City officials are planning on reviewing the fixed asset records with their auditor in an attempt to lower the depreciation. That adjustment would not be very large, but every little bit will help. An employee left and was not replaced during FY 14. That amount will reduce the expenses.

Effective July 1, 2014, rates were increased 23%. An interfund loan is slowly being repaid. The City is scheduled to be debt free by 2015.

Staff recommends the Board endorse the actions of the City of Puryear and continue to monitor its financial condition.

**CITY OF PURYEAR
HISTORY FILE**

	Audited	Audited	Audited	Audited	Audited	Audited	Audited
Fiscal Year 6/30	2007	2008	2009	2010	2011	2012	2013
Water/Sewer revenues	\$ 126,902	\$ 121,180	\$ 118,347	\$ 115,826	\$ 154,351	\$ 156,825	\$ 150,503
Other revenues	\$ 3,032	\$ 2,662	\$ 1,369	\$ 1,479	\$ 1,554	\$ 431	\$ 966
Capital contributions	\$ 56,833						
Total Revenue	\$ 186,767	\$ 123,842	\$ 119,716	\$ 117,305	\$ 155,905	\$ 157,256	\$ 151,469
Total Expenses	\$ 148,160	\$ 158,618	\$ 168,456	\$ 160,809	\$ 177,946	\$ 166,086	\$ 160,790
Operating Income	\$ 38,607	\$ (34,776)	\$ (48,740)	\$ (43,504)	\$ (22,041)	\$ (8,830)	\$ (9,321)
Interest Expense	\$ 8,844	\$ 6,488	\$ 7,033	\$ 6,004	\$ 4,976	\$ 3,852	\$ 3,474
Change Net Position	\$ 86,596	\$ (41,264)	\$ (55,773)	\$ (49,508)	\$ (27,017)	\$ (12,682)	\$ (12,795)
<u>Supplemental Information</u>							
Principal payment	\$ 18,000	\$ 19,000	\$ 21,000	\$ 21,000	\$ 23,000	\$ 23,000	\$ 25,000
Depreciation	\$ 71,434	\$ 71,434	\$ 71,435	\$ 71,434	\$ 72,231	\$ 71,123	\$ 71,123
Water Rates							
Inside first 2,000 gallons	\$ 7.50	\$ 7.50	\$ 7.50	\$ 10.50	\$ 10.50	\$ 10.50	\$ 10.50
All over	\$ 2.25	\$ 2.25	\$ 2.25	\$ 3.15	\$ 3.15	\$ 3.15	\$ 3.15
Outside first 2,000 gallons	\$ 11.25	\$ 11.25	\$ 11.25	\$ 15.75	\$ 15.75	\$ 15.75	\$ 15.75
All over	\$ 3.375	\$ 3.375	\$ 3.375	\$ 4.73	\$ 4.73	\$ 4.73	\$ 4.73
Sewer Rates							
Inside - minimum	\$ 8.59	\$ 8.59	\$ 8.59	\$ 12.03	\$ 12.03	\$ 12.03	\$ 12.03
per 1,000 gallons	\$ 2.925	\$ 2.925	\$ 2.925	\$ 4.10	\$ 4.10	\$ 4.10	\$ 4.10
Outside - minimum	\$ 12.89	\$ 12.89	\$ 12.89	\$ 18.05	\$ 18.05	\$ 18.05	\$ 18.05
per 1,000 gallons	\$ 4.388	\$ 4.388	\$ 4.388	\$ 6.14	\$ 6.14	\$ 6.14	\$ 6.14
Customers - Water	357	358	358	348	349	350	360
Customers - Sewer	327	327	327	320	322	325	335
Water Loss			37%	49%	41%	34.48%	
Validity Score							70
Non-revenue water							10.10%

PURYEAR WATER & SEWER
P.O. BOX 278
PURYEAR, TENNESSEE 38251
731-247-5362

JUN 16 2014

Attn: Joyce Welborn
Utilities Board Manager
James K. Polk Building Suite 1500
Nashville, Tn. 37243-1402

Dear Joyce:

The City of Puryear Mayor and Board of Alderman passed Ordinance # 68-14 increasing the rates of the water & sewer system by the recommendation of 23% of the water and waste water financing board. This increase becomes effective July 1, 2014. This increase will be for inside and outside customers. The City continues to repair any leaks and while reading meters on a monthly base checks for any meters that could be affecting the customer billing. The Mayor and Board is paying on the debit owed to the general fund and the City will be debt free as of 2015 for the water and sewer system. The City has worked diligently since being contacted and we will continue to establish and maintain just and equitable rates and charges for the system.

Please advise if this letter and information is sufficient enough to satisfy the water and waste water financing board and to put the City's water and sewer system in a positive change in the net asset.

Sincerely



Mayor David Vaarner

ORDINANCE NUMBER 68-14

AN ORDINANCE TO SET THE RATES, FOR WATER AND SEWER SERVICE, WATER AND SEWER TAPS OF THE CITY OF PURYEAR.

Whereas, To have financially viable water and sewer system; and

Whereas, To comply with Tennessee Code Annotated; and

Whereas, The Board of Mayor and Alderman of the City of Puryear finds it necessary to increase the rates for the water and sewer system and the cost of water and sewer taps for the customers of the City of Puryear.

NOW, THEREFORE: BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMAN OF THE CITY OF PURYEAR, TENNESSEE, THAT:

Section 1. This ordinance will replace in entirety the current water and sewer rates and the water & sewer taps for the City of Puryear as specified in Ordinance # 61-10.

Section 2. The following rates shall be charged to the customers per billing cycle:

Water inside city limits first 2,000 gallons	\$ 15.50
Water per every 1,000 gallons above first 2,000	\$ 3.15
Water outside city limits first 2,000 gallons	\$ 20.75
Water per every 1,000 gallons above first 2,000	\$ 4.73
Sewer onside city limits customers monthly base	\$ 12.03
Sewer per 1,000 gallons	\$ 4.10
Sewer outside city limit customer monthly base	\$ 18.05
Sewer per 1,000 gallons	\$ 6.14

Water tap fee
Sewer tap fee

\$ 400.00
\$ 800.00

Section 3. The above rates shall become effective July 1, 2014

Section 4. This ordinance shall become effective upon final passage, the public welfare requiring it.

