

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## MEETING AGENDA AND PACKET

### BOARD OF ALDERMEN

**November 12, 2024**

**6:00 p.m.**

**Willard City Hall**

**224 W. Jackson St.**

#### Mayor

**Troy Smith**

#### Board Members

**Casey Biellier**

**Jeremy Hill**

**David Keene (Mayor Pro-Tem)**

**Joyce Lancaster**

**Scott Swatosh**

**Carol Wilson**

[www.cityofwillard.org](http://www.cityofwillard.org)

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #2

### Agenda Amendments/Approval of Agenda

**CITY OF WILLARD  
BOARD OF ALDERMEN  
REGULAR MEETING  
November 12, 2024  
6:00 P.M.**

Update Posted on November 6, 2024 @ 4:30 p.m.

Notice is hereby given that the City of Willard, Missouri, Board of Aldermen will conduct a meeting on **November 12, 2024, at 6:00 p.m.**, at the **Willard City Hall, 224 W. Jackson St., Willard, MO.**

The tentative agenda of this meeting includes:

**PLEDGE OF ALLEGIANCE**

**Call the meeting to order.**

**1. Roll Call**

**2. Agenda Amendments/Approval of Agenda**

**3. Consent Agenda:**

“A Consent Agenda allows the Board of Aldermen to consider and approve routine items of business without discussion. Any member of the Board of Aldermen, the City Staff or the Public may request removal of any item from the Consent Agenda and request that it be considered under the Regular Agenda if discussion or debate of the item is desired. Items not removed from the Consent Agenda will stand approved upon motion by any Board member, second and unanimous vote to “approve the Consent Agenda as published or modified.”

- a. Minutes from the Regular Meeting October 28, 2024
- b. October/November 2024 Outstanding Invoices, Checks, and Draft Paid Invoices
- c. Department Head Reports
- d. Board Attendance Report

**4. Current Outstanding Invoices, Draft & Check Paid Invoices for October/November 2024**

**5. Citizen Input**

**6. An Ordinance of the City of Willard Establishing a Water Advisory Board**

**7. An Ordinance of the City of Willard, Missouri, Amending Title VII Utilities, Chapter 705, Water Rates, Article II Water Rates**

**8. An Ordinance of the City of Willard, Missouri, Amending Title VII Utilities, Chapter 710, Sewer Use and Sewer Rates, Article VII Wastewater Charges and Rates**

- 9. Approve a Letter Allowing the Mayor to Grant Wesley Young the Authority to Bind the City of Willard to All Legal Agreements and Subsequent Versions of Program Licenses Presented on Behalf of the Apple Developer Program**
- 10. A Resolution Authorizing the Mayor to Enter into a Financial Services Agreement with Piper Sandler for Lease-Purchase Financing for the Sewer System Improvements**
- 11. Parks Department Proposal for Special Event Fees and Cost Recovery in Willard**
- 12. An Ordinance to Establish a Reimbursement Policy for City Employees by Adding a New Subsection to Title I Government Code, Chapter 117 Personnel and Safety Manuals**
- 13. An Ordinance to Establish a Training and Conference Policy for City Employees by Adding a New Subsection to Title I Government Code, Chapter 117 Personnel and Safety Manuals**
- 14. An Ordinance Revising and Replacing Section 400.200 of the City Code**
- 15. An Ordinance Revising and Replacing Section 400.470 of the City Code**
- 16. An Ordinance Revising and Replacing Section 400.480 of the City Code**
- 17. An Ordinance Revising and Replacing Section 400.510 of the City Code**
- 18. An Ordinance Revising and Replacing Section 400.890 of the City Code**
- 19. An Ordinance Revising and Replacing Section 705.090 of the City Code**
- 20. An Ordinance Revising and Replacing Section 705.110 of the City Code**
- 21. An Ordinance Revising and Replacing Section 710.475 of the City Code**
- 22. Sanitary Sewer Project Status**
- 23. City Administrator Remarks**
- 24. New Business**
- 25. Unfinished Business**

**26. Recess the Open Session & Open the Closed Session Pursuant to RSMO Section 610.021 #(1) Legal**


**27. Call the Meeting to Order**

**28. Roll Call**

**29. Close the Closed Session and Reconvene the Open Session**

**30. Adjourn Meeting**

If you have special needs which require accommodation, please notify personnel at the City Hall. Representatives of the news media may obtain copies of this notice by contacting the City Clerk at 417-742-5302.

  
Janice Gargus, City Clerk



### Consent Agenda Item #3

“A Consent Agenda allows the Board of Aldermen to consider and approve routine items of business without discussion. Any member of the Board of Aldermen, the City Staff or the Public may request removal of any item from the Consent Agenda and request that it be considered under the Regular Agenda if discussion or debate of the item is desired. Items not removed from the Consent Agenda will stand approved upon motion by any Board member, second and unanimous vote to “approve the Consent Agenda as published or modified.”

- a. Minutes from the Regular Meeting October 28, 2024
- b. October/November 2024 Outstanding Invoices, Checks, and Draft Paid Invoices
- c. Department Head Reports
- d. Board Attendance Report

# CITY OF WILLARD, MISSOURI

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Consent Agenda Item #3a

## Minutes from the Regular Meeting October 28, 2024

## MEETING MINUTES

**CITY OF WILLARD  
BOARD OF ALDERMEN  
REGULAR MEETING  
October 28, 2024  
6:00 P.M.**

Staff Present: City Administrator Wesley Young, City Attorney Nate Dally, City Clerk Janice Gargus, CFO Carolyn Halverson, Parks Director Jason Knight, Planning & Zoning Commission Director Mike Ruesch, Public Works Director Trevor Hoffman, Public Works Assistant Director Shane Fox, Project Manager Steve Bodenhamer, Police Officer JD Landon

Citizens Present: G. Cook, Christina McQueen, Marilyn Ulney, Lisa Savage, Jenny Williams, Jim Williams, Daran Whited, David O'Connor, Julie Carey, Kelley Bennett, Angie Wilson, Cindy Holcomb, Marta Mize, Sandra Wallace

The tentative agenda of this meeting includes:

### **PLEDGE OF ALLEGIANCE**

Mayor Smith led the Pledge of Allegiance

### **Call the meeting to order.**

Mayor Smith called the meeting to order and asked the City Clerk to conduct the Roll Call.

#### **1. Roll Call**

The City Clerk conducted the Roll Call.

Present: Mayor Troy Smith, Alderman Casey Biellier, Alderman Jeremy Hill, Alderman & Mayor Pro-Tem David Keene, Alderman Joyce Lancaster, Alderman Scott Swatosh, Alderman Carol Wilson

#### **2. Agenda Amendments/Approval of Agenda**

City Administrator Wes Young asked that Items #4 & #10 be removed from the agenda without renumbering the remaining Items. Planning & Zoning Commission Director Mike Ruesch asked that Item #20 be removed from the agenda. Motion was made by Alderman Biellier and seconded by Alderman Keene to approve the agenda as amended by removing Items # 4, 1#0, & #20 and not renumbering the items. Motion passed with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

#### **3. Consent Agenda:**

"A Consent Agenda allows the Board of Aldermen to consider and approve routine items of business without discussion. Any member of the Board of Aldermen, the City Staff or the Public may request removal of any item from the Consent Agenda and request that it be considered under the Regular Agenda if discussion or debate of the item is desired. Items not removed from the Consent Agenda will stand approved upon motion by any Board member, second and unanimous vote to "approve the Consent Agenda as published or modified."



- a. Minutes from the Regular Meeting October 14, 2024
- b. September Financial Summaries
- c. September Financial Statements
- d. September/October Outstanding Invoices, Checks and Draft Paid Invoices
- e. September Check Register
- f. September Utility Adjustments Report

Mayor Smith asked for a motion to approve the Consent Agenda. Motion was made by Alderman Biellier and seconded by Alderman Keene to approve the Consent Agenda as stands with no amendments. Motion carried with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

~~4. Current Outstanding Invoices, Draft & Check Paid Invoices for September/October 2024~~

**5. Citizen Input**

Mayor Smith asked if there were any citizens that would like to speak. The following citizens did speak and asked questions and expressed their concerns over the proposed rate increases for water and sewer. Their main concern conveyed is the difference between rates inside the city versus the rates for outside the city. They stated they understand the need for rate increases; however, they do not understand why the rate outside the city must be so much higher versus the in-city rates and they just want a fair rate increase across the board that is the same amount for outside the city and inside the city. Mayor Smith asked that they hold off on some of these issues until the agenda items specific to the rate increases are discussed later in the meeting. Wes Young told them he is going to ask the board to approve a Water Advisory Board, and that item will be discussed as well when the water and sewer rate agenda item is discussed later in the meeting. Several citizens spoke and those who chose to give their name prior to speaking include: Kathy Cook (Greg Cook) – Out of City, Lisa Savage, Jenny Williams, Greg Cook, Mr. Savage, Kelly Bennett, Angie Wilson.

**6. A Resolution of the Board of Aldermen of the City of Willard, Missouri, Approving the Mayor to Enter into a Healthcare Contract Providing Health Insurance for the Employees of the City of Willard, Missouri, with Ollis/Akers/Arney Insurance & Business Advisors of Springfield, Missouri Representing United Healthcare.**

- a. Exhibit A
- b. Exhibit B

Cameron Ollis presented the insurance presentation and started by giving a brief history of his experience in the insurance industry. It was noted that the city is asking for the board to approve a new insurance plan with Anthem BCBS and not United Healthcare as indicated on the resolution. Cameron has been in discussion with CFO Carolyn Halverson, Director of Human Resources Dona Slater, and City Administrator Wes Young. Cameron compared six different carriers and is recommending changing from United Healthcare to Anthem BCBS due to a much better savings for the city's premiums. Additionally, there are added benefits for employees including the deductible going from \$6,750 down to \$4,500 for individuals and from \$13,500 down to \$9,000 for families. Cameron explained that Anthem BCBS is in a contract battle with Mercy and they're making progress, and he believes it's going to be resolved probably in late December. If not, then there will be a 90-day extension for solving the contract renewal. If it does not get renewed, city employees will need to switch to Cox Health Doctors. Cameron also said the dental insurance will be a better program and overall, the city will be saving around \$35,000. Mayor Smith asked for a

motion to approve the resolution. Motion was made by Alderman Lancaster and seconded by Alderman Biellier Approving the Mayor to Enter into a Healthcare Contract Providing Health Insurance for the Employees of the City of Willard, Missouri with Ollis/Akers/Arney Insurance & Business Advisors for a New Healthcare Plan with Anthem BCBS. Motion carried with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

**7. A Resolution of the Board of Aldermen of the City of Willard, Missouri, Approving the Mayor to Enter into a Loaner Agreement with JJB Transportation, LLC, PO Box 222, Collinsville, Oklahoma 74021 for a Loaner Bus**

**a. Exhibit A**

Parks Director Jason Knight explained that the new bus is not ready to be picked up and a loaner bus is needed because the afterschool program is starting on November 4<sup>th</sup>. There are currently ten students enrolled and there is a need to expand to other school areas and he is evaluating the costs of doing so. Jason said there is a need to maintain consistency since we've had these kids sign up and we said we were committed to doing this program through May 2025. If the program doesn't take off as hoped and more students don't enroll, it will not be offered next school year. Mayor Smith asked for a motion to approve the resolution. Motion was made by Alderman Biellier and seconded by Alderman Hill to Approve a Resolution of the Board of Aldermen of the City of Willard, Missouri, Approving the Mayor to Enter into a Loaner Agreement with JJB Transportation, LLC, PO Box 222, Collinsville, Oklahoma 74021 for a Loaner Bus. Motion passed with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

**8. A Resolution of the Board of Aldermen of the City of Willard, Missouri, Approving the Mayor to Enter into a Contract for Engineering and Professional Services for the Jackson Street Improvements**

**a. Exhibit A**

Mike Ruesch briefly explained the resolution and the need to approve it. After questions and discussion, Mayor Smith asked for a motion to approve the resolution. Motion was made by Alderman Biellier and seconded by Alderman Lancaster to Approve a Resolution of the Board of Aldermen of the City of Willard, Missouri, Approving the Mayor to Enter into a Contract for Engineering and Professional Services for the Jackson Street Improvements. Motion carried with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

**9. A Resolution of the Board of Aldermen of the City of Willard, Missouri, to Appoint Members to the Southwest Missouri Joint Municipal Water Utility Commission**

**a. Exhibit A**

Wes Young explained the purpose of this resolution. Mayor Smith asked for a motion to approve the resolution. Motion was made by Alderman Hill and seconded by Alderman Keene to Approve a Resolution of the Board of Aldermen of the City of Willard, Missouri, to Appoint Members to the Southwest Missouri Joint Municipal Water Utility Commission. Motion carried with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

~~**10. An Ordinance Authorizing the Appointment of One Director and One Alternate to the Southwest Missouri Joint Municipal Water Utility Commission**~~

**11. An Ordinance Amending the City of Willard Missouri Code to Authorize Certain City Officials and Employees to Speak on Behalf of the City on Social Media, in the City of Willard, Missouri**

Wes Young reiterated the purpose of this ordinance and gave a brief explanation of those who will be included to speak on behalf of the City of Willard on social media. This was the second read and Mayor Smith asked for a motion to approve the ordinance. Motion was made by Alderman Hill and seconded by Alderman Biellier to Approve an Ordinance Amending the City of Willard Missouri Code to Authorize Certain City Officials and Employees to Speak on Behalf of the City on Social Media, in the City of Willard, Missouri. Motion passed with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

***Note in Reference to Items #12 & #13: The Board will discuss the water and sewer rates previously presented at the recent public hearing, along with additional options recently provided by the rate analyst as a result of the public hearing's discussions. If the Board finds that the recommendations from the public hearing represent the necessary option, they will proceed with a vote and complete both the first and second readings of the proposed rate ordinance.***

**12. An Ordinance of the City of Willard, Missouri, Amending Title VII Utilities, Chapter 705, Water Rates, Article II Water Rates**

- a. Exhibit A
- b. Exhibit B
- c. Exhibit C
- d. Exhibit D

**13. An Ordinance of the City of Willard, Missouri, Amending Title VII Utilities, Chapter 710, Sewer Use and Sewer Rates, Article VII Wastewater Charges and Rates**

***Items #12 & #13*** were discussed by Wes Young, and he explained the different options for settling the issues that have been discussed with the rate analyst and the concerns voiced by the citizens at the Public Hearing. Options include appointing a utilities advisory board with members from in and out of town. Wes also explained the different rate possibilities included in the BOA packet. There was a lot of discussion and questions asked by the board members in reference to the newest water rate scenarios provided by Carl Brown and board members assured citizens in the meeting that their concerns have been heard and the board wants to choose an option that most meets the needs of the citizens and the city. Wes indicated that Carl Brown's latest water rates did not include any updated sewer rate scenarios. Wes will ask Carl to submit them, and they hopefully will be available for the next meeting.

**14. An Ordinance Revising and Replacing Section 400.200 of the City Code**

Mike Ruesch explained the reason for revising this section and that it's due to schools will probably always be located in residential neighborhoods and this revision will allow for signs to be added in an R-1 School Zone without having to obtain permission each time as long as the ordinance specifications are followed.

**15. An Ordinance Revising and Replacing Section 400.470 of the City Code**

Mike Ruesch explained that revising this section is mainly for removing car washes from C-1 Zones and placing them in M-1 Zones.

**16. An Ordinance Revising and Replacing Section 400.480 of the City Code**

Mike Ruesch explained that revising this section allows self-storage units to be put back in the ordinance for M-1 Zones and for car washes to be moved to the M-1 Zone.

**17. An Ordinance Revising and Replacing Section 400.510 of the City Code**

Mike Ruesch explained the reason for making changes to the Mixed-Use Section. Mixed-use zones allow developers to come in and modify mixed-use which would include rezoning a commercial use property with options such as developing a zone that would include offices on the bottom and apartments on the top. Mr. Ruesch said he wants to encourage mixed-use because right now everything is located far away in different zones and he hopes for developing goals that develop a conceptual plan. Developers will be required to keep 40% of the land open space for trails, parks, amenities, etc. He said everyone would hear the developers' details for their plans up front and engineers will be used to plan the developments and there will be a measuring guideline for things the developer includes. There will be an interconnectivity score for connecting with another subdivision; recreation space; and designing and installing parks for the City of Willard. Mike said he also encourages mixed-use because it saves on transportation issues and there must be diversity of the design with various buildings and purposes. There will be credit and scoring for different uses and the city will give them a preferred developer status. Inspection times will be at a block rate and there's no need for concerns for preferred treatment because the developer isn't paying for the service.

**18. An Ordinance Revising and Replacing Section 400.890 of the City Code**

Mike Ruesch explained the revisions in this section to include the specifics of school signage allowed.

**19. An Ordinance Revising and Replacing Section 705.090 of the City Code**

Mike Ruesch explained that new connection fees have been approved and a connection and capacity table has been added to this section.

**20. ~~An Ordinance Revising and Replacing Section 705.125 of the City Code~~**

**21. An Ordinance Revising and Replacing Section 710.475 of the City Code**

Mike Ruesch explained that connection fees are already established, and this revision is including a table for water and sewer capacity fees. He added there are no increases, just adjustments being made.

**22. Sanitary Sewer Project Status**

Project Manager Steven Bodenhamer discussed the details of this project by explaining the updates on his memo which is included in the packet.

### **23. City Administrator Remarks**

Wes Young stated that he has been Certified as a Missouri Municipal Government Employee. He has attended two recent PIO trainings and gained some good tips and feedback as we hopefully develop our PIO soon and received a lot of good feedback on our social media policy which we are now ahead including crisis planning. We generally should develop some general templates to get information out on social media. Wes has been exploring the idea of a Water Advisory Board and has been looking at other cities that have a board for this. Mayor Smith said it makes sense especially in our circumstance and it gives those outside the city some kind of representation and it relieves communication issues, input issues, and ownership issues. Wes will continue to explore the options for setting up this board. Wes pointed out that he has generated some summaries of the community survey's, and he will email those to everyone and they will be discussed more at the next meeting. At this point, Wes opened the new website on the monitor for everyone to see and he explained changes and new items this new website will include and the potential for launching the website soon. He also explained this new website allows the city information to be shared on social media including Facebook, Instagram, and X, and there will also be an app and it can be connected with a smart phone. There will be more feedback and more opportunity to show citizens what the city is accomplishing and keep them up to date with the latest news. There will also be a map that Public Works will use to show the locations of the current projects they are working on. Wes also explained the new Agenda Management Program Software and how it will work with the new website.

### **24. New Business**

None

### **25. Unfinished Business**

None

### **26. Recess the Open Session & Open the Closed Session Pursuant to RSMO Section 610.021 # (1) Legal**

Mayor Smith asked for a motion to recess the open session and open the closed session. Motion was made by Alderman Keene and seconded by Alderman Biellier to Recess the Open Session & Open the Closed Session Pursuant to RSMO Section 610.021 # (1) Legal at 8:23 p.m. Motion passed with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

### **27. Call the Meeting to Order**

Mayor Smith called the meeting to order at 8:24 p.m.

### **28. Roll Call**

Mayor Smith asked the City Clerk to conduct the Roll Call.

The Roll Call was conducted by the City Clerk.

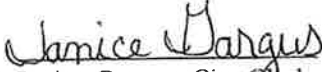
Present: Mayor Smith, Alderman Casey Biellier, Alderman Jeremy Hill, Alderman Joyce Lancaster, Alderman & Mayor Pro-Tem David Keene, Alderman Scott Swatosh, Alderman Carol Wilson.

### **29. Close the Closed Session and Reconvene the Open Session**

Mayor Smith asked for a motion to close the closed session and reconvene the open session. Motion was made by Alderman Biellier and seconded by Alderman Hill to Close the Closed Session and Reconvene the Open Session at 8:34 p.m. Motion carried with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

### **30. Adjourn Meeting**

Mayor Smith asked for a motion to adjourn the meeting. Motion was made by Alderman Biellier and seconded by Alderman Lancaster to adjourn the meeting at 8:35 p.m. Motion passed with a 6-0 vote. Voting aye: Aldermen Biellier, Hill, Keene, Lancaster, Swatosh, Wilson.

  
Janice Gargus, City Clerk

**CITY OF WILLARD  
BOARD OF ALDERMEN**



**AGENDA ITEM #3b  
FINANCE DEPARTMENT**

**ACTION REQUIRED: APPROVAL REQUESTED**

- **October 2024/November 2024 Outstanding Invoices**
- **October 2024/November 2024 Check Paid Invoices and Draft Paid Invoices**



# Expense Approval Report 1

By Vendor Name

Post Dates 10/25/2024 - 11/8/2024

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
<b>Vendor: AMA300 - ALLGEIER, MARTIN &amp; ASSOCIATES, INC</b>					
ALLGEIER, MARTIN & ASSOCIA	03	11/07/2024	94 LS & FM IMPRVMENTS FY2023 CDS GRNT DESGN - S	20-700-95500	3,339.00
ALLGEIER, MARTIN & ASSOCIA	164	11/07/2024	PROF FEES GEN ON-CALL REQ	20-700-56400	7,511.00
ALLGEIER, MARTIN & ASSOCIA	165	11/07/2024	PROF FEES LFT STN 94 CONSTR-S	20-700-56400	3.85
ALLGEIER, MARTIN & ASSOCIA	167	11/07/2024	PROF FEES MDWS TRNK SWR - S	20-700-56400	12,416.08
ALLGEIER, MARTIN & ASSOCIA	168	11/07/2024	PROCTOR RD DRAINAGE IMPRVMENTS FSBLTY STDY-P&	10-400-56400	452.00
<b>Vendor AMA300 - ALLGEIER, MARTIN &amp; ASSOCIATES, INC Total:</b>					<b>23,721.93</b>
<b>Vendor: REP425 - ALLIED SERVICES, LLC</b>					
ALLIED SERVICES, LLC	3029	11/07/2024	TRASH EXP-ALL	10-100-62300	128.69
ALLIED SERVICES, LLC	3029	11/07/2024	TRASH EXP-ALL	10-200-62300	46.40
ALLIED SERVICES, LLC	3029	11/07/2024	TRASH EXP-ALL	20-600-62300	157.78
ALLIED SERVICES, LLC	3029	11/07/2024	TRASH EXP-ALL	20-700-62300	157.78
ALLIED SERVICES, LLC	3029	11/07/2024	TRASH EXP-ALL	30-800-50450	220.59
ALLIED SERVICES, LLC	3029	11/07/2024	TRASH EXP-ALL	30-800-62300	570.51
ALLIED SERVICES, LLC	4533	11/07/2024	RECYCLE CENTER-S	20-700-57200	132.83
ALLIED SERVICES, LLC	4799	11/07/2024	RECYCLE CENTER EXP-S	20-700-57200	429.00
<b>Vendor REP425 - ALLIED SERVICES, LLC Total:</b>					<b>1,843.58</b>
<b>Vendor: ACS100 - AMAZON CAPITAL SERVICES INC</b>					
AMAZON CAPITAL SERVICES I	1KPF	11/07/2024	PAD LCK, SOLAR CHGR KIT, MEASURING WHL-ST/S/W/S	10-300-52000	49.83
AMAZON CAPITAL SERVICES I	1KPF	11/07/2024	PAD LCK, SOLAR CHGR KIT, MEASURING WHL-ST/S/W/S	20-600-52000	99.66
AMAZON CAPITAL SERVICES I	1KPF	11/07/2024	PAD LCK, SOLAR CHGR KIT, MEASURING WHL-ST/S/W/S	20-700-52000	99.66
AMAZON CAPITAL SERVICES I	9D4	11/07/2024	EAR MUFFS,SIGN,LCKOUT/TAGOU T KIT,LOG BKS-ST/S/W/S	10-300-56500	55.13
AMAZON CAPITAL SERVICES I	9D4	11/07/2024	EAR MUFFS,SIGN,LCKOUT/TAGOU T KIT,LOG BKS-ST/S/W/S	20-600-56500	110.26
AMAZON CAPITAL SERVICES I	9D4	11/07/2024	EAR MUFFS,SIGN,LCKOUT/TAGOU T KIT,LOG BKS-ST/S/W/S	20-700-56500	110.26
AMAZON CAPITAL SERVICES I	9T9C	11/07/2024	OUTDOOR FAUCET HANDLES, FAUCET HOSE, HSE BIB-W	20-600-50300	35.79
AMAZON CAPITAL SERVICES I	JN6	11/07/2024	CONNCTNG NUT,CHCK VLVE DCKBLS,TUBNG,SERV KIT-W	20-600-50300	178.83
AMAZON CAPITAL SERVICES I	KHD	11/07/2024	GLOW NECKLACKES , MARKING FLAGS - PKS	30-800-50170	38.28
AMAZON CAPITAL SERVICES I	KHD	11/07/2024	GLOW NECKLACKES , MARKING FLAGS - PKS	30-800-50180	64.99
AMAZON CAPITAL SERVICES I	KJR	11/07/2024	GUARD RAIL WINCH, MANHOLE GUARD RAIL, DUCT FAN-S	20-700-51000	1,321.01
AMAZON CAPITAL SERVICES I	LTQ	11/07/2024	SANTA AREA DECOR - PKS	30-800-50170	169.85
<b>Vendor ACS100 - AMAZON CAPITAL SERVICES INC Total:</b>					<b>2,333.55</b>
<b>Vendor: BVM100 - AMERICAN TRAILER &amp; STORAGE, INC.</b>					
AMERICAN TRAILER & STORA	968	11/07/2024	STORAGE CONTAINER RENTALS - PKS	30-800-55850	305.00
AMERICAN TRAILER & STORA	969	11/07/2024	STORAGE CONTAINER RENTAL - PKS	30-800-55850	115.00
<b>Vendor BVM100 - AMERICAN TRAILER &amp; STORAGE, INC. Total:</b>					<b>420.00</b>



Expense Approval Report 1

Post Dates: 10/25/2024 - 11/8/2024

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
<b>Vendor: APAC100 - APAC CENTRAL, INC</b>					
APAC CENTRAL, INC	700	11/07/2024	COMM SURFACE STONE - FR 124 LEAK REPAIR - W	20-600-51000	479.82
APAC CENTRAL, INC	893	11/07/2024	COMM SURFACE - LANGSTON WTR REPAIR - W	20-600-51000	448.14
<b>Vendor APAC100 - APAC CENTRAL, INC Total:</b>					<b>927.96</b>
<b>Vendor: BWI200 - BULK WASTE LLC d/b/a BWI SANITATION</b>					
BULK WASTE LLC d/b/a BWI S	414	11/07/2024	MILLER PARK TOILETS - PKS	30-800-55850	239.80
BULK WASTE LLC d/b/a BWI S	824	11/07/2024	TOILET RENTALS, TRUNK OR TREAT/ SPOOKY 5K - PKS	30-800-55850	320.00
<b>Vendor BWI200 - BULK WASTE LLC d/b/a BWI SANITATION Total:</b>					<b>559.80</b>
<b>Vendor: STE200 - CALEB STEEN</b>					
CALEB STEEN	BASS PRO	11/07/2024	REIM FOR BOOTS BOUGHT AT BASS PRO - LAW	10-200-92500	130.60
<b>Vendor STE200 - CALEB STEEN Total:</b>					<b>130.60</b>
<b>Vendor: COMMGN - COMMERCE CREDIT CARD SERVICES</b>					
COMMERCE CREDIT CARD SE	10-31-24 DG	11/07/2024	DG PLATES, CUPS, NAPKINS FOR INS MEET - GEN	10-100-50130	13.98
COMMERCE CREDIT CARD SE	11-1-24	11/07/2024	PIZZA HUT PARENTS NIGHT OUT PIZZA - PKS	30-800-50175	50.25
COMMERCE CREDIT CARD SE	11-4-24	11/07/2024	APPLE MRKT DRINKS FOR INS MEET - GEN	10-100-50130	19.40
COMMERCE CREDIT CARD SE	1494	11/07/2024	INDEED JOB POSTS PW & BUS DRV - STS/W/S/PKS	10-300-55200	49.38
COMMERCE CREDIT CARD SE	1494	11/07/2024	INDEED JOB POSTS PW & BUS DRV - STS/W/S/PKS	20-600-55200	98.77
COMMERCE CREDIT CARD SE	1494	11/07/2024	INDEED JOB POSTS PW & BUS DRV - STS/W/S/PKS	20-700-55200	98.77
COMMERCE CREDIT CARD SE	1494	11/07/2024	INDEED JOB POSTS PW & BUS DRV - STS/W/S/PKS	30-800-55200	246.91
COMMERCE CREDIT CARD SE	1599	11/07/2024	ZORO WIRE CONNECTRS INCLSV PLYGRND LGHTNG-PK	30-800-95500	579.42
COMMERCE CREDIT CARD SE	2084	11/07/2024	MPRA LUNCH & LEARN SAMANTHA GUINN - PKS	30-800-56950	15.00
COMMERCE CREDIT CARD SE	2138 1	11/07/2024	GEN RENTL VAC MOP FOR MURRAY ROOM FLOOR-PKS	30-800-55850	33.00
COMMERCE CREDIT CARD SE	2138 2	11/07/2024	GEN RENTL VAC MOP FOR MURRAY ROOM FLOOR-PKS	30-800-55850	72.19
COMMERCE CREDIT CARD SE	24983V	11/07/2024	CROWN POWER TRACTOR TIE ROD - PKS	30-800-71100	134.38
COMMERCE CREDIT CARD SE	2847	11/07/2024	SAMS CONCESSIONS, TRASH BAGS, PAPER PLATES - PKS	30-800-50200	273.28
COMMERCE CREDIT CARD SE	2847	11/07/2024	SAMS CONCESSIONS, TRASH BAGS, PAPER PLATES - PKS	30-800-50550	74.94
COMMERCE CREDIT CARD SE	390824	11/07/2024	GOEDECKE STRGHT FORMS, NAILSTAKES-SIDEWLK-ST	10-300-50130	777.50
COMMERCE CREDIT CARD SE	4910	11/07/2024	SMARTSIGN OBJECT MARKR, LETTER KITS-ST	10-300-50130	561.10
COMMERCE CREDIT CARD SE	5217	11/07/2024	WIRE & CABLE WIRNG INCLSV PLYGRND LIGHTNG-PKS	30-800-95500	1,705.00
COMMERCE CREDIT CARD SE	7511	11/07/2024	ALL VALLEYBALL BALL CAGE, VOLLEYBALLS -PKS	30-800-50180	768.87
COMMERCE CREDIT CARD SE	8645	11/07/2024	BAGSPOT DOG POOP BAGS - PKS	30-800-50130	59.95
COMMERCE CREDIT CARD SE	884	11/07/2024	MASTERS PLMBNG MANHOLE RINGS & LIDS - S	20-700-51000	927.00
COMMERCE CREDIT CARD SE	CASEYS	11/07/2024	CASEYS DONUTS FOR INS MEET - GEN	10-100-50130	68.24
COMMERCE CREDIT CARD SE	DURHAM	11/07/2024	TOMO PRE-EMPLYMNT SCREEN J. DURHAM - GEN	10-100-56400	56.65
COMMERCE CREDIT CARD SE	IVANOV	11/07/2024	TOMO PRE-EMPLYMNT SCREEN M. IVANOV - GEN	10-100-56400	56.65

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Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
COMMERCE CREDIT CARD SE	LOWES	11/07/2024	LOWES 50LB NON SHRINK	10-300-51000	60.06
COMMERCE CREDIT CARD SE	ROSS	11/07/2024	PREC-SOUTHVW CLEAN UP-ST		
COMMERCE CREDIT CARD SE	ROSS	11/07/2024	TOMO PRE-EMPLYMNT	10-100-56400	56.65
COMMERCE CREDIT CARD SE	SW CODE	11/07/2024	SCREEN D. ROSS - GEN		
COMMERCE CREDIT CARD SE	SW CODE	11/07/2024	SW MO CODE OFFICIALS	10-400-56950	100.00
COMMERCE CREDIT CARD SE	ZOO	11/07/2024	TRAINING M. RUESCH-P&D		
COMMERCE CREDIT CARD SE	ZOO	11/07/2024	FRIENDS OF ZOO ANIMAL	30-800-47100	75.00
COMMERCE CREDIT CARD SE	8247	11/08/2024	VISIT PARENTS NIGHT OUT-PK		
COMMERCE CREDIT CARD SE	8247	11/08/2024	ROST READY MIX	10-300-51000	1,115.03
			RESURFACING MATERIAL FR		
			124 - STS		
<b>Vendor COMMGN - COMMERCE CREDIT CARD SERVICES Total:</b>					<b>8,147.37</b>
<b>Vendor: CON170 - CONCO COMPANIES</b>					
CONCO COMPANIES	3108	11/07/2024	R 3000 PSI AE - 101 DEER RUN	10-300-51000	782.78
CONCO COMPANIES	9499	11/07/2024	SIDEWALK PROJ - STS		
CONCO COMPANIES	9499	11/07/2024	5/8" COMM STN,1" DRTY	20-600-51000	89.71
CONCO COMPANIES	9509	11/07/2024	BASE- MILLER ST PIPE REPR-		
CONCO COMPANIES	9509	11/07/2024	5/8" COMM STN, 1" DRTY	20-600-51000	135.87
CONCO COMPANIES	9509	11/07/2024	BASE- LK REPAIR KNIGHT ST-		
<b>Vendor CON170 - CONCO COMPANIES Total:</b>					<b>1,008.36</b>
<b>Vendor: DAV100 - DAVID DORAN,ATTORNEY AT LAW</b>					
DAVID DORAN,ATTORNEY AT L	11-1-24	11/07/2024	MUNICIPAL JUDGE FEES - CT	10-250-56400	900.00
<b>Vendor DAV100 - DAVID DORAN,ATTORNEY AT LAW Total:</b>					<b>900.00</b>
<b>Vendor: DWH100 - DIG WISE HYDRO INC</b>					
DIG WISE HYDRO INC	1618	11/08/2024	WTR REPRS AT KNIGHT, FR	20-600-95100	6,987.50
DIG WISE HYDRO INC	1618	11/08/2024	124 & HWY EE - W		
<b>Vendor DWH100 - DIG WISE HYDRO INC Total:</b>					<b>6,987.50</b>
<b>Vendor: DNS100 - DNS EQUIPMENT LLC</b>					
DNS EQUIPMENT LLC	1663	11/07/2024	UN1791, HYPOCHLORITE	20-600-50000	1,626.99
DNS EQUIPMENT LLC	1663	11/07/2024	SOLUTION-WELLS - W		
<b>Vendor DNS100 - DNS EQUIPMENT LLC Total:</b>					<b>1,626.99</b>
<b>Vendor: ESR500 - ESRI, INC.</b>					
ESRI, INC.	4151	11/07/2024	ARCGIS DESKTOP BASIC	10-400-57400	460.00
ESRI, INC.	4151	11/07/2024	MAINT - P&D		
<b>Vendor ESR500 - ESRI, INC. Total:</b>					<b>460.00</b>
<b>Vendor: FRA555 - FIRST RESPONDER OUTFITTERS, INC</b>					
FIRST RESPONDER OUTFITTER	16563-2	11/07/2024	UNIFORM ITEMS L. O'NEIL -	10-200-92500	298.95
FIRST RESPONDER OUTFITTER	16563-2	11/07/2024	LAW		
<b>Vendor FRA555 - FIRST RESPONDER OUTFITTERS, INC Total:</b>					<b>298.95</b>
<b>Vendor: GGR100 - GETTINGGREATRATES.COM</b>					
GETTINGGREATRATES.COM	100.538.25	11/08/2024	LAST INV FOR RATE STUDY &	20-600-56400	6,111.51
GETTINGGREATRATES.COM	100.538.25	11/08/2024	ADDL MODEL - W/S		
GETTINGGREATRATES.COM	100.538.25	11/08/2024	LAST INV FOR RATE STUDY &	20-700-56400	6,111.52
GETTINGGREATRATES.COM	100.538.25	11/08/2024	ADDL MODEL - W/S		
<b>Vendor GGR100 - GETTINGGREATRATES.COM Total:</b>					<b>12,223.03</b>
<b>Vendor: GOTO100 - GOTO COMMUNICATIONS, INC</b>					
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	10-100-61050	117.94
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	10-200-61050	117.94
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	10-250-61050	84.18
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	10-300-61050	87.00
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	10-400-61050	84.18
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	20-600-61050	129.14
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	20-700-61050	129.14
GOTO COMMUNICATIONS, IN	9844	11/07/2024	INTERNET-ALL	30-800-61050	131.97
<b>Vendor GOTO100 - GOTO COMMUNICATIONS, INC Total:</b>					<b>881.49</b>
<b>Vendor: HAY150 - HAYNES EQUIPMENT COMPANY INC</b>					
HAYNES EQUIPMENT COMPA	28889H	11/08/2024	CHLORINE ANALYZER PANEL-	20-600-50300	9,395.76
HAYNES EQUIPMENT COMPA	28889H	11/08/2024	WTR TESTING - W		
<b>Vendor HAY150 - HAYNES EQUIPMENT COMPANY INC Total:</b>					<b>9,395.76</b>

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
<b>Vendor: JKN100 - JASON KNIGHT</b>					
JASON KNIGHT	AUG	11/07/2024	REIM PHONE AUG - PKS	30-800-61000	50.00
JASON KNIGHT	JUL	11/07/2024	REIM PHONE JUL - PKS	30-800-61000	50.00
JASON KNIGHT	OCT	11/07/2024	REIM PHONE OCT - PKS	30-800-61000	50.00
JASON KNIGHT	SEP	11/07/2024	REIM PHONE SEP - PKS	30-800-61000	50.00
<b>Vendor JKN100 - JASON KNIGHT Total:</b>					<b>200.00</b>
<b>Vendor: LML100 - LAUBER AND ASSOCIATES MUNICIPAL LAW LLC</b>					
LAUBER AND ASSOCIATES MU	28491	11/07/2024	CITY ATTY FEES - ALL	10-100-56200	1,621.00
LAUBER AND ASSOCIATES MU	28491	11/07/2024	CITY ATTY FEES - ALL	10-400-56400	1,205.74
LAUBER AND ASSOCIATES MU	28491	11/07/2024	CITY ATTY FEES - ALL	20-600-56400	703.63
LAUBER AND ASSOCIATES MU	28491	11/07/2024	CITY ATTY FEES - ALL	20-700-56400	703.63
LAUBER AND ASSOCIATES MU	28491	11/07/2024	CITY ATTY FEES - ALL	30-800-56400	212.00
LAUBER AND ASSOCIATES MU	28492	11/07/2024	CITY PROSECUTOR FEES - LAW	10-200-56400	4,946.00
<b>Vendor LML100 - LAUBER AND ASSOCIATES MUNICIPAL LAW LLC Total:</b>					<b>9,392.00</b>
<b>Vendor: LEG250 - LEGALSHIELD</b>					
LEGALSHIELD	10-25-24	11/07/2024	GROUP INS MCCLAIN & SHIPLEY-LAW	10-200-93000	29.90
<b>Vendor LEG250 - LEGALSHIELD Total:</b>					<b>29.90</b>
<b>Vendor: LOW505 - LOWE'S CREDIT SERVICES</b>					
LOWE'S CREDIT SERVICES	10-24-24	11/07/2024	CONDUIT,FITTINGS,PVC	30-800-95500	662.07
LOWE'S CREDIT SERVICES	10-24-24 LOWES	11/07/2024	CEMNT INCLSV PLY LGHT-PKS PVC CONDUIT INCLSV PLYGRND LIGHTNG - PKS	30-800-95500	303.60
<b>Vendor LOW505 - LOWE'S CREDIT SERVICES Total:</b>					<b>965.67</b>
<b>Vendor: LES100 - LOYD'S ELECTRIC SUPPLY INC</b>					
LOYD'S ELECTRIC SUPPLY INC	129	11/07/2024	250V RKS T/D FUSE- WELL (VAULT) REPAIRS - W	20-600-51000	562.37
<b>Vendor LES100 - LOYD'S ELECTRIC SUPPLY INC Total:</b>					<b>562.37</b>
<b>Vendor: LXE100 - LUMIX ELECTRICAL INC</b>					
LUMIX ELECTRICAL INC	240497	11/07/2024	PW MAINT SHOP RE-WIRE - STS / S / W	10-300-95100	4,613.66
LUMIX ELECTRICAL INC	240497	11/07/2024	PW MAINT SHOP RE-WIRE - STS / S / W	20-600-95100	9,227.33
LUMIX ELECTRICAL INC	240497	11/07/2024	PW MAINT SHOP RE-WIRE - STS / S / W	20-700-95100	9,227.33
LUMIX ELECTRICAL INC	240498	11/07/2024	LIFT STATION 94 EXTRAS - S	20-700-95500	9,364.00
LUMIX ELECTRICAL INC	240501	11/07/2024	SERVICE ON WELL # 1 - W	20-600-95100	9,903.00
<b>Vendor LXE100 - LUMIX ELECTRICAL INC Total:</b>					<b>42,335.32</b>
<b>Vendor: MATM100 - MATERIALS MANAGEMENT</b>					
MATERIALS MANAGEMENT	300	11/07/2024	5/8" COMM STONE - N MELVILLE PIPE REPLACEMENT - W	20-600-51000	524.29
MATERIALS MANAGEMENT	882	11/07/2024	1" DIRTY BASE, TOPSOIL-LAGOONS - S	20-700-51000	686.13
<b>Vendor MATM100 - MATERIALS MANAGEMENT Total:</b>					<b>1,210.42</b>
<b>Vendor: MRT100 - MERIT ELECTRICAL LLC</b>					
MERIT ELECTRICAL LLC	159	11/07/2024	PW NEW OFFICE WIRING - STS / W / S	10-300-95100	1,442.10
MERIT ELECTRICAL LLC	159	11/07/2024	PW NEW OFFICE WIRING - STS / W / S	20-600-95100	2,884.20
MERIT ELECTRICAL LLC	159	11/07/2024	PW NEW OFFICE WIRING - STS / W / S	20-700-95100	2,884.20
<b>Vendor MRT100 - MERIT ELECTRICAL LLC Total:</b>					<b>7,210.50</b>
<b>Vendor: MCL100 - MISSION COMMUNICATIONS LLC</b>					
MISSION COMMUNICATIONS	2825	11/07/2024	SERVICE PKG-MYDRO M150 RENEWAL - S/W	20-600-56400	347.40
MISSION COMMUNICATIONS	2825	11/07/2024	SERVICE PKG-MYDRO M150 RENEWAL - S/W	20-700-56400	347.40
<b>Vendor MCL100 - MISSION COMMUNICATIONS LLC Total:</b>					<b>694.80</b>

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Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
<b>Vendor: MIS380 - MISSOURI MUNICIPAL LEAGUE</b>					
MISSOURI MUNICIPAL LEAGUE	10936	11/07/2024	ONLINE EDU COURSES W. YOUNG - GEN	10-100-56950	90.00
<b>Vendor MIS380 - MISSOURI MUNICIPAL LEAGUE Total:</b>					<b>90.00</b>
<b>Vendor: MOC100 - MISSOURI ONE CALL SYSTEM, INC</b>					
MISSOURI ONE CALL SYSTEM,	4100324	11/07/2024	PROF LOCATE FEES-W/S	20-600-56400	93.83
MISSOURI ONE CALL SYSTEM,	4100324	11/07/2024	PROF LOCATE FEES-W/S	20-700-56400	93.82
<b>Vendor MOC100 - MISSOURI ONE CALL SYSTEM, INC Total:</b>					<b>187.65</b>
<b>Vendor: MPR200 - MISSOURI PARK &amp; RECREATION ASSOCIATION</b>					
MISSOURI PARK & RECREATIO	2116	11/07/2024	LUNCH & LEARN JASON KNIGHT - PKS	30-800-56950	15.00
<b>Vendor MPR200 - MISSOURI PARK &amp; RECREATION ASSOCIATION Total:</b>					<b>15.00</b>
<b>Vendor: NFC - NATIONAL FASTENER CORP</b>					
NATIONAL FASTENER CORP	4305	11/07/2024	#11 STEP DRILL - SHOP TOOLS - STS / W / S	10-300-52000	23.48
NATIONAL FASTENER CORP	4305	11/07/2024	#11 STEP DRILL - SHOP TOOLS - STS / W / S	20-600-52000	46.97
NATIONAL FASTENER CORP	4305	11/07/2024	#11 STEP DRILL - SHOP TOOLS - STS / W / S	20-700-52000	46.96
<b>Vendor NFC - NATIONAL FASTENER CORP Total:</b>					<b>117.41</b>
<b>Vendor: HYP100 - NITEL LLC</b>					
NITEL LLC	586360	11/07/2024	INTERNET-ALL	10-100-61050	231.90
NITEL LLC	586360	11/07/2024	INTERNET-ALL	10-200-61050	231.90
NITEL LLC	586360	11/07/2024	INTERNET-ALL	10-250-61050	165.52
NITEL LLC	586360	11/07/2024	INTERNET-ALL	10-300-61050	171.07
NITEL LLC	586360	11/07/2024	INTERNET-ALL	10-400-61050	165.52
NITEL LLC	586360	11/07/2024	INTERNET-ALL	20-600-61050	253.92
NITEL LLC	586360	11/07/2024	INTERNET-ALL	20-700-61050	253.92
NITEL LLC	586360	11/07/2024	INTERNET-ALL	30-800-61050	259.47
<b>Vendor HYP100 - NITEL LLC Total:</b>					<b>1,733.22</b>
<b>Vendor: ORE145 - O'REILLY AUTOMOTIVE, INC</b>					
O'REILLY AUTOMOTIVE, INC	2295	11/07/2024	MUD FLPS, FUEL/WTR SEP,FUEL TRTMNT-ST / S / W	10-300-71100	14.49
O'REILLY AUTOMOTIVE, INC	2295	11/07/2024	MUD FLPS, FUEL/WTR SEP,FUEL TRTMNT-ST / S / W	20-600-71100	28.97
O'REILLY AUTOMOTIVE, INC	2295	11/07/2024	MUD FLPS, FUEL/WTR SEP,FUEL TRTMNT-ST / S / W	20-700-71100	28.97
O'REILLY AUTOMOTIVE, INC	3098	11/07/2024	ANTIGEL, DE-GEL - SHIP SPLYS - STS / W / S	10-300-50130	6.00
O'REILLY AUTOMOTIVE, INC	3098	11/07/2024	ANTIGEL, DE-GEL - SHIP SPLYS - STS / W / S	20-600-50130	11.99
O'REILLY AUTOMOTIVE, INC	3098	11/07/2024	ANTIGEL, DE-GEL - SHIP SPLYS - STS / W / S	20-700-50130	11.99
O'REILLY AUTOMOTIVE, INC	3260	11/07/2024	TOWING HITCH - STS / S / W	10-300-52000	11.00
O'REILLY AUTOMOTIVE, INC	3260	11/07/2024	TOWING HITCH - STS / S / W	20-600-52000	21.99
O'REILLY AUTOMOTIVE, INC	3260	11/07/2024	TOWING HITCH - STS / S / W	20-700-52000	22.00
O'REILLY AUTOMOTIVE, INC	4141	11/07/2024	BALL JOINTS - 1993 FRD #106 REPAIR-ST / S / W	10-300-71100	24.18
O'REILLY AUTOMOTIVE, INC	4141	11/07/2024	BALL JOINTS - 1993 FRD #106 REPAIR-ST / S / W	20-600-71100	48.36
O'REILLY AUTOMOTIVE, INC	4141	11/07/2024	BALL JOINTS - 1993 FRD #106 REPAIR-ST / S / W	20-700-71100	48.36
O'REILLY AUTOMOTIVE, INC	4303	11/07/2024	STARTING FLUID FOR GENERATOR - PKS	30-800-71100	6.79
O'REILLY AUTOMOTIVE, INC	5117	11/07/2024	HEADLIGHT BULBS FOR CAR #2 - LAW	10-200-71000	9.58
O'REILLY AUTOMOTIVE, INC	5489	11/07/2024	CAULKING GUN - STREET SPLYS - STS	10-300-50130	10.99
O'REILLY AUTOMOTIVE, INC	6227	11/07/2024	DIESEL FUEL CANS- SHOP SPLYS - STS / W / S	10-300-50130	11.60

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Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
O'REILLY AUTOMOTIVE, INC	6227	11/07/2024	DIESEL FUEL CANS- SHOP SPLYS - STS / W / S	20-600-50130	23.19
O'REILLY AUTOMOTIVE, INC	6227	11/07/2024	DIESEL FUEL CANS- SHOP SPLYS - STS / W / S	20-700-50130	23.19
O'REILLY AUTOMOTIVE, INC	6342	11/07/2024	WIPER BLDES, COTTER PIN- PW TRK #116- STS / W / S	10-300-71000	3.90
O'REILLY AUTOMOTIVE, INC	6342	11/07/2024	WIPER BLDES, COTTER PIN- PW TRK #116- STS / W / S	20-600-71000	7.79
O'REILLY AUTOMOTIVE, INC	6342	11/07/2024	WIPER BLDES, COTTER PIN- PW TRK #116- STS / W / S	20-700-71000	7.80
O'REILLY AUTOMOTIVE, INC	6372	11/07/2024	FUEL CAP FOR PW WRK TRUCK # 116 - STS / W / S	10-300-71000	5.92
O'REILLY AUTOMOTIVE, INC	6372	11/07/2024	FUEL CAP FOR PW WRK TRUCK # 116 - STS / W / S	20-600-71000	11.84
O'REILLY AUTOMOTIVE, INC	6372	11/07/2024	FUEL CAP FOR PW WRK TRUCK # 116 - STS / W / S	20-700-71000	11.84
O'REILLY AUTOMOTIVE, INC	933	11/07/2024	BATTERY CORESALE - SHOP - STS / W / S	10-300-52000	5.00
O'REILLY AUTOMOTIVE, INC	933	11/07/2024	BATTERY CORESALE - SHOP - STS / W / S	20-600-52000	10.00
O'REILLY AUTOMOTIVE, INC	933	11/07/2024	BATTERY CORESALE - SHOP - STS / W / S	20-700-52000	10.00
O'REILLY AUTOMOTIVE, INC	6219	11/08/2024	BALL JOINTS 1993 FORD #106 - STS/W/S	10-300-71000	7.72
O'REILLY AUTOMOTIVE, INC	6219	11/08/2024	BALL JOINTS 1993 FORD #106 - STS/W/S	20-600-71000	15.43
O'REILLY AUTOMOTIVE, INC	6219	11/08/2024	BALL JOINTS 1993 FORD #106 - STS/W/S	20-700-71000	15.43
<b>Vendor ORE145 - O'REILLY AUTOMOTIVE, INC Total:</b>					<b>476.31</b>
<b>Vendor: DOS100 - PETTY CASH - DONA SLATER</b>					
PETTY CASH - DONA SLATER	PETTY	11/07/2024	PETTY CASH	10-100-50550	10.80
PETTY CASH - DONA SLATER	PETTY	11/07/2024	REIMBURSEMENT - ALL DEPTS PETTY CASH	10-100-56900	40.00
PETTY CASH - DONA SLATER	PETTY	11/07/2024	REIMBURSEMENT - ALL DEPTS PETTY CASH	10-200-71000	3.50
<b>Vendor DOS100 - PETTY CASH - DONA SLATER Total:</b>					<b>54.30</b>
<b>Vendor: MLF100 - QUADIENT LEASING</b>					
QUADIENT LEASING	8345	11/07/2024	NEW FOLDING MACHINE LEASE QTRLY-W/S	20-600-55850	449.77
QUADIENT LEASING	8345	11/07/2024	NEW FOLDING MACHINE LEASE QTRLY-W/S	20-700-55850	449.78
<b>Vendor MLF100 - QUADIENT LEASING Total:</b>					<b>899.55</b>
<b>Vendor: RAN175 - RANDALL A. BROWN</b>					
RANDALL A. BROWN	167284	11/07/2024	BLDG INSPECTIONS & ZONING CONSLT - P&D	10-400-56450	1,680.00
<b>Vendor RAN175 - RANDALL A. BROWN Total:</b>					<b>1,680.00</b>
<b>Vendor: SPS150 - SCHEDEL PEST SERVICES</b>					
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	10-100-50130	25.00
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	10-200-50130	35.00
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	10-250-50130	5.00
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	10-300-50130	10.00
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	10-400-50130	5.00
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	20-600-50130	30.00
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	20-700-50130	30.00
SCHENDEL PEST SERVICES	5482	11/07/2024	PEST CONTROL-ALL	30-800-50130	40.00
<b>Vendor SPS150 - SCHEDEL PEST SERVICES Total:</b>					<b>180.00</b>
<b>Vendor: GCT100 - SPRINGFIELD GREENE COUNTY OFFICE OF EM</b>					
SPRINGFIELD GREENE COUNT	4TH QTR 24	11/07/2024	SERV 4TH QTR 2024-EM	10-500-55600	4,334.00
<b>Vendor GCT100 - SPRINGFIELD GREENE COUNTY OFFICE OF EM Total:</b>					<b>4,334.00</b>

