



JASON E. MUMPOWER  
*Comptroller*

**WWFB Agenda**

- I. Call to Order
- II. Approval of Minutes
- III. Release Cases
  - a. Financial Distress
  - b. Financial Distress with Open Water Loss Cases
- IV. Water Loss
  - a. Water Loss Violations
  - b. Water Loss Plans
- V. Training Compliance
- VI. Annual Information Report
- VII. Financial Distress Orders
  - a. Decherd Page 26
  - b. Greenbrier Page 36
  - c. Parrottsville Page 82
  - d. Petersburg Page 85
  - e. Rutherford Page 88
  - f. Vanleer Page 108
- VIII. Board Investigations
  - a. Hornsby Page 112
  - b. Oliver Springs Page 115
- IX. Board Discussion



JASON E. MUMPOWER  
*Comptroller*

**MINUTES**  
**of the**  
**WATER AND WASTEWATER FINANCING BOARD MEETING**  
**November 17, 2022**  
**10:00 am**

**Greeting:**

Chairman Moody detected a quorum and called to order the meeting of the Water and Wastewater Financing Board (“WWFB”) in the Volunteer Conference Center on the 2<sup>nd</sup> Floor of the Cordell Hull Building in Nashville, TN at 10:00 a.m. (CDT).

**Board Members Present and Constituting A Quorum:**

Greg Moody, Chairman  
Tom Moss, Vice-Chairman  
Mike Adams  
Jim Redwine  
Drexel Heidel  
Eugene Hampton  
Nick Newman  
Mike Goodman, Participated Virtually

**Staff Present:**

Ross Colona, Comptroller’s Office  
Meghan Huffstutter, Comptroller’s Office  
Nate Fontenot, Comptroller’s Office  
Ben Johnson, Comptroller’s Office

**Counsel Present:**

Seth May, Comptroller’s Office

**Others present and Addressing the Board**

Steve Osborne, Assistant Director LGF, Comptroller’s Office  
Don Scholes, Tennessee Association of Utility Districts  
John Greer, Tennessee Association of Utility Districts  
Representatives from the Town of Spencer

Kenny Baird, Lafollette Utilities  
Casey Burnett, Mayor, City of Friendship  
Carol Austin, Attorney, City of Friendship  
Nathaniel Green, Professional Engineer, James C. Hailey & Company

### **Approval of Minutes**

Chairman Moody presented the March 24, 2022, for approval. Mr. Heidel moved to approve the minutes. Mr. Newman seconded the motion which passed unanimously.

### **Water Loss**

Mr. Colona reminded the board of the Water Loss process and gave a brief overview to the board of which entities had been identified as out of compliance.

Mr. May gave the staff summary and explained staff recommendations.

1. The Entity shall send Board staff an update by February 28th, that details their plan to improve their non-revenue water and validity score. This plan should include any capital improvements that are to be made.
2. The Entity shall remain under Board supervision until the Board releases the Entity from its oversight.

Mr. Colona then opened the floor up for Mr. Kenny Baird to address the board on his concerns regarding how water loss is now reported. After a brief discussion the board concluded that the current model for measuring water loss was appropriate.

Mr. Adams then moved to accept staff recommendations. Vic-Chairman Moss seconded the motion which passed unanimously.

### **The Town of Brighton**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. A review of the capitalization policy, including any recommended modifications;

- b. A review of the debt management policy, including any recommended modifications;
  - c. The creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. A review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. Verification that all governing body members of the utility are in compliance with all relevant training requirements; and,
  - f. A review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist.
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
  3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementations.
  4. Board staff is given the authority to grant one extension of up to six (6) months of the foregoing deadlines upon a showing of good cause by the Entity.
  5. Should the Entity fail to comply with any directive in this order, Board staff and Counsel shall, with the full authority of the Board, issue subpoenas for the Entity's governing body and Manager to appear in-person before the Board during its next meeting following noncompliance of this order.

Mr. Redwine asked to amend the staff recommendations to only allow for a three-month extension upon showing of good cause by the Entity, due to the delinquency of the Entity in the past.

Mr. Redwine moved to accept staff recommendations. Mr. Newman seconded the motion which passed unanimously.

## **Bulls Gap**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. A review of the capitalization policy, including any recommended modifications;

- b. A review of the debt management policy, including any recommended modifications;
  - c. The creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. A review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. A review of anticipated changes to the Entity's customer base and ongoing capital projects, including any recommended modifications or considerations for future rate modifications; and,
  - f. Confirming that all members of the utility system's governing body have complied with the applicable training requirements.
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
  3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementations.

Mr. Newman moved to accept staff recommendations. Mr. Redwine seconded the motion which passed unanimously.

## **Cumberland Gap**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. A review of the capitalization policy, including any recommended modifications;
  - b. A review of the debt management policy, including any recommended modifications;
  - c. The creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. A review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. A review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
  - f. A justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure;
  - g. A justification for having unbilled sewer customers, including any recommendations to bill all customers if needed;

- h. Verification that all governing body members of the utility are in compliance with all relevant training requirements;
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementations.
4. Board staff is given the authority to grant an extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

Mr. Redwine asked if there were any utilities in the nearby area that would be capable of merging with the Entity. The staff recommendations were then amended adding a requirement for the Entity to complete a feasibility study over the possibility of merging with another utility.

Mr. Redwine moved to accept staff recommendations. Vice-Chairman seconded the motion which passed unanimously.

### **Friendship**

Mr. Colona described the current standing of the utility and explained the staff recommendations, he also mentioned a past TAUD study that had recommended that the Entity should hook onto County Wide.

1. All previous Board orders relating to Friendship, to the extent that they remain in effect, are hereby rescinded.
2. Friendship shall not enter into any capital projects or take on any new debt without express consent of Board staff.
3. Board staff shall determine if capital projects are feasible and in the best interest of Friendship. Staff's determination will consider financial information, engineering plans and opinions, coordination with TDEC, and other sources of information as necessary.
4. Friendship shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - b. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - c. a review of any capital improvements Friendship wishes to pursue, or that TAUD (or other expert retained by Friendship and approved by Board staff) finds necessary or advisable, including the result on future rates; and,

- d. confirmation that all members of the utility system's governing body have complied with the applicable training requirements.
5. By January 31, 2023, Friendship shall send Board staff a copy of the contract between Friendship and the qualified expert who is to perform the tasks in paragraph 4.
6. By July 31, 2023, Friendship shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
7. Friendship shall not lower its water and sewer rates without approval of Board staff.
8. Friendship shall continue its meter replacement program.
9. Friendship shall provide monthly updates in a form prescribed by Board staff regarding its current litigation with the Friendship Water Company, status of current and proposed capital projects, and other information as necessary and requested by Board staff.

Mr. Colona then opened the floor for Mayor Burnett to address the board regarding various issues the Town has been experiencing with water quality, a rate study, and depreciation. Mayor Burnett also added that the Town is currently planning on building a new water plant north of the town, he asked for the board to allow for completion instead of issuing new orders. Mr. Colona readdressed the board and reiterated the Town's request for a delay on new orders, he recommended that due to the many issues that have been corrected according to Mayor Burnett, the town would especially benefit from another rate study.

Mr. Redwine expressed concerns regarding the Town's ability to provide safe drinking water and the current lawsuit between the Entity and the Company selling the water. Vice-Chairman Moss added to Mr. Redwine's statement and asked how building new water plants would circumvent the outstanding lawsuit. Mayor Burnett then spoke regarding various improvements that have been made in their systems as well as the different wells that the Friendship Water Company owns and operates. Mr. Colona reiterated the question to Mayor Burnett and asked for clarification on his answer. Mayor Burnett turned the question to the City's attorney, Carol Austin. Ms. Austin mentioned that the other party in the lawsuit may seek an injunction to stop the construction of the new wells, but at this time the court had not attempted to stop the Town from using their own wells. The Town's attorney concluded by stating that she expects the lawsuit to continue on for some time and will probably not be finalized for several more years. Vice-Chairman Moss mentioned that the current contract between the Town and water company requires that water is provided in its natural state, and that the Tetra-Chloroethylene is not a naturally occurring product. The town concurred with that opinion but mentioned that the company still retained the right to pursue a lawsuit and that it was uncertain how a judge might rule.

Mr. Redwine discussed the outstanding issues a little further before stating that he would like to see all staff recommendations be accepted and that all possible routes are explored. Mr. Adams asked if the Town had applied for the outstanding ARPA funding, and what would happen to those

monies if the Town could not complete the project. Mayor Burnett replied that the Town had applied for the ARPA funding by the deadline, and he did not believe that there would be any requirement to repay the funds. Mayor Burnett added that he did not believe connecting to County Wide Utility District to be financially feasible.

Mr. Colona brought the Board back to the original staff recommendations. Mr. Adams asked to shorten the time frame allowed for the rate study, and Mr. Newman asked if the rate study would effect the project. Mr. Colona agreed on amending the staff recommendations and did not see any ways that the rate study would affect the project.

Mr. Redwine moved to accept staff recommendations. Vice-Chairman Moss seconded the motion which passed unanimously.

## **Galloway**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. A review of the capitalization policy, including any recommended modifications;
  - b. A review of the debt management policy, including any recommended modifications;
  - c. The creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. A review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. Verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. And a review of the leak adjustment policy, including recommended modifications or adoption of such policy should one not exist.
2. By January 31, 2023, the entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study either proof of implementation of the resulting recommendations or a proposed plan of implementation.
4. Board staff is given the authority to grant one extension of up to six months of the foregoing deadline upon a showing of good cause by the Entity.



Mr. Newman moved to accept staff recommendations. Mr. Adams seconded the motion which passed unanimously.

## **Gleason**

Mr. Colona described the current standing of the utility and explained staff recommendations, he also added that the Town had re-occurring issues with audits.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. A review of the capitalization policy, including any recommended modifications
  - b. A review of the debt management policy, including any recommended modifications;
  - c. The creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. A review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. Verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. A review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
  - g. A justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure.
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
4. Board staff is given the authority to grant two extensions of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

Mr. Heidel asked that the recommendations be amended to include an update on the audit provided by the Entity by January 31<sup>st</sup>.

Vice-Chairman Moss moved to accept staff recommendations. Chairman Moody seconded the motion which passed unanimously.

## **Gordonsville**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. A review of the capitalization policy, including any recommended modifications;
  - b. A review of the debt management policy, including any recommended modifications;
  - c. The creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. A review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. Verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. A review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist; and,
  - g. A justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure.
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
4. Board staff is given the authority to grant two extensions of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

Mr. Newman moved to accept staff recommendations. Mr. Adams seconded the motion which passed unanimously.

## **Grand Junction**

Mr. Colona described the current standing of the utility and explained the staff recommendations, also added that the Town was delinquent in the most recent audit. Mr. Colona asked the Board if they would like to amend the recommendations to require the Town to update board staff by January 31<sup>st</sup> on outstanding audits. The board agreed.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:

- a. a review of the capitalization policy, including any recommended modifications;
  - b. a review of the debt management policy, including any recommended modifications;
  - c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
  - g. and a justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure.
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
  3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
  4. Board staff is given the authority to grant one extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

Mr. Heidel moved to accept staff recommendations. Mr. Newman seconded the motion which passed unanimously.

## **Henning**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. A review of the capitalization policy, including any recommended modifications;
  - b. A review of the debt management policy, including any recommended modifications;
  - c. The creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. A review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. Verification that all governing body members of the utility are in compliance with all relevant training requirements.

- f. Review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
  - g. And a justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure.
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
4. Board staff is given the authority to grant two extensions of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.
5. Should the Entity fail to comply with any directive in this order, Board staff and Counsel, acting on the Board's authority, shall issue subpoenas for the Entity's governing body and manager to appear in-person before the Board during its next meeting following non-compliance of this order.

Mr. Newman moved to accept staff recommendations. Vice-Chairman Moss seconded the motion which passed unanimously.

### **Hollow Rock**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. a review of the capitalization policy, including any recommended modifications;
  - b. a review of the debt management policy, including any recommended modifications;
  - c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. and a review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.

3. By February 28, 2023, the Entity shall send Board staff a proposed plan of action to improve its non-revenue water which may include proposed capital projects or any engagements with third parties to address water loss.
4. By July 31 , 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
5. Board staff is given the authority to grant one extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

Mr. Newman moved to accept staff recommendations. Mr. Adams seconded the motion which passed unanimously.

### **Lynnville**

Mr. Colona described the current standing of the utility and explained the staff recommendations, he also referred to a recent investigation that had been conducted by the Comptroller of the Treasury.

1. Paragraph 3 of the September 2021 order shall be amended to: By March 31, 2023, the Town shall send Board staff proof the utility system's governing body have complied with the training requirements as set out in Tenn. Code Ann. 7-34-1150).
2. Paragraph 4 of the September 2021 order shall be amended to: By June 30, 2023, the Town shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a plan of implementation.

Vice-Chairman Moss moved to accept staff recommendations. Mr. Newman seconded the motion which passed unanimously.

### **Toone**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. the creation of a capitalization policy, including any recommended modifications;
  - b. the creation of a debt management policy, including any recommended modifications;
  - c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;

- d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. a review of the leak adjustment policy, including any recommended modifications or adoption of such policy if one does not exist;
  - f. a justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure; and, verification that all governing body members of the utility are in compliance with all relevant training requirements.
2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
  3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
  4. Board staff is given the authority to grant one extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

Mr. Newman moved to accept staff recommendations. Mr. Adams seconded the motion which passed unanimously.

### **Tullahoma Utilities Authority**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. the creation of a capitalization policy, including any recommended modifications;
  - b. the creation of a debt management policy, including any recommended modifications;
  - c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. a review of the leak adjustment policy, including any recommended modifications or adoption of such policy if one does not exist;
  - f. a justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure; and, verification that all governing body members of the utility are in compliance with all relevant training requirements.

2. By January 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By July 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
4. Board staff is given the authority to grant one extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

### **Mason**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. By March 31, 2023, the Town shall send an update to Board staff regarding the capital project for which the Community Development Block Grant was awarded.

Mr. Hampton asked for confirmation that the Town had been making the required payments to reimburse the Water and Sewer Fund. Steve Osborne confirmed to the board that the required payments were being properly made.

Mr. Redwine moved to accept staff recommendations. Mr. Hampton seconded the motion which passed unanimously.

### **Spencer**

Mr. Colona gave an update to the board on new progress being taken by the Town. This included the information that the Town approached Warren County Utility District to help run the plant, which Board staff believes to be in the best interest for the Town and its customers. Warren County Utility District issued a response to Spencer's request for help, stating they will only consider if they are allowed to take over. Mr. Colona went on to explain the current staff recommendations being made.

1. The City shall send Board staff an update by February 28th, 2023, the Town shall send Board staff an update regarding any efforts made to work with any surrounding utilities to ensure the financial, technical, and managerial health of the utility.
2. The City shall send Board staff an update by February 28th, 2023, that details their plan to improve their non-revenue water and validity score. This plan should include any capital improvements that are to be made.

Vice-Chairman Moss affirmed that TDEC was in agreement with Staff's recommendation for a separate utility to take over plant operations. Mr. Adams voiced his concern of how it would affect the rates for sewer customers if the water operations were separated. Mr. Nathaniel Green addressed the board and stated that there was currently an analysis underway to investigate the impacts of a take over that should be finalized by February. Jackson Thornton is also working on completing an additional rate study that should be finished by year end. Vice-Chairman Moss asked if Board staff foresee any legal issues with a Utility District taking over a Municipality. Mr. Colona saw no concerns.

Mr. Adams moved to accept staff recommendations. Mr. Newman seconded the motion which passed unanimously.

### **Collinwood**

Mr. Colona described the current standing of the utility and explained the staff recommendations. Mr. Colona also mentioned that Wayne County had successfully divided the remaining portions of its' utility infrastructure upon the reaching of an agreement with the City of Collinwood.

1. By January 31, 2023, the Entity shall provide Board staff with proof of implementation of the rate study recommendations.
2. The Entity shall send financial updates to Board staff by March 1st and September 1<sup>st</sup> of each year beginning March 1, 2023, until the Board releases the Entity from its oversight.

Vice Chairman Moss moved to accept staff recommendations. Mr. Redwine seconded the motion which passed unanimously.

### **Lobelville**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall send financial updates to Board staff by March 1st and September 1<sup>st</sup> of each year beginning March 1, 2023, until the Board releases the Entity from its oversight.
2. By February 28, 2023, the Entity shall send Board staff a proposed plan of action to improve its non-revenue water which may include proposed capital projects or any engagements with third parties to address water loss.



Mr. Adams moved to accept staff recommendations. Vice-Chairman Moss seconded the motion which passed unanimously.

### **Puryear**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. The Entity shall send financial updates to Board staff by March 1st and September 1<sup>st</sup> of each year beginning March 1, 2023, until the Board releases the Entity from its oversight.

Chairman Moody moved to accept staff recommendations. Mr. Redwine seconded the motion which passed unanimously.

### **Rutledge**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. By January 31, 2023, the Entity shall provide Board staff with proof of implementation of the rate study recommendations.
2. The Entity shall send financial updates to Board staff by March 1st and September 1<sup>st</sup> of each year beginning March 1, 2023, until the Board releases the Entity from its oversight.

Vice-Chairman Moss moved to accept staff recommendations. Mr. Newman seconded the motion which passed unanimously.

### **Trimble**

1. By January 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.

2. The Entity shall send financial updates to Board staff by March 1st and September 1<sup>st</sup> of each year beginning March 1, 2023, until the Board releases the Entity from its oversight.

Chairman Moody moved to accept staff recommendations. Mr. Redwine seconded the motion which passed unanimously.

### **Vanleer**

Mr. Colona described the current standing of the utility and explained the staff recommendations.

1. By January 31, 2023, the Entity shall provide Board staff with proof of implementation of the rate study recommendations.
2. The Entity shall send financial updates to Board staff by March 1st and September 1<sup>st</sup> of each year beginning March 1, 2023, until the Board releases the Entity from its oversight.

Mr. Adams moved to accept staff recommendations. Mr. Newman seconded the motion which passed unanimously.

### **Future Meeting Dates**

Mr. Colona addressed the Board regarding future meeting dates for the 2023 calendar year. The below dates were recommended.

March 23, 2023

August 24, 2023

November 16, 2023

Mr. Redwine asked that calendar invites be included in the next email.

Mr. Redwine moved to accept staff recommendations. Mr. Heidel seconded the motion which passed unanimously.

**Other Business**

Mr. Adams asked if the Board could require that all parties who wished to address the Board in the future be made to attend in person. Mr. Colona saw no issues with that requirement.

**Adjournment**

Mr. Adams moved that adjourned the meeting at 11:23 am. Mr. Newman seconded. The motion carried unanimously.

## Financial Distress Release

The following entities have complied with Board directives to remedy financial distress. Board staff recommends the following entities be released from Board oversight.

Baileyton  
Blaine  
Bulls Gap  
Chapel Hill  
Elkton  
Englewood  
Goodlettsville  
Greenfield  
Humphreys County  
Hornbeak  
Huntingdon  
Jellico  
Kingsport  
Kingston  
Lauderdale County  
Lobelville  
Marshall County  
Metro Nashville- Davidson County  
Newbern  
Purveyar  
Smithville  
Tusculum  
Watauga River Water and Wastewater Treatment Authority  
Woodland Mills

### **Staff Recommendation:**

The Board should order the following to the above referenced entities:

1. The Entity is officially released from the Board's oversight.
2. Staff and Counsel shall close the case.

### **Financial Distress Release, Retain Water Loss**

The following entities have complied with Board directives to remedy financial distress, but these utilities have still demonstrated non-compliance with water loss standards. Board staff recommends the following entities be released from Board oversight for financial distress.

Bruceton  
Dunlap  
Metro Lynchburg- Moore County  
Troy

Staff Recommendation:

The Board should order the following to the above referenced entities:

1. The Entity's financial distress case is officially released from the Board's oversight.
2. Staff and Counsel shall close the financial distress case.
3. The Entity's water loss case shall remain open under the Board's oversight.

## Water Loss Violations

The following entities have been referred to the Board for excessive water loss. These entities have not completed the AWWA 6.0 Water Loss Tool through the confirmation of a third party.

Byrdstown  
Portland  
South Fulton  
Waynesboro

### **Staff Recommendation:**

The Board should order the following to the above referenced entities:

1. By June 30, 2023, the Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, complete the AWWA Free Audit Software version 6.0.
2. By April 28, 2023, the Entity shall send Board staff proof of engagement between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By July 15, 2023, the Entity shall send Board staff the completed report from the tasks in paragraph 1.

## Water Loss Plan

The following entities have been referred to the Board for excessive water loss. These entities have since completed the AWWA 6.0 Water Loss Tool through the confirmation of a third party.

Adamsville  
Benton  
Celina  
Centerville  
Collinwood  
Dover  
Elizabethton  
Erin  
Grand Junction  
Harriman  
Lawrenceburg  
Lexington  
McLemoresville  
Mountain City  
Sardis  
Waverly

### **Staff Recommendation:**

The Board should order the following to the above referenced entities:

1. The Entity shall send Board staff an update by June 30, 2023, that details their plan to improve their non-revenue water and validity score. This plan should include any capital improvements that are to be made.
2. The Entity shall remain under Board supervision until the Board releases the Entity from its oversight.

## Training Violations

The following entities have been referred to the Board for non-compliance with applicable governing body member training requirements.

Celina  
Gates  
Kenton  
Lexington  
Mitchellville  
Mount Carmel  
Toone

### Staff Recommendation:

The Board should order the following to the above referenced entities:

1. By June 30, 2023, the Entity shall send Board staff proof that all members of the utility system's governing body have complied with the applicable training requirements.
2. Should the Entity fail to comply with any directive in this order, Board staff and Counsel shall issue subpoenas for the Entity's governing body to appear in-person before the Board during its next meeting following non-compliance with this order.
3. If the Entity shows that all governing body members are compliant with training requirements and Board staff are unaware of any reason for which the Entity should remain under Board supervision, Board staff may close the Entity's case without further action by the Board.



## Annual Information Report

The following entities have not complied with completing the Annual Information Report which is filed with the Comptroller of the Treasury.

Caryville- Jacksboro Utility Commission  
Church Hill  
Clarksburg  
Copperhill  
Graysville  
Lynnville  
Mason  
Oakdale  
Parrottsville  
Ridgely  
Surgoinsville

### **Staff Recommendation:**

1. The entity shall complete the Annual Information Report by May 31, 2023.
2. Should the Entity fail to comply with any directive in this order, Board staff and Counsel shall issue subpoenas for the Entity's governing body to appear in-person before the Board during its next meeting following non-compliance with this order.
3. If the Entity shows compliance with completing the Annual Information Report and Board staff are unaware of any reason for which the Entity should remain under Board supervision, Board staff may close the Entity's case without further action by the Board.