Passed On First Reading

6/10/2014

A handwritten signature in cursive script, appearing to read "Daniel R. ...", written over a horizontal line.

Mayor

A handwritten signature in cursive script, appearing to read "魏克 Smith", written over a horizontal line.

Recorder

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: Town of Bruceton, Carroll County
Mayor: Robert N. Scott
Customers: 630 water, 632 sewer
Validity Score: 77
Water loss: 12.00%

The Town of Bruceton was reported as being financially distressed based on a negative change in net position for two consecutive years in its water and sewer system. The financial and rate history is attached.

In 2013 the Town replaced all meters 2" and larger. The Town is in the process of replacing all smaller meters. The meters have been purchased and are being installed as possible based on the work load of employees. That process should be complete by December 2015. Approximately 60 customers have been lost in the past five years due to industry closings. The Town is also reallocating salaries to properly reflect work that employees perform in areas other than the water and sewer systems.

The water and sewer fund is owed \$152,560 from the general fund. This came from the Town "borrowing" from the "tank reclamation" fund twice in the last few years. The Town has contacted the Office of State and Local Finance in the Comptroller's office to establish a repayment schedule. That repayment should begin in FY 15.

The Town is paying off long-term debt, and can be debt free by 2016. The Town is also changing auditors, in part, to make sure that funds are properly classified in the new accounting system.

As noted in the attached letter, there are several options being considered to resolve the issues being faced. However, some of those will take a couple of years to get in place.

Staff recommends the Board endorse the actions of the Town of Bruceton and monitor the situation. The Town will remain under the jurisdiction of the Board until an audit is received which reflects compliance.

TOWN OF BRUCETO			
HISTORY FILE			
	Audited	Audited	Audited
Fiscal Year 6/30	2007	2008	2009
Water/sewer revenues	\$ 451,482	\$ 429,261	\$ 420,020
Other revenues	\$ 41,835	\$ 34,620	\$ 24,767
Grant Revenue	\$ 84,959	\$ 10,906	
Total Operating Revenues	\$ 578,276	\$ 474,787	\$ 444,787
Total Operating Expenses	\$ 426,387	\$ 444,384	\$ 426,422
Operating Income	\$ 151,889	\$ 30,403	\$ 18,365
Interest Expense	\$ 49,898	\$ 43,403	\$ 33,742
Transfers		\$ (6,300)	\$ (6,300)
Change in Net Position	\$ 101,991	\$ (19,300)	\$ (21,677)
<u>Supplemental Information</u>			
Principal payment	\$ 76,855	\$ 83,358	\$ 86,841
Depreciation	\$ 141,210	\$ 149,854	\$ 156,442
<u>Water rates - base rate</u>			
Water inside	\$ 10.00	\$ 10.00	\$ 10.00
Water only second meter	\$ 10.00	\$ 10.00	\$ 10.00
<i>Per 1,000 gallons each level</i>	\$ 3.33	\$ 3.33	\$ 3.33
Water outside	\$ 11.00	\$ 11.00	\$ 11.00
<i>Per 1,000 gallons</i>	\$ 4.00	\$ 4.00	\$ 4.00
Small commercial inside	\$ 12.00	\$ 12.00	\$ 12.00
Large commercial in/out	\$ 15.00	\$ 15.00	\$ 15.00
<i>Per 1,000 gallons each level</i>			
Industrial/manufacturing in/out	\$ 150.00	\$ 150.00	\$ 150.00
<i>Per 1,000 gallons each level</i>	\$ 3.50	\$ 3.50	\$ 3.50
Elderly inside	\$ 9.00	\$ 9.00	\$ 9.00
<i>Per 1,000 gallons</i>	\$ 3.00	\$ 3.00	\$ 3.00
Water loss	39.60%	33.30%	37.50%
Validity Score			
Non-revenue Water			
Water customers	687	693	693
<u>Sewer rates</u>			
Residential	\$ 10.00	\$ 10.00	\$ 10.00
Commercial	\$ 10.00	\$ 10.00	\$ 10.00
per 1,000 gallons - Res/Comm	\$ 4.25	\$ 4.25	\$ 4.25
Elderly inside	\$ 9.00	\$ 9.00	\$ 9.00
Per 1,000 gallons	\$ 4.00	\$ 4.00	\$ 4.00
Sprinklers/per month	\$ 21.94	\$ 21.94	\$ 21.94
Maintenance rate/per month	\$ 2.00	\$ 2.00	\$ 2.00
Sewer customers	630	630	630
Sprinklers customers	3	3	3
Maintenance customers	654	654	654

Dear Ms. Welborn,

I am writing you on behalf of The Town of Bruceton in regards to the Water/Sewer Fund. I have looked into some of the things we discussed in our meeting earlier this month. You pointed out that we have \$14,115 in Fire Hydrant Expenses on our FYE 2013 Audit. I don't know why the auditor labeled it as so. After looking into the expenses and cross-referencing; I realized this expense was for water distributing supplies.

The Town of Bruceton is looking into ways to solve the deficit for our Water/Sewer Fund. We purchased a software system back in FYE 2013. We were very new to the system and classified some things wrong due to very little training in the software. The auditors found several adjustments that needed to be done within our system. Unfortunately, we were not given these adjustments until a few weeks after the audit was presented to the board (months after the initial audit). We have re-hired our CPA firm, ATA to clean up our books. ATA came to our May board meeting. During the FYE 2014, we received a CDBG Grant for generators General Fund and Water/Sewer. The CPA distributed the appropriate funds to Water/Sewer. Water/Sewer also took in leachate in our lagoon. The income from the grant and leachate was over \$120,000. According to the ATA, our Water/Sewer fund is in the black for FYE 2014 as of May. However, these numbers are not going to be reoccurring. We will not have a grant coming in for the next fiscal year. We will be continuing to take in leachate. We cannot determine accurate figures due to the companies are still working out levels in the samples.