Expense Approval Report 1

Post Dates: 10/25/2024 - 11/8/2024

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
<b>Vendor: SPR275 - SPRINGFIELD WINWATER WORKS CO</b>					
SPRINGFIELD WINWATER WO	1903	11/07/2024	DMR42 4X2 MJ REDUCER - W	20-600-51000	264.24
SPRINGFIELD WINWATER WO	1909	11/07/2024	DI MJ LNG SOLID SLEEVE - W	20-600-51000	312.80
SPRINGFIELD WINWATER WO	2042	11/07/2024	2X20 PVC JASKET JOINT - MILLER RD PIPE REPLCMNT-W	20-600-51000	451.20
SPRINGFIELD WINWATER WO	2060	11/07/2024	2" IPS MIDCO, 4 PVC	20-600-50130	687.33
SPRINGFIELD WINWATER WO	2104	11/07/2024	MEGALUG, GASKET, BOLTS - PVC MTR PIT, METER COVER - WTR SPLYS - W	20-600-51000	2,394.40
<b>Vendor SPR275 - SPRINGFIELD WINWATER WORKS CO Total:</b>					<b>4,109.97</b>
<b>Vendor: SPR200 - SPRINGFIELD-GREENE COUNTY HEALTH DEPARTMENT</b>					
SPRINGFIELD-GREENE COUNT	110424	11/07/2024	WATER SAMPLE TESTING - W	20-600-50200	364.00
<b>Vendor SPR200 - SPRINGFIELD-GREENE COUNTY HEALTH DEPARTMENT Total:</b>					<b>364.00</b>
<b>Vendor: STE300 - STATE TRACTOR &amp; EQUIPMENT CO., INC</b>					
STATE TRACTOR & EQUIPMEN	373.02	11/07/2024	CH SY50 18" BUCKET FOR MINI EX - S/W	20-600-52000	392.50
STATE TRACTOR & EQUIPMEN	373.02	11/07/2024	CH SY50 18" BUCKET FOR MINI EX - S/W	20-700-52000	392.50
<b>Vendor STE300 - STATE TRACTOR &amp; EQUIPMENT CO., INC Total:</b>					<b>785.00</b>
<b>Vendor: SMS200 - SUMMIT MAILING &amp; SHIPPING SYSTEMS</b>					
SUMMIT MAILING & SHIPPIN	4575	11/07/2024	SEAL TIGHT FOR MAILING MACHINE - W/S	20-600-50130	40.97
SUMMIT MAILING & SHIPPIN	4575	11/07/2024	SEAL TIGHT FOR MAILING MACHINE - W/S	20-700-50130	40.98
<b>Vendor SMS200 - SUMMIT MAILING &amp; SHIPPING SYSTEMS Total:</b>					<b>81.95</b>
<b>Vendor: WUC100 - SWMO JOINT MUNICIPAL WATER UTILITY COMMISSION</b>					
SWMO JOINT MUNICIPAL WA	2025	11/07/2024	2025 MEMBERSHIP - W	20-600-55800	3,162.50
<b>Vendor WUC100 - SWMO JOINT MUNICIPAL WATER UTILITY COMMISSION Total:</b>					<b>3,162.50</b>
<b>Vendor: DAR200 - TALLENT AUTOMOTIVE INC</b>					
TALLENT AUTOMOTIVE INC	10-14-24	11/07/2024	2 HERCULES TIRES & INSTALL FOR KABOTA ATV - W	20-600-71100	348.37
TALLENT AUTOMOTIVE INC	10-22-24	11/07/2024	TIRE DISPOSAL FEE - PKS	30-800-71100	3.15
TALLENT AUTOMOTIVE INC	9-23-24	11/07/2024	TIRE DISPOSAL FEE - PKS	30-800-71100	12.60
<b>Vendor DAR200 - TALLENT AUTOMOTIVE INC Total:</b>					<b>364.12</b>
<b>Vendor: TRI295 - TRI-STATE WATER RESOURCE COALITION</b>					
TRI-STATE WATER RESOURCE	2025	11/07/2024	2025 MEMBERSHIP - W	20-600-55800	3,162.50
<b>Vendor TRI295 - TRI-STATE WATER RESOURCE COALITION Total:</b>					<b>3,162.50</b>
<b>Vendor: WSP100 - TURN 2 APPAREL LLC</b>					
TURN 2 APPAREL LLC	13948	11/07/2024	SPOOKY SPRINT SHIRTS - PKS	30-800-47000	163.60
<b>Vendor WSP100 - TURN 2 APPAREL LLC Total:</b>					<b>163.60</b>
<b>Vendor: AMK100 - VESTIS</b>					
VESTIS	1939	11/07/2024	PW DEPT UNIFORM SERVICE - STS / S / W	10-300-92500	73.34
VESTIS	1939	11/07/2024	PW DEPT UNIFORM SERVICE - STS / S / W	20-600-92500	146.68
VESTIS	1939	11/07/2024	PW DEPT UNIFORM SERVICE - STS / S / W	20-700-92500	146.68
VESTIS	3803	11/07/2024	PW DEPT UNIFORM SERVICE - STS / S / W	10-300-92500	20.37
VESTIS	3803	11/07/2024	PW DEPT UNIFORM SERVICE - STS / S / W	20-600-92500	40.74
VESTIS	3803	11/07/2024	PW DEPT UNIFORM SERVICE - STS / S / W	20-700-92500	40.74
VESTIS	5668	11/07/2024	PW DEPT UNIFORM SERVICE- STS / W/ S	10-300-92500	18.51
VESTIS	5668	11/07/2024	PW DEPT UNIFORM SERVICE- STS / W/ S	20-600-92500	37.03

Expense Approval Report 1

Post Dates: 10/25/2024 - 11/8/2024

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
VESTIS	5668	11/07/2024	PW DEPT UNIFORM SERVICE-STS / W/ S	20-700-92500	37.02
<b>Vendor AMK100 - VESTIS Total:</b>					<b>561.11</b>
<b>Vendor: WAL110 - WALMART CAPITAL ONE</b>					
WALMART CAPITAL ONE	SAMS 10-2-24	11/07/2024	SAMS CONCESSIONS, PINESOL, TRASH BAGS, CUPS -	30-800-50200	47.92
WALMART CAPITAL ONE	SAMS 10-2-24	11/07/2024	SAMS CONCESSIONS, PINESOL, TRASH BAGS, CUPS -	30-800-50550	64.94
WALMART CAPITAL ONE	SAMS 10-23-24	11/07/2024	SAMS HOTDOG CONCESSIONS TRUNK OR TREAT - PKS	30-800-50200	334.38
WALMART CAPITAL ONE	SAMS 11-6-24	11/07/2024	SAMS PACKING AND MASKING TAPE - PKS	30-800-50700	24.96
<b>Vendor WAL110 - WALMART CAPITAL ONE Total:</b>					<b>472.20</b>
<b>Vendor: WRI110 - WEX BANK</b>					
WEX BANK	2195	11/07/2024	VEH AND EQUIP FUEL-LAW/PKS/STS/W/S/P&D	10-200-70000	1,719.04
WEX BANK	2195	11/07/2024	VEH AND EQUIP FUEL-LAW/PKS/STS/W/S/P&D	10-300-70000	519.48
WEX BANK	2195	11/07/2024	VEH AND EQUIP FUEL-LAW/PKS/STS/W/S/P&D	10-400-70000	75.29
WEX BANK	2195	11/07/2024	VEH AND EQUIP FUEL-LAW/PKS/STS/W/S/P&D	20-600-70000	1,065.93
WEX BANK	2195	11/07/2024	VEH AND EQUIP FUEL-LAW/PKS/STS/W/S/P&D	20-700-70000	1,065.93
WEX BANK	2195	11/07/2024	VEH AND EQUIP FUEL-LAW/PKS/STS/W/S/P&D	30-800-70000	624.88
WEX BANK	2195	11/07/2024	VEH AND EQUIP FUEL-LAW/PKS/STS/W/S/P&D	30-800-70100	1,203.33
<b>Vendor WRI110 - WEX BANK Total:</b>					<b>6,273.88</b>
<b>Vendor: WCP100 - WHITE CAP LP</b>					
WHITE CAP LP	2484	11/07/2024	LIGHTING SUPPLIES INCLSV PLYGRND - PKS	30-800-95500	528.80
WHITE CAP LP	4201	11/07/2024	19 1/2" PLACER BLUE HANDLE W. HOOK-STS	10-300-52000	119.98
<b>Vendor WCP100 - WHITE CAP LP Total:</b>					<b>648.78</b>
<b>Vendor: WTV100 - WILLARD HOME CENTER LLC</b>					
WILLARD HOME CENTER LLC	2818	11/07/2024	DUPLEX NAILS, CONCRTE SAW MAINT - STS	10-300-50130	56.36
WILLARD HOME CENTER LLC	3046	11/07/2024	DUAL GRIT RUBBING STONE-CONCRT SPLYS - STS	10-300-50130	11.24
WILLARD HOME CENTER LLC	3055	11/07/2024	GALV WORM GEAR, FLEX VINYL HOSE-REGIONAL LS - S	20-700-51000	19.88
WILLARD HOME CENTER LLC	3061	11/07/2024	80# READY-MIX GRAVEL-DEER RUN SIDEWALK-STS	10-300-50130	20.45
WILLARD HOME CENTER LLC	3084	11/07/2024	EXTREME MNT TAPE- TO MNT SIGN ON SHP DR-STS/W/S	10-300-95100	1.62
WILLARD HOME CENTER LLC	3084	11/07/2024	EXTREME MNT TAPE- TO MNT SIGN ON SHP DR-STS/W/S	20-600-95100	3.23
WILLARD HOME CENTER LLC	3084	11/07/2024	EXTREME MNT TAPE- TO MNT SIGN ON SHP DR-STS/W/S	20-700-95100	3.24
WILLARD HOME CENTER LLC	3108	11/07/2024	CLR CLK, 55GAL BLK LINER-NEW BLDG-STS/W/S	10-300-95100	5.75
WILLARD HOME CENTER LLC	3108	11/07/2024	CLR CLK, 55GAL BLK LINER-NEW BLDG-STS/W/S	20-600-95100	11.49
WILLARD HOME CENTER LLC	3108	11/07/2024	CLR CLK, 55GAL BLK LINER-NEW BLDG-STS/W/S	20-700-95100	11.49
WILLARD HOME CENTER LLC	3123	11/07/2024	APPL EXTENSN CORD-REGIONAL LS MAINT - S	20-700-51000	8.09
WILLARD HOME CENTER LLC	3309	11/07/2024	COUPLINGS INCLSV PLYGRND LIGHTNG - PKS	30-800-95500	19.33
WILLARD HOME CENTER LLC	3694	11/07/2024	NO SMOKING SIGN FOR VEHICLE - STS / S / W	10-300-71000	0.36

Expense Approval Report 1

Post Dates: 10/25/2024 - 11/8/2024

Vendor Name	Payable Number	Post Date	Description (Item)	Account Number	Amount
WILLARD HOME CENTER LLC	3694	11/07/2024	NO SMOKING SIGN FOR VEHICLE - STS / S / W	20-600-71000	0.71
WILLARD HOME CENTER LLC	3694	11/07/2024	NO SMOKING SIGN FOR VEHICLE - STS / S / W	20-700-71000	0.72
WILLARD HOME CENTER LLC	3802	11/07/2024	UPS SHIPPING CHARGE- W	20-600-50750	14.87
WILLARD HOME CENTER LLC	4122	11/07/2024	GT TELE BY LOPPER - STS	10-300-52000	31.49
WILLARD HOME CENTER LLC	4229	11/07/2024	2X12-16' LUMBER - DUMP TRUCKS-STS / S / W	10-300-71000	18.93
WILLARD HOME CENTER LLC	4229	11/07/2024	2X12-16' LUMBER - DUMP TRUCKS-STS / S / W	20-600-71000	37.85
WILLARD HOME CENTER LLC	4229	11/07/2024	2X12-16' LUMBER - DUMP TRUCKS-STS / S / W	20-700-71000	37.86
WILLARD HOME CENTER LLC	4403	11/07/2024	CLAMP TOOL - PKS	30-800-50130	5.37
WILLARD HOME CENTER LLC	4429	11/07/2024	2X4-16' LUMBER FOR SIDEWALK FORM - STS	10-300-50130	59.94
WILLARD HOME CENTER LLC	4450	11/07/2024	VINYL PLUG, TOILET PLATE - PKS	30-800-50500	5.65
WILLARD HOME CENTER LLC	4451	11/07/2024	SINGLE CUT KEYS - PKS	30-800-52000	3.58
WILLARD HOME CENTER LLC	4473	11/07/2024	CONC STKS, GROOVER, EDGER, TROWEL- STS	10-300-50130	178.10
WILLARD HOME CENTER LLC	4680	11/07/2024	1/2" X 20' REBAR STREETS SPLY - STS	10-300-50130	8.00
WILLARD HOME CENTER LLC	4683	11/07/2024	3/4" WTR METER COUPLING - WTR SPLYS - W	20-600-50130	70.15
WILLARD HOME CENTER LLC	4690	11/07/2024	SPOOKY SPRINT PROP MAINT - PKS	30-800-50170	3.56
WILLARD HOME CENTER LLC	4692	11/07/2024	SPOOKY SPRINT PROP MAINTENANCE - PKS	30-800-50170	4.32
WILLARD HOME CENTER LLC	5253	11/07/2024	WHT LEXEL CAULK-SHOP SPLYS - STS/W/S	10-300-50130	8.99
WILLARD HOME CENTER LLC	5253	11/07/2024	WHT LEXEL CAULK-SHOP SPLYS - STS/W/S	20-600-50130	17.99
WILLARD HOME CENTER LLC	5253	11/07/2024	WHT LEXEL CAULK-SHOP SPLYS - STS/W/S	20-700-50130	17.98
WILLARD HOME CENTER LLC	5306	11/07/2024	DECOR WALL PLATE, HD SHELF, 8OUT PROTECTOR-W	20-600-50130	53.97
WILLARD HOME CENTER LLC	5382	11/07/2024	TCT FLUSH BLADE, ORG CARP SQ-REPRS TO VAULT- W	20-600-51000	22.48
<b>Vendor WTV100 - WILLARD HOME CENTER LLC Total:</b>					<b>775.04</b>
<b>Grand Total:</b>					<b>165,159.94</b>



## Report Summary

## Fund Summary

Fund	Expense Amount
10 - GENERAL FUND	30,873.97
20 - WATER AND SEWER FUND	123,272.49
30 - PARKS FUND	11,013.48
<b>Grand Total:</b>	<b>165,159.94</b>

## Account Summary

Account Number	Account Name	Expense Amount
10-100-50130	SUPPLIES-GCG	126.62
10-100-50550	CUSTODIAL SUPPLIES-GC	10.80
10-100-56200	LEGAL-GCG	1,621.00
10-100-56400	PROFESSIONAL-GCG	169.95
10-100-56900	TRAVEL EXPENSE-GCG	40.00
10-100-56950	TRAINING & EDUCATION	90.00
10-100-61050	INTERNET-GCG	349.84
10-100-62300	UTILITIES OTHER-GCG	128.69
10-200-50130	SUPPLIES-LAW	35.00
10-200-56400	PROFESSIONAL-LAW	4,946.00
10-200-61050	INTERNET-LAW	349.84
10-200-62300	UTILITIES OTHER-LAW	46.40
10-200-70000	VEHICLE EXPENSES FUEL	1,719.04
10-200-71000	VEHICLE REPAIR & MAIN	13.08
10-200-92500	UNIFORMS-LAW	429.55
10-200-93000	GROUP INSURANCE-LA	29.90
10-250-50130	SUPPLIES-COURT	5.00
10-250-56400	PROFESSIONAL-COURT	900.00
10-250-61050	INTERNET-COURT	249.70
10-300-50130	SUPPLIES-STREETS	1,720.27
10-300-51000	REPAIRS AND MAINTEN	1,957.87
10-300-52000	SUPPLIES SMALL EQUIP	240.78
10-300-55200	ADVERTISING-STS	49.38
10-300-56500	SAFETY PROGRAM-STRE	55.13
10-300-61050	INTERNET-STREETS	258.07
10-300-70000	VEHICLE EXPENSE FUEL-	519.48
10-300-71000	VEHICLE REPAIR & MAIN	36.83
10-300-71100	EQUIPMENT REPAIR &	38.67
10-300-92500	UNIFORMS-STREETS	112.22
10-300-95100	CAPITAL ASSET EXP-STRE	6,063.13
10-400-50130	SUPPLIES-P&D	5.00
10-400-56400	PROFESSIONAL-P&D	1,657.74
10-400-56450	CONTRACT SERVICES/SE	1,680.00
10-400-56950	TRAINING & EDUCATION	100.00
10-400-57400	EQUIPMENT/SOFTWARE	460.00
10-400-61050	INTERNET-P&D	249.70
10-400-70000	VEHICLE EXPENSE FUEL-	75.29
10-500-55600	CONTRACT LABOR-EM	4,334.00
20-600-50000	CHEMICALS-WATER	1,626.99
20-600-50130	SUPPLIES-WATER	935.59
20-600-50200	LABORATORY FEES-WAT	364.00
20-600-50300	LABORATORY SUPPLIES-	9,610.38
20-600-50750	POSTAGE-WATER	14.87
20-600-51000	REPAIRS AND MAINTEN	5,685.32
20-600-52000	SUPPLIES SMALL EQUIP	571.12
20-600-55200	ADVERTISING-WATER	98.77
20-600-55800	DUES AND SUBSCRIPTIO	6,325.00
20-600-55850	EQUIPMENT RENTAL-WA	449.77
20-600-56400	PROFESSIONAL-WATER	7,256.37
20-600-56500	SAFETY PROGRAM-WAT	110.26

**Account Summary**

<b>Account Number</b>	<b>Account Name</b>	<b>Expense Amount</b>
20-600-61050	INTERNET-WATER	383.06
20-600-62300	UTILITIES OTHER-WATER	157.78
20-600-70000	VEHICLE EXPENSE FUEL-	1,065.93
20-600-71000	VEHICLE REPAIR & MAIN	73.62
20-600-71100	EQUIPMENT REPAIR &	425.70
20-600-92500	UNIFORMS-WATER	224.45
20-600-95100	CAPITAL ASSET EXP-WAT	29,016.75
20-700-50130	SUPPLIES-SEWER	124.14
20-700-51000	REPAIRS AND MAINTEN	2,962.11
20-700-52000	SUPPLIES SMALL EQUIP	571.12
20-700-55200	ADVERTISING-SEWER	98.77
20-700-55850	EQUIPMENT RENTAL-SE	449.78
20-700-56400	PROFESSIONAL-SEWER	27,187.30
20-700-56500	SAFETY PROGRAM-SEW	110.26
20-700-57200	RECYCLE CENTER EXPEN	561.83
20-700-61050	INTERNET-SEWER	383.06
20-700-62300	UTILITIES OTHER-SEWER	157.78
20-700-70000	VEHICLE EXPENSE FUEL-	1,065.93
20-700-71000	VEHICLE REPAIR & MAIN	73.65
20-700-71100	EQUIPMENT REPAIR &	77.33
20-700-92500	UNIFORMS-SEWER	224.44
20-700-95100	CAPITAL ASSET EXP-SEW	12,126.26
20-700-95500	CAPITAL ASSET EQUIPM	12,703.00
30-800-47000	ADULT PROGRAMS-PKS	163.60
30-800-47100	YOUTH PROGRAMS-PKS	75.00
30-800-50130	SUPPLIES GENERAL-PKS	105.32
30-800-50170	SUPPLIES SPECIAL ACTIV	216.01
30-800-50175	SUPPLIES YOUTH PROGR	50.25
30-800-50180	SUPPLIES SPORTS-PKS	833.86
30-800-50200	CONCESSIONS-PKS	655.58
30-800-50450	FREEDOM FEST EXPENSE	220.59
30-800-50500	BUILDING MAINTENANC	5.65
30-800-50550	CUSTODIAL SUPPLIES-PK	139.88
30-800-50700	OFFICE SUPPLIES-PKS	24.96
30-800-52000	SUPPLIES SMALL EQUIP	3.58
30-800-55200	ADVERTISING-PKS	246.91
30-800-55850	EQUIPMENT RENTAL-PK	1,084.99
30-800-56400	PROFESSIONAL-PKS	212.00
30-800-56950	TRAINING & EDUCATION	30.00
30-800-61000	TELEPHONE-PKS	200.00
30-800-61050	INTERNET-PARKS	391.44
30-800-62300	UTILITIES OTHER-PKS	570.51
30-800-70000	VEHICLE EXPENSE FUEL-	624.88
30-800-70100	EQUIPMENT FUEL-PKS	1,203.33
30-800-71100	EQUIPMENT REPAIR &	156.92
30-800-95500	CAPITAL ASSET EQUIPM	3,798.22
	<b>Grand Total:</b>	<b>165,159.94</b>

**Project Account Summary**

<b>Project Account Key</b>	<b>Expense Amount</b>	
**None**	127,743.90	
2070095500-12	3,339.00	
2070095500-13	30,278.82	
308009550011	3,798.22	
	<b>Grand Total:</b>	<b>165,159.94</b>

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Consent Agenda Item #3c

## Department Head Reports

**CITY CLERK REPORT  
PREPARED FOR THE CITY OF WILLARD  
BOARD OF ALDERMEN MEETING  
ON 11/12/2024**



1. I issued a total of 10 business licenses in October.

New Licenses = 0

Renewals = 10 = These were all pending business license applications from December through April 2024 that had not been followed up with for missing information, documents, and/or payments.

HNH Chinese Restaurant  
KJA Properties  
Korean Garden Restaurant  
Lumi Aesthetics  
Pickett Plumbing  
Ramsey Excavating  
Subway Restaurant  
Whatever You Want Food Truck  
Willard Estates  
Willard Heights

2. The iPads were used for the first time at the 10.28.2024 BOA Meeting. They will be used for each meeting in the future and will be used for the first time at the P&Z Meeting on 11.19.2024.
3. I attended the monthly Southwest MoCCFOA City Clerk's Meeting in Branson West on 10.30.2024. The educational aspect of the meeting focused on Economic Development. I have been asked to host the meeting in May 2025. I am being nominated for treasurer for 2025 and I've been appointed to the Audit Committee and the Membership Committee.
4. I have been attending the CivicPlus online trainings and preparing for the agenda, packets, meeting minutes, etc. to go live.
5. I am preparing for year-end items including deadlines for the 4.8.2025 Election. I am also preparing to clean up more digital files and start new ones for 2025 as well as continuing to revise and the current paper filing system.

6. Letters for the 2025 Business License Application Renewals will be sent out as well this month. My goal is to have those out by 11.15.2024.

*Janice Gargus*  
Janice Gargus, City Clerk



## MUNICIPAL DIVISION SUMMARY REPORTING FORM

*Refer to instructions for directions and term definitions. Complete a report each month even if there has not been any court activity.*

<b><u>I. COURT INFORMATION</u></b>		Municipality: WILLARD	Reporting Period: Oct 1, 2024 - Oct 31, 2024	
Mailing Address: 224 W JACKSON ST, WILLARD, MO 65781				
Physical Address: 224 W JACKSON ST, WILLARD, MO 65781			County: Greene County	Circuit: 31
Telephone Number:		Fax Number:		
Prepared by: Terry Forshee		E-mail Address:		
Municipal Judge: DAVID W. DORAN				
<b><u>II. MONTHLY CASELOAD INFORMATION</u></b>		Alcohol & Drug Related Traffic	Other Traffic	Non-Traffic Ordinance
A. Cases (citations/informations) pending at start of month		9	406	75
B. Cases (citations/informations) filed		1	60	6
C. Cases (citations/informations) disposed				
1. jury trial (Springfield, Jefferson County, and St. Louis County only)		0	0	0
2. court/bench trial - GUILTY		0	0	0
3. court/bench trial - NOT GUILTY		0	0	0
4. plea of GUILTY in court		1	53	2
5. Violations Bureau Citations (i.e. written plea of guilty) and bond forfeiture by court order (as payment of fines/costs)		0	17	0
6. dismissed by court		0	0	0
7. <i>nolle prosequi</i>		0	23	1
8. certified for jury trial (not heard in Municipal Division)		0	0	0
<b>9. TOTAL CASE DISPOSITIONS</b>		1	93	3
D. Cases (citations/informations) pending at end of month [pending caseload = (A+B)-C9]		9	373	78
E. Trial de Novo and/or appeal applications filed		0	0	0
<b><u>III. WARRANT INFORMATION (pre- &amp; post-disposition)</u></b>		<b><u>IV. PARKING TICKETS</u></b>		
1. # Issued during reporting period	16	1. # Issued during period	0	
2. # Served/withdrawn during reporting period	23	<input checked="" type="checkbox"/> Court staff does not process parking tickets		
3. # Outstanding at end of reporting period	294			

## MUNICIPAL DIVISION SUMMARY REPORTING FORM

<b>COURT INFORMATION</b>	Municipality: WILLARD	Reporting Period: Oct 1, 2024 - Oct 31, 2024
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### V. DISBURSEMENTS

<b>Excess Revenue (minor traffic and municipal ordinance violations, subject to the excess revenue percentage limitation)</b>		<b>Other Disbursements:</b> Enter below additional surcharges and/or fees not listed above. Designate if subject to the excess revenue percentage limitation. Examples include, but are not limited to, arrest costs and witness fees.	
Fines - Excess Revenue	\$6,491.50	Court Automation	\$474.73
Clerk Fee - Excess Revenue	\$658.00	Judicial Facility Srchg CT31	\$680.00
Crime Victims Compensation (CVC) Fund surcharge - Paid to City/Excess Revenue	\$22.13	<b>Total Other Disbursements</b>	<b>\$1,154.73</b>
Bond forfeitures (paid to city) - Excess Revenue	\$225.00	<b>Total Disbursements of Costs, Fees, Surcharges and Bonds Forfeited</b>	<b>\$11,079.00</b>
<b>Total Excess Revenue</b>	<b>\$7,396.63</b>	<b>Bond Refunds</b>	<b>\$860.50</b>
<b>Other Revenue (non-minor traffic and ordinance violations, not subject to the excess revenue percentage limitation)</b>		<b>Total Disbursements</b>	<b>\$11,939.50</b>
Fines - Other	\$1,681.50		
Clerk Fee - Other	\$88.00		
Judicial Education Fund (JEF) <input type="checkbox"/> Court does not retain funds for JEF	\$67.81		
Peace Officer Standards and Training (POST) Commission surcharge	\$67.82		
Crime Victims Compensation (CVC) Fund surcharge - Paid to State	\$483.55		
Crime Victims Compensation (CVC) Fund surcharge - Paid to City/Other	\$2.96		
Law Enforcement Training (LET) Fund surcharge	\$136.00		
Domestic Violence Shelter surcharge	\$0.00		
Inmate Prisoner Detainee Security Fund surcharge	\$0.00		
Restitution	\$0.00		
Parking ticket revenue (including penalties)	\$0.00		
Bond forfeitures (paid to city) - Other	\$0.00		
<b>Total Other Revenue</b>	<b>\$2,527.64</b>		

## HUMAN RESOURCES

### MONTHLY REPORT

OCTOBER 2024

The new timekeeping software, ExecuTime, is still having issues with supervisor approvals of timesheets. The software is scheduled for an update late this month. Tyler Technologies believes this will help with the approval issues.

Carolyn and I met with Cameron Black of Ollis, Akers, Arney and discussed preliminary insurance renewals for employees. The life, dental, and vision premiums will remain the same. Health insurance premiums came back at a ten percent (10%) increase over last year. Based on this, he continued looking at other options. Late in October, Carolyn, Wes, and I had a phone conversation with Cameron and discussed moving the health insurance to Anthem. Cameron will present this at the next Board of Aldermen meeting. It was decided to have a meeting with all full-time employees to discuss the change if approved by the Board. Our open enrollment will be held the first week of November.

We have had a couple of employee resignations and are in the process of seeking new job candidates to fill the vacancies in the Public Works department.

Dona Slater



## **Parks and Recreation Director's Monthly Report: October**

**Quote of the month** "I cannot endure to waste anything so precious as autumnal sunshine by staying in the house." – Nathaniel Hawthorne

### Programs and Events

#### 1. Trunk or Treat & Spooky Sprint

Our October events were a resounding success. Trunk or Treat welcomed hundreds of local families, who enjoyed a safe and festive Halloween experience with decorated trunks and treats for all ages. The Spooky Sprint 5K saw strong participation, with both seasoned runners and families joining in. Feedback was overwhelmingly positive, with participants enjoying both the event's organization and atmosphere.

#### 2. Veterans Day Parade

Veterans Day Parade was a good turnout; Willard Parks did not organize the event, but did help support AMVETS Post 188 for the parade. This event is always scheduled for the first Saturday of November, honoring our veterans and bringing the community together to recognize their service. Coordination with local veterans' groups and logistical planning was challenging, I recommend adopting a parade policy to ensure a smooth and respectful parade experience.

#### 3. Afterschool Program Launch

November also marked the successful launch of our After School Program. Enrollments aren't meeting expectations, but initial feedback indicates satisfaction from both students and parents. This program offers structured activities and supervised homework time, providing a safe and supportive environment for students after school. We are looking at expanding the program to the south side schools.

#### 4. New Bus Acquisition

We are pleased to announce the acquisition of a new bus to aid transportation for our programs. This addition will enhance our ability to provide safe, reliable transport for youth programs, off-site events, and group excursions. We are looking at licensing a second bus driver, and are looking at developing adult programs to travel.

#### 5. Parents' Night Out

October's Parents' Night Out program was met with high demand and positive feedback from the community. This monthly program provides childcare and fun activities for kids while parents enjoy a well-deserved evening off. We look forward to continuing this successful program once each month.

#### 6. Sports Programs

- Soccer: October concluded our youth soccer program. Participant numbers were high, and families appreciated the quality of coaching and field conditions. We will use feedback from the season to further improve next year's offerings.

- Volleyball: With soccer concluded, volleyball season is now underway. Strong registration numbers reflect the growing interest in this sport, and our coaches are excited to work with this year's teams.

- Basketball: Registration for the basketball program has been particularly strong, signaling an enthusiastic response from families and participants. We are preparing to kick off the season and accommodate high interest.

#### 7. New Fitness Classes

This month, we welcomed a new fitness instructor, who has introduced evening fitness classes. These offerings include a range of high-energy and strength-building classes, catering to various skill levels. Community response has been positive, and we anticipate strong attendance as the word spreads.

## Maintenance and Facilities

### 1. Winterizing

Maintenance staff completed the annual winterizing of outdoor facilities, with a focus on soccer fields and other water-sensitive areas. This ensures our resources are protected and ready for spring programs.

### 2. Arbor Day Event

We celebrated Arbor Day with a well-attended community tree-planting event, reinforcing our commitment to the Tree City USA program. Attendees participated in hands-on tree planting, and volunteers were instrumental in making this event a success.

### 3. Playground Lighting Installation

Installation of new lighting at the playground site began this month, enhancing safety and usability for evening play. This addition aligns with our commitment to improving park amenities and accessibility.



## Planning Department Report

**October 2024**

### Permits - September

Permits Issued	Fees collected (October)	Est. Value of Work (October)	Permits Issued (YtD)	Fees Collected (YtD)	Est. Value of Work (YtD)
7	\$738.00	\$68650.00	237	\$386,200.02	26,397,536.00

*Sunshine requests included the US Census, Data Dodge Analytics, and Build-zoom*

### Current Development

Hoffman Hills Phase I: Finishing up. Multiple buildings are under construction

Hoffman Hills Phase II: Several Building permits have been issued. They are building residential homes.

Stone Creek Phase II: Almost finished with subdivision. Have a few permits still out.

Generations Village: All building permits have been issued. They have started excavating.

Rocky Point: Has Preliminary plat. Working on construction drawings and utility installation.

Mike Ruesch  
Director of Planning and Development  
417-742-5310

## Other Business

1. Mixed use code in review with BOA.
2. Mediacom is installing fiber in the Hoffman hills area
3. Funding for the Underpass at 160 and AB has been approved
4. Looking for input on the downtown overlay, if you have ideas and suggestions please get with staff.
  - a. Had a meeting with Ozark Greenways on trails and downtown improvements and participation.
5. Coordinating information on a Master Transportation Plan
  - a. Have a meeting on November 13 with CJW to discuss specifications and process for development of said plan
  - b. Master plans will coordinate with the comprehensive plan adopted by the BOA in 2019
  - c. Coordinating with parks on a Master Parks and Trails Plan in conjunction with the Master transportation plan



**Willard Police Department**  
**October 2024 - Monthly Statistical Report**



Administration	Officer – DSN	Case #'s
Tom McClain, Chief	1601-001	13
Shannon Shipley, Asst. Chief	1602-003	11
	<b>Total</b>	<b>24</b>

Squad #1	1607-050	Caleb Steen, Cpl.	56	Squad #2	1603-027	Steve Purdy, Sgt.	12
	1605-056	Mark Cole, Cpl.	49		1608-054	Stefan Collette, Cpl.	51
	1611-064	Danielle Cale, Officer	26		1610-061	Christian Smith, Officer	65
	1604-065	Anthony Hickox, Officer	73		1609-063	Cody Weatherford, Officer	44
	<b>Total</b>		<b>204</b>		<b>Total</b>		<b>172</b>

Reserves	Officer	Officer Names	Case #'s	Hours
	1644-057	Matthew Hanson, PT Officer		
	1641-014	Brian Gordon, Reserve		
	1642-015	JD Landon, Reserve		
	1645-047	Glenn Cozzens, Reserve		
	1646-031	Andrew Hunt, Reserve		
	1643-048	Tim Wheeler, Reserve		
	<b>Total</b>			
<b>Total Incidents for the month...</b>			<b>400</b>	

**Incident Statistics**

Felony	3	HBO (Handled by Officers)	274
Misdemeanor	3	Use of Force	0
Infraction	169	Dog at Large	4
Other (Services)	225	Neglect-0 /Abuse-0 /Bites-0	0

**Vehicle Maintenance**

Vehicle	Odometer Reading	Monthly Mileage	Shifts Used	Miles per Shift	Monthly Maintenance	Year to Date Maintenance
WPD-01 2021 Ford F-150	35,282	1,069	21	51		72.97
WPD-02 2021 Charger	70,725	1,731	15	115	1,203.56	1,425.55
WPD-03 2023 Charger	1,080	192	5	38		
WPD-04 2023 Durango	29,581	1,391	21	66		1,037.03
WPD-05 2023 Charger	31,569	3,337	33	101	76.49	506.45
WPD-06 2023 Durango	19,893	2,416	22	110		213.98
WPD-07 2017 Explorer	31,240	745	17	44	417.97	1,562.87
WPD-08 2008 Harley	6,332	0	0	0		95.73

**Monthly Vehicle Maintenance Details**

WPD-01:	WPD-05: oil change
WPD-02: oil change; tire rotation; brakes; headlights	WPD-06:
WPD-03:	WPD-07: windshield COWL
WPD-04:	

## **Public Works Report**

October2024

115 Service Orders

69 Rereads

8 After Hour Call ins

Locates 149

Shut Offs 26

Meter ERTS Replaced 11

### **Water Department**

1. Waterline replacement on Miller Rd. and set up for tie in at a later date to existing 10" on Miller Rd.
2. Water leak on Lone Oak
3. Water Leak on Alan Ave.
4. Water Leak on New Mellville
5. Water leak on Farm Rd. 89
6. Water leak in back alley of Pershing & Barwick
7. Water leak on Farm Rd. 99
8. Water leak on Farm rd. 124
9. Spotted waterlines and fiber optic lines for Cowboy Church water line installation
10. Turned in Lead and Copper inventory to DNR
11. Repaired chlorine monitors at Willard well #1, and Willard well #2
12. Dirt work on Mark St.
13. Crawl space inspections for L&C
14. Lead And Copper Data Input
15. Replaced 16 meter pits
16. Re Reads
17. Flushing
18. Well Checks and Chlorine Maintenance

### **Sewer Department**

1. Lift Station maintenance

2. Repaired broken manhole behind Pizza Hut
3. Sewer Lagoon Pond maintenance
4. Lagoon samples & EDMR

### **Streets Department**

1. 70' of sidewalk replaced on Deer Run
2. Grouted pipes on Southview drainage
3. 30' sidewalk repair on Arrowhead
4. Road patch on Pershing
5. Repaired storm drain on Arrowhead
6. Repaired sidewalk on Pheasant
7. Moved sidewalk on Hunt Rd.
8. Dirt work on Farm Rd. 97
9. Installed "No Loitering" signs behind Korean Garden
10. Installed "Do not block alleyway" signs behind PW shop
11. Installed "No loitering" and "No graffiti" signs at Knight St. drainage.
12. Cleaned out storm drain box on Knight St., community service worked repainted the concrete basin, and PW applied anti-graffiti paint over top.
13. Finished Dirt work on Robberson and Jefferson
14. New Office drywall work

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Consent Agenda Item #3d

## Board Attendance Report



**2024 BOARD ATTENDANCE REPORT**

<b>ATTENDED: Y</b>	<b>1/8/2024</b>	<b>1/22/2024</b>	<b>2/12/2024</b>	<b>2/26/2024</b>	<b>3/4/2024</b>	<b>SPECIAL SESSION</b>	<b>3/11/2024</b>	<b>SPECIAL SESSION</b>	<b>3/14/2024</b>
<b>NAME</b>									
MAYOR SAM BAIRD	Y	Y	Y	Y	Y		Y	Y (LATE)	OUT
TROY SMITH (MAYOR PRO TEM)	Y	Y	Y	Y	Y		OUT	Y	OUT
DAVID KEENE	Y	Y	Y	Y	Y		OUT	Y	Y
SCOTT SWATOSH	Y	Y	Y	Y	OUT		OUT	Y	Y
LANDON HALL	OUT	Y	OUT	OUT	Y		OUT	Y	Y
CASEY BILLIER	Y	Y	Y	Y	Y		Y	Y	Y
JOYCE LANCASTER	Y	Y	Y	Y	Y		Y	Y	Y
			SPECIAL SESSION						
<b>NAME</b>	<b>3/21/2024</b>	<b>3/25/2024</b>	<b>4/3/2024</b>	<b>4/23/2024</b>	<b>5/13/2024</b>	<b>SPECIAL SESSION</b>	<b>6/10/2024</b>	<b>5/29/2024</b>	<b>6/24/2024</b>
MAYOR SAM BAIRD	Y	OUT	Y	Y	Y		Y	Y	FINISHED
MAYOR TROY SMITH	Y	Y	Y	Y	Y		Y	Y	Y
DAVID KEENE	Y (LATE)	Y	OUT	Y	Y		OUT	Y	Y
SCOTT SWATOSH	OUT	Y	Y	Y	Y		Y	Y	Y
LANDON HALL	Y	Y	Y	-	-		-	-	-
CASEY BILLIER	Y	Y	Y	Y	Y		Y	Y	Y
JOYCE LANCASTER	Y	Y	Y	Y	Y		Y	Y	Y
CAROL WILSON (4/2/24)	-	-	-	Y	Y		OUT	Y	Y

<b>NAME</b>	<b>7/8/2024</b>	<b>7/22/2024</b>	<b>8/12/2024</b>	<b>8/26/2024</b>	<b>9/9/2024</b>	<b>9/23/2024</b>	<b>10/14/2024</b>	<b>10/28/2024</b>
MAYOR TROY SMITH	Y	Y	Y	Y	Y	Y	Y	Y
CASEY BIELLIER	Y	Y	Y	Y	OUT	Y	Y	Y
JEREMY HILL	Y	OUT	OUT	OUT	OUT	Y	Y	Y
DAVID KEENE (MAYOR PRO-TEM)	Y	Y	Y	Y	Y	Y	Y	Y
JOYCE LANCASTER	OUT	OUT	Y	Y	Y	Y	Y	Y
SCOTT SWATOSH	Y	Y	Y	Y	Y	OUT	Y	Y
CAROL WILSON	Y	Y	OUT	Y	Y	OUT	Y	Y

<b>NAME</b>	<b>11/12/2024</b>	<b>11/25/2024</b>	<b>12/9/2024</b>	<b>12/23/2024</b>
MAYOR TROY SMITH				
CASEY BIELLIER				
JEREMY HILL				
DAVID KEENE (MAYOR PRO-TEM)				
JOYCE LANCASTER				
SCOTT SWATOSH				
CAROL WILSON				

**CITY OF WILLARD, MISSOURI**

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #6

**An Ordinance of the City of Willard  
Establishing a Water Advisory Board**



## Subject: Recommendation on Establishing a Water Advisory Board

### Background:

At the recent board meeting, we discussed the proposal to establish a Water Advisory Board, a body that would provide ongoing guidance and public engagement for sewer and water-related issues, including rate reviews, infrastructure needs, and customer concerns. This board would offer a structured forum for residents to voice concerns, contribute feedback, and assist in planning for the city's sewer and water needs.

### Proposal Overview:

The proposed ordinance establishes a Water Advisory Board consisting of five members, including at-large representatives to provide community insights. The board would meet regularly, adhere to open-meeting requirements, and focus on issues related to sewer and water rates, system maintenance, and long-term planning. This approach mirrors the successful model in Columbia, Missouri, and aligns with best practices observed in other municipalities.

### Recommendations:

Based on the discussions and concerns raised at the board meeting, the following actions are available:

1. **Approve the Ordinance:** Approval and a first read would allow the city to formalize the advisory board and allow for structured input on sewer and water-related decisions. Given community interest in greater transparency and engagement, the advisory board could serve as a valuable asset in maintaining public trust and fostering collaborative solutions to sewer and water challenges.
2. **Modify the Ordinance:** Consider modifications to address specific concerns that may arise during discussions:
  - o **Representation:** Expand the board to include additional members representing specific stakeholder groups (e.g., business owners, residents with out-of-town status) to ensure broader representation.
  - o **Scope:** Broaden or narrow the board's focus to include specific areas of interest based on city priorities (e.g., infrastructure planning or customer service improvements).
  - o **Frequency of Meetings:** Adjust the proposed meeting frequency to balance community engagement with administrative feasibility.

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



3. **Deny the Ordinance:** If the board believes this advisory body may create redundant oversight or if existing channels are deemed sufficient for sewer and water-related input, it may be more effective to allocate resources toward alternative community engagement initiatives.

### **Recommendation for Action:**

After reviewing the benefits and considerations in conjunction with community feedback, my recommendation is to **approve and perform a read of the ordinance as written.**

This approach offers a proactive response to community concerns, strengthens transparency, and creates a structured process for addressing and discussing the city's sewer and water needs and issues.

Please let me know if further clarification or additional information is needed.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Wesley Young', is written over a faint, larger version of the same signature.

Wesley Young, MPA, CPM  
City Administrator  
City of Willard

**First Reading: 11/12/2024**  
**Bill No.: 24-58**

**Second Reading: 11/25/2024**  
**Ordinance No.: 241112**

### **An Ordinance of the City of Willard Establishing a Water Advisory Board**

**WHEREAS**, the City of Willard is committed to providing reliable and transparent water services to all customers within its service area, including both incorporated and non-incorporated areas; and

**WHEREAS**, community engagement and public input are essential to ensuring that water services meet the needs of all residents and customers served by the City of Willard; and

**WHEREAS**, establishing a Water Advisory Board will provide a formal mechanism for residents to share concerns, offer recommendations, and promote continuous improvement in the delivery of water services; and

**WHEREAS**, it is in the public interest to include representation for non-incorporated customers to ensure that all segments of the City's service area are fairly represented;

**NOW, THEREFORE**, be it ordained by the Board of Aldermen of the City of Willard:

#### **Section 1: Creation and Purpose**

A Water Advisory Board is hereby established to advise the Board of Alders of the City of Willard on matters related to the management and operation of the city's sewer and water system. The Board shall provide a forum for customers to voice concerns, recommend improvements, and support the efficient and sound operation of Willard's sewer and water services.

#### **Section 2: Membership**

The Board shall consist of five members appointed by the Board of Aldermen. At least one member shall be an at-large member, representing non-incorporated customers of the City of Willard's water system. All members of the board shall be customers of the Willard water system, with at least one member, and no more than 2 members, being at-large members of the City of Willard sewer and/or water system.

#### **Section 3: Qualifications and Terms**

Members of the Board must be qualified customers or residents of the Willard sewer and/or water system and must demonstrate an interest in the effective management of the sewer and water system. Each member shall serve a term of four (4) years, with terms staggered so that approximately one member's term expires each year. Initial appointments shall vary in length to create this staggering.

**Section 4: Powers and Duties**

The Water Advisory Board shall:

1. Review and advise on policies, practices, and issues concerning the operation of the City’s sewer and water system.
2. Gather and report customer feedback regarding sewer and water services and provide recommendations for improvements.
3. Serve as a liaison between the public and the City to ensure transparent and efficient sewer and water services.
4. Submit an annual report to the Board of Aldermen summarizing its activities, findings, and recommendations.

**Section 5: Meetings**

The Water Advisory Board shall meet at least quarterly and shall conduct its meetings in accordance with applicable open meeting laws. Meetings shall provide an opportunity for public comment, and all residents and customers of the Willard sewer and/or water system shall be encouraged to attend.

**Section 6: Compensation and Reimbursement**

Board members shall serve without compensation but may be reimbursed for actual expenses incurred in the performance of their duties, subject to approval by the Board of Aldermen.

**Section 7: Effective Date**

This ordinance shall become effective immediately upon adoption.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri, on the **25<sup>th</sup> day of November 2024.**

Approved as to Form: \_\_\_\_\_  
Nate Dally, City Attorney

Approved By: \_\_\_\_\_  
Troy Smith, Mayor

Attested By: \_\_\_\_\_  
Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #7

### **An Ordinance of the City of Willard, Missouri, Amending title VII Utilities, Chapter 705, Water Rates, Article II Water Service, Section 705.040 Water Rates**

**FIRST READ: 11/12/2024**

**SECOND READ: 11/25/2024**

**BILL NO.: 24-46**

**ORDINANCE NO.: 241028**

**AN ORDINANCE OF THE CITY OF WILLARD, MISSOURI, AMENDING TITLE VII UTILITIES, CHAPTER 705, WATER RATES, ARTICLE II WATER RATES**

WHEREAS, the City of Willard owns and operates a municipal water supply storage and distribution system permitted by the State of Missouri; and

WHEREAS, the City of Willard has caused to be a conducted a rate analysis to determine whether the current rate structure is adequate to cover operating and maintenance costs for the water system of the City of Willard; and

WHEREAS, the results of which has caused City of Willard to determine a need to amend Chapter 705 of the Municipal Code to update the water rates for both in-City and non-City customers to ensure the proper maintenance and operation of the municipal water system;

NOW THEREFORE, BE IT ORDAINED AND RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF WILLARD, GREENE COUNTY, MISSOURI, AS FOLLOWS:

**Section 1:** The City does hereby amend **Title VII Utilities, Chapter 705 Waterworks System, Article II Water Service, Section 705.040 Water Rates** of the Municipal Code of the City of Willard, effective **October 28, 2024**, as follows:

Except as provided for bulk at a flat rate, every user of water from the municipal water system of the City of Willard, Missouri, shall use said water only after it has been metered in a water meter to be furnished, installed, regulated, and controlled by said City and the applicant for each meter, on behalf of themselves, shall pay for said water used at the following monthly rate:

- a. There shall be assessed to each **in-City user** of the municipal water system a **minimum charge of twelve dollars and fifty-seven cents (\$12.57) per month**, and an additional charge of **three dollars and ninety-one cents (\$3.91) per one thousand (1,000) gallons** or fractional part thereof used per month with no usage allowance.
- b. There shall be assessed to each **non-City user** of the municipal water system a **minimum charge of eighteen dollars and eighty-six cents (\$18.86) per month**, and an additional charge of **five dollars and eighty-seven cents (\$5.87) per one thousand (1,000) gallons** or fractional part thereof used per month with no usage allowance.



These rates shall be reviewed annually before the end of each fiscal year. Recommendations for any rate adjustments shall be presented to the Board of Aldermen as part of the upcoming fiscal year's budget consideration. Any proposed rate changes shall thereafter be timely presented in a public hearing, allowing for their implementation at the beginning of the upcoming fiscal year or as soon thereafter as feasible.

**Section 2:** Definitions: An **in-City user** shall be defined as a user located within the incorporated city limits at the time of billing. A **non-City user** shall be defined as a user located outside the incorporated city limits at the time of billing.

**Section 3:** In addition to the above charges, all other provisions of Chapter 710 not specifically amended by this ordinance shall remain in full force and effect.

**Section 4:** The terms of this ordinance shall take effect from and after its passage by the Board of Aldermen and approval by the Mayor.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **28<sup>th</sup>** day of **October 2024**.

Approved as to Form: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Mayor Troy Smith

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

**BLANK RATES DRAFT TO BE UPDATED IF NEW RATES ARE APPLIED**

**FIRST READ: 11/12/2024**

**SECOND READ: 11/25/2024**

**BILL NO.: 24-46**

**ORDINANCE NO.: 241028**

**AN ORDINANCE OF THE CITY OF WILLARD, MISSOURI, AMENDING TITLE VII UTILITIES, CHAPTER 705, WATER RATES, ARTICLE II WATER RATES**

WHEREAS, the City of Willard owns and operates a municipal water supply storage and distribution system permitted by the State of Missouri; and

WHEREAS, the City of Willard has caused to be a conducted a rate analysis to determine whether the current rate structure is adequate to cover operating and maintenance costs for the water system of the City of Willard; and

WHEREAS, the results of which has caused City of Willard to determine a need to amend Chapter 705 of the Municipal Code to update the water rates for both in-City and non-City customers to ensure the proper maintenance and operation of the municipal water system;

NOW THEREFORE, BE IT ORDAINED AND RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF WILLARD, GREENE COUNTY, MISSOURI, AS FOLLOWS:

**Section 1:** The City does hereby amend **Title VII Utilities, Chapter 705 Waterworks System, Article II Water Service, Section 705.040 Water Rates** of the Municipal Code of the City of Willard, effective **October 28, 2024**, as follows:

Except as provided for bulk at a flat rate, every user of water from the municipal water system of the City of Willard, Missouri, shall use said water only after it has been metered in a water meter to be furnished, installed, regulated, and controlled by said City and the applicant for each meter, on behalf of themselves, shall pay for said water used at the following monthly rate:

- a. There shall be assessed to each **in-City user** of the municipal water system a **minimum charge of \_\_\_\_\_, (\$ . )** and an additional charge of \_\_\_\_\_ **(\$ . ) per one thousand (1,000) gallons** or fractional part thereof used per month with no usage allowance.
- b. There shall be assessed to each **non-City user** of the municipal water system a **minimum charge of \_\_\_\_\_ (\$ . ) per month**, and an

additional charge of \_\_\_\_\_ (**\$ . ) per one thousand (1,000) gallons** or fractional part thereof used per month with no usage allowance.

These rates shall be reviewed annually before the end of each fiscal year.

Recommendations for any rate adjustments shall be presented to the Board of Aldermen as part of the upcoming fiscal year’s budget consideration. Any proposed rate changes shall thereafter be timely presented in a public hearing, allowing for their implementation at the beginning of the upcoming fiscal year or as soon thereafter as feasible.

**Section 2:** Definitions: An **in-City user** shall be defined as a user located within the incorporated city limits at the time of billing. A **non-City user** shall be defined as a user located outside the incorporated city limits at the time of billing.

**Section 3:** In addition to the above charges, all other provisions of Chapter 710 not specifically amended by this ordinance shall remain in full force and effect.

**Section 4:** The terms of this ordinance shall take effect from and after its passage by the Board of Aldermen and approval by the Mayor.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **28<sup>th</sup>** day of **October 2024**.

Approved as to Form: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Mayor Troy Smith

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

October 21, 2024

Mr. Troy Smith, Mayor  
City of Willard  
224 W Jackson St.  
Willard, Missouri 65781

Subject: Water and Sewer Rate Analysis Report

Dear Mayor Smith:

About one month ago, I sent the City Administrator the City's water and sewer rate analysis report. We all thought that was the final report. But City staff updated the City's capital improvement plan (CIP) soon after and changed how to fund the revised CIP. And City staff, performing due-diligence review of the report, found that I had incorrectly recorded in my models several data points. We all wanted the report and model to be as correct and up to date as possible, so I corrected and updated all those things.

Even more recently, the City has conducted public hearings about the need to adjust rates and the Council has determined it wants to see several additional rate structure scenarios. This, the final report, includes those, as well.

Because the report has changed so much over the last few months, you and all others need to discard the previously received report versions. They are out of date. Use the enclosed report, instead.

Before I address the report, I want to speak to everyone who will read this.

Interim City Administrator Donna Stewart got the rate analysis ball rolling. I was impressed with her drive and ability to shepherd this project early on. Of course, her stint as interim ended soon and she turned everything over to Carolyn Halverson, Director of Finance. I worked with Ms. Halverson closely and almost exclusively for data gathering, proofing and more. Ms. Halverson was so fast, accurate and helpful. She made my work go quickly, and accurately. I really appreciate that.

About the time the data gathering and model building phase was being completed, Wesley Young, your new City Administrator, came on board. And Mike Ruesch, your Director of Planning & Development joined in about then, too. All these folks have helped by reviewing draft reports, giving me feedback for corrections, updates and improvements. And all have been great to work with.

I am sure you and the Board recognize the expertise and value of these staff. I hope citizens and ratepayers will also get a glimpse of just how well they are being served by these folks. Without them, and without their accurate assistance, my analysis work would not be possible.

The report and the included rate models cover a lot of technical ground. There is a lot of material and data, but I tried to include some summaries to make comparing and contrasting easier.

If Board members have questions after reviewing the report, filter to me through any of these contacts and I will answer them all. Should you need me to address the Board again, I would be glad to do so. But I suspect the Board will be able to act on new rates from the report without me being there in person. Plus, you need to adopt new rates as soon as possible, so you can reduce the severity of the shortfall in the sewer fund.

Finally, I am sure you and Board members know of other cities and utilities that also need rate setting help. As you run into these folks at municipal league and other meetings and venues, I hope you will tell them about my services. I get much of my business from referrals by past clients. I hope to be able to trace several future clients back to my work with Willard, as well.