JASON E. MUMPOWER  
Comptroller

**Entity Referred:** City of Decherd  
**Referral Reason:** Decrease In Net Position  
**Utility Type Referred:** Water And Sewer

**Staff Summary:**

The City of Decherd ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since its fiscal year 2021 audit.

1. The Entity has returned its financial distress questionnaire to Board staff. Board staff has identified the following potential issues:
2. The Entity has delinquent audits.
3. Board staff has concerns that the Entity does not have an adequate plan to address its financial distress. The Entity's plan focuses on correcting financial errors and hiring/training personnel.
4. The Entity has not completed a rate study in the previous 5 years.
5. The Entity has not implemented a rate increase in the previous 5 years. The last rate increase was in February 2017.
6. The Entity does not have an asset management plan and should adopt one. They should also reexamine the existing policies.
7. The Entity has differing inside and outside the city limit rates for customers. These should be evaluated to ensure they are reasonable and justifiable.

**Staff Recommendation:**

The Board should order the following:

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. a review of the capitalization policy, including any recommended modifications;
  - b. a review of the debt management policy, including any recommended modifications;
  - c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. verification that all governing body members of the utility are in compliance with all relevant training requirements;



JASON E. MUMPOWER  
*Comptroller*

- f. a review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
  - g. a justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure.
  - h. and complete the AWWA Free Audit Software version 6.0.
2. By May 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By December 31, 2023 the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
4. Board staff is given the authority to grant one extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

# Decherd

	Category: <b>Water And Sewer</b>		County: <b>Franklin</b>	
	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Net Assets</b>	\$11,746,081.00	\$18,609,736.00	\$23,094,893.00	\$23,061,016.00
<b>Deferred Outflow Resources</b>	\$47,962.00	\$53,450.00	\$52,366.00	\$48,627.00
<b>Net Liabilities</b>	\$1,573,176.00	\$7,002,977.00	\$9,702,341.00	\$9,559,368.00
<b>Deferred Inflow Resources</b>	\$7,738.00	\$16,926.00	\$30,421.00	\$26,683.00
<b>Total Net Position</b>	\$10,213,129.00	\$11,643,283.00	\$13,414,497.00	\$13,523,592.00
<b>Operating Revenues</b>	\$2,213,733.00	\$2,284,003.00	\$1,985,073.00	\$2,098,574.00
<b>Net Sales</b>	\$2,079,288.00	\$2,137,474.00	\$1,820,971.00	\$1,868,199.00
<b>Operating Expenses</b>	\$1,747,248.00	\$1,792,596.00	\$1,919,173.00	\$5,135,286.00
<b>Depreciation Expenses</b>	\$452,668.00	\$452,201.00	\$508,739.00	\$407,000.00
<b>Non Operating Revenues</b>	\$76,668.00	-\$81,427.00	-\$539,376.00	-\$186,158.00
<b>Capital Contributions</b>	\$0.00	\$1,020,174.00	\$2,244,690.00	\$3,232,413.00
<b>Transfers In</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	\$543,153.00	\$1,430,154.00	\$1,870,766.00	\$9,543.00
<b>Statutory Change In Net Position</b>	\$543,153.00	\$409,980.00	-\$274,372.00	-\$3,222,870.00

## Contact Information and Comptroller Filings

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<b>Entity ID Number</b>	1656
<b>Utility Name</b>	City of Decherd- Water Department
<b>Name of Person Filing this Out</b>	Mary Nell Hess
<b>Utility Email</b>	maryhess@decherd.net
<b>Utility Phone</b>	(931) 967-5181
<b>Mailing Address</b>	1301 W. Main St. Decherd , TN 37324

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**Has the most recent Annual Information report been timely filed for this utility?** No

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**Has the utility filed its most recent budget with the Comptroller's Office within 15 days of adoption?** Yes

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**Has the utility filed its most recent audit with the Comptroller's Office within 6 months of the last fiscal year end?** No

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**Please provide the reason why this local government did not timely file its most recent audit with the Comptroller's Office?** Auditors had issues accessing the city's accounting records and issued a disclaimer opinion when the audit was finished.

---

## Financial Distress Remedy Plans

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**Does this utility have a plan to remedy the current financial distress?** Yes

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**Please describe the current plan to remedy the utility's financial distress.** Hired a CPA firm, Bean, Rhoton, & Kelley, approved by the Comptroller's Office to correct financial errors in the 2020-21 financial report and hired under contract Winnett Associates to perform audit work for FY 2020-21 after remedial work. This plan has been approved by the Comptroller's Office. Meanwhile, the CPA firm is building an accounting system for the 2022-23 FY which will assist in the audit process for future years. New personnel have been hired and will attend CMFO classes and the CPA firm believes the new personnel can perform the job duties required for this position. We will also be hiring an accounts payable clerk to assist in the bookkeeping process.

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## Rates and Fees Information

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**Has a rate study been completed for the utility in the previous 5 years?** No

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**Has the utility implented a rate increase in the last 6 months?** No

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**Does the utility have plans to implement a rate increase in the next 6 months?** No

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**Please upload a copy of the current rate ordinance or resolution.** <https://www.formstack.com/admin/download/file/13939235493>

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**Has this utility had any changes to fees in the last 5 years?** Yes

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**Please upload a copy of the current utility fee schedule.** <https://www.formstack.com/admin/download/file/13939235495>

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**Please provide a written rationale for the fees contained in the current fee schedule and any changes that may have occurred if indicated so in the previous question.** Fees were based on a rate study issued in February 2017. The fee structure took into account the cost of running the water and wastewater department based on the direct and indirect costs associated with treating and distributing water and treating wastewater.

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## Financial Initiatives

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**Has the utility incurred any new debt during its current fiscal year, or does the utility plan on incurring any new debt during the current or next fiscal year?** No

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**Has the utility received any grants during its current fiscal year, or does the utility plan on applying for or receiving any new grants during the current or next fiscal year?** Yes

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**How much is this funding, and what is the source of this funding?** Infrastructure Planning Grant- \$50,000 American Recover Act- \$185,523; Applied for ARA

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**What will this funding be used for?** Infrastructure Planning Grant- CCTV sewer cleaning and smoke testing  
American Recovery Act- repairs to the infrastructure of wastewater lines  
ARA- waterline replacement to solve water loss issues

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## Utility Information

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Does this utility offer water service? Yes

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Does this utility offer sewer or wastewater service? Yes

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## Water Utility Information

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How many billed customers does the water utility have? 1697

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How many unbilled customers does the water utility have? 0

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How many metered customers does the water utility have? 1743

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How many unmetered customers does the water utility have? 0

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What was the net sales revenue from the largest 10 customers last fiscal year? 521085

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What was the net sales revenue for the water utility last fiscal year? 927799

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What percentage of sales do the largest 10 customers account for annually? 1.406

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What percentage of sales do the largest 10 customers account for annually? - Copy 1.406

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How many gallons were sold to the largest 10 customers last fiscal year? 188513.20

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How many gallons were sold last fiscal year? 366700.90

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What percentage of volume do the largest 10 customers account for annually? 0.51

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Does the water utility have a rate structure with differing rates based on geographical location? Yes

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**Please provide a customer count breakdown of these different rate classes.**

Water Inside City (Residential)  
 Water Outside City (Residential)  
  
 Water Inside City- (Commercial)  
 Water Outside City- (Commercial)  
  
 Water Inside City Exempt- (Tax Exempt)

**Please explain the method in which these rates have been determined to be reasonable and justifiable.**

Cost to distribute water to distance outside the city limits

**Does this utility have a water connection to another utility to purchase water or to have a backup water supply in case of emergency?**

Yes

**Does this utility produce its entire water supply without purchasing water from another utility?**

No

**Does a contract exist for the purchase of any water from another utility?**

Yes

**Is it feasible for this utility regionalize, merge, or consolidate with a surrounding utility to improve water service to its current or future customer base?**

No

**Does this utility sell water at a wholesale rate to any customers such as large commercial/industrial customers or other surrounding utilities?**

Yes

**Does a contract exist for the sale of this water?**

Yes

**Does this utility have a water treatment facility?**

Yes

**What is the design capacity of the water treatment facility?**

2 mgd

**What is the average operating capacity of the water treatment facility?**

1.2 mgd

**Are there any environmental concerns including government environmental orders for the water utility?**

No



## Wastewater Utility Information

How many billed customers does the wastewater utility have?	1287
How many unbilled customers does the wastewater utility have?	0
How many metered customers does the wastewater utility have?	1287
How many unmetered customers does the wastewater utility have?	0
What was the net sales revenue from the largest 10 customers last fiscal year?	659830
What was the net sales revenue for the wastewater utility last fiscal year?	756955
How many thousand gallons of wastewater were treated for the largest 10 customers last fiscal year?	98824
How many thousand gallons of wastewater were treated by the utility last fiscal year?	207000
Percentage of sales from Largest 10 Customers	0.87
Percentage of flow from Largest 10 Customers	0.48
Does the wastewater utility have a rate structure with differing rates based on geographical location?	Yes
Please provide a customer count breakdown of these different wastewater rate classes.	Residential Inside- \$5.90 per 1,000 gal Residential Outside- \$7.92 per 1,000 gal Commercial, Tax Exempt, & Government- \$6.79 per 1,000 gal
Please explain the method in which these wastewater rate classes have been determined to be reasonable and justifiable.	Cost to transport wastewater to the water treatment facility
Does this utility treat all of the wastewater collections without sending wastewater to another utility for treatment?	Yes

Does this utility treat wastewater from another utility?	No
Is it feasible for this utility regionalize, merge, or consolidate with a surrounding utility to improve wastewater service to its current or future customer base?	No
Does this utility treat wastewater for customers on wells?	No
Excluding any potential customers on wells, are all customers billed based on metered water usage?	Yes
Does this utility treat wastewater at a wholesale rate to any customers such as large commercial/industrial customers or other surrounding utilities?	No
What is the design capacity of the wastewater treatment facility?	2650000
What is the average operating capacity of the wastewater treatment facility?	750000
Are there any environmental concerns including government environmental orders for the wastewater utility?	No
Does this utility have a sewer use ordinance or resolution?	Yes
How is this sewer use ordinance or resolution enforced?	Monitoring program

## Plans and Policies

Does this utility have a debt management policy?	Yes
Does this utility have a capitalization policy?	Yes
Does this utility have a leak adjustment policy?	Yes
Does this utility have an asset management plan?	No

**How are capital projects or purchases adequately planned for?** We are currently working on this.

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**Does this utility have a copy of its capital asset list on file?** Yes

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**How often is this capital asset list reviewed and by whom?** Annually- Department Heads

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JASON E. MUMPOWER  
*Comptroller*

**Entity Referred:**                      **Town of Greenbrier**

**Referral Reason:**                    **Decrease In Net Position**

**Utility Type Referred:**            **Water And Sewer**

**Staff Summary:**

The Town of Greenbrier ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since 2021. Without Board order, the Entity contracted with Rate Studies, Inc. to complete a rate study. Board staff has since received the rate study and proof of implementation of the recommendations.

**Staff Recommendation:**

The Board should order the following:

1. The Entity shall send financial updates to Board staff by March 1st and September 1st of each year beginning September 1, 2023, until the Board releases the Entity from its oversight.

# Greenbrier

	Category: <b>Water And Sewer</b>		County: <b>Robertson</b>	
	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Net Assets</b>	\$13,986,546.00	\$14,751,187.00	\$15,351,959.00	\$15,769,812.00
<b>Deferred Outflow Resources</b>	\$61,503.00	\$55,244.00	\$51,306.00	\$74,066.00
<b>Net Liabilities</b>	\$5,405,888.00	\$6,067,933.00	\$6,915,658.00	\$7,820,911.00
<b>Deferred Inflow Resources</b>	\$11,791.00	\$18,436.00	\$44,148.00	\$28,989.00
<b>Total Net Position</b>	\$8,630,370.00	\$8,720,062.00	\$8,443,459.00	\$7,993,978.00
<b>Operating Revenues</b>	\$2,362,880.00	\$2,327,510.00	\$2,540,809.00	\$2,979,386.00
<b>Net Sales</b>	\$2,350,266.00	\$2,320,996.00	\$2,538,916.00	\$2,970,950.00
<b>Operating Expenses</b>	\$2,255,380.00	\$2,364,702.00	\$2,996,370.00	\$3,510,002.00
<b>Depreciation Expenses</b>	\$243,881.00	\$229,191.00	\$367,515.00	\$438,634.00
<b>Non Operating Revenues</b>	-\$18,445.00	-\$23,216.00	-\$9,588.00	-\$54,566.00
<b>Capital Contributions</b>	\$165,086.00	\$150,100.00	\$169,200.00	\$135,701.00
<b>Transfers In</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	\$254,141.00	\$109,038.00	-\$295,949.00	-\$449,481.00
<b>Statutory Change In Net Position</b>	\$89,055.00	-\$21,716.00	-\$465,149.00	-\$585,182.00



# Rate Study

## Cost of Service Analysis 2021

*Prepared By:*



# The City of Greenbrier

## 2021 Wastewater Rate Study

### Introduction

#### **Purpose**

The purpose of this report is to assist The City of Greenbrier (City) in determining if the current water and wastewater rates will:

- Provide sufficient revenue to meet all expenses, including depreciation,
- Ensure compliance with TCA § 68-221-1010 (included at the end of this report), and
- Provide sufficient cash to fund the City's Five-Year Capital Improvement Plan (CIP).

#### **Methodology**

The Cash Flow Analysis methodology used by RateStudies is based on the *American Water Works Association (AWWA) M54 Manual - Developing Rates for Small Systems*. The Change in Net Position Analysis is based on the "Statement of Revenues, Expenses, and Changes in Net Position", found in the City's annual audit. A Cost of Service is also included for the determination of fair rates for each customer class. Although rate studies are not an exact science, this report's financial models can be a valuable tool for making financial decisions and setting rates. Considerations are made to simplify the rate study process to be understandable by utility officials, managers, staff, and customers.

This report presents a comprehensive financial analysis of the City's water and wastewater systems, including a historical five-year view and a five-year projection of customer growth, revenue, and expenses. A five-year Capital Improvement Plan and its impact on depreciation are included. The City's Mayor, City Recorder, other City staff, and the City's consulting engineer from FOXPE helped collect historical data, develop the Capital Improvement Plan, growth projections, financial projections, and the final recommendations.

This study uses a Cash Flow Analysis and a Change in Net Position Analysis to determine the need for rate increases. Each of these indicates the financial stability for the City's water and wastewater systems separately and combined. Such information is presented in Excel spreadsheets designed to function as financial models. Graphs and charts are used to give a visual presentation of each analysis.

The Cash Flow Analysis includes income, expenses, capital improvements, and financing methods for the City's five-year Capital Improvement Plan. The Change in Net Position Analysis contains similar information but includes depreciation as an expense and does not incorporate the City's five-year Capital Improvement Plan or the principal payments on any loans. The Change in Net Position Analysis will determine if rate increases are needed and how much. A Cost of Service Analysis is provided to determine appropriate rates by class of customer.

## Significant Events and Factors

Factors affecting this analysis are the following conditions or significant factors:

- The City has seen minimal (1-2%) customer growth over the past five years. Also, the City has agreed to a consent order and assessment with the Tennessee Department of Environment and Conservation, which limits adding new customers pending corrections to the wastewater system.
- The City of Springfield (Springfield) sells water to the City. Over the past six years, water rates have increased as follows:

Springfield Rate Increases						
	2016	2017	2018	2019	2020	2021
Rate Per 1,000 Gallons	\$3.35	\$3.82	\$4.20	\$4.32	\$4.67	\$4.95
% Increase	12%	14%	10%	3%	8%	6%

- The City also increased its water rates annually using the same annual percentages as Springfield but has applied such increases to only the unit cost per 1,000 gallons over 2,000. The minimum bill has stayed the same.
- The five-year Capital Improvement Plan (CIP) is \$50,000 for the water system plus \$6,050,000 for the wastewater system. Also, Developers are anticipated to add \$400,000 to the water system and \$600,000 to the wastewater system by way of contributions in aid of construction.
- While Developers install water and wastewater infrastructure at their own cost, the City must bear the burden of funding the infrastructure depreciation through water and wastewater revenue. Depreciation is projected to increase by \$216,064 over the next five years. The wastewater plant addition
- The City is currently under a moratorium for adding sewer customers.
- The City had two consecutive years of negative change in net position, a Tennessee State Law violation.
- The City is considering other sources of water. However, the financial impacts of such action are not included in this rate study.
- The City is considering consolidating some of its wastewater debt.

## Recommendations

Rate recommendations from this study include the following:

- Increase the water system rate by 50% and the wastewater system rate by 30%, both starting in FY 2022, if not sooner.
- Use the Cost of Service Analysis (COS) rate for each class of customer as the base for applying the rate increases.



Figures 1a – 1d show the Current (2021) rates, the COS rates, and the Proposed rates to be implemented in FY 2022, if not sooner.

Water Inside the City										
Current Water Rates			Current Water Rates (COS) - with no Inc.				Proposed Water Rates (COS) plus 50% Inc.			
Gallons	Minimum		Gallons	Minimum	% Inc.	Gallons	Minimum	% Inc.		
First	2,000	\$11.88	First	2,000	\$11.97	1%	First	2,000	\$17.96	50%
		<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>		
Over	2,000	\$8.69	Over	2,000	\$8.69	0%	Over	2,000	\$13.04	50%

Figure 1a

Water Outside the City										
Current Water Rates			Current Water Rates (COS) - with no Inc.				Proposed Water Rates (COS) plus 50% Inc.			
Gallons	Minimum		Gallons	Minimum	% Inc.	Gallons	Minimum	% Inc.		
First	2,000	\$15.85	First	2,000	\$15.16	-4%	First	2,000	\$22.74	50%
		<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>		
Over	2,000	\$8.87	Over	2,000	\$8.87	0%	Over	2,000	\$13.31	50%

Figure 1b

Wastewater Inside the City										
Current Wastewater Rates			Current Wastewater Rates (COS) with No Increase				Proposed Wastewater Rates (COS) with 30% Inc.			
Gallons	Minimum		Gallons	Minimum	% Inc.	Gallons	Minimum	% Inc.		
		\$7.00			\$6.88	-2%			\$8.94	30%
		<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>		
Over	0	\$9.73	Over	0	\$9.73	0%	Over	0	\$12.65	30%

Figure 1c

Wastewater Outside the City										
Current Wastewater Rates			Current Wastewater Rates (COS) with No Increase				Proposed Wastewater Rates (COS) with 30% Inc.			
Gallons	Minimum		Gallons	Minimum	% Inc.	Gallons	Minimum	% Inc.		
		\$10.00			\$12.32	23%			\$16.01	30%
		<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>		
Over	0	\$10.30	Over	0	\$10.30	0%	Over	0	\$13.39	30%

Figure 1d

**Other Considerations**

Price elasticity is a measurement of how buyers respond to changes in price. Generally, as the price of a product increases, buyers will buy less of the product. The City may experience price elasticity with some of its customers. Higher rates could encourage customers to use less water, which would result in less water bought and less revenue collected. This report does not include a price elasticity analysis.

This report's recommendations are designed to improve the City's finances and meet the Tennessee Comptroller requirements over the next five years. It is recommended to monitor and verify projections presented in this report on an annual basis and to react to unforeseen financial changes and make corrections, as necessary.

## Customer Growth, Usage, and Revenue Projections

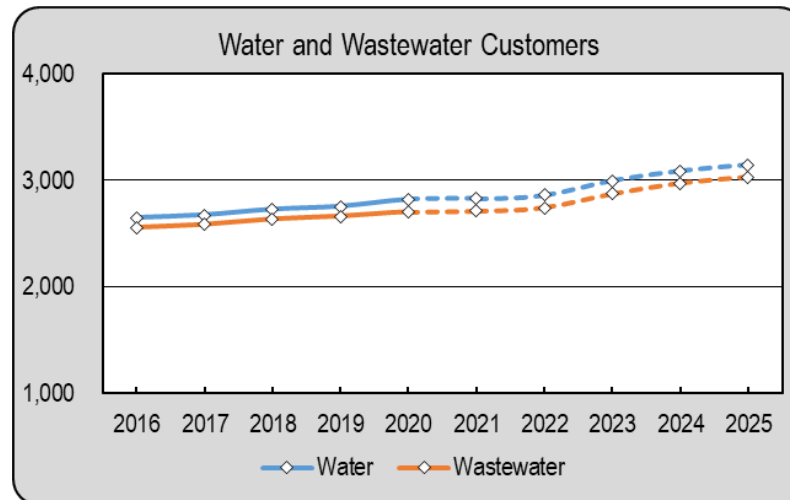
### Overview

The City depends on customer revenue to pay for all the water and wastewater systems' financial needs, including the cost of operation, maintenance, depreciation, and capital expenses. A review and analysis of the previous five years of records, as well as consideration of current legal restrictions, provide a reasonable basis for making growth and revenue projections over the next five years.

### Customer Growth

The City has seen a minimal (1-2%) annual growth in its water and wastewater customer base over the past five years, adding 174 water customers and 148 wastewater customers during FY 2016-2020. The City's consent order and assessment with the Tennessee Department of Environment and Conservation limit adding new wastewater customers pending corrections to the wastewater system. At this time, management's goal is to have such corrections completed by the end of FY 2022, at which time the demand for new connections may cause growth to jump up to 3-5% on a short-term basis. **Figure 2** shows the water and wastewater customer growth.

Customers										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water	2,648	2,675	2,728	2,756	2,822	2,832	2,862	2,995	3,090	3,150
Percent Change		1%	2%	1%	2%	0.4%	1%	5%	3%	2%
Wastewater	2,556	2,585	2,636	2,663	2,705	2,715	2,745	2,878	2,973	3,033
Percent Change		1%	2%	1%	2%	0.4%	1%	5%	3%	2%



**Figure 2**

### Customer Usage

In spite of adding new customers over the past five years, the total water and wastewater usage in million gallons varied but did not increase. As well, the water and wastewater usage in gallons per customer per month also declined during FY 2016-2020. For this analysis, it is assumed that water and wastewater usage will increase over the next five years as new customers are added. **Figure 3** shows the total usage and usage per customer per month.