We have not passed the FYE 2015 budget. We are waiting for the CPA firm to give us our accurate bottom line numbers for the FYE 2014. So the FYE 2015 plan for the Water/Sewer fund is still under consideration. This is what the board has as follows:

- We are replacing almost 600 meters to generate more income. Last year we operated in a little over \$28,000 deficit. The year prior to that was a little of \$40,000. We feel that the deficit lowered last year due to changing out several meters to the bigger facilities in the town. These meters have not been changed since the mid 1980's. It made a tremendous difference in the amount collected. Our Water/Sewer department has purchased new meters and we are changing them out throughout the town. We feel this will help in the deficit a great deal.

- We will continue to bring in more leachate. The two companies that have been bringing leachate are still willing to use our lagoon. Things are at a temporary halt due to the ammonia levels. They are working with our city attorney as well as Tegrah Engineering to work out the ins and outs so they can restart the process.
- The General Fund owes Water/Sewer \$138,265. The fund will start reimbursing the Water/Sewer Fund back starting in the FYE 2015. We are waiting to hear back from the State and Local Finance Division to approve a payback plan.
- We have a new convenience store coming into town. It will be opening in November, 2014. This will also generate more income for the Water/Sewer department.
- We will be cutting back expenses in the Water/Sewer department as well. Water Sewer will not be paying in lieu of taxes (\$6,300) to General Fund (pending board approval). We will also be distributing a portion of the Water/Sewer salaries and benefits to our General Fund. The Water/Sewer employees also work in our street department as well (which validates splitting a portion with General Fund).
- September, 2016, the Water/Sewer bond note will be paid off. That will be another \$91,000 expense taken off the Water/Sewer Fund.
- There is a \$2,000 bond that has been on the books for several years (1963). So we will be taking that expense off the books and sending it to the Unclaimed Property Division.
- The board is also considering the thought of renting out fire hydrants from the Water/Sewer department.

I wish that we could give you actual numbers. We will not be able to do so until we complete our budget. Once the mayor and aldermen decide on some actual figures, I will let you know. I thank you for taking the time out to consider our plans.

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: City of Bolivar,
Mayor: Barrett Stevens, Sr.
Customers: 2,707 water, 2,405 sewer
Validity Score: 82
Non revenue water: 4.2%

The City of Bolivar has been reported to the Water and Wastewater Financing Board as being financially distressed based on a negative change in net position for two consecutive years in its water and sewer fund. The financial and rate history is attached.

The City has paid Bolivar Electric Authority (BEA) for meter reading, billing, and collecting for many years. In FY 12, the City paid approximately \$150,000 to BEA for those services. In FY13 the City had cost of approximately \$44,000. Also in FY 13, \$72,000 was spent to renovate the current billing office - including furniture, equipment, and supplies.

Through the current year (FY14) the City has \$10,680 in cost associated with the billing function. Since the City has taken over the billing function, they have replaced several meters that were not working. Those meters were never reported as non-functioning under the prior system. One specific commercial account has increased revenue \$2,500 per month due to the meter now working properly. All commercial meters and bills are now being checked for accuracy.

Since the Authority had been providing the billing and collection functions, mistakes were made. Almost \$20,000 in collected sales taxes on water had not been remitted to the State of Tennessee. That costly error has now been corrected and taxes are properly filed.

The City provided water to the Town of Hornsby until 2012 when Hornsby started purchasing its water from the City of Selmer. That loss of revenue was a blow to the water/sewer fund.

The City has lost almost all industry in the area.

The City is projecting a positive change in net position for the current fiscal year. This is due, in part, to the reduction of billing expenses, and the increased revenue from properly working meters. The City has also purchased new automatic read water meters. Water revenue has increased 14.67% over the same time period last fiscal year.

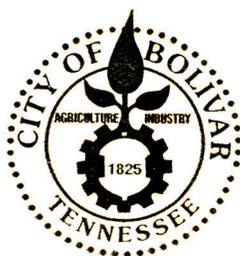
Staff recommends the Board endorse the actions of the City of Bolivar. The City will remain under the jurisdiction of the Board until an audit is received which reflects compliance.