Best regards,  
GettingGreatRates.com



Carl E. Brown  
President

Enclosure

# Water and Sewer Rate Analysis Report 3 Willard, Missouri

Prepared October 21, 2024

Carl Brown, President  
GettingGreatRates.com

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1	Current Rates	55	N.A.	N.A.
2	Volume Usage	56	N.A.	N.A.
3	Incomes	59	N.A.	N.A.
4	Costs	60	N.A.	N.A.
5	CIP	62	N.A.	N.A.
5B	City's CIP Plan	63	N.A.	N.A.
6	Replacement-Detailed	N.A.	N.A.	N.A.
7	Replacement Annuity	N.A.	N.A.	N.A.
8	Cost Classification	67	N.A.	N.A.
9	Marginal Cost Classification	69	N.A.	N.A.
10	Rate Calculation	71	82	94
11	AWWA Meter Study	N.A.	N.A.	N.A.
12	Capacity Costs	N.A.	N.A.	N.A.
13	Capacity Fees	N.A.	N.A.	N.A.
14	Capacity Fee Revenues	N.A.	N.A.	N.A.
15	Minimum Charge Calculation	N.A.	N.A.	N.A.
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5	Working Capital vs. Goal	79	90	102
6	Cash Value Before Inflation	79	90	102
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8	Total Reserves	80	91	103

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	Cover Page	105	117	141
1	Current Rates	N.A.	118	N.A.
2	Volume Usage	N.A.	119	N.A.
3	Incomes	N.A.	121	N.A.
4	Costs	N.A.	122	N.A.
5	CIP	N.A.	124	N.A.
5B	City's CIP Plan	N.A.	125	N.A.
6	Replacement-Detailed	N.A.	N.A.	N.A.
7	Replacement Annuity	N.A.	N.A.	N.A.
8	Cost Classification	N.A.	128	N.A.
9	Marginal Cost Classification	N.A.	130	N.A.
10	Rate Calculation	106	132	142
11	AWWA Meter Study	N.A.	N.A.	N.A.
12	Capacity Costs	N.A.	N.A.	N.A.
13	Capacity Fees	N.A.	N.A.	N.A.
14	Capacity Fee Revenues	N.A.	N.A.	N.A.
15	Minimum Charge Calculation	N.A.	N.A.	N.A.
16	Minimum Charge Revenues	N.A.	N.A.	N.A.
17	Financial Indicators	109	134	144
18	Bill Comparisons	110	135	145
<b>Chart</b>				
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2	Coverage Ratio	112	137	147
3	Residential Users' Bill	113	138	148
4	Affordability	113	138	148
5	Working Capital vs. Goal	114	139	149
6	Cash Value Before Inflation	114	139	149
7	Cash Value After Inflation	115	140	150
8	Total Reserves	115	140	150

## Executive Summary

*This report started with "...Narrative Report 2024-2," and then adds several more rate structure scenarios requested by the City Administrator. Thus, this report still includes the original rate models, one for water and one for sewer. The additional scenarios are then covered in report sections following the original model discussions. Each additional scenario examines the effect of varying the degree or method of rate adjustments of out-of-City customers compared to in-City customers. To avoid confusion in the future, the City should discard the original report dated September 19, 2024, and replace it with this report.*

## The Meaning of This Report, in a Nutshell

Willard, later at times just called the "City," the "utility," or "you," hired GettingGreatRates.com, later called "me," or "I," to perform rate analysis of its water and sewer utilities; to produce a report of my findings and recommendations; and to provide guidance on rate setting.

This report is detailed and somewhat long. The math behind the report is complex. Some assumptions had to be made about data and outcomes, which is normal. Still, these things make the modeling complex and interpreting the models difficult. Following is the "Cliff's Notes" version of what the calculated rates will do and what they mean to customers.

*The first set of rate calculations in this report for each utility are quite closely based on the principle called, "cost-of-service" or "cost-to-serve" rates. This is the prime industry standard for utility rate analysis. Quite simply, if a customer causes the utility to incur a cost, that customer should reimburse the utility for that cost. In your case, meter size-based minimum charges are not warranted. There are so few large meters, assessing higher rates to those meters would not lower the rates of smaller meters very much. Thus, simpler rates where you assess a single minimum and a single unit charge to all in-City customers is simpler and fair enough. Assessing rates to out-of-City customers with that same structure, only higher, will also suffice. Importantly, rate revenues need to go up moderately to make the utilities sustainable. The additional rate models simply start with the original models and depict varying degrees of rate changes for out-of-City customers relative to in-City customers, but all target the same total reserves level ten years out.*

## Introduction

I analyzed rates for the City that will cover the costs of significant system improvements, pay all operating and related costs, and build appropriate reserves over the next ten years. These things will be big drivers of higher rates.

The utilities' customer bases are growing rapidly. That improves the ability of the utilities to become more economical to own and operate over time, because there will be many new customers to share costs.

As for me, your rate analyst, I have analyzed rates as a consultant since 2005, completing 389 analyses since then. Before that, from 1991 to 2005, I did similar work, as well as grant and loan coordination work, for the Missouri Department of Natural Resources. My experience is deep. I calculated your rates with due diligence using the best methodologies and reasoning I can. I trust my expertise and the results I get. You should, too. You can adopt the rates recommended in this report and all should turn out well for you.

But it is reasonable for you to be curious about my methodologies and why and how I employ them. "Trust but verify" is a reasonable attitude for you to have because rate setting is one of your most critical and criticized tasks. You need to get it right. Just summarizing my methodologies requires a lot of discussion, therefore, I left that discussion out of the main part of the report. I placed those discussions in Appendix A, starting on page 29.

If you have a basic working knowledge of rate setting, and if you consider the logic of what follows, you should be able to read on and learn what you need to know to set rates appropriately and confidently. If, however, you read something that you do not understand and you want to understand it, go to Appendix A. I likely covered the issue there. If I did not and if the issue is important to you, just call and I will talk you through it.

Appendix A summarizes my rate analysis methodologies, theories, and general issues.

The water user charge rate structure is "description" based – in-City residential customers, in-City commercial customers and the same outside of the City. The minimum charge and unit charge are higher for out-of-City customers in recognition of the fact that it is generally more costly to serve outside of the City. For water there is a 1,000 gallons per month usage allowance. Sewer does not have a usage allowance.

This report is the culmination of a process where I submitted information and data requests to my primary City contact, Carolyn Halverson, Director of Finance. I am sure others behind the scenes assisted but I coordinated all communications through Ms. Halverson.

As I received information and data, I modeled the utilities' finances and rates and submitted drafts for review to get feedback. Ms. Halverson reviewed those drafts to assure accuracy, and when needed, she corrected data. Note: Late in the analysis phase, Mr. Wesley Young came on board as the new City Administrator, so he provided feedback, as well.

The rate analysis modeling covered 12 years, as follows:

- The "test year" is the one-year period from which data was used as the starting place for the analysis. We almost always use the last completed fiscal year as the test year. That is what we did in your case, too.
- The modeling was started and completed during the next year. In the model tables, this is called, "0 Year."
- For the next ten years, the modeling used budget figures, capital improvement cost estimates, etc. when available. Those normally cover one or two future years. For the remainder of the ten projection years, we increased incomes, costs, etc. by expected inflationary factors.

I prepared and submitted a draft final report. Again, my contacts reviewed and gave me feedback. We cycled through this process a few times to arrive at this, the final report.

The report is in two parts. The first part is this narrative report that tells readers what should be done to the utilities' rates and why and interprets much of the mathematical modeling.

The second part is a printout of the models. The water models are named and described as follows:

- "Willard, MO, Water Rates Model 2024-3." Later this model will just be called Water Model 3. (Many prior models were created during analysis to determine the rate effects of variables. The appropriate aspects of those early models have been incorporated into the final Water Model 3.) Water Model 3 assumes the City will continue many practices, but it would restructure rates.
- "Willard, MO, Water Rates Model 2024-4" is like Water Model 3 except it assumes out of City customers' rates would be set at 10 percent higher than in-City rates.
- "Willard, MO, Water Rates Model 2024-5" is like Water Models 3 and 4, except it assumes out of City customers' rates would be "capped" like this; the minimum charge would be 41 percent higher than the in-City minimum, and the unit charge would be 37 percent higher than the in-City unit charge.
- "Willard, MO, Water Rates Model 2024-6" is like Water Models 3, 4 and 5, except it assumes out of City customers' rates would be the same as in-City rates.

The sewer models are named and described as follows:

- "Willard, MO, Sewer Rates Model 2024-3," later called, Sewer Model 3, is like Water Model 3 except it covers sewer rates.
- "Willard, MO, Sewer Rates Model 2024-4," later called, Sewer Model 4, is like Sewer Model 3 except it assumes out of City customers' rates would be "capped" like this; the minimum charge would be 22 percent higher than the in-City minimum, and the unit charge would be 35 percent higher than the in-City unit charge.

As you read this report, please keep this in mind. The report does not *direct* the City to do anything. Actions you take or do not take are strictly up to you. The report is meant to inform and educate so you can make well-informed decisions about actions to take. And the report and models are not legal recommendations. For legal issues consult your attorney.

## About the Models, Generally

The models were built to match the systems' financial statements and other data as much as possible. Because incomes and expenses in standard financial statements, and other data, are seldom grouped in such a way as to enable the required rate calculation methodology, the Models do not always match financial statements.

For modeling purposes, it does not matter whether funds are held in the general system account, a debt service sinking fund, repair and replacement account, etc. Therefore, the Models account for funds in a more simplified way than most utilities do it. When it comes to segregating funds, staff knows best how to do that, so the Models do little in this regard and I leave the segregating up to staff.

Several line graph charts in the Models graphically depict some things which would be difficult to pick out of the tables. In all the charts, the **blue line** represents what would happen under the **modeled** rates and the **red line** under the **current** rates. Financial trends for the red lines are (generally) bad. Those for the blue lines are (generally) good. Review the definitions section of Water Model 3 to learn the meaning of terms used in the charts. A few explanations should help you interpret the charts.

Chart 2 of the Models can depict the blue line, the modeled rates coverage ratio, at zero or going to zero. That could be a good thing, or a bad thing. It is a good thing if you have no debt, or the debt is paid off during the time being modeled. It is a bad thing if you have debt but no current income available to pay that debt.

Charts 1 and 2, page 137 of Sewer Model 3 can be confusing. This is what they depict.

Chart 1 measures a utility's ability to pay operating costs using current incomes. The current incomes part of the definition is key. When you have reserves, those can be used to pay debt or pay cash for other things. But the classic definition of the operating ratio does not include reserves, only current incomes. Therefore, an operating ratio at 1.0 means current income equals current operating costs – that income is at the break-even point with operating costs. For sewer, you started below 1.0. That means you did not have enough current income to fully pay current operating costs and there was no current income left over to pay debt or cash-paid system improvement costs, either. But you had reserves, so temporarily, you were fine. After raising rates (the blue line) as modeled, the operating ratio rises.

Chart 2 of Sewer Model 3, the coverage ratio, measures the utility's ability to pay debt service from current income after satisfying operating costs and setting aside appropriate operating reserves. For sewer, you had no current income above what it would take to satisfy the operating reserves goal, so you started with no coverage ratio. But again, you had reserves, so you were fine. Since even the rate revenue increases modeled do not generate net revenue above what it will take to satisfy the operating reserves goal, the classic coverage reserve stays at zero.

Because of the shortcoming in how the classic coverage ratio is calculated, I calculate an "alternative coverage ratio," which is the green line in Chart 2. For this ratio, I include reserves, because undedicated reserves are available to pay debt service. Now your picture still looks odd because the green line goes below zero. That indicates that, during those years you will not have enough income and reserves to pay all operating costs plus pay debt service. Later in the report I will describe how you probably will cover this shortfall.

Charts 1 and 2 or Water Model 3 function the same as those in the Sewer Model, but the income and debt situations for water were very different, so those charts look very different compared to the Sewer Model 3 charts.

On to other charts, Chart 8 depicts reserve levels under the existing rates (red line) and the modeled rates (blue line). When the blue line goes up, that is a good thing for the utility. When the red line goes down, that is a bad thing, at least, if you were to decide to keep your current rates for very long.

In contrast to Chart 8, Charts 3 and 4 in the Models depict user rates. When the Chart 3 and 4 blue lines go up, meaning rates are going up, customers do not like that. But the utility will be better funded as a result and that benefits ratepayers because it makes their utility more resilient and able to make improvements that will serve them better. Effectiveness is the first priority. Efficiency (low cost, as customers view it) is the second priority. Customers want efficiency. But if the system is not effective, cost is a moot point.

One thing you will notice in viewing Chart 5 is this. Only the red line (current rates) and the black line (goal amounts) show up at all, or most of the time. When that happens, the line depicting the proposed rates is taking the same path as the line depicting the goal. That is because, in the Models, I programmed all funds that exceed what is needed to meet the working capital goal to “spill over” into the CIP and Debt Service fund reserve. Thus, the recommended rates line is taking the same path as the goal line.

Chart 8 spells the difference between the current rates and the modeled rates. The modeled rates will generate more revenue over time and, thus, produce stronger total reserves. It is useful if you can understand the other charts, but Chart 8 is the one to focus on.

As you set and later reset rates, I suggest you follow the guidance I give in my book, “How to Get Great Rates.” This book is one of the rate setting resources I mentioned earlier.

The remainder of this report directly addresses the analysis findings and my recommendations, starting with water rates.

## Comparing the Bill Effects of the Water Rate Alternatives

This report covers four alternative water rate structures. Before getting to the details of each of the models, it would be useful to compare the bills from the models for a certain set of customers. That is a residential customer using 5,000 gallons of water per month. The following table shows those comparisons.

Where do the current rates trend lines come from?

Comparison of the chart trend lines between the current rates (red) and the modeled rates (blue) are useful to planning and action.

My modeling template models incomes, expenses, capital improvement plans and much more, resulting in a set of system development fees and user charge rates that will pay all costs well into the future.

In the background the template also runs a second analysis that assumes the above things but assumes the current rate and fee structures will continue for the next ten years and apply to customers as the customer base grows.

Thus, the results of that “background” analysis can be compared to the “foreground” analysis. That enables an “apples to apples” comparison of what likely will happen under the current rates versus what likely will happen under the modeled rates. Often, the best course of action is then very easy to see.

Table 18B - Bill Comparisons Among the Water Rate Alternatives

Table 18B - Bill Comparisons Among the Water Rate Alternatives											
This table compares the annual cost of 5,000 gallons of water per month under the rates in each of the four rate structures.											
Customer, Rate Class or Meter Size	# Customers	Water Model 3 Annual Cost	Water Model 4 Compared to Model 3			Water Model 5 Compared to Model 3			Water Model 6 Compared to Model 3		
			Annual Cost	Dollar Difference	% Difference	Annual Cost	Dollar Difference	% Difference	Annual Cost	Dollar Difference	% Difference
In-City Res, Irr, Water Only	248	\$385.48	\$434.77	\$49.29	13%	\$398.29	\$12.82	3%	\$449.56	\$64.08	17%
In-City Commercial, Irr, Water Only	5	\$385.48	\$434.77	\$49.29	13%	\$398.29	\$12.82	3%	\$449.56	\$64.08	17%
Rural Residential, Irr, Water Only	121	\$578.22	\$478.25	-\$99.97	-17%	\$551.90	-\$26.32	-5%	\$449.56	-\$128.66	-22%
Rural Commercial, Irr, Water Only	1	\$578.22	\$478.25	-\$99.97	-17%	\$551.90	-\$26.32	-5%	\$449.56	-\$128.66	-22%

Note 1: You may interpret this table like this. Under the Water Model 6 rates, an In-City residential customer’s annual bill would need to go up by \$64.08 so a Rural Residential customer’s bill could go down by \$128.66.

Note 2: These comparisons are only for 5,000 gallons of use per month. Because the alternative rate structures are quite different from each other, the bill changes for other volumes of use would be quite different. Refer to Table 18 of each of the models you want to compare.

Now, on to the details.

### Water Model 3 Discussion

These are the rates I recommend you adopt because they are the closest to a cost-to-serve structure of all the models. Other models are discussed later. Those models’ rates are not as fair as the recommended rates, on a cost-to-serve basis. But they can serve as a frame of reference for the Water Model 3 rates. And if the City chose one of those sets of rates, like the Model 3 rates, they would also generate adequate revenues.



## System Development Fees, Minimum and Unit Charges

The discussions in the rest of this subsection are brief because I recommend you stay with description-based minimum charges, and you continue with the system development fees (plant investment fees) calculated by Cochran Engineering and already adopted by the City.

There are a few ways to raise money to pay for system capacity costs:

1. System development fees (plant investment fees) paid when new connections are made, and
2. System development surcharges to the minimum charge, which are paid monthly. These direct from whom this money is raised.
3. A third undirected way is to just cover system development costs as they come along, probably by setting regular user charge rates high enough to cover costs as they appear. This alternative may or may not have customers pay according to the system capacity costs they cause.

You are already using Alternative 1 (the Cochran-recommended and since adopted system investment fees) and Alternative 3, which nearly every water and sewer utility is using. You are not using Alternative 2, meter size-based minimum charges. In your case, I recommend you not adopt meter size-based minimum charges, too. In your case, there is little improvement in rate structure fairness with meter size-based rates and those rates would be much more complicated than a description-based rate structure, like the current one.

A special note: The City engaged Cochran Engineering to calculate the plant investment fees (system development fees) for a large development. Cochran issued its report last April. Cochran found that the water plant investment fee for a five-eighths inch or three-quarter inch meter should be \$800, and a four-inch meter should be \$9,600, with in-between meter size fees falling within that range. Sewer plant fees should be between \$1,000 and \$22,500 for those same meter sizes. I incorporated the Cochran fees into my model and found them to be appropriate. The City has since adopted the Cochran fees. For those reasons, I recommend you stay with the Cochran fees.

In the models, Tables 11 through 16 calculate meter size-based system development fees and minimum charges. Since you already have plant investment fees covered, there is no need to show Tables 11 through 14, so I left those out of this report. And since I am recommending description-based minimum charges, not meter size-based

### Terminology

In the practice of setting rates and fees, many terms are used to denote the price of things and services.

In rate analysis practice, the terms "system development fee" and "system capacity fee," and a few others are interchangeable.

This narrative report and the included rate model(s) use the term "system development fee." If you use a different term and it suits your purpose, continue.

In contrast, the terms "new connection fee" or "tap-on fee" refer to payment to the utility for the cost of issuing a permit to connect, the cost of inspecting new connections before they are buried, the cost of providing a water meter and pit, and similar out-of-pocket costs.

To adhere to the principle of "cost-to-serve" rates, a utility should recover at least part of its capacity costs through system development fees. In addition, they should recover out-of-pocket costs through connection fees.

minimums, I “zeroed out” Tables 15 and 16, they were not used at all in the modeling, and those tables have been left out, too. Thus, Tables 11 through 16 do not appear in the report. That is not an oversight. They simply were not needed in your case.

As to new connections, part of what you call “METER REPLACEMENT/ INSTALLATIONS...” in Table 3, page 59, those are fees currently being charged for service connection costs, not plant investments. Therefore, you should continue to assess the “METER REPLACEMENT...” fees in addition to the recently adopted plant investment fees.

### Out-of-City Rate Premiums

Rates for out-of-City service should be much higher than the current premium of 8.8 percent for the minimum charge and 9.1 percent for the unit charge. Most out-of-City rates are set at between 25 and 100 percent higher than the in-City rates for both minimum and unit charges. (I call that differential a “premium.”) I usually recommend a 50 percent premium, and that is what I modeled and recommend for you, too.

The following is not a legal argument for out-of-City rate premiums. Rather, it is a discussion of the practicalities of utility management.

One might ask, “Is the cost of providing service out of the City higher than in-City? And is the cost difference 50 percent?”

You do not have cost records to show the cost of service for in-City versus out-of-City. That is not a shortcoming on your part. No utility has such “records” because most costs are shared or blended. There is no clear division of most costs for in-City service versus out-of-City service. But conceptually, a service location outside of the City is, on average, farther away from most of the utility’s infrastructure than a service location inside of the City. Adding distance adds cost. For example, water and sewer line construction can cost \$1 Million dollars per mile just to build. And then there are costs of maintaining that line, paying for electricity to pump water or wastewater through the line and more.

In addition, nearly all in-City customers are subject to City ordinances – governance by the City. Out of City customers are not. In-City customers almost always pay City property taxes. Out of City customers do not. If the City uses a general obligation bond to pay for a system improvement, in-City property taxes underwrite that bond. Out of City customers do not.

The last and probably the strongest reason for assessing rates and fees outside of the City that are higher than those inside the City is this. Water and sewer service inside of the City is a monopoly. At some point in time, City voters voted to form the utility, pay for the utility, and be governed by the utility. The City has an obligation to at least attempt to serve properties inside the City. It has no obligation to serve those outside of the City and doing so adds a layer of risk. What if the City pays \$1 Million to build a line to serve outside of the City, and then those customers decide to get their service in some other way?

While the amount or percentage of the rate premium for out-of-City service cannot be set on a known-cost basis, it is prudent practice to assess some premium. I generally recommend what I most commonly see, a 50 percent premium.

Moving on.

## Expected Incomes

Table 3, page 59, shows the various past incomes and future incomes to expect, as well as several other things related to revenues. The modeling assumes new rates will be adopted early enough to begin assessing at the new rates on January 1, 2025. If you adopt new rates sooner, you will begin to build reserves sooner.

High in Table 3 is a line called, "Rate Increases Projected for Future Years." As mentioned earlier, after the initial adjustment, revenues are expected to rise by 35.3 percent. In years following that, rates will need to be raised enough to match budget inflation each year, assumed to be 4.0 percent. To be conservative, I assumed plant investment fees would not be increased, but you should examine those fees for need of increases each year, too. Details will be provided later.

## Expected Operating Costs

Table 4, page 60, shows expected operating costs. Those in the first column came from the utility's financial statement. In the years after that, I expect most operating costs will inflate by four percent per year. Some costs rise due to inflation plus growth in customers and growth in use. Those costs are highlighted green.

To make calculation of a few financial indicators accurate and simple, I do not include as "operating costs" those costs associated with building and financing capital improvements. Those costs are covered in Table 5.

## Capital Improvements and Related Issues

### Capital Improvements are a Key Rates Driver

Capital improvements and their costs will be a big driver of higher rates. In a few years, the City plans to invest in a new well(s) and a storage tower. Those costs are expected to be paid mainly with loans and small grants. Other on-going projects called "Capital Assets" will be paid with cash. All these things are shown in Table 5, page 62.

## Repair and Replacement Scheduling

The utility does not have a "formal" equipment repair and replacement (R&R) schedule. You handle those things through your regular budgeting process. Therefore, Tables 6 and 7 of the Model have been left out. That said, I encourage you to create an R&R schedule because it takes most of the risk out of paying for these kinds of needs. You are welcome to use my "ReplacementScheduler" worksheet, available free at <https://gettinggreatrates.com/Freebies> to make that process easy.

## Target Reserve Levels

According to your test year balance sheet, your total reserves were right at where they should have been for a system of your size. Therefore, I targeted reserves in the tenth year at that level, plus the amount of inflation I expect by then.

To give you a sense of how I arrived at the amount of target reserves, the following bullet points state the targets I commonly recommend for systems like yours. I recommend these for you, too:

1. Unobligated cash and cash equivalent reserves equal to at least 50 percent of the annual operating costs, not including debt service and general administration costs.
2. A 20-year repair and replacement (R&R) schedule reserve, in the 20<sup>th</sup> year equal to at least twice the average year's cost of R&R. Your cash reserves need to cover this function, too.
3. Capital improvement and debt reserves at the end of the tenth year, after debt is paid, equal to that year's debt payments plus cash-paid capital improvement expenses.

The above actions, and the rates recommended from Water Model 3 will cause reserves to stay nearly level, except for the years when the well and tower work is expected. Chart 8, page 80 gives you a visual picture of what this will look like.

Projecting budgets and ending balances for next year is a difficult task. Doing the same five years out, I can usually get close. Ten years out, there are so many assumptions we must make now that will not pan out years from now that you should not bank on those numbers. But they serve as good planning targets. In most cases, a utility will see big cost, income, growth, debt, and other changes looming on the horizon a few years out. When that happens, it is time to do a new rate analysis to get rates back on track to meet those challenges. Thus, target balances give you something to aim for, but the target will move over time. With each new rate analysis, we will bring you back on course.

## What if Expenses in the Model Miss the Mark Someday?

First, missing the mark is a certainty. Eventually, the projected expenses will miss the mark. That is why analysis needs to be redone periodically. With time, things change.

If you adopt the Water Model 3 rates, then in a future year it turns out the Model failed to accurately predict the expenses you experience, what should you do? That depends upon which way (higher or lower) your expenses went, and how much they differed from what was predicted. It may also depend upon which expense(s) varied because that could markedly affect cost structure, and therefore, rate structure. And it will depend upon what happened to revenues, too.

- Your "fix" for a situation may be to continue with future rate adjustments as recommended. Not all "misses" need to be addressed. Some right themselves.

- Or it may be to speed up or slow down future inflationary increases to get revenues and reserves back on track.
- Or it may be to do a proportional increase to minimum and unit charges based upon the percentage that the experienced expenses are higher or lower than those in Water Model 3.
- Or it may be to give me a call if you are not clear about how to make the needed adjustments.

My suggestion is this. When in doubt, err on the side of calling me for advice. I can usually talk folks through how to make the appropriate adjustment and I do not charge for that.

If your new situation requires modeling, I probably will request a fee for that. In that case, I would estimate the hours needed to do the analysis adjustment and I would propose to do that at the hourly rate I used to calculate the fees for the original project, if not much time has passed. Otherwise, I would propose using my then current hourly rate. Most such projects, including the reporting out, take a day or less to do, so they rarely go over \$1,000.

If “getting back on track” is a problem several or many years into the future, many issues could then be in play. In that case, it is time for a new rate analysis.

The critical point is this. Do not hesitate to make the recommended rate adjustments just because you are not positive it will work out. Make the adjustments and then track how it works out through the years. If you get concerned about something later, just call. I cannot say, “I have seen it all.” But I have seen a lot. I probably can work you through any rate setting situation you will experience.

### Rate Affordability

I calculate each rate analysis client’s rate affordability, measured by the Affordability Index (AI). For most utilities, it is a very useful tool to assess how “cheap” or “expensive” their rates will be. The AI is also used by many grant and loan programs to determine if an applicant will be awarded a grant, how much grant, an interest subsidized loan or no funding assistance at all.

Income growth, as determined by the Census Bureau, averaged 4.26 percent over 22 years through 2022. That is shown in the top left corner of Table 3, page 59. That is a strong growth rate.

#### Ratepayers ask, “Why should I pay more?”

Nearly every ratepayer served by every one of my client systems wants to keep their current (lower) rates. No one wants to pay more for their water than someone “down the road.” That is human nature. We are wired that way, and that is not a bad thing.

Nearly all my client systems have system improvements they need to make. They cannot fund them out of current revenues. That is why they have a backlog of improvement needs. Quite simply, rates need to go higher, so improvements can be done. While your rates may go higher than those in other systems nearby, that is likely a temporary situation. Those other systems have a backlog of improvement needs. Once they start to attack that problem, their rates will go up, too.

Saying this will not make anyone feel good about higher rates. But this situation is going on nearly everywhere. Maybe not on the same schedule as you, but their day is coming, too.

Water use for all in-City customers averaged 4,230 gallons monthly. That is a bit below the national use benchmark for affordability of 5,000 gallons monthly. Based on the available data, the bill affordability for your average in-City customer will be lower than the Affordability Index that appears in Table 17, page 74. The Affordability Index is also shown graphically in Chart 4, page 78.

In the table, the Affordability Index calculation for the test year was 0.40 percent. That means, a 5,000 gallon per month residential customer earning at the City-wide median household income level paid 0.40 percent of their monthly household income to pay their monthly water bill. The national average is thought to be approximately 1.0 percent, so your current rates should be considered “cheap” when compared to the national average. And your average water usage is less than that benchmark, so those rates are cheaper, still.

Under the modeled rates for the fiscal year that will start in 2025, the first full year after the initial adjustments have been completed, this customer’s Affordability Index would go up to 0.46 percent. That is a small change in affordability. Compared to most of my client utilities, you are in great shape on this metric. Most are paying close to the national average currently and the Affordability Index goes up with the recommended rates, often a lot. Be aware, based on rate affordability, you may not qualify for grants on the well and tower projects.

The Affordability Index does not depict how new rates will affect customers using different volumes. Table 18, page 75, shows “before and after” bills for customers using different volumes of water. It is one of the few tables from the Model that I recommend you copy and bring to the Board meeting as a handout for the public. Because most customers are concerned about what will happen to their bills, you should give this table to everyone who wants a copy.

Affordability Index: The monthly charge for (typically) 5,000 gallons of residential service divided by the median monthly household income for the area served by the system. An index of 1.0, meaning a household pays one percent of its income to pay its bill for 5,000 gallons of service, is generally considered affordable. The Affordability index is a primary factor in determining grant and loan eligibility and grant amount.

## How to Implement the Water Model 3 Rates

These are the rates I recommend you adopt.

In the following, I summarize most things you would need to do to get set on this course of rates. In your case, you should adopt rate adjustments in two phases.

1. The first set of adjustments is a revenue increase and rate restructuring. Table A states the initial set of rates to adopt. Adopt these rates early enough to become effective by January 1, 2025. Adopt earlier, if you can. You would need to satisfy all Statutory requirements for making rate adjustments in advance of billing at the adjusted rates.
  - a) In this table, I did not include system development fees (plant investment fees) because my analysis indicates you should keep the current plant investment fees.

2. The next adjustment needs to occur one year later, at the same time of year or to be effective right after the start of the next fiscal year. Increase minimum and unit charges across-the-board by 4.0 percent annually, but whatever the budget inflation rate is expected to be each year, raise rates across-the-board by that percentage rate. Again, satisfy Statutory requirements.
3. Inflationary increases should continue each year. Again, I assumed you will need to raise all minimum and unit charges by 4.0 percent annually, but whatever the budget inflation rate is expected to be each year, raise rates across-the-board by that percentage rate.
4. When making inflationary increases, you should examine the costs and incomes the utility experienced during the then current year, plus the balances that accrued. Compare those items to the same items in Tables 3, 4, 5 and 17, of the Model for the year in question:
  - a) If all criteria are performing close to the values in the Model, raise all rates by 4.0 percent, as shown near the top of Table 3, page 59.
  - b) If criteria are not performing as shown at the bottom of Table 17, page 74, but they are not egregiously different, follow the instructions in Chapter 9 of the book, "How to Get Great Rates" for how to make inflationary increases correctly, adjusting for variations in incomes, costs, etc. Download that book for free from <https://gettinggreatrates.com/Freebies>.
  - c) If any criterion is performing poorly by an amount that is troubling to you (balances too low, incomes too low, expenses too high), call me to discuss the situation. It is likely I will be able to "talk you through" how to make appropriate rate adjustments to correct the situation. If not, I can do a model revision for a small fee.
5. I recommend repeating the Bullet Point 4 task each following year until you have raised rates and fees by a total of 20 percent. However, if your costs, capital improvements, and other things change dramatically over the next few years, I suggest you get a new rate analysis done when it seems to you it will be most productive. Otherwise, if these criteria are near what I modeled, and for most utilities they usually are, you may not need the next analysis for several additional years. A subsequent rate analysis would likely be useful just before you solidify plans for a major system improvement. That would let you use the analysis to support planning. When rate analysis time arrives, have me or another rate analyst of your choice perform a new rate analysis.

Table A: Rates From Water Model 3

Table A: System Development Fees; Minimum and Unit Charges; No Usage Allowance, Calculated by the Willard, MO, Water Rates Model 2024-3				
Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
All	In-City	\$12.57	0.000	\$3.91
All	Out-of-City	\$18.86	0.000	\$5.87

### Closing

**The utility needs more revenue to cover all costs and arrive at appropriate reserves in ten years. It should also restructure rates, so they are fairer. The recommended rates accomplish those goals.**

It is important that you examine incomes, costs, and accrued balances each year to assure the rates are bringing in adequate revenue to meet needs and maintain reserves. If they are not, increase rates across-the-board by a percentage that will bring the balances up to where I calculated they need to be each year.



## Water Model 4 Discussion

Because Water Model 4 is the same as Water Model 3, except that the rate structure is different, only those things that are different in Water Model 4 are discussed here. Refer to the Water Model 3 Discussion section for all other issues.

### Minimum and Unit Charges

This model assumes out-of-City customers' rates would be set at 10 percent higher than in-City rates.

### Rate Affordability

The Affordability Index (AI) for these rates appears in Table 17, page 85. The Affordability Index is also shown graphically in Chart 4, page 89.

The AI for the Model 3 rates is projected to rise to 0.46 percent in 2025. The AI for the Water Model 4 rates would go up to 0.52 percent in that year. Though that is higher, be aware, based on rate affordability, you still may not qualify for grants.

Table 18, page 86, shows "before and after" bills for customers at these rates. Compare this to The Water Model 3 Table 18, page 75.

### How to Implement the Water Model 4 Rates

To adopt these rates, follow the steps that start on page 17, except adopt the rates in the following table.

Table B: Rates From Water Model 4

Table B: System Development Fees; Minimum and Unit Charges; No Usage Allowance, Calculated by the Willard, MO, Water Rates Model 2024-4				
Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
All	In-City	\$14.18	0.000	\$4.41
All	Out-of-City	\$15.60	0.000	\$4.85

### Closing

**Like the recommended rates, these rates will cover all costs and arrive at the appropriate reserves in ten years.**

## Water Model 5 Discussion

Because Water Model 5 is the same as Water Model 3, except that the rate structure is different, only those things that are different in Water Model 5 are discussed here. Refer to the Water Model 3 Discussion section for all other issues.

### Minimum and Unit Charges

This model like Water Models 3 and 4 except it assumes out of City customers' rates would be "capped" like this; the minimum charge would be 41 percent higher than the in-City minimum, and the unit charge would be 37 percent higher than the in-City unit charge.

### Rate Affordability

The Affordability Index (AI) for these rates appears in Table 17, page 97. The Affordability Index is also shown graphically in Chart 4, page 101.

The AI for the Model 3 rates is projected to rise to 0.46 percent in 2025. The AI for the Water Model 5 rates would go up to 0.48 percent in that year. Though that is higher, be aware, based on rate affordability, you still may not qualify for grants.

Table 18, page 98, shows "before and after" bills for customers at these rates. Compare this to The Water Model 3 Table 18, page 75.

### How to Implement the Water Model 5 Rates

To adopt these rates, follow the steps that start on page 17, except adopt the rates in the following table.

Table C: Rates From Water Model 5

Table C: System Development Fees; Minimum and Unit Charges; No Usage Allowance, Calculated by the Willard, MO, Water Rates Model 2024-5				
Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
All	In-City	\$12.99	0.000	\$4.04
All	Out-of-City	\$18.32	0.000	\$5.53

### Closing

**Like the recommended rates, these rates will cover all costs and arrive at the appropriate reserves in ten years.**

## Water Model 6 Discussion

Because Water Model 6 is the same as Water Model 3, except that the rate structure is different, only those things that are different in Water Model 6 are discussed here. Refer to the Water Model 3 Discussion section for all other issues.

### Minimum and Unit Charges

This model like Water Models 3, 4 and 5 except it assumes out of City customers' rates would be the same as in-City rates.

### Rate Affordability

The Affordability Index (AI) for these rates appears in Table 17, page 109. The Affordability Index is also shown graphically in Chart 4, page 113.

The AI for the Model 3 rates is projected to rise to 0.46 percent in 2025. The AI for the Water Model 6 rates would go up to 0.54 percent in that year. Though that is higher, be aware, based on rate affordability, you still may not qualify for grants.

Table 18, page 110, shows "before and after" bills for customers at these rates. Compare this to The Water Model 3 Table 18, page 75.

### How to Implement the Water Model 6 Rates

To adopt these rates, follow the steps that start on page 17, except adopt the rates in the following table.

Table D: Rates From Water Model 6

Table D: System Development Fees; Minimum and Unit Charges; No Usage Allowance, Calculated by the Willard, MO, Water Rates Model 2024-6				
Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
All	In-City	\$14.66	0.000	\$4.56
All	Out-of-City	\$14.66	0.000	\$4.56

### Closing

**Like the recommended rates, these rates will cover all costs and arrive at the appropriate reserves in ten years.**

## Comparing the Bill Effects of the Sewer Rate Alternatives

This report covers two alternative sewer rate structures. The following table makes the same comparisons as the table on page 11, except it compares sewer bills.

Table 18C - Bill Comparisons Between the Sewer Rate Alternatives

Table 18C - Bill Comparisons Between the Sewer Rate Alternatives						
This table compares the annual cost of 5,000 gallons of sewer service per month under the rates in the two rate structures.						
Customer, Rate Class or Meter Size	# Customers	Sewer Model 3 Annual Cost	Annual Cost	Sewer Model 4		
				Dollar Difference Compared to Model 3	Percentage Difference Compared to Model 3	
In-City Residential	248	\$816.56	\$864.76	\$48.20	6%	
In-City Commercial	5	\$816.56	\$864.76	\$48.20	6%	
Rural Residential	121	\$1,224.84	\$1,126.37	-\$98.46	-8%	
Rural Commercial	1	\$1,224.84	\$1,126.37	-\$98.46	-8%	

Note 1: You may interpret this table like this. Under the Sewer Model 4 rates, an In-City residential customer’s annual bill would need to go up by \$48.20 so a Rural Residential customer’s bill could go down by \$98.46.

Note 2: These comparisons are only for 5,000 gallons of use per month. Because the alternative rate structures are quite different from each other, the bill changes for other volumes of use would be quite different. To make those comparisons, refer to Table 18 of each of the two models.

Now, to the details of the models.

## Sewer Model 3 Discussion

Most issues for sewer are the same as for water, so many of the issues are not discussed again here and duplicative tables have been left out. Things that are different are discussed.

### System Development Fees and Minimum Charges

Handle new connection fees and sewer system development fees as described in the Water Model section.

One difference that applies to sewer rates but not water rates is how to bill for residential customers. You currently bill residential customers each month based on winter averaged water use. In essence, for each residential customer you calculated their monthly average use for some selected months, you apply the unit charge rate to that, add the residential minimum charge and bill that customer that amount each month until you set new rates. That is a good practice and I recommend you continue it.

### Expected Operating Costs

Table 4, page 122, shows expected operating costs. The big difference between water and sewer operating costs is the cost of wastewater treatment done by the City of Springfield for Willard. City staff shared with me a letter from Springfield outlining treatment rate increases Springfield will be assessing to Willard. They will be expensive. Plus, Willard is sending more of its wastewater to Springfield for treatment than it did just a year or two ago. And as Willard grows, it will send even more wastewater to Springfield. As a result, the "Springfield Sewer Charges..." cost item in Table 4 is expected to more than double to \$1.1 million per year by the tenth year. By then, treatment by Springfield will amount to 42.5 percent of Willard's wastewater utility operating budget.

### Inflow and Infiltration (I&I)

Related to the cost of wastewater treatment is inflow and infiltration (I&I). It is prudent for wastewater systems to try to reduce I&I as much as is practical. It costs money to transport and treat I&I. that is especially the case for Willard, looking at a very high bill for treatment. To put numbers to this cost, in Table 9, page 130, bottom right corner of that table, I calculated the marginal cost of I&I at \$8.87 per 1,000 gallons. Then in the bottom right corner of Table 8, page 128, I calculated the total variable cost of I&I at \$198,001 per year. That is more than ten percent of your total operating cost.

I reviewed draft Ordinance Number 240529 for the City. This ordinance involves control and reduction of I&I. I believe such ordinances are standard procedure for most wastewater systems. It only makes sense to not treat water that should not be in the wastewater system in the first place. The ordinance was quite normal for this issue. I found it to be reasonable in every regard and I encourage the Board to adopt this ordinance.

## Capital Improvements and Borrowing From the Water Fund

Table 5, page 124 shows that you expect to take on nearly \$4.5 million in two large system improvements. Most of that will be paid for by grants and only a small part will be paid from reserves, but the immediate cash outlay is projected to be nearly \$1 million for those projects. Add another \$200,000 for other improvements paid for with cash and the total cash outlay will be \$1,164,872 for 2025. That will drop the sewer reserve to a negative \$780,000 by the end of that year. After that, reserves will begin to recover.

If expenses and their timing come in like this, you will need to borrow to cover the shortfall. Fortunately, the water reserve is projected to be strong during that time, so I have assumed sewer will borrow from water for a few years. But by 2031 the water loan should be paid back in full, and the sewer fund will quickly recover to reach its target reserve by the tenth year.

The critical message is this. The water fund will be strong for the next ten years. Both sets of rates will rise substantially, though sewer reserves will go negative during the middle years. The need for and the cost of improvements is so great that the sewer fund will need to borrow from the water fund. And in about the year 2028, there will only be about \$500,000 in total reserves between the two funds. Thus, you must adjust and raise water and sewer rates soon, continue to raise rates in the future and be careful about the cost and timing of improvements to avoid exhausting both funds.

Some ratepayers may think that all these rate increases are not needed or are too much. Without these increases, plus financial vigilance and careful timing of improvements, the utilities will financially fail. Increases are critical.

## Target Reserve Levels

According to your test year balance sheet, your total reserves were a bit higher than what I recommend. For sewer, I recommend the same percentages of reserves as described in the Water Model sections earlier, so the sewer rates I modeled will grow those reserves slightly over the long term. But reserves will fall and go negative for a few years before getting to the target level in the tenth year.

## Rate Affordability

In Table 17, page 134, the Affordability Index for the test year was 0.83 percent, a bit below the national average of 1.0 percent. Under the modeled rates for the fiscal year that will start in 2025, this customer's Affordability Index would go up to 0.98 percent. Table 18, page 135, shows "before and after" bills for customers using different volumes of sewer service.

## How to Implement the Sewer Model 3 Rates

These are the rates I recommend you adopt.

For sewer rate adjustments, follow the instructions for water rate adjustments that start on page 17, except adopt the rates shown in Table E that follows.

Table E: Rates From Sewer Model 3

Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
All	In-City	\$24.85	0.000	\$8.64
All	Out-of-City	\$37.27	0.000	\$12.96

## Closing

**The utility needs more revenue to cover all costs and arrive at appropriate reserves in ten years. Even with that, in a year or so it will run negative reserves and need to borrow for a few years to get through a high-cost, low-reserves period. But reserves will recover. The recommended rates will be fairly structured and build those reserves.**

## Sewer Model 4 Discussion

Because Sewer Model 4 is the same as Sewer Model 3, except that the rate structure is different, only those things that are different in Sewer Model 4 are discussed here. Refer to the Sewer Model 3 Discussion section for all other issues.

### Minimum and Unit Charges

This model is like Sewer Model 3 except it assumes out of City customers' rates would be "capped" like this; the minimum charge would be 22 percent higher than the in-City minimum, and the unit charge would be 35 percent higher than the in-City unit charge.

### Rate Affordability

The Affordability Index (AI) for these rates appears in Table 17, page 144. The Affordability Index is also shown graphically in Chart 4, page 148.

The AI for the Sewer Model 3 rates is projected to rise to 0.98 percent in 2025. The AI for the Sewer Model 4 rates would go up to 1.03 percent in that year. Though that is higher, be aware, based on rate affordability, you still may not qualify for grants.

Table 18, page 145, shows "before and after" bills for customers at these rates. Compare this to The Sewer Model 3 Table 18, page 135.

### How to Implement the Sewer Model 4 Rates

To adopt these rates, follow the steps that start on page 17, except adopt the rates in the following table.

Table F: Rates From Sewer Model 4

Table F: System Development Fees; Minimum and Unit Charges; No Usage Allowance, Calculated by the Willard, MO, Sewer Rates Model 2024-4				
Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
All	In-City	\$26.31	0.000	\$9.15
All	Out-of-City	\$32.10	0.000	\$12.35

### Closing

**Like the recommended rates, these rates will cover all costs and arrive at the appropriate reserves in ten years.**



## Conclusion

“Conclusion” is a misnomer here. This report provides information to help the City make decisions. Thus, it begins the process by which you will initially adjust rates and fees and take other actions. I will continue to help you as you do that, so always feel free to call me to discuss any concerns you have as the years pass. Having the Model available to track your progress and determine the effect of condition changes later, I should be able to test changes easily and advise you quickly.

As time passes you will need to adjust rates incrementally as modeled in this report and as described in more detail in my book. Eventually, you will start this cycle over.

As you take on the initial adjustments, keep the following in mind.

- Everyone impacted by the City’s water rates should at least be made aware of the results of this report.
- My default recommendation is to give any customer as much information as they want. If they want a copy of the full report, give them that.
- Give the media a copy of the full report so they can quote the report directly and accurately rather than be forced to “figure things out.” Much of this is very complex. Few people know how to, or have the time to, calculate utility rates. Make it easy for everyone to get the facts right.
- For most customers, what would happen to their bills is as much as they will care to know about this analysis. To satisfy those information needs, the City can publicize the current and modeled rates and/or the bill comparisons.
- A few customers will want to know more, especially high-volume customers. Give them the full report if that is what they want.
- A good way to accomplish these things is to post the report on the City’s Web site, Facebook page or other social media, so everyone can see for themselves what the report says. Publicize the posting widely and publicly. Information is a good thing. *Being seen* as trying hard to get information out to folks is also a good thing.

You have not engaged me to pay an in-person visit to the City’s Board, but you can and should. Whether done in person or virtually, I hope we can meet soon. At that meeting I will discuss my findings and recommendations, answer questions, and do my best to get you over the new rates finish line. I look forward to that.

## Appendix A: Rate Analysis Methodology and Related Issues

This appendix covers many issues related to rate analysis and rate setting generally, and specifically to how I do rate analysis. But first, I thank governing bodies for the valuable service they give to us.

### The Governing Body's Job is Broad and Critical

The report covered my findings. Based on those findings, I made rate and fee setting recommendations. I may have offered some options, too. However, and this is important, my job is only to advise. The governing body's job is to set rates, among many other things.

Utility management requires the governing body to consider rates-related issues:

- How would the recommended rate structure and overall level of the rates affect ratepayers and funding of system needs?
- How different is the recommended structure compared to the current rate structure, meaning, how much "rate shock" would the recommended rates create for some customers?
- How might the governing body prudently reduce system costs, delay capital improvements, obtain grant or other outside funding for improvements and do many other things to reduce the need for additional revenue?
- And even if rate increases are not a problem, how might the utility be managed differently to reduce costs and be more efficient?

Those are just a few issues related to rate setting the governing body must consider. The job of the governing body is a big one, covering much more than rate setting. The members of the governing body have intimate knowledge of "conditions on the ground," community needs and ratepayer feelings. I only got a glimpse of such things. As the governing body considers those, and many other things, it will decide how to set rates and fees. My analyses and recommendations should be helpful as they do that, but my charge is only to advise, not direct.

All ratepayers and utility customers should be thankful that people from the community stepped forward and joined the governing body to do that critical work. Without such civic-minded people making utility services function well, quite literally, community-based living would not be possible. It is common for some citizens these days to not believe officials and even work against "government" at all levels. That is unfortunate because local government officials make it possible for the rest of us to live and work where we do.

To the governing body members, I say a heartfelt, "thank you." I feel privileged to advise you and I trust you to seek the best overall outcome for your citizens and utility customers.

Now, on to issues that related more narrowly to rate analysis and rate setting.

## Rate Setting Resources Beyond This Report

Over the years, I have found that several topics are common to many utilities. Others can be important to a utility at certain times in their development. Rather than cover such issues here, I cover them in separate guides and a rate setting book, all available for FREE download at <https://gettinggreatrates.com/Freebies>. Following is a listing and descriptions of a few those guides and resources:

1. How to Get Great Rates© (e-book) – The book focuses on basic rate setting issues. It is most applicable to smaller, simpler systems.
2. Rate Setting Best Practices Guide© – This guide expands upon the book to cover affordability, sustainability, bill assistance programs, meter size-based system development fees and minimum charges, how to acquire rate analysis services, and more.
3. Rate Setting Issues Guide© is just that.
4. Replacement Scheduler© is a spreadsheet application that enables users to build their own equipment repair and replacement schedule, which calculates the annuity (savings amount) needed to fund all items in the schedule.
5. CIP Planner© is a similar spreadsheet application for capital improvements planning.

The two spreadsheets were extracted from my rate analysis model template and made a bit more user-friendly for do-it-yourselfers. I encourage my rate analysis clients to use these two sheets so they can make repair and replacement and capital improvement plans more formal, more forward looking and less reactive. Plus, the sheets make data gathering easy for clients and me.

There are other guides and resources on this site. All are FREE, so check them out.

## Recommendations for Policy and General Issues

Many of the following things you probably are already aware of or are already doing, but they are worth repeating. A comprehensive list of rate setting best practices is presented in the “Rate Setting Best Practices Guide,” cited above.

Whether your entity is a city, town, district, or utility authority, you can use the following as a checklist of “to-do” tasks for rate setting and rate analysis. If a reference you see in the following does not quite fit your situation, consider how you can apply the information to your special situation:

1. It is easy to export data from a robust, user-friendly billing program. Your staff gathered volume usage data from that program for my analysis work. For you to examine payment history and problems, usage trends, new connection trends, the effects of usage allowances and other rate structures on revenue generation, and many other issues, you must have a billing program that is user-friendly and robust. If your current billing

program is not as usable as you would like, I recommend you acquire a program that is. A good first contact to research billing programs is your state rural water association.

2. You should charge for the various services staff perform for customers and others. These include various services you provide in the field, such as after-hours service, meter disconnects and reconnects, special meter readings, etc. Just driving to a customer's site takes a minimum amount of time. That is time the staff person cannot perform other duties. To assess appropriate fees:
  - a. You should periodically determine how long it takes to drive to and back from the average site and to perform each service.
  - b. Determine how much it costs the utility per hour, on average, to have staff perform these services. Include staff wages, benefits, taxes, use of utility vehicles, tools, and minor equipment, etc.
  - c. Include a fair amount to cover the time that office staff devotes to working on these services to track them, bill for them, etc.

In almost all cases, these estimated costs should be recovered with fees for the various services. In addition, set a minimum that you will charge for showing up. In that minimum fee, grant a certain amount of time spent on-site, such as 10 minutes for a special meter reading or 30 minutes for a meter change-out.

In essence, set your fees in the same way plumbers and similar technicians do – a set fee for showing up, which buys the customer a set amount of time, and an hourly rate if the job takes longer than the show up charge will cover.

While accounting for time and other investments in the various services staff perform is important, do not make the costing tracking process burdensome. For many services you likely can just estimate staff time occasionally and charge fees based upon those estimates.

3. Retain required funds in interest bearing debt service and debt reserve accounts when required by your lender(s).
4. Have me or another rate analyst of your choosing conduct a full rate analysis again when the *actual* financial performance and my *projection of future* performance diverge enough to make a new analysis worthwhile. Conditions should dictate rate analysis timing. Most utilities benefit from rate analysis on about a five-year cycle or when total costs have risen by 20 percent. But if you are planning to do significant capital improvements that were not previously included in the rate modeling, or when actual improvement costs or funding plans have changed significantly compared to those that were modeled, those factors call for a new rate analysis as soon as you can get it done.

5. Fully adopt management strategies that are included in what is commonly called, “advanced asset management.” These strategies can yield better service and reduced costs for a utility, especially those looking to build new facilities or replace existing facilities soon. At a basic level, you can use my free spreadsheet tools called, “CIP Planner©” and “ReplacementScheduler©” to do capital improvement and equipment repair and replacement scheduling, costing, and annuity calculations. These functions are at the core of asset management and may be all, or nearly all the “asset management” a small, simple system needs to do. Download these tools and others from <https://gettinggreatrates.com/Freebies>.
6. As a reminder, check with your attorney for language and legality of all issues discussed in this report.

## Cost-based Rate Calculations

To give you a synopsis of rate analysis, as I do it, and to make it easier for you to read and understand my findings and recommendations, a tutorial on my methodology is in order. Most situations are simple enough that I do not need to use all these methods, but it will serve you well to know the breadth of the methodology.

When I analyze rates for a government-owned water-based utilities, and other utilities that are empowered to assess cost-of-service rates, I use the cost-needs approach. The approach is exhaustively described in the American Water Works City’s “M1 Manual, Principles of Water Rates, Fees and Charges,” Seventh Edition. This manual, in use since the 1960s and periodically updated, is considered by many to be the “Bible” of water rate setting best practices.

While the manual focuses on water rate setting and uses terms, units of measure and other things specific to water, the principles and approaches work just as well for electric, sewer, stormwater, trash collection and other utilities and services that are paid for with rates and fees. One just needs to use the appropriate units of measure and a few conventions common to the other types of utilities and services when applying these principles to them.

The cost-needs approach is a static (one year) rate calculation. One could do a new rate study every year to arrive at the rates to assess each year, spread over many years. But that is a lot of work or expense with very little practical benefit to be gained. It also can lead to rates that would rise drastically one year just to fall the next year. It is much more palatable to ratepayers if you keep their rates more stable. That requires calculating rates, revenues, costs, and many other things over a long period of time, say five to ten years and setting rates to bridge the cost highs and lows with prudent reserves.

### Important Terms

The cost-needs approach results in rates that are called, “cost-to-serve” or “cost-of-service” rates. Simply stated, the costs for a targeted budgeting period, usually a year during the next five years, are classified as “fixed,” “variable,” “capacity-to-serve,” or some combination of the three.

- Fixed costs are converted to a base minimum charge.
- Variable costs are converted to a unit charge.
- Capacity costs are converted to some combination of system development fees and surcharges to the base minimum charge.

*A typical rate study considers the rates needed to fund one year, usually the coming fiscal year. Utilities need to plan farther into the future than that, hence, the more accurate term of rate "analysis" rather than a rate "study."*

Most utilities are better served by getting a rate analysis when rate restructuring may be in order or when rates will need to go up markedly. During the years in between rate analyses, it is simple and convenient to just raise all significant rates and fees by an across-the-board percentage, which should have been specified by the analyst. Such increases may be aimed at keeping up with inflation. Or they may be designed to achieve other goals. In whatever way these increases are to be done, they were planned for in the analysis and described in the foregoing report.

To guide utilities to do future increases well, I expand the cost-needs approach by projecting costs, revenues, rates, and other criteria ten years into the future. That gives each utility a "road map" of what they can expect in the future, so they can reset rates appropriately.

Because I intend for utilities to reset rates on their own for some years into the future (I describe to them how to do that), and I want those rates to be “fair enough” to serve them well, I calculate the initially restructured rates so that they take future across-the-board increases into account. This is how it works.

Based on my calculations, the initially adjusted rates will be closer to a “cost-to-serve” structure than the current rates. And as across-the-board increases are applied, rates will move even closer to a cost-to-serve structure until the year used for cost classification has arrived, which normally is four to five years in the future. After that, additional across-the-board increases will move the rate structure further away from cost-to-serve. Eventually, a new rate analysis should be done to make the structure fair again. For most moderate sized utilities, that is about five years into the future. For most smaller utilities, that may be eight or more years away.