Usage - Million Gallons per Year										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water	145	140	143	142	143	144	145	152	157	160
Percent Change		-3%	2%	-1%	1%	0.4%	1%	5%	3%	2%
Wastewater	125	122	124	124	123	124	125	131	136	138
Percent Change		-2%	2%	-1%	-0.3%	0.4%	1%	5%	3%	2%
Usage - Gallons per Customer per Month										
Water	4,604	4,407	4,422	4,323	4,253	4,253	4,253	4,253	4,253	4,253
Percent Change		-4%	0.3%	-2%	-2%	0.0%	0%	0%	0%	0%
Wastewater	4,371	4,225	4,226	4,263	3,899	3,899	3,899	3,899	3,899	3,899
Percent Change		-3%	0.02%	1%	-9%	0%	0%	0%	0%	0%

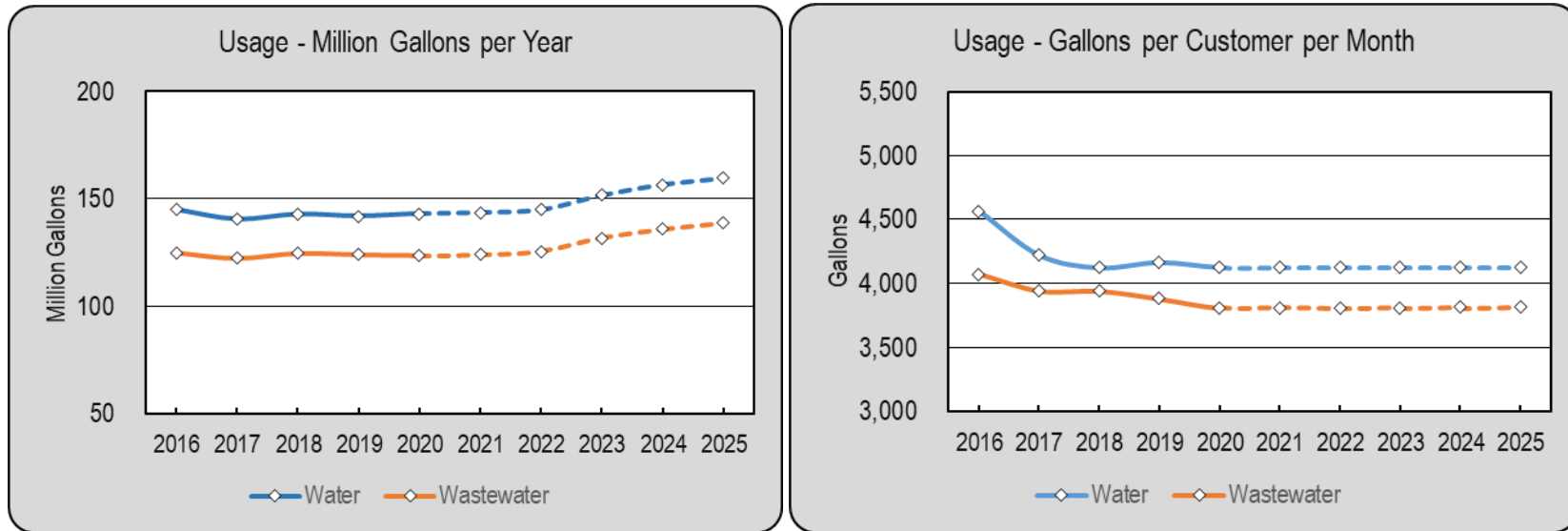
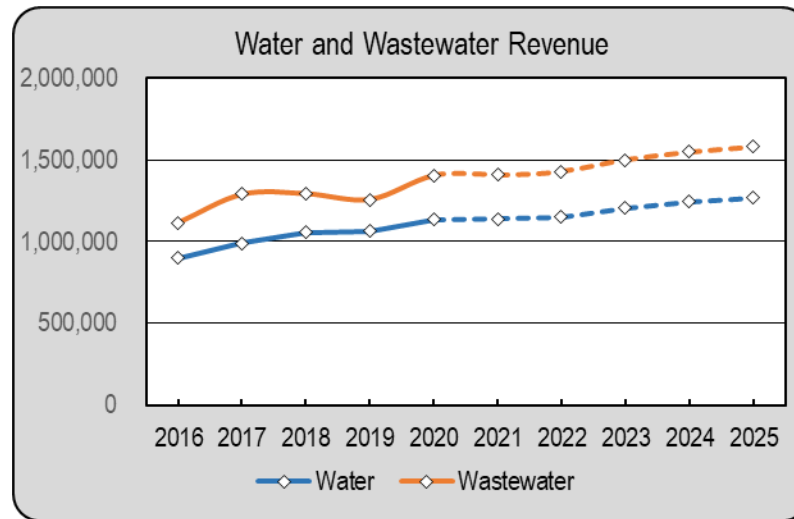


Figure 3

**Customer Revenue**

As a result of rate increases implemented over the period FY 2016-2020, which were primarily on water customers and almost exclusively on the “per gallon charge over the minimum”, total water and wastewater revenue did increase, as shown in **Figure 4**.

Revenue										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water	901,496	989,747	1,057,739	1,063,099	1,133,708	1,137,694	1,150,359	1,204,588	1,242,454	1,266,370
Percent Change		10%	6.9%	1%	7%	0.4%	1%	5%	3%	2%
Wastewater	1,114,072	1,289,480	1,292,527	1,257,897	1,405,208	1,410,487	1,427,257	1,499,075	1,549,229	1,580,906
Percent Change		16%	0.2%	-3%	12%	0.4%	1%	5%	3%	2%



**Figure 4**

**Methodology**

There are two classes of water customers: Inside the City and Outside the City. There are four classes of wastewater customers: Inside the City, Outside the City, Multiple Housing, and Metered (however, the latter two classes are billed the same as Inside the City). A review and analysis of the previous five years of data (FY 2016-2020) provide a reasonable basis for making projections over the next five years (FY 2021-2025) concerning customer growth, usage, and revenue. A work session was held with the City’s Mayor, City Recorder, other City staff, and the City’s consulting engineer to make the projections for each class of customers.

In addition to the legal restrictions limiting customer growth, the amount of usage and revenue varies due to weather conditions and customers implementing water conservation measures. Changes in commercial and industrial practices could also impact water and wastewater usage and revenue. **Figures 2 and 4** show both a spreadsheet and graphical representation of the number of water and wastewater customers and related revenue.

## Water Bought, Water Sold, and Non-Revenue Water

The City is required to include an AWWA water audit form in its annual financial audit report. Data from this form indicates the percent of non-revenue water was 32% in FY 2016, decreased to 28% in FY 2017, but then increased again in FY 2020, to 32%. The amount of water loss or non-revenue water in FY 2020 was 68 million gallons. The cost of this water loss, using the 2020 Springfield rate of \$4.67 per 1,000 gallons is \$317,560.

The following is a comparison of the City's water loss with the water losses reported by other utility systems:

	Water Loss By Volume	Water Loss By Cost
Whitehouse UD	20%	11%
Clarksville	25%	7%
Pleasant View UD	28%	10%
Greenbrier	32%	20%
Gallatin	38%	6%
Springfield	44%	11%

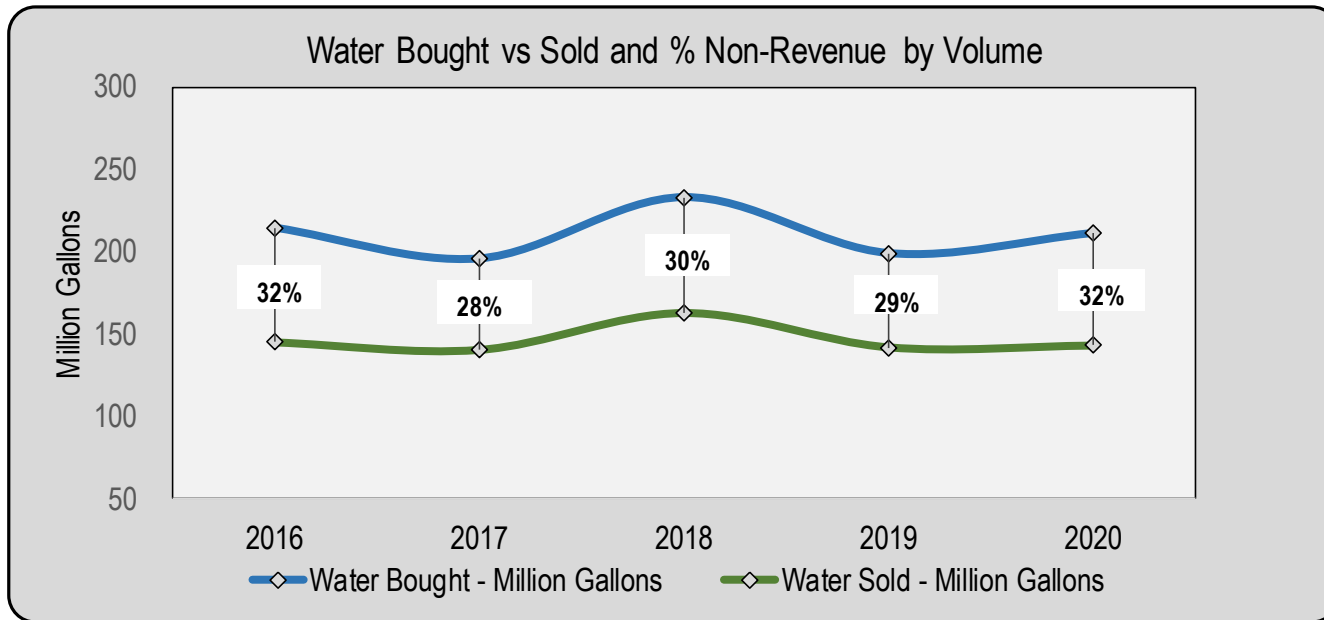
Non-revenue water includes apparent losses and real losses. Apparent losses include all types of inaccuracies associated with customer metering and unauthorized consumption (theft or illegal use). Real losses include physical water losses from leaks in the pressurized system (water mains and customer service connections) and the utility's storage tanks. Unbilled and unmetered water use, such as flushing lines, is considered an authorized consumption. Inaccurate meters are also a source of lost revenue. The City has an active water loss program such that the percent of non-revenue water is expected to improve in future years.

The amount of water loss in terms of percent by volume is not regulated. However, the percentage of the non-revenue water cost to the total cost of operating the water system is regulated. The state requirement for non-revenue water is based on the percent of the cost for non-revenue water to the cost of operating the water system, including operation and maintenance costs, debt service (principal and interest), and depreciation. The percent of the cost of non-revenue water to the cost of operating the water system has ranged from 17% to 24%. The state law regulating this requires the non-revenue water percentage to be less than 20%. The City has been cited for violating this requirement in the past.

The City's "water loss by cost" is higher than the other comparison utilities because it is the only utility without its own water source.

**Figure 5** is a table showing the amount of water bought, water sold, and the percent of non-revenue water by volume and cost. A graph is also shown to present a visual relationship between the amount of water bought and sold.

Water Loss Data					
	2016	2017	2018	2019	2020
Water Bought - Million Gallons	215	196	233	199	211
<i>Percent Change</i>		-9%	19%	-15%	6%
Water Sold - Million Gallons	145	140	163	142	143
<i>Percent Change</i>		-3%	16%	-13%	1%
Non-Revenue Water					
Non-Revenue Water - Million Gallons	70	56	70	57	68
<i>Percent Non-Revenue by Volume</i>	32%	28%	30%	29%	32%
<i>Percent Non-Revenue by Cost</i>	24%	20%	22%	17%	20%
<i>Percent Non-Revenue by Cost Requirement</i>	25%	20%	20%	20%	20%



**Figure 5**

## Capital Improvement Plan

### Overview

A Capital Improvement Plan (CIP) is an unaudited planning document used to identify needed capital improvements and other assets, along with methods of financing. Capital assets are defined by the City as assets with an initial individual cost of \$3,000 or more and a useful life of more than two years. The City defines infrastructure capital assets as an initial cost of more than \$500 for Land, \$10,000 for Buildings, \$5,000 for Improvements other than Buildings, \$5,000 for Machinery, Equipment, and Vehicles, and an estimated useful life over one year. Donated fixed assets are valued at their estimated fair value on the date granted. The costs of routine maintenance and repairs that do not add to the asset's value or materially extend asset lives are not capitalized.

### Anticipated projects

The City's Water and Wastewater CIPs are shown in **Figures 6a** and **b**. Anticipated capital improvements and other capital assets, estimated cost, proposed financing, and the year in which each expense would occur are shown for both water and wastewater.

### Financing Future Expenditures

For the Water CIP, capital improvement projects are to be financed by way of developer contributions in aid of construction and available cash. For the Wastewater CIP, financing includes one Public Building Authority note, one Capital Outlay Note, and two State Revolving Fund Loans, as well as developer contributions and available cash.

Water Capital Improvement Plan (CIP)								
Project	Est Cost	Financed Via:		Cost incurred by Year				
		Cash	Developers	2021	2022	2023	2024	2025
Westbrook	175,000		175,000		175,000			
Cattle Trail	225,000		225,000		225,000			
Miscellaneous	50,000	50,000		10,000	10,000	10,000	10,000	10,000
<b>Total</b>	<b>450,000</b>	<b>50,000</b>	<b>400,000</b>	<b>10,000</b>	<b>410,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>
<b>Total Less Developers</b>	<b>50,000</b>	<b>50,000</b>	<b>0</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>

	2016	2017	2018	2019	2020
Prior Years' Capital Expenses	-	-	-	-	-

**Figure 6a**



Wastewater Capital Improvement Plan (CIP)										
Project	Est Cost	Financed via:			Cost Incurred by Year					
		Cash	Developers	Loan	2021	2022	2023	2024	2025	
Sewer Lift Stations	400,000			400,000	400,000					
2021 Sewer Rehab	1,046,000			1,046,000	1,046,000					
Sewer Rehab	3,000,000			3,000,000		500,000	1,250,000	1,250,000		
WWTP Screening & Disinfection	1,000,000			1,000,000		500,000	500,000			
PS Upgrades & Rennovations	600,000			600,000		150,000	150,000	150,000	150,000	
WWTP Solids Handling	1,000,000			1,000,000						1,000,000
Westbrook	250,000		250,000			250,000				
Cattle Trail	350,000		350,000			350,000				
Miscellaneous	50,000	50,000			10,000	10,000	10,000	10,000	10,000	10,000
<b>Total</b>	<b>7,696,000</b>	<b>50,000</b>	<b>600,000</b>	<b>7,046,000</b>	<b>1,456,000</b>	<b>1,760,000</b>	<b>1,910,000</b>	<b>1,410,000</b>	<b>1,160,000</b>	
<b>Total Less Developers</b>	<b>7,096,000</b>	<b>50,000</b>	<b>0</b>	<b>7,046,000</b>	<b>1,456,000</b>	<b>1,160,000</b>	<b>1,910,000</b>	<b>1,410,000</b>	<b>1,160,000</b>	
					2016	2017	2018	2019	2020	Avg
Prior Years' Capital Expenses and Average					139,937	2,334,255	1,382,741	733,976	1,299,417	1,178,065

Figure 6b

**Other Considerations**

The CIP can serve as a planning document and should be reviewed and updated annually. The plan should cover at least five years and include all significant capital expenditures or contributions. The CIP can also help in developing annual budgets that include depreciation as an expense.

## Depreciation

### Overview

Depreciation is a reduction in the value of an asset over time due to wear and tear. Although depreciation is listed as an expense, it is not paid out to anyone. Still, it remains within the City's cash reserves. Funding depreciation is a process compelling the City to accumulate cash. Over time the accumulated depreciation equals the value of money initially spent on each capital asset. This process allows the City to have enough funds for financing new capital improvements or replacing depreciated assets.

### Requirement

Tennessee state law requires that all utility systems depreciate capital assets. The Governmental Accounting Standards Board (GASB) requires depreciation to be included in the "Statement of Revenues, Expenses, and Change in Net Position" section of the audit report as an operating expense. Therefore, the utility must provide sufficient revenue to "fund" the depreciation expense.

### Calculating the costs

There are several methods of determining depreciation; the "straight line" method is used by the City. The calculation is simply dividing the cost of an asset by its useful life. As noted in the City's audit report, the estimated useful lives for Water and Sewer Plant are 10-50 years; the estimated useful lives for Machinery, Equipment, and Vehicles are 5-20 years.

The depreciation schedule is a listing of each asset, its original cost, the year it went into service, and its useful life. Based on this information, an annual depreciation amount is determined. The accumulated depreciated amount is calculated, and the book value is determined. When the accumulated depreciated amount equals the original cost, the book value goes to zero. The annual amount of depreciation also goes to zero. Unless new assets are added, the total yearly depreciation will either stay the same or eventually go away.

### Other considerations

It is important to note that all assets are to be depreciated regardless of financing methods, even if they are acquired with grants or purchased by developers. An asset begins to depreciate when placed into service, not when it is bought or under construction.

**Figures 7a-c** show simplified depreciation schedules for water, wastewater, and in total. Each schedule shows depreciation for the past five years and projections for the next five. Without any additions to either system's fixed assets, the water system's scheduled depreciation decreases from \$62,186 in FY 2021 to \$48,696 in FY 2025. Similarly, the wastewater system's scheduled depreciation decreases from \$348,896 in FY 2021 to \$345,884 in FY 2025. However, new additions proposed in the CIP over the next five years will add \$13,000 in new water depreciation and \$176,000 in new wastewater depreciation, resulting in \$189,000 of additional depreciation in FY2025.

Water Depreciation										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Scheduled Depreciation	62,129	66,482	67,223	63,174	62,186	<b>62,186</b>	<b>61,566</b>	<b>55,746</b>	<b>50,546</b>	<b>48,696</b>
Five-Year CIP Depreciation						<b>1,000</b>	<b>10,000</b>	<b>11,000</b>	<b>12,000</b>	<b>13,000</b>
<b>Total Depreciation</b>	<b>62,129</b>	<b>66,482</b>	<b>67,223</b>	<b>63,174</b>	<b>62,186</b>	<b>63,186</b>	<b>71,566</b>	<b>66,746</b>	<b>62,546</b>	<b>61,696</b>

Figure 7a

Wastewater Depreciation										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Scheduled Depreciation	163,272	174,710	176,658	166,017	305,329	<b>348,896</b>	<b>348,896</b>	<b>348,896</b>	<b>348,246</b>	<b>345,884</b>
Five-Year CIP Depreciation						<b>17,000</b>	<b>61,750</b>	<b>110,250</b>	<b>146,250</b>	<b>176,000</b>
<b>Total Depreciation</b>	<b>163,272</b>	<b>174,710</b>	<b>176,658</b>	<b>166,017</b>	<b>305,329</b>	<b>365,896</b>	<b>410,646</b>	<b>459,146</b>	<b>494,496</b>	<b>521,884</b>

Figure 7b

Total Depreciation										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Scheduled Depreciation	225,401	241,192	243,881	229,191	367,515	<b>411,082</b>	<b>410,462</b>	<b>404,642</b>	<b>398,792</b>	<b>394,579</b>
Five-Year CIP Depreciation						<b>18,000</b>	<b>71,750</b>	<b>121,250</b>	<b>158,250</b>	<b>189,000</b>
<b>Total Depreciation</b>	<b>225,401</b>	<b>241,192</b>	<b>243,881</b>	<b>229,191</b>	<b>367,515</b>	<b>429,082</b>	<b>482,212</b>	<b>525,892</b>	<b>557,042</b>	<b>583,579</b>

Figure 7c

Figures 8a-c provide graphical representations of the water and wastewater depreciation schedules.

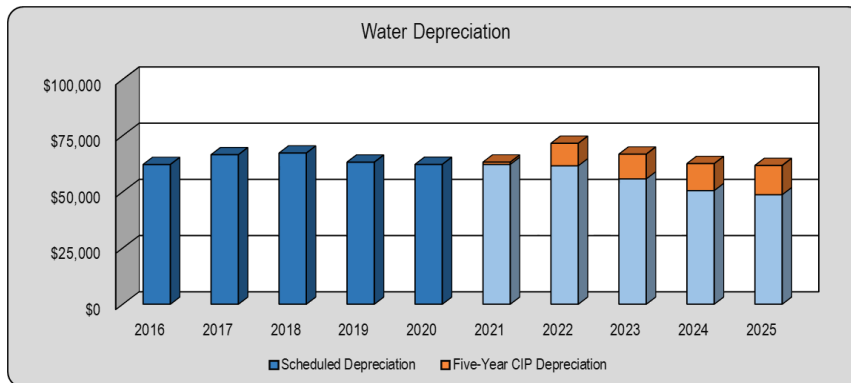


Figure 8a

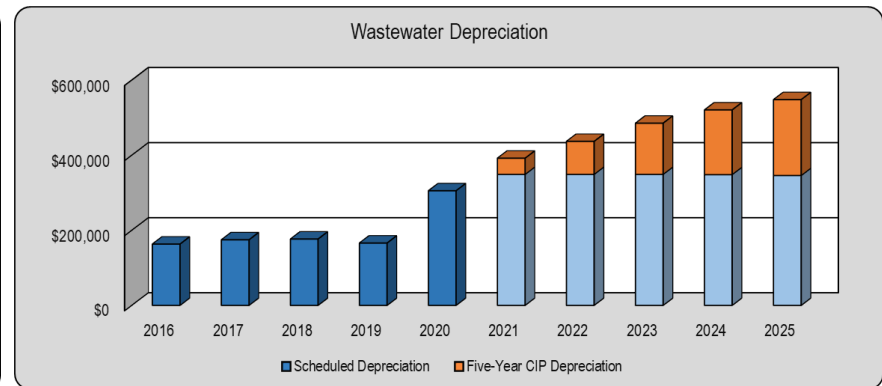


Figure 8b

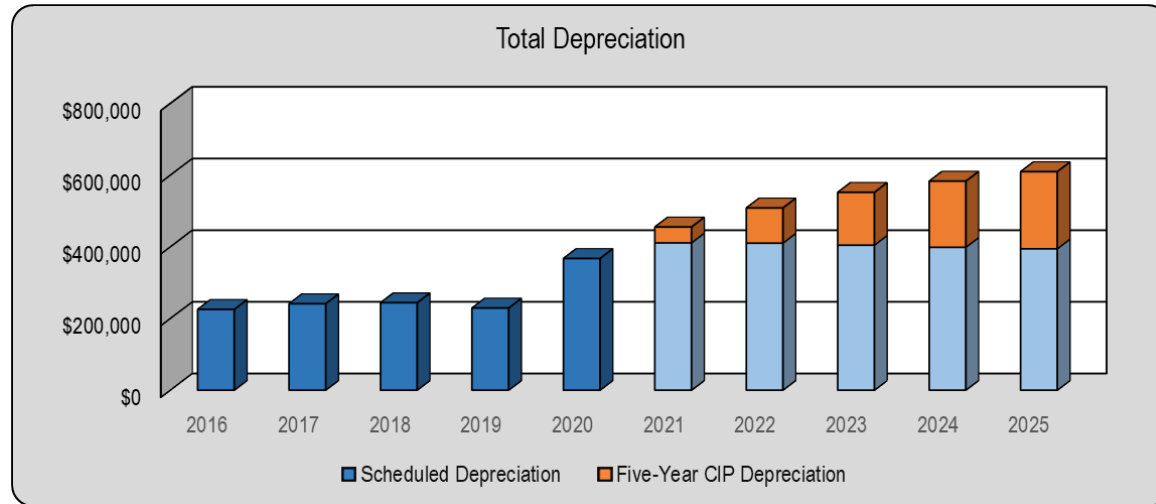


Figure 8c

## Debt Service

### Overview

The City currently pays principal and interest on five State Revolving Fund (SRF) loans dedicated to Wastewater projects. The Wastewater CIP anticipates that future projects' financing will be performed via one Public Building Authority (PBA) note, one Capital Outlay Note (CON), and two more State Revolving Fund (SRF) loans in FY 2022 and FY 2025.