**CITY OF BOLIVAR
HISTORY FILE**

	Audited								
FYE 6/30	2005	2006	2007	2008	2009	2010	2011	2012	2013
W/S Revenue	\$ 1,197,762	\$ 1,178,553	\$ 1,361,829	\$ 1,788,567	\$ 1,813,662	\$ 1,778,312	\$ 1,701,619	\$ 1,586,119	\$ 1,444,408
Other Revenue	\$ 81,976	\$ 97,116	\$ 91,392	\$ 71,527	\$ 115,079	\$ 140,762	\$ 154,331	\$ 172,115	\$ 121,685
Total Revenue	\$ 1,279,738	\$ 1,275,669	\$ 1,453,221	\$ 1,860,094	\$ 1,928,741	\$ 1,919,074	\$ 1,855,950	\$ 1,758,234	\$ 1,566,093
Total Expense	\$ 1,475,874	\$ 1,709,420	\$ 1,896,345	\$ 1,941,794	\$ 2,082,595	\$ 1,672,436	\$ 1,736,188	\$ 1,790,960	\$ 1,794,509
Operating Income	\$ (196,136)	\$ (433,751)	\$ (443,124)	\$ (81,700)	\$ (153,854)	\$ 246,638	\$ 119,762	\$ (32,726)	\$ (228,416)
Interest Expense	\$ 1,073	\$ 39,103	\$ 86,604	\$ 95,739	\$ 76,983	\$ 62,746	\$ 100,535	\$ 107,735	\$ 110,223
Interest Income	\$ 26,110	\$ 21,727	\$ 33,585	\$ 7,451					
Grant revenue									
Transfers Out	\$ 229,000								
Capital contributions	\$ 11,829	\$ 339,131	\$ 149,040	\$ 158,058	\$ 417,536		\$ 24,214	\$ 111,657	\$ 218,735
Change Net Assets	\$ (388,270)	\$ (111,996)	\$ (347,103)	\$ (11,930)	\$ 186,699	\$ 183,892	\$ 43,441	\$ (28,804)	\$ (119,904)
Additional Info									
Principal payment	\$ 17,150	\$ 10,860	\$ 79,320	\$ 228,101		\$ 151,209	\$ 266,487	\$ 178,240	\$ 647,750
Depreciation	\$ 329,466	\$ 345,867	\$ 442,845	\$ 435,295	\$ 412,247	\$ 396,221	\$ 391,220	\$ 390,177	\$ 378,956
Water Rates									
<i>Residential Inside</i>									
Minimum Bill	\$ 6.25	\$ 6.25	\$ 8.40	\$ 8.40		\$ 11.26	\$ 11.26	\$ 11.26	\$ 11.26
First 2,000 gallons	\$ 3.125	\$ 3.125	\$ 4.20	\$ 4.20		\$ 5.63	\$ 5.63	\$ 5.63	\$ 5.63
2,001 - 10,000 gallons	\$ 1.625	\$ 1.625	\$ 2.20	\$ 2.20		\$ 2.95	\$ 2.95	\$ 2.95	\$ 2.95
over 10,000 gallons	\$ 1.250	\$ 1.250	\$ 1.70	\$ 1.70		\$ 2.28	\$ 2.28	\$ 2.28	\$ 2.28
<i>Residential Outside</i>									
Minimum Bill	\$ 9.38	\$ 9.38	\$ 12.60	\$ 12.60		\$ 16.88	\$ 16.88	\$ 16.88	\$ 16.88
First 2,000 gallons	\$ 4.690	\$ 4.690	\$ 6.30	\$ 6.30		\$ 8.44	\$ 8.44	\$ 8.44	\$ 8.44
2,001 - 10,000 gallons	\$ 2.435	\$ 2.435	\$ 3.20	\$ 3.20		\$ 4.29	\$ 4.29	\$ 4.29	\$ 4.29
over 10,000 gallons	\$ 1.875	\$ 1.875	\$ 2.50	\$ 2.50		\$ 3.35	\$ 3.35	\$ 3.35	\$ 3.35
Customers	2,771	2,746	2,821	2,821		2,726	2,716	2,716	2,707
Water Loss				14%			10.47%		
Validity Score									82
Non-revenue water									4.20%
Sewer Rates									
<i>Res & Commercial</i>									
Minimum Bill	\$ 4.00	\$ 4.00	\$ 8.40	\$ 8.40		\$ 11.26	\$ 11.26	\$ 11.26	\$ 11.26
First 2,000 gallons	\$ 2.00	\$ 2.00	\$ 4.20	\$ 4.20		\$ 5.60	\$ 5.60	\$ 5.60	\$ 5.60
Over 2,000 gallons	\$ 2.00	\$ 2.00	\$ 2.20	\$ 2.20		\$ 2.90	\$ 2.90	\$ 2.90	\$ 2.90
Maximum Bill			\$ 75.00	\$ 75.00		\$ 75.00	\$ 75.00	\$ 75.00	\$ 75.00
Customers	2,451	2,427	2,495	2,495		2,391	2,373	2,373	2,405

Barrett Stevens, Sr.
MAYOR

Shelia Dellinger
INTERIM CITY ADMINISTRATOR



City of Bolivar
211 North Washington
Bolivar, TN 38008

Council Members:

Tracy Byrum
James Futrell
Teresa Golden
Randy Hill
Todd Lowe
Larry McKinnie
David Rhea
Brenda Woods

June 2, 2014

Ms. Joyce Welborn
State of Tennessee
Comptroller of the Treasury
Office of State and Local Finance
505 Deaderick Street, Suite 1600
Nashville, TN 37243

Dear Ms. Welborn,

On behalf of the Bolivar Water and Wastewater Departments, I would like to thank you and Mr. Greer for the time you spent with us today in order to explain our situation of why we had a negative change in net position for two consecutive years and what we are doing to correct this.

I have provided you with a proposed budget for 2014-15 which shows approximately \$15,000 gain of revenue over expenditures. The reasons for the gain and for the two years we showed a negative are as follows:

1. The Bolivar Water and Wastewater Department started doing all of our meter reading and billing and collecting effective July 1, 2012. In 2011-12 we paid Bolivar Energy Authority \$150,000 to provide this service for us. Beginning July 1, 2013, through April 30, 2014, we have only paid out \$10,000. We are paying a company to print and mail these bills and we, Bolivar Utility Department, are collecting and reading the meters. This has generated a huge savings to our water and wastewater department.
2. Beginning January 2011, the Bolivar Utility Department renovated the new billing and collecting office. This was approximately a \$70,000 cost to the water/wastewater department. They also hired three full time employees and two part-time employees to get started.
3. The Utility Department purchased all new ARB Neptune water meters. The new system has definitely helped us monitor all the bills that we are sending out. Before we

took over our own meter reading and collecting we had no way to check for stopped meters, theft or malfunctioning meters. This is generating more revenue for the department because we are checking all bills before they are sent out to make sure the usage is correct. We recently found a meter at Western State Mental Health that was not being read properly. This bill will be increased approximately \$2,500 per month.

4. The revenue comparison from 2012-13 to 2013-14 has increased. As of May 31, 2014 we increased water revenue by 14.6749%.
5. It was determined the water department did not report any sales tax to the Department of Revenue the first 18 months we opened. Our employees did not know we were supposed to do this, since we had never collected water bills before and BEA did not tell us either. The water department had to pay \$19,349 in penalty and interest. This was a hard earned lesson! We are now reporting every month.
6. In 2011-12 Hornsby Utility District stopped purchasing water from Bolivar. They decided to switch to McNairy County. This was a loss of revenue to Bolivar Water Department.

We appreciate the options you proposed to us on raising our water and sewer tap fees as well as changing the rate schedule for residential customers that will not affect the elderly or low usage users. We will discuss this with our board members and make recommendations to do what is best for the department.