To arrive at cost-to-serve rates in a future year, I must choose an appropriate year for cost classification.

- The best year may be the first year after a big capital improvement is planned to be finished because the debt service for that improvement probably will have already started.
- Or, if costs are expected to inflate uniformly, the best year may simply be five years in the future, the year in which most utilities should consider having a new rate analysis done anyway.

There are some basic steps to arrive at cost-to-serve rates. Calling these “steps” implies that I do one and then move on to the next. In practice, most steps are affected by, and affect, what happens in other steps. Therefore, they are all done in concert with the others.

That said, here are the basic steps:

1. Cost Classification: Operating costs are placed into different categories – fixed, variable, peak flow capacity, and sometimes others. I classify costs projected for a year in the future, usually within five years of the present. And I use a year that appears to be typical of what the utility can expect in the future.

#### Rate Analysis, in a Nutshell

At its simplest, rate analysis helps a utility arrive at rates and fees that are adequate – they will pay all the utility’s costs. The next level of complexity is to arrive at rates that, on an average cost basis, will enable the utility to recover fixed and variable costs “fairly.” Most small water and sewer utilities need analysis only to this level of complexity – doing more than that results in rates that are impractical for small systems.

Another level of complexity includes calculation of meter size-based minimum surcharges and system development (connection) fees. Another includes calculation of rates on a “marginal” cost basis, for special groups of customers. Yet another level is marginal cost basis calculation of rates for individual customers, such as a wholesale customer. These facets of analysis result in accurate but complex rate structures; appropriate for the larger utility with diverse customers.

Analysis can and should provide a sound basis for advising the utility to “go or don’t go” concerning various actions it might take. Some of these actions are purely financial. Some, like the decision to enter into, or not enter into, a wholesale supply agreement, for example, include “hassle factor” and other non-financial issues. And because such agreements are made for nearly forever, a mistake made in the beginning can hamstring a utility for years or decades to come. Regardless of system size, thorough analysis should always be done before entering into such agreements.

For all utility types, operating cost classification is done in Table 8 of the model(s) that will follow in this report. The core notion of cost-to-serve rates is this: The basic minimum charge assessed to all customers should recover the sum of all fixed costs; and the average unit charge should recover the sum of all variable costs.

System capacity costs can, and usually should be recovered on a cost basis, too. That is a bit complicated and will be covered shortly.

Back to recovery of operating costs, near the bottom of Table 8 in the foregoing report, you will see the “Average Fixed Cost/User/Month” and the “Average Variable Cost to Produce/1,000 gallons (or other units).” These are the basic minimum charge and the average unit charge based on the costs expected in that future year. The same model template is used for calculating rates for the various utility types. The main difference for those analyses is the measurement method for unit charges.

*An aside, but an important one in my mind, is this. The M1 Manual describes how to calculate cost-to-serve rates down to the customer class level. If a rate analyst classifies costs to that level and the utility sets rates that achieve that result, it can correctly be said that the utility has cost-to-serve rates. Those rates will be fairly structured, but only at the customer class level.*

*I classify costs to the customer level. Thus, rates that I calculate are cost-to-serve to the customer level. My reasoning for doing this is, rate structure fairness if felt at the customer level, not at the customer class level. Customers pay utility bills. Classes do not.*

2. Capacity costs: In the ideal, capacity costs should be assessed on a cost-to-be-able-to-serve basis, but these costs are a long-term proposition. No one knows at present what the cost of capacity is because those costs unfold over decades. Thus, the dollar cost of capacity can only be estimated, but that is not a problem. The key is, whatever one estimates capacity will cost, or whatever portion of capacity a utility desires to recover with capacity charges, that cost should be divvied out to new connections and current customers on a fair basis. The following goes to that goal.
  - The American Water Works City has done excellent research on the sustainable peak flow capacity of different water meter sizes and types, so I generally use the flow capacity of each meter size and type as the basis for divvying water and sewer peak flow capacity costs. That math is lengthy, so it is spread out over Tables 11 through 16 of the model(s) in the report. The notion of capacity applies to all utility services, so:
  - When I calculate water and sewer rates where meters are used, I use meter flow capacity as the capacity share criterion.
  - When I calculate electric rates, I use what is commonly called the “demand” exerted on the wholesale power supplier. If the client produces its own power, I use the demand measured by the client’s metering system.



- When I calculate sanitation (trash collection) rates, I use the cubic foot capacity of the various bin and dumpster sizes times the number of pickups per month of each as the capacity criterion. Thus, for trash collection services except for the rare ones that actually weigh trash as it is collected, the capacity of bins times the pickup frequency becomes a component of the “unit” charge for each customer.
  - Stormwater capacity is like trash collection in that impervious surface area is the usual capacity, and “unit” charge criterion. Square footage or the equivalent of impervious surface area appears in the rates as the unit charge analogue.
3. Future cost projections: I project costs ten years into the future. Generally, this is done by applying an expected inflationary factor to each cost. But it is also common that some costs, like the cost of debt service needed to build a new treatment plant in two years, will change future costs markedly. Such cost changes are estimated, then entered into the model in the year in which they are expected to occur. Some expenses, like postage, treatment chemicals and electricity for production, treatment, and distribution, rise with inflation plus growth in the customer base and use. Those are increased in future years by inflation and growth.
4. Reserves: Reserve goals are set through the tenth year. Those goals will only be met if (primarily) rates are set high enough and/or (secondarily) grants and subsidized loans are large enough to enable the utility to generate net revenues over the modeling period. The amount or percentages and types of reserves are dependent upon each utility’s needs, so that is discussed in the foregoing report.
5. Calculate rates: The full suite of rates needed to fully fund the utility and do it fairly is a dynamic set of calculations, too complex to completely explain here. And each situation requires variations on this theme. I will leave out some details, so this is the “Cliff’s Notes” version of rate calculation:
- Capacity cost recovery is calculated first. Likewise, penalties collected, and other non-user charge fee incomes are calculated. These revenues are

For the techie reader, the analysis model we use – a Microsoft Excel spreadsheet application we call, “CBGreatRates” – is usually 3.8 mega-bites in size. Each rate analysis includes one of these sheets.

For a 1,000-connection utility, for example, we use another spreadsheet, 12.1 mega-bites in size, to sort and calculate customer volume use. We use one of these sheets for each rate class. There are usually five or so for the simplest rates. Each of these sheets is linked to the client’s usage data file, usually a few mega-bites in size, for importing usage data. Thus, an analysis for a 1,000 connection utility totals 65 or so mega-bites in size.

For some of our larger client utilities with more rate classes and more customers, total size of all the linked spreadsheets runs over 250 mega-bites. We run computers with lots of RAM and memory but some of the calculations for a larger utility can take around 60 minutes to run. When usage data sheet runtimes get long, we usually switch to a database format application to speed up the heavy number crunching.

deducted from the total revenue needed to arrive at the revenues needed from user charge fees.

- Next, the across-the-board future rate increase rate (a percentage) is set. In the future, starting about one year after the initial rate adjustments have been done, rates will increase annually by this percentage. The revenue needed from the initial rate adjustments, here called the “net revenue need,” will come from the revenues generated by the initial rate adjustments. (In truth, future inflationary revenue increases, plus interest earnings on balances accrued are dependent upon the rates that are initially set, so most “pre-calculated” revenue streams are adjusted dynamically as initial rate revenues rise or fall.)
- The calculated bases for fixed costs and variable costs (Table 8) establish a ratio of the revenues that each rate component would generate in a cost-to-serve structure.
- To increase (or very rarely decrease) overall revenues to satisfy the net revenue need, each revenue stream is increased or decreased by the same percentage. Thus, the revenue streams remain in the same ratio to each other. That means they retain their cost-to-serve proportions.
- Once the overall revenue increase (or decrease) is established:
  - The base minimum charge is “back calculated” from the adjusted minimum charge revenue amount. (Every customer, regardless of their meter size, pays the base minimum charge.) The meter size-based surcharge, for water and sewer systems, is added to the base minimum charge to arrive at the full minimum charge for each meter size. (Similar math is done for other utility types.)
  - The average unit charge is calculated from the unit charge revenue amount. If inclining or declining rates are to be assessed, or if there is to be a usage allowance, unit charge revenues are calculated dynamically based on those variations.

- The resulting rates are the starting user charge rates – the initial adjusted rates – what you will (hopefully) adopt initially. In later years, you will increase these starter rates and fees across-the-board by the inflationary factor, generally to keep them tracking with rising costs.
  - After examining balances projected for future years, the future inflationary increase rate may be raised or lowered to enable the utility to accrue appropriate balances either sooner or later. That, of course, will result in initial rate adjustments that would need to be either lower or higher, respectively, to offset the change to the future adjustments rate.
  - Finally, it is common for managers and decision-makers of utilities to want to “tweak” rates into a different structure, timing of adjustment or in other ways. Having built the model to handle “on-the-fly” adjustments, I model their preferences to arrive at the rates needed to fund the utility as they desire.
6. Reporting out: The culmination of all this data gathering, calculations and more ends up in a rate analysis report like the report this appendix is attached to. The report covers everything that seems to be important and gives the client my recommendations and guidance on how to adjust rates now, and in the future.

If desired by the client, I present the report, my findings and recommendations, and answer questions, usually at a Board or Board meeting. Before COVID-19 that was always done in person or rarely by phone call into their Board or Board meeting. During COVID-19, that was almost always done by remote video. After COVID-19, these meetings are being done either way, as the client desires. Many of my client systems are small and their management had not yet adopted on-line meetings. COVID has changed that. Many of my “meetings” now are done on-line, even with very small utilities. Cutting out my travel saves them a lot.

## System Development (Capacity) Fees and Surcharges

System development (capacity) fees (SDFs), and (minimum charge) surcharges (later often called, “SDFs” collectively to be brief), are common and useful rate structuring tools. They also require quite involved calculations to arrive at these fees and surcharges in a cost-based structure. I touched on the topic in the body of the report and I cover these fees and surcharges in more detail here.

There are two main things one must do to determine, mathematically, how to set SDFs:

1. Determine how much of the system’s capacity development costs to recover.
2. Determine when, and how much of those costs to recover from each customer. Determining “who pays how much and when,” is easier when the utility sells the commodity based on metering of some sort.

Calculating proportionality and level of fees is a process. This process is not a single pass through a list of calculations. I go through the calculations and then consider if the resulting fees are “doable.” If they come out too high, or if some fees come out markedly higher or lower than the “competition’s” fees, or they are markedly different than the utility’s current fees, and if any of these could be a problem, one should consider how the calculations may be tailored to arrive at more “doable” fees.

To keep it simple, let’s go through the steps and calculations one time and then circle back to making the fees doable.

### Step 1: Meter Equivalent Ratio (Capacity Share)

Meter flow capacities have been determined by the American Water Works Association (AWWA). Based on AWWA meter peak flow capacity research, the flow capacity of a five-eighths inch meter (the smallest practical size and commonly used for residential connections) is assigned a flow capacity of 1.0. Larger meters can pass more peak flow, so each size and type is assigned a proportionately higher peak flow capacity factor or “share.” These results are shown in Table 11, page 31, in the “Meter Equivalent Ratio (Capacity Shares)” column. In simple terms, a five-eighths inch meter would be charged one share of peak flow capacity cost. A two-inch meter would be charged eight shares of peak flow capacity cost because it has eight times more peak flow capacity than a five-eighths inch meter.

Capacity “shares” are the basis for the proportionality of capacity fees calculated later.

### Step 2: SDF Cost Basis

No one can know how much it will cost to build capacity-to-serve in the future, how many customers will be available to pay those costs in the future, or how long built capacity will be serviceable before it must be rebuilt or improved. But that is not an insurmountable problem because few utilities will recover all system development costs with SDFs and surcharges anyway. Thus, the cost of system development is mainly the starting place for calculating proportionality of the resulting SDFs and surcharges.

To set SDFs, one should start with calculation of the amount of cost to recover through SDFs. Oftentimes, SDFs only cover peak flow costs. The flatter the distribution of meter sizes is, the more reasonable that approach is. (If all customers are served by one meter size, there is no immediate need for varying SDFs, or surcharges based on meter size.) As larger meters come into play, varying fees and surcharges begin to make structure fairness and practical sense.

Costs to be recovered may be forward looking – future capital improvement needs, debt service and such (Table 5 in the modeling). Much of that will come from a capital improvements plan and debt repayment schedules for existing debt, or calculated payments for yet-to-be-incurred debt. At best, most of these are estimates.

Alternatively, the cost basis may be backwards looking – dollars invested in “plant” or “hard assets” in the past. Those values are typically tracked in the balance sheet as original plant investments. For most utilities, these values are known and tracked. That is the cost basis I

normally use for a few reasons. Quite important is, that basis is not subject to the debate of, "Do we really need that capital improvement, or need it now, and what should it cost?" Investments that appear on the balance sheet have already been made and in the future, at least that dollar amount will probably need to be made again. Future capacity costs can easily be argued about. Balance sheet plant investments cannot.

Part of the cost basis should be recovered "up front" with SDFs. But there is also the surcharge to the basic minimum charge to consider. Some system development costs should be recovered with surcharges because system capacity development is an on-going process. Capacity must be rebuilt for existing customers.

This brings up an important fact to stress. That is, capacity costs are not incurred just once, and then they are paid for with fees paid by new connections (customers) just once. They occur over time. They are paid for by different new connections (customers) over a long span of time. Likewise, some capacity costs will be paid for by existing customers by way of user charge rates over a long span of time. The time factor is a part of SDF calculations and surcharge calculations.

Said another way, a new connection (customer) makes a one-time payment toward system development costs and then they are done. But other new connections are made over time, with each one making their one-time payment. But one-time payments occur over time. Alternatively, surcharges are a long series of payments made periodically by existing customers, essentially the same customers.

This discussion has gone esoteric, so let's move on.

In Table 12, I classified costs as peak flow-related with the balance, if any, being base flow-related. Only the peak flow-related costs will be used further down the table for calculating SDFs (the middle section of the table). Surcharges, if any, appear in the last section of the table. Frequently, I only calculate the peak Flow-related cost "share." But sometimes, if my client contact tells me the "powers that be or the developers" will not accept a marked change in SDFs, I also use the base flow calculation subsection to calculate a base flow component to the SDF. By varying the peak flow, base flow, and surcharge "shares" I can tailor the resulting fees and surcharges to better fill the needs of each utility. I can make these fees and surcharges "doable."

### Step 3: Capacity Share Dollar Value

The dollar value of one Capacity Share is calculated in Table 12, page 32. In this case, capacity comes in three flavors, peak and base SDFs, and a surcharge to the basic minimum charge.

Subsection 2 of that table calculates the dollar value of peak and base capacity costs per Capacity Share. To do that, one must determine what part of that annual cost to recover each year. You can target recovering little of it, all of it or even more than all of it. I usually can only recover a small percentage of the annual cost basis and keep the resulting SDFs competitive with neighboring systems. (Nearly every system in the U.S. is recovering too little of its system

capacity costs. To a degree that is reasonable, because a high percentage of system capacity costs are initially paid for with loans, and loan payments get added to user charge fees, so some capacity costs are being passed on to customers. But many systems simply have rates and fees that are too low to fully pay their system capacity costs.) In competing for development, which is a reasonable goal, systems often must keep their system capacity fees lower than full cost. When that happens, some costs are shifted to the user charge rates of existing customers, or to future customers.

Surcharges to the minimum charge, the last subsection of Table 12, are also based on meter size, and are calculated in nearly the same way except that recovery is paid periodically (usually monthly).

#### Step 4: SDF for Each Meter Size

Once the per share cost has been established, the SDF for each meter size and type can be calculated. For SDFs, that step is done in Table 13, page 33. It is quite easy: multiply the “Peak Capacity Cost per Capacity Share” by the number of shares for each meter size being connected, then add the “Base Capacity Cost per New Connection...” amount to those values.

For surcharges to the minimum charge, that step is done in Table 15, page with similar calculations.

#### Step 5: SDF and Surcharge Total Expected Revenues

Finally, using all prior data and calculations, and the assumed number of connections of each meter size and type, the revenues those SDFs will generate can be calculated. Those results show in Table 14, page 34 for SDFs and Table 16, page for surcharges.

To summarize data and calculation flows through the tables:

- Table 5, page 29, can serve as the basis for peak and base system development costs to recover. Otherwise, the original plant value from the utility’s balance sheet, undepreciated, is a good basis for calculating these fees.
- Table 11, page 31, develops the share of costs that each meter size is responsible for,
- Table 12, page 32, calculates the dollar values of a peak capacity share, a base capacity share, and a surchargeable share,
- Table 13, page 33, calculates the SDF for each meter size and type, and
- Table 14, page 34, calculates the SDF revenue to be generated in a full year by connecting an assumed number of new meters of assumed sizes.
- Table 15, page 33, calculates the minimum charge, including surcharges for each meter size and type, and
- Table 16, page , shows the surcharge revenues to be generated in a full year, listed by meter size.

Finally, it is often prudent to compare the calculated SDFs and surcharged minimum charges with the “competition.” It can be useful to compare the calculated fees and rates to the current fees and rates, too. After all, the new fees and surcharges must be doable. If the calculated fees and rates are markedly higher, it may be useful to circle back to the capacity cost to be recovered or the split between peak capacity and base capacity. To make the new fees and surcharges palatable, these may need to be adjusted and the fees and surcharge calculations run again.

There is much more to calculating these fees and surcharges, but you have probably learned more than you cared or needed to learn, so we move on.

### Regional Cities’ and Districts’ Fees – the “Competition”

I do not recommend comparing user charge rates in your city, town, or district to others. Your cost structure, indeed, the whole system, is unique.

However, you may want your SDFs to be competitive with neighboring cities and districts, so you can get your fair “share” of new development. In most utilities, SDF revenue is minimal. User charge rates are where they make the real money to pay the bills. Once you connect a new customer, their property will be a user charge paying customer forever, for all practical purposes. Set SDFs too high and they will not come. You will lose the chance to get that “forever” user charge paying customer. Yes, things change over the forever time span, but you will have them for a very long time.

Therefore, be at least somewhat competitive with neighboring communities’ SDFs. But if your city, district or area has other great reasons for a person or business to “move to town,” you can charge more in SDFs and surcharges.

I love calculating SDFs and surcharges. You are probably worn out with this discussion, so I will move on.

### The Nature of Rate Structure Parts and Types

**Cost-to-serve rates are considered by many, including me, to be the most mathematically fair and defensible rate structure.** While I previously described how I do such calculations, I will now tell you what I consider to be “fixed” costs, “variable” costs and “capacity-to-serve” costs:

- ***Fixed operating costs are those that are related to the fact that you have customers.***  
For every customer, the utility incurs one increment of this type of cost. Billing is the simplest, purest example of a fixed cost. Whether a customer uses a lot of the commodity or none, it (almost always) takes the same work, equipment, software and more to calculate their bill, “send it out” and collect the money.
  - Another part of the minimum charge will likely be a surcharge intended to recover all or part of peak flow or unusual capacity costs. These are almost always based upon water meter size because the larger a meter is, the greater is its capacity to sustainably pass peak flows. This peak flow capacity relates

well to the cost of building infrastructure “big enough” to handle peak flows. Thus, *capacity costs are related to the fact that a particular customer has a certain capacity to demand flow or service, regardless of how much flow or service they actually use.* These surcharges are added to the base minimum charge to arrive at the full minimum charge for each meter size.

- Larger systems invariably have more large meter customers and that makes surcharging the larger meters worthwhile and fair.
- However, small systems with few “unusual” customers and few meters larger than one inch often find it expedient to consider even peak flow capacity cost to be a fixed cost, equally sharable by all customers. At some point, there is more to be gained from administration simplicity than exact rate structure fairness.
- *Unit charges are related to the volume of service received.* While unit charges can be structured in various ways, the revenues they generate should be adequate to pay those costs that are related to the flow that customers use.

There are three unit charge structures that I commonly recommend, depending on the situation:

- Some systems need “conservation rates,” or, their administrations simply like the notion of encouraging customers to use less of the utility’s services. In this rate structure, the unit charge goes up as volume used goes up. Most of us respond to, or at least we think twice about it, when we are assessed a higher price to buy more of something. Conservation rates are most appropriate in areas with limited water supplies or in a utility that is bumping up against its capacity to produce water.
- Most systems use, and should use, level unit charges – a unit charge that is the same regardless of how much volume a customer uses. With level unit charges, customers are assessed unit charges on an average unit cost basis. Such rates are the easiest to calculate, they are the easiest for a clerk to explain to a complaining customer on the phone and the revenues such rates will produce next year are the easiest to accurately predict. Most water utilities, and almost all sewer utilities assess level unit charges.

If you are going to err either on the side of complex rates that precisely assess costs to each customer or simpler rates that round off some of the accuracy corners but are easier to administer, choose simple rates.



- The last major unit charge structure is called, “declining” rates. These are the reverse of conservation rates. I often call them, “use encouragement” rates. It is popular these days for many to belittle those who do not conserve resources at every opportunity. Declining rates are often scorned for that reason. However, if a system has an ample water supply and ample infrastructure to produce and distribute it, doing so will not cause unintended bad (mostly environmental) consequences; and if the governing body wants to encourage high use (which often entails such users hiring more or better paid workers), declining rates can make good sense. Declining rates are most appropriate in areas that have many high-volume industrial users or folks in that area want to attract such users. Declining rates seem to be most common in the industrial east, but they seem to be less popular everywhere these days. However, keep this in mind. One can accurately calculate the average unit charge and “prove up” that rate case. One cannot do the same with inclining or declining rates.
- Another unit charge structure is the “usage allowance.” For example, a usage allowance of 3,000 gallons per month means you get the first 3,000 gallons at no additional cost beyond the minimum charge. Thus, the unit charge between zero and 3,000 gallons is zero dollars per 1,000 gallons. At 3,001 gallons, you start to add unit charges to your monthly bill.

As described earlier, the minimum charge should cover fixed costs, not variable costs. The costs to source, pump, treat, store and distribute water are not all fixed costs, so not all of those costs belong in a minimum charge. And the first gallons of water are the most expensive to produce. In a cost-to-serve rate structure, those gallons should get paid for by the customers that use them.

## Rate Modeling and Rate Setting Advice

Rate setting is first about recovering costs. Job one of utility rates is to pay the utility’s bills. But usually, proper rate setting is also about building adequate reserves; funding a capital improvements program (CIP); catching up on needed equipment repair and replacement (R&R); and covering similar needs. Thus, these soon-to-be-experienced costs or likely-to-be-experienced costs need to be factored into rates and fees, as well. Because time marches on and costs usually inflate over time, rate setting should account for the need for future incremental increases to cover inflation. And you cannot just assume that because the utility needs more revenue that your ratepayers will be glad to pay higher rates. Rate affordability, and the public’s perception of affordability, must be addressed, too.

Even the simplest rates situation requires some complex and integrated calculations to account for these factors. For that reason, I build a spreadsheet for each analysis that depicts, in virtual reality, the utility’s real-life financial and rates situation.

These models are dynamic. When the initial rate increase is set higher, future inflationary increases can be lower. When minimum charges are set lower, unit or other charges need to be set higher to make up the shortfall. When future expenses need to be higher, or lower, or of a

different nature, the Model adjusts rates and fees accordingly. Such modeling enables me to do dynamic “what-if” scenario calculations. That enables me to arrive quickly at the “best fit” rates for each utility. Usually, the client goes with what I recommended. Sometimes they don’t, although once I show them the results of doing what they think would be better, they often circle back to my original recommendations. That’s OK. I have learned a lot while taking these detours.

My model is dynamic. It is easy to calculate the effects of changes to rates and other things over the years. If a change does not affect the cost structure drastically, I can do the same for almost any cost or rate change. If one, two or three years from now, you discover your costs or incomes will be different from what you and I had assumed, you can call me up, tell me what is different, I will enter the changes into the model(s) and re-run the rates. If the change is small and quick to model, I do that for no charge. If it is more complex and will take some time and usually a written report, I do those projects on an hourly basis. Fees for those usually come in under \$1,000. Some clients find that to be a very accurate and cost-effective way to maintain good rates, even when conditions change dramatically.

I have been building my template model since 2005. It is the starting place for all my analyses. The template is so robust that I can set a few “switches” here and there, build in a few things that are unique to a new client’s situation and soon, I am modeling rates tailored to their needs.

Two final thoughts on the rate modeling and adjustment topic:

- Almost always, rate adjustments include bill increases. Thus, time is money, often big money, to the utility. A rate increase delayed is a rate increase that must be even higher to reach the same reserve target in the same amount of time. Get to know this report well but do not spend months mulling it over. Time will not make your rate setting task easier. Proceed deliberately but quickly and make the needed changes. If you cannot make all the needed changes at the same time, make those that you can as soon as you can. Then, circle back to the rest as soon as you can.
- You will get complaints about customers’ bills going up. I do not want to be dismissive, but in my experience, most of the time, when the math is laid out for all to see, most people are understanding. Cost-to-serve rate analysis does not arrive at unfair rates. It arrives at fair rates. Who doesn’t want fair rates? Well, those who are

#### **Temptation Happens**

I could build a static model that arrived at what I thought was the best rates outcome for a client. If the client asked for something different, I would be tempted to tell the client that, “In my experience, blah blah, blah, that would not be a good thing to do.” Based on my experience, I probably would be right, but that tack would be self-serving – it would save me work.

- Half the reason I build dynamic models is to be able to show the client the outcome of what they asked for and that usually proves up the case for what I originally recommended.
- The other half reason is, when I model what the client asked for, I sometimes find that indeed, it is doable and may even be superior to the solution I assumed was best.

Assumptions based upon deep experience are useful. But facts and good math are a great training experience for a rate analyst.

paying cheaper than fair rates. If they can convince those who are subsidizing them to keep subsidizing them, even though the analysis shows that is not fair, more power to them. But generally, cost-to-serve rates win the day.

- These statements do not mean “do-it-yourself” rate adjustments are always unfair or insufficient, or that rate adjustments calculated by a “rate analyst” are always fair and sufficient. I always try to calculate and advocate for rates that are fairly structured. But over time, costs and other conditions change, so even cost-to-serve rates I have calculated will become unfair after some years.
  - A good blend of fair rates and a low cost to achieve them is this. You get a rate analysis done occasionally and adjust accordingly. For a few years after that, do-it-yourself across-the-board increases will keep revenues tracking with inflation. Eventually, you analyze again.

Please keep the above summary of cost-based rate calculations in mind as I close with some principles.

## Principles

I use several guiding principles when I help systems set their utility rates, fees, and policies. I considered these principles as I prepared the foregoing rate analysis report and the model(s) that follow:

1. Water, sewer, and all other utilities are businesses, regardless of who owns them. The first order of business is, stay in business. Your customers want you to do that. They do not want their investments in homes and businesses to be left high and dry without utility services to support them.
2. The second order of business is, perform in a business-like manner. First, be effective. If you do nothing else, be effective. Next, be as efficient as is reasonably possible. Efficiency tends to foster lower rates, which ratepayers like. Effectiveness and efficiency fight against each other. In most utility services and situations, effectiveness trumps efficiency. It does not benefit water customers if you pump lots of water cheaply if that water will make them sick, or if too much of it leaks out of holes in the pipe. Customers also gain more benefit from water rates that are a bit higher than they would like, but those extra funds are used to keep the utility sustainable.
3. If a service costs the utility money, the utility should recover that cost from the most logical “person” if that makes good business and community administration sense. For example, generally “growth should pay for growth.” Developers should fairly pay for their consumption of utility capacity obligated to what they build by paying commensurate system development fees. Likewise, service users should pay for what they use. Each class of users should pay their fair share of service costs. Ideally, each individual user should do that, too.

4. It sometimes contradicts point number 3 above, but if adjusting a rate, fee or policy will turn currently "good" customers into "bad" customers, or discourage development that the community desires, you should consider the necessity of making the change carefully before doing it. For example, while it may be

As you consider rate adjustments, always keep this customer in mind:

The "little old lady, widowed, retired, living alone on Social Security." Treat her badly, or just be seen as treating her badly, and you lose the goodwill contest. Lose goodwill and you may never get it back.

warranted, raising the minimum charge markedly to your residential customers may make it very difficult for fixed, low-income customers to pay their utility bill. That may cause more of them to pay late or not pay at all. That may trigger the utility's attorney to write collection letters to those customers and eventually require shutoff of service. Thus, in the attempt to generate more net revenue by raising rates, net revenues may go down due to non-payment and payment collection costs. Likewise, stifling development with uncompetitive system development fees costs a utility in the form of additional paying customers because they chose to "build down the road." That forces existing customers to pay all the costs of the utility rather than sharing them with new customers.

5. While cost-based rates are the most demonstrably fair rate structure, purely cost-to-serve rates can be impractical for some utilities. Consider this:
  - a. A large city has thousands of customers served by a wide range of meter sizes and those customers have a wide range of service use. That city needs rates that are cost-based and, necessarily, those rates will be complicated. Such rate complexity is worthwhile because the utility's situation is complicated.
  - b. In contrast, a small town serves few customer. Those customers usually have only a few meter sizes and few of them use high volumes of service. That town would not be well-served by complicated rates. Simpler rates are better for them.

However, both should still get a cost-to-serve rate analysis at least occasionally, so even if they adopt rates in a different structure, they will know what you are giving up.

That is probably more than you care to know about rates and rate analysis but if I did not answer all your questions, just give me a call, or drop me an e-mail.



## Willard, MO, Water Rates Model 2024-3

This model calculated cost-to-serve rates, with level minimum and unit charges for in-City customers, and out-of-City rates in the same structure, but higher due to higher costs to serve outside of the City.

September 19, 2024

This rate analysis model was produced by

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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

## Definitions

Affordability Index	The monthly charge for (typically) 5,000 gallons of residential service divided by the median monthly household income for the area served by the system. An index of 1.0, meaning a household pays one percent of its income to pay its bill for 5,000 gallons of service, is generally considered affordable. Affordability index is often a factor in determining grant and loan eligibility and grant amount.
Analysis Year	The year following the "test year." Generally, rate analysis is done during the year following the "test year" and initial rate adjustments are done later still during the analysis year or sometime during the following year once the analysis shows how rates should be adjusted. See related "test year."
Capacity Cost (also see System Development Charge)	The cost incurred to design and build the infrastructure needed to provide a utility service. As the infrastructure ages and wears out from use, it must be refurbished and replaced, which is a continual capacity cost. Capacity costs are recovered in various ways - connection fees, system development fees, regular user charges and others. The cost of that capacity and the nature of the costs - base flow capacity versus peak flow capacity - should determine the way these costs are recovered.
Capital Improvement Plan or Program (CIP)	A schedule of anticipated capital improvements. These are the more expensive items such as treatment plants, lines and other expensive infrastructure that generally requires bond or grant funding.
Capital Improvement Reserves	Cash reserves dedicated to funding the CIP
Comprehensive Rate Analysis	A thorough examination of a system's operating, capital improvement, equipment replacement and other costs, revenues, current rates, number of users and their use of the system, growth rates and all other key issues surrounding the system. This examination will determine how rates and fees should be set in the future to cash-flow the system properly, to build appropriate reserves and to be fair to ratepayers. It also will determine how policies should be adjusted to enable the system to operate well now, operate well in the medium-range future (about 10 years) and prepare for expected and expectable events such as capital improvements and equipment replacement.
Connection Charge	See system development fee
Conservation (Inclining) Rates	Unit charges that go up as the volume used goes up
Cost-to-produce	There are several ways to define and calculate cost-to-produce. Each is acceptable for different purposes. Generally, cost-to-produce is the total of all variable costs required to get service to a utility's customers during one year divided by the total units of service delivered during that year. This calculation will yield the <u>average</u> cost-to-produce. In a proportional to use rate structure, this is the unit charge. See "Cost Calculations" at the bottom of Table 19.
Cost-to-serve, or Cost-of-service Rates	Rates where, at the customer class level, fixed and variable costs caused by each customer class are paid by that class primarily with minimum and unit charges, respectively. However, this analysis model takes it one step further and calculates cost-to-serve rates at the individual customer level.
Cost Types; Fixed and Variable	The two main types of costs are fixed - those that are related to the fact that someone is a customer; and variable - those that are related to the volume of the commodity delivered to customers. Generally, fixed costs should be recovered with minimum charges and variable costs with unit charges.
Coverage Ratio (CR)	Incomes available to pay debt divided by the amount of the debt for that year. A CR of 1.0 is "break-even." Most systems should have a CR greater than 1.25.
Current Position	For purposes of this report, for one year, the sum of all incomes and undedicated reserves minus all current financial obligations for that year. Future obligations (next year's loan payments) and depreciation are not included. Current position, often called "cash and cash equivalents," is a good measure of liquidity.
Declining Rates	Rates where unit charges go down as the volume used goes up
Fire Sprinkler Systems and Related Costs	Generally, fire suppression in businesses is provided by a built-in system of fire sprinklers. "Service" to such systems is primarily in the form of peak flow capacity availability to fight a fire. Capacity costs money, so larger, more sophisticated water systems should assess at least part of such costs to fire suppression systems. Small water systems usually do not charge separately for these costs, and that is reasonable.
Fixed Cost	Accounting considers a cost that does not change to be a fixed cost. That definition does not work fairly for rate setting purposes. For rate setting, a fixed cost is one that is related to the fact that you have customers. The simplest example is billing, because the utility incurs billing costs not in relation to the volume of service a customer consumes. Rather, those costs are equal for all customers, or they are so close to being equal for all customers that one likely could not justify such a cost being different for one customer compared to other customers.

## Definitions

Flat Rates	Rates where all users pay exactly the same fee regardless of the volume of service they use
Equivalent Dwelling Unit (EDU) or Equivalent Residential Unit (ERU)	This definition is for water and sewer service. Based upon number of water using fixtures, average flow, potential flow or similar criteria; the consumption rate of the average single family home is rated at one ERU. All other types of customers are then compared on this basis and multiples or parts of an ERU are assigned to each for billing purposes.
Equivalent Residential Unit (ERU) for Stormwater	This definition is for stormwater. As compared to water and sewer, that are concerned with water flow, one ERU of stormwater service is the average square footage of impervious surface of a single family home. Then, larger and non-residential properties are rated by their multiples or parts of an ERU of impervious surface area for the purpose of billing for stormwater impact costs. When there is a large variation in single family home size and impervious surface area, some cities and similar places use the smaller size range of homes as their ERU standard and assess larger homes at multiples of that ERU basis, as well.
Incremental Rate Increases (Inflationary Increases)	Rate increases done, generally annually, following the initial rate adjustment. The usual goal of such increases is to keep the system's incomes on track with inflation. Such increases are usually small, in the two to five percent per year range.
Initial Rate Adjustments	Rate adjustments done in response to the comprehensive rate analysis. Generally, the goal of such adjustments is to establish rates that cover the system's short-term expected costs and do it with a structure that is fair to ratepayers. Initial adjustments should be followed in subsequent years with incremental rate increases.
Inflow & Infiltration (I&I)	In a sewer system, water that gets into the collection system by way of illicit connections (inflow) such as gutter downspouts, plus leaks in manholes and sewer lines (infiltration)
Infrastructure	Most commonly thought of as the hard assets, such as buildings, treatment plants and lines needed to provide service to customers connected to the system. In reality, staff, software and other "soft" assets should be thought of as infrastructure, as well because the hard assets cannot run well or run for long without staff.
Life-cycle Cost	The total cost to design, build, operate, maintain and eventually dispose of, or decommission, an asset. One asset may cost less to build but it may be more expensive to operate and maintain, yielding a higher total life-cycle cost. Life-cycle cost is an important consideration of asset management.
Marginal Costs	The parts of a utility's costs that are unavoidable in the course of serving a particular customer, a group of customers, more volume to all customers or some other marginal use of the system. Such customer(s) or extra use could be added at a discounted but still profitable fee, if desired. Generally marginal costs are less than the average costs but when extra use requires a system upsizing, they can be greater. These costs are especially useful when considering selling service at wholesale or charging "snow birds" while they are away, for example.
Minimum Charge	This rate, charge or fee goes by other names. "Base charge" and "availability charge" are common. This is the periodic fee paid for having water, sewer or other commodity service made available to the customer to use. Most common is a monthly or quarterly minimum charge. Generally, this charge should recover fixed costs.
Mixed Costs	Fixed and variable costs are defined elsewhere. Costs that are mixed are those that are a blend of fixed and variable. For example, a utility hires staff and provides them benefits partly just to have staff on hand to deal with line breaks, equipment breakdowns and other problems. But most staff time and related costs are incurred because the utility is doing what it was designed to do - provide water or other commodity services to customers. Two gross examples illustrate the extremes of staff costs. In one small water system with one operator, the operator sits around in the shop all day, every day with nothing to do. The cost of that operator is fixed and should be shared by all customers equally in a minimum charge. Another water system has one operator, but that operator works all day, every day operating and maintaining the system. That operator is enabling the system to do what it was designed to do - provide a commodity - so that operator's time and related costs should be considered variable and recoverable through unit charges. In reality, staffing and many other costs are a blend of fixed and variable costs, so they should be consider partly a fixed cost and partly a variable cost.
Operating Costs	Definitions and calculations vary. For rate setting purposes operating costs are costs incurred because a system is operated. Such costs are usually recovered primarily through unit charges.
Operating Reserves or Working Capital	Analogous to current position, this is the net revenues generated during "profitable" years and retained to fund operating costs during times when costs exceed incomes.
Operating Revenues	Revenues collected in the form of user fees and similar operating cost-related fees
Operating Ratio (OR)	Current incomes divided by current expenses, not including debt. An OR of 1.0 is "break even." Most systems should have an OR of 1.25 or higher.
Payback Period	In this case, time required for the investment made to get this analysis done to return that investment through increased user and other fees.



## Definitions

Peak Flow Capacity or Demand	The volume of service that a user could demand for a short period of time at full volume use. In water systems, and generally in sewer systems, too, the peak flow capacity limiting factor is usually the size of the customer's meter or service line. In electric systems, demand for each commercial and industrial customer (and sometimes others) is usually calculated annually based upon the peak energy usage during a defined short period.
Proportional to Use Rates	Rates where the minimum charge recovers all fixed costs, the unit charge recovers all variable costs, the unit charge is the same for all volume sold, and there is no usage allowance in the minimum charge. This rate structure is similar to and often the same as cost-to-serve rates.
Replacement Schedule	A timetable that describes equipment replacement and important repairs that are too infrequent and/or too expensive to cover as annual operating costs but not so expensive that they need to be covered as capital improvements.
Replacement Reserves	Cash reserves used to fund the Replacement Schedule
Return on Investment	In this case, the dollar amount or percentage of revenue gain enabled by this rate analysis. Related to payback period.
Snow Bird	A customer, usually residential, that goes away during part of the year. Most commonly, these are people of "means" who live in the north who "fly south" for the winter. But, this category includes everyone who is absent for a significant part of the year but returns to their permanent residence.
Stormwater	Precipitation that falls on and then leaves a site, flows elsewhere, potentially causing or adding to flooding and often carries with it sediment and pollutants.
Stormwater Management	The practice of reducing and mitigating off-site stormwater flows and impacts.
System Development Charge or Fee	Fee assessed to pay for at least part of the cost to build system capacity. For purposes of this model, all charges related to connecting new customers will be "rolled together" into a system development charge, usually including a charge that buys a new customer system capacity. This combined charge may be a few hundred dollars for a residential customer, if little or no capacity costs are included. If capacity costs are included, it could be many thousands of dollars for a large industrial customer. Similar terms in common use include "tap-on fee," "connection fee or charge," "hook-up fee," "impact fee," "availability charge," and "capacity charge."
Test Year	The one year period from which data was gathered to be the basis of the rate analysis, the starting place, which is usually the last completed fiscal year. See related "analysis year."
Unit Charge	This rate, charge or fee goes by other names, too. It is the rate paid for water, sewer or other commodity per unit of measurement, like per 1,000 gallons or per 100 cubic feet. Generally, this charge should recover variable costs.
Usage Allowance	The volume, if any, that is "given away" with the minimum charge. Most systems give away no volume. Those that give away an unlimited volume have what are called "flat rates" - a minimum charge only.
User Fee, User Charge, User Rates	Fees assessed to customers for use of the system. This does not include system development charges, late payment penalties or other types of charges.
Variable Cost	Accounting and rate setting agree on this definition. For rate setting, a variable cost is one that rises and falls as the customer uses the commodity. The simplest example is electricity used to treat and move water around. While the power company assesses a minimum charge and demand charges to the water or other utility that is "signed up" for electric service, the majority of the electric bill rises and falls with the volume of water produced by that utility. Therefore, variable costs should be recovered with unit charges.
Water Loss and Unbilled-for Water	Measured by volume or percent, the part of a water system's net water production that does not reach customers or is not billed to customers. This loss also includes billable volume lost due to under-registering customer meters. "Unbilled-for water" includes water loss, but it also includes water actually given away at no charge.
Working Capital, Net Income	The amount left in the operating fund after paying all costs due during that month, year or other time period.
Working Capital Goal or Operating Reserves Goal	The desired operating fund reserve, in dollars or percent, at a stated point in time. Small systems (1,000 connections) generally should target 35 percent or greater. Larger systems can target a lower percentage. The goal for each system should be based upon the needs of that system and the risk the customers are willing to take.

## Table and Chart Descriptions

The tables and charts of this model tell a story about the rates and finances of the utility.

The tables you first see in this model depict utility data, like the rates that were being assessed to customers during the test year, the volume of service those customers used, how much income the utility collected, what its costs were, and more. This data came from utility records. In addition, the tables in this model go beyond the utility's historical data and include projections of incomes that will be generated by the new rates, future expenses as they grow with inflation and other forward-looking features.

Tables in the middle part of the model primarily calculate new rates and fees that will generate enough revenue to pay the utility's costs over time.

The tables in the last part of the model show the results of new rates and fees. Those include the rates themselves, surcharges to rates, if appropriate, the affordability of the new rates, and reserves generated by the new rates. Many of these results as shown graphically in charts at the end of the model.

As you progress through the model, keep this story in mind. You probably understand much the math performed by the model. There is some you likely do not recognize, and that is OK. Just know that new, adequate rates were calculated based upon the utility's historical data, projected into the future.

A final note: When a numbered table or chart listed below is not in the package, that was not a mistake. It simply means that table or chart from our master program was not needed in this situation, so it was bypassed and left out.

Now, here are descriptions of the tables and charts.

Name	What Each is or Does
Definitions (List)	The meaning of terms used in this report and in rate setting generally
Return on Investment (Calculation)	A summary of financial outcomes enabled by the proposed rates
Table 1 - Rates	User rates in effect at the end of the test year. Unless rates were recently changed, these are the current rates.
Table 2 - Test Year Usage	Compilation of actual volume of service used by customers during the test year
Table 3 - Basic User Data and Operating Incomes	Basic user statistics and operating revenues, projected for 10 years, based on the assumption the modeled rates and future inflationary increases will be adopted
Table 4 - Operating Costs and Net Income	Operating costs projected for 10 years
Table 5 - Capital Improvements Program (CIP)	Capital improvements and how they will be paid over next 10 years, including debt service
Table 6 - Equipment Replacement Schedule - Detailed	If applicable, detailed schedule of equipment replacements for next 20 years
Table 7 - Equipment Replacement Annuity Calculation	If applicable, calculation of the annual annuity (yearly savings amount) needed to pay for all equipment replacements as they come due and ending with the desired balance
Table 8 - Average Cost Classification	Summation of a target year's costs and calculation of the "cost-of-service" rate structure basis for recovery of fixed costs and variable costs. Unless directed to do otherwise, this analysis developed cost-to-serve rates based on cost classification in this table.
Table 9 - Marginal Cost Classification	If applicable, calculation of costs incurred to serve a specified type of customer
Table 10 - Initial Rate Adjustments and Resulting Revenues	These are the modeled user rates and the resulting "blended" revenues they, and the current rates, will generate during the rate adjustment year
Table 11 - AWWA Safe Operating Flow by Meter Size	If applicable, this table calculates the meter equivalent ratio, which is used for calculating peak flow capacity-based system development fees, surcharges and revenues in Tables 13 through 16 for water meters, and when applicable, capacity costs for fire sprinklers.
Table 11B - Fire Sprinkler Peak Flow Capacity Factor	If applicable, this table shows peak flow capacity shares of various size fire sprinkler systems.

Table 12 - Flow Capacity Costs	If applicable, calculation of the various costs to build base and peak flow capacity to serve customers, when such fees will be based on water meter size
Table 12B - Capacity Costs Attributable to Fire Sprinkler Systems	If applicable, nearly the same as Table 12, except it applies to fire suppression systems.
Table 13 - System Development Fees	If applicable, calculation of meter size-based system development fees needed to recover costs calculated in Table 11, when such fees will be based on water meter size.
Table 13B - System Development Fees for Fire Sprinkler Systems	If applicable, nearly the same as Table 13, except it applies to fire suppression systems
Table 14 - Revenues From System Development Fees	If applicable, calculation of total fee revenues that would be generated during one full year at the fees in Table 13.
Table 14B - Revenues From System Development Fees for Fire Sprinkler Systems	If applicable, nearly the same as Table 14, except it applies to fire suppression systems
Table 15 - Minimum Charge Fees, Including Capacity Surcharges	If applicable, calculation of meter size-based capacity surcharges and minimum charges to recover costs calculated in Table 11, when such fees will be based on water meter size
Table 15B - Sprinkler System Capacity Charges	Nearly the same as Table 15, except it applies to fire suppression systems.
Table 16 - Revenues From Minimum Charge Surcharges	If applicable, calculation of total fee revenues that would be generated during one full year at the fees in Table 15.
Table 16B - Revenues From Sprinkler System Charges	Nearly the same as Table 16, except it applies to fire suppression systems
Table 17 - Financial Capacity Indicators and Reserves	Shows the financial effects of the modeled rates, costs, etc. on the utility and on the benchmark 5,000 gallon per month residential water or sewer customer, as appropriate
Table 18 - Bills Before and After Rate Adjustments	Bills at the modeled rates are compared to those under the current rates. Note: the modeled bills do not include capacity surcharges to the minimum charges unless they are included in the minimum charges column of Table 10.
Table 19 - User Statistics	If included, this table shows volumes and percentages of use, revenue generated and other statistics
<i>Chart 1 - Operating Ratio</i>	<i>Graph of operating ratio for 10 years as a result of the modeled rates and the current rates</i>
<i>Chart 2 - Coverage Ratio</i>	<i>Graph of coverage ratios for 10 years of the modeled rates and the current rates</i>
<i>Chart 3 - 5,000 Gallon Residential User's Bill</i>	<i>Graph of the bill for the benchmark 5,000 gallon per month residential user, with smallest available meter size (used in grant and loan eligibility determinations) as a result of the modeled rates, and the current rates</i>
<i>Chart 4 - Affordability Index</i>	<i>Graph of the affordability index for 10 years of the benchmark residential user's bill (used in grant and loan eligibility determinations)</i>
<i>Chart 5 - Working Capital vs Goal</i>	<i>Graph for 10 years of total (unobligated) cash assets at modeled rates compared to the goal for total cash assets</i>
<i>Chart 6 - Value of Cash Assets Before Inflation</i>	<i>Graph for 10 years of unobligated cash assets NOT adjusted for inflation at modeled rates and current rates</i>
<i>Chart 7 - Value of Cash Assets After Inflation</i>	<i>Graph for 10 years of unobligated cash assets adjusted for inflation at modeled rates and current rates. This is the real buying power of cash reserves.</i>
<i>Chart 8 - Sum of All Reserves</i>	<i>Graph of all reserves of all kinds at the modeled rates and at the current rates</i>

**Table 1 - Rates**  
**Willard, MO, Water Rates Model 2024-3**

If we received the now current rates for the utility, the current rates are in this table. Otherwise, these rates were in effect at the end of the test year. If a volume range was left out of the table, rest assured, it is in the Model. We just hid some volume ranges to make the table and report shorter. In such cases, the unit charge that applies to next lowest volume range also applies to the hidden volume ranges.

**Rates in Effect Now**

Customer Type, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Use Within Each Range in 1,000 Gallons	Billing Cycle Minimum Charge	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
In-City Res, Irr, Water Only	0	999	0.940	\$15.28	1.000	\$2.86
	1,000	1,999	0.872	\$15.28	1.000	\$2.86
	2,000	2,999	0.793	\$15.28	1.000	\$2.86
	3,000	3,999	0.733	\$15.28	1.000	\$2.86
	4,000	4,999	0.698	\$15.28	1.000	\$2.86
	5,000	5,999	0.682	\$15.28	1.000	\$2.86
	10,000	19,999	3.713	\$15.28	1.000	\$2.86
	800,000	800,001	0.000	\$15.28	1.000	\$2.86
In-City Commercial, Irr, Water Only	0	999	0.662	\$15.28	1.000	\$2.86
	1,000	1,999	0.736	\$15.28	1.000	\$2.86
	2,000	2,999	0.845	\$15.28	1.000	\$2.86
	3,000	3,999	0.878	\$15.28	1.000	\$2.86
	4,000	4,999	0.911	\$15.28	1.000	\$2.86
	5,000	5,999	0.905	\$15.28	1.000	\$2.86
	10,000	19,999	8.422	\$15.28	1.000	\$2.86
	800,000	800,001	0.000	\$15.28	1.000	\$2.86
Rural Residential, Irr, Water Only	0	999	0.950	\$16.63	1.000	\$3.12
	1,000	1,999	0.902	\$16.63	1.000	\$3.12
	2,000	2,999	0.821	\$16.63	1.000	\$3.12
	3,000	3,999	0.765	\$16.63	1.000	\$3.12
	4,000	4,999	0.734	\$16.63	1.000	\$3.12
	5,000	5,999	0.739	\$16.63	1.000	\$3.12
	10,000	19,999	4.827	\$16.63	1.000	\$3.12
	800,000	800,001	0.000	\$16.63	1.000	\$3.12
Rural Commercial, Irr, Water Only	0	999	0.840	\$16.63	1.000	\$3.12
	1,000	1,999	0.777	\$16.63	1.000	\$3.12
	2,000	2,999	0.734	\$16.63	1.000	\$3.12
	3,000	3,999	0.794	\$16.63	1.000	\$3.12
	4,000	4,999	0.963	\$16.63	1.000	\$3.12
	5,000	5,999	0.910	\$16.63	1.000	\$3.12
	10,000	19,999	4.081	\$16.63	1.000	\$3.12
	800,000	800,000	0.000	\$16.63	1.000	\$3.12
No Charge ("Zero")	0	999	0.705	\$0.00	0.000	\$0.00
	800,000	800,001	0.000	\$0.00	0.000	\$0.00

## Table 2 - Test Year Usage Willard, MO, Water Rates Model 2024-3

This table shows usage by all customers during the test year: Residential meter readings per year: 12  
 Test year = the one-year period being analyzed starts: 1/1/2023 Other customer readings per year: 12  
 Date this model created: 7/3/2024 Bills per year: 12

Customer, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Use in Each Range in Gallons	# of Customers That "Maxed Out" in Each Range	% of Customers That "Maxed Out" in Each Range	% of Total Use in Each Range
In-City Res, Irr, Water Only	0	999	26,483,139	142	3.8%	0.0%
	1,000	1,999	23,082,000	283	7.6%	1.5%
	2,000	2,999	18,315,000	397	10.7%	4.3%
	3,000	3,999	13,425,000	408	11.0%	6.6%
	4,000	4,999	9,375,000	338	9.1%	7.3%
	5,000	5,999	6,394,000	248	6.7%	6.7%
	6,000	6,999	4,454,000	162	4.3%	5.2%
	7,000	7,999	3,136,000	110	3.0%	4.1%
	8,000	8,999	2,364,000	64	1.7%	2.8%
	9,000	9,999	1,754,000	51	1.4%	2.5%
	10,000	19,999	6,513,000	121	3.3%	8.1%
	20,000	29,999	1,864,000	16	0.4%	2.0%
	30,000	39,999	750,000	5	0.1%	0.8%
	40,000	49,999	447,000	2	0.1%	0.5%
	50,000	59,999	221,000	1	0.0%	0.4%
	60,000	69,999	145,000	0	0.0%	0.1%
	70,000	79,999	108,000	0	0.0%	0.1%
	80,000	89,999	72,000	0	0.0%	0.1%
	90,000	99,999	70,000	0	0.0%	0.0%
	100,000	199,999	203,000	1	0.0%	0.3%
200,000	299,999	53,000	0	0.0%	0.1%	
300,000	399,999	0	0	0.0%	0.0%	
			119,228,139	2,349	63.2%	53.4%
In-City Commercial, Irr, Water Only	0	999	1,379,000	59	1.6%	0.0%
	1,000	1,999	1,015,000	30	0.8%	0.2%
	2,000	2,999	858,000	13	0.4%	0.1%
	3,000	3,999	753,000	9	0.2%	0.1%
	4,000	4,999	686,000	6	0.2%	0.1%
	5,000	5,999	621,000	5	0.1%	0.1%
	6,000	6,999	583,000	3	0.1%	0.1%
	7,000	7,999	556,000	2	0.1%	0.1%
	8,000	8,999	518,000	3	0.1%	0.1%
	9,000	9,999	488,000	3	0.1%	0.1%
	10,000	19,999	4,110,000	11	0.3%	0.9%
	20,000	29,999	3,029,000	7	0.2%	1.0%
	30,000	39,999	2,263,000	5	0.1%	1.0%
	40,000	49,999	1,687,000	5	0.1%	1.3%
	50,000	59,999	1,220,000	2	0.1%	0.6%
	60,000	69,999	977,000	2	0.1%	0.8%
	70,000	79,999	714,000	1	0.0%	0.6%
	80,000	89,999	616,000	1	0.0%	0.3%
	90,000	99,999	533,000	1	0.0%	0.4%
	100,000	199,999	2,905,000	3	0.1%	2.0%
200,000	299,999	1,212,000	1	0.0%	1.1%	
300,000	399,999	517,000	0	0.0%	0.6%	
400,000	499,999	186,000	0	0.0%	0.4%	
500,000	599,999	37,000	0	0.0%	0.2%	
600,000	699,999	0	0	0.0%	0.0%	
			27,463,000	174	4.7%	12.3%

## Table 2 - Test Year Usage

Customer, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Use in Each Range in Gallons	# of Customers That "Maxed Out" in Each Range	% of Customers That "Maxed Out" in Each Range	% of Total Use in Each Range
Rural Residential, Irr, Water Only	0	999	13,346,000	59	1.6%	0.0%
	1,000	1,999	12,042,000	109	2.9%	0.6%
	2,000	2,999	9,882,000	180	4.8%	1.9%
	3,000	3,999	7,557,000	194	5.2%	3.1%
	4,000	4,999	5,546,000	168	4.5%	3.6%
	5,000	5,999	4,098,000	121	3.2%	3.2%
	6,000	6,999	3,026,000	89	2.4%	2.9%
	7,000	7,999	2,333,000	58	1.6%	2.2%
	8,000	8,999	1,827,000	42	1.1%	1.8%
	9,000	9,999	1,477,000	29	0.8%	1.4%
	10,000	19,999	7,130,000	87	2.3%	6.0%
	20,000	29,999	2,605,000	21	0.6%	2.7%
	30,000	39,999	1,142,000	8	0.2%	1.4%
	40,000	49,999	598,000	3	0.1%	0.7%
	50,000	59,999	368,000	2	0.0%	0.5%
	60,000	69,999	244,000	1	0.0%	0.2%
	70,000	79,999	197,000	1	0.0%	0.2%
	80,000	89,999	132,000	0	0.0%	0.2%
	90,000	99,999	98,000	0	0.0%	0.1%
	100,000	199,999	392,000	1	0.0%	0.4%
200,000	299,999	84,000	0	0.0%	0.2%	
300,000	399,999	0	0	0.0%	0.0%	
			74,124,000	1,171	31.5%	33.2%
Rural Commercial, Irr, Water Only	0	999	179,000	3	0.1%	0.0%
	1,000	1,999	139,000	3	0.1%	0.0%
	2,000	2,999	102,000	3	0.1%	0.0%
	3,000	3,999	81,000	2	0.0%	0.0%
	4,000	4,999	78,000	0	0.0%	0.0%
	5,000	5,999	71,000	1	0.0%	0.0%
	6,000	6,999	65,000	1	0.0%	0.0%
	7,000	7,999	58,000	1	0.0%	0.0%
	8,000	8,999	45,000	1	0.0%	0.0%
	9,000	9,999	37,000	1	0.0%	0.0%
	10,000	19,999	151,000	3	0.1%	0.2%
	20,000	29,999	50,000	0	0.0%	0.0%
	30,000	39,999	30,000	0	0.0%	0.0%
	40,000	49,999	12,000	0	0.0%	0.0%
	50,000	59,999	10,000	0	0.0%	0.0%
	60,000	69,999	10,000	0	0.0%	0.0%
	70,000	79,999	10,000	0	0.0%	0.0%
	80,000	89,999	10,000	0	0.0%	0.0%
	90,000	99,999	2,000	0	0.0%	0.0%
	100,000	199,999	0	0	0.0%	0.0%
			1,140,000	18	0.5%	0.5%

## Table 2 - Test Year Usage

Customer, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Use in Each Range in Gallons	# of Customers That "Maxed Out" in Each Range	% of Customers That "Maxed Out" in Each Range	% of Total Use in Each Range
	0	999	67,000	2	0.1%	0.0%
	1,000	1,999	57,000	1	0.0%	0.0%
	2,000	2,999	47,000	1	0.0%	0.0%
	3,000	3,999	40,000	1	0.0%	0.0%
	4,000	4,999	38,000	0	0.0%	0.0%
	5,000	5,999	35,000	0	0.0%	0.0%
	6,000	6,999	30,000	0	0.0%	0.0%
	7,000	7,999	29,000	0	0.0%	0.0%
	8,000	8,999	23,000	1	0.0%	0.0%
	9,000	9,999	19,000	0	0.0%	0.0%
	10,000	19,999	97,000	1	0.0%	0.1%
	20,000	29,999	61,000	0	0.0%	0.0%
No Charge ("Zero")	30,000	39,999	50,000	0	0.0%	0.0%
	40,000	49,999	48,000	0	0.0%	0.0%
	50,000	59,999	36,000	0	0.0%	0.0%
	60,000	69,999	29,000	0	0.0%	0.0%
	70,000	79,999	20,000	0	0.0%	0.0%
	80,000	89,999	20,000	0	0.0%	0.0%
	90,000	99,999	17,000	0	0.0%	0.0%
	100,000	199,999	100,000	0	0.0%	0.0%
	200,000	299,999	100,000	0	0.0%	0.0%
	300,000	399,999	100,000	0	0.0%	0.0%
	400,000	499,999	58,000	0	0.0%	0.2%
	500,000	599,999	0	0	0.0%	0.0%
			1,121,000	8	0.2%	0.5%
Grand Totals:			223,076,139	3,719	100%	100%

**Table 3 - Operating Incomes and Basic User Data  
Willard, MO, Water Rates Model 2024-3**

This table depicts user statistics, customer growth, and system incomes and across the board "inflationary" style rate increases through the 10th year.