### Methodology

Funding debt service impacts both the cash flow and the change in net position analyses. Both principal and interest are included in the Cash Flow Analysis. Only the interest amount is included in the Change in Net Position Analysis.

### Wastewater Debt Service

The wastewater system debt service schedule is shown in **Figure 9**.

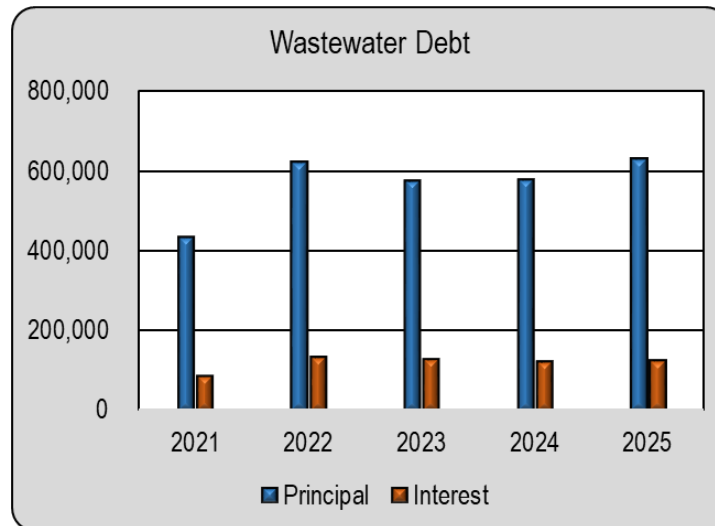
### Other Considerations

The principal and interest debt schedule can be a resource when developing an annual budget.

**Wastewater Debt Servicing Schedule:**

Current Wastewater Debt										
SRF 99-124		SRF 01-152		SRF 16-370		SRF 16-371		SRF 17-380		
Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	
2021	101,880	3,144	4,740	252	62,424	3,396	108,365	5,951	102,090	10,233
2022	52,081	444	4,860	132	62,628	3,192	108,712	5,603	102,622	9,701
2023			3,058	18	62,832	2,988	109,060	5,255	103,157	9,166
2024					63,024	2,796	109,410	4,906	103,695	8,629
2025					63,228	2,592	109,760	4,555	104,235	8,088

Current Wastewater Debt			Proposed Wastewater Debt				Total				
PBA Bond		CON 2020		SRF 4,600,000		SRF 1,000,000		Total Wastewater Debt			
Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Total	
2021	55,000	59,175			4,722			434,499	86,873	521,372	
2022	56,000	57,510	28,700	10,374	208,910	46,000		624,513	132,956	757,469	
2023	58,000	55,800	29,500	9,591	211,000	43,911		576,607	126,729	703,335	
2024	60,000	54,030	30,200	8,788	213,110	41,801		579,439	120,950	700,388	
2025	62,000	52,200	31,100	7,964	215,241	39,670	45,415	10,000	630,979	125,069	756,048



**Figure 9**

## General Expenses

### Overview

General expenses are listed in the annual audit report's "Statement of Revenues, Expenses, and Changes in Net Position" page. Items such as water purchased, general administration, salaries and benefits, utilities, repair and maintenance, and other expenses are included. Depreciation is an expense and is included in the Change in Net Position Analysis. However, because depreciation is a non-cash expense, it is not shown as an expense in the Cash Flow Analysis.

### Methodology

Work sessions were held with the City's staff to make projections of each expense line item listed. The amounts for the previous five years, as well as management's sense of any future changes, were used in determining expense projections for the next five years.

### Analysis

Although the total general expenses have varied over the past five years, the staff's consensus is that most future water system expenses will increase about 2 to 4% per year for FY 2021-2025. However, the most significant single water expense is the cost of water purchased from the City of Springfield (with rate increases averaging 8.8% over the past six years). The City of Springfield has recently indicated to City management that they will set rates for 2022 at 2% and thereafter will rely on a rate study to be performed by Municipal Technical Advisory Service (MTAS). **Figure 10** shows a summary of the water, wastewater, and total expenses with a graphical representation.

### Other Considerations

For a small city like Greenfield, operating expenses can vary widely from year to year. A significant repair item or the need to buy large quantities of materials & supplies can make a difference in general expenses. A considerable, unexpected expense would have a negative impact on the Cash Flow and the Change in Net Position.

Water Expenses										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water Purchased	701,004	733,277	798,868	858,762	975,913	1,065,007	1,093,987	1,150,592	1,198,904	1,239,181
General Administration	87,062	126,308	112,175	129,658	165,370	171,984	178,864	186,018	193,459	201,197
Salaries	109,201	167,294	181,059	177,096	265,539	270,850	276,267	281,792	287,428	293,177
Utilities	7,733	6,531	10,136	7,343	5,743	7,490	7,640	7,792	7,948	8,107
Supplies	30,803	26,595	15,965	31,476	33,516	34,186	34,870	35,567	36,279	37,004
Contractual Services	8	5	0	0	3,314	3,314	3,380	3,448	3,517	3,587
Repairs and Maintenance	13,623	18,077	14,689	18,218	41,362	40,000	41,200	42,436	43,709	45,020
<b>Total</b>	<b>949,435</b>	<b>1,078,087</b>	<b>1,132,892</b>	<b>1,222,553</b>	<b>1,490,757</b>	<b>1,592,832</b>	<b>1,636,207</b>	<b>1,707,646</b>	<b>1,771,244</b>	<b>1,827,274</b>
<i>Percent Change</i>		14%	5%	8%	22%	7%	3%	4%	4%	3%

Wastewater Expenses										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
General Administration	217,684	268,742	293,228	287,312	311,592	327,171	343,530	360,706	378,741	397,678
Salaries	170,147	175,252	194,440	185,668	254,290	267,005	280,355	294,372	309,091	324,546
Utilities	143,143	143,983	169,116	176,377	192,584	196,436	200,364	204,372	208,459	212,628
Supplies	64,448	71,997	50,799	61,401	105,082	107,184	109,327	111,514	113,744	116,019
Contractual Services	6,651	1,780	4,345	8,526	3,494	2,000	2,040	2,081	2,122	2,165
Repairs and Maintenance	117,714	91,338	166,680	193,675	271,057	276,478	282,008	287,648	293,401	299,269
<b>Total</b>	<b>719,786</b>	<b>753,092</b>	<b>878,608</b>	<b>912,959</b>	<b>1,138,099</b>	<b>1,176,273</b>	<b>1,217,624</b>	<b>1,260,693</b>	<b>1,305,559</b>	<b>1,352,305</b>
<i>Percent Change</i>		5%	17%	4%	25%	3%	4%	4%	4%	4%

Total Water and Wastewater Expenses										
<b>Total Expenses</b>	<b>1,669,221</b>	<b>1,831,179</b>	<b>2,011,499</b>	<b>2,135,511</b>	<b>2,628,855</b>	<b>2,769,105</b>	<b>2,853,831</b>	<b>2,968,339</b>	<b>3,076,803</b>	<b>3,179,579</b>
<i>Percent Change</i>		10%	10%	6%	23%	5%	3%	4%	4%	3%

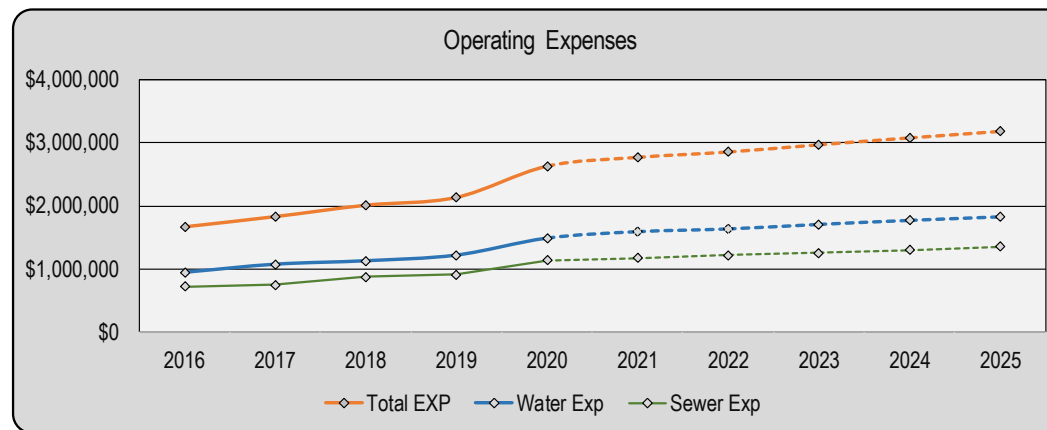


Figure 10

## Cash Flow Analysis with No Rate Increases

### Overview

It is essential for the City to know the amount of cash it has on hand and whether its cash reserves are growing or being depleted. Cash is necessary to pay for the utility's operational and maintenance needs, debt service payments, and capital expenditures to preserve its infrastructure. Also, cash is needed to retain its staff, deliver services to customers, and maintain a healthy cash reserve. Therefore, it is vital to predicting its anticipated expenditures and how much cash the City expects to receive from its customers and other sources. Such an examination is called a Cash Flow Analysis. If the projected Cash Flow reaches an amount detrimental to the City's water and/or wastewater operations, then rate increase(s) are needed.

### Methodology

The Cash Flow Analysis is configured like a cash budget showing the amount of cash at the beginning of the fiscal year, the amount of income (including customer charges and other income), general expenses, and debt payment. The Cash Flow Analysis does not include depreciation as an expense. Adding income and subtracting expenses provides the amount of cash generated by normal operations. Loan proceeds and contributions such as tap and connection fees reflect cash available to finance capital expenses which are then subtracted. Any remaining cash is added to the cash reserves. The City operates on an accrual accounting basis, so an accrual adjustment line item is added to facilitate balancing to the actual cash amount at the end of the year. It is difficult to project the accrual adjustment (reconciliation of operating income) in future years, so it is not included in the projected years. The cash balance at the end of one year becomes the amount of cash available at the beginning of the following year.

The Cash Flow Analysis is first developed for each system – water and wastewater – and is then combined. Each of these versions is first shown without any new rate increases. Doing so provides a basis for understanding each system's current rates' effectiveness separately and in total. These results thus aid in determining the need for future rate increases to each system.

### Water Cash Flow – with No Rate Increase

**Figure 11** shows the water system's Cash Flow Analysis with no rate increases over the next five years. Since FY 2016, the Income less Expenses line has been negative, indicating that the water rates have been insufficient to support the water expenses. More specifically, in both FY 2019 and 2020, the deficit of water cash generated by operations (Income Less Expenses) more than doubled. The water system's Cash Flow Analysis indicates a continuing significant deficit for FY 2021-2025.

### Wastewater Cash Flow – with No Rate Increase

**Figure 12** shows the wastewater system's Cash Flow Analysis with no new rate increases. This analysis also indicates significantly insufficient wastewater cash flows for FY 2020-2025.

### Combined (Water and Wastewater) Cash Flow – with No Rate Increase

**Figure 13** shows the combined Cash Flow Analysis with no new rate increases. Based on the above separate cash flow analyses, it is not surprising that there exist significantly insufficient combined net cash flows for FY 2020-2025. **Figure 14** shows a graph of the combined systems' Cash Flow Analyses with no future rate increases.



### Water Cash Flow – with No Rate Increase

Water Cash Flow - No Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cash Beginning Jul 1	359,537	354,617	384,283	234,060	156,758	0	0	0	0	0
Revenue / Income										
Charges for Services	901,496	989,747	1,057,739	1,063,099	1,133,708	1,137,694	1,150,359	1,204,588	1,242,454	1,266,370
Other Income	3,159	3,139	8,469	4,988	10,075	10,579	5,044	980	979	978
Total Income	904,655	992,886	1,066,208	1,068,087	1,143,783	1,148,273	1,155,403	1,205,568	1,243,433	1,267,348
Expenses										
Operating Exp w/o Deprec Debt	949,435	1,078,087	1,132,892	1,222,553	1,490,757	1,592,832	1,636,207	1,707,646	1,771,244	1,827,274
Total Expenses	949,435	1,078,087	1,132,892	1,222,553	1,490,757	1,592,832	1,636,207	1,707,646	1,771,244	1,827,274
Income Less Expenses	(44,780)	(85,201)	(66,684)	(154,465)	(346,973)	(444,559)	(480,804)	(502,078)	(527,811)	(559,926)
Capital Financing										
Loans										
Tap Fees from Customers	45,100	93,100	61,700	72,100	67,500	15,375	7,688	138,375	146,063	92,250
Total Capital Financing	45,100	93,100	61,700	72,100	67,500	15,375	7,688	138,375	146,063	92,250
Capital Expenses										
Capital Expenses						10,000	10,000	10,000	10,000	10,000
Water Net Cash Flow										
Annual Gain - (Loss)	320	7,899	(4,984)	(82,365)	(279,473)	(439,184)	(483,117)	(373,703)	(391,748)	(477,676)
Accrual Adjustment	(5,240)	21,768	(145,239)	5,063	78,395					
Cash Ending Jun 30	354,617	384,283	234,060	156,758						
Local Government Investment Pool	175,768	176,625	177,872	178,957	181,251	183,573	183,573	184,491	185,414	186,341

Figure 11

### Wastewater Cash Flow – with No Rate Increase

Wastewater Cash Flow - No Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cash Beginning Jul 1	359,537	588,277	624,370	1,193,074	1,518,904	1,291,973	1,021,005	476,136	140,777	0
Revenue / Income										
Charges for Services	1,114,072	1,289,480	1,292,527	1,257,897	1,405,208	1,410,487	1,427,257	1,499,075	1,549,229	1,580,906
Other Income	3,248	3,394	9,729	5,535	10,278	10,814	5,280	1,220	1,221	1,222
Total Income	1,117,320	1,292,874	1,302,256	1,263,432	1,415,486	1,421,302	1,432,537	1,500,295	1,550,450	1,582,127
Expenses										
Operating Exp w/o Deprec	719,786	753,092	878,608	912,959	1,138,099	1,176,273	1,217,624	1,260,693	1,305,559	1,352,305
Debt	110,016	111,025	278,484	325,194	409,831	521,372	757,469	703,335	700,388	756,048
Total Expenses	829,802	864,117	1,157,092	1,238,153	1,547,930	1,697,645	1,975,093	1,964,028	2,005,947	2,108,353
Income Less Expenses	287,518	428,757	145,165	25,279	(132,444)	(276,343)	(542,556)	(463,734)	(455,497)	(526,226)
Capital Financing										
Loans	0	1,826,722	3,010,049	951,465	1,024,835	1,446,000	1,150,000	1,900,000	1,400,000	1,150,000
Tap Fees from Customers	86,400	93,100	103,386	78,000	101,700	15,375	7,688	138,375	146,063	92,250
Total Capital Financing	86,400	1,919,822	3,113,435	1,029,465	1,126,535	1,461,375	1,157,688	2,038,375	1,546,063	1,242,250
Capital Expenses										
Capital Expenses	139,937	2,334,255	1,382,741	733,976	1,299,417	1,456,000	1,160,000	1,910,000	1,410,000	1,160,000
Wastewater Net Cash Flow										
Annual Gain - (Loss)	233,981	14,324	1,875,859	320,768	(305,326)	(270,968)	(544,869)	(335,359)	(319,435)	(443,976)
Accrual Adjustment	(5,240)	21,768	(1,307,155)	5,063	78,395					
Cash Ending Jun 30	588,277	624,370	1,193,074	1,518,904	1,291,973	1,021,005	476,136	140,777	0	0
Local Government Investment Pool	175,768	176,625	177,872	178,957	181,251	183,573	183,573	184,491	185,414	186,341

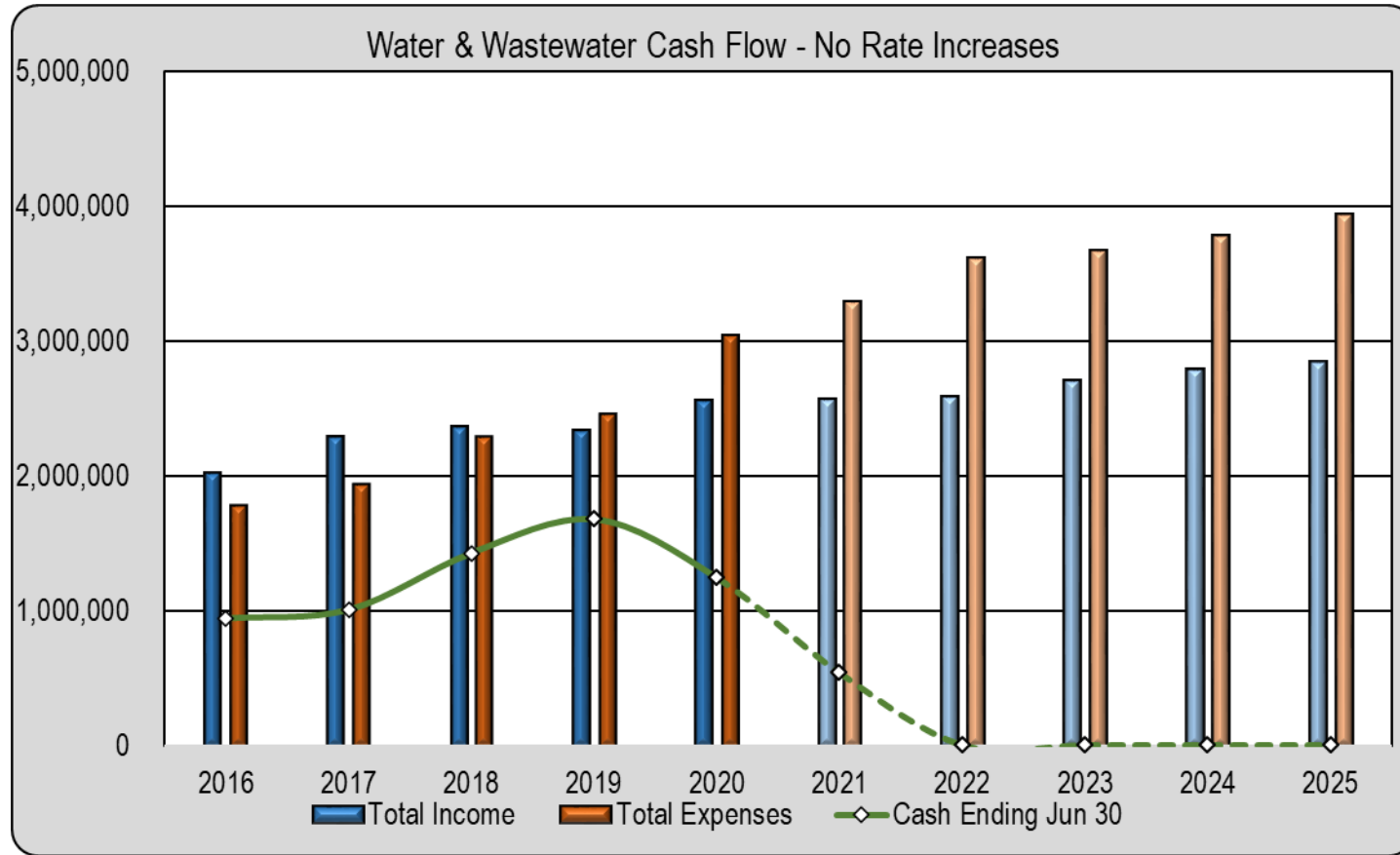
Figure 12

**Combined (Water and Wastewater) Cash Flow – with No Rate Increase**

Water and Wastewater Cash Flow - No Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cash Beginning Jul 1	719,073	942,894	1,008,653	1,427,134	1,675,662	1,247,652	537,500	0	0	0
Revenue / Income										
Charges for Services	2,015,568	2,279,227	2,350,266	2,320,996	2,538,916	2,548,181	2,577,616	2,703,663	2,791,683	2,847,275
Other Income	6,407	6,533	18,198	10,523	20,353	21,393	10,324	2,200	2,200	2,200
Total Income	2,021,975	2,285,760	2,368,464	2,331,519	2,559,269	2,569,574	2,587,940	2,705,863	2,793,883	2,849,475
Expenses										
Operating Exp w/o Deprec	1,669,221	1,831,179	2,011,499	2,135,511	2,628,855	2,769,105	2,853,831	2,968,339	3,076,803	3,179,579
Debt	110,016	111,025	278,484	325,194	409,831	521,372	757,469	703,335	700,388	756,048
Total Expenses	1,779,237	1,942,204	2,289,983	2,460,705	3,038,686	3,290,477	3,611,300	3,671,675	3,777,192	3,935,627
Income Less Expenses	242,738	343,556	78,481	(129,186)	(479,417)	(720,902)	(1,023,360)	(965,812)	(983,308)	(1,086,152)
Capital Financing										
Loans	0	1,826,722	3,010,049	951,465	1,024,835	1,446,000	1,150,000	1,900,000	1,400,000	1,150,000
Tap Fees from Customers	131,500	186,200	165,086	150,100	169,200	30,750	15,375	276,750	292,125	184,500
Total Capital Financing	131,500	2,012,922	3,175,135	1,101,565	1,194,035	1,476,750	1,165,375	2,176,750	1,692,125	1,334,500
Capital Expenses										
Capital Expenses	139,937	2,334,255	1,382,741	733,976	1,299,417	1,466,000	1,170,000	1,920,000	1,420,000	1,170,000
Water and Wastewater Net Cash Flow										
Annual Gain - (Loss)	234,301	22,223	1,870,875	238,403	(584,799)	(710,152)	(1,027,985)	(709,062)	(711,183)	(921,652)
Accrual Adjustment	(10,480)	43,536	(1,452,394)	10,125	156,789					
Cash Ending Jun 30	942,894	1,008,653	1,427,134	1,675,662	1,247,652	537,500	0	0	0	0
Local Government Investment Pool	351,536	353,249	355,744	357,914	362,501	367,147	367,147	368,983	370,827	372,682

**Figure 13**

**Combined (Water and Wastewater) Cash Flow Graph – with No Rate Increase.**



**Figure 14**

**Recommendation**

Given the future cash deficit, significant rate increases will be needed for both systems.