Again, thank you for the time you spent with us and if you need further information, please feel free to contact me at any time.

Sincerely,



Shelia Dellinger
City Administrator

WATER AND WASTEWATER FINANCING BOARD
Case Study

Case: City of Bradford, Gibson County
Mayor: Frank Lockard
Customers: 505 water, 484 sewer
Validity Score: 69
Non-revenue Water: 8.10%

The City of Bradford has been reported to the Water and Wastewater Financing Board as being financially distressed based on a negative change in net position for two consecutive years in its water/sewer system. A financial and rate history is attached.

In 2012 the water department paid the City \$10,000 in lieu of taxes. There were several different City recorders during this period, and they did not realize that this payment would put the water department at a negative change in net position. The payment has since been eliminated by the Board of Aldermen. In 2013 the City dealt with a main break, pumps malfunctioning, and maintenance issues. The City raised rates effective May 1, 2013.

The water system will pump 3,000,000 gallons of water, but because of the large I and I problem, the sewer system has a flow of 13,000,000 during rain events. A grant has been applied for to fix this issue. A logging company broke two lines and two manholes with one of their logging trucks. This cost the City over \$7,000 to repair these issues. A lawsuit has been filed in an attempt to recover this expense.

Due to the rate increase in May 2013 and the decrease in expenses, the City is projecting a positive change in net position for the current year – FY 14.

Staff recommends the Board endorse the actions of the City of Bradford. The City will remain under the jurisdiction of the WWFB until an audit is received which reflects compliance.

City of Bradford

P. O. Box 87
Bradford, TN 38316
731.742.3465- Office
731.742.2969- Fax
bcrecorder@gmail.com

JUN 16 2014

June 11, 2014

Joyce Welborn
Office of State and Local Finance
James K. Polk State Office Building
505 Deaderick Street, Suite 1600
Nashville, Tn. 37243

Re: compliance with negative asset

Ms. Joyce,

Below is a summary of items the City of Bradford has completed in order to become in compliance with a positive net asset for our FY 13-14.

- Increased rates as of May 2013
 - Water - 1st 2,000 gallons \$22.68 after that \$3.75 per 1,000 gallons
 - Sewer – 69% of water usage
- Amended FY13-14 budget December 2013
 - Removed the 'In Lieu of' to the General Fund \$10,625
 - Expensed estimated to be approx. \$15,000 less than the budgeted amount of \$344,356
- Increased Re-connect fees to \$30.00 effective April 2014
- Added a transfer fee for existing account to a new service address of \$25.00 effective April 2014
- Added a minimum of one month service to anyone making temporary repairs or cleaning or for any other purposes for the customer's exclusive benefit.

We have also made some other changes that will benefit the City in the future.

- Physically moving depreciation fund money into separate banking account to be used for capital projects and debt service principle payments.
- Adjustments to water billing for faulty plumbing, filling of swimming pools, watering of lawns or gardens and frozen pipes. If leak is legitimate, the customer will pay for ½ of the water leak.
- Fee of \$250.00 plus \$75.00 connection fee if utility service is requested at an address were a meter has not been in use for a minimum of 3 years.

Thank you,



Melissa Workman
City Recorder

CITY OF BRADFORD					
HISTORY FILE					
	Audited	Audited	Audited	Audited	Audited
Fiscal Year 6/30	2009	2010	2011	2012	2013
Water/sewer revenues	\$ 291,626	\$ 294,107	\$ 309,624	\$ 296,525	\$ 295,243
Other revenues	\$ 53,197	\$ 18,698	\$ 20,543	\$ 23,852	\$ 17,508
Grant proceeds			\$ 200,051		
Total Operating Revenues	\$ 344,823	\$ 312,805	\$ 530,218	\$ 320,377	\$ 312,751
Total Operating Expenses	\$ 275,615	\$ 289,371	\$ 297,804	\$ 310,523	\$ 326,772
Operating Income	\$ 69,208	\$ 23,434	\$ 232,414	\$ 9,854	\$ (14,021)
Interest Expense	\$ 17,938	\$ 16,705	\$ 15,467	\$ 14,025	\$ 12,667
Transfers out	\$ 5,000	\$ 13,090	\$ 10,000		
Change in Net Assets	\$ 46,270	\$ (6,361)	\$ 206,947	\$ (4,171)	\$ (26,688)
<u>Supplemental Information</u>					
Principal payment	\$ 25,328	\$ 30,436	\$ 30,424	\$ 30,616	\$ 30,724
Depreciation	\$ 86,562	\$ 89,489	\$ 97,054	\$ 106,866	\$ 106,370
<u>Water Rates</u>					
First 2,000 gallons	\$ 20.68	\$ 20.68	\$ 20.68	\$ 20.68	\$ 20.68
All over	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75
Water customers	508	508	508	508	505
<u>Sewer Rates</u>					
First 2,000 gallons	\$ 12.82	\$ 12.82	\$ 12.82	\$ 14.27	\$ 14.27
All over% of water over min.	62%	62%	69%	69%	69%
Sewer customers	488	488	488	488	484
Water Loss	16.87%	16.92%	17.80%	17.80%	
Validity Score					69
Non-revenue water					8.1%

Town of Atwood Utility Rate

Ordinance No. 250

AN ORDINANCE SETTING WATER AND SEWER UTILITY RATES

The Town of Atwood Board of Mayor and Alderman does ordain the following:

Section 1. Findings. Pursuant to Tennessee Law, and upon a review of a study conducted by the Mayor and Board of Alderman, the water and sewer utility rate schedule is hereby adopted as follows:

Water Utility Rates

1. For the first 2000 gallons or less, the charge shall be a minimum charge of \$9 per month and identified as base fees.
2. For consumption of water in excess of 2000 gallons, the charge shall be per thousand gallons at \$1.50 per thousand gallons used.