**Annual Median Household Income (AMHI)**

\$76,681	Census Bureau estimate of AMHI for the year 2022
\$39,565	Census Bureau estimate of AMHI for the year 2000
\$37,116	AMHI growth during this time period
4.26%	Simple annual income growth rate during this time period (used to project future household incomes)

**Test Year Growth of Customer Base and Average Tap Fee Paid per Connection**

40	Number new Water connections made during test year
\$811	Average Water tap or installation fee assessed during the test year

This model is programmed for rates to be reset in the "Analysis Year," also called the "0 Year" column below (shading highlighted blue). Revenues will be collected at the non-current rates for the first part of the analysis year and the modeled rates for the last part of the analysis year. Thus, the revenues shown that column of the table are "blended" revenues, part collected at the old rates and part collected at the new rates. It was then assumed that all rate adjustments made after the initial (major) adjustment will be done annually on approximately the anniversary of the first adjustment. If rates will not be adjusted during the "0 Year," an adjustment (normally a revenue reduction) was calculated below to account for the late start in making the first adjustments.

**Basic User (Customer) Data**

	Inflation/ Deflation (-) Factor	Analysis Year		Years Following the Analysis Year (for Which Results Have Been Projected)									
		0 Year		1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year
		Starting 1/1/23	Starting 1/1/24	Starting 1/1/25	Starting 1/1/26	Starting 1/1/27	Starting 1/1/28	Starting 1/1/29	Starting 1/1/30	Starting 1/1/31	Starting 1/1/32	Starting 1/1/33	Starting 1/1/34
Rate Increases Projected for Future Years	N.A.	N.A.	N.A.	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
The row above shows the rate at which user charge fees should be increased for each year beyond the initial rate adjustment year. Unless stated otherwise, these should be across-the-board increases to all rates and fees and that should continue until a new rate analysis is done.													
Average Number of Customers	N.A.	3,719	3,759	3,799	3,839	3,879	3,919	3,959	3,999	4,039	4,080	4,120	4,160
Customers Added or Lost (-) Each Year	N.A.	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
Customer Growth or Loss (-) Rate	N.A.	1.08%	1.07%	1.06%	1.04%	1.03%	1.02%	1.01%	1.00%	0.99%	0.98%	0.97%	0.96%
Test Year (Actual) and Projected Future Years' Sales, in Gallons	N.A.	223,076,139	225,480,952	227,885,764	230,290,577	232,695,389	235,100,202	237,505,014	239,909,827	242,314,639	244,719,452	247,124,264	249,529,077

**Calculated User Charge Fees, Accounting for New Customers and Future Rate Increases Over the Years**

Actual or Calculated Sales Revenues		\$1,113,358	\$1,121,846	\$1,731,117	\$1,819,360	\$1,911,893	\$2,008,918	\$2,110,646	\$2,217,297	\$2,329,104	\$2,446,308	\$2,569,161	\$2,697,929
Additional Sales Revenues From New Customers			\$33	\$18,268	\$18,999	\$19,759	\$20,549	\$21,371	\$22,226	\$23,115	\$24,039	\$25,001	\$26,001
Total Calculated Revenues (User Charge Fees)		\$1,113,358	\$1,121,879	\$1,749,385	\$1,838,359	\$1,931,652	\$2,029,467	\$2,132,017	\$2,239,523	\$2,352,219	\$2,470,347	\$2,594,162	\$2,723,930
<b>Operating Incomes</b>													
Water Sales - All (Including Taxes)	N.A.	\$1,052,825	\$1,054,253	\$1,643,933	\$1,727,544	\$1,815,213	\$1,907,132	\$2,003,500	\$2,104,526	\$2,210,429	\$2,321,436	\$2,437,788	\$2,559,733
PENALTY INCOME-WATER	N.A.	\$42,382	\$42,834	\$43,286	\$43,738	\$44,190	\$44,642	\$45,094	\$45,546	\$45,998	\$46,450	\$46,902	\$47,355
METER REPLACEMENT/INSTALLATIONS-W...	% Above	\$32,500	\$32,411	\$32,411	\$32,411	\$32,411	\$32,411	\$32,411	\$32,411	\$32,411	\$32,411	\$32,411	\$32,411
Adjusted Meter Size-based Plant Investment Fees (Cochran Fees)	% Above	\$0	\$0	\$33,857	\$33,857	\$33,857	\$33,857	\$33,857	\$33,857	\$33,857	\$33,857	\$33,857	\$33,857
Interest Income	N.A.	\$37,796	\$5,991	\$5,843	\$5,942	\$6,182	\$6,500	\$6,687	\$7,337	\$7,334	\$7,564	\$7,860	\$8,261
MISCELLANEOUS INCOME-WATER	N.A.	\$7,001	\$7,011	\$10,932	\$11,488	\$12,071	\$12,682	\$13,323	\$13,995	\$14,699	\$15,437	\$16,211	\$17,022
CONVENIENCE FEE-WATER	N.A.	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752	\$19,752
TRANSFER IN-WATER	N.A.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CAPITAL ASSET SALES-WATER	N.A.	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103
Revenue Loss (-) Due to Conservation	5.0%	\$0	\$0	-\$17,942	-\$2,544	-\$2,668	-\$2,797	-\$2,932	-\$3,074	-\$3,222	-\$3,378	-\$3,540	-\$3,710
<b>Total Operating Incomes</b>		<b>\$1,199,359</b>	<b>\$1,169,355</b>	<b>\$1,779,176</b>	<b>\$1,879,292</b>	<b>\$1,968,113</b>	<b>\$2,061,283</b>	<b>\$2,158,795</b>	<b>\$2,261,454</b>	<b>\$2,368,361</b>	<b>\$2,480,633</b>	<b>\$2,598,344</b>	<b>\$2,721,783</b>



**Table 4 - Operating Costs and Net Income**  
**Willard, MO, Water Rates Model 2024-3**

This table depicts expenses during the test year, this year and for the next 10 years. Some future costs will experience inflation. Those costs that go up as use goes up are increased by the cost inflation factor plus the growth rate in users. (First year costs and net incomes are actual, subsequent years are projected.)

Expense Items	Inflation/ Deflation (-) Factor	Test Year Starting 1/1/23	Years Following the Analysis Year (for Which Results Have Been Projected)										
			Analysis Year 0 Year Starting 1/1/24	1st Year Starting 1/1/25	2nd Year Starting 1/1/26	3rd Year Starting 1/1/27	4th Year Starting 1/1/28	5th Year Starting 1/1/29	6th Year Starting 1/1/30	7th Year Starting 1/1/31	8th Year Starting 1/1/32	9th Year Starting 1/1/33	10th Year Starting 1/1/34
CHEMICALS-WATER	4.0%	\$9,104	\$9,570	\$10,057	\$10,569	\$11,105	\$11,668	\$12,257	\$12,875	\$13,523	\$14,202	\$14,914	\$15,660
SUPPLIES-WATER	4.0%	\$50,757	\$52,787	\$54,899	\$57,095	\$59,378	\$61,754	\$64,224	\$66,793	\$69,464	\$72,243	\$75,133	\$78,138
LABORATORY FEES-WATER	4.0%	\$1,997	\$2,077	\$2,160	\$2,246	\$2,336	\$2,430	\$2,527	\$2,628	\$2,733	\$2,842	\$2,956	\$3,074
LABORATORY SUPPLIES-WATER	4.0%	\$5,233	\$5,443	\$5,660	\$5,887	\$6,122	\$6,367	\$6,622	\$6,887	\$7,162	\$7,448	\$7,746	\$8,056
PERMIT FEES-WATER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BUILDING MAINTENANCE-WATER	4.0%	\$89	\$92	\$96	\$100	\$104	\$108	\$112	\$117	\$122	\$126	\$132	\$137
CUSTODIAL SUPPLIES-WATER	4.0%	\$172	\$179	\$186	\$194	\$202	\$210	\$218	\$227	\$236	\$245	\$255	\$265
MISCELLANEOUS EXPENSE-WATER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OFFICE SUPPLIES-WATER	4.0%	\$4,607	\$4,791	\$4,983	\$5,182	\$5,389	\$5,605	\$5,829	\$6,062	\$6,305	\$6,557	\$6,819	\$7,092
POSTAGE-WATER	4.0%	\$11,279	\$11,856	\$12,460	\$13,094	\$13,758	\$14,455	\$15,185	\$15,951	\$16,754	\$17,595	\$18,477	\$19,401
REPAIRS AND MAINTENANCE-WATER	4.0%	\$82,506	\$85,807	\$89,239	\$92,809	\$96,521	\$100,382	\$104,397	\$108,573	\$112,916	\$117,432	\$122,130	\$127,015
SUPPLIES SMALL EQUIPMENT-WATER	4.0%	\$11,080	\$11,524	\$11,985	\$12,464	\$12,963	\$13,481	\$14,020	\$14,581	\$15,164	\$15,771	\$16,402	\$17,058
METER REPLACEMENT-WATER	4.0%	\$13,821	\$14,374	\$14,949	\$15,547	\$16,169	\$16,815	\$17,488	\$18,188	\$18,915	\$19,672	\$20,459	\$21,277
ADVERTISING-WATER	4.0%	\$105	\$109	\$114	\$118	\$123	\$128	\$133	\$138	\$144	\$149	\$155	\$162
AUDIT EXPENSE-WATER	4.0%	\$6,880	\$7,155	\$7,441	\$7,739	\$8,049	\$8,371	\$8,705	\$9,054	\$9,416	\$9,792	\$10,184	\$10,591
BANK/CREDIT CARD FEES-WATER	4.0%	\$22,707	\$23,867	\$25,084	\$26,360	\$27,697	\$29,100	\$30,570	\$32,112	\$33,728	\$35,421	\$37,197	\$39,058
CONTRACT LABOR-WATER	4.0%	\$2,546	\$2,648	\$2,754	\$2,864	\$2,978	\$3,098	\$3,222	\$3,350	\$3,484	\$3,624	\$3,769	\$3,919
DUES AND SUBSCRIPTIONS-WATER	4.0%	\$2,161	\$2,248	\$2,338	\$2,431	\$2,529	\$2,630	\$2,735	\$2,844	\$2,958	\$3,076	\$3,199	\$3,327
EQUIPMENT RENTAL-WATER	4.0%	\$5,895	\$6,130	\$6,376	\$6,631	\$6,896	\$7,172	\$7,459	\$7,757	\$8,067	\$8,390	\$8,726	\$9,075
INSURANCE-WATER	4.0%	\$32,225	\$33,514	\$34,855	\$36,249	\$37,699	\$39,207	\$40,775	\$42,406	\$44,102	\$45,866	\$47,701	\$49,609
LEGAL-WATER	4.0%	\$102	\$106	\$111	\$115	\$120	\$124	\$129	\$135	\$140	\$146	\$151	\$157
PROFESSIONAL-WATER	4.0%	\$21,961	\$22,839	\$23,753	\$24,703	\$25,691	\$26,719	\$27,788	\$28,899	\$30,055	\$31,257	\$32,508	\$33,808
SAFETY PROGRAM-WATER	4.0%	\$581	\$604	\$628	\$653	\$680	\$707	\$735	\$764	\$795	\$827	\$860	\$894
TRAVEL EXPENSE-WATER	4.0%	\$411	\$428	\$445	\$462	\$481	\$500	\$520	\$541	\$563	\$585	\$608	\$633
TRAINING & EDUCATION-WATER	4.0%	\$2,769	\$2,880	\$2,995	\$3,115	\$3,239	\$3,369	\$3,504	\$3,644	\$3,790	\$3,941	\$4,099	\$4,263
RENT-WATER	4.0%	\$1,250	\$1,300	\$1,352	\$1,406	\$1,462	\$1,521	\$1,582	\$1,645	\$1,711	\$1,779	\$1,850	\$1,924
EQUIPMENT/SOFTWARE CONTRACTS-WATER	4.0%	\$19,342	\$20,116	\$20,920	\$21,757	\$22,627	\$23,533	\$24,474	\$25,453	\$26,471	\$27,530	\$28,631	\$29,776
TELEPHONE WATER	4.0%	\$2,217	\$2,306	\$2,398	\$2,494	\$2,594	\$2,697	\$2,805	\$2,918	\$3,034	\$3,156	\$3,282	\$3,413
INTERNET-WATER	4.0%	\$5,846	\$6,080	\$6,323	\$6,576	\$6,839	\$7,113	\$7,397	\$7,693	\$8,001	\$8,321	\$8,654	\$9,000
UTILITIES ELECTRIC-WATER	4.0%	\$109,887	\$115,501	\$121,389	\$127,563	\$134,037	\$140,824	\$147,940	\$155,400	\$163,220	\$171,416	\$180,008	\$189,012
UTILITIES GAS-WATER	4.0%	\$3,788	\$3,940	\$4,097	\$4,261	\$4,432	\$4,609	\$4,793	\$4,985	\$5,184	\$5,392	\$5,608	\$5,832
UTILITIES OTHER-WATER	4.0%	\$2,203	\$2,292	\$2,383	\$2,479	\$2,578	\$2,681	\$2,788	\$2,900	\$3,015	\$3,136	\$3,262	\$3,392
VEHICLE EXPENSE FUEL-WATER	4.0%	\$11,501	\$11,961	\$12,440	\$12,937	\$13,455	\$13,993	\$14,553	\$15,135	\$15,740	\$16,370	\$17,025	\$17,706
EQUIPMENT FUEL-WATER	4.0%	\$1,662	\$1,728	\$1,797	\$1,869	\$1,944	\$2,022	\$2,102	\$2,187	\$2,274	\$2,365	\$2,460	\$2,558
VEHICLE REPAIR & MAINT-WATER	4.0%	\$7,341	\$7,634	\$7,940	\$8,257	\$8,588	\$8,931	\$9,288	\$9,660	\$10,046	\$10,448	\$10,866	\$11,301
EQUIPMENT REPAIR & MAINT-WATER	4.0%	\$3,805	\$3,957	\$4,115	\$4,280	\$4,451	\$4,629	\$4,814	\$5,007	\$5,207	\$5,416	\$5,632	\$5,857
VEHICLE LEASE-WATER	4.0%	\$21,470	\$22,329	\$23,222	\$24,151	\$25,117	\$26,122	\$27,167	\$28,253	\$29,383	\$30,559	\$31,781	\$33,052

**Table 4 - Operating Costs and Net Income**

Expense Items	Inflation/ Deflation (-) Factor	Test Year	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year	
		Starting 1/1/23	Starting 1/1/24	Starting 1/1/25	Starting 1/1/26	Starting 1/1/27	Starting 1/1/28	Starting 1/1/29	Starting 1/1/30	Starting 1/1/31	Starting 1/1/32	Starting 1/1/33	Starting 1/1/34	
EQUIPMENT LEASE	4.0%	\$3,179	\$3,306	\$3,439	\$3,576	\$3,719	\$3,868	\$4,023	\$4,184	\$4,351	\$4,525	\$4,706	\$4,894	
SALARIES-WATER	4.0%	\$444,622	\$462,407	\$480,904	\$500,140	\$520,145	\$540,951	\$562,589	\$585,093	\$608,496	\$632,836	\$658,150	\$684,476	
SALARIES OVERTIME-WATER	4.0%	\$11,609	\$12,074	\$12,557	\$13,059	\$13,581	\$14,124	\$14,689	\$15,277	\$15,888	\$16,524	\$17,184	\$17,872	
PAYROLL TAXES-WATER	4.0%	\$34,147	\$35,513	\$36,933	\$38,411	\$39,947	\$41,545	\$43,207	\$44,935	\$46,733	\$48,602	\$50,546	\$52,568	
RETIREMENT-WATER	4.0%	\$19,342	\$20,116	\$20,921	\$21,758	\$22,628	\$23,533	\$24,474	\$25,453	\$26,471	\$27,530	\$28,631	\$29,777	
PENSION EXPENSE-WATER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UNIFORMS-WATER	4.0%	\$628	\$654	\$680	\$707	\$735	\$765	\$795	\$827	\$860	\$895	\$930	\$968	
GROUP INSURANCE-WATER	4.0%	\$88,455	\$91,993	\$95,673	\$99,500	\$103,480	\$107,619	\$111,924	\$116,401	\$121,057	\$125,899	\$130,935	\$136,173	
CAPITAL ASSET EXP-WATER	4.0%	\$90,716	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
CAPITAL ASSET EXP EQUIPMENT-WATER	N.A.	\$24,721	\$29,500	\$13,750	\$13,000	\$13,000	\$10,000	\$85,000	\$13,000	\$13,000	\$10,000	\$10,000	\$13,000	
PRINCIPAL EXPENSE-WATER	0.0%	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
INTEREST EXPENSE-WATER	0.0%	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
FISCAL AGENT FEES-WATER	4.0%	\$1,500	\$1,560	\$1,622	\$1,687	\$1,755	\$1,825	\$1,898	\$1,974	\$2,053	\$2,135	\$2,220	\$2,309	
BAD DEBT EXPENSE-WATER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
TRANSFER TO GCG-WATER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Annual Payment to R&R Reserve (Table 7)	0.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
User Charge Analysis Services	5.0%	\$0	\$11,395	\$0	\$0	\$12,563	\$0	\$0	\$13,851	\$0	\$0	\$15,270	\$0	
Total CIP-related Payouts	N.A.	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
<b>Total Operating Costs</b>		<b>\$1,198,225</b>	<b>\$1,168,690</b>	<b>\$1,188,422</b>	<b>\$1,236,494</b>	<b>\$1,299,905</b>	<b>\$1,337,301</b>	<b>\$1,467,457</b>	<b>\$1,466,753</b>	<b>\$1,512,732</b>	<b>\$1,572,043</b>	<b>\$1,652,210</b>	<b>\$1,707,529</b>	
Net Income (or Loss)		\$1,135	\$665	\$590,755	\$642,798	\$668,208	\$723,982	\$691,338	\$794,701	\$855,630	\$908,590	\$946,134	\$1,014,254	
Working Capital Goal	50%	In Dollars, That is:	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765

Notes: Most expenses are expected to rise by four percent each year. The green highlighted expenses are expected to do that, plus rise as new customers connect and use more water. Also, principal and interest expenses are related to capital improvements, so those are handled in Table 5. The gold highlighted item has the same name as an expense in the CIP, but this cost is quite minor compared to the CIP costs, so I left this one in the expense table.

**Table 5 - Capital Improvement Program (CIP)**  
**Willard, MO, Water Rates Model 2024-3**

This table depicts capital improvements and their funding costs reflect inflation	Analysis Year		Years Following the Analysis Year (for Which Improvement Projects, Costs, Funding, etc. Have Been Projected)									
	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34
<b>Planned Spending, Debt-paid Portion of Projects (CIP costs to be funded with loans are shown in this section.)</b>												
City Well Located Main City	\$0	\$0	\$0	\$0	\$1,311,272	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Storage Tower	\$0	\$0	\$0	\$0	\$0	\$2,025,916	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Debt-paid Portion of Projects</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,311,272</b>	<b>\$2,025,916</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Planned Spending, Grant-paid Portion of Projects (CIP costs to be grant-funded are shown here.)</b>												
<b>Total Grant-paid Portion of Projects</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Planned Spending, Cash-paid Portion of Projects (CIP costs to be funded from reserves are shown here.)</b>												
Capital Assets (See City's Capital Improvements Plan for Details)	\$0	\$353,500	\$499,293	\$460,431	\$310,334	\$455,831	\$294,456	\$254,333	\$409,548	\$425,635	\$242,688	\$415,270
<b>Total Cash-paid Portion of Projects</b>	<b>\$0</b>	<b>\$353,500</b>	<b>\$499,293</b>	<b>\$460,431</b>	<b>\$310,334</b>	<b>\$455,831</b>	<b>\$294,456</b>	<b>\$254,333</b>	<b>\$409,548</b>	<b>\$425,635</b>	<b>\$242,688</b>	<b>\$415,270</b>
<b>Total CIP Costs</b>	<b>\$0</b>	<b>\$353,500</b>	<b>\$499,293</b>	<b>\$460,431</b>	<b>\$1,621,607</b>	<b>\$2,481,747</b>	<b>\$294,456</b>	<b>\$254,333</b>	<b>\$409,548</b>	<b>\$425,635</b>	<b>\$242,688</b>	<b>\$415,270</b>
<b>Debt Repayment</b>												
<b>Existing Debt Payments (Following is debt that was initiated during the test year or earlier.)</b>												
Water/Sewer 2014 and 2018 COPs, Water Portion	\$98,791	\$101,028	\$100,644	\$100,178	\$99,631	\$96,544	\$0	\$0	\$0	\$0	\$0	\$0
<b>New Debt Payments (Following are payments for projects to be paid with new debt. It is assumed these will be loan/lease-financed for a term of 10 years at a 5.0% interest rate.)</b>												
COP for Well						\$169,816	\$169,816	\$169,816	\$169,816	\$169,816	\$169,816	\$169,816
COP for Tower						\$262,365	\$262,365	\$262,365	\$262,365	\$262,365	\$262,365	\$262,365
<b>Total Debt Payments</b>	<b>\$98,791</b>	<b>\$101,028</b>	<b>\$100,644</b>	<b>\$100,178</b>	<b>\$99,631</b>	<b>\$266,360</b>	<b>\$432,181</b>	<b>\$432,181</b>	<b>\$432,181</b>	<b>\$432,181</b>	<b>\$432,181</b>	<b>\$432,181</b>
<b>Total CIP-related Payouts</b>	<b>\$98,791</b>	<b>\$454,528</b>	<b>\$599,936</b>	<b>\$560,609</b>	<b>\$1,721,238</b>	<b>\$2,748,106</b>	<b>\$726,637</b>	<b>\$686,514</b>	<b>\$841,729</b>	<b>\$857,816</b>	<b>\$674,869</b>	<b>\$847,451</b>
<i>(This is the total cash required for this CIP and debt payment schedule. These amounts must come from utility income, reserves or outside sources, as shown in the next section.)</i>												
<b>CIP Fund Sources (Following are the sources and amounts of funds expected to pay for the above CIP schedule.)</b>												
<b>Cash Reserves (Internal Funds)</b>												
Debt and CIP Reserves Starting Balance	\$0	\$861,750	\$439,889	\$429,640	\$496,386	\$732,850	\$730,601	\$644,836	\$766,271	\$772,508	\$809,077	\$1,056,440
Working Capital Transferred in	\$960,541	\$15,432	\$580,889	\$618,762	\$636,502	\$705,284	\$626,260	\$795,053	\$832,640	\$878,935	\$906,051	\$986,595
Debt and CIP Reserves Interest Earned (or Paid)	\$0	\$17,235	\$8,798	\$8,593	\$9,928	\$14,657	\$14,612	\$12,897	\$15,325	\$15,450	\$16,182	\$21,129
<b>Total Available Internal Funds</b>	<b>\$960,541</b>	<b>\$894,418</b>	<b>\$1,029,576</b>	<b>\$1,056,995</b>	<b>\$1,142,816</b>	<b>\$1,452,791</b>	<b>\$1,371,473</b>	<b>\$1,452,785</b>	<b>\$1,614,237</b>	<b>\$1,666,893</b>	<b>\$1,731,309</b>	<b>\$2,064,163</b>
<b>Grant and Loan Proceeds (External Funds)</b>												
Grants Assumed in Second Sub-section Above	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COP for Well					\$1,311,272	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COP for Tower						\$2,025,916	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Available External Funds</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,311,272</b>	<b>\$2,025,916</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Available Funds</b>	<b>\$960,541</b>	<b>\$894,418</b>	<b>\$1,029,576</b>	<b>\$1,056,995</b>	<b>\$2,454,088</b>	<b>\$3,478,707</b>	<b>\$1,371,473</b>	<b>\$1,452,785</b>	<b>\$1,614,237</b>	<b>\$1,666,893</b>	<b>\$1,731,309</b>	<b>\$2,064,163</b>
<b>Outcomes (This CIP spending and funding plan will result in the following cash needs and ending balances each year.)</b>												
<b>Total Available Funds</b>	<b>\$960,541</b>	<b>\$894,418</b>	<b>\$1,029,576</b>	<b>\$1,056,995</b>	<b>\$2,454,088</b>	<b>\$3,478,707</b>	<b>\$1,371,473</b>	<b>\$1,452,785</b>	<b>\$1,614,237</b>	<b>\$1,666,893</b>	<b>\$1,731,309</b>	<b>\$2,064,163</b>
<b>Total CIP-related Payouts</b>	<b>\$98,791</b>	<b>\$454,528</b>	<b>\$599,936</b>	<b>\$560,609</b>	<b>\$1,721,238</b>	<b>\$2,748,106</b>	<b>\$726,637</b>	<b>\$686,514</b>	<b>\$841,729</b>	<b>\$857,816</b>	<b>\$674,869</b>	<b>\$847,451</b>
<b>Debt and CIP Reserves Ending Balances</b>	<b>\$861,750</b>	<b>\$439,889</b>	<b>\$429,640</b>	<b>\$496,386</b>	<b>\$732,850</b>	<b>\$730,601</b>	<b>\$644,836</b>	<b>\$766,271</b>	<b>\$772,508</b>	<b>\$809,077</b>	<b>\$1,056,440</b>	<b>\$1,216,712</b>

Notes: The City has a capital improvements plan, from which the above project data came. I assumed the expensive projects not related to equipment repair and replacement will be funded 75% by loans, and 25% by grants. Other projects are generally not eligible for grants and loans, so those are to be funded with utility reserves and incomes.

Table 5B: City's Water Capital Improvements (with edits by GettingGreatRates.com to make transfer to the models easier and clearer)

<u>Year</u>	<u>Description</u>	<u>Capital Assets</u>	<u>Annual Sum</u>	<u>Bigger Assets</u>	<u>Annual Sum</u>
		<u>Equip</u>	<u>Cash Paid</u>		<u>COP Paid</u>
2024	Water Imp.-Pipe Replacement	5,000	353,500		-
	Water Meters	60,000			
	5 Yr Water Loss Project	20,000			
	Meadows Water Tower Exterior	115,000			
	Langston water line	12,000			
	Mark Water Line/valve replace	25,000			
	Pole Barn	10,000			
	Public Works Building	75,000			
	Vehicle Lease Equipment	7,000			
	Badger Box	7,500			
	Missions Update	14,000			
Pipe Cutter Saw	3,000				
2025	Water Imp.-Pipe Replacement	100,000	484,750		-
	Water Meters	60,000			
	Misc - TBD	1,000			
	5 Yr Water Loss Project	20,000			
	Meadows Water Tower Interior	135,000			
	Water Towers Restoration	150,000			
	Equipment	5,000			
	Jack Hammer Attachment (33 water-33% s	3,750			
	Generator	10,000			

<u>Year</u>	<u>Description</u>	<u>Capital Assets</u>	<u>Annual Sum</u>		<u>Annual Sum</u>
		<u>Equip</u>	<u>Cash Paid</u>	<u>Bigger Assets</u>	<u>COP Paid</u>
2026	Water Imp.-Pipe Replacement	100,000	434,000		-
	Water Meters	60,000			
	Misc - TBD	1,000			
	School Water Tower Interior	135,000			
	Meadows Stand Storage	75,000			
	Meadows Well Pump	40,000			
	Computer (2) Equipment	3,000 20,000			
2027	Water Imp.-Pipe Replacement	100,000	284,000		1,200,000
	Water Meters	45,000			
	Misc - TBD	1,000			
	School Water Tower Exterior	115,000			
	City Well Located Main City			1,200,000	
	Computer (2) Equipment	3,000 20,000			
2028	Water Imp.-Pipe Replacement	100,000	405,000		1,800,000
	Water Meters	45,000			
	Booster Water Pump	30,000			
	Small Water Tower Interior	135,000			
	Meadows Stand Storage	75,000			
	Water Storage Tower			1,800,000	
	Equipment	20,000			

<u>Year</u>	<u>Description</u>	<u>Capital Assets</u>	<u>Annual Sum</u>	<u>Bigger Assets</u>	<u>Annual Sum</u>
		<u>Equip</u>	<u>Cash Paid</u>		<u>COP Paid</u>
2029	Water Imp.-Pipe Replacement	100,000	254,000		-
	Water Meters	45,000			
	Equipment	20,000			
	Backhoe (50% water-50%sewer)	75,000			
	Missions Update	14,000			
2030	Water Imp.-Pipe Replacement	15,000	213,000		-
	Water Meters	45,000			
	Booster Water Pump	30,000			
	Meadows Stand Storage	100,000			
	Computer (2)	3,000			
	Equipment	20,000			
2031	Water Imp.-Pipe Replacement	150,000	333,000		-
	Meadows Water Tower Exterior	115,000			
	Water Meters	45,000			
	Computer (2)	3,000			
	Equipment	20,000			
2032	Water Imp.-Pipe Replacement	1,000	336,000		-
	Water Meters	50,000			
	Meadows Water Tower Interior	135,000			
	Booster Water Pump	30,000			
	Meadows Stand Storage	100,000			
	Equipment	20,000			

<u>Year</u>	<u>Description</u>	<u>Capital Assets</u>	<u>Annual Sum</u>	<u>Bigger Assets</u>	<u>Annual Sum</u>
		<u>Equip</u>	<u>Cash Paid</u>		<u>COP Paid</u>
2033	Water Imp.-Pipe Replacement	1,000	186,000		-
	Meadows Water Tower Exterior	115,000			
	Water Meters	50,000			
	Equipment	20,000			
2034	Water Imp.-Pipe Replacement	1,000	309,000		-
	Water Meters	50,000			
	School Water Tower Interior	135,000			
	Meadows Stand Storage	100,000			
	Computer (2)	3,000			
	Equipment	20,000			
			3,592,250		3,000,000

**Table 8 - Average Cost Classification**  
**Willard, MO, Water Rates Model 2024-3**

This table distributes costs from a representative year (the "average rate structure basis year") to fixed and variable categories (see Definitions) in order to calculate the "cost of service" rate structure for that year.

The average rate structure basis year runs from: 1/1/2028 through 12/31/2028

Cost Items During the Basis Year	Cost During Basis Year	Fixed Cost %	Variable Cost %	Fixed Cost	Variable Cost
CHEMICALS-WATER	\$11,668	0.0%	100.0%	\$0	\$11,668
SUPPLIES-WATER	\$61,754	50.0%	50.0%	\$30,877	\$30,877
LABORATORY FEES-WATER	\$2,430	100.0%	0.0%	\$2,430	\$0
LABORATORY SUPPLIES-WATER	\$6,367	100.0%	0.0%	\$6,367	\$0
PERMIT FEES-WATER	\$0	100.0%	0.0%	\$0	\$0
BUILDING MAINTENANCE-WATER	\$108	100.0%	0.0%	\$108	\$0
CUSTODIAL SUPPLIES-WATER	\$210	100.0%	0.0%	\$210	\$0
MISCELLANEOUS EXPENSE-WATER	\$0	100.0%	0.0%	\$0	\$0
OFFICE SUPPLIES-WATER	\$5,605	100.0%	0.0%	\$5,605	\$0
POSTAGE-WATER	\$14,455	100.0%	0.0%	\$14,455	\$0
REPAIRS AND MAINTENANCE-WATER	\$100,382	50.0%	50.0%	\$50,191	\$50,191
SUPPLIES SMALL EQUIPMENT-WATER	\$13,481	50.0%	50.0%	\$6,741	\$6,741
METER REPLACEMENT-WATER	\$16,815	0.0%	100.0%	\$0	\$16,815
ADVERTISING-WATER	\$128	100.0%	0.0%	\$128	\$0
AUDIT EXPENSE-WATER	\$8,371	100.0%	0.0%	\$8,371	\$0
BANK/CREDIT CARD FEES-WATER	\$29,100	39.1%	60.9%	\$11,378	\$17,722
CONTRACT LABOR-WATER	\$3,098	25.0%	75.0%	\$774	\$2,323
DUES AND SUBSCRIPTIONS-WATER	\$2,630	25.0%	75.0%	\$657	\$1,972
EQUIPMENT RENTAL-WATER	\$7,172	50.0%	50.0%	\$3,586	\$3,586
INSURANCE-WATER	\$39,207	100.0%	0.0%	\$39,207	\$0
LEGAL-WATER	\$124	100.0%	0.0%	\$124	\$0
PROFESSIONAL-WATER	\$26,719	25.0%	75.0%	\$6,680	\$20,039
SAFETY PROGRAM-WATER	\$707	100.0%	0.0%	\$707	\$0
TRAVEL EXPENSE-WATER	\$500	25.0%	75.0%	\$125	\$375
TRAINING & EDUCATION-WATER	\$3,369	25.0%	75.0%	\$842	\$2,527
RENT-WATER	\$1,521	50.0%	50.0%	\$760	\$760
EQUIPMENT/SOFTWARE CONTRACTS-WATER	\$23,533	100.0%	0.0%	\$23,533	\$0
TELEPHONE WATER	\$2,697	100.0%	0.0%	\$2,697	\$0
INTERNET-WATER	\$7,113	100.0%	0.0%	\$7,113	\$0
UTILITIES ELECTRIC-WATER	\$140,824	0.0%	100.0%	\$0	\$140,824
UTILITIES GAS-WATER	\$4,609	100.0%	0.0%	\$4,609	\$0
UTILITIES OTHER-WATER	\$2,681	100.0%	0.0%	\$2,681	\$0
VEHICLE EXPENSE FUEL-WATER	\$13,993	50.0%	50.0%	\$6,997	\$6,997
EQUIPMENT FUEL-WATER	\$2,022	50.0%	50.0%	\$1,011	\$1,011
VEHICLE REPAIR & MAINT-WATER	\$8,931	50.0%	50.0%	\$4,466	\$4,466
EQUIPMENT REPAIR & MAINT-WATER	\$4,629	50.0%	50.0%	\$2,315	\$2,315
VEHICLE LEASE-WATER	\$26,122	50.0%	50.0%	\$13,061	\$13,061
EQUIPMENT LEASE	\$3,868	50.0%	50.0%	\$1,934	\$1,934



**Table 8 - Average Cost Classification**

Cost Items During the Basis Year	Cost During Basis Year	Fixed Cost %	Variable Cost %	Fixed Cost	Variable Cost
SALARIES-WATER	\$540,951	25.0%	75.0%	\$135,238	\$405,713
SALARIES OVERTIME-WATER	\$14,124	25.0%	75.0%	\$3,531	\$10,593
PAYROLL TAXES-WATER	\$41,545	25.0%	75.0%	\$10,386	\$31,159
RETIREMENT-WATER	\$23,533	25.0%	75.0%	\$5,883	\$17,650
PENSION EXPENSE-WATER	\$0	25.0%	75.0%	\$0	\$0
UNIFORMS-WATER	\$765	25.0%	75.0%	\$191	\$573
GROUP INSURANCE-WATER	\$107,619	25.0%	75.0%	\$26,905	\$80,714
CAPITAL ASSET EXP-WATER	\$0	50.0%	50.0%	\$0	\$0
CAPITAL ASSET EXP EQUIPMENT-WATER	\$10,000	50.0%	50.0%	\$5,000	\$5,000
PRINCIPAL EXPENSE-WATER	\$0	50.0%	50.0%	\$0	\$0
INTEREST EXPENSE-WATER	\$0	50.0%	50.0%	\$0	\$0
FISCAL AGENT FEES-WATER	\$1,825	50.0%	50.0%	\$912	\$912
BAD DEBT EXPENSE-WATER	\$0	39.1%	60.9%	\$0	\$0
TRANSFER TO GCG-WATER	\$0	25.0%	75.0%	\$0	\$0
Annual Payment to R&R Reserve (Table 7)	\$0	25.0%	75.0%	\$0	\$0
User Charge Analysis Services	\$0	39.1%	60.9%	\$0	\$0
Total CIP-related Payouts, Less Capacity Charges From Tables 14 & 16 (This value can be negative)	\$688,334	50.0%	50.0%	\$344,167	\$344,167
Grand Total Costs, Weighted Avg Percentages	\$2,025,634	39.1%	60.9%	\$792,950	\$1,232,684
<b>Bases for Cost to Serve Rate Structure</b>		100%		\$2,025,634	
Number Customers During Basis Year	3,919				
Billed Volume, in Gallons, During Basis Year	235,100,202				
Average Fixed Cost per User per Month During Basis Year	\$16.86				
Average Variable Cost to Produce per 1,000 Gallons During Basis Year	\$5.24				
Gallons per Billing Cycle Used by Average Residential Customer	4,230				

**Table 9 - Marginal Cost Classification**  
**Willard, MO, Water Rates Model 2024-3**

The utility incurs "marginal" costs. These costs are unavoidable. Thus, the utility must collect minimal fees from various customers to "break even" on a marginal cost basis. Costs vary by customer type and volume used.

Below, it is assumed that marginal variable costs are being calculated for: Unaccounted-for Water

(Fixed costs are irrelevant in this case)

The marginal rate structure basis year runs from: 1/1/2028 through 12/31/2028

Cost Items During the Basis Year	Fixed Cost	Variable Cost	Marginal Fixed Cost %	Marginal Variable Cost %	Marginal Fixed Cost	Marginal Variable Cost
CHEMICALS-WATER	\$0	\$11,668	100%	100%	\$0	\$11,668
SUPPLIES-WATER	\$30,877	\$30,877	10%	10%	\$3,088	\$3,088
LABORATORY FEES-WATER	\$2,430	\$0	100%	100%	\$2,430	\$0
LABORATORY SUPPLIES-WATER	\$6,367	\$0	100%	100%	\$6,367	\$0
PERMIT FEES-WATER	\$0	\$0	10%	10%	\$0	\$0
BUILDING MAINTENANCE-WATER	\$108	\$0	0%	0%	\$0	\$0
CUSTODIAL SUPPLIES-WATER	\$210	\$0	0%	0%	\$0	\$0
MISCELLANEOUS EXPENSE-WATER	\$0	\$0	100%	100%	\$0	\$0
OFFICE SUPPLIES-WATER	\$5,605	\$0	100%	100%	\$5,605	\$0
POSTAGE-WATER	\$14,455	\$0	100%	100%	\$14,455	\$0
REPAIRS AND MAINTENANCE-WATER	\$50,191	\$50,191	50%	50%	\$25,095	\$25,095
SUPPLIES SMALL EQUIPMENT-WATER	\$6,741	\$6,741	10%	10%	\$674	\$674
METER REPLACEMENT-WATER	\$0	\$16,815	0%	0%	\$0	\$0
ADVERTISING-WATER	\$128	\$0	0%	0%	\$0	\$0
AUDIT EXPENSE-WATER	\$8,371	\$0	0%	0%	\$0	\$0
BANK/CREDIT CARD FEES-WATER	\$11,378	\$17,722	0%	0%	\$0	\$0
CONTRACT LABOR--WATER	\$774	\$2,323	50%	50%	\$387	\$1,162
DUES AND SUBSCRIPTIONS-WATER	\$657	\$1,972	10%	10%	\$66	\$197
EQUIPMENT RENTAL-WATER	\$3,586	\$3,586	10%	10%	\$359	\$359
INSURANCE-WATER	\$39,207	\$0	10%	10%	\$3,921	\$0
LEGAL-WATER	\$124	\$0	10%	10%	\$12	\$0
PROFESSIONAL-WATER	\$6,680	\$20,039	50%	50%	\$3,340	\$10,020
SAFETY PROGRAM-WATER	\$707	\$0	50%	50%	\$353	\$0
TRAVEL EXPENSE-WATER	\$125	\$375	10%	10%	\$13	\$38
TRAINING & EDUCATION-WATER	\$842	\$2,527	10%	10%	\$84	\$253
RENT-WATER	\$760	\$760	10%	10%	\$76	\$76
EQUIPMENT/SOFTWARE CONTRACTS-WATER	\$23,533	\$0	10%	10%	\$2,353	\$0
TELEPHONE WATER	\$2,697	\$0	10%	10%	\$270	\$0
INTERNET-WATER	\$7,113	\$0	10%	10%	\$711	\$0
UTILITIES ELECTRIC-WATER	\$0	\$140,824	100%	100%	\$0	\$140,824
UTILITIES GAS-WATER	\$4,609	\$0	10%	10%	\$461	\$0
UTILITIES OTHER-WATER	\$2,681	\$0	10%	10%	\$268	\$0

**Table 9 - Marginal Cost Classification**

Cost Items During the Basis Year	Fixed Cost	Variable Cost	Marginal Fixed Cost %	Marginal Variable Cost %	Marginal Fixed Cost	Marginal Variable Cost
VEHICLE EXPENSE FUEL-WATER	\$6,997	\$6,997	10%	10%	\$700	\$700
EQUIPMENT FUEL-WATER	\$1,011	\$1,011	10%	10%	\$101	\$101
VEHICLE REPAIR & MAINT-WATER	\$4,466	\$4,466	10%	10%	\$447	\$447
EQUIPMENT REPAIR & MAINT-WATER	\$2,315	\$2,315	10%	10%	\$231	\$231
VEHICLE LEASE-WATER	\$13,061	\$13,061	10%	10%	\$1,306	\$1,306
EQUIPMENT LEASE	\$1,934	\$1,934	10%	10%	\$193	\$193
SALARIES-WATER	\$135,238	\$405,713	10%	10%	\$13,524	\$40,571
SALARIES OVERTIME-WATER	\$3,531	\$10,593	10%	10%	\$353	\$1,059
PAYROLL TAXES-WATER	\$10,386	\$31,159	10%	10%	\$1,039	\$3,116
RETIREMENT-WATER	\$5,883	\$17,650	10%	10%	\$588	\$1,765
PENSION EXPENSE-WATER	\$0	\$0	10%	10%	\$0	\$0
UNIFORMS-WATER	\$191	\$573	10%	10%	\$19	\$57
GROUP INSURANCE-WATER	\$26,905	\$80,714	10%	10%	\$2,690	\$8,071
CAPITAL ASSET EXP-WATER	\$0	\$0	50%	50%	\$0	\$0
CAPITAL ASSET EXP EQUIPMENT-WATER	\$5,000	\$5,000	50%	50%	\$2,500	\$2,500
PRINCIPAL EXPENSE-WATER	\$0	\$0	50%	50%	\$0	\$0
INTEREST EXPENSE-WATER	\$0	\$0	50%	50%	\$0	\$0
FISCAL AGENT FEES-WATER	\$912	\$912	50%	50%	\$456	\$456
BAD DEBT EXPENSE-WATER	\$0	\$0	100%	100%	\$0	\$0
TRANSFER TO GCG-WATER	\$0	\$0	100%	100%	\$0	\$0
User Charge Analysis Services	\$0	\$0	10%	10%	\$0	\$0
Total CIP-related Payouts, Less Capacity Charges From Tables 14 & 16 (This value can be negative)	\$344,167	\$344,167	50%	50%	\$172,083	\$172,083
Grand Total All Costs	\$792,950	\$1,232,684			\$266,619	\$426,110
		\$2,025,634				\$692,729
<b>Marginal Fixed and Variable Cost Bases</b> (For the Customer Type(s) Listed Above)					Monthly Marginal Fixed Cost per Customer	Marginal Variable Cost per 1,000 Gallons
					\$5.67	
Marginal Fixed Cost as a Percent of Total Fixed Cost:					34%	\$1.81
Marginal Variable Cost as a Percent of Total Variable Cost:						35%

**Table 10 - Initial Rate Adjustments and Resulting Revenues  
Willard, MO, Water Rates Model 2024-3**

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Res, Irr, Water Only	0	999	\$23,548	\$12.57	0.000	\$3.91	\$341	\$23,890
	1,000	1,999	\$106,960	\$12.57	0.000	\$3.91	\$363	\$107,323
	2,000	2,999	\$113,522	\$12.57	0.000	\$3.91	\$359	\$113,881
	3,000	3,999	\$102,546	\$12.57	0.000	\$3.91	\$311	\$102,858
	4,000	4,999	\$80,409	\$12.57	0.000	\$3.91	\$239	\$80,648
	5,000	5,999	\$57,872	\$12.57	0.000	\$3.91	\$171	\$58,043
	6,000	6,999	\$38,422	\$12.57	0.000	\$3.91	\$114	\$38,536
	7,000	7,999	\$26,388	\$12.57	0.000	\$3.91	\$79	\$26,467
	8,000	8,999	\$16,823	\$12.57	0.000	\$3.91	\$52	\$16,875
	9,000	9,999	\$12,998	\$12.57	0.000	\$3.91	\$40	\$13,037
	10,000	19,999	\$37,001	\$12.57	0.000	\$3.91	\$119	\$37,120
	20,000	29,999	\$7,465	\$12.57	0.000	\$3.91	\$26	\$7,491
	30,000	39,999	\$2,720	\$12.57	0.000	\$3.91	\$10	\$2,730
	40,000	49,999	\$1,491	\$12.57	0.000	\$3.91	\$6	\$1,497
	50,000	59,999	\$795	\$12.57	0.000	\$3.91	\$3	\$798
	60,000	69,999	\$431	\$12.57	0.000	\$3.91	\$2	\$433
	70,000	79,999	\$322	\$12.57	0.000	\$3.91	\$1	\$323
	80,000	89,999	\$214	\$12.57	0.000	\$3.91	\$1	\$215
	90,000	99,999	\$182	\$12.57	0.000	\$3.91	\$1	\$182
	100,000	199,999	\$609	\$12.57	0.000	\$3.91	\$2	\$612
200,000	299,999	\$151	\$12.57	0.000	\$3.91	\$1	\$152	
300,000	399,999	\$0	\$12.57	0.000	\$3.91	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Commercial, Irr, Water Only	0	999	\$9,766	\$12.57	0.000	\$3.91	\$39	\$9,805
	1,000	1,999	\$7,674	\$12.57	0.000	\$3.91	\$23	\$7,697
	2,000	2,999	\$4,399	\$12.57	0.000	\$3.91	\$15	\$4,414
	3,000	3,999	\$3,407	\$12.57	0.000	\$3.91	\$12	\$3,419
	4,000	4,999	\$2,707	\$12.57	0.000	\$3.91	\$10	\$2,716
	5,000	5,999	\$2,511	\$12.57	0.000	\$3.91	\$9	\$2,519
	6,000	6,999	\$2,038	\$12.57	0.000	\$3.91	\$8	\$2,046
	7,000	7,999	\$1,816	\$12.57	0.000	\$3.91	\$7	\$1,823
	8,000	8,999	\$1,869	\$12.57	0.000	\$3.91	\$7	\$1,876
	9,000	9,999	\$1,681	\$12.57	0.000	\$3.91	\$6	\$1,687
	10,000	19,999	\$12,527	\$12.57	0.000	\$3.91	\$49	\$12,575
	20,000	29,999	\$9,087	\$12.57	0.000	\$3.91	\$35	\$9,122
	30,000	39,999	\$6,768	\$12.57	0.000	\$3.91	\$26	\$6,795
	40,000	49,999	\$5,247	\$12.57	0.000	\$3.91	\$20	\$5,267
	50,000	59,999	\$3,510	\$12.57	0.000	\$3.91	\$14	\$3,524
	60,000	69,999	\$2,921	\$12.57	0.000	\$3.91	\$11	\$2,933
	70,000	79,999	\$2,087	\$12.57	0.000	\$3.91	\$8	\$2,095
	80,000	89,999	\$1,694	\$12.57	0.000	\$3.91	\$7	\$1,701
	90,000	99,999	\$1,521	\$12.57	0.000	\$3.91	\$6	\$1,527
	100,000	199,999	\$7,976	\$12.57	0.000	\$3.91	\$32	\$8,008
200,000	299,999	\$3,281	\$12.57	0.000	\$3.91	\$13	\$3,294	
300,000	399,999	\$1,396	\$12.57	0.000	\$3.91	\$6	\$1,402	
400,000	499,999	\$510	\$12.57	0.000	\$3.91	\$2	\$512	
500,000	599,999	\$110	\$12.57	0.000	\$3.91	\$0	\$110	
600,000	699,999	\$0	\$12.57	0.000	\$3.91	\$0	\$0	
Rural Residential, Irr, Water Only	0	999	\$10,615	\$18.86	0.000	\$5.87	\$250	\$10,866
	1,000	1,999	\$53,768	\$18.86	0.000	\$5.87	\$260	\$54,029
	2,000	2,999	\$60,558	\$18.86	0.000	\$5.87	\$270	\$60,828
	3,000	3,999	\$56,461	\$18.86	0.000	\$5.87	\$241	\$56,702
	4,000	4,999	\$46,031	\$18.86	0.000	\$5.87	\$192	\$46,223
	5,000	5,999	\$33,440	\$18.86	0.000	\$5.87	\$140	\$33,581
	6,000	6,999	\$24,735	\$18.86	0.000	\$5.87	\$104	\$24,838
	7,000	7,999	\$17,057	\$18.86	0.000	\$5.87	\$73	\$17,130
	8,000	8,999	\$12,804	\$18.86	0.000	\$5.87	\$55	\$12,860
	9,000	9,999	\$9,461	\$18.86	0.000	\$5.87	\$42	\$9,502
	10,000	19,999	\$35,981	\$18.86	0.000	\$5.87	\$168	\$36,149
	20,000	29,999	\$11,223	\$18.86	0.000	\$5.87	\$55	\$11,278
	30,000	39,999	\$4,622	\$18.86	0.000	\$5.87	\$23	\$4,645
	40,000	49,999	\$2,221	\$18.86	0.000	\$5.87	\$11	\$2,233
	50,000	59,999	\$1,329	\$18.86	0.000	\$5.87	\$7	\$1,336
	60,000	69,999	\$797	\$18.86	0.000	\$5.87	\$4	\$801
	70,000	79,999	\$664	\$18.86	0.000	\$5.87	\$4	\$667
80,000	89,999	\$434	\$18.86	0.000	\$5.87	\$2	\$436	
90,000	99,999	\$323	\$18.86	0.000	\$5.87	\$2	\$325	
100,000	199,999	\$1,201	\$18.86	0.000	\$5.87	\$7	\$1,207	
200,000	299,999	\$268	\$18.86	0.000	\$5.87	\$1	\$270	
300,000	399,999	\$0	\$18.86	0.000	\$5.87	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Commercial, Irr, Water Only	0	999	\$513	\$18.86	0.000	\$5.87	\$5	\$517
	1,000	1,999	\$997	\$18.86	0.000	\$5.87	\$4	\$1,001
	2,000	2,999	\$847	\$18.86	0.000	\$5.87	\$4	\$850
	3,000	3,999	\$546	\$18.86	0.000	\$5.87	\$2	\$548
	4,000	4,999	\$266	\$18.86	0.000	\$5.87	\$1	\$268
	5,000	5,999	\$307	\$18.86	0.000	\$5.87	\$1	\$308
	6,000	6,999	\$275	\$18.86	0.000	\$5.87	\$1	\$276
	7,000	7,999	\$270	\$18.86	0.000	\$5.87	\$1	\$271
	8,000	8,999	\$323	\$18.86	0.000	\$5.87	\$1	\$325
	9,000	9,999	\$225	\$18.86	0.000	\$5.87	\$1	\$226
	10,000	19,999	\$880	\$18.86	0.000	\$5.87	\$4	\$884
	20,000	29,999	\$202	\$18.86	0.000	\$5.87	\$1	\$203
	30,000	39,999	\$85	\$18.86	0.000	\$5.87	\$0	\$85
	40,000	49,999	\$64	\$18.86	0.000	\$5.87	\$0	\$64
	50,000	59,999	\$28	\$18.86	0.000	\$5.87	\$0	\$28
	60,000	69,999	\$28	\$18.86	0.000	\$5.87	\$0	\$28
	70,000	79,999	\$28	\$18.86	0.000	\$5.87	\$0	\$28
80,000	89,999	\$28	\$18.86	0.000	\$5.87	\$0	\$28	
90,000	99,999	\$21	\$18.86	0.000	\$5.87	\$0	\$21	
100,000	199,999	\$0	\$18.86	0.000	\$5.87	\$0	\$0	
No Charge ("Zero")	0	999	\$0	\$0.00	0.000	\$0.00	\$0	\$0
	800,000	800,001	\$0	\$0.00	0.000	\$0.00	\$0	\$0
Total Rate Revenue at Current Rates			\$1,117,298	Total Rate Revenue at Modeled Rates			\$4,548	
Total Blended Rate Revenues for the Year								\$1,121,846

**Table 17 - Financial Capacity Indicators and Reserves  
Willard, MO, Water Rates Model 2024-3**

This table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the test year and the next 10 years

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$26.72	\$32.12	\$33.41	\$34.74	\$36.13	\$37.58	\$39.08	\$40.65	\$42.27	\$43.96	\$45.72	\$47.55	
AMHI Within Service Area	\$79,951	\$63,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
Affordability Index: Current Rates First Column, Modeled Rates After That	0.40%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.45%	0.45%	0.45%	0.45%	
National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area ( gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.													
Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$18.14	\$20.39	\$21.21	\$22.06	\$22.94	\$23.86	\$24.81	\$25.80	\$26.84	\$27.91	\$29.03	\$30.19	
income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,829	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
Affordability for Low-income, Low-volume: Current Rates First Column, Modeled Rates After That	0.54%	0.60%	0.61%	0.62%	0.63%	0.64%	0.66%	0.67%	0.68%	0.69%	0.71%	0.72%	
The additional indicator of affordability assumes a residential customer with income at one-half the median household income above, that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow payers" and "no payers" compared to others, so this indicator goes to the "business sense" of the rates modeled here. In other words, raise this customer's bill too much and they are more likely to pay late or not pay													
Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That	1.00	1.00	1.50	1.52	1.51	1.54	1.47	1.54	1.57	1.58	1.57	1.59	
Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red". Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.													
Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That	0.00	0.00	0.00	0.25	0.18	0.21	0.00	0.14	0.23	0.28	0.28	0.37	
Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N.A." above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below), it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.													
Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That	15.78	14.46	10.18	10.22	11.19	5.19	3.24	3.19	3.47	3.54	3.69	4.36	
This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,556,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,556,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,556,518	\$599,112	\$584,345	\$576,384	\$581,708	\$593,194	\$591,951	\$630,078	\$610,862	\$611,131	\$616,039	\$628,031	\$649,058
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	\$861,750	\$439,889	\$429,640	\$496,386	\$732,850	\$730,601	\$644,836	\$766,271	\$772,508	\$809,077	\$1,056,440	\$1,216,712
Sum of All Reserves	\$1,556,518	\$1,460,862	\$1,024,234	\$1,023,850	\$1,114,633	\$1,382,803	\$1,399,251	\$1,378,564	\$1,499,648	\$1,528,874	\$1,595,998	\$1,882,545	\$2,070,477

**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Water Rates Model 2024-3**

The modeled rates will generate 48.6% more revenue per year than the rates at the end of the test year.