**Other considerations**

Having a better understanding of cash flow and the accumulation of cash or depletion of cash can help develop a multi-year Capital Improvement Plan and financing of future projects.

## Change in Net Position Analysis with No Rate Increases

### Overview

Net position is generally defined as assets less liabilities. The City's assets include all cash, land, and the "net value" of everything it owns necessary to the utility's operation. The net value of a capital asset is defined as its original cost less its accumulated depreciation. Liabilities include items such as outstanding loans and bonds if the City should need financing. Each year there is a change in net position because the amount of cash changes with increasing or decreasing revenues and expenses. The net capital asset value changes because of new capital assets being purchased, and capital assets being depreciated. The Change in Net Position is calculated in a section of the City's audit report called "Statement of Revenues, Expenses, and Changes in the Net Position." The Change in Net Position Analysis in this report contains the same data and information in that section of the audit report.

### Methodology

The Change in Net Position Analysis is different from the Cash Flow Analysis because it includes depreciation as an operating expense. However, it does not include capital expenses. Also, the change in net position does not flow from one year to the next like the cash flow; instead, it is calculated each year. TCA § 68-221-1010 states the City is subject to actions by the Water and Wastewater Financing Board if the water and wastewater systems' combined change in net position is negative for two consecutive years.

The Change in Net Position Analysis is first developed for each system – water and wastewater – and is then combined. Each of these versions is first shown without any new rate increases. This approach provides a basis for understanding the current rates' effectiveness on each system and the need for future rate increases.

### Water Change in Net Position – with No Rate Increase

**Figure 15** shows the water system's Change in Net Position Analysis with no rate increases over the next five years. Since FY 2016, the water system's Change in Net Position has been negative and becomes increasingly worse in the future.

### Wastewater Change in Net Position – with No Rate Increase

**Figure 16** shows the wastewater system's Change in Net Position Analysis with no new rate increases. This analysis indicates that in FY 2020 and FY 2021, the Change in Net Position was (and will be) been negative, then improves moderately, before beginning to decline once more.

### Combined (Water and Wastewater) Change in Net Position – with No Rate Increase

**Figure 17** shows the combined (water and wastewater) Change in Net Position Analysis with no new rate increases. Due to the first instance of having two consecutive years of negative Change in Net Position (FY 2019 and FY 2020), the City is considered in violation of state law. However, even more, concerning is that without correction, this condition will continue till at least FY 2025. **Figure 17** also shows a graph of the Combined Change in Net Position Analysis, with no future rate increases.

**Water Change in Net Position (with no future rate increases):**

Water Change in Net Position - No Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Revenue / Income</b>										
Charges for Services	901,496	989,747	1,057,739	1,063,099	1,133,708	1,137,694	1,150,359	1,204,588	1,242,454	1,266,370
Other Income	3,683	3,581	9,326	5,800	11,528	6,211	3,234	980	979	978
Total Water Income	905,179	993,328	1,067,065	1,068,899	1,145,236	1,143,905	1,153,593	1,205,568	1,243,433	1,267,348
<b>Expenses</b>										
Operating Exp w/o Deprec	949,435	1,078,087	1,132,892	1,222,553	1,490,757	1,592,832	1,636,207	1,707,646	1,771,244	1,827,274
Depreciation	62,129	66,482	67,223	63,174	62,186	63,186	71,566	66,746	62,546	61,696
Interest Expense										
Total Water Expenses	1,011,564	1,144,569	1,200,115	1,285,727	1,552,942	1,656,017	1,707,773	1,774,392	1,833,790	1,888,970
Income Less Expenses	(106,386)	(151,241)	(133,049)	(216,827)	(407,706)	(512,112)	(554,180)	(568,824)	(590,357)	(621,622)
<b>Change in Net Position</b>										
Change in Net Position (2017 Statute)	(106,386)	(151,241)	(133,049)	(216,827)	(407,706)	(512,112)	(554,180)	(568,824)	(590,357)	(621,622)

Figure 15

**Wastewater Change in Net Position (with no future rate increases):**

Wastewater Change in Net Position - No Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Revenue / Income</b>										
Charges for Services	1,114,072	1,289,480	1,292,527	1,257,897	1,405,208	1,410,487	1,427,257	1,499,075	1,549,229	1,580,906
Other Income	4,130	4,665	11,397	6,863	13,412	7,701	4,012	1,220	1,221	1,222
Total Wastewater Income	1,118,202	1,294,145	1,303,924	1,264,760	1,418,620	1,418,188	1,431,269	1,500,295	1,550,450	1,582,127
<b>Expenses</b>										
Operating Exp w/o Deprec	719,786	753,092	878,608	912,959	1,138,099	1,176,273	1,217,624	1,260,693	1,305,559	1,352,305
Depreciation	163,272	174,710	176,658	166,017	305,329	392,046	436,796	485,296	520,646	548,034
Interest Expense	17,784	16,069	26,554	29,365	32,635	86,873	132,956	126,729	120,950	125,069
Total Wastewater Expenses	900,842	943,871	1,081,819	1,108,340	1,476,063	1,655,192	1,787,376	1,872,718	1,947,155	2,025,408
Income Less Expenses	217,361	350,274	222,104	156,419	(57,443)	(237,004)	(356,107)	(372,423)	(396,705)	(443,280)
<b>Change in Net Position</b>										
Change in Net Position (2017 Statute)	217,361	350,274	222,104	156,419	(57,443)	(237,004)	(356,107)	(372,423)	(396,705)	(443,280)

Figure 16

**Combined (Water and Wastewater) Change in Net Position (with no future rate increases):**

Water & Wastewater Change in Net Position - No Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue / Income										
Charges for Services	2,015,568	2,279,227	2,350,266	2,320,996	2,538,916	2,548,181	2,577,616	2,703,663	2,791,683	2,847,275
Other Income	7,813	8,246	20,723	12,663	24,940	13,912	7,246	2,200	2,200	2,200
<b>Total Income</b>	<b>2,023,381</b>	<b>2,287,473</b>	<b>2,370,989</b>	<b>2,333,659</b>	<b>2,563,856</b>	<b>2,562,093</b>	<b>2,584,861</b>	<b>2,705,863</b>	<b>2,793,883</b>	<b>2,849,475</b>
Expenses										
Operating Exp w/o Deprec	1,669,221	1,831,179	2,011,499	2,135,511	2,628,855	2,769,105	2,853,831	2,968,339	3,076,803	3,179,579
Depreciation	225,401	241,192	243,881	229,191	367,515	455,232	508,362	552,042	583,192	609,729
Interest Expense	17,784	16,069	26,554	29,365	32,635	86,873	132,956	126,729	120,950	125,069
<b>Total Expenses</b>	<b>1,912,406</b>	<b>2,088,440</b>	<b>2,281,934</b>	<b>2,394,067</b>	<b>3,029,005</b>	<b>3,311,209</b>	<b>3,495,149</b>	<b>3,647,110</b>	<b>3,780,945</b>	<b>3,914,377</b>
<b>Income Less Expenses</b>	<b>110,975</b>	<b>199,033</b>	<b>89,055</b>	<b>(60,408)</b>	<b>(465,149)</b>	<b>(749,116)</b>	<b>(910,287)</b>	<b>(941,247)</b>	<b>(987,062)</b>	<b>(1,064,902)</b>
Change in Net Position										
<b>Change in Net Position (2017 Statute)</b>	<b>110,975</b>	<b>199,033</b>	<b>89,055</b>	<b>(60,408)</b>	<b>(465,149)</b>	<b>(749,116)</b>	<b>(910,287)</b>	<b>(941,247)</b>	<b>(987,062)</b>	<b>(1,064,902)</b>

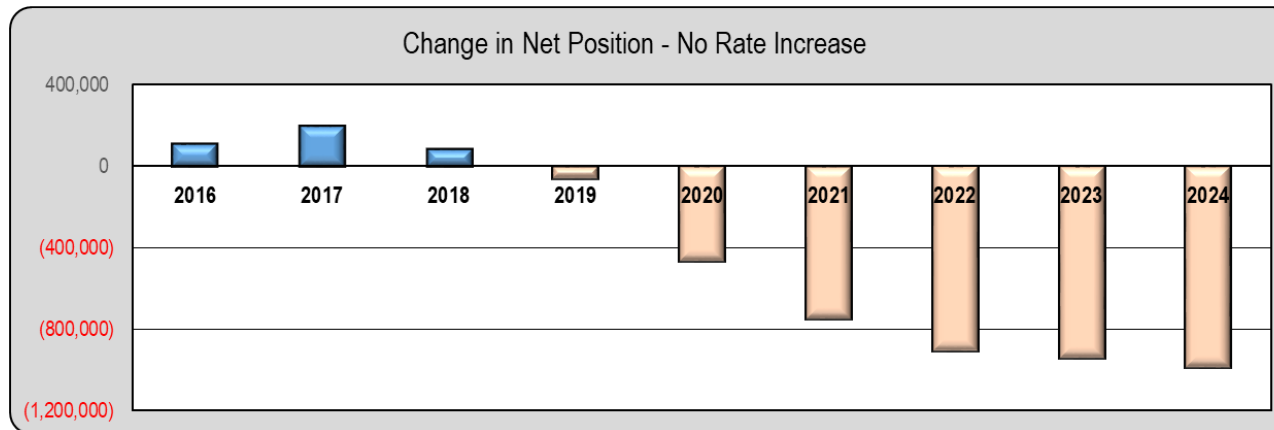


Figure 17

**Other Considerations**

The Change in Net Position Analysis is the analysis that generally controls the amount of rate increases. Annual budgets should be based on the "Statement of Revenues, Expenses, and Changes in the Net Position" format. Grants and capital contributions should be subtracted to determine the "Statutory" Change in Net Position (2017 Law).

## Rate Increase Recommendations

The combination of several factors -- significant increases in general expenses during FY 2019–2020, projected large increases in wastewater expenses (both depreciation and debt servicing due to major capital improvements), and the impact of Springfield's water rate increases – create the need for considerable water and wastewater rate increases. It is recommended to increase the water rates by 50% and increase the wastewater rates by 30%. These increases should be implemented as soon as possible. After this initial increase, the City is also recommended to raise rates by 2% in FY2025.



## Cash Flow Analyses with Recommended Rate Increases

### Water Cash Flow – with Recommended Rate Increase

Figure 18 shows the projected impact on water Cash Flow by applying a recommended water rate increase of 50% in FY 2022, and 2% in FY 2025.

Water Cash Flow - With Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cash Beginning Jul 1	359,537	354,617	384,283	234,060	156,758	0	0	92,063	320,654	550,133
Revenue / Income										
Charges for Services	901,496	989,747	1,057,739	1,063,099	1,133,708	1,137,694	1,725,538	1,806,882	1,863,681	1,937,546
<i>Rate Increase</i>							50%			2%
Other Income	3,159	3,139	8,469	4,988	10,075	10,579	5,044	980	979	978
Total Income	904,655	992,886	1,066,208	1,068,087	1,143,783	1,148,273	1,730,583	1,807,862	1,864,660	1,938,524
Expenses										
Operating Exp w/o Deprec Debt	949,435	1,078,087	1,132,892	1,222,553	1,490,757	1,592,832	1,636,207	1,707,646	1,771,244	1,827,274
Total Expenses	949,435	1,078,087	1,132,892	1,222,553	1,490,757	1,592,832	1,636,207	1,707,646	1,771,244	1,827,274
Income Less Expenses	(44,780)	(85,201)	(66,684)	(154,465)	(346,973)	(444,559)	94,376	100,216	93,416	111,250
Capital Financing										
Loans							0	0	0	0
Tap Fees from Customers	45,100	93,100	61,700	72,100	67,500	15,375	7,688	138,375	146,063	92,250
Total Capital Financing	45,100	93,100	61,700	72,100	67,500	15,375	7,688	138,375	146,063	92,250
Capital Expenses										
Capital Expenses	0	0	0	0	0	10,000	10,000	10,000	10,000	10,000
Water Net Cash Flow										
Annual Gain - (Loss)	320	7,899	(4,984)	(82,365)	(279,473)	(439,184)	92,063	228,591	229,479	193,500
Accrual Adjustment	(5,240)	21,768	(145,239)	5,063	78,395					
Cash Ending Jun 30	354,617	384,283	234,060	156,758	0	0	92,063	320,654	550,133	743,633
Local Government Investment Pool	175,768	176,625	177,872	178,957	181,251	183,573	183,573	184,491	185,414	186,341

Figure 18

### Wastewater Cash Flow – with Recommended Rate Increase

Figure 19 shows the projected impact on wastewater Cash Flow by applying a recommended wastewater rate increase of 30% in FY 2022, and 2% in FY 2025.

Wastewater Cash Flow - With Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cash Beginning Jul 1	359,537	588,277	624,370	1,193,074	1,518,904	1,291,973	1,021,005	904,314	1,018,677	1,164,011
Revenue / Income										
Charges for Services	1,114,072	1,289,480	1,292,527	1,257,897	1,405,208	1,410,487	1,855,434	1,948,797	2,013,998	2,096,281
<i>Rate Increase</i>							30%			2%
Other Income	3,248	3,394	9,729	5,535	10,278	10,814	5,280	1,220	1,221	1,222
Total Income	1,117,320	1,292,874	1,302,256	1,263,432	1,415,486	1,421,302	1,860,715	1,950,017	2,015,219	2,097,502
Expenses										
Operating Exp w/o Deprec	719,786	753,092	878,608	912,959	1,138,099	1,176,273	1,217,624	1,260,693	1,305,559	1,352,305
Debt	110,016	111,025	278,484	325,194	409,831	521,372	757,469	703,335	700,388	756,048
Total Expenses	829,802	864,117	1,157,092	1,238,153	1,547,930	1,697,645	1,975,093	1,964,028	2,005,947	2,108,353
Income Less Expenses	287,518	428,757	145,165	25,279	(132,444)	(276,343)	(114,379)	(14,011)	9,271	(10,850)
Capital Financing										
Loans	0	1,826,722	3,010,049	951,465	1,024,835	1,446,000	1,150,000	1,900,000	1,400,000	1,150,000
Tap Fees from Customers	86,400	93,100	103,386	78,000	101,700	15,375	7,688	138,375	146,063	92,250
Total Capital Financing	86,400	1,919,822	3,113,435	1,029,465	1,126,535	1,461,375	1,157,688	2,038,375	1,546,063	1,242,250
Capital Expenses										
Capital Expenses	139,937	2,334,255	1,382,741	733,976	1,299,417	1,456,000	1,160,000	1,910,000	1,410,000	1,160,000
Wastewater Net Cash Flow										
Annual Gain - (Loss)	233,981	14,324	1,875,859	320,768	(305,326)	(270,968)	(116,691)	114,364	145,334	71,400
Accrual Adjustment	(5,240)	21,768	(1,307,155)	5,063	78,395	0	0	0	0	0
Cash Ending Jun 30	588,277	624,370	1,193,074	1,518,904	1,291,973	1,021,005	904,314	1,018,677	1,164,011	1,235,411
Local Government Investment Pool	175,768	176,625	177,872	178,957	181,251	183,573	183,573	184,491	185,414	186,341

Figure 19

### Combined (Water and Wastewater) Cash Flow – with Recommended Rate Increases

Figure 20 shows the projected impact on Combined (water and wastewater) Cash Flow using the two recommended rate increases.

Water and Wastewater Cash Flow - With Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cash Beginning Jul 1	719,073	942,894	1,008,653	1,427,134	1,675,662	1,247,652	537,500	512,871	855,825	1,230,638
Revenue / Income										
Charges for Services	2,015,568	2,279,227	2,350,266	2,320,996	2,538,916	2,548,181	3,580,972	3,755,679	3,877,679	4,033,826
Other Income	6,407	6,533	18,198	10,523	20,353	21,393	10,324	2,200	2,200	2,200
Total Income	2,021,975	2,285,760	2,368,464	2,331,519	2,559,269	2,569,574	3,591,296	3,757,879	3,879,879	4,036,026
Expenses										
Operating Exp w/o Deprec	1,669,221	1,831,179	2,011,499	2,135,511	2,628,855	2,769,105	2,853,831	2,968,339	3,076,803	3,179,579
Debt	110,016	111,025	278,484	325,194	409,831	521,372	757,469	703,335	700,388	756,048
Total Expenses	1,779,237	1,942,204	2,289,983	2,460,705	3,038,686	3,290,477	3,611,300	3,671,675	3,777,192	3,935,627
Income Less Expenses	242,738	343,556	78,481	(129,186)	(479,417)	(720,902)	(20,004)	86,204	102,687	100,400
Capital Financing										
Loans	0	1,826,722	3,010,049	951,465	1,024,835	1,446,000	1,150,000	1,900,000	1,400,000	1,150,000
Tap Fees from Customers	131,500	186,200	165,086	150,100	169,200	30,750	15,375	276,750	292,125	184,500
Total Capital Financing	131,500	2,012,922	3,175,135	1,101,565	1,194,035	1,476,750	1,165,375	2,176,750	1,692,125	1,334,500
Capital Expenses										
Capital Expenses	139,937	2,334,255	1,382,741	733,976	1,299,417	1,466,000	1,170,000	1,920,000	1,420,000	1,170,000
Water and Wastewater Net Cash Flow										
Annual Gain - (Loss)	234,301	22,223	1,870,875	238,403	(584,799)	(710,152)	(24,629)	342,954	374,812	264,900
Accrual Adjustment	(10,480)	43,536	(1,452,394)	10,125	156,789					
Cash Ending Jun 30	942,894	1,008,653	1,427,134	1,675,662	1,247,652	537,500	512,871	855,825	1,230,638	1,495,537
Local Government Investment Pool	351,536	353,249	355,744	357,914	362,501	367,147	367,147	368,983	370,827	372,682

Figure 20

**Combined (Water and Wastewater) Cash Flow Graph – with Rate Increases.**

Figure 21 shows the graphic results of combining the water and wastewater systems' cash flow using the two recommended rate increases.

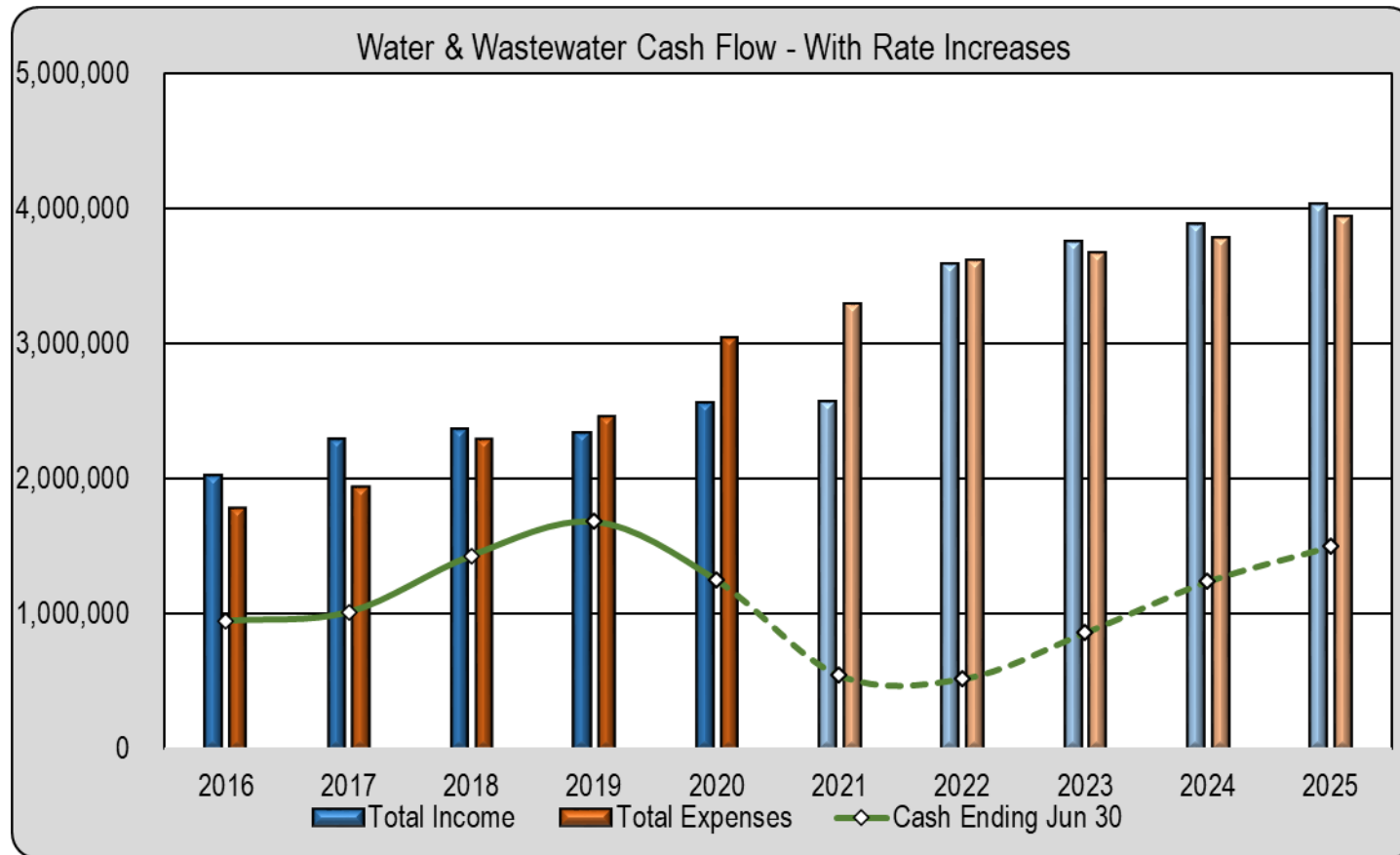


Figure 21

**Change in Net Position Analyses with Recommended Rate Increases**

**Water Change in Net Position and Wastewater Change in Net Position – each with Recommended Rate Increases**

Figure 22 shows the Change in Net Position Analyses for the water system using a 50% rate increase in FY2022 and a 2% increase in FY 2025, and for the wastewater system using a 30% FY 2022 and a 2% increase in FY2025.