Sewer Utility Rates

1. For the first 2000 gallons or less, the charge shall be a minimum charge of \$9 per month as outlined in the Water Rate Table and identified as base fees.
2. For consumption of water in excess of 2000 gallons, the charge shall be per thousand gallons at \$1.50 per thousand gallons used.

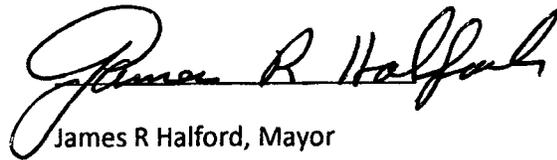
Section 2. Effective Date of Ordinance. This amending Ordinance shall be effective as of July 1, 2014.

Passed by the Town of Atwood Board of Mayor and Alderman, this the 13th day of February, 2014.

ATTEST:



James E. Marshall, City Recorder



James R Halford, Mayor

1st Reading: February 13, 2014

Publication: Milan Mirror Exchange

2nd Reading: March 13, 2014

Town of Atwood Water Plant

P.O. Box 339
45 First Street
Atwood, Tennessee 38220
Phone (731)662-7689

June 12, 2014

RE: Water Loss Plan

1. On October 25, 2013, Rye Engineering performed a meter accuracy test on our 6" Kent T-3000/C-701 Turbine Meter. Based on the two different test: (Drawdown test on clearwell & ultrasonic water meter test) our finished water meter was 99.2 % accurate. The AWWA limits: (98.5% - 101.5%).
This test will be performed annually.
2. Test all large meters annually. 3" and larger. Example: WCHS.
3. Start a meter change program. A very high percentage of our meters are well past the AWWA recommendation of 10 years/1,000,000 gallons. I propose a 5 year program that will completely replace our residential and commercial meters to newer and more accurate measurements. Approximate cost per ¾" meter is \$45.00. 100 meters per year x \$45.00 = \$4500.00.
4. Calculate gallons of water used flushing distribution system.
5. Receive monthly report from Atwood Fire Department of water usage for fire fighting and training.
6. Repair leaks within 5 days of notification.
7. Contract with a leak detection company to evaluate our distribution system.
*Rye Engineers: Estimate 3 ½ days to cover entire distribution system. (10.5 miles of main, 530 services, 65 hydrants) \$6,000.00.

Item # 1 - 6 was approved by the city board in the regular meeting on June 12, 2014. If the first phase of new meters show a substantial increase in usage, the second phase will be installed immediately. If this does not show a substantial increase in water, we will begin item # 7.

AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.2

[Back to Instructions](#)

[?](#) Click to access definition

Water Audit Report for: **Town of Monteagle, Tennessee**
 Reporting Year: **2013** / **7/2012 - 6/2013**

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	<input type="text" value="5"/>	<input type="text" value="98.000"/>	Million gallons (US)/yr (MG/Yr)
Master meter error adjustment (enter positive value):	<input type="text" value="3"/>	<input type="text" value="0.000"/>	MG/Yr
Water imported:	<input type="text" value="5"/>	<input type="text" value="19.000"/>	MG/Yr
Water exported:	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr
WATER SUPPLIED:		117.000	MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	<input type="text" value="7"/>	<input type="text" value="84.000"/>	MG/Yr
Billed unmetered:	<input type="text" value="10"/>	<input type="text" value="0.000"/>	MG/Yr
Unbilled metered:	<input type="text" value="10"/>	<input type="text" value="0.000"/>	MG/Yr
Unbilled unmetered:	<input type="text" value="7"/>	<input type="text" value="1.463"/>	MG/Yr
AUTHORIZED CONSUMPTION:		85.463	MG/Yr

Click here: [?](#) for help using option buttons below

Pcnt: Value:

Use buttons to select percentage of water supplied OR value

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

WATER LOSSES (Water Supplied - Authorized Consumption) MG/Yr

Apparent Losses

Unauthorized consumption:	<input type="text" value="5"/>	<input type="text" value="0.293"/>	MG/Yr
Customer metering inaccuracies:	<input type="text" value="3"/>	<input type="text" value="4.421"/>	MG/Yr
Systematic data handling errors:	<input type="text" value="5"/>	<input type="text" value="0.000"/>	MG/Yr
Apparent Losses:		4.714	

Pcnt: Value:

Value:

Choose this option to enter a percentage of billed metered consumption. This is NOT a default value

Systematic data handling errors are likely, please enter a non-zero value: otherwise grade = 5

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: MG/Yr

WATER LOSSES: MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: MG/Yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains: miles

Number of active AND inactive service connections: conn./mile main

Average length of customer service line: ft (pipe length between curbstop and customer meter or property boundary)

Average operating pressure: psi

COST DATA

Total annual cost of operating water system: \$/Year

Customer retail unit cost (applied to Apparent Losses): \$/1000 gallons (US)

Variable production cost (applied to Real Losses): \$/Million gallons

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	<input type="text" value="28.2%"/>
Non-revenue water as percent by cost of operating system:	<input type="text" value="22.8%"/>
Annual cost of Apparent Losses:	<input type="text" value="\$51,849"/>
Annual cost of Real Losses:	<input type="text" value="\$114,565"/>

Operational Efficiency Indicators

Apparent Losses per service connection per day:	<input type="text" value="9.82"/>	gallons/connection/day
Real Losses per service connection per day*:	<input type="text" value="55.89"/>	gallons/connection/day
Real Losses per length of main per day*:	<input type="text" value="N/A"/>	
Real Losses per service connection per day per psi pressure:	<input type="text" value="1.12"/>	gallons/connection/day/psi

*** UARL cannot be calculated as either average pressure, number of connections or length of mains is too small: SEE UARL DEFINITION ***

From Above, Real Losses = Current Annual Real Losses (CARL):

Infrastructure Leakage Index (ILI) [CARL/UARL]:

* only the most applicable of these two indicators will be calculated

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 62 out of 100 ***

A weighted 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: Customer metering inaccuracies
- 3: Water imported

For more information, click here to see the Grading Matrix worksheet

Mayor
Marilyn Campbell Nixon

Town of Monteagle

P.O. Box 127
Monteagle, Tennessee 37356

Phone: 931-924-2265
Fax: 931-924-2264

City Recorder / CMFO
Debbie Taylor

Police Chief
Virgil McNeece

E911 Director
Wanda McDaniel

Street Department
Carl Cantrell

Aldermen
Alexander Orr
Harry Parmley
Alvin Powell
Russell Leonard

Building / Codes Enforcement
Earl Geary

Joyce Welborn, Utilities Board Manager
State of Tennessee
Water and Wastewater Financing Board
James K. Polk State Office Building, Suite 1500
505 Deaderick Street
Nashville, TN 37243-1402

MAY 07 2014

Dear Ms Welborn

The following are the actions we have taken since June 30, 2013 to address the town's water loss and improve our accountability over the water system.