However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

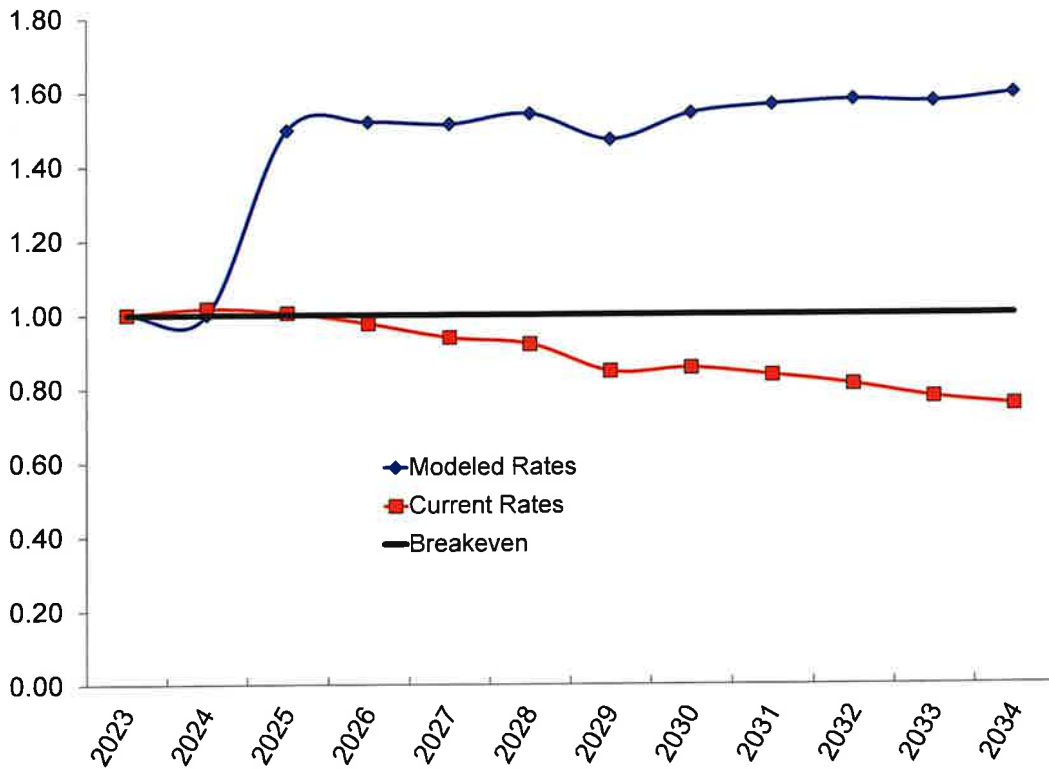
Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Res, Irr, Water Only	0	142	142	\$15.28	\$12.57	-\$2.71	-18%
	1,000	283	425	\$15.28	\$16.48	\$1.20	8%
	2,000	397	822	\$18.14	\$20.39	\$2.25	12%
	3,000	408	1,230	\$21.00	\$24.30	\$3.30	16%
	4,000	338	1,567	\$23.86	\$28.21	\$4.35	18%
	5,000	248	1,816	\$26.72	\$32.12	\$5.40	20%
	6,000	162	1,977	\$29.58	\$36.03	\$6.45	22%
	7,000	110	2,087	\$32.44	\$39.94	\$7.50	23%
	8,000	64	2,152	\$35.30	\$43.85	\$8.55	24%
	9,000	51	2,202	\$38.16	\$47.76	\$9.60	25%
	10,000	121	2,323	\$41.02	\$51.67	\$10.65	26%
	20,000	16	2,339	\$69.62	\$90.77	\$21.15	30%
	30,000	5	2,344	\$98.22	\$129.87	\$31.65	32%
	40,000	2	2,346	\$126.82	\$168.97	\$42.15	33%
	50,000	1	2,347	\$155.42	\$208.07	\$52.65	34%
	60,000	0	2,348	\$184.02	\$247.17	\$63.15	34%
	70,000	0	2,348	\$212.62	\$286.27	\$73.65	35%
	80,000	0	2,348	\$241.22	\$325.37	\$84.15	35%
	90,000	0	2,348	\$269.82	\$364.47	\$94.65	35%
	100,000	1	2,349	\$298.42	\$403.57	\$105.15	35%
200,000	0	2,349	\$584.42	\$794.57	\$210.15	36%	
In-City Commercial, Irr, Water Only	0	59	59	\$15.28	\$12.57	-\$2.71	-18%
	1,000	30	89	\$15.28	\$16.48	\$1.20	8%
	2,000	13	102	\$18.14	\$20.39	\$2.25	12%
	3,000	9	111	\$21.00	\$24.30	\$3.30	16%
	4,000	6	117	\$23.86	\$28.21	\$4.35	18%
	5,000	5	122	\$26.72	\$32.12	\$5.40	20%
	6,000	3	125	\$29.58	\$36.03	\$6.45	22%
	7,000	2	127	\$32.44	\$39.94	\$7.50	23%
	8,000	3	131	\$35.30	\$43.85	\$8.55	24%
	9,000	3	133	\$38.16	\$47.76	\$9.60	25%
	10,000	11	144	\$41.02	\$51.67	\$10.65	26%
	20,000	7	152	\$69.62	\$90.77	\$21.15	30%
	30,000	5	157	\$98.22	\$129.87	\$31.65	32%
	40,000	5	162	\$126.82	\$168.97	\$42.15	33%
	50,000	2	164	\$155.42	\$208.07	\$52.65	34%
	60,000	2	167	\$184.02	\$247.17	\$63.15	34%
	70,000	1	168	\$212.62	\$286.27	\$73.65	35%
	80,000	1	169	\$241.22	\$325.37	\$84.15	35%
	90,000	1	170	\$269.82	\$364.47	\$94.65	35%
	100,000	3	172	\$298.42	\$403.57	\$105.15	35%
200,000	1	173	\$584.42	\$794.57	\$210.15	36%	
300,000	0	173	\$870.42	\$1,185.57	\$315.15	36%	



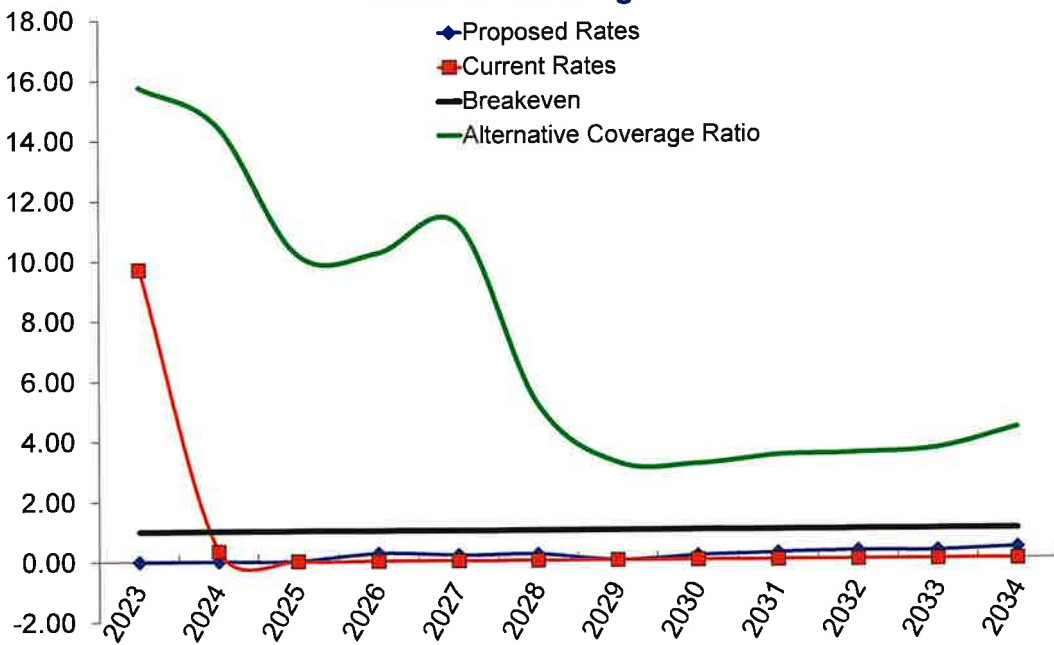
**Table 18 - Bills Before and After Rate Adjustments**

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential, Irr, Water Only	0	59	59	\$16.63	\$18.86	\$2.23	13%
	1,000	109	167	\$16.63	\$24.72	\$8.09	49%
	2,000	180	347	\$19.75	\$30.59	\$10.84	55%
	3,000	194	541	\$22.87	\$36.45	\$13.58	59%
	4,000	168	709	\$25.99	\$42.32	\$16.33	63%
	5,000	121	829	\$29.11	\$48.18	\$19.07	66%
	6,000	89	919	\$32.23	\$54.05	\$21.82	68%
	7,000	58	976	\$35.35	\$59.91	\$24.56	69%
	8,000	42	1,019	\$38.47	\$65.78	\$27.31	71%
	9,000	29	1,048	\$41.59	\$71.64	\$30.05	72%
	10,000	87	1,135	\$44.71	\$77.51	\$32.80	73%
	20,000	21	1,156	\$75.91	\$136.16	\$60.25	79%
	30,000	8	1,164	\$107.11	\$194.81	\$87.70	82%
	40,000	3	1,167	\$138.31	\$253.46	\$115.15	83%
	50,000	2	1,168	\$169.51	\$312.11	\$142.60	84%
	60,000	1	1,169	\$200.71	\$370.76	\$170.05	85%
	70,000	1	1,170	\$231.91	\$429.41	\$197.50	85%
	80,000	0	1,170	\$263.11	\$488.06	\$224.95	85%
	90,000	0	1,170	\$294.31	\$546.71	\$252.40	86%
	100,000	1	1,171	\$325.51	\$605.36	\$279.85	86%
200,000	0	1,171	\$637.51	\$1,191.86	\$554.35	87%	
Rural Commercial, Irr, Water Only	0	3	3	\$16.63	\$18.86	\$2.23	13%
	1,000	3	6	\$16.63	\$24.72	\$8.09	49%
	2,000	3	9	\$19.75	\$30.59	\$10.84	55%
	3,000	2	11	\$22.87	\$36.45	\$13.58	59%
	4,000	0	11	\$25.99	\$42.32	\$16.33	63%
	5,000	1	12	\$29.11	\$48.18	\$19.07	66%
	6,000	1	12	\$32.23	\$54.05	\$21.82	68%
	7,000	1	13	\$35.35	\$59.91	\$24.56	69%
	8,000	1	14	\$38.47	\$65.78	\$27.31	71%
	9,000	1	15	\$41.59	\$71.64	\$30.05	72%
	10,000	3	17	\$44.71	\$77.51	\$32.80	73%
	20,000	0	18	\$75.91	\$136.16	\$60.25	79%
No Charge ("Zero")	0	2	2	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	\$0.00	\$0.00	\$0.00	N.A.
30,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	
800,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	

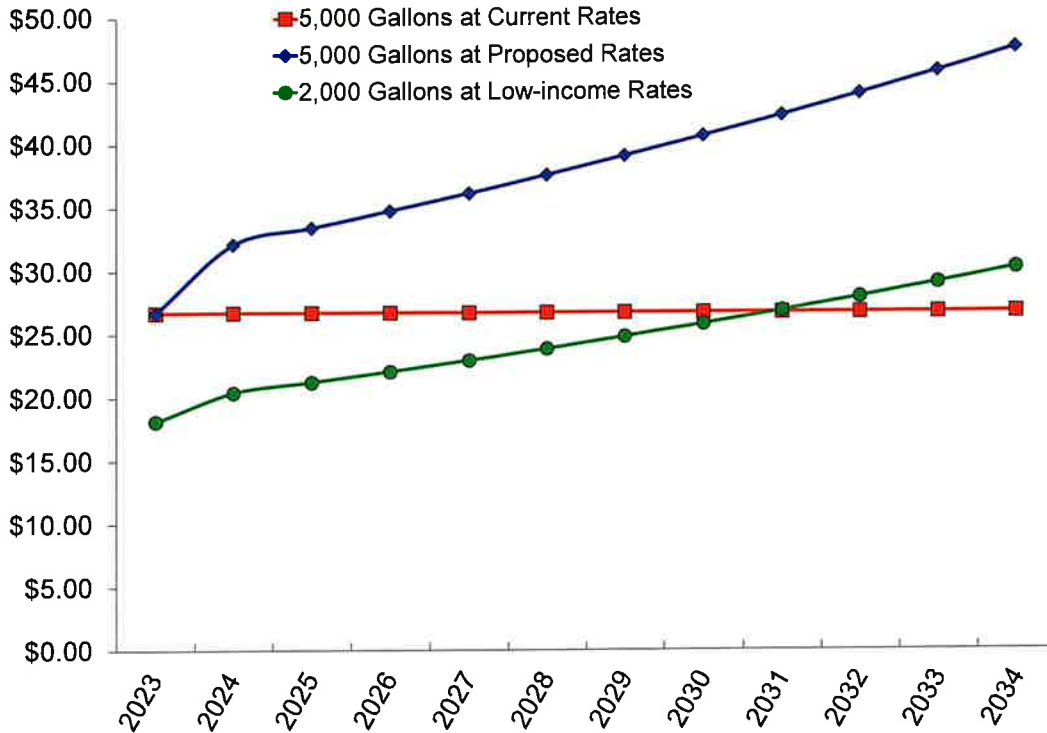
**Chart 1 - Operating Ratio**



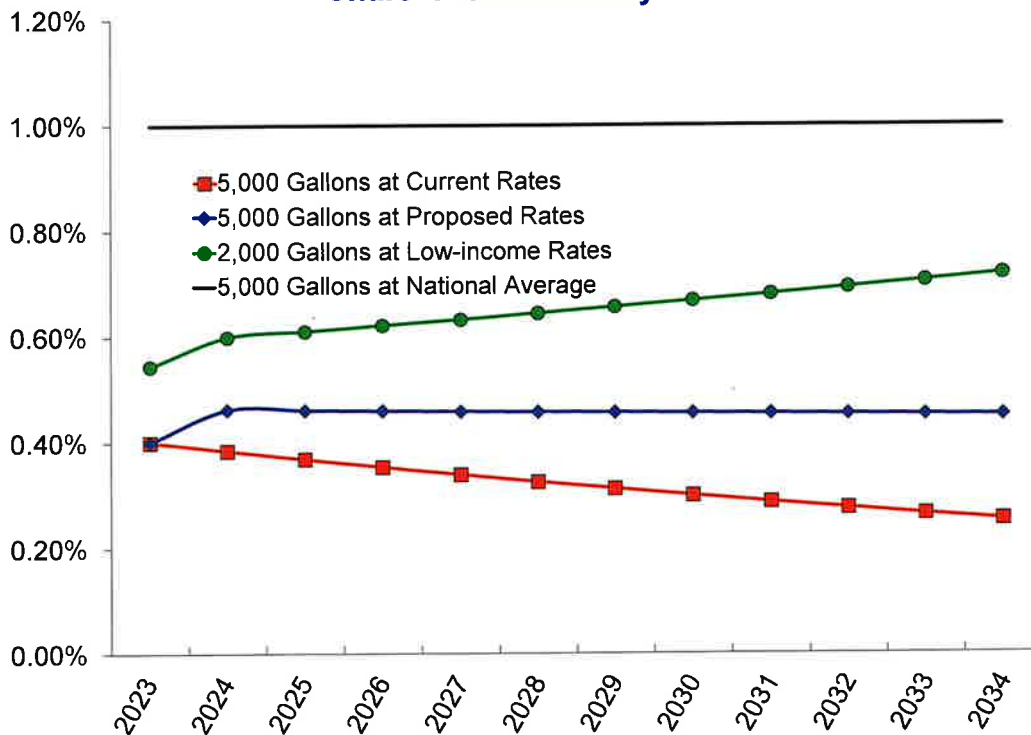
**Chart 2 - Coverage Ratio**



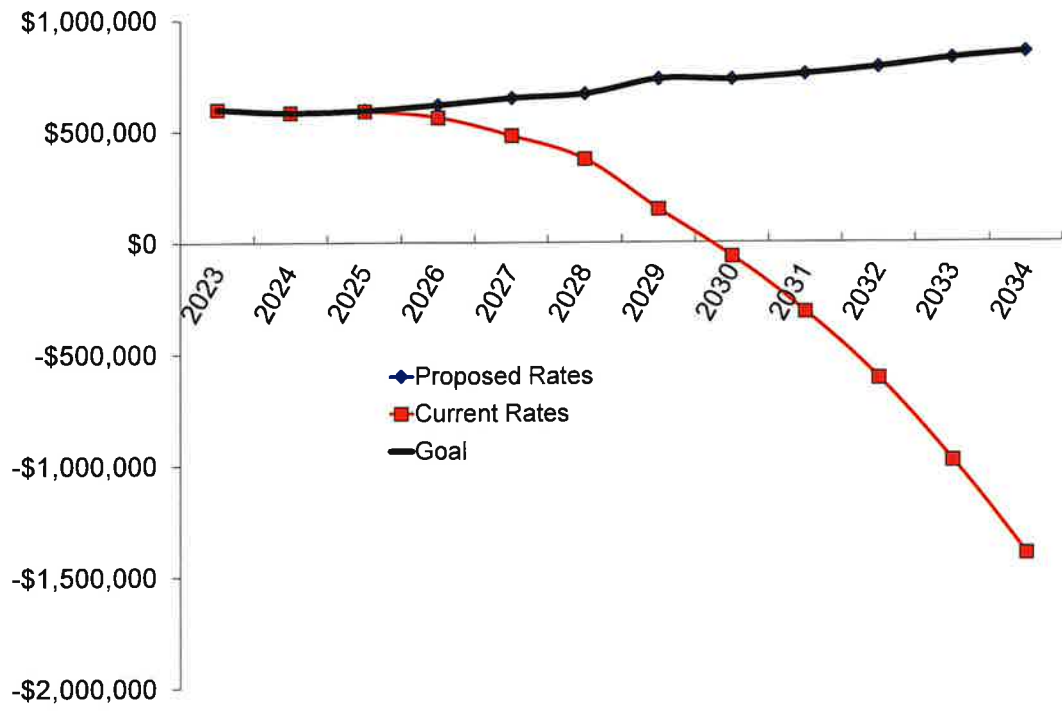
**Chart 3 - Residential Users' Bills**



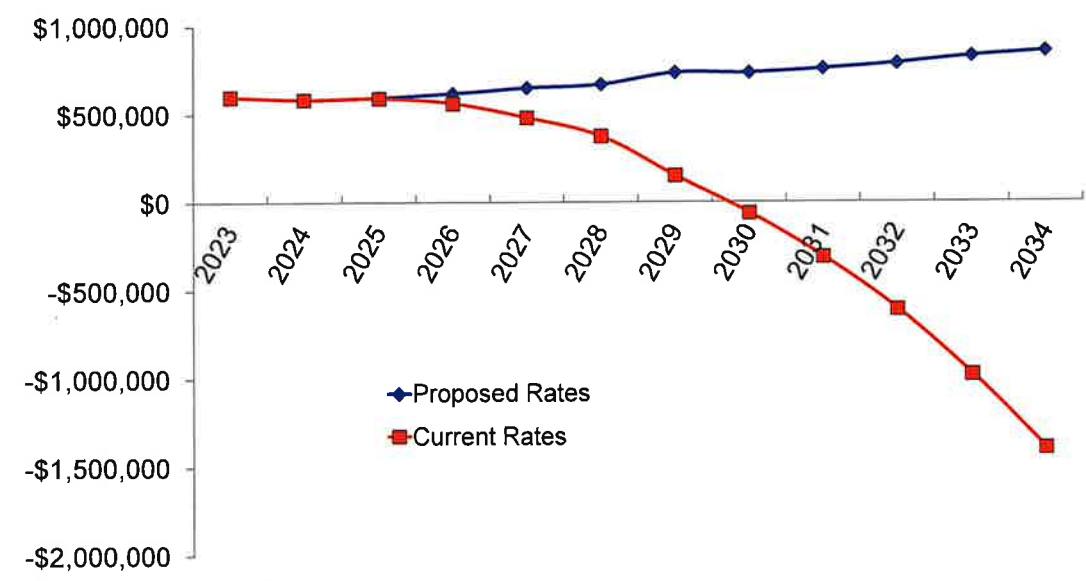
**Chart 4 - Affordability**



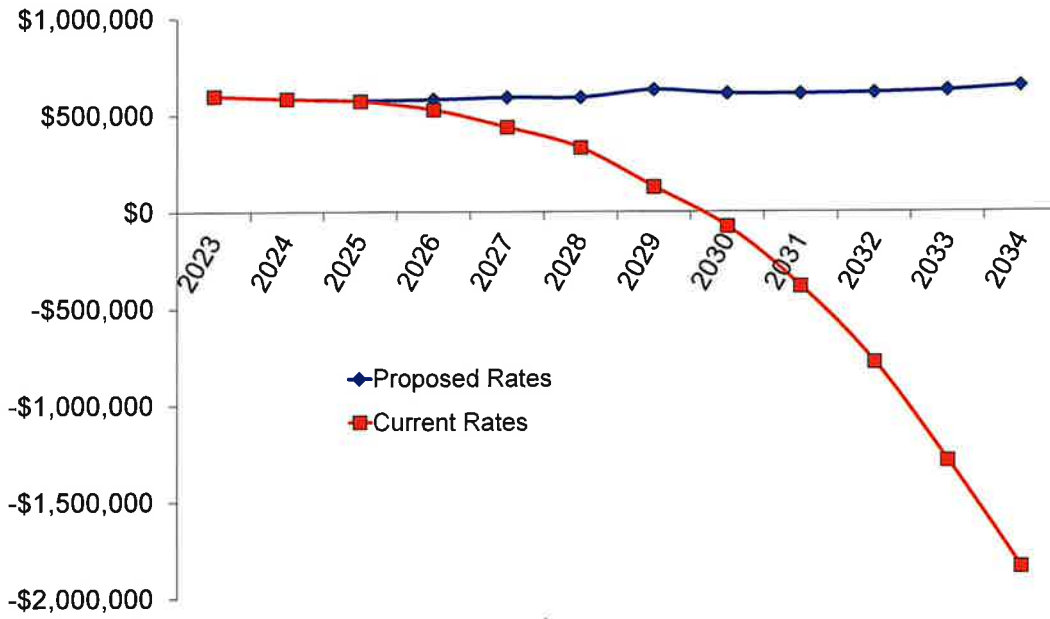
**Chart 5 - Working Capital vs Goal**



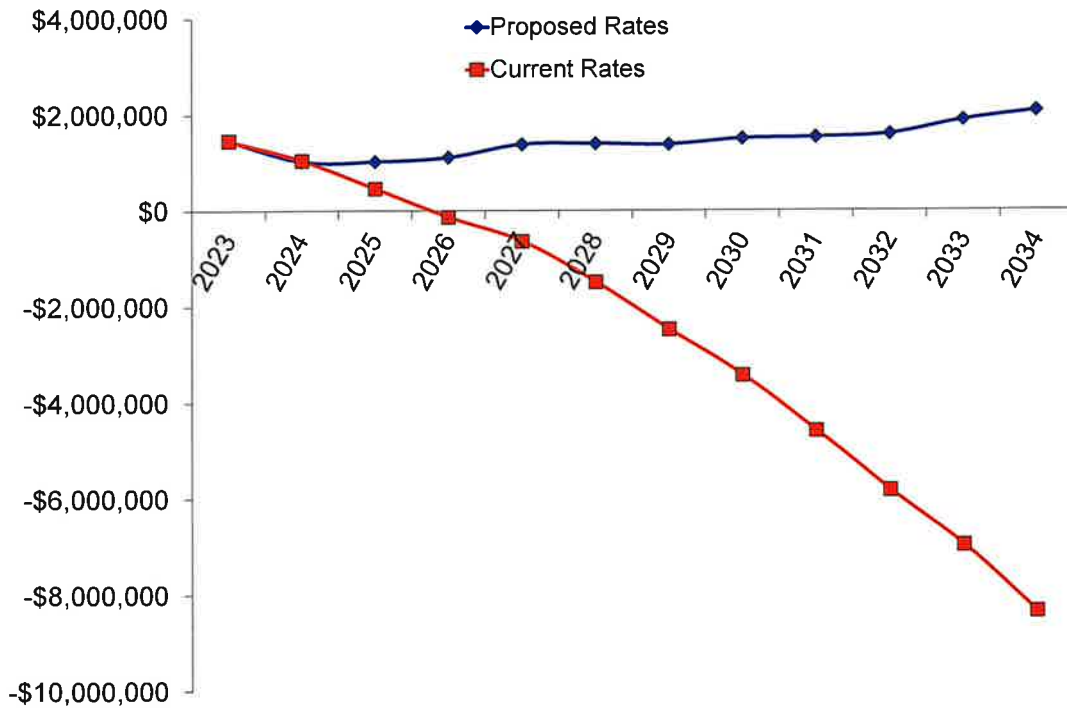
**Chart 6 - Value of Cash Assets Before Inflation**



**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**



## Willard, MO, Water Rates Model 2024-4

This model like Water Model 3 except it assumes out of City customers' rates would be set at 10 percent higher than in City rates.

October 21, 2024

This rate analysis model was produced by

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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

## Table 10 - Initial Rate Adjustments and Resulting Revenues Willard, MO, Water Rates Model 2024-4

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

Premium for Out-of-City Service **110%**

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Res, Irr, Water Only	0	999	\$23,548	\$14.18	0.000	\$4.41	\$385	\$23,933
	1,000	1,999	\$106,960	\$14.18	0.000	\$4.41	\$410	\$107,370
	2,000	2,999	\$113,522	\$14.18	0.000	\$4.41	\$405	\$113,927
	3,000	3,999	\$102,546	\$14.18	0.000	\$4.41	\$351	\$102,897
	4,000	4,999	\$80,409	\$14.18	0.000	\$4.41	\$270	\$80,679
	5,000	5,999	\$57,872	\$14.18	0.000	\$4.41	\$193	\$58,064
	6,000	6,999	\$38,422	\$14.18	0.000	\$4.41	\$129	\$38,551
	7,000	7,999	\$26,388	\$14.18	0.000	\$4.41	\$89	\$26,477
	8,000	8,999	\$16,823	\$14.18	0.000	\$4.41	\$58	\$16,882
	9,000	9,999	\$12,998	\$14.18	0.000	\$4.41	\$45	\$13,042
	10,000	19,999	\$37,001	\$14.18	0.000	\$4.41	\$135	\$37,135
	20,000	29,999	\$7,465	\$14.18	0.000	\$4.41	\$30	\$7,495
	30,000	39,999	\$2,720	\$14.18	0.000	\$4.41	\$11	\$2,732
	40,000	49,999	\$1,491	\$14.18	0.000	\$4.41	\$6	\$1,498
	50,000	59,999	\$795	\$14.18	0.000	\$4.41	\$3	\$798
	60,000	69,999	\$431	\$14.18	0.000	\$4.41	\$2	\$433
	70,000	79,999	\$322	\$14.18	0.000	\$4.41	\$1	\$323
	80,000	89,999	\$214	\$14.18	0.000	\$4.41	\$1	\$215
	90,000	99,999	\$182	\$14.18	0.000	\$4.41	\$1	\$182
	100,000	199,999	\$609	\$14.18	0.000	\$4.41	\$3	\$612
200,000	299,999	\$151	\$14.18	0.000	\$4.41	\$1	\$152	
300,000	399,999	\$0	\$14.18	0.000	\$4.41	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Commercial, Irr, Water Only	0	999	\$9,766	\$14.18	0.000	\$4.41	\$44	\$9,810
	1,000	1,999	\$7,674	\$14.18	0.000	\$4.41	\$26	\$7,700
	2,000	2,999	\$4,399	\$14.18	0.000	\$4.41	\$16	\$4,416
	3,000	3,999	\$3,407	\$14.18	0.000	\$4.41	\$13	\$3,420
	4,000	4,999	\$2,707	\$14.18	0.000	\$4.41	\$11	\$2,718
	5,000	5,999	\$2,511	\$14.18	0.000	\$4.41	\$10	\$2,521
	6,000	6,999	\$2,038	\$14.18	0.000	\$4.41	\$8	\$2,047
	7,000	7,999	\$1,816	\$14.18	0.000	\$4.41	\$8	\$1,823
	8,000	8,999	\$1,869	\$14.18	0.000	\$4.41	\$8	\$1,877
	9,000	9,999	\$1,681	\$14.18	0.000	\$4.41	\$7	\$1,688
	10,000	19,999	\$12,527	\$14.18	0.000	\$4.41	\$55	\$12,582
	20,000	29,999	\$9,087	\$14.18	0.000	\$4.41	\$40	\$9,127
	30,000	39,999	\$6,768	\$14.18	0.000	\$4.41	\$30	\$6,798
	40,000	49,999	\$5,247	\$14.18	0.000	\$4.41	\$23	\$5,270
	50,000	59,999	\$3,510	\$14.18	0.000	\$4.41	\$16	\$3,525
	60,000	69,999	\$2,921	\$14.18	0.000	\$4.41	\$13	\$2,934
	70,000	79,999	\$2,087	\$14.18	0.000	\$4.41	\$9	\$2,096
	80,000	89,999	\$1,694	\$14.18	0.000	\$4.41	\$8	\$1,702
	90,000	99,999	\$1,521	\$14.18	0.000	\$4.41	\$7	\$1,527
	100,000	199,999	\$7,976	\$14.18	0.000	\$4.41	\$36	\$8,012
200,000	299,999	\$3,281	\$14.18	0.000	\$4.41	\$15	\$3,296	
300,000	399,999	\$1,396	\$14.18	0.000	\$4.41	\$6	\$1,402	
400,000	499,999	\$510	\$14.18	0.000	\$4.41	\$2	\$512	
500,000	599,999	\$110	\$14.18	0.000	\$4.41	\$0	\$110	
600,000	699,999	\$0	\$14.18	0.000	\$4.41	\$0	\$0	
Rural Residential, Irr, Water Only	0	999	\$10,615	\$15.60	0.000	\$4.85	\$207	\$10,822
	1,000	1,999	\$53,768	\$15.60	0.000	\$4.85	\$215	\$53,984
	2,000	2,999	\$60,558	\$15.60	0.000	\$4.85	\$223	\$60,781
	3,000	3,999	\$56,461	\$15.60	0.000	\$4.85	\$199	\$56,660
	4,000	4,999	\$46,031	\$15.60	0.000	\$4.85	\$159	\$46,190
	5,000	5,999	\$33,440	\$15.60	0.000	\$4.85	\$116	\$33,556
	6,000	6,999	\$24,735	\$15.60	0.000	\$4.85	\$86	\$24,821
	7,000	7,999	\$17,057	\$15.60	0.000	\$4.85	\$60	\$17,118
	8,000	8,999	\$12,804	\$15.60	0.000	\$4.85	\$46	\$12,850
	9,000	9,999	\$9,461	\$15.60	0.000	\$4.85	\$34	\$9,495
	10,000	19,999	\$35,981	\$15.60	0.000	\$4.85	\$139	\$36,120
	20,000	29,999	\$11,223	\$15.60	0.000	\$4.85	\$45	\$11,268
	30,000	39,999	\$4,622	\$15.60	0.000	\$4.85	\$19	\$4,641
	40,000	49,999	\$2,221	\$15.60	0.000	\$4.85	\$9	\$2,231
	50,000	59,999	\$1,329	\$15.60	0.000	\$4.85	\$6	\$1,334
	60,000	69,999	\$797	\$15.60	0.000	\$4.85	\$4	\$800
	70,000	79,999	\$664	\$15.60	0.000	\$4.85	\$3	\$666
	80,000	89,999	\$434	\$15.60	0.000	\$4.85	\$2	\$436
	90,000	99,999	\$323	\$15.60	0.000	\$4.85	\$1	\$324
	100,000	199,999	\$1,201	\$15.60	0.000	\$4.85	\$5	\$1,206
200,000	299,999	\$268	\$15.60	0.000	\$4.85	\$1	\$269	
300,000	399,999	\$0	\$15.60	0.000	\$4.85	\$0	\$0	



**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Commercial, Irr, Water Only	0	999	\$513	\$15.60	0.000	\$4.85	\$4	\$516
	1,000	1,999	\$997	\$15.60	0.000	\$4.85	\$4	\$1,000
	2,000	2,999	\$847	\$15.60	0.000	\$4.85	\$3	\$850
	3,000	3,999	\$546	\$15.60	0.000	\$4.85	\$2	\$548
	4,000	4,999	\$266	\$15.60	0.000	\$4.85	\$1	\$267
	5,000	5,999	\$307	\$15.60	0.000	\$4.85	\$1	\$308
	6,000	6,999	\$275	\$15.60	0.000	\$4.85	\$1	\$276
	7,000	7,999	\$270	\$15.60	0.000	\$4.85	\$1	\$271
	8,000	8,999	\$323	\$15.60	0.000	\$4.85	\$1	\$325
	9,000	9,999	\$225	\$15.60	0.000	\$4.85	\$1	\$226
	10,000	19,999	\$880	\$15.60	0.000	\$4.85	\$3	\$883
	20,000	29,999	\$202	\$15.60	0.000	\$4.85	\$1	\$203
	30,000	39,999	\$85	\$15.60	0.000	\$4.85	\$0	\$85
	40,000	49,999	\$64	\$15.60	0.000	\$4.85	\$0	\$64
	50,000	59,999	\$28	\$15.60	0.000	\$4.85	\$0	\$28
	60,000	69,999	\$28	\$15.60	0.000	\$4.85	\$0	\$28
	70,000	79,999	\$28	\$15.60	0.000	\$4.85	\$0	\$28
80,000	89,999	\$28	\$15.60	0.000	\$4.85	\$0	\$28	
90,000	99,999	\$21	\$15.60	0.000	\$4.85	\$0	\$21	
100,000	199,999	\$0	\$15.60	0.000	\$4.85	\$0	\$0	
No Charge ("Zero")	0	999	\$0	\$0.00	0.000	\$0.00	\$0	\$0
	800,000	800,001	\$0	\$0.00	0.000	\$0.00	\$0	\$0
Total Rate Revenue at Current Rates			\$1,117,298	Total Rate Revenue at Modeled Rates			\$4,546	
Total Blended Rate Revenues for the Year								\$1,121,844

**Table 17 - Financial Capacity Indicators and Reserves**  
**Willard, MO, Water Rates Model 2024-4**

This table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the test year and the next 10 years.

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$26.72	\$36.23	\$37.68	\$39.19	\$40.75	\$42.39	\$44.08	\$45.84	\$47.68	\$49.58	\$51.57	\$53.63	
AMHI Within Service Area	\$79,951	\$83,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
Affordability Index: Current Rates First Column, Modeled Rates After That	0.40%	0.52%	0.52%	0.52%	0.52%	0.52%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	
National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
<p><b>Customary Affordability Index</b></p> <p>Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area (gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.</p>													
<b>Low-Income, Low-Volume Affordability Index</b>													
Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$18.14	\$23.00	\$23.92	\$24.86	\$25.87	\$26.91	\$27.98	\$29.10	\$30.27	\$31.48	\$32.74	\$34.05	
Income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,828	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
Affordability for Low-Income, Low-volume: Current Rates First Column, Modeled Rates After That	0.54%	0.68%	0.69%	0.70%	0.71%	0.73%	0.74%	0.75%	0.77%	0.78%	0.80%	0.81%	
<p>This additional indicator of affordability assumes a residential customer with income at one-half the median household income above that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow payers" and "no payers" compared to others, so this indicator goes to the "business sense" of the rates modeled here. In other words, raise this customer's bill too much and they are more likely to pay late or not pay.</p>													
Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That	1.00	1.00	1.50	1.52	1.51	1.54	1.47	1.54	1.56	1.58	1.57	1.59	
<p>Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red." Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.</p>													
Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That	0.00	0.00	0.00	0.24	0.17	0.20	0.00	0.14	0.23	0.28	0.27	0.37	
<p>Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A." above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below), it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.</p>													
Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That	15.78	14.46	10.18	10.21	11.17	5.18	3.23	3.18	3.46	3.52	3.67	4.33	
<p>This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.</p>													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,558,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,558,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,558,518	\$599,112	\$584,345	\$576,384	\$581,708	\$593,194	\$591,951	\$630,078	\$610,882	\$611,131	\$616,039	\$628,031	\$649,058
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	\$861,750	\$439,887	\$426,652	\$494,732	\$730,270	\$727,030	\$640,208	\$760,515	\$765,548	\$800,835	\$1,046,834	\$1,205,654
Sum of All Reserves	\$1,558,518	\$1,460,862	\$1,024,232	\$1,023,062	\$1,112,979	\$1,380,222	\$1,395,680	\$1,373,936	\$1,493,891	\$1,521,914	\$1,586,857	\$1,872,939	\$2,059,418

**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Water Rates Model 2024-4**

The modeled rates will generate 48.5% more revenue per year than the rates at the end of the test year.

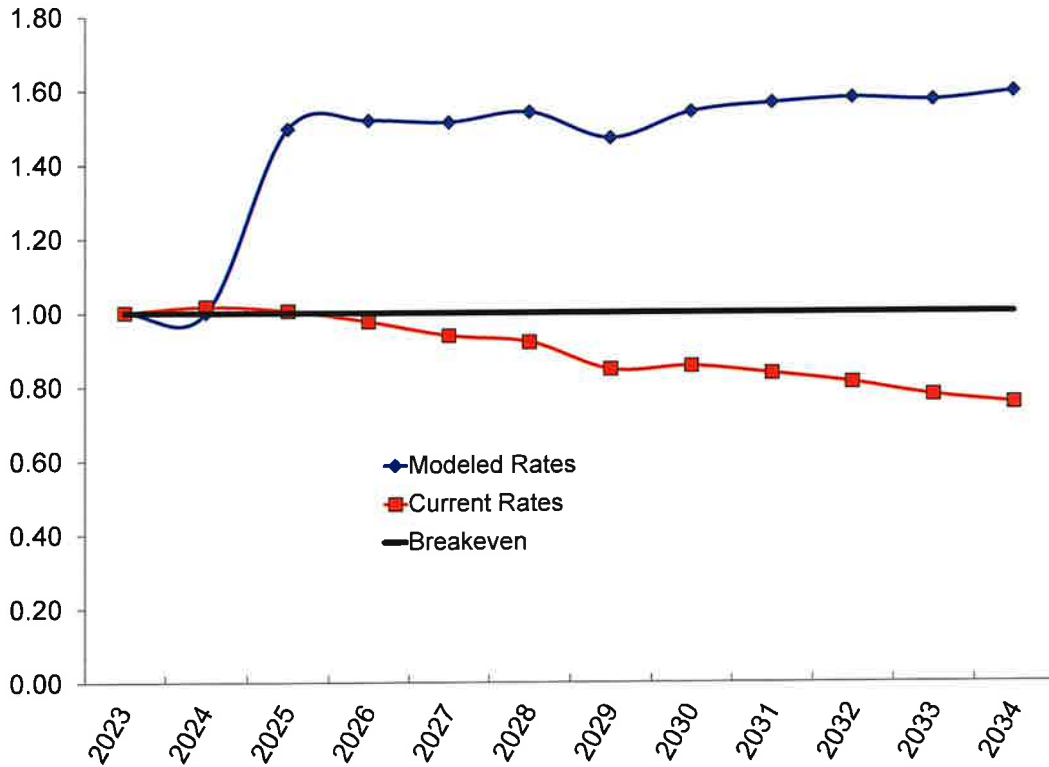
However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Res, Irr, Water Only	0	142	142	\$15.28	\$14.18	-\$1.10	-7%
	1,000	283	425	\$15.28	\$18.59	\$3.31	22%
	2,000	397	822	\$18.14	\$23.00	\$4.86	27%
	3,000	408	1,230	\$21.00	\$27.41	\$6.41	31%
	4,000	338	1,567	\$23.86	\$31.82	\$7.96	33%
	5,000	248	1,816	\$26.72	\$36.23	\$9.51	36%
	6,000	162	1,977	\$29.58	\$40.64	\$11.06	37%
	7,000	110	2,087	\$32.44	\$45.05	\$12.61	39%
	8,000	64	2,152	\$35.30	\$49.46	\$14.16	40%
	9,000	51	2,202	\$38.16	\$53.87	\$15.71	41%
	10,000	121	2,323	\$41.02	\$58.28	\$17.26	42%
	20,000	16	2,339	\$69.62	\$102.38	\$32.76	47%
	30,000	5	2,344	\$98.22	\$146.48	\$48.26	49%
	40,000	2	2,346	\$126.82	\$190.58	\$63.76	50%
	50,000	1	2,347	\$155.42	\$234.68	\$79.26	51%
	60,000	0	2,348	\$184.02	\$278.78	\$94.76	51%
	70,000	0	2,348	\$212.62	\$322.88	\$110.26	52%
	80,000	0	2,348	\$241.22	\$366.98	\$125.76	52%
	90,000	0	2,348	\$269.82	\$411.08	\$141.26	52%
100,000	1	2,349	\$298.42	\$455.18	\$156.76	53%	
200,000	0	2,349	\$584.42	\$896.18	\$311.76	53%	
In-City Commercial, Irr, Water Only	0	59	59	\$15.28	\$14.18	-\$1.10	-7%
	1,000	30	89	\$15.28	\$18.59	\$3.31	22%
	2,000	13	102	\$18.14	\$23.00	\$4.86	27%
	3,000	9	111	\$21.00	\$27.41	\$6.41	31%
	4,000	6	117	\$23.86	\$31.82	\$7.96	33%
	5,000	5	122	\$26.72	\$36.23	\$9.51	36%
	6,000	3	125	\$29.58	\$40.64	\$11.06	37%
	7,000	2	127	\$32.44	\$45.05	\$12.61	39%
	8,000	3	131	\$35.30	\$49.46	\$14.16	40%
	9,000	3	133	\$38.16	\$53.87	\$15.71	41%
	10,000	11	144	\$41.02	\$58.28	\$17.26	42%
	20,000	7	152	\$69.62	\$102.38	\$32.76	47%
	30,000	5	157	\$98.22	\$146.48	\$48.26	49%
	40,000	5	162	\$126.82	\$190.58	\$63.76	50%
	50,000	2	164	\$155.42	\$234.68	\$79.26	51%
	60,000	2	167	\$184.02	\$278.78	\$94.76	51%
	70,000	1	168	\$212.62	\$322.88	\$110.26	52%
	80,000	1	169	\$241.22	\$366.98	\$125.76	52%
	90,000	1	170	\$269.82	\$411.08	\$141.26	52%
100,000	3	172	\$298.42	\$455.18	\$156.76	53%	
200,000	1	173	\$584.42	\$896.18	\$311.76	53%	
300,000	0	173	\$870.42	\$1,337.18	\$466.76	54%	

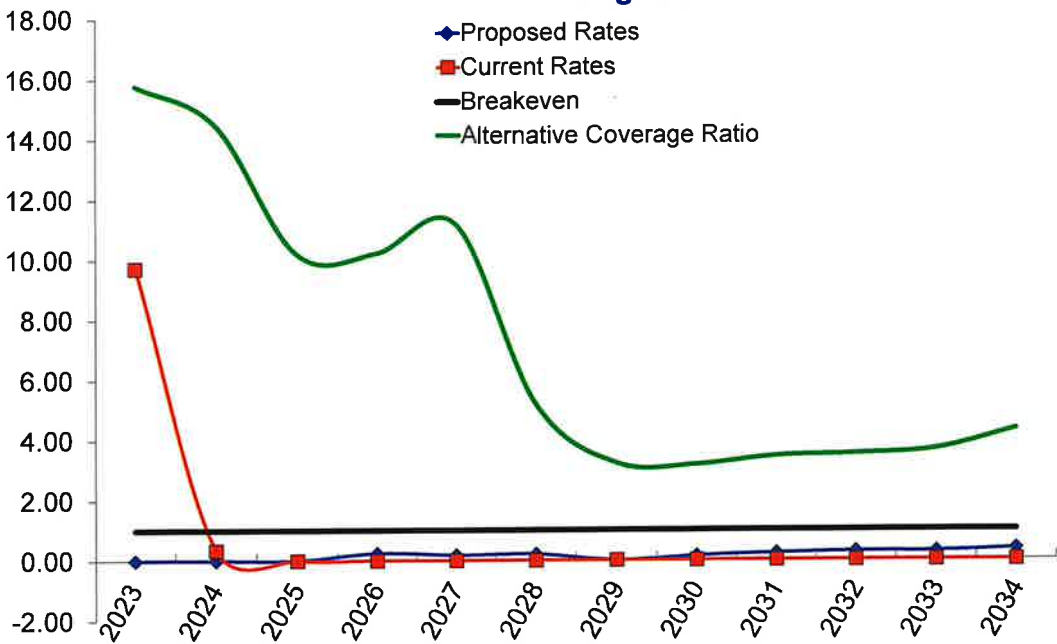
**Table 18 - Bills Before and After Rate Adjustments**

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential, Irr, Water Only	0	59	59	\$16.63	\$15.60	-\$1.03	-6%
	1,000	109	167	\$16.63	\$20.45	\$3.82	23%
	2,000	180	347	\$19.75	\$25.30	\$5.55	28%
	3,000	194	541	\$22.87	\$30.15	\$7.28	32%
	4,000	168	709	\$25.99	\$35.00	\$9.01	35%
	5,000	121	829	\$29.11	\$39.85	\$10.74	37%
	6,000	89	919	\$32.23	\$44.71	\$12.48	39%
	7,000	58	976	\$35.35	\$49.56	\$14.21	40%
	8,000	42	1,019	\$38.47	\$54.41	\$15.94	41%
	9,000	29	1,048	\$41.59	\$59.26	\$17.67	42%
	10,000	87	1,135	\$44.71	\$64.11	\$19.40	43%
	20,000	21	1,156	\$75.91	\$112.62	\$36.71	48%
	30,000	8	1,164	\$107.11	\$161.13	\$54.02	50%
	40,000	3	1,167	\$138.31	\$209.64	\$71.33	52%
	50,000	2	1,168	\$169.51	\$258.15	\$88.64	52%
	60,000	1	1,169	\$200.71	\$306.66	\$105.95	53%
	70,000	1	1,170	\$231.91	\$355.17	\$123.26	53%
	80,000	0	1,170	\$263.11	\$403.68	\$140.57	53%
	90,000	0	1,170	\$294.31	\$452.19	\$157.88	54%
100,000	1	1,171	\$325.51	\$500.70	\$175.19	54%	
200,000	0	1,171	\$637.51	\$985.80	\$348.29	55%	
Rural Commercial, Irr, Water Only	0	3	3	\$16.63	\$15.60	-\$1.03	-6%
	1,000	3	6	\$16.63	\$20.45	\$3.82	23%
	2,000	3	9	\$19.75	\$25.30	\$5.55	28%
	3,000	2	11	\$22.87	\$30.15	\$7.28	32%
	4,000	0	11	\$25.99	\$35.00	\$9.01	35%
	5,000	1	12	\$29.11	\$39.85	\$10.74	37%
	6,000	1	12	\$32.23	\$44.71	\$12.48	39%
	7,000	1	13	\$35.35	\$49.56	\$14.21	40%
	8,000	1	14	\$38.47	\$54.41	\$15.94	41%
	9,000	1	15	\$41.59	\$59.26	\$17.67	42%
	10,000	3	17	\$44.71	\$64.11	\$19.40	43%
	20,000	0	18	\$75.91	\$112.62	\$36.71	48%
No Charge ("Zero")	0	2	2	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	\$0.00	\$0.00	\$0.00	N.A.
30,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	
800,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	