<b>Water Change in Net Position - With Rate Increases</b>										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue / Income										
Charges for Services	901,496	989,747	1,057,739	1,063,099	1,133,708	1,137,694	1,725,538	1,806,882	1,863,681	1,937,546
Other Income	3,683	3,581	9,326	5,800	11,528	6,211	3,234	980	979	978
<b>Total Water Income</b>	<b>905,179</b>	<b>993,328</b>	<b>1,067,065</b>	<b>1,068,899</b>	<b>1,145,236</b>	<b>1,143,905</b>	<b>1,728,772</b>	<b>1,807,862</b>	<b>1,864,660</b>	<b>1,938,524</b>
Expenses										
Operating Exp w/o Deprec	949,435	1,078,087	1,132,892	1,222,553	1,490,757	1,592,832	1,636,207	1,707,646	1,771,244	1,827,274
Depreciation	62,129	66,482	67,223	63,174	62,186	63,186	71,566	66,746	62,546	61,696
Interest Expense	0	0	0	0	0	0	0	0	0	0
<b>Total Water Expenses</b>	<b>1,011,564</b>	<b>1,144,569</b>	<b>1,200,115</b>	<b>1,285,727</b>	<b>1,552,942</b>	<b>1,656,017</b>	<b>1,707,773</b>	<b>1,774,392</b>	<b>1,833,790</b>	<b>1,888,970</b>
<b>Income Less Expenses</b>	<b>(106,386)</b>	<b>(151,241)</b>	<b>(133,049)</b>	<b>(216,827)</b>	<b>(407,706)</b>	<b>(512,112)</b>	<b>20,999</b>	<b>33,470</b>	<b>30,870</b>	<b>49,554</b>
Change in Net Position										
<b>Change in Net Position (2017 Statute)</b>	<b>(106,386)</b>	<b>(151,241)</b>	<b>(133,049)</b>	<b>(216,827)</b>	<b>(407,706)</b>	<b>(512,112)</b>	<b>20,999</b>	<b>33,470</b>	<b>30,870</b>	<b>49,554</b>
<b>Wastewater Change in Net Position - With Rate Increases</b>										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue / Income										
Charges for Services	1,114,072	1,289,480	1,292,527	1,257,897	1,405,208	1,410,487	1,855,434	1,948,797	2,013,998	2,096,281
Other Income	4,130	4,665	11,397	6,863	13,412	7,701	4,012	1,220	1,221	1,222
<b>Total Wastewater Income</b>	<b>1,118,202</b>	<b>1,294,145</b>	<b>1,303,924</b>	<b>1,264,760</b>	<b>1,418,620</b>	<b>1,418,188</b>	<b>1,859,446</b>	<b>1,950,017</b>	<b>2,015,219</b>	<b>2,097,502</b>
Expenses										
Operating Exp w/o Deprec	719,786	753,092	878,608	912,959	1,138,099	1,176,273	1,217,624	1,260,693	1,305,559	1,352,305
Depreciation	163,272	174,710	176,658	166,017	305,329	392,046	436,796	485,296	520,646	548,034
Interest Expense	17,784	16,069	26,554	29,365	32,635	86,873	132,956	126,729	120,950	125,069
<b>Total Wastewater Expenses</b>	<b>900,842</b>	<b>943,871</b>	<b>1,081,819</b>	<b>1,108,340</b>	<b>1,476,063</b>	<b>1,655,192</b>	<b>1,787,376</b>	<b>1,872,718</b>	<b>1,947,155</b>	<b>2,025,408</b>
<b>Income Less Expenses</b>	<b>217,361</b>	<b>350,274</b>	<b>222,104</b>	<b>156,419</b>	<b>(57,443)</b>	<b>(237,004)</b>	<b>72,070</b>	<b>77,299</b>	<b>68,064</b>	<b>72,095</b>
Change in Net Position										
<b>Change in Net Position (2017 Statute)</b>	<b>217,361</b>	<b>350,274</b>	<b>222,104</b>	<b>156,419</b>	<b>(57,443)</b>	<b>(237,004)</b>	<b>72,070</b>	<b>77,299</b>	<b>68,064</b>	<b>72,095</b>

Figure 22

### Combined (Water and Wastewater) Change in Net Position – with Recommended Rate Increases

Figure 23 shows the Change in Net Position Analysis for the combined (water and wastewater) system using both recommended rate increases, as well as a graph of the Combined Change in Net Position Analysis using the recommended rate increases.

Water & Wastewater Change in Net Position - With Rate Increases										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue / Income										
Charges for Services	2,015,568	2,279,227	2,350,266	2,320,996	2,538,916	2,548,181	3,580,972	3,755,679	3,877,679	4,033,826
Other Income	7,813	8,246	20,723	12,663	24,940	13,912	7,246	2,200	2,200	2,200
<b>Total Income</b>	<b>2,023,381</b>	<b>2,287,473</b>	<b>2,370,989</b>	<b>2,333,659</b>	<b>2,563,856</b>	<b>2,562,093</b>	<b>3,588,218</b>	<b>3,757,879</b>	<b>3,879,879</b>	<b>4,036,026</b>
Expenses										
Operating Exp w/o Deprec	1,669,221	1,831,179	2,011,499	2,135,511	2,628,855	2,769,105	2,853,831	2,968,339	3,076,803	3,179,579
Depreciation	225,401	241,192	243,881	229,191	367,515	455,232	508,362	552,042	583,192	609,729
Interest Expense	17,784	16,069	26,554	29,365	32,635	86,873	132,956	126,729	120,950	125,069
<b>Total Expenses</b>	<b>1,912,406</b>	<b>2,088,440</b>	<b>2,281,934</b>	<b>2,394,067</b>	<b>3,029,005</b>	<b>3,311,209</b>	<b>3,495,149</b>	<b>3,647,110</b>	<b>3,780,945</b>	<b>3,914,377</b>
<b>Income Less Expenses</b>	<b>110,975</b>	<b>199,033</b>	<b>89,055</b>	<b>(60,408)</b>	<b>(465,149)</b>	<b>(749,116)</b>	<b>93,069</b>	<b>110,769</b>	<b>98,934</b>	<b>121,649</b>
Change in Net Position										
<b>Change in Net Position (2017 Statute)</b>	<b>110,975</b>	<b>199,033</b>	<b>89,055</b>	<b>(60,408)</b>	<b>(465,149)</b>	<b>(749,116)</b>	<b>93,069</b>	<b>110,769</b>	<b>98,934</b>	<b>121,649</b>

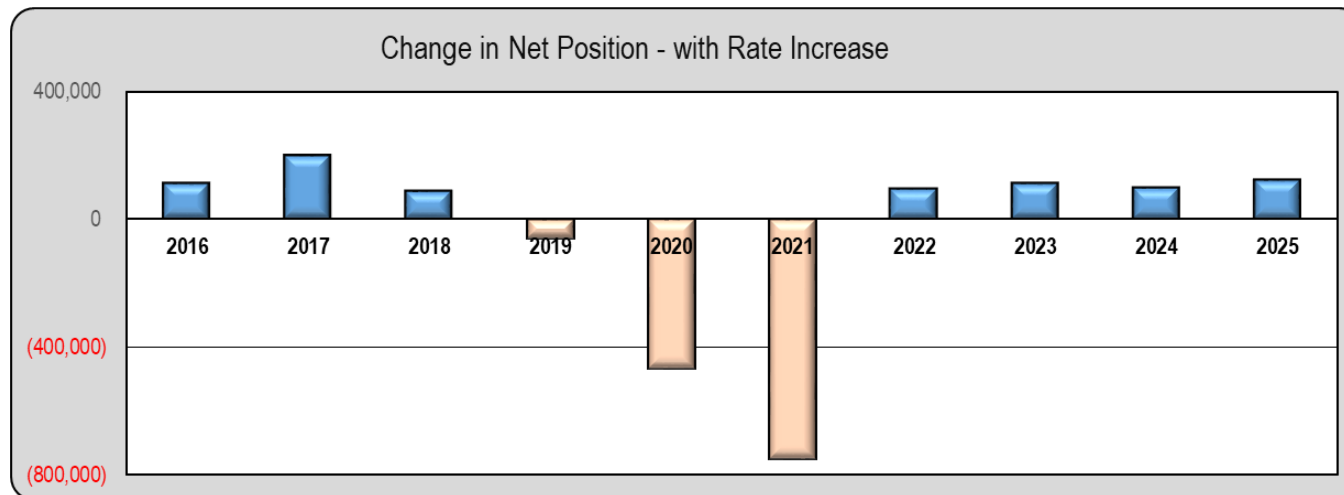


Figure 23

### Other Considerations

Projections and estimates of revenue, expenses, capital expenses, and capital improvements to be made over the next five years are the basis for making recommendations for rate increases. The City should review the impacts of making these increases annually, particularly the “Change in Net Position” as presented in each annual audit, and adjust, as necessary.

## Cost of Service Analysis

### Overview

The purpose of the Cost of Service (COS) Analysis is to determine a fair rate for each customer class. Currently, the 2021 rates for the water and wastewater customer classes are shown in **Figure 24**:

Current (2021) Water Rates	Inside City Limits	Outside City Limits	Current (2021) Sewer Rates	Inside City Limits	Outside City Limits
First 2,000 Gallons	\$11.88	\$15.85	Minimum	\$7.00	\$10.00
Per 1,000 Gallons over 2,000	\$8.69	\$8.87	Per 1,000 Gallons	\$9.73	\$10.30

**Figure 24**

### Water COS Methodology

The main cost difference between servicing water customers Inside versus Outside the City is the amount of depreciation applicable to each customer class. There are no other categories of general expenses that can be specifically identified as Inside only, Outside only, or any variation of expenses that would create a need for a difference in rates. It is assumed that depreciation is allocated to the minimum bill.

The depreciation for specific water lines serving Outside customers cannot be determined from the City's depreciation schedule. However, the length of water mains serving the Outside customers is about 7.8 miles or 41,184 feet. Assuming the average cost of water line installation was approximately \$15 per foot, the outside lines' cost is estimated to be \$617,760. Using the straight-line method of depreciation, the annual depreciation for the outside lines is \$12,355. There are a total of 314 Outside customers. Allocating the \$12,355 of depreciation among all Outside customers results in a monthly amount of \$3.28, as shown in **Figure 25**.

	Miles	Feet	Est. Cost \$15/Ft	Depreciation 50 Yrs	Total Outside Customers	Cost per Cust. per Month
Outside City Water Mains	7.8	41,184	\$617,760	\$12,355	314	\$3.28

**Figure 25**

The minimum bill for the Outside customers should be the same as the Inside customers, plus the additional amount calculated for the additional depreciation as shown in **Figure 26**.

	Minimum Bill for All Customers	+ Additional for Depreciation	= Adjusted Minimum Bill
Inside Customers	\$11.88	\$0.00	\$11.88
Outside Customers	\$11.88	\$3.28	\$15.16

**Figure 26**

Because the current (2021) minimum bill for Outside customers is \$15.85, reducing it to the proposed Outside minimum bill of \$15.16 would effectively reduce annual revenue by \$2,600. As shown in **Figure 27**, that amount should be added to the Inside minimum bill.

Current Outside Min/ Revised Outside Min	# of Outside Customers	Old Annual Rev/ New Annual Rev	# of Inside Customers	Increase to Inside Min Rate
\$15.85	314	\$59,723		
\$15.16	314	\$57,123		
		\$2,600	2,508	\$0.09

**Figure 27**

As a result, the adjusted Inside and Outside minimum bills are shown in **Figure 28**:

Water	Minimum Bill for 2,000 Gallons
Inside	\$11.97
Outside	\$15.16

**Figure 28**

Finally, in considering the water “rate per 1,000 gallons over 2,000”, the current difference between customers Inside vs. Outside is only 2%. This difference should be considered as adequate compensation for additional travel to service the 314 Outside customers and the 7.8 miles of water mains outside the city limits. The resulting COS water rates are shown in **Figure 29**:

COS Water Rates	Inside City Limits	Outside City Limits
First 2,000 Gallons	\$11.97	\$15.16
Per 1,000 Gallons over 2,000	\$8.69	\$8.87

**Figure 29**



### Wastewater COS Methodology

The main cost difference between servicing wastewater customers Inside versus Outside the City is the amount of depreciation related to the specific wastewater lines and three lift stations that serve the Outside customers. The length of these sewer main lines is about 3.0326 miles or 16,012 feet. Assuming the average cost of water line installation was approximately \$20 per foot, the outside lines' cost is estimated to be \$320,240. Using the straight-line method of depreciation, the annual depreciation for the outside lines is \$6,405. The cost of the three lift stations is estimated as \$120,000; resulting in annual depreciation of \$2,400. There are a total of 138 Outside customers. Allocating the depreciation for both sewer mains and lift stations outside the City results in a monthly amount of \$5.32 to be added to the Outside customer's minimum bill, as shown in **Figure 30**:

	Miles	Feet	Est. Cost \$20/Ft	Depreciation 50 Yrs	Total Outside Customers	Cost per Cust. per Month
Sewer Mains Outside City	3.0	16,012	\$320,240	\$6,405	138	\$3.87
			Est. Cost	Depreciation 50 Yrs	Total Outside Customers	Cost per Cust. per Month
Lift Stations Outside City	3		\$120,000	\$2,400	138	\$1.45
Total Additional Cost for Depreciation						\$5.32

**Figure 30**

The minimum bill for the Outside customers should be the same as the Inside customers, plus the additional amount calculated for the additional depreciation as shown in **Figure 31**:

	Minimum Bill for All Customers	+ Additional for Depreciation	= Adjusted Minimum Bill
Inside Customers	\$7.00	\$0.00	\$7.00
Outside Customers	\$7.00	\$5.32	\$12.32

**Figure 31**

Because the current (2021) minimum bill for Outside customers is \$10.00, increasing it to the proposed Outside minimum bill of \$12.32 would increase annual revenue by \$3,837. As shown in **Figure 32**, that amount should be subtracted from the minimum bill for Inside customers:

Current Outside Min/ Revised Outside Min	# of Outside Customers	Old Annual Rev/ New Annual Rev	# of Inside Customers	Decrease to Inside Min Rate
\$10.00	138	\$16,560		
\$12.32	138	\$20,397		
		<u>(\$3,837)</u>	2,567	(\$0.12)

**Figure 32**

As a result, the adjusted Inside and Outside minimum bills are shown in **Figure 33**:

Wastewater	Minimum Bill
Inside	\$6.88
Outside	\$12.32

**Figure 33**

Finally, in considering the “rate per 1,000 gallons”, the current difference between Inside and Outside customers is 6%. This difference should be considered as adequate compensation for additional travel to service the 138 Outside sewer customers, the 3 miles of sewer mains outside the city limits, and the three lift stations outside the city limits. The resulting COS Sewer rates are shown in **Figure 34**:

COS Sewer Rates	Inside City Limits	Outside City Limits
Minimum	\$6.88	\$12.32
Per 1,000 Gallons	\$9.73	\$10.30

**Figure 34**

## Current and Proposed Water and Wastewater Rates

**Figure 35** shows, for Water Customers Inside the City and Outside the City: The Current (2021) rates, the COS Rates (with no rate increase), and the Proposed (COS plus 50% increased) rates to be implemented in FY2022, if not sooner.

Water Inside the City										
Current Water Rates			Current Water Rates (COS) - with no Inc.				Proposed Water Rates (COS) plus 50% Inc.			
Gallons	Minimum		Gallons	Minimum	% Inc.	Gallons	Minimum	% Inc.		
First	2,000	\$11.88	First	2,000	\$11.97	1%	First	2,000	\$17.95	50%
		<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>		
Over	2,000	\$8.69	Over	2,000	\$8.69	0%	Over	2,000	\$13.035	50%
Water Sold (Gallons)	Monthly Charge		Monthly Charge	Difference		% Change	Monthly Charge	Difference		% Change
1,000	\$11.88		\$11.97	\$0.09		1%	\$17.95	\$5.98		50%
3,000	\$20.57		\$20.66	\$0.09		0%	\$30.98	\$10.33		50%
4,000	\$29.26		\$29.35	\$0.09		0%	\$44.03	\$14.68		50%
7,000	\$55.33		\$55.42	\$0.09		0%	\$83.12	\$27.71		50%
10,000	\$81.40		\$81.49	\$0.09		0%	\$122.23	\$40.74		50%

Water Outside the City										
Current Water Rates			Current Water Rates (COS) - with no Inc.				Proposed Water Rates (COS) plus 50% Inc.			
Gallons	Minimum		Gallons	Minimum	% Inc.	Gallons	Minimum	% Inc.		
First	2,000	\$15.85	First	2,000	\$15.16	-4%	First	2,000	\$22.74	50%
		<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>			<u>Per 1,000 gal.</u>		
Over	2,000	\$8.87	Over	2,000	\$8.87	0%	Over	2,000	\$13.31	50%
Water Sold (Gallons)	Monthly Charge		Monthly Charge	Difference		% Change	Monthly Charge	Difference		% Change
1,000	\$15.85		\$15.16	(\$0.69)		-4%	\$22.74	\$7.58		50%
3,000	\$24.72		\$24.03	(\$0.69)		-3%	\$36.05	\$12.02		50%
4,000	\$33.59		\$32.90	(\$0.69)		-2%	\$49.35	\$16.45		50%
7,000	\$60.20		\$59.51	(\$0.69)		-1%	\$89.27	\$29.76		50%
10,000	\$86.81		\$86.12	(\$0.69)		-1%	\$129.18	\$43.06		50%

**Figure 35**

**Figure 36** shows, for Wastewater Customers Inside the City and Outside the City: The Current (2021) rates, the COS Rates (with no rate increase), and the Proposed (COS plus 30% increased) rates to be implemented in FY2022, if not sooner.

Wastewater Inside the City										
Current Wastewater Rates			Current Wastewater Rates (COS) with No Increase			Proposed Wastewater Rates (COS) with 30% Inc.				
Gallons		Minimum	Gallons		Minimum	% Inc.	Gallons		Minimum	% Inc.
		\$7.00			\$6.88	-2%			\$8.94	30%
		Per 1,000 gal.			Per 1,000 gal.				Per 1,000 gal.	
Over	0	\$9.73	Over	0	\$9.73	0%	Over	0	\$12.65	30%
Water Sold (Gallons)	Monthly Charge		Monthly Charge	Difference		% Change	Monthly Charge	Difference		% Change
1,000	\$16.73		\$16.61	(\$0.12)		-1%	\$21.59	\$4.86		30%
2,000	\$26.46		\$26.34	(\$0.12)		0%	\$34.24	\$7.78		30%
4,000	\$45.92		\$45.80	(\$0.12)		0%	\$59.53	\$13.61		30%
7,000	\$75.11		\$74.99	(\$0.12)		0%	\$97.48	\$22.37		30%
10,000	\$104.30		\$104.18	(\$0.12)		0%	\$135.43	\$31.13		30%

Wastewater Outside the City										
Current Wastewater Rates			Current Wastewater Rates (COS) with No Increase			Proposed Wastewater Rates (COS) with 30% Inc.				
Gallons		Minimum	Gallons		Minimum	% Inc.	Gallons		Minimum	% Inc.
		\$10.00			\$12.32	23%			\$16.01	30%
		Per 1,000 gal.			Per 1,000 gal.				Per 1,000 gal.	
Over	0	\$10.30	Over	0	\$10.30	0%	Over	0	\$13.39	30%
Water Sold (Gallons)	Monthly Charge		Monthly Charge	Difference		% Change	Monthly Charge	Difference		% Change
1,000	\$20.30		\$22.62	\$2.32		11%	\$29.40	\$6.79		30%
2,000	\$30.60		\$32.92	\$2.32		8%	\$42.79	\$9.88		30%
4,000	\$51.20		\$53.52	\$2.32		5%	\$69.57	\$16.06		30%
7,000	\$82.10		\$84.42	\$2.32		3%	\$109.74	\$25.33		30%
10,000	\$113.00		\$115.32	\$2.32		2%	\$149.91	\$34.60		30%

**Figure 36**

## Comparison with Other Utilities

Figure 37 shows a comparison with similar utilities of a monthly water bill and wastewater bill for an Inside City customer with 4,000 gallons of usage.

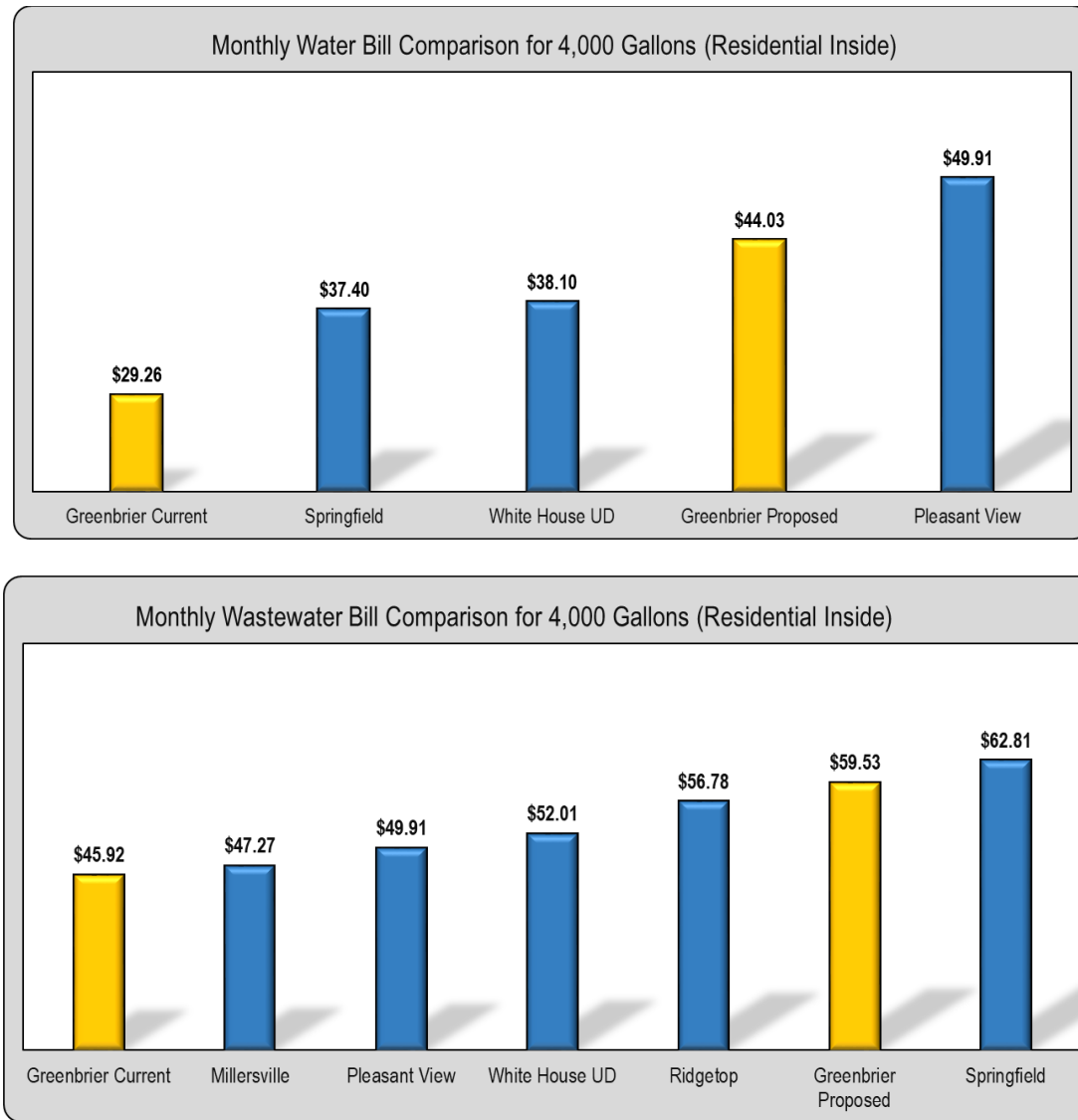


Figure 37

## Tenn. Code Ann. § 68-221-1010

Current through the 2019 Regular Session

### § 68-221-1010. Facilities with earnings or operating deficit or operating in default.

(a)

(1) Within sixty (60) days from the time that an audit of a water system or wastewater facility is filed with the comptroller of the treasury, the comptroller of the treasury, shall file with the board the audited annual financial report of any water system or wastewater facility that has a deficit total net position in any one (1) year, has a negative change in net position for two (2) consecutive years or is currently in default on any of its debt instruments. For purposes of this section, “change in net position” means total revenues less all grants, capital contributions, and expenses, but without reduction for any excluded non-cash items. For purposes of this section, “excluded non-cash items” means any non-cash charges arising from changes to or the implementation of pension and other post-employment benefit standards promulgated by the governmental accounting standards board.