1. Since July 1 2013 we are now billing the city for all water usage.
2. Starting in October 2013 we are reading the meters at the sewer plant and accounting for their usage.
3. In October 2013 we checked all large meters for accuracy and the Board has now adopted a policy to inspect these meters on an annual basis.
4. We have recently adopted a policy to annually after completion of the annual inspection it is the policy of the board to recalibrate all large meters on an annual basis.
5. Currently we are reviewing our meter replacement policy and after the board has selected a new Water and Sewer Director we will adopt a meter replacement policy.
6. Monthly we calculate the water loss and examine the billing register for apparent unauthorized consumption. We do have a policy in place for dealing with unauthorized consumption in place.
7. Currently we do not have a leak detection program in place; however, after the selection of a new Water and Sewer Director we will adopt a program for leak detection.
8. We have adopted policies for billing adjustments that authorize approval and at what level the adjustments needs to be approved.
9. We currently have no non-customer users. The Town of Monteagle Fire department usage is monitored during a fire and the usage is estimated and used during the monthly calculation of the Water Loss.
10. Currently we are in process of Zoning the water system and have requested funding in the 2014-2015 budget to fund the completion of the project.
11. Currently we are in the process of hiring a new Water and Sewer Director and after the completion of this process we will address this issue.
12. Currently we are in the process of hiring a new Water and Sewer Director and after the completion of this process we will address this issue.

13. Currently we have no leak detection equipment after the selection of a new director we will address this issue.
14. We have a policy of notifying the customer with a door hanger if excessive usage is identified during the billing process
15. Currently we have no program to encourage citizens to report water leaks.
16. Currently our policy is to prosecute water theft to the fullest extent possible and to bill the usage or theft of unbilled consumption to the customer.
17. The annual cost of apparent losses is \$51,849 and we are aggressively getting these losses under control by testing meters and recalibration of large meters. The annual real losses of \$114,565 we will address this problem in the future after the hiring of the new Water and Sewer Director with a line replacement and leak detection program.
18. Currently we are aggressively working on the zoning of the system and have recalibrate several of the large meters to improve the apparent losses of the system. The infrastructure of the physical line have a number of years on them and with the assistance of a new Water and Sewer Director the Town of Monteagle will be improving this infrastructure as it is monetarily feasible.

If you need any other information or please contact me at 931-222-0515 or email me at mayor@blomand.net.

Sincerely,

A handwritten signature in cursive script that reads "Marilyn Campbell Rodman".

Marilyn Rodman
Mayor Town of Monteagle

Monroe Ary
MAYOR
Donna Stricklin
RECORDER

CITY OF SHARON

P.O BOX 235
SHARON, TN 38255
PHONE (731) 456-2122
FAX (731) 456-3045

ALDERMEN
Stewart Broussard
Wanda Hamlin
Jimmy Harris
Jason Plunk

February 20, 2014

State of Tennessee
Water and Wastewater Financing Board
James K. Polk State Office Building, Suite 1500
505 Deaderick Street
Nashville, TN 37243-1402

Dear Joyce Welborn:

RE: LEAK DETECTION PROGRAM

In July 2013, our city started having the public works department do the monthly water meter readings. The water meter reading had been contracted out previously. With our workers reading the meters and going house to house we are able to detect water leaks sooner. Also each morning when the workers travel around town to service the lift stations; they are checking ditches for running water. The police department has been asked to contact the Public Works Director if they see unusual water activity, after normal work hours. We also have a public awareness for reporting of any water activity, while citizens are out walking, doing yard work, etc. We have seen a decrease in our monthly water loss.

If more information is needed, please feel free to contact me at (731) 456-2717.

Sincerely,

Greg Evans
Public Works Director



P.O. Box 510
Jellico, TN 37762
(423) 784-8431 Fax (423) 784-3742

May 28, 2014

Joyce Welborn, Board Coordinator
Water and Wastewater Financing Board
James K. Polk State Office Building
505 Deaderick Street, Suite 1600
Nashville, Tennessee 37243-1402

JUN 04 2014

Re: Water Loss Reduction Plan Update
City of Jellico / Jellico Electric and Water System

Dear Ms. Welborn,

In response to your May 9th letter concerning the City's Water Loss Reduction Plan (WLRP) and initial response letter, we offer the following comments:

4. Do you have a recalibration policy and procedure in place?

While not a formal procedure, all water treatment plant flow meters are recalibrated each year by qualified technicians. In this way the raw water flow into the plant and treated water flow to the distribution system is accurate and checked on an annual basis.

5. Do you have a meter replacement policy? Is the trigger based on age (length of time in service) or on gallons?

As stated in the previous letter, a draft meter replacement process has been developed but has not been implemented, because of the forthcoming AMR Water Meter Replacement project. The AMR project will replace all meters within the distribution system this year. Once completed the meter replacement policy will be formalized and enacted in accordance with the meter manufactures recommendations. The full replacement of the system water meters in a single project will allow us the time to formulate and enact a meter replacement procedure that is fiscally responsible and efficient for the water system.

6. Do you have a process to inspect for unauthorized consumption? What are the consequences if unauthorized consumption is discovered?