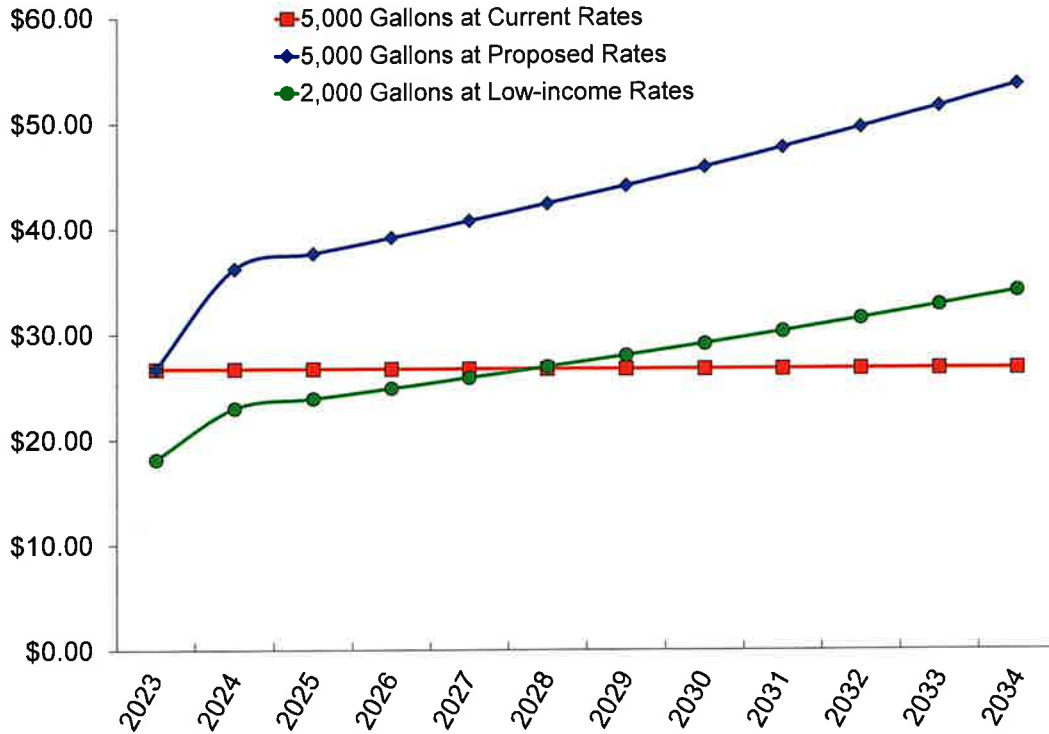
**Chart 1 - Operating Ratio**



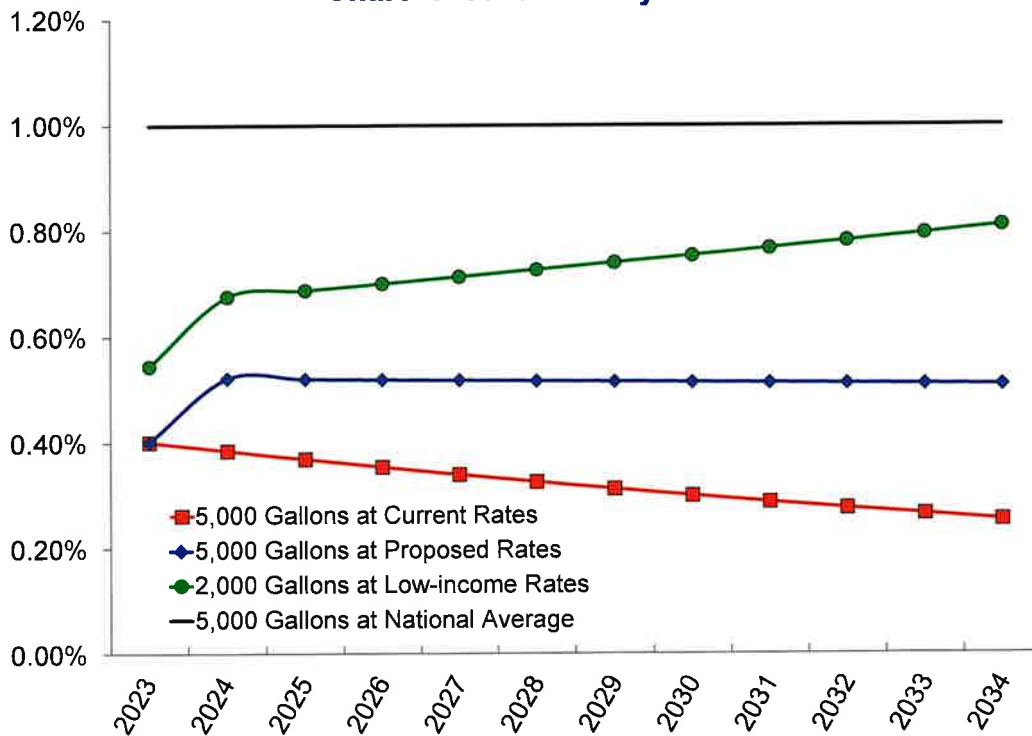
**Chart 2 - Coverage Ratio**



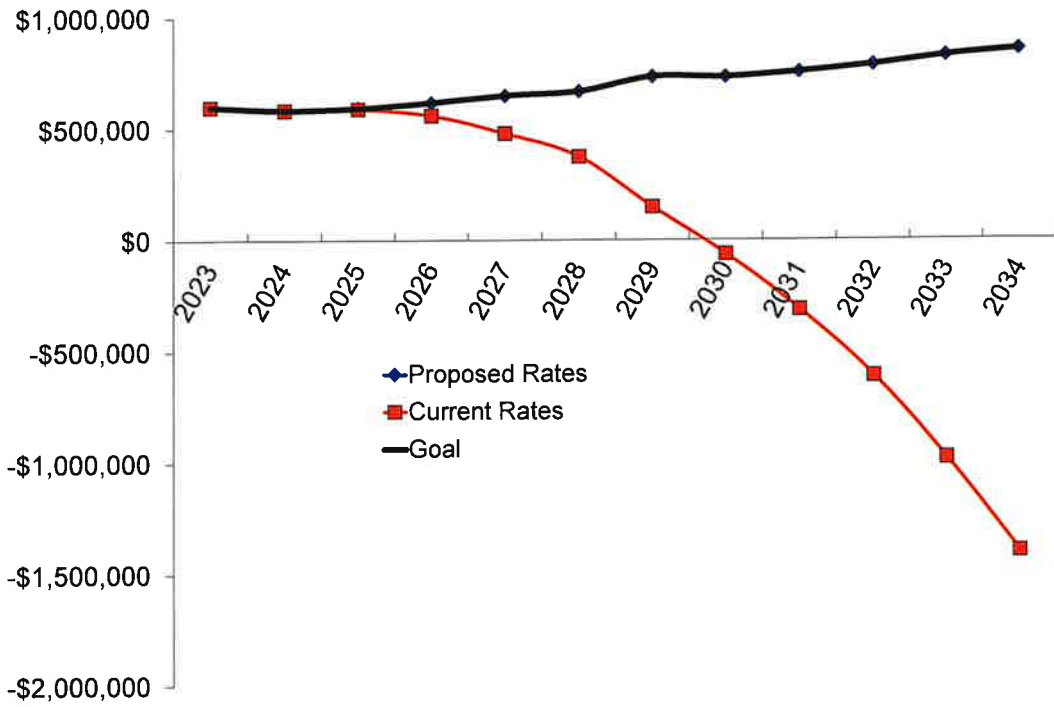
**Chart 3 - Residential Users' Bills**



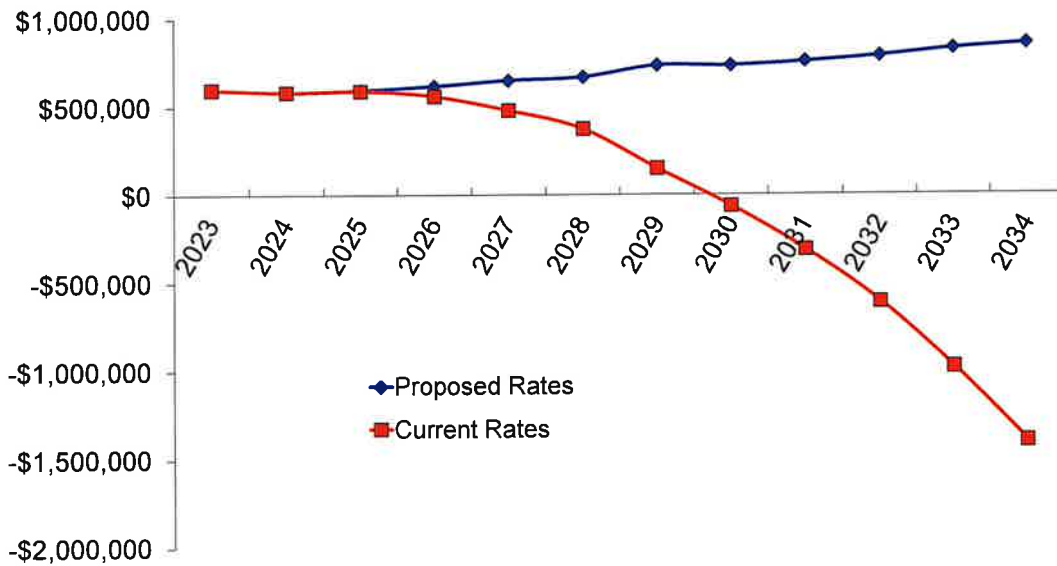
**Chart 4 - Affordability**



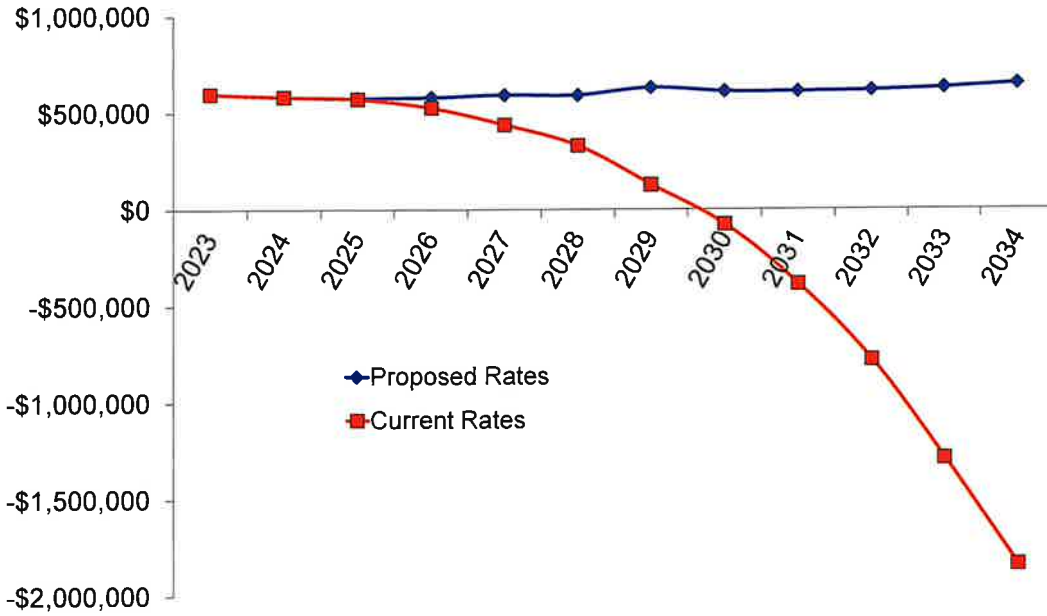
**Chart 5 - Working Capital vs Goal**



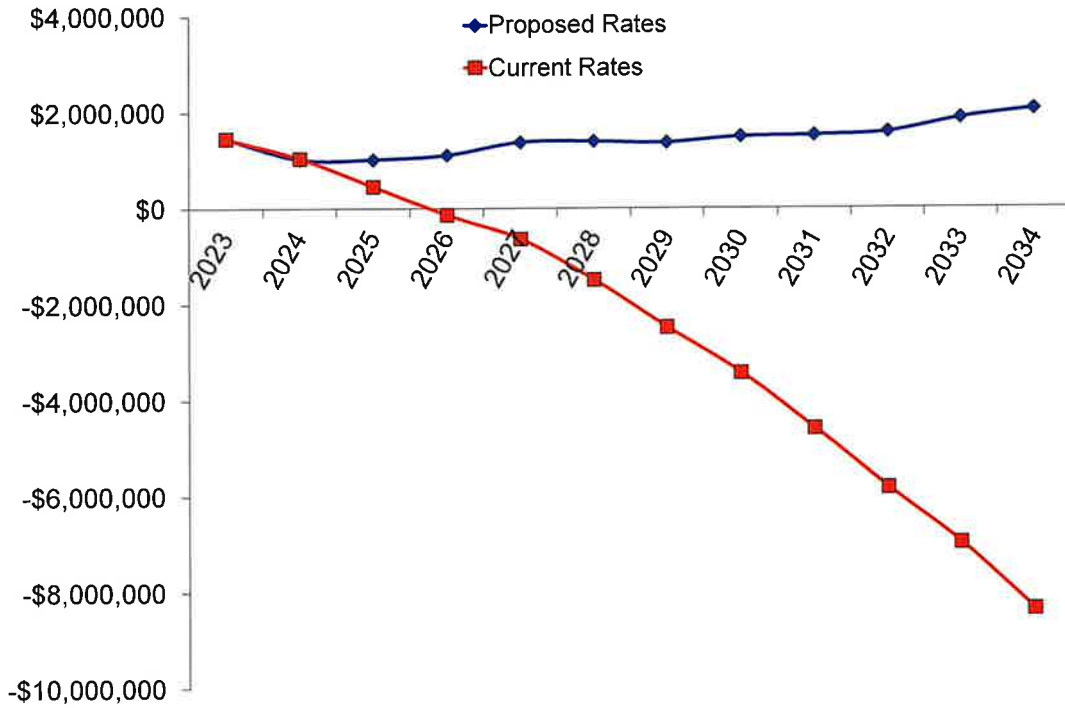
**Chart 6 - Value of Cash Assets Before Inflation**



**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**







## Willard, MO, Water Rates Model 2024-5

This model is like Water Models 3 and 4 except it assumes out of City customers' rates would be "capped" like this; the minimum charge would be 41 percent higher than the in-City minimum, and the unit charge would be 37 percent higher than the in-City unit charge.

October 21, 2024

This rate analysis model was produced by

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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

## Table 10 - Initial Rate Adjustments and Resulting Revenues Willard, MO, Water Rates Model 2024-5

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

Premiums for Out-of-City Service 141% Minimum Charge 137% Unit Charge

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Res, Irr, Water Only	0	999	\$23,548	\$12.99	0.000	\$4.04	\$353	\$23,901
	1,000	1,999	\$106,960	\$12.99	0.000	\$4.04	\$376	\$107,336
	2,000	2,999	\$113,522	\$12.99	0.000	\$4.04	\$371	\$113,893
	3,000	3,999	\$102,546	\$12.99	0.000	\$4.04	\$322	\$102,868
	4,000	4,999	\$80,409	\$12.99	0.000	\$4.04	\$247	\$80,656
	5,000	5,999	\$57,872	\$12.99	0.000	\$4.04	\$176	\$58,048
	6,000	6,999	\$38,422	\$12.99	0.000	\$4.04	\$118	\$38,540
	7,000	7,999	\$26,388	\$12.99	0.000	\$4.04	\$81	\$26,470
	8,000	8,999	\$16,823	\$12.99	0.000	\$4.04	\$53	\$16,877
	9,000	9,999	\$12,998	\$12.99	0.000	\$4.04	\$41	\$13,039
	10,000	19,999	\$37,001	\$12.99	0.000	\$4.04	\$123	\$37,124
	20,000	29,999	\$7,465	\$12.99	0.000	\$4.04	\$27	\$7,492
	30,000	39,999	\$2,720	\$12.99	0.000	\$4.04	\$10	\$2,731
	40,000	49,999	\$1,491	\$12.99	0.000	\$4.04	\$6	\$1,497
	50,000	59,999	\$795	\$12.99	0.000	\$4.04	\$3	\$798
	60,000	69,999	\$431	\$12.99	0.000	\$4.04	\$2	\$433
	70,000	79,999	\$322	\$12.99	0.000	\$4.04	\$1	\$323
	80,000	89,999	\$214	\$12.99	0.000	\$4.04	\$1	\$215
	90,000	99,999	\$182	\$12.99	0.000	\$4.04	\$1	\$182
	100,000	199,999	\$609	\$12.99	0.000	\$4.04	\$2	\$612
200,000	299,999	\$151	\$12.99	0.000	\$4.04	\$1	\$152	
300,000	399,999	\$0	\$12.99	0.000	\$4.04	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Commercial, Irr, Water Only	0	999	\$9,766	\$12.99	0.000	\$4.04	\$40	\$9,806
	1,000	1,999	\$7,674	\$12.99	0.000	\$4.04	\$24	\$7,698
	2,000	2,999	\$4,399	\$12.99	0.000	\$4.04	\$15	\$4,415
	3,000	3,999	\$3,407	\$12.99	0.000	\$4.04	\$12	\$3,419
	4,000	4,999	\$2,707	\$12.99	0.000	\$4.04	\$10	\$2,717
	5,000	5,999	\$2,511	\$12.99	0.000	\$4.04	\$9	\$2,520
	6,000	6,999	\$2,038	\$12.99	0.000	\$4.04	\$8	\$2,046
	7,000	7,999	\$1,816	\$12.99	0.000	\$4.04	\$7	\$1,823
	8,000	8,999	\$1,869	\$12.99	0.000	\$4.04	\$7	\$1,877
	9,000	9,999	\$1,681	\$12.99	0.000	\$4.04	\$6	\$1,687
	10,000	19,999	\$12,527	\$12.99	0.000	\$4.04	\$50	\$12,577
	20,000	29,999	\$9,087	\$12.99	0.000	\$4.04	\$37	\$9,123
	30,000	39,999	\$6,768	\$12.99	0.000	\$4.04	\$27	\$6,795
	40,000	49,999	\$5,247	\$12.99	0.000	\$4.04	\$21	\$5,268
	50,000	59,999	\$3,510	\$12.99	0.000	\$4.04	\$14	\$3,524
	60,000	69,999	\$2,921	\$12.99	0.000	\$4.04	\$12	\$2,933
	70,000	79,999	\$2,087	\$12.99	0.000	\$4.04	\$8	\$2,095
	80,000	89,999	\$1,694	\$12.99	0.000	\$4.04	\$7	\$1,701
	90,000	99,999	\$1,521	\$12.99	0.000	\$4.04	\$6	\$1,527
	100,000	199,999	\$7,976	\$12.99	0.000	\$4.04	\$33	\$8,009
200,000	299,999	\$3,281	\$12.99	0.000	\$4.04	\$14	\$3,295	
300,000	399,999	\$1,396	\$12.99	0.000	\$4.04	\$6	\$1,402	
400,000	499,999	\$510	\$12.99	0.000	\$4.04	\$2	\$512	
500,000	599,999	\$110	\$12.99	0.000	\$4.04	\$0	\$110	
600,000	699,999	\$0	\$12.99	0.000	\$4.04	\$0	\$0	
Rural Residential, Irr, Water Only	0	999	\$10,615	\$18.32	0.000	\$5.53	\$237	\$10,852
	1,000	1,999	\$53,768	\$18.32	0.000	\$5.53	\$247	\$54,016
	2,000	2,999	\$60,558	\$18.32	0.000	\$5.53	\$258	\$60,816
	3,000	3,999	\$56,461	\$18.32	0.000	\$5.53	\$231	\$56,692
	4,000	4,999	\$46,031	\$18.32	0.000	\$5.53	\$185	\$46,215
	5,000	5,999	\$33,440	\$18.32	0.000	\$5.53	\$134	\$33,575
	6,000	6,999	\$24,735	\$18.32	0.000	\$5.53	\$99	\$24,834
	7,000	7,999	\$17,057	\$18.32	0.000	\$5.53	\$70	\$17,127
	8,000	8,999	\$12,804	\$18.32	0.000	\$5.53	\$53	\$12,857
	9,000	9,999	\$9,461	\$18.32	0.000	\$5.53	\$40	\$9,501
	10,000	19,999	\$35,981	\$18.32	0.000	\$5.53	\$160	\$36,141
	20,000	29,999	\$11,223	\$18.32	0.000	\$5.53	\$52	\$11,275
	30,000	39,999	\$4,622	\$18.32	0.000	\$5.53	\$22	\$4,644
	40,000	49,999	\$2,221	\$18.32	0.000	\$5.53	\$11	\$2,232
	50,000	59,999	\$1,329	\$18.32	0.000	\$5.53	\$7	\$1,335
	60,000	69,999	\$797	\$18.32	0.000	\$5.53	\$4	\$801
	70,000	79,999	\$664	\$18.32	0.000	\$5.53	\$3	\$667
	80,000	89,999	\$434	\$18.32	0.000	\$5.53	\$2	\$436
	90,000	99,999	\$323	\$18.32	0.000	\$5.53	\$2	\$324
	100,000	199,999	\$1,201	\$18.32	0.000	\$5.53	\$6	\$1,207
200,000	299,999	\$268	\$18.32	0.000	\$5.53	\$1	\$269	
300,000	399,999	\$0	\$18.32	0.000	\$5.53	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Commercial, Irr, Water Only	0	999	\$513	\$18.32	0.000	\$5.53	\$4	\$517
	1,000	1,999	\$997	\$18.32	0.000	\$5.53	\$4	\$1,001
	2,000	2,999	\$847	\$18.32	0.000	\$5.53	\$3	\$850
	3,000	3,999	\$546	\$18.32	0.000	\$5.53	\$2	\$548
	4,000	4,999	\$266	\$18.32	0.000	\$5.53	\$1	\$267
	5,000	5,999	\$307	\$18.32	0.000	\$5.53	\$1	\$308
	6,000	6,999	\$275	\$18.32	0.000	\$5.53	\$1	\$276
	7,000	7,999	\$270	\$18.32	0.000	\$5.53	\$1	\$271
	8,000	8,999	\$323	\$18.32	0.000	\$5.53	\$1	\$325
	9,000	9,999	\$225	\$18.32	0.000	\$5.53	\$1	\$226
	10,000	19,999	\$880	\$18.32	0.000	\$5.53	\$4	\$884
	20,000	29,999	\$202	\$18.32	0.000	\$5.53	\$1	\$203
	30,000	39,999	\$85	\$18.32	0.000	\$5.53	\$0	\$85
	40,000	49,999	\$64	\$18.32	0.000	\$5.53	\$0	\$64
	50,000	59,999	\$28	\$18.32	0.000	\$5.53	\$0	\$28
	60,000	69,999	\$28	\$18.32	0.000	\$5.53	\$0	\$28
	70,000	79,999	\$28	\$18.32	0.000	\$5.53	\$0	\$28
80,000	89,999	\$28	\$18.32	0.000	\$5.53	\$0	\$28	
90,000	99,999	\$21	\$18.32	0.000	\$5.53	\$0	\$21	
100,000	199,999	\$0	\$18.32	0.000	\$5.53	\$0	\$0	
No Charge ("Zero")	0	999	\$0	\$0.00	0.000	\$0.00	\$0	\$0
	800,000	800,001	\$0	\$0.00	0.000	\$0.00	\$0	\$0
Total Rate Revenue at Current Rates			\$1,117,298	Total Rate Revenue at Modeled Rates			\$4,546	
Total Blended Rate Revenues for the Year								\$1,121,844

**Table 17 - Financial Capacity Indicators and Reserves**  
**Willard, MO, Water Rates Model 2024-5**

This table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the last year and the next 10 years.

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$26.72	\$33.19	\$34.52	\$35.90	\$37.34	\$38.83	\$40.38	\$42.00	\$43.68	\$45.42	\$47.24	\$49.13	
AMHI Within Service Area	\$79,951	\$83,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
Affordability Index: Current Rates First Column, Modeled Rates After That	0.40%	0.48%	0.48%	0.48%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	
National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
<p>Customary Affordability Index</p> <p>Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area ( gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.</p>													
Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$18.14	\$21.07	\$21.91	\$22.79	\$23.70	\$24.65	\$25.64	\$26.66	\$27.73	\$28.84	\$29.99	\$31.19	
Income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,828	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
Affordability for Low-income, Low-volume: Current Rates First Column, Modeled Rates After That	0.54%	0.62%	0.63%	0.64%	0.65%	0.67%	0.68%	0.69%	0.70%	0.72%	0.73%	0.74%	
<p>Low-income, Low-volume Affordability Index</p> <p>This additional indicator of affordability assumes a residential customer with income at one-half the median household income above, that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow pays" and "no pays" compared to others, so this indicator goes to the "business sense" of the rates modeled here. In other words, raise this customer's bill too much and they are more likely to pay late or not pay.</p>													
Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That	1.00	1.00	1.50	1.52	1.51	1.54	1.47	1.54	1.56	1.58	1.57	1.59	
<p>Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red". Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.</p>													
Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That	0.00	0.00	0.00	0.24	0.17	0.20	0.00	0.14	0.23	0.28	0.27	0.37	
<p>Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A" above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below), it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.</p>													
Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That	15.78	14.46	10.18	10.21	11.17	5.18	3.23	3.18	3.46	3.52	3.67	4.33	
<p>This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.</p>													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,558,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,558,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,558,518	\$599,112	\$584,345	\$576,384	\$581,708	\$593,194	\$591,951	\$630,078	\$610,882	\$611,131	\$616,039	\$628,031	\$649,056
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	\$861,750	\$439,887	\$428,806	\$494,635	\$730,119	\$726,822	\$639,938	\$760,179	\$785,143	\$800,355	\$1,046,274	\$1,205,010
Sum of All Reserves	\$1,558,518	\$1,460,862	\$1,024,232	\$1,023,017	\$1,112,882	\$1,380,072	\$1,395,472	\$1,373,607	\$1,493,556	\$1,521,509	\$1,586,377	\$1,872,380	\$2,058,775

**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Water Rates Model 2024-5**

The modeled rates will generate 48.5% more revenue per year than the rates at the end of the test year.

However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

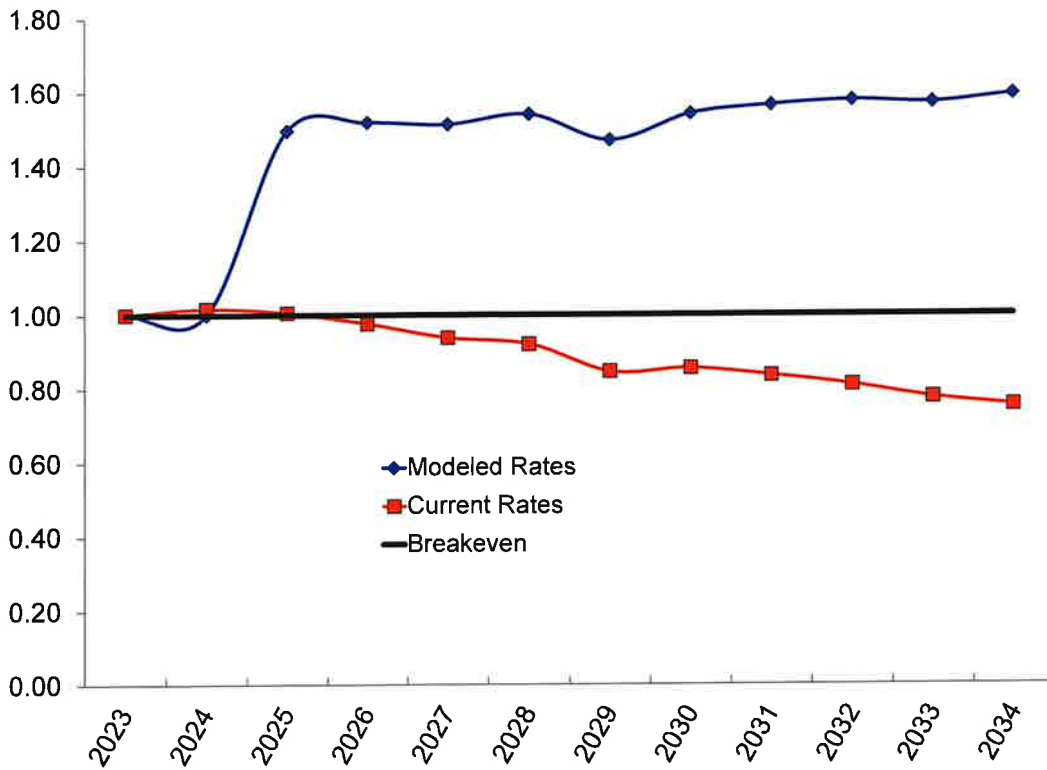
Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Res, Irr, Water Only	0	142	142	\$15.28	\$12.99	-\$2.29	-15%
	1,000	283	425	\$15.28	\$17.03	\$1.75	11%
	2,000	397	822	\$18.14	\$21.07	\$2.93	16%
	3,000	408	1,230	\$21.00	\$25.11	\$4.11	20%
	4,000	338	1,567	\$23.86	\$29.15	\$5.29	22%
	5,000	248	1,816	\$26.72	\$33.19	\$6.47	24%
	6,000	162	1,977	\$29.58	\$37.23	\$7.65	26%
	7,000	110	2,087	\$32.44	\$41.27	\$8.83	27%
	8,000	64	2,152	\$35.30	\$45.31	\$10.01	28%
	9,000	51	2,202	\$38.16	\$49.35	\$11.19	29%
	10,000	121	2,323	\$41.02	\$53.39	\$12.37	30%
	20,000	16	2,339	\$69.62	\$93.79	\$24.17	35%
	30,000	5	2,344	\$98.22	\$134.19	\$35.97	37%
	40,000	2	2,346	\$126.82	\$174.59	\$47.77	38%
	50,000	1	2,347	\$155.42	\$214.99	\$59.57	38%
	60,000	0	2,348	\$184.02	\$255.39	\$71.37	39%
	70,000	0	2,348	\$212.62	\$295.79	\$83.17	39%
	80,000	0	2,348	\$241.22	\$336.19	\$94.97	39%
	90,000	0	2,348	\$269.82	\$376.59	\$106.77	40%
	100,000	1	2,349	\$298.42	\$416.99	\$118.57	40%
200,000	0	2,349	\$584.42	\$820.99	\$236.57	40%	
In-City Commercial, Irr, Water Only	0	59	59	\$15.28	\$12.99	-\$2.29	-15%
	1,000	30	89	\$15.28	\$17.03	\$1.75	11%
	2,000	13	102	\$18.14	\$21.07	\$2.93	16%
	3,000	9	111	\$21.00	\$25.11	\$4.11	20%
	4,000	6	117	\$23.86	\$29.15	\$5.29	22%
	5,000	5	122	\$26.72	\$33.19	\$6.47	24%
	6,000	3	125	\$29.58	\$37.23	\$7.65	26%
	7,000	2	127	\$32.44	\$41.27	\$8.83	27%
	8,000	3	131	\$35.30	\$45.31	\$10.01	28%
	9,000	3	133	\$38.16	\$49.35	\$11.19	29%
	10,000	11	144	\$41.02	\$53.39	\$12.37	30%
	20,000	7	152	\$69.62	\$93.79	\$24.17	35%
	30,000	5	157	\$98.22	\$134.19	\$35.97	37%
	40,000	5	162	\$126.82	\$174.59	\$47.77	38%
	50,000	2	164	\$155.42	\$214.99	\$59.57	38%
	60,000	2	167	\$184.02	\$255.39	\$71.37	39%
	70,000	1	168	\$212.62	\$295.79	\$83.17	39%
	80,000	1	169	\$241.22	\$336.19	\$94.97	39%
	90,000	1	170	\$269.82	\$376.59	\$106.77	40%
	100,000	3	172	\$298.42	\$416.99	\$118.57	40%
200,000	1	173	\$584.42	\$820.99	\$236.57	40%	
300,000	0	173	\$870.42	\$1,224.99	\$354.57	41%	

**Table 18 - Bills Before and After Rate Adjustments**

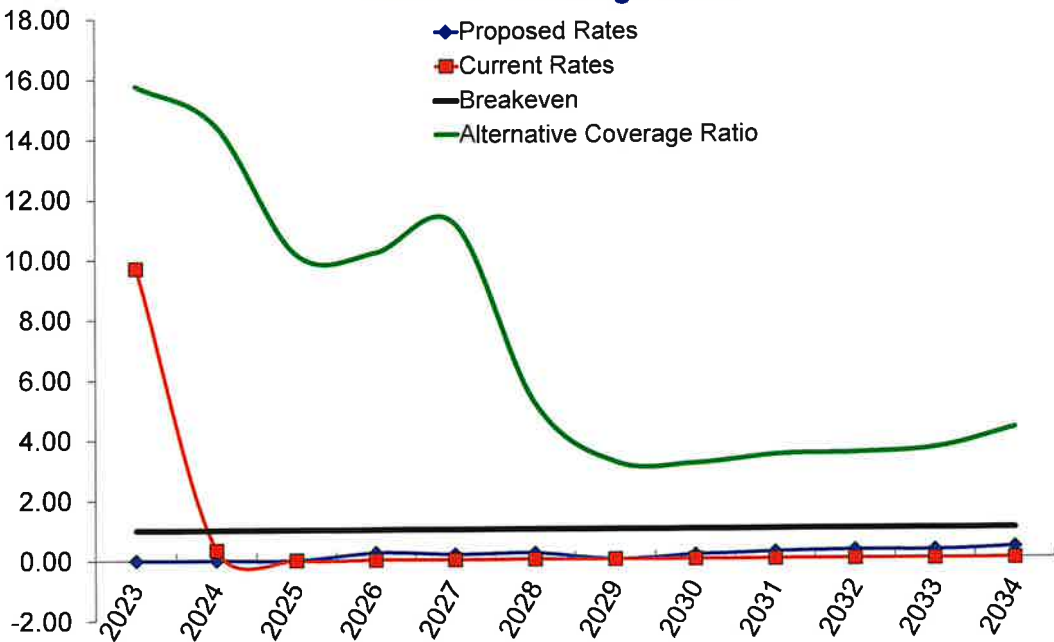
Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential, Irr, Water Only	0	59	59	\$16.63	\$18.32	\$1.69	10%
	1,000	109	167	\$16.63	\$23.85	\$7.22	43%
	2,000	180	347	\$19.75	\$29.39	\$9.64	49%
	3,000	194	541	\$22.87	\$34.92	\$12.05	53%
	4,000	168	709	\$25.99	\$40.46	\$14.47	56%
	5,000	121	829	\$29.11	\$45.99	\$16.88	58%
	6,000	89	919	\$32.23	\$51.53	\$19.30	60%
	7,000	58	976	\$35.35	\$57.06	\$21.71	61%
	8,000	42	1,019	\$38.47	\$62.60	\$24.13	63%
	9,000	29	1,048	\$41.59	\$68.13	\$26.54	64%
	10,000	87	1,135	\$44.71	\$73.67	\$28.96	65%
	20,000	21	1,156	\$75.91	\$129.01	\$53.10	70%
	30,000	8	1,164	\$107.11	\$184.36	\$77.25	72%
	40,000	3	1,167	\$138.31	\$239.71	\$101.40	73%
	50,000	2	1,168	\$169.51	\$295.06	\$125.55	74%
	60,000	1	1,169	\$200.71	\$350.41	\$149.70	75%
	70,000	1	1,170	\$231.91	\$405.75	\$173.84	75%
	80,000	0	1,170	\$263.11	\$461.10	\$197.99	75%
90,000	0	1,170	\$294.31	\$516.45	\$222.14	75%	
100,000	1	1,171	\$325.51	\$571.80	\$246.29	76%	
200,000	0	1,171	\$637.51	\$1,125.28	\$487.77	77%	
Rural Commercial, Irr, Water Only	0	3	3	\$16.63	\$18.32	\$1.69	10%
	1,000	3	6	\$16.63	\$23.85	\$7.22	43%
	2,000	3	9	\$19.75	\$29.39	\$9.64	49%
	3,000	2	11	\$22.87	\$34.92	\$12.05	53%
	4,000	0	11	\$25.99	\$40.46	\$14.47	56%
	5,000	1	12	\$29.11	\$45.99	\$16.88	58%
	6,000	1	12	\$32.23	\$51.53	\$19.30	60%
	7,000	1	13	\$35.35	\$57.06	\$21.71	61%
	8,000	1	14	\$38.47	\$62.60	\$24.13	63%
	9,000	1	15	\$41.59	\$68.13	\$26.54	64%
	10,000	3	17	\$44.71	\$73.67	\$28.96	65%
	20,000	0	18	\$75.91	\$129.01	\$53.10	70%
No Charge ("Zero")	0	2	2	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	\$0.00	\$0.00	\$0.00	N.A.
30,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	
80,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	



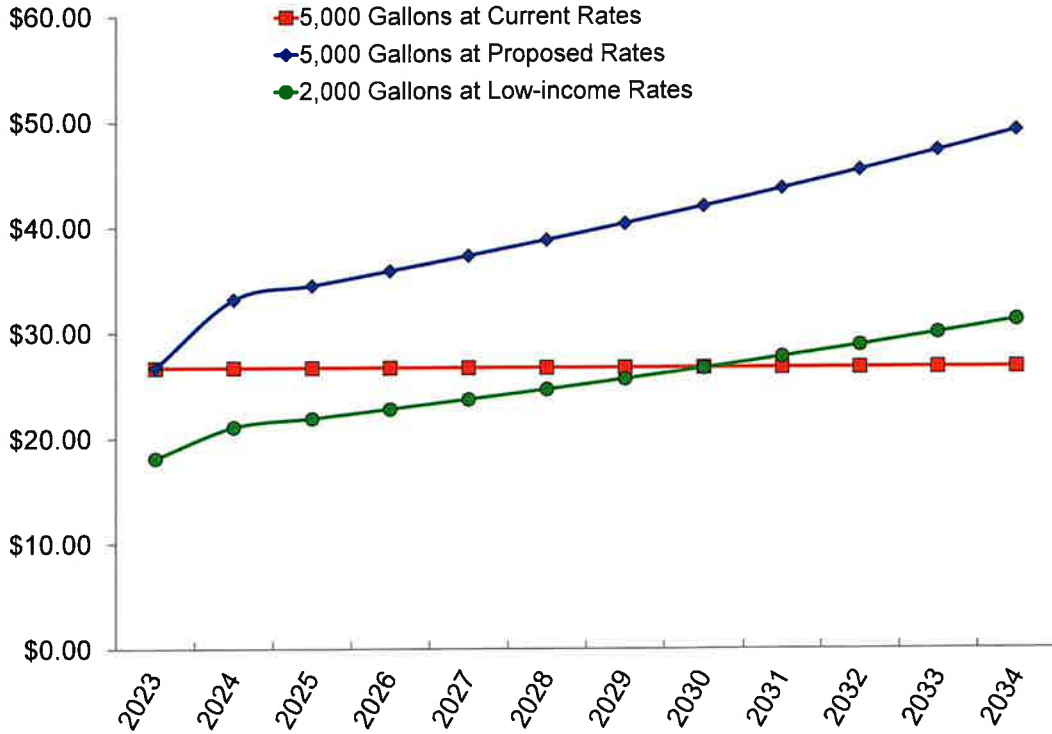
**Chart 1 - Operating Ratio**



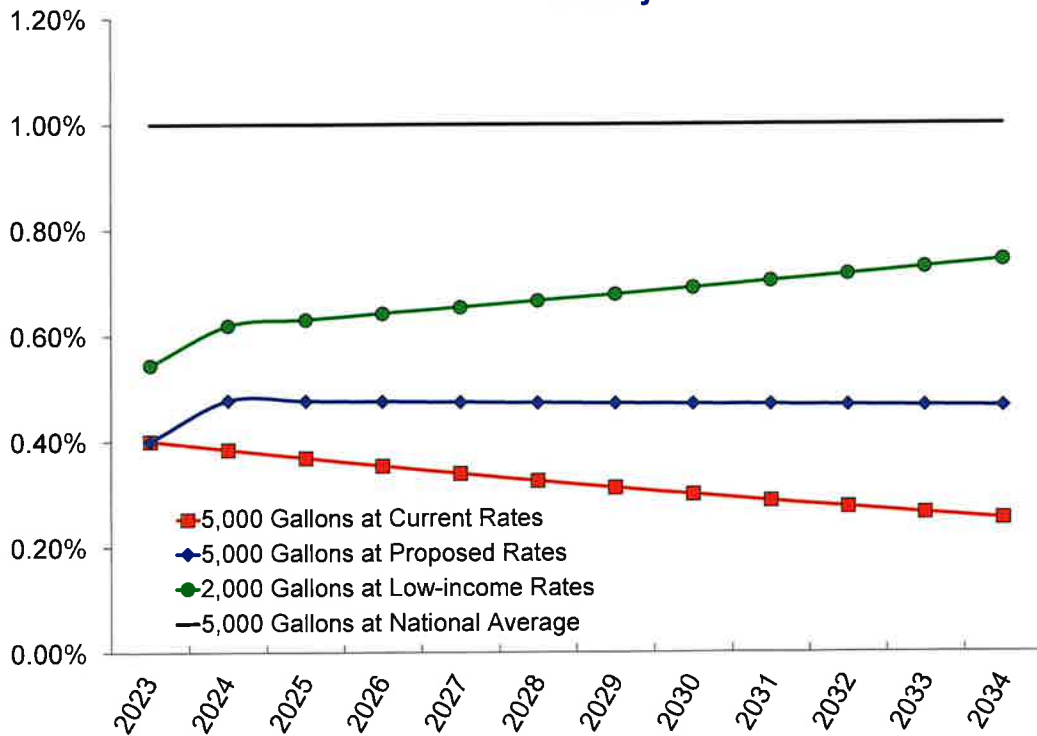
**Chart 2 - Coverage Ratio**



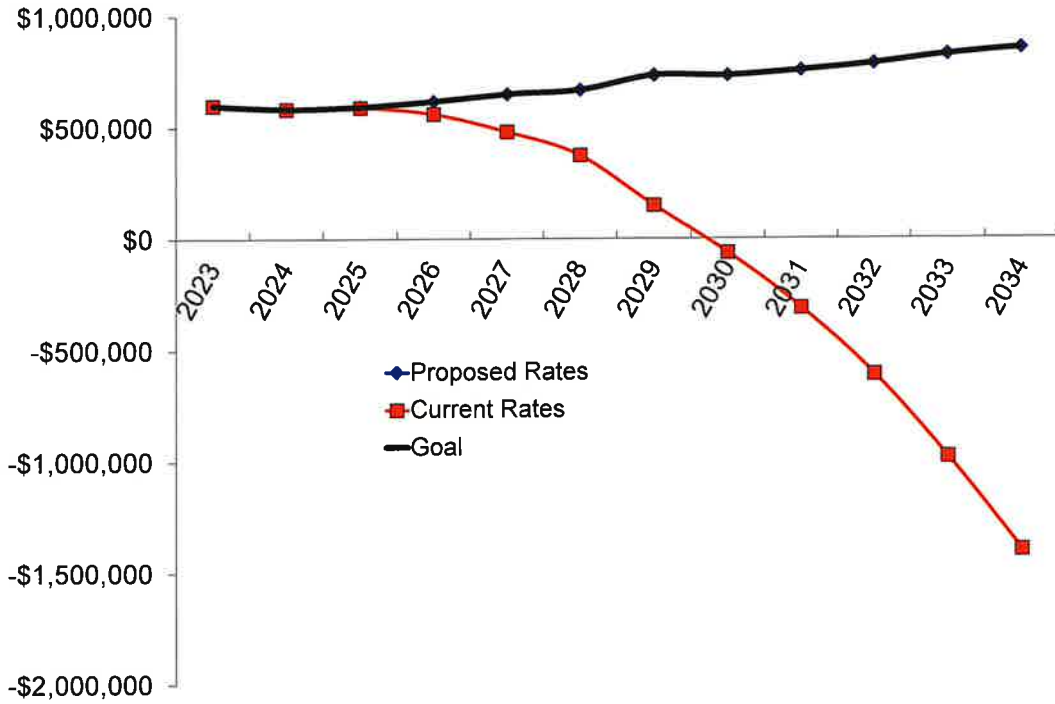
**Chart 3 - Residential Users' Bills**



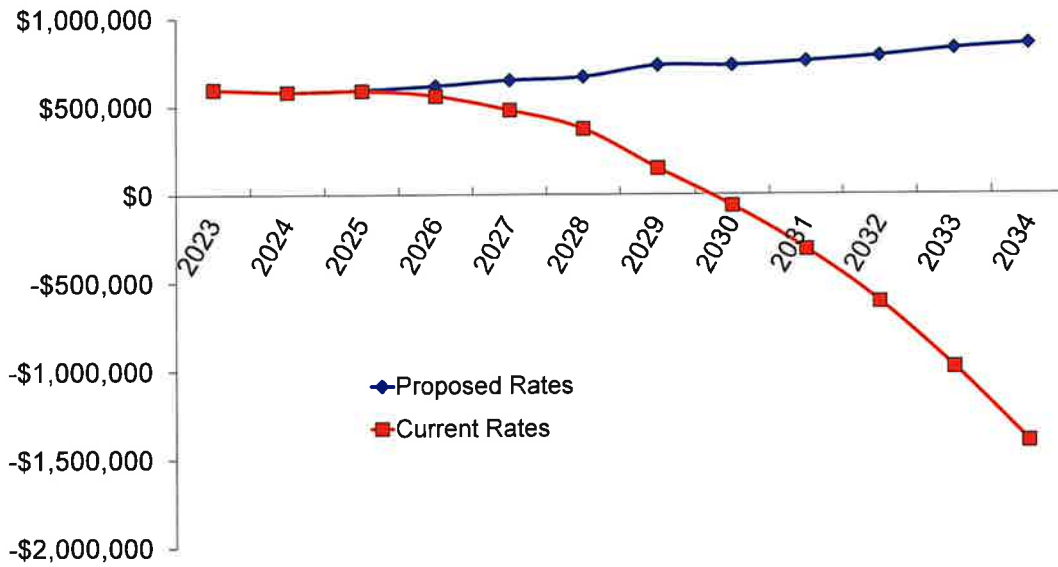
**Chart 4 - Affordability**



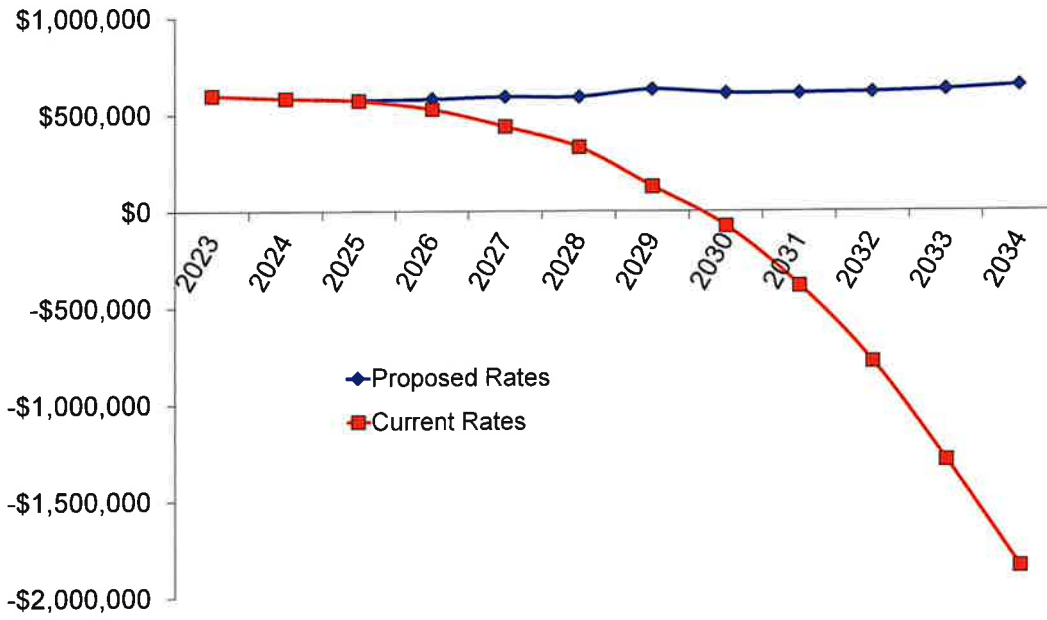
**Chart 5 - Working Capital vs Goal**



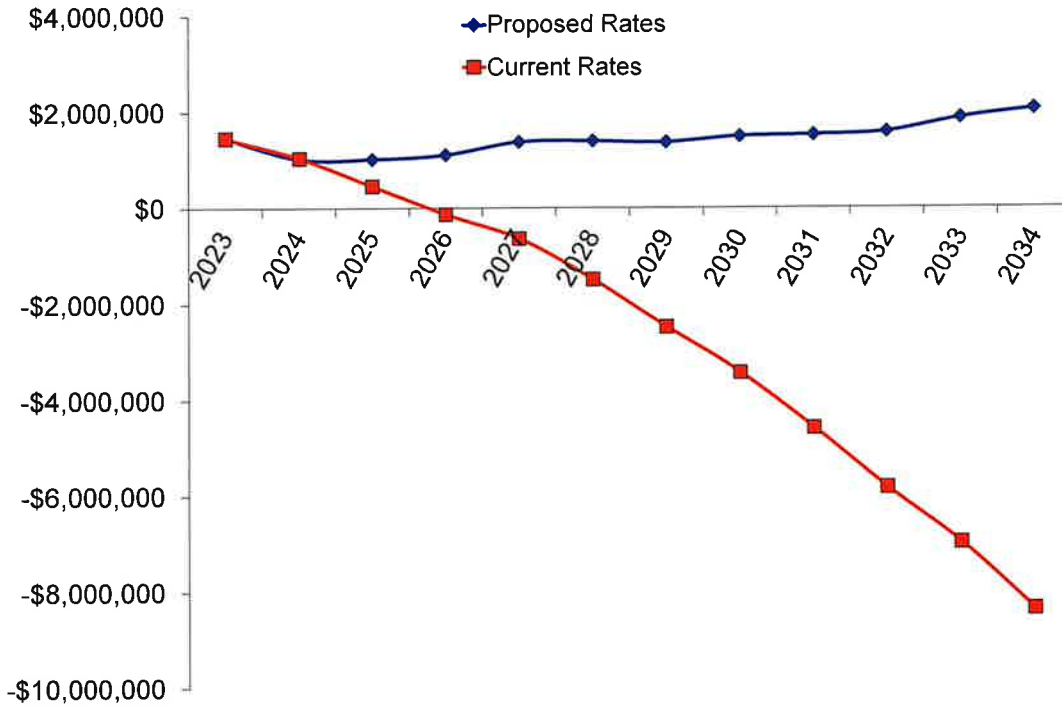
**Chart 6 - Value of Cash Assets Before Inflation**



**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**





## Willard, MO, Water Rates Model 2024-6

This model like Water Models 3, 4 and 5 except it assumes out of City customers' rates would be the same as in-City rates.