(2) Notwithstanding any other law to the contrary, a government joint venture that supplies or treats water or wastewater for wholesale use only to other governments shall not fall under the jurisdiction of the water and wastewater financing board for the purpose of reporting negative change in the net position annually, but must be referred to the board if the government joint venture is in a deficit or default position as provided herein.

(b)

(1) Within sixty (60) days from the receipt of the audited annual financial report filed by the comptroller of the treasury, the board shall schedule a hearing to determine whether the water system or wastewater facility described in the report is likely to continue in a deficit position. In reaching its determination, the board shall consider current user rates charged by the water system or wastewater facility, the size of the facility and the local government served by it, the quality of the facility's operation and management, and other relevant criteria.

(2) Upon a determination that the water system or wastewater facility is likely to remain in a deficit position, the board may order the management of the water system or wastewater facility to adopt and maintain user rate structures necessary to:

- (A) Fund operation, maintenance, principal and interest obligations and adequate depreciation to recover the cost of the water system or wastewater facility over its useful life;
- (B) Liquidate in an orderly fashion any deficit in total net position; and
- (C) Cure a default on any indebtedness of the water system and wastewater facility.

**(3)** Any such order shall become final and not subject to review unless the parties named therein request by written petition a hearing before the board, as provided in §§ 68-221-1007 — 68-221-1013, no later than thirty (30) days after the date such order is served. Any hearing or rehearing provided by §§ 68-221-1007 — 68-221-1013 shall be brought pursuant to the Uniform Administrative Procedures Act, compiled in title 4, chapter 5, part 3. Such hearing may be conducted by the board at a regular or special meeting by any member or panel of members as designated by the chair to act on its behalf, or the chair may designate an administrative judge who shall have the power and authority to conduct hearings in the name of the board to issue initial orders pursuant to the Uniform Administrative Procedures Act.

**(c)** In the event a water system and wastewater facility fails to adopt user rate structures pursuant to a final order of the board, the board may petition the chancery court in a jurisdiction in which the water system and wastewater facility is situated or in the chancery court of Davidson County to require the adoption of the user rate structures ordered by the board or to obtain other remedial action, which, in the discretion of the court, may be required to cause the water system and wastewater facility to be operated in a financially self-sufficient manner.

**(d)**

**(1)** Within sixty (60) days from the time that an audit of a water system is filed with the comptroller of the treasury, the comptroller of the treasury shall file with the board the audited annual financial report of any water system whose water loss as reported in the audit is excessive as established by rules promulgated by the board. Failure of the water system to include the schedule required in this section constitutes excessive water loss and the water system shall be referred to the water and wastewater financing board.

**(2)** In the event a water system fails to take the appropriate actions required by the board to reduce the water loss to an acceptable level pursuant to § 68-221-1009(a)(7), the board may petition the chancery court in a jurisdiction in which the water system is operating to require the water system to take such actions.

**(3)** By February 1 of each year, the comptroller of the treasury shall provide a written report to the speaker of the house of representatives and the speaker of the senate listing the average annual water loss contained in the annual audit for those utility systems described in § 68-221-1007.

**CITY OF GREENBRIER, TENNESSEE  
ORDINANCE 21-07**

**AN ORDINANCE OF THE CITY OF GREENBRIER AMENDING ORDINANCE  
18-12 TO INCREASE THE WATER RATES AND SEWER RATES EFFECTIVE  
JUNE 1, 2021**

**Whereas**, the City of Greenbrier is charged with providing and maintaining an adequate water and sewer system for its residents at all times; the City of Greenbrier has experienced significant loss in the water and sewer fund for two plus consecutive years and has not historically maintained nor properly prepared for future needs and growth in the city;

**Whereas**, the City of Greenbrier recognizes the necessity to take the appropriate measure to fully secure and maintain a proper fund balance each year to meet the state requirements of a water and sewer utility system. Due to the first instance of having two consecutive years of negative Change in Net Position (FY 2019 and FY 2020), the City is considered in violation of state law. However, even more, concerning is that without correction, this condition will continue until at least FY 2025;

**Henceforth**, the following adjustments shall be changed immediately upon passage;

**SECTION 1. BE IT ORDAINED**, by the Board of Mayor and Aldermen of Greenbrier, Tennessee, that effective June 1, 2021, there is hereby levied an increase in the water rates for customers of the City of Greenbrier's water system. The rates are as follows:

LOCATION	FLAT RATE OF FIRST 2,000 GALLONS	PER 1,000 GALLONS AFTER THE FIRST 2,000
Inside City Limits	\$17.95	\$13.04
Outside City Limits	\$22.74	\$13.31

**SECTION 2. BE IT ORDAINED**, by the Board of Mayor and Aldermen of Greenbrier, Tennessee, that effective June 1, 2021, there is hereby levied an increase in the sewer rates for customers of the City of Greenbrier's sewer system. The rates are as follows:

LOCATION	FLAT RATE FOR EVERY CUSTOMER	PER 1,000 GALLONS
Inside City Limits	\$8.94	\$12.65
Outside City Limits	\$16.01	\$13.39

**SECTION 2. BE IT FURTHER ORDAINED**, that all ordinances of the Board of Mayor and Aldermen of Greenbrier, Tennessee, which are in conflict with this ordinance, are hereby repealed.




**SECTION 3. BE IT FURTHER ENACTED**, by the Board of Mayor and Aldermen of Greenbrier, Tennessee that this ordinance shall take effect immediately from and after its passage, the welfare of the city requiring it.

PASSED this 3 day of May, 2021.

PUBLIC HEARING: April 15, 2021

**PASSED FIRST READING: April 15, 2021**

**PASSED SECOND READING: May 3, 2021**

  
\_\_\_\_\_  
Mayor Lanny Adcock

Attest:   
\_\_\_\_\_  
City Recorder



JASON E. MUMPOWER  
Comptroller

**Entity Referred:** Town of Parrottsville  
**Referral Reason:** Decrease In Net Position  
**Utility Type Referred:** Sewer

**Staff Summary:**

The Town of Parrottsville ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since the 2017 fiscal year audit. The Entity has demonstrated inability or unwillingness to comply with Board orders in the past. The Entity currently operates a very small sewer system, and the rates are not sufficient to cover the cost of the system. Board staff has been informed that the Entity has elected a new mayor and replaced staff including the City Recorder.

Board staff has also been informed that the City of Newport currently provides the water to the Entity's wastewater system and is responsible for billing the Entity's wastewater customers. Board staff believes Newport is capable to own and manage the sewer system entirely. The Entity should seek an outside opinion on the benefits and feasibility of a merger between the Entity and Newport.

Staff believe the Entity's new administration should be given the opportunity to comply with Board orders. Accordingly, Board staff recommends that the Board rescind its prior orders and issue a new order to ensure clarity as to what is required of the Entity.

**Staff Recommendation:**

The Board should order the following:

1. By May 31, 2023, the Entity shall contract with TAUD, or another qualified expert, to conduct a feasibility study of the potential merger between the Entity's utility and the City of Newport's utility.
2. By December 31, 2023, the Entity shall provide Board staff with the completed feasibility study of the potential merger with the City of Newport's utility and either proof of implementation of the resulting recommendation or a proposed plan of implementation.
3. The Entity shall continue to allow Newport to provide the billing for its wastewater system.



JASON E. MUMPOWER  
*Comptroller*

4. Should the Entity fail to comply with any directive in this order, Board staff and Counsel shall issue subpoenas for the Entity's governing body and Manager to appear in-person before the Board during its next meeting following non-compliance of this order.

# Parrottsville

	Category: <b>Sewer</b>		County: <b>Cocke</b>	
	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Net Assets</b>	\$664,491.00	\$822,075.00	\$805,989.00	\$796,582.00
<b>Deferred Outflow Resources</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Net Liabilities</b>	\$131,010.00	\$253,396.00	\$248,761.00	\$230,830.00
<b>Deferred Inflow Resources</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Net Position</b>	\$533,481.00	\$568,679.00	\$557,228.00	\$565,752.00
<b>Operating Revenues</b>	\$57,727.00	\$68,679.00	\$39,138.00	\$49,782.00
<b>Net Sales</b>	\$43,685.00	\$43,154.00	\$39,138.00	\$42,521.00
<b>Operating Expenses</b>	\$36,760.00	\$59,256.00	\$49,123.00	\$62,150.00
<b>Depreciation Expenses</b>	\$17,866.00	\$18,037.00	\$24,244.00	\$24,499.00
<b>Non Operating Revenues</b>	\$0.00	-\$1,165.00	-\$1,466.00	-\$1,908.00
<b>Capital Contributions</b>	\$0.00	\$24,690.00	\$0.00	\$22,800.00
<b>Transfers In</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	\$20,967.00	\$32,948.00	-\$11,451.00	\$8,524.00
<b>Statutory Change In Net Position</b>	\$20,967.00	\$8,258.00	-\$11,451.00	-\$14,276.00



JASON E. MUMPOWER  
Comptroller

**Entity Referred:** Town of Petersburg  
**Referral Reason:** Decrease In Net Position  
**Utility Type Referred:** Water

**Staff Summary:**

The Town of Petersburg ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since its fiscal year 2019. The Entity previously complied with Board directives in completing a rate study. The Entity experienced a positive change in net position in 2020, but the Entity reported negative changes in net position in 2021 and 2022. Board staff is not confident the rates adopted by the Town have been sufficient. Board staff believes the utility should complete another rate study to ensure the Entity's rates are sufficient to improve its financial position, and to examine the potential for the Entity's utilities to merge with a surrounding system.

**Staff Recommendation:**

The Board should order the following:

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. verification that all governing body members of the Entity are in compliance with all relevant training requirements;
  - b. verification that the Entity's usage rates are sufficient to ensure the financial health of the Entity;
  - c. justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure; and
  - d. a preliminary judgment on whether or not a merger is feasible with other utilities close to its service area.
2. By May 31, 2023 the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.
3. By December 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.



JASON E. MUMPOWER  
*Comptroller*

4. Board staff is given the authority to grant one extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

# Petersburg

	Category: <b>Water And Sewer</b>		County: <b>Lincoln; Marshall</b>	
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Net Assets</b>	\$729,673.00	\$758,679.00	\$759,188.00	\$805,175.00
<b>Deferred Outflow Resources</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Net Liabilities</b>	\$39,013.00	\$61,814.00	\$62,700.00	\$155,338.00
<b>Deferred Inflow Resources</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Net Position</b>	\$690,660.00	\$696,865.00	\$696,488.00	\$649,837.00
<b>Operating Revenues</b>	\$208,160.00	\$240,782.00	\$257,761.00	\$207,379.00
<b>Net Sales</b>	\$199,521.00	\$234,285.00	\$209,611.00	\$201,941.00
<b>Operating Expenses</b>	\$215,488.00	\$234,984.00	\$271,589.00	\$254,148.00
<b>Depreciation Expenses</b>	\$45,078.00	\$44,097.00	\$44,136.00	\$44,611.00
<b>Non Operating Revenues</b>	\$193.00	\$407.00	\$1,825.00	\$118.00
<b>Capital Contributions</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers In</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	-\$7,135.00	\$17,831.00	-\$12,003.00	-\$46,651.00
<b>Statutory Change In Net Position</b>	-\$7,135.00	\$17,831.00	-\$12,003.00	-\$46,651.00



JASON E. MUMPOWER  
Comptroller

**Entity Referred:** Town of Rutherford  
**Referral Reason:** Decrease In Net Position  
**Utility Type Referred:** Water And Sewer

**Staff Summary:**

The Town of Rutherford ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since its fiscal year 2021 audit. The Entity timely completed the financial distress questionnaire. Board staff has compiled the following findings in reading through the financial distress questionnaire:

1. The Entity last had rate increases in July of 2022. Prior to those increases, the Entity implemented rate increases in both fiscal years of 2021 and 2020. None of these rate increase have been based on a rate study.
2. The Entity failed to report information regarding various items on the questionnaire without providing an explanation. The Town should ensure that proper oversight is being given to the management and reporting of the utility.

**Staff Recommendation:**

The Board should order the following:

1. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. a review of the capitalization policy, including any recommended modifications;
  - b. a review of the debt management policy, including any recommended modifications;
  - c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. and a review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
2. By May 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 1.





JASON E. MUMPOWER  
*Comptroller*

3. By May 31, 2023, the Entity shall update Board staff as to the status of their delinquent audits.
3. By December 31, 2023, the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.
4. Board staff is given the authority to grant one extension of up to six months of the foregoing deadlines upon a showing of good cause by the Entity.

# Rutherford

	Category: <b>Water And Sewer</b>		County: <b>Gibson</b>	
	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Net Assets</b>	N/A	\$3,096,053.00	\$3,877,801.00	\$3,752,954.00
<b>Deferred Outflow Resources</b>	N/A	\$6,336.00	\$12,980.00	\$11,320.00
<b>Net Liabilities</b>	N/A	\$401,198.00	\$907,037.00	\$791,091.00
<b>Deferred Inflow Resources</b>	N/A	\$6,344.00	\$3,758.00	\$5,627.00
<b>Total Net Position</b>	N/A	\$2,694,847.00	\$2,979,986.00	\$2,967,556.00
<b>Operating Revenues</b>	N/A	\$340,137.00	\$373,157.00	\$384,745.00
<b>Net Sales</b>	N/A	\$320,824.00	\$325,367.00	\$354,127.00
<b>Operating Expenses</b>	N/A	\$322,544.00	\$384,034.00	\$409,861.00
<b>Depreciation Expenses</b>	N/A	\$88,523.00	\$89,341.00	\$118,584.00
<b>Non Operating Revenues</b>	N/A	\$1,113.00	-\$1,504.00	-\$21,443.00
<b>Capital Contributions</b>	N/A	\$88,383.00	\$297,520.00	\$34,129.00
<b>Transfers In</b>	N/A	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	N/A	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	N/A	\$107,089.00	\$285,139.00	-\$12,430.00
<b>Statutory Change In Net Position</b>	N/A	\$18,706.00	-\$12,381.00	-\$46,559.00

# Contact Information and Comptroller Filings

It is possible to save progress on this form and resume filling out the form at a later time. Please scroll to the bottom of the page and follow the link in order to save your progress.

Should you have any questions, please contact the Comptroller's utility office at 615.747.5260.

Entity ID Number \*

312825

Utility Name \*

Town of Rutherford

Name of Person Filling this Out \*

Donna

First Name

Stricklin

Last Name

Utility Email \*

recorder@townofrutherford.com

Utility Phone \*

(731) 665-7166

Use this format: (555) 555 5555

Mailing Address \*

PO Box 487

Address Line 1

Address Line 2

Rutherford

City

Tennessee

State

38369

ZIP Code

Has the most recent Annual Information report been timely filed for this utility? \*

Yes

No

Has the utility filed its most recent budget with the Comptroller's Office within 15 days of adoption? \*

Yes

No

Has the utility filed its most recent audit with the Comptroller's Office within 6 months of the last fiscal year end? \*

Yes

No

Please provide the reason why this local government did not timely file its most recent audit with the Comptroller's Office? \*

The audit firm was late completing the audit due to being shorthanded.

## Financial Distress Remedy Plans

Does this utility have a plan to remedy the current financial distress? \*

Yes

No

Please describe the current plan to remedy the utility's financial distress. \*

Water rates were raised by \$1.00 per customer per month. Sewer rates were increased by \$2.00 per customer per month. Expenses will be monitored monthly. Water and sewer tap fees are increasing from \$250.00 to \$500.00.

## Rates and Fees Information

Has a rate study been completed for the utility in the previous 5 years? \*

Yes

No

Has the utility implemented a rate increase in the last 6 months? \*

Yes

No

Does the utility have plans to implement a rate increase in the next 6 months? \*

Yes

No

Is this rate increase based on a rate study conducted by an independent third party? \*

94

Yes

No

Please upload a copy of the current rate ordinance or resolution. \*

Choose File Remove File No File Chosen

File uploads may not work on some mobile devices.

Has this utility had any changes to fees in the last 5 years? \*

Yes

No

Please upload a copy of the current utility fee schedule. \*

Choose File Remove File No File Chosen

File uploads may not work on some mobile devices.

Please provide a written rationale for the fees contained in the current fee schedule and any changes that may have occurred if indicated so in the previous question. \*

## Financial Initiatives

Has the utility incurred any new debt during its current fiscal year, or does the utility plan on incurring any new debt during the current or next fiscal year? \*

Yes

No

Has the utility received any grants during its current fiscal year, or does the utility plan on applying for or receiving any new grants during the current or next fiscal year? \*

Yes

No

How much is this funding, and what is the source of this funding? \*

\$276,854.00, CDBG

What will this funding be used for? \*

Well repair, new aerator at water treatment plant, new influent flow meter

## Utility Information

Does this utility offer water service? \*

Yes

No

Does this utility offer sewer or wastewater service? \*

Yes

No

# Water Utility Information

How many billed customers does the water utility have? \*

561

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the water from the utility.

How many unbilled customers does the water utility have? \*

13

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the water from the utility.

How many metered customers does the water utility have? \*

574

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the water from the utility.

How many unmetered customers does the water utility have? \*

0

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the water from the utility.

What was the net sales revenue from the largest 10 customers last fiscal year? \*

\$ 0

What was the net sales revenue for the water utility last fiscal year? \*

\$ 195669

How many gallons were sold to the largest 10 customers last fiscal year? \*

0.00

Please input this in thousands of gallons. For example: 100,000 gallons would be input as 100.

How many gallons were sold last fiscal year? \*

22124292.00

Please input this in thousands of gallons. For example: 100,000 gallons would be input as 100.

Does the water utility have a rate structure with differing rates based on on geographical location? \*



Yes No

For example: Inside/Outside City Limits, Neighborhoods or Communities with Differing Rates

Does this utility have a water connection to another utility to purchase water or to have a backup water supply in case of emergency? \*

 Yes No

Does this utility produce its entire water supply without purchasing water from another utility? \*

 Yes No

Is it feasible for this utility regionalize, merge, or consolidate with a surrounding utility to improve water service to its current or future customer base? \*

 No

Does this utility sell water at a wholesale rate to any customers such as large commercial/industrial customers or other surrounding utilities? \*

 Yes No

Does this utility have a water treatment facility? \*

 Yes No

What is the design capacity of the water treatment facility? \*

0.72 mgd assuming operates 24 hours per day

What is the average operating capacity of the water treatment facility? \*

0.077 mgd

Are there any environmental concerns including government environmental orders for the water utility? \*

Yes

No

## Wastewater Utility Information

How many billed customers does the wastewater utility have? \*

554

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the wastewater service from the utility.

How many unbilled customers does the wastewater utility have? \*

14

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the wastewater service from the utility.

How many metered customers does the wastewater utility have? \*

540

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the wastewater service from the utility.

How many unmetered customers does the wastewater utility have? \*

0

If this entity keeps track of billing units apart from customer count, please provide the billing units to give a better understanding of how many people or entities actually use the wastewater service from the utility.

What was the net sales revenue from the largest 10 customers last fiscal year? \*

99

\$ 0

What was the net sales revenue for the wastewater utility last fiscal year? \*

\$ 21422974

How many thousand gallons of wastewater were treated for the largest 10 customers last fiscal year? \*

0

How many thousand gallons of wastewater were treated by the utility last fiscal year? \*

0

Does the wastewater utility have a rate structure with differing rates based on geographical location? \*

Yes

No

For example: Inside/Outside City Limits, Neighborhoods or Communities with Differing Rates

Does this utility treat all of the wastewater collections without sending wastewater to another utility for treatment? \*

Yes

No

Does this utility treat wastewater from another utility? \*

Yes

No

Is it feasible for this utility regionalize, merge, or consolidate with a surrounding utility to improve wastewater service to its current or future customer base? \*

No

100

Does this utility treat wastewater for customers on wells? \*

Yes

No

Excluding any potential customers on wells, are all customers billed based on metered water usage? \*

Yes

No

Does this utility treat wastewater at a wholesale rate to any customers such as large commercial/industrial customers or other surrounding utilities? \*

Yes

No

What is the design capacity of the wastewater treatment facility? \*

0.36 mgd

What is the average operating capacity of the wastewater treatment facility? \*

0.15 mgd

Are there any environmental concerns including government environmental orders for the wastewater utility? \*

Yes

No

Does this utility have a sewer use ordinance or resolution? \*

Yes

No

How is this sewer use ordinance or resolution enforced? \*

City police is they violate city ordinance

## Plans and Policies

Does this utility have a debt management policy?

Yes

No

Does this utility have a capitalization policy? \*

Yes

No

Does this utility have a leak adjustment policy? \*

Yes

No

Does this utility have an asset management plan? \*

Yes No

How are capital projects or purchases adequately planned for? \*

Most projects are based on need and general improvements.

Does this utility have a copy of its capital asset list on file? \*

 Yes No

How often is this capital asset list reviewed and by whom? \*

Water/Wastewater operator

[Save and Resume Later](#)

Submit Form

Ordinance Number 2022-6-27

**AN ORDINANCE SETTING WATER AND WASTEWATER SERVICE RATES FOR THE TOWN OF RUTHERFORD, TENNESSEE**

Be It Ordained by the Board of Mayor and Alderman of the Town of Rutherford, Tennessee as follows:

WHEREAS, to have financially viable water and sewer system; and

WHEREAS, to comply with Tennessee Code Annotated; and

WHEREAS, the Board of Mayor and Alderpersons of the Town of Rutherford finds it necessary to increase the rates for water and sewer system customers of the Town of Rutherford;

Section 1. This Ordinance will replace in entirety the current water rates for the Rutherford Water Department as specified in 2021-06-21 A

Section 2. Monthly water service rates inside the city shall be:

- 1. First 0 gallons a minimum charge of..... \$15.97.
- 2. Over 1000 gallons the rate of ..... \$4.70 per thousand.