Yes, a written process exists but it is vague. As with the water meter replacement policy, the implementation and revision of the initial policy was suspended pending the AMR

Water Meter Replacement project. With the installation of the AMR meter in the water system, Jellico will have compiled data for water useage that is suspected to be unauthorized consumption and will get warnings when meter water useage is outside the range of normal use. In this way, the system will allow for inspection of water useage with the compilation of meter data. Again, the installation of the AMR system will allow Jellico time to formulate an inspection procedure that utilizes the new technology as well as the previously written policies.

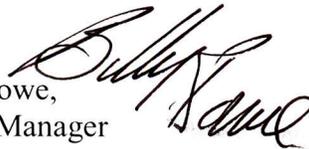
16. Do you have a policy to prosecute water theft or meter tampering/damage?
Jellico has a written policy that addressed tampering and damage of its property which includes meters. The formal documents effective date was December 1, 2008. As stated in the previous letter, both fines and criminal prosecution are mentioned but the amount and extent of the penalties are not specific. Our goal is to refine and revise the policy to be effective in protecting the water assets while being fair to the citizens of Jellico. To date, the revisions to the policy have not been made.

The Jellico Electric and Water System is committed to reducing the system water loss and has implemented several policies to aid in reducing the water loss. It is our belief, that the majority of the water loss is “apparent loss” which will be greatly reduced with this year’s water meter replacement project. The new AMR water meter system will also aid Jellico in diagnosing and reacting to irregular and unauthorized water consumption, which will help Jellico to react quicker and more decisively to these situations.

Thank you for your assistance. If there are any questions or the need for additional information, please do not hesitate to contact me.

Jellico Electric & Water System

Billy Rowe,
Utility Manager



Water and Wastewater Financing Board

Compliance Reports

July 10, 2014

City of Friendsville	Validity Score 77, Non-Revenue water 9.0%
	Change in net position \$55,854
Lenoir City Utilities Board	Validity Score 72, Non-Revenue Water 11.2%
	Change in net position \$1,139,827
City of McLemoresville	Validity Score 68; Non-revenue water 5.0%
	Change in net position \$7,636

Systems under the WWFB July 2014			
SYSTEM		LAST AUDIT	LAST BD APPEARANCE
Town of Alexandria		2013	Jan-13
Town of Atwood		2013	Jul-14
City of Bluff City		2013	Jul-14
City of Bolivar		2013	Jul-14
City of Bradford		2013	Jul-14
Town of Bruceton		2013	Jul-14
Coffee County WTA		2013	Jul-12
City of Collinwood		2012	Jul-13
Town of Decatur		2013	Jul-14
City of Dunlap	WL	2013	
Town of Englewood		2013	
City of Erin		2013	Jul-12
City of Friendship		2013	Mar-13
Town of Gainesboro		2013	Jul-14
City of Grand Junction		2013	Jan-13
Town of Halls	WL	2013	Jul-13
Town of Henning		2013	Jan-13
City of Hohenwald	WL	2013	Jul-14
Town of Hornsby		2013	
Humphreys County		2013	Mar-12
Town of Huntland		2013	
Town of Huntsville		2013	Jul-13
City of Jellico	WL	2013	Jul-14
City of Kenton	WL	2013	Mar-13
Lauderdale County Water		2013	
Town of McLemoresville		2013	Jul-14
City of McMinnville	WL	2013	
City of Middleton		2013	Jul-12
City of Millington	WL	2013	
Town of Monteagle	WL	2013	Jul-14
City of Munford		2013	
Town of Obion		2012	
Town of Oneida		2013	Mar-13
City of Puryear		2013	Jul-14
City of Ramer		2013	May-11
City of Red Boiling Springs		2013	Jul-13
Town of Rutledge		2013	Jul-14
Scott County Sewer System		2013	
Town of Sharon		2013	Jul-14
City of Springfield	WL	2013	Mar-12
Town of Stanton		2013	
City of Sunbright		2013	Jul-13
Town of Tellico Plains	WL	2013	Nov-11
Town of Tennessee Ridge		2013	Jul-14
Town of Vonore		2013	Mar-12
City of Westmoreland	WL	2013	Nov-11
Town of Woodbury	WL	2013	Nov-11

WATER LOSS STATUS								
Utility system	original referral %	original audit referral date	subsequent review %	subsequent review date	subsequent review %	subsequent review date	subsequent review %	subsequent review date
Collinwood	45.96%	6/30/2009	51.30%	6/30/2010	51.30%	6/30/2011	46/5.4%	6/30/2012
Dunlap	64/10.8%	6/30/2013						
Erin	51.00%	6/30/2010	49.76%	6/30/2011	42.54%	6/30/2012	80/32.3%	6/30/2013
Grand Junction	45.55%	6/30/2010	not included	6/30/2011	not included	6/30/2012	not included	6/30/2013
Halls	35.10%	6/30/2011	36.67%	6/30/2012	60/3.0%	6/30/2013		
Hohenwald	46.00%	6/30/2010	36.00%	6/30/2011	36.00%	6/30/2012	81/48.0%	6/30/2013
Jellico	43.76%	6/30/2010	40.25%	6/30/2011	38.96%	6/30/2012	74/32.2%	6/30/2013
Kenton	48.80%	6/30/2010	46.40%	6/30/2011	1.37%	6/30/2012	70/22.2%	6/30/2013
McMinnville	33.98%	6/30/2012	82/36.6%	6/30/2013				
Millington	61/2.2%	6/30/2013						
Monteagle	62/22.8%	6/30/2013						
Springfield	38.10%	6/30/2010	38.03%	6/30/2011	39.30%	6/30/2012	67/38.0%	6/30/2013
Tellico Plains	52.88%	6/30/2010	51.24%	6/30/2011	46.33%	6/30/2012	60/8.3%	6/30/2013
Westmoreland	42.00%	6/30/2010	46.00%	6/30/2011	40.00%	6/30/2012	61/30.7%	6/30/2013
Woodbury	46.00%	6/30/2010	44.06%	6/30/2011	36.00%	6/30/2012	82/41.3%	6/30/2013