Section 3. Monthly wastewater service rates inside the city shall be:

- 1. First gallons-a minimum charge of ..... \$14.45.
- 2. Over 1000 gallons the rate of ..... \$4.41 per thousand.

Section 4. The rates outlined herein shall become effective for all service received after, July 1, 2022.

Section 5. This ordinance shall become effective upon its final passage, the public welfare requiring it.

Passed 1<sup>st</sup> reading June 6, 2022  
Passed 2<sup>nd</sup> reading June 27, 2022

Sandy Simpson  
Mayor

Dona Stricklin  
Attest: City Recorder

## AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0  
American Water Works Association  
Copyright © 2014. All Rights Reserved.

Water Audit Report for: **Town of Rutherford (0000599)**  
Reporting Year: **2021**      **7/2020 - 6/2021**

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 (n/a or 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**

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

### WATER SUPPLIED

← Enter grading in column 'E' and 'J' →

Volume from own sources:	<input type="button" value="9"/>	<input type="button" value="9"/>	28.184	MG/Yr
Water imported:	<input type="button" value="n/a"/>	<input type="button" value="n/a"/>	0.000	MG/Yr
Water exported:	<input type="button" value="n/a"/>	<input type="button" value="n/a"/>	0.000	MG/Yr

### Master Meter and Supply Error Adjustments

Pcnt:	Value:	MG/Yr
<input type="button" value="7"/> <input type="button" value="-0.20%"/>	<input type="button" value="1.121"/>	MG/Yr
<input type="button" value="7"/>	<input type="button" value=""/>	MG/Yr
<input type="button" value="7"/>	<input type="button" value=""/>	MG/Yr

Enter negative % or value for under-registration  
Enter positive % or value for over-registration

**WATER SUPPLIED:**  MG/Yr

### AUTHORIZED CONSUMPTION

Billed metered:	<input type="button" value="9"/>	<input type="button" value="9"/>	23.046	MG/Yr
Billed unmetered:	<input type="button" value="n/a"/>	<input type="button" value="n/a"/>	0.000	MG/Yr
Unbilled metered:	<input type="button" value="9"/>	<input type="button" value="9"/>	0.220	MG/Yr
Unbilled unmetered:	<input type="button" value="9"/>	<input type="button" value="9"/>	1.121	MG/Yr

Unbilled Unmetered volume entered is greater than the recommended default value

**AUTHORIZED CONSUMPTION:**  MG/Yr

Click here:  for help using option buttons below

Pcnt:	Value:	MG/Yr
<input type="button" value=""/>	<input type="button" value="1.121"/>	MG/Yr

Use buttons to select percentage of water supplied OR value

Pcnt:	Value:	MG/Yr
<input type="button" value="0.25%"/>	<input type="button" value=""/>	MG/Yr

<input type="button" value="0.50%"/>	<input type="button" value=""/>	MG/Yr
<input type="button" value="0.25%"/>	<input type="button" value=""/>	MG/Yr

### WATER LOSSES (Water Supplied - Authorized Consumption)

MG/Yr

#### Apparent Losses

Unauthorized consumption:  MG/Yr

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

Customer metering inaccuracies:	<input type="button" value="9"/>	<input type="button" value="9"/>	0.117	MG/Yr
Systematic data handling errors:	<input type="button" value="7"/>	<input type="button" value="7"/>	0.058	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

**Apparent Losses:**  MG/Yr

#### 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

= Water Losses + Unbilled Metered + Unbilled Unmetered

### SYSTEM DATA

Length of mains:	<input type="button" value="7"/>	<input type="button" value="7"/>	16.5	miles
Number of active AND inactive service connections:	<input type="button" value="7"/>	<input type="button" value="7"/>	673	
Service connection density:	<input type="button" value="7"/>	<input type="button" value="7"/>	41	conn./mile main

Are customer meters typically located at the curbside or property line?

Average length of customer service line:  (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure:   psi

### COST DATA

Total annual cost of operating water system:	<input type="button" value="9"/>	<input type="button" value="9"/>	\$306,182	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<input type="button" value="9"/>	<input type="button" value="9"/>	\$8.00	\$/1000 gallons (US)
Variable production cost (applied to Real Losses):	<input type="button" value="9"/>	<input type="button" value="9"/>	\$814.86	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

### WATER AUDIT DATA VALIDITY SCORE:

\*\*\* YOUR SCORE IS: 85 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: Unauthorized consumption
- 3: Systematic data handling errors



Copy only for w/s finance board



# GOVERNMENTAL GRANT CONTRACT

(cost reimbursement grant contract with a federal or Tennessee local governmental entity or their agents and instrumentalities)

<b>Begin Date</b> March 15, 2022	<b>End Date</b> March 14, 2025	<b>Agency Tracking #</b> 33004-34622	<b>Edison ID</b>		
<b>Grantee Legal Entity Name</b> Town of Rutherford				<b>Edison Vendor ID</b> 2064	
<b>Subrecipient or Recipient</b> <input checked="" type="checkbox"/> Subrecipient <input type="checkbox"/> Recipient		<b>CFDA # 14.228</b>			
		<b>Grantee's fiscal year end 6/30</b>			
<b>Service Caption (one line only)</b> Community Development Block Grant Program (Rural Development) - Water System Improvements					
<b>Funding —</b>					
<b>FY</b>	<b>State</b>	<b>Federal</b>	<b>Interdepartmental</b>	<b>Other</b>	<b>TOTAL Grant Contract Amount</b>
2022		\$276,854.00			\$276,854.00
		\$276,854.00			\$276,854.00
<b>Grantee Selection Process Summary</b>					
<input checked="" type="checkbox"/> Competitive Selection		Grantees under the Community Development Block Grant Program are selected based upon the criteria set forth in the Delegated Grant Authority for this program.			
<input type="checkbox"/> Non-competitive Selection					
<b>Budget Officer Confirmation:</b> There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.			CPO USE - GG		
<b>Speed Chart (optional)</b>		<b>Account Code (optional)</b>			

## ATTACHMENT B

Copy  
only

GRANT BUDGET			
<b>GRANT CONTRACT #:</b> _____			
<b>GRANTEE:</b> <u>Town of Rutherford</u>			
<b>GRANTEE CONTACT:</b> <u>Shannon Cotter, sicprojectmgt@gmail.com</u>			
<b>PROGRAM AREA:</b> <u>Community Development Block Grant</u>			
<b>The Grant Budget line-item amounts below shall be applicable only to expenses incurred during the following applicable period:</b>			
<b>BEGIN: March 15, 2022</b>		<b>END: March 14, 2025</b>	
EXPENSE OBJECT LINE-ITEM CATEGORY <sup>1</sup>	GRANT CONTRACT	GRANTEE MATCH	TOTAL PROJECT
Construction	\$202,497.00	\$25,028.00	\$227,525.00
Construction Inspection	\$13,350.00	\$1,650.00	\$15,000.00
Engineering Design	\$20,470.00	\$2,530.00	\$23,000.00
Engineering (other than design) <sup>2</sup>	\$0.00	\$0.00	\$0.00
Legal Services	\$0.00	\$0.00	\$0.00
Appraisals	\$0.00	\$0.00	\$0.00
Acquisition of Real Property	\$0.00	\$0.00	\$0.00
Relocation (payments and assistance to persons, businesses, non-profit organizations, including movement to other temporary or permanent sites)	\$0.00	\$0.00	\$0.00
Housing Rehabilitation (loans and grants for single-unit, privately-owned homes)	\$0.00	\$0.00	\$0.00
Housing Inspection	\$0.00	\$0.00	\$0.00
Clearance and Demolition	\$0.00	\$0.00	\$0.00
Grant/Project Administration	\$16,910.00	\$2,090.00	\$19,000.00
Tap Fees (for "low and moderate income" beneficiaries)	\$0.00	\$0.00	\$0.00
Environmental Review	\$2,000.00	\$500.00	\$2,500.00
Capital Purchase <sup>2</sup>	\$0.00	\$0.00	\$0.00
Other Non-Personnel <sup>2</sup>	\$1,335.00	\$165.00	\$1,500.00
Other Professional Fees <sup>2</sup>	\$0.00	\$0.00	\$0.00
Project Contingency (for potential project costs exceeding the total budget amount in line items above)	\$20,292.00	\$2,508.00	\$22,800.00
<b>GRAND TOTAL</b>	<b>\$276,854.00</b>	<b>\$34,471.00</b>	<b>\$311,325.00</b>

<sup>1</sup> Each expense object line-item shall be defined by the Department of Finance and Administration Policy 03, *Uniform Reporting Requirements and Cost Allocation Plans for Subrecipients of Federal and State Grant Monies, Appendix A.* (posted on the Internet at: <http://www.state.tn.us/finance/act/documents/policy3.pdf>).

<sup>2</sup> Applicable detail follows this page if line-item is funded.

**ATTACHMENT B**

**GRANT BUDGET LINE-ITEM DETAIL:**

<b>OTHER PROFESSIONAL FEES</b>	<b>AMOUNT</b>
N/A	\$0.00
<b>TOTAL</b>	<b>\$0.00</b>

<b>OTHER NON-PERSONNEL</b>	<b>AMOUNT</b>
Legal Notices [ environmental, bidding, close out]	\$1,500.00
<b>TOTAL</b>	<b>\$1,500.00</b>

<b>CAPITAL PURCHASE</b>	<b>AMOUNT</b>
N/A	\$0.00
<b>TOTAL</b>	<b>\$0.00</b>

<b>ENGINEERING (OTHER THAN DESIGN)</b>	<b>AMOUNT</b>
N/A	\$0.00
<b>TOTAL</b>	<b>\$0.00</b>



JASON E. MUMPOWER  
Comptroller

**Entity Referred:** Town of Vanleer

**Referral Reason:** Decrease In Net Position

**Utility Type Referred:** Water

**Staff Summary:**

The Town of Vanleer ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since its fiscal year 2019 audit. The Entity has complied with Board directives to complete a rate study, but Board staff is concerned with the Entity's unwillingness to comply with Tennessee's Certified Municipal Financial Officer ("CMFO") requirements as stated in TCA § 6-56-402.

Violations of this requirement can result in the following penalties as stated in § 6-56-407:

- (1) Sales tax revenue collected and distributed by the state to the municipality shall be reduced by an amount mutually agreed upon by the comptroller of the treasury and the commissioner of revenue. The sales tax revenue reduction shall not exceed fifteen percent (15%) of the total amount due to the municipality in a fiscal year, until the municipality is in compliance with § 6-56-402;
- (2) The amounts reduced as a penalty pursuant to this section shall be held in reserve by the department of revenue and allocated to the municipality after the municipality complies with § 6-56-402 as determined by the comptroller of the treasury.

Currently, the Entity's state-shared sales tax revenue deduction is set at 12%. While the state-shared sales tax revenue reduction does not impact the Entity's utility directly, Board staff has concern this can cause potential problems for the utility moving forward. Board staff is aware of instances where utilities illegally transferred funds from the utility fund to the general fund to cover general fund expenses. Since the Entity is foregoing revenues, this could be necessary in the future for the Entity to cover certain expenses. Furthermore, the lack of trained financial staff at the local level could result in poor financial decisions for the utility which could partly explain the original financial distress the Entity experienced. For this reason, Board staff believes the Board should take action to ensure CMFO compliance for the Entity.

**Staff Recommendation:**

The Board should order the following:



JASON E. MUMPOWER  
*Comptroller*

1. By June 30, 2023, the Entity shall contract with a CPA to serve as the Entity's CMFO or hire a CMFO in accordance with § 6-56-401 et seq. The Entity shall take whatever necessary action to remain in compliance moving forward, should it become necessary to contract with another CPA or hire a new CMFO.
2. By July 15, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the CPA as detailed in paragraph 1 in this order.

# Vanleer

	Category: <b>Water</b>		County: <b>Dickson</b>	
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Net Assets</b>	\$5,270,861.00	\$5,383,757.00	\$5,354,599.00	\$5,613,232.00
<b>Deferred Outflow Resources</b>	\$13,134.00	\$13,182.00	\$24,094.00	\$37,844.00
<b>Net Liabilities</b>	\$1,781,353.00	\$1,716,025.00	\$1,572,578.00	\$1,527,878.00
<b>Deferred Inflow Resources</b>	\$0.00	\$2,356.00	\$1,598.00	\$77,512.00
<b>Total Net Position</b>	\$3,502,642.00	\$3,680,914.00	\$3,804,517.00	\$4,045,686.00
<b>Operating Revenues</b>	\$788,377.00	\$892,736.00	\$901,195.00	\$957,076.00
<b>Net Sales</b>	\$726,556.00	\$799,800.00	\$836,423.00	\$859,806.00
<b>Operating Expenses</b>	\$791,064.00	\$716,538.00	\$735,724.00	\$769,130.00
<b>Depreciation Expenses</b>	\$206,182.00	\$212,380.00	\$219,717.00	\$219,455.00
<b>Non Operating Revenues</b>	-\$63,545.00	-\$59,905.00	-\$55,192.00	-\$52,477.00
<b>Capital Contributions</b>	\$133,997.00	\$61,979.00	\$13,324.00	\$105,700.00
<b>Transfers In</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	\$67,765.00	\$178,272.00	\$123,603.00	\$241,169.00
<b>Statutory Change In Net Position</b>	-\$66,232.00	\$116,293.00	\$110,279.00	\$135,469.00



JASON E. MUMPOWER  
*Comptroller*

March 15, 2023

Honorable Mayor Heath Ellis and Board  
Town of Vanleer  
P.O. Box 97  
Vanleer, Tennessee 37181-0097

Honorable Mayor Ellis and Board,

As of the date of this letter, the Town of Vanleer has failed to demonstrate an attempt to comply with the requirements of the Municipal Finance Officer Certification and Education Act of 2007 (CMFO Act), Tenn. Code Ann. §§ 6-56-401, et seq.

In January 2019, Vanleer began incurring a 3% withholding of state-shared sales tax revenue as a penalty for non-compliance. In February 2020, the penalty was increased to 6%. In February 2022, the penalty was increased to 9%. The Department of Revenue is currently holding in reserve \$10,159.50 in state-shared sales tax revenue targeted for Vanleer.

Due to the town's failure to comply with the CMFO Act, the penalty will increase to 12% beginning in March 2023. Revenue will continue to hold state-shared sales tax revenue in reserve and will release those funds to Vanleer once our office can determine the town is in compliance.

If you have any questions, please contact Mark Fawver, Contract Audit Review Specialist for the Division of Local Government Audit (Phone – 615.747.8851 or E-mail – [Mark.Fawver@cot.tn.gov](mailto:Mark.Fawver@cot.tn.gov)).

Sincerely,

A handwritten signature in blue ink that reads "Jason E. Mumpower".

Jason E. Mumpower  
Comptroller of the Treasury

cc: Senator Kerry Roberts  
Representative Jody Barrett  
Jim Arnette – Director, Division of Local Government Audit  
Michael Powell – Town of Vanleer, Treasurer



JASON E. MUMPOWER  
Comptroller

**Entity Referred:** Town of Hornsby

**Referral Reason:** Investigation

**Utility Type Referred:** Water

**Staff Summary:**

The Town of Hornsby ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since its fiscal year 2021 audit. The Entity has not returned its financial distress questionnaire. Board staff has since discovered there has been a large amount of turnover within the Entity's staff. Board staff has been told that the Mayor, an Alderman, the Police Chief, the Fire Chief, the Utility Clerk, and the Utility Meter Reader have all resigned in recent months due to internal issues that have not been disclosed to Board staff. There appear to be frequent billing issues with delinquent notices due to record keeping issues despite accounts being in good standing.

The Entity's 2022 audit is delinquent due in part to poor records for the water fund. Board staff believes there are internal control issues that could be a sign of severe managerial and technical issues. Board staff believes an investigation should be conducted into the Entity's managerial, technical, and financial capacity.

**Staff Recommendation:**

The Board should order the following:

1. Board staff shall investigate the Entity to address the financial, technical, and managerial capacity of the Entity to comply with the requirements of any applicable federal and state laws or regulations.
2. Board staff shall, with the full authority of the Board, issue subpoenas for any documents, records, or information needed, and for the Entity's manager, governing body, and any other necessary staff, to appear in-person before the Board at its second meeting of 2023 if the Entity does not comply fully with the Board's investigation.
3. Board staff shall update the Board as to the status of this investigation at its next meeting on August 24, 2023.
4. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:





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*Comptroller*

- a. a review of the capitalization policy, including any recommended modifications;
  - b. a review of the debt management policy, including any recommended modifications;
  - c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. a review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
  - g. and a justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure.
5. By May 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 4.
6. By December 31, 2023 the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.

# Hornsby

	Category: <b>Water</b>		County: <b>Hardeman</b>	
	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Net Assets</b>	\$477,569.00	\$527,739.00	\$487,129.00	\$476,157.00
<b>Deferred Outflow Resources</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Net Liabilities</b>	\$43,844.00	\$5,501.00	\$7,103.00	\$5,557.00
<b>Deferred Inflow Resources</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Net Position</b>	\$433,725.00	\$522,238.00	\$480,026.00	\$470,600.00
<b>Operating Revenues</b>	\$201,134.00	\$193,045.00	\$193,665.00	\$204,061.00
<b>Net Sales</b>	\$201,134.00	\$193,045.00	\$193,665.00	\$204,061.00
<b>Operating Expenses</b>	\$180,811.00	\$188,312.00	\$236,153.00	\$213,785.00
<b>Depreciation Expenses</b>	\$8,792.00	\$6,428.00	\$11,699.00	\$11,227.00
<b>Non Operating Revenues</b>	\$719.00	\$341.00	\$276.00	\$298.00
<b>Capital Contributions</b>	\$145,167.00	\$83,439.00	\$0.00	\$0.00
<b>Transfers In</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	\$166,209.00	\$88,513.00	-\$42,212.00	-\$9,426.00
<b>Statutory Change In Net Position</b>	\$21,042.00	\$5,074.00	-\$42,212.00	-\$9,426.00



JASON E. MUMPOWER  
Comptroller

**Entity Referred:** Town of Oliver Springs

**Referral Reason:** Decrease In Net Position

**Utility Type Referred:** Water And Sewer

**Staff Summary:**

The Town of Oliver Springs ("the Entity") has been referred to the Water and Wastewater Financing Board ("the Board") for financial distress since its fiscal year 2021 audit that was submitted to the Comptroller's office in September of 2022. The Entity has had delinquent audits for several years and is currently not up to date with its audit submissions. The Entity has not verified with a qualified third party that its rates are set in a manner to improve its financial condition.

Board Staff reviewed the Entity's Annual Utility Survey submission from June 22, 2022, and found that the Entity reported non-revenue water losses of 33%. Board staff reviewed the American Water Works Association reporting worksheet submitted with the entity's 2021 audit and found that the Entity had non-revenue water losses of 77%. Board staff believes that the Board should investigate the Entity's managerial, technical, and financial capacity, whether the Entity is financially distressed, and to evaluate the Entity's non-revenue water loss.

**Staff Recommendation:**

1. Board staff shall investigate the Entity to address the financial, technical, and managerial capacity of the Entity to comply with the requirements of any applicable federal and state laws or regulations.
2. Board staff shall, with the full authority of the Board, issue subpoenas for any documents, records, or information needed, and for the Entity's manager, governing body, and any other necessary staff, to appear in-person before the Board at its second meeting of 2023 if the Entity does not comply fully with the Board's investigation.
3. Board staff shall update the Board as to the status of this investigation at its next meeting on August 24, 2023.
4. The Entity shall have the Tennessee Association of Utility Districts, or another qualified expert as approved by Board staff, perform a rate study that includes the following:
  - a. a review of the capitalization policy, including any recommended modifications;
  - b. a review of the debt management policy, including any recommended modifications;



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*Comptroller*

- c. the creation of a five-year capital asset budget, to be taken from the current capital asset list and to include future anticipated needs;
  - d. a review of relevant utility fees including but not limited to connection or tap fees, including any recommended modifications;
  - e. verification that all governing body members of the utility are in compliance with all relevant training requirements;
  - f. a review of the leak adjustment policy, including any recommended modifications or adoption of such policy should one not exist;
  - g. and a justification of the inside and outside the city limit rates, including any recommended modifications to the rate structure.
5. By May 31, 2023, the Entity shall send Board staff a copy of the contract between the Entity and the qualified expert who is to perform the tasks in paragraph 4.
6. By December 31, 2023 the Entity shall provide Board staff with the completed rate study and either proof of implementation of the resulting recommendations or a proposed plan of implementation.

# Oliver Springs

	Category: <b>Water And Sewer</b>		County: <b>Anderson; Morgan; Roane</b>	
	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Net Assets</b>	\$12,515,958.00	\$15,117,177.00	\$18,197,587.00	\$18,266,874.00
<b>Deferred Outflow Resources</b>	\$75,899.00	\$63,861.00	\$67,662.00	\$78,114.00
<b>Net Liabilities</b>	\$4,421,838.00	\$6,940,676.00	\$7,913,518.00	\$7,413,216.00
<b>Deferred Inflow Resources</b>	\$40,847.00	\$49,497.00	\$46,689.00	\$20,769.00
<b>Total Net Position</b>	\$8,129,172.00	\$8,190,865.00	\$10,305,042.00	\$10,911,003.00
<b>Operating Revenues</b>	\$1,859,521.00	\$1,831,395.00	\$1,868,625.00	\$1,940,079.00
<b>Net Sales</b>	\$1,714,184.00	\$1,699,113.00	\$1,747,651.00	\$1,831,735.00
<b>Operating Expenses</b>	\$1,769,689.00	\$1,719,900.00	\$2,106,446.00	\$2,409,627.00
<b>Depreciation Expenses</b>	\$431,583.00	\$452,744.00	\$464,336.00	\$522,819.00
<b>Non Operating Revenues</b>	-\$33,783.00	-\$55,695.00	-\$77,580.00	-\$74,865.00
<b>Capital Contributions</b>	\$503,889.00	\$5,893.00	\$2,388,351.00	\$1,150,374.00
<b>Transfers In</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>Transfers Out</b>	\$0.00	\$0.00	\$0.00	\$0.00
<b>GAAP Change In Net Position</b>	\$559,938.00	\$102,920.00	\$2,072,950.00	\$605,961.00
<b>Statutory Change In Net Position</b>	\$56,049.00	\$138,254.00	-\$315,401.00	-\$544,413.00