October 21, 2024

This rate analysis model was produced by  
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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

**Table 10 - Initial Rate Adjustments and Resulting Revenues  
Willard, MO, Water Rates Model 2024-6**

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Res, Irr, Water Only	0	999	\$23,548	\$14.66	0.000	\$4.56	\$398	\$23,947
	1,000	1,999	\$106,960	\$14.66	0.000	\$4.56	\$424	\$107,384
	2,000	2,999	\$113,522	\$14.66	0.000	\$4.56	\$419	\$113,941
	3,000	3,999	\$102,546	\$14.66	0.000	\$4.56	\$363	\$102,909
	4,000	4,999	\$80,409	\$14.66	0.000	\$4.56	\$279	\$80,688
	5,000	5,999	\$57,872	\$14.66	0.000	\$4.56	\$199	\$58,071
	6,000	6,999	\$38,422	\$14.66	0.000	\$4.56	\$133	\$38,555
	7,000	7,999	\$26,388	\$14.66	0.000	\$4.56	\$92	\$26,480
	8,000	8,999	\$16,823	\$14.66	0.000	\$4.56	\$60	\$16,884
	9,000	9,999	\$12,998	\$14.66	0.000	\$4.56	\$46	\$13,044
	10,000	19,999	\$37,001	\$14.66	0.000	\$4.56	\$139	\$37,140
	20,000	29,999	\$7,465	\$14.66	0.000	\$4.56	\$31	\$7,496
	30,000	39,999	\$2,720	\$14.66	0.000	\$4.56	\$12	\$2,732
	40,000	49,999	\$1,491	\$14.66	0.000	\$4.56	\$7	\$1,498
	50,000	59,999	\$795	\$14.66	0.000	\$4.56	\$3	\$798
	60,000	69,999	\$431	\$14.66	0.000	\$4.56	\$2	\$433
	70,000	79,999	\$322	\$14.66	0.000	\$4.56	\$1	\$323
	80,000	89,999	\$214	\$14.66	0.000	\$4.56	\$1	\$215
	90,000	99,999	\$182	\$14.66	0.000	\$4.56	\$1	\$182
	100,000	199,999	\$609	\$14.66	0.000	\$4.56	\$3	\$612
200,000	299,999	\$151	\$14.66	0.000	\$4.56	\$1	\$152	
300,000	399,999	\$0	\$14.66	0.000	\$4.56	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Commercial, Irr, Water Only	0	999	\$9,766	\$14.66	0.000	\$4.56	\$45	\$9,811
	1,000	1,999	\$7,674	\$14.66	0.000	\$4.56	\$27	\$7,701
	2,000	2,999	\$4,399	\$14.66	0.000	\$4.56	\$17	\$4,416
	3,000	3,999	\$3,407	\$14.66	0.000	\$4.56	\$14	\$3,421
	4,000	4,999	\$2,707	\$14.66	0.000	\$4.56	\$11	\$2,718
	5,000	5,999	\$2,511	\$14.66	0.000	\$4.56	\$10	\$2,521
	6,000	6,999	\$2,038	\$14.66	0.000	\$4.56	\$9	\$2,047
	7,000	7,999	\$1,816	\$14.66	0.000	\$4.56	\$8	\$1,824
	8,000	8,999	\$1,869	\$14.66	0.000	\$4.56	\$8	\$1,877
	9,000	9,999	\$1,681	\$14.66	0.000	\$4.56	\$7	\$1,688
	10,000	19,999	\$12,527	\$14.66	0.000	\$4.56	\$57	\$12,583
	20,000	29,999	\$9,087	\$14.66	0.000	\$4.56	\$41	\$9,128
	30,000	39,999	\$6,768	\$14.66	0.000	\$4.56	\$31	\$6,799
	40,000	49,999	\$5,247	\$14.66	0.000	\$4.56	\$24	\$5,270
	50,000	59,999	\$3,510	\$14.66	0.000	\$4.56	\$16	\$3,526
	60,000	69,999	\$2,921	\$14.66	0.000	\$4.56	\$13	\$2,934
	70,000	79,999	\$2,087	\$14.66	0.000	\$4.56	\$10	\$2,096
	80,000	89,999	\$1,694	\$14.66	0.000	\$4.56	\$8	\$1,702
	90,000	99,999	\$1,521	\$14.66	0.000	\$4.56	\$7	\$1,528
	100,000	199,999	\$7,976	\$14.66	0.000	\$4.56	\$37	\$8,013
200,000	299,999	\$3,281	\$14.66	0.000	\$4.56	\$16	\$3,297	
300,000	399,999	\$1,396	\$14.66	0.000	\$4.56	\$7	\$1,403	
400,000	499,999	\$510	\$14.66	0.000	\$4.56	\$2	\$512	
500,000	599,999	\$110	\$14.66	0.000	\$4.56	\$1	\$110	
600,000	699,999	\$0	\$14.66	0.000	\$4.56	\$0	\$0	
Rural Residential, Irr, Water Only	0	999	\$10,615	\$14.66	0.000	\$4.56	\$194	\$10,810
	1,000	1,999	\$53,768	\$14.66	0.000	\$4.56	\$202	\$53,971
	2,000	2,999	\$60,558	\$14.66	0.000	\$4.56	\$210	\$60,768
	3,000	3,999	\$56,461	\$14.66	0.000	\$4.56	\$187	\$56,648
	4,000	4,999	\$46,031	\$14.66	0.000	\$4.56	\$150	\$46,181
	5,000	5,999	\$33,440	\$14.66	0.000	\$4.56	\$109	\$33,550
	6,000	6,999	\$24,735	\$14.66	0.000	\$4.56	\$81	\$24,815
	7,000	7,999	\$17,057	\$14.66	0.000	\$4.56	\$57	\$17,114
	8,000	8,999	\$12,804	\$14.66	0.000	\$4.56	\$43	\$12,847
	9,000	9,999	\$9,461	\$14.66	0.000	\$4.56	\$32	\$9,493
	10,000	19,999	\$35,981	\$14.66	0.000	\$4.56	\$131	\$36,112
	20,000	29,999	\$11,223	\$14.66	0.000	\$4.56	\$43	\$11,266
	30,000	39,999	\$4,622	\$14.66	0.000	\$4.56	\$18	\$4,640
	40,000	49,999	\$2,221	\$14.66	0.000	\$4.56	\$9	\$2,230
	50,000	59,999	\$1,329	\$14.66	0.000	\$4.56	\$5	\$1,334
	60,000	69,999	\$797	\$14.66	0.000	\$4.56	\$3	\$800
	70,000	79,999	\$664	\$14.66	0.000	\$4.56	\$3	\$666
80,000	89,999	\$434	\$14.66	0.000	\$4.56	\$2	\$436	
90,000	99,999	\$323	\$14.66	0.000	\$4.56	\$1	\$324	
100,000	199,999	\$1,201	\$14.66	0.000	\$4.56	\$5	\$1,206	
200,000	299,999	\$268	\$14.66	0.000	\$4.56	\$1	\$269	
300,000	399,999	\$0	\$14.66	0.000	\$4.56	\$0	\$0	



**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Commercial, Irr, Water Only	0	999	\$513	\$14.66	0.000	\$4.56	\$4	\$516
	1,000	1,999	\$997	\$14.66	0.000	\$4.56	\$3	\$1,000
	2,000	2,999	\$847	\$14.66	0.000	\$4.56	\$3	\$850
	3,000	3,999	\$546	\$14.66	0.000	\$4.56	\$2	\$548
	4,000	4,999	\$266	\$14.66	0.000	\$4.56	\$1	\$267
	5,000	5,999	\$307	\$14.66	0.000	\$4.56	\$1	\$308
	6,000	6,999	\$275	\$14.66	0.000	\$4.56	\$1	\$276
	7,000	7,999	\$270	\$14.66	0.000	\$4.56	\$1	\$271
	8,000	8,999	\$323	\$14.66	0.000	\$4.56	\$1	\$325
	9,000	9,999	\$225	\$14.66	0.000	\$4.56	\$1	\$226
	10,000	19,999	\$880	\$14.66	0.000	\$4.56	\$3	\$883
	20,000	29,999	\$202	\$14.66	0.000	\$4.56	\$1	\$203
	30,000	39,999	\$85	\$14.66	0.000	\$4.56	\$0	\$85
	40,000	49,999	\$64	\$14.66	0.000	\$4.56	\$0	\$64
	50,000	59,999	\$28	\$14.66	0.000	\$4.56	\$0	\$28
	60,000	69,999	\$28	\$14.66	0.000	\$4.56	\$0	\$28
	70,000	79,999	\$28	\$14.66	0.000	\$4.56	\$0	\$28
80,000	89,999	\$28	\$14.66	0.000	\$4.56	\$0	\$28	
90,000	99,999	\$21	\$14.66	0.000	\$4.56	\$0	\$21	
100,000	199,999	\$0	\$14.66	0.000	\$4.56	\$0	\$0	
No Charge ("Zero")	0	999	\$0	\$0.00	0.000	\$0.00	\$0	\$0
	800,000	800,001	\$0	\$0.00	0.000	\$0.00	\$0	\$0
Total Rate Revenue at Current Rates			\$1,117,298	Total Rate Revenue at Modeled Rates			\$4,549	
Total Blended Rate Revenues for the Year								\$1,121,848

**Table 17 - Financial Capacity Indicators and Reserves**  
**Willard, MO, Water Rates Model 2024-6**

This table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the test year and the next 10 years.

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$26.72	\$37.48	\$38.96	\$40.52	\$42.14	\$43.83	\$45.58	\$47.40	\$49.30	\$51.27	\$53.32	\$55.45	
AMHI Within Service Area	\$79,951	\$83,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
Affordability Index: Current Rates First Column, Modeled Rates After That	0.40%	0.54%	0.54%	0.54%	0.54%	0.53%	0.53%	0.53%	0.53%	0.53%	0.53%	0.53%	
National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area (cleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.													
Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$18.14	\$23.78	\$24.73	\$25.72	\$26.75	\$27.82	\$28.94	\$30.09	\$31.30	\$32.55	\$33.85	\$35.21	
Income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,828	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
Affordability for Low-income, Low-volume: Current Rates First Column, Modeled Rates After That	0.54%	0.70%	0.71%	0.72%	0.74%	0.75%	0.77%	0.78%	0.79%	0.81%	0.82%	0.84%	
This additional indicator of affordability assumes a residential customer with income at one-half the median household income above, that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow payers" and "no payers" compared to others, so this indicator goes to the "business sense" of the rates modeled here. In other words, raise this customer's bill too much and they are more likely to pay late or not pay.													
Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That	1.00	1.00	1.50	1.52	1.51	1.54	1.47	1.54	1.57	1.58	1.57	1.59	
Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red". Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.													
Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That	0.00	0.00	0.00	0.25	0.19	0.21	0.00	0.14	0.23	0.29	0.28	0.37	
Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A" above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below), it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.													
Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That	15.78	14.46	10.18	10.23	11.20	5.20	3.24	3.20	3.48	3.55	3.70	4.37	
This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,558,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,558,518	\$599,112	\$584,345	\$594,211	\$618,247	\$649,953	\$668,650	\$733,729	\$733,377	\$756,366	\$786,022	\$826,105	\$853,765
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,558,518	\$599,112	\$584,345	\$576,384	\$581,708	\$593,194	\$591,951	\$630,078	\$610,882	\$611,131	\$616,039	\$628,031	\$649,058
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	\$861,750	\$439,891	\$430,161	\$497,480	\$734,558	\$732,964	\$647,899	\$770,081	\$777,114	\$814,531	\$1,062,797	\$1,224,030
Sum of All Reserves	\$1,558,518	\$1,460,862	\$1,024,236	\$1,024,372	\$1,115,727	\$1,384,510	\$1,401,614	\$1,381,627	\$1,503,458	\$1,533,480	\$1,600,553	\$1,888,902	\$2,077,795

**Table 18 - Bills Before and After Rate Adjustments**  
**Willard, MO, Water Rates Model 2024-6**

The modeled rates will generate 48.6% more revenue per year than the rates at the end of the test year.

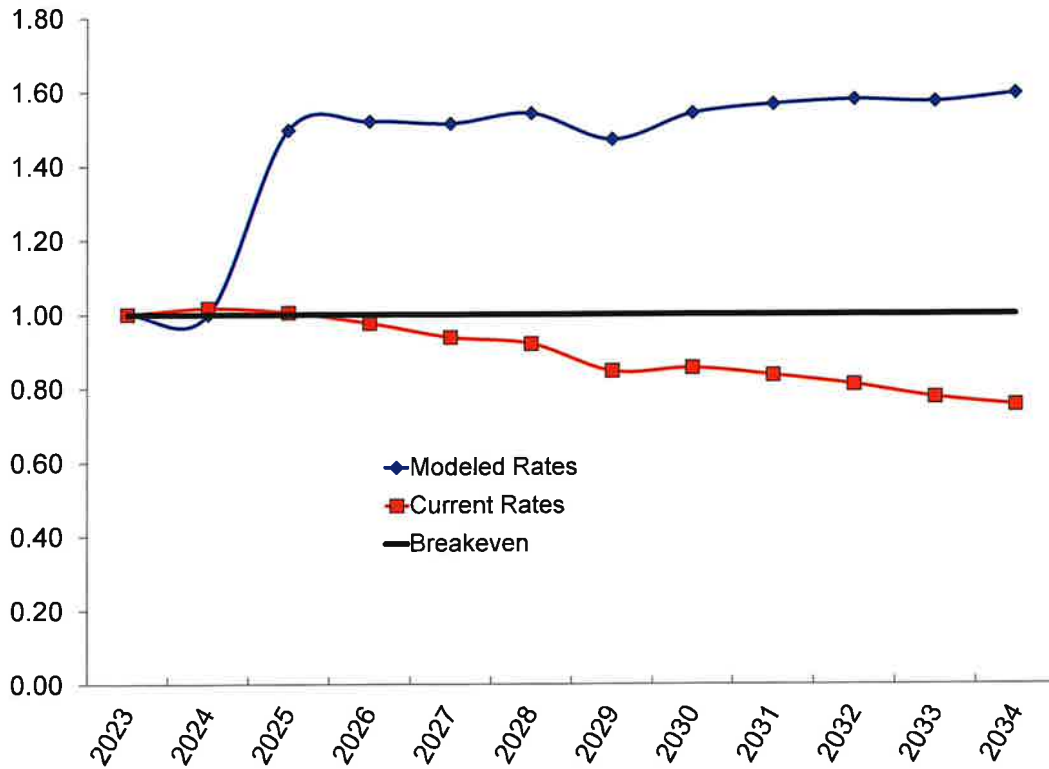
However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Res, Irr, Water Only	0	142	142	\$15.28	\$14.66	-\$0.62	-4%
	1,000	283	425	\$15.28	\$19.22	\$3.94	26%
	2,000	397	822	\$18.14	\$23.78	\$5.64	31%
	3,000	408	1,230	\$21.00	\$28.34	\$7.34	35%
	4,000	338	1,567	\$23.86	\$32.90	\$9.04	38%
	5,000	248	1,816	\$26.72	\$37.46	\$10.74	40%
	6,000	162	1,977	\$29.58	\$42.02	\$12.44	42%
	7,000	110	2,087	\$32.44	\$46.58	\$14.14	44%
	8,000	64	2,152	\$35.30	\$51.14	\$15.84	45%
	9,000	51	2,202	\$38.16	\$55.70	\$17.54	46%
	10,000	121	2,323	\$41.02	\$60.26	\$19.24	47%
	20,000	16	2,339	\$69.62	\$105.86	\$36.24	52%
	30,000	5	2,344	\$98.22	\$151.46	\$53.24	54%
	40,000	2	2,346	\$126.82	\$197.06	\$70.24	55%
	50,000	1	2,347	\$155.42	\$242.66	\$87.24	56%
	60,000	0	2,348	\$184.02	\$288.26	\$104.24	57%
	70,000	0	2,348	\$212.62	\$333.86	\$121.24	57%
	80,000	0	2,348	\$241.22	\$379.46	\$138.24	57%
	90,000	0	2,348	\$269.82	\$425.06	\$155.24	58%
	100,000	1	2,349	\$298.42	\$470.66	\$172.24	58%
200,000	0	2,349	\$584.42	\$926.66	\$342.24	59%	
In-City Commercial, Irr, Water Only	0	59	59	\$15.28	\$14.66	-\$0.62	-4%
	1,000	30	89	\$15.28	\$19.22	\$3.94	26%
	2,000	13	102	\$18.14	\$23.78	\$5.64	31%
	3,000	9	111	\$21.00	\$28.34	\$7.34	35%
	4,000	6	117	\$23.86	\$32.90	\$9.04	38%
	5,000	5	122	\$26.72	\$37.46	\$10.74	40%
	6,000	3	125	\$29.58	\$42.02	\$12.44	42%
	7,000	2	127	\$32.44	\$46.58	\$14.14	44%
	8,000	3	131	\$35.30	\$51.14	\$15.84	45%
	9,000	3	133	\$38.16	\$55.70	\$17.54	46%
	10,000	11	144	\$41.02	\$60.26	\$19.24	47%
	20,000	7	152	\$69.62	\$105.86	\$36.24	52%
	30,000	5	157	\$98.22	\$151.46	\$53.24	54%
	40,000	5	162	\$126.82	\$197.06	\$70.24	55%
	50,000	2	164	\$155.42	\$242.66	\$87.24	56%
	60,000	2	167	\$184.02	\$288.26	\$104.24	57%
	70,000	1	168	\$212.62	\$333.86	\$121.24	57%
	80,000	1	169	\$241.22	\$379.46	\$138.24	57%
	90,000	1	170	\$269.82	\$425.06	\$155.24	58%
	100,000	3	172	\$298.42	\$470.66	\$172.24	58%
200,000	1	173	\$584.42	\$926.66	\$342.24	59%	
300,000	0	173	\$870.42	\$1,382.66	\$512.24	59%	

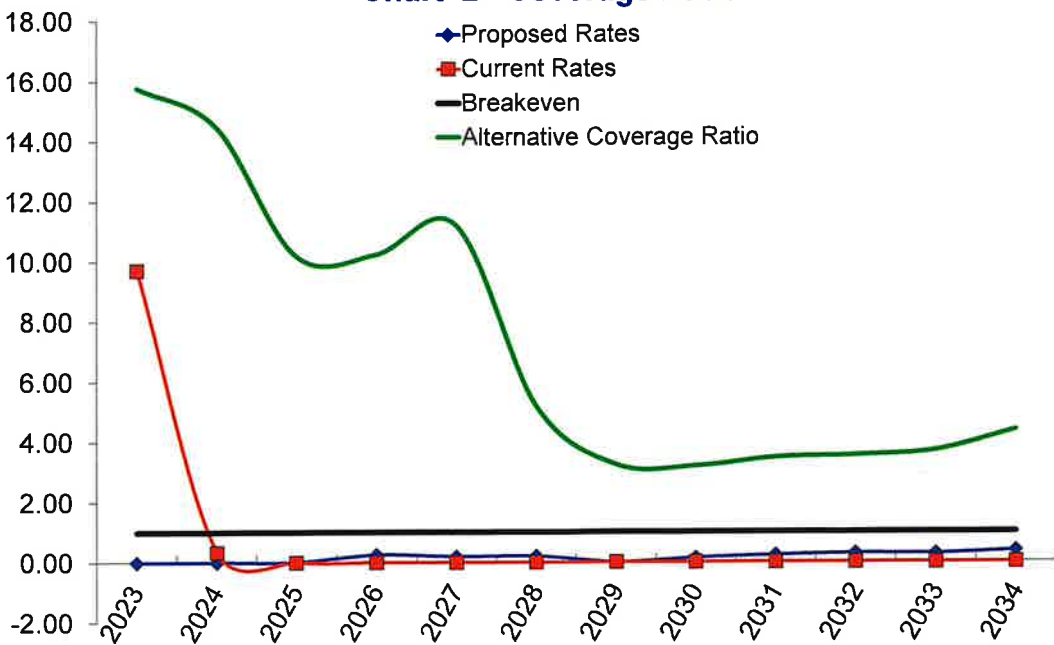
**Table 18 - Bills Before and After Rate Adjustments**

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential, Irr, Water Only	0	59	59	\$16.63	\$14.66	-\$1.97	-12%
	1,000	109	167	\$16.63	\$19.22	\$2.59	16%
	2,000	180	347	\$19.75	\$23.78	\$4.03	20%
	3,000	194	541	\$22.87	\$28.34	\$5.47	24%
	4,000	168	709	\$25.99	\$32.90	\$6.91	27%
	5,000	121	829	\$29.11	\$37.46	\$8.35	29%
	6,000	89	919	\$32.23	\$42.02	\$9.79	30%
	7,000	58	976	\$35.35	\$46.58	\$11.23	32%
	8,000	42	1,019	\$38.47	\$51.14	\$12.67	33%
	9,000	29	1,048	\$41.59	\$55.70	\$14.11	34%
	10,000	87	1,135	\$44.71	\$60.26	\$15.55	35%
	20,000	21	1,156	\$75.91	\$105.86	\$29.95	39%
	30,000	8	1,164	\$107.11	\$151.46	\$44.35	41%
	40,000	3	1,167	\$138.31	\$197.06	\$58.75	42%
	50,000	2	1,168	\$169.51	\$242.66	\$73.15	43%
	60,000	1	1,169	\$200.71	\$288.26	\$87.55	44%
	70,000	1	1,170	\$231.91	\$333.86	\$101.95	44%
	80,000	0	1,170	\$263.11	\$379.46	\$116.35	44%
90,000	0	1,170	\$294.31	\$425.06	\$130.75	44%	
100,000	1	1,171	\$325.51	\$470.66	\$145.15	45%	
200,000	0	1,171	\$637.51	\$926.66	\$289.15	45%	
Rural Commercial, Irr, Water Only	0	3	3	\$16.63	\$14.66	-\$1.97	-12%
	1,000	3	6	\$16.63	\$19.22	\$2.59	16%
	2,000	3	9	\$19.75	\$23.78	\$4.03	20%
	3,000	2	11	\$22.87	\$28.34	\$5.47	24%
	4,000	0	11	\$25.99	\$32.90	\$6.91	27%
	5,000	1	12	\$29.11	\$37.46	\$8.35	29%
	6,000	1	12	\$32.23	\$42.02	\$9.79	30%
	7,000	1	13	\$35.35	\$46.58	\$11.23	32%
	8,000	1	14	\$38.47	\$51.14	\$12.67	33%
	9,000	1	15	\$41.59	\$55.70	\$14.11	34%
	10,000	3	17	\$44.71	\$60.26	\$15.55	35%
	20,000	0	18	\$75.91	\$105.86	\$29.95	39%
No Charge ("Zero")	0	2	2	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	\$0.00	\$0.00	\$0.00	N.A.
30,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	
800,000	0	8	\$0.00	\$0.00	\$0.00	N.A.	

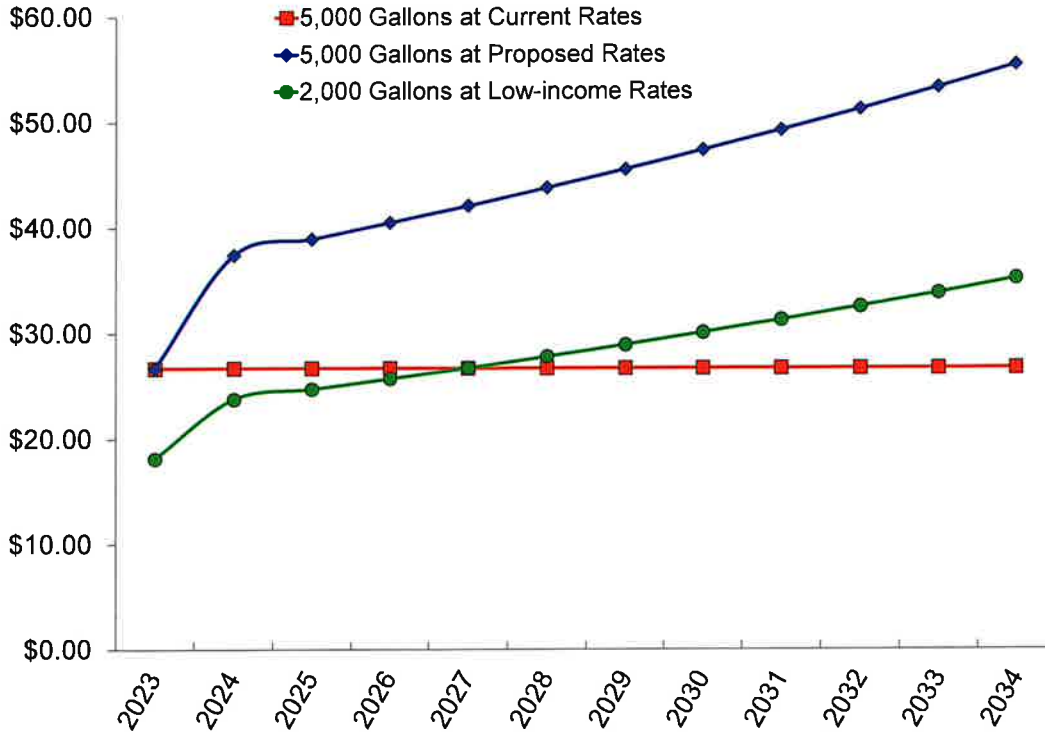
**Chart 1 - Operating Ratio**



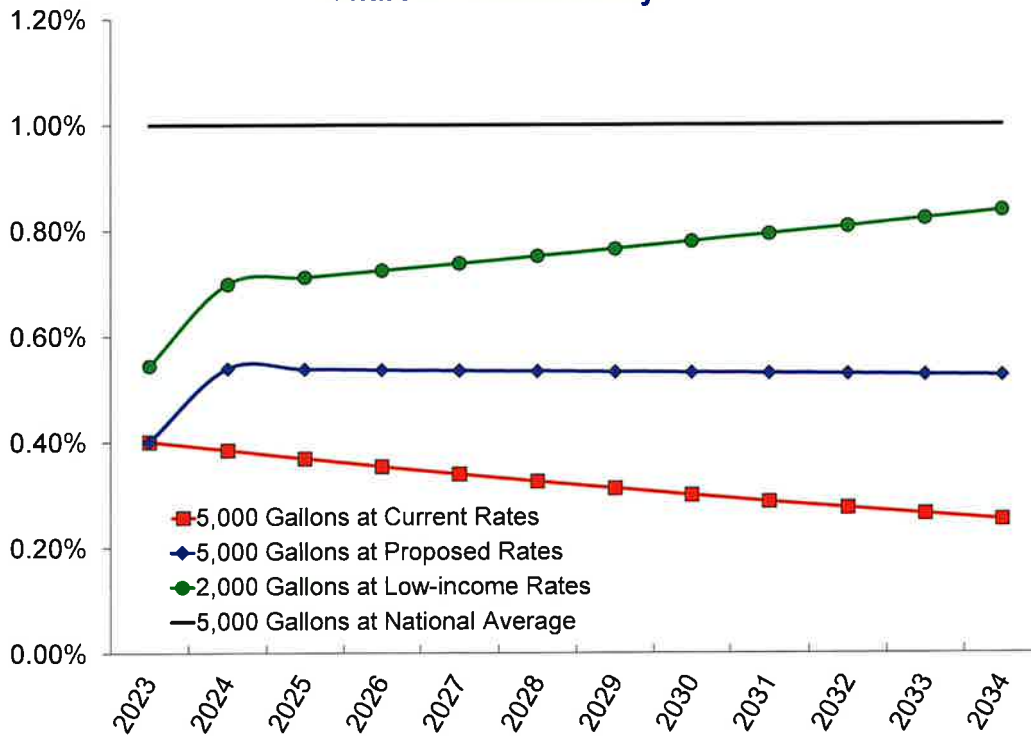
**Chart 2 - Coverage Ratio**



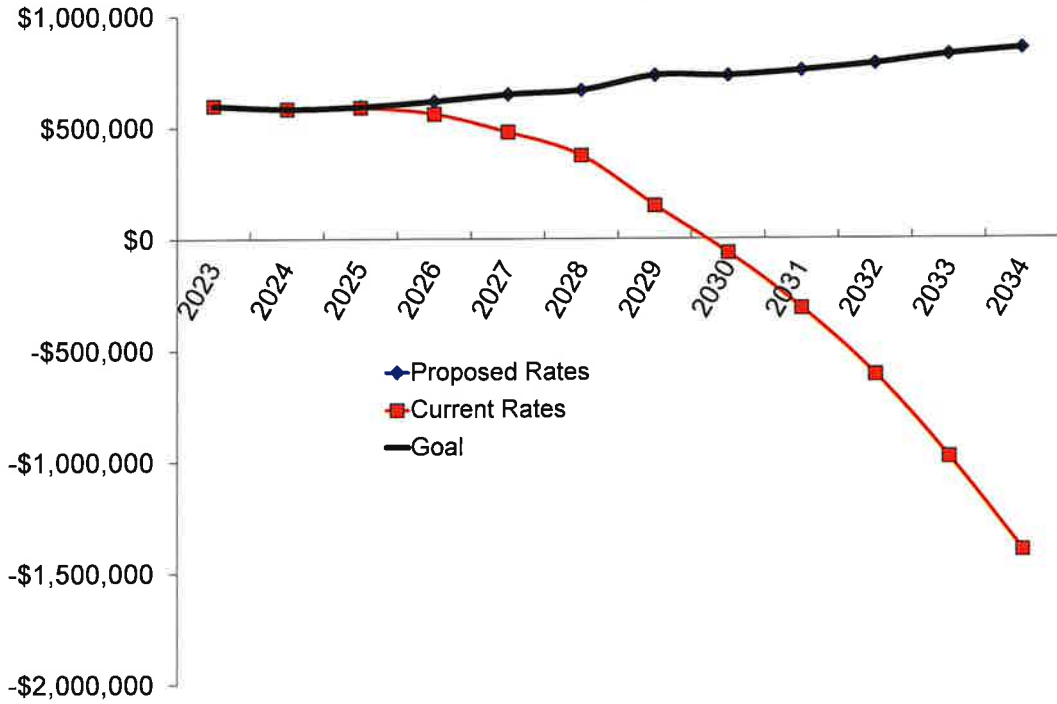
**Chart 3 - Residential Users' Bills**



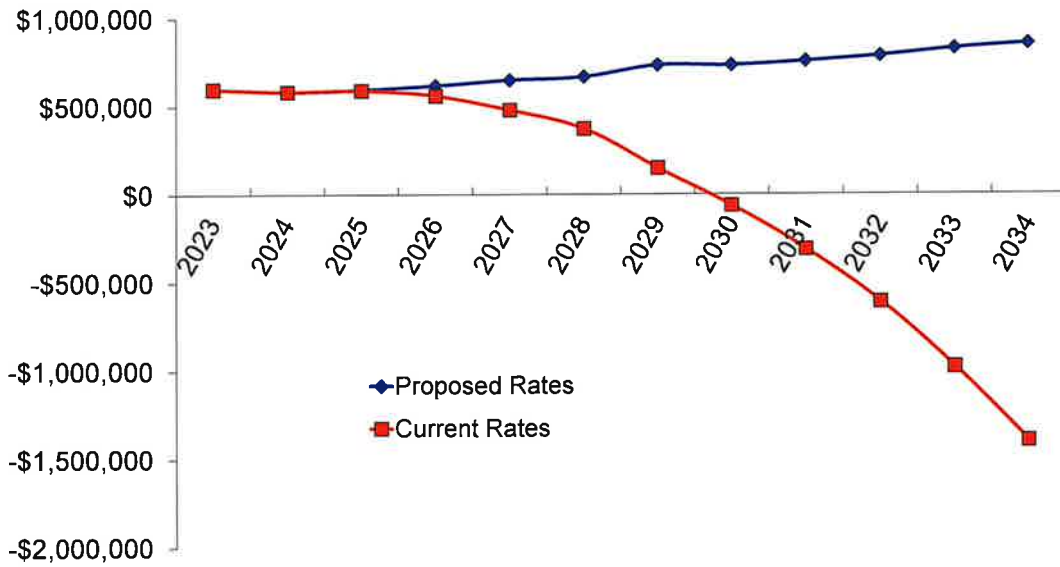
**Chart 4 - Affordability**



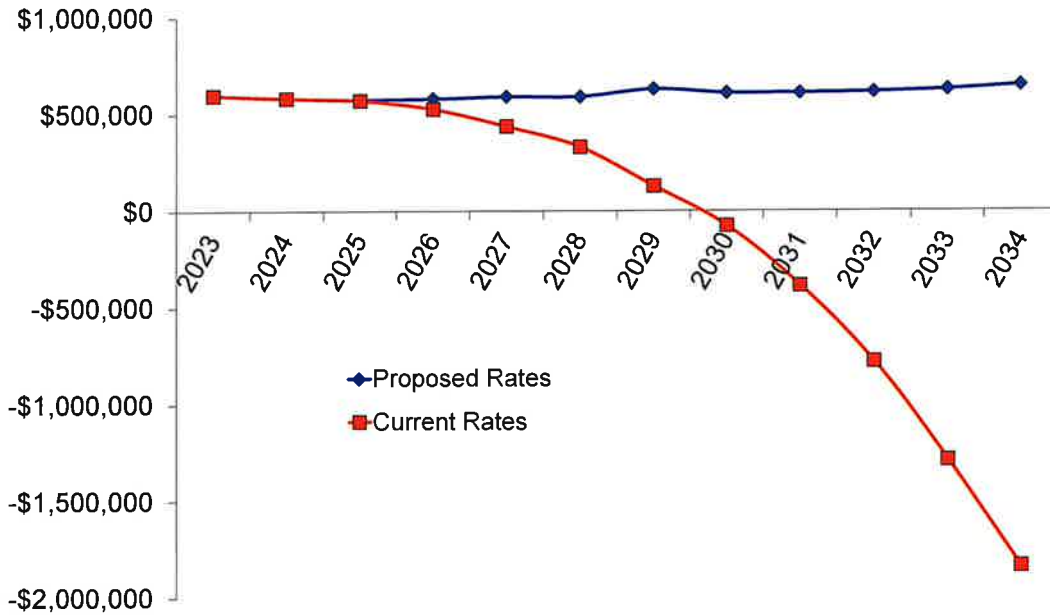
**Chart 5 - Working Capital vs Goal**



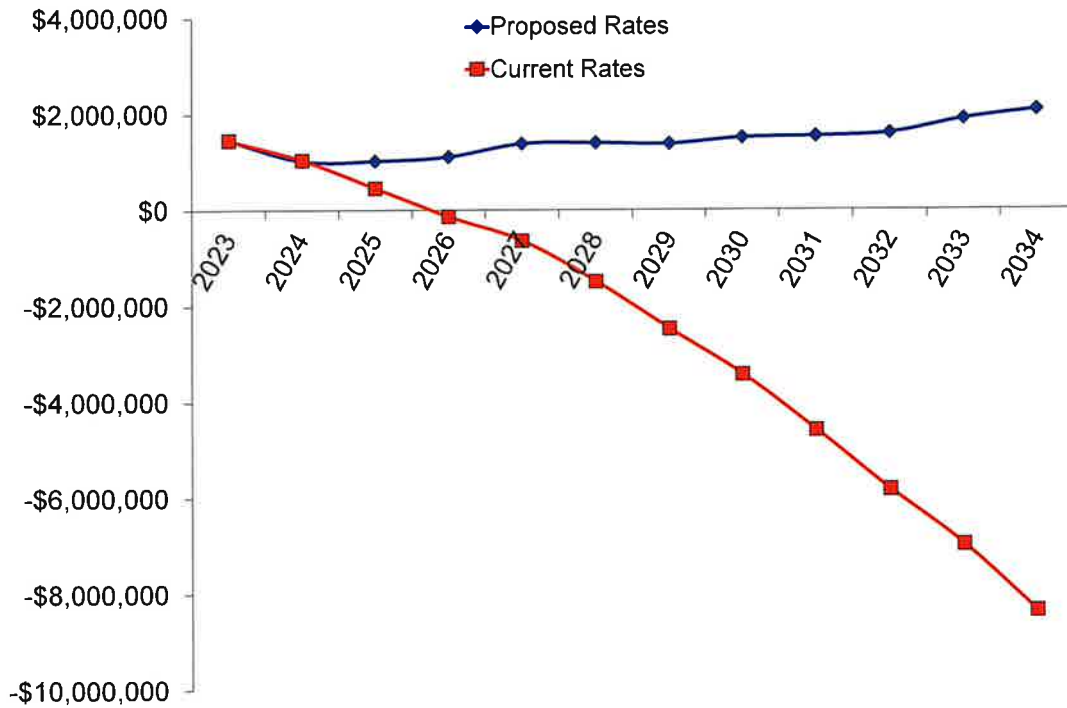
**Chart 6 - Value of Cash Assets Before Inflation**



**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**







## Willard, MO, Sewer Rates Model 2024-3

This model calculated cost-to-serve rates, with level minimum and unit charges for in-City customers, and out-of-City rates in the same structure, but higher due to higher costs to serve outside of the City.

October 21, 2024

This rate analysis model was produced by

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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

**Table 1 - Rates**  
**Willard, MO, Sewer Rates Model 2024-3**

If we received the now current rates for the utility, the current rates are in this table. Otherwise, these rates were in effect at the end of the test year. If a volume range was left out of the table, rest assured, it is in the Model. We just hid some volume ranges to make the table and report shorter. In such cases, the unit charge that applies to next lowest volume range also applies to the hidden volume ranges.

**Test Year Ending and (Assumed) Current Rates**

Customer Type, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Use Within Each Range in 1,000 Gallons	Billing Cycle Minimum Charge	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons
In-City Residential	0	999	0.940	\$26.21	0.000	\$5.85
	1,000	1,999	0.872	\$26.21	0.000	\$5.85
	2,000	2,999	0.793	\$26.21	0.000	\$5.85
	3,000	3,999	0.733	\$26.21	0.000	\$5.85
	4,000	4,999	0.698	\$26.21	0.000	\$5.85
	5,000	5,999	0.682	\$26.21	0.000	\$5.85
	10,000	19,999	3.713	\$26.21	0.000	\$5.85
	800,000	800,001	0.000	\$26.21	0.000	\$5.85
In-City Commercial	0	999	0.662	\$26.21	0.000	\$5.85
	1,000	1,999	0.736	\$26.21	0.000	\$5.85
	2,000	2,999	0.845	\$26.21	0.000	\$5.85
	3,000	3,999	0.878	\$26.21	0.000	\$5.85
	4,000	4,999	0.911	\$26.21	0.000	\$5.85
	5,000	5,999	0.905	\$26.21	0.000	\$5.85
	10,000	19,999	8.422	\$26.21	0.000	\$5.85
	800,000	800,001	0.000	\$26.21	0.000	\$5.85
Rural Residential	0	999	0.950	\$28.52	0.000	\$6.36
	1,000	1,999	0.902	\$28.52	0.000	\$6.36
	2,000	2,999	0.821	\$28.52	0.000	\$6.36
	3,000	3,999	0.765	\$28.52	0.000	\$6.36
	4,000	4,999	0.734	\$28.52	0.000	\$6.36
	5,000	5,999	0.739	\$28.52	0.000	\$6.36
	10,000	19,999	4.827	\$28.52	0.000	\$6.36
	800,000	800,001	0.000	\$28.52	0.000	\$6.36
Rural Commercial	0	999	0.840	\$36.47	0.000	\$6.36
	1,000	1,999	0.777	\$36.47	0.000	\$6.36
	2,000	2,999	0.734	\$36.47	0.000	\$6.36
	3,000	3,999	0.794	\$36.47	0.000	\$6.36
	4,000	4,999	0.963	\$36.47	0.000	\$6.36
	5,000	5,999	0.910	\$36.47	0.000	\$6.36
	10,000	19,999	4.081	\$36.47	0.000	\$6.36
	800,000	800,000	0.000	\$36.47	0.000	\$6.36

## Table 2 - Test Year Usage

### Willard, MO, Sewer Rates Model 2024-3

This table shows usage by all customers during the test year. Residential meter readings per year: 12  
 Test year = the one-year period being analyzed starts: 1/1/2023 Other customer readings per year: 12  
 Date this model created: 10/21/2024 Bills per year: 12

Customer, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Use in Each Range in Gallons	# of Customers That "Maxed Out" in Each Range	% of Customers That "Maxed Out" in Each Range	% of Total Use in Each Range
In-City Residential	0	999	26,483,139	142	3.8%	0.0%
	1,000	1,999	23,082,000	283	7.6%	1.5%
	2,000	2,999	18,315,000	397	10.7%	4.3%
	3,000	3,999	13,425,000	408	11.0%	6.6%
	4,000	4,999	9,375,000	338	9.1%	7.3%
	5,000	5,999	6,394,000	248	6.7%	6.7%
	6,000	6,999	4,454,000	162	4.3%	5.2%
	7,000	7,999	3,136,000	110	3.0%	4.1%
	8,000	8,999	2,364,000	64	1.7%	2.8%
	9,000	9,999	1,754,000	51	1.4%	2.5%
	10,000	19,999	6,513,000	121	3.3%	8.1%
	20,000	29,999	1,864,000	16	0.4%	2.0%
	30,000	39,999	750,000	5	0.1%	0.8%
			119,228,139	2,349	63.2%	53.4%
In-City Commercial	0	999	1,379,000	59	1.6%	0.0%
	1,000	1,999	1,015,000	30	0.8%	0.2%
	2,000	2,999	858,000	13	0.4%	0.1%
	3,000	3,999	753,000	9	0.2%	0.1%
	4,000	4,999	686,000	6	0.2%	0.1%
	5,000	5,999	621,000	5	0.1%	0.1%
	6,000	6,999	583,000	3	0.1%	0.1%
	7,000	7,999	556,000	2	0.1%	0.1%
	8,000	8,999	518,000	3	0.1%	0.1%
	9,000	9,999	488,000	3	0.1%	0.1%
	10,000	19,999	4,110,000	11	0.3%	0.9%
	20,000	29,999	3,029,000	7	0.2%	1.0%
	30,000	39,999	2,263,000	5	0.1%	1.0%
	40,000	49,999	1,687,000	5	0.1%	1.3%
	50,000	59,999	1,220,000	2	0.1%	0.6%
	60,000	69,999	977,000	2	0.1%	0.8%
	70,000	79,999	714,000	1	0.0%	0.6%
80,000	89,999	616,000	1	0.0%	0.3%	
90,000	99,999	533,000	1	0.0%	0.4%	
100,000	199,999	2,905,000	3	0.1%	2.0%	
200,000	299,999	1,212,000	1	0.0%	1.1%	
		27,463,000	174	4.7%	12.3%	

### Table 2 - Test Year Usage

Customer, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Use in Each Range in Gallons	# of Customers That "Maxed Out" in Each Range	% of Customers That "Maxed Out" in Each Range	% of Total Use in Each Range
Rural Residential	0	999	13,346,000	59	1.6%	0.0%
	1,000	1,999	12,042,000	109	2.9%	0.6%
	2,000	2,999	9,882,000	180	4.8%	1.9%
	3,000	3,999	7,557,000	194	5.2%	3.1%
	4,000	4,999	5,546,000	168	4.5%	3.6%
	5,000	5,999	4,098,000	121	3.2%	3.2%
	6,000	6,999	3,026,000	89	2.4%	2.9%
	7,000	7,999	2,333,000	58	1.6%	2.2%
	8,000	8,999	1,827,000	42	1.1%	1.8%
	9,000	9,999	1,477,000	29	0.8%	1.4%
	10,000	19,999	7,130,000	87	2.3%	6.0%
	20,000	29,999	2,605,000	21	0.6%	2.7%
	30,000	39,999	1,142,000	8	0.2%	1.4%
			74,124,000	1,171	31.5%	33.2%
Rural Commercial	0	999	179,000	3	0.1%	0.0%
	1,000	1,999	139,000	3	0.1%	0.0%
	2,000	2,999	102,000	3	0.1%	0.0%
	3,000	3,999	81,000	2	0.0%	0.0%
	4,000	4,999	78,000	0	0.0%	0.0%
	5,000	5,999	71,000	1	0.0%	0.0%
	6,000	6,999	65,000	1	0.0%	0.0%
	7,000	7,999	58,000	1	0.0%	0.0%
	8,000	8,999	45,000	1	0.0%	0.0%
	9,000	9,999	37,000	1	0.0%	0.0%
	10,000	19,999	151,000	3	0.1%	0.2%
	20,000	29,999	50,000	0	0.0%	0.0%
	30,000	39,999	30,000	0	0.0%	0.0%
			1,140,000	18	0.5%	0.5%
<b>Grand Totals:</b>			223,076,139	3,719	100%	100%

**Table 3 - Operating Incomes and Basic User Data  
Willard, MO, Sewer Rates Model 2024-3**

This table depicts user statistics, customer growth, and system incomes and across the board, "inflationary" style rate increases through the 10th year.

**Annual Median Household Income (AMHI)**

\$76,681	Census Bureau estimate of AMHI for the year 2022
\$39,565	Census Bureau estimate of AMHI for the year 2000
\$37,116	AMHI growth during this time period
4.26%	Simple annual income growth rate during this time period (used to project future household incomes)

**Test Year Growth of Customer Base and Average Tap Fee Paid per Connection**

42	Number new Sewer connections made during test year
\$1,063	Average Sewer tap or installation fee assessed during the test year

This model is programmed for rates to be reset in the "Analysis Year," also called the "0 Year" column below (heading highlighted blue). Revenues will be collected at the noncurrent rates for the first part of the analysis year and the modeled rates for the rest part of the analysis year. Thus, the revenues shown that column of the table are "blended" revenues, part collected at the old rates and part collected at the new rates. It was then assumed that all rate adjustments made after the initial (major) adjustment will be done annually on approximately the anniversary of the first adjustment. If rates will not be adjusted during the "0 Year," an adjustment (normally a revenue reduction) was calculated below to account for the late start in making the first adjustments.

**Basic User (Customer) Data**

Inflation/ Deflation (-) Factor	Analysis Year		Years Following the Analysis Year (for Which Results Have Been Projected)										
	Test Year	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year	
	Starting 1/1/23	Starting 1/1/24	Starting 1/1/25	Starting 1/1/26	Starting 1/1/27	Starting 1/1/28	Starting 1/1/29	Starting 1/1/30	Starting 1/1/31	Starting 1/1/32	Starting 1/1/33	Starting 1/1/34	
Rate Increases Projected for Future Years	N.A.	N.A.	N.A.	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Average Number of Customers	N.A.	3,719	3,761	3,804	3,846	3,888	3,931	3,973	4,016	4,058	4,100	4,143	4,185
Customers Added or Lost (-) Each Year	N.A.	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
Customer Growth or Loss (-) Rate	N.A.	1.14%	1.13%	1.12%	1.10%	1.09%	1.08%	1.07%	1.06%	1.05%	1.03%	1.02%	1.01%
Test Year (Actual) and Projected Future Years' Sales, in Gallons	N.A.	223,076,139	225,620,344	228,164,549	230,708,755	233,252,960	235,797,165	238,341,370	240,885,576	243,429,781	245,973,986	248,518,191	251,062,397

The row above shows the rate at which user charge fees should be increased for each year beyond the initial rate adjustment year. Unless stated otherwise, these should be across-the-board increases to all rates and fees and that should continue until a new rate analysis is done.

**Calculated User Charge Fees, Accounting for New Customers and Future Rate Increases Over the Years**

Actual or Calculated Sales Revenues	\$2,301,618	\$2,304,964	\$3,667,497	\$3,856,728	\$4,055,230	\$4,263,440	\$4,481,820	\$4,710,848	\$4,951,028	\$5,202,884	\$5,466,968	\$5,743,853	
Additional Sales Revenues From New Customers		\$71	\$40,895	\$42,531	\$44,232	\$46,002	\$47,842	\$49,755	\$51,746	\$53,815	\$55,968	\$58,207	
Total Calculated Revenues (User Charge Fees)	\$2,301,618	\$2,305,035	\$3,708,392	\$3,899,259	\$4,099,462	\$4,309,442	\$4,529,661	\$4,760,603	\$5,002,773	\$5,256,700	\$5,522,936	\$5,802,060	
<b>Operating Incomes</b>													
Sewer Sales - All (Including Taxes)	N.A.	\$1,481,554	\$1,483,754	\$2,387,096	\$2,509,957	\$2,638,828	\$2,773,993	\$2,915,748	\$3,064,406	\$3,220,291	\$3,383,743	\$3,555,120	\$3,734,792
PENALTY INCOME-SEWER	N.A.	\$27,531	\$27,842	\$28,152	\$28,463	\$28,773	\$29,084	\$29,394	\$29,704	\$30,015	\$30,325	\$30,636	\$30,946
HOOK UP FEES RECEIVE-SEWER	% Above	\$45,100	\$44,977	\$44,977	\$44,977	\$44,977	\$44,977	\$44,977	\$44,977	\$44,977	\$44,977	\$44,977	\$44,977
Adjusted Meter Size-based Plant Investment Fees (Cochran Fees)	% Above	\$0	\$0	\$40,083	\$40,083	\$40,083	\$40,083	\$40,083	\$40,083	\$40,083	\$40,083	\$40,083	\$40,083
INTEREST INCOME-SEWER	N.A.	\$37,738	\$3,619	\$3,544	\$8,314	\$8,744	\$9,264	\$9,669	\$10,554	\$12,552	\$11,801	\$11,887	\$12,598
MISCELLANEOUS INCOME-SEWER	N.A.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CONVENIENCE FEE-SEWER	N.A.	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764	\$19,764
GRANT RECEIPTS-SEWER	N.A.	\$58,737	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TRANSFER IN-SEWER	N.A.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CAPITAL ASSET SALES-SEWER	N.A.	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103	\$7,103
Total Operating Incomes		\$1,677,528	\$1,587,059	\$2,530,720	\$2,658,662	\$2,788,273	\$2,924,266	\$3,066,739	\$3,216,692	\$3,374,785	\$3,537,798	\$3,709,670	\$3,890,264

**Table 4 - Operating Costs and Net Income**  
**Willard, MO, Sewer Rates Model 2024-3**

This table depicts expenses during the test year, this year and for the next 10 years. Some future costs will experience inflation. Those costs that go up as use goes up are increased by the cost inflation factor plus the growth rate in users (First year costs and net incomes are actual subsequent years are projected)

Expense Items	Inflation/Deflation (-) Factor	Analysis Year		Years Following the Analysis Year (for Which Results Have Been Projected)									
		Test Year Starting 1/1/23	0 Year Starting 1/1/24	1st Year Starting 1/1/25	2nd Year Starting 1/1/26	3rd Year Starting 1/1/27	4th Year Starting 1/1/28	5th Year Starting 1/1/29	6th Year Starting 1/1/30	7th Year Starting 1/1/31	8th Year Starting 1/1/32	9th Year Starting 1/1/33	10th Year Starting 1/1/34
SUPPLIES-SEWER	4.0%	\$14,910	\$15,681	\$16,490	\$17,339	\$18,229	\$19,163	\$20,142	\$21,169	\$22,246	\$23,375	\$24,559	\$25,800
PERMIT FEES-SEWER	4.0%	\$3,000	\$3,120	\$3,245	\$3,375	\$3,510	\$3,650	\$3,796	\$3,948	\$4,106	\$4,270	\$4,441	\$4,618
BUILDING MAINTENANCE-SEWER	4.0%	\$89	\$92	\$96	\$100	\$104	\$108	\$112	\$117	\$122	\$126	\$132	\$137
CUSTODIAL SUPPLIES-SEWER	4.0%	\$172	\$179	\$186	\$194	\$202	\$210	\$218	\$227	\$236	\$245	\$255	\$265
MISCELLANEOUS EXPENSE-SEWER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OFFICE SUPPLIES-SEWER	4.0%	\$4,480	\$4,712	\$4,955	\$5,210	\$5,478	\$5,758	\$6,053	\$6,361	\$6,685	\$7,024	\$7,380	\$7,753
POSTAGE-SEWER	4.0%	\$12,491	\$13,137	\$13,815	\$14,526	\$15,271	\$16,054	\$16,874	\$17,734	\$18,636	\$19,582	\$20,574	\$21,614
REPAIRS AND MAINTENANCE-SEWER	4.0%	\$118,585	\$123,328	\$128,261	\$133,392	\$138,727	\$144,277	\$150,048	\$156,050	\$162,292	\$168,783	\$175,535	\$182,556
SUPPLIES SMALL EQUIPMENT-SEWER	4.0%	\$11,232	\$11,681	\$12,148	\$12,634	\$13,139	\$13,665	\$14,212	\$14,780	\$15,371	\$15,986	\$16,626	\$17,291
HOOK UP EXPENSE-SEWER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ADVERTISING-SEWER	4.0%	\$105	\$109	\$114	\$118	\$123	\$128	\$133	\$138	\$144	\$149	\$155	\$162
AUDIT EXPENSE-SEWER	4.0%	\$7,820	\$8,133	\$8,458	\$8,796	\$9,148	\$9,514	\$9,895	\$10,291	\$10,702	\$11,130	\$11,576	\$12,039
BANK/CREDIT CARD FEES-SEWER	4.0%	\$22,709	\$23,884	\$25,116	\$26,409	\$27,765	\$29,187	\$30,678	\$32,243	\$33,883	\$35,602	\$37,406	\$39,296
CONTRACT LABOR-SEWER	4.0%	\$3,833	\$3,986	\$4,146	\$4,312	\$4,484	\$4,663	\$4,850	\$5,044	\$5,246	\$5,456	\$5,674	\$5,901
DUES AND SUBSCRIPTIONS-SEWER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EQUIPMENT RENTAL-SEWER	4.0%	\$3,082	\$3,242	\$3,409	\$3,585	\$3,769	\$3,962	\$4,164	\$4,376	\$4,599	\$4,833	\$5,077	\$5,334
INSURANCE-SEWER	4.0%	\$42,976	\$44,695	\$46,483	\$48,342	\$50,276	\$52,287	\$54,378	\$56,553	\$58,816	\$61,168	\$63,615	\$66,160
LEGAL-SEWER	4.0%	\$22,333	\$23,227	\$24,156	\$25,122	\$26,127	\$27,172	\$28,259	\$29,389	\$30,565	\$31,787	\$33,059	\$34,381
PROFESSIONAL-SEWER	4.0%	\$45,915	\$47,752	\$49,662	\$51,648	\$53,714	\$55,863	\$58,097	\$60,421	\$62,838	\$65,351	\$67,965	\$70,684
SAFETY PROGRAM-SEWER	4.0%	\$581	\$604	\$628	\$653	\$680	\$707	\$735	\$764	\$795	\$827	\$860	\$894
CITIZEN TRASH EXPENSE-SEWER	4.0%	\$313,840	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TRAVEL EXPENSE-SEWER	4.0%	\$411	\$428	\$445	\$462	\$481	\$500	\$520	\$541	\$563	\$585	\$608	\$633
TRAINING & EDUCATION-SEWER	4.0%	\$1,020	\$1,061	\$1,104	\$1,148	\$1,194	\$1,241	\$1,291	\$1,343	\$1,396	\$1,452	\$1,510	\$1,571
RECYCLE CENTER EXPENSE	4.0%	\$5,505	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RENT-SEWER	4.0%	\$1,250	\$1,300	\$1,352	\$1,406	\$1,462	\$1,521	\$1,582	\$1,645	\$1,711	\$1,779	\$1,850	\$1,924
EQUIPMENT/SOFTWARE CONTRACTS-SEW...	4.0%	\$12,381	\$12,877	\$13,392	\$13,927	\$14,484	\$15,064	\$15,666	\$16,293	\$16,945	\$17,622	\$18,327	\$19,060

**Table 4 - Operating Costs and Net Income**

Expense Items	Inflation/ Deflation (-) Factor	Test Year Starting 1/1/23	0 Year Starting 1/1/24	1st Year Starting 1/1/25	2nd Year Starting 1/1/26	3rd Year Starting 1/1/27	4th Year Starting 1/1/28	5th Year Starting 1/1/29	6th Year Starting 1/1/30	7th Year Starting 1/1/31	8th Year Starting 1/1/32	9th Year Starting 1/1/33	10th Year Starting 1/1/34	
<b>STANDARD SEWER RATE LOWER WITH 2% INCREASES FOR 2 YEARS TO 8% THEREAFTER</b>	<b>8.0%</b>	<b>\$504,554</b>	<b>\$544,504</b>	<b>\$584,454</b>	<b>\$637,812</b>	<b>\$683,536</b>	<b>\$732,451</b>	<b>\$784,776</b>	<b>\$840,742</b>	<b>\$900,599</b>	<b>\$964,612</b>	<b>\$1,033,065</b>	<b>\$1,106,260</b>	
TELEPHONE-SEWER	4.0%	\$2,217	\$2,306	\$2,398	\$2,494	\$2,594	\$2,698	\$2,805	\$2,918	\$3,034	\$3,156	\$3,282	\$3,413	
INTERNET-SEWER	4.0%	\$5,846	\$6,080	\$6,323	\$6,576	\$6,839	\$7,113	\$7,397	\$7,693	\$8,001	\$8,321	\$8,654	\$9,000	
UTILITIES ELECTRIC-SEWER	4.0%	\$82,881	\$87,168	\$91,665	\$96,383	\$101,332	\$106,522	\$111,966	\$117,674	\$123,661	\$129,937	\$136,518	\$143,418	
UTILITIES GAS-SEWER	4.0%	\$696	\$724	\$753	\$783	\$814	\$846	\$880	\$916	\$952	\$990	\$1,030	\$1,071	
UTILITIES OTHER-SEWER	4.0%	\$2,203	\$2,292	\$2,383	\$2,479	\$2,578	\$2,681	\$2,788	\$2,900	\$3,016	\$3,136	\$3,262	\$3,392	
VEHICLE EXPENSE FUEL-SEWER	4.0%	\$11,501	\$11,961	\$12,440	\$12,937	\$13,455	\$13,993	\$14,553	\$15,135	\$15,740	\$16,370	\$17,025	\$17,706	
EQUIPMENT FUEL-SEWER	4.0%	\$5,600	\$5,824	\$6,057	\$6,299	\$6,551	\$6,813	\$7,086	\$7,369	\$7,664	\$7,970	\$8,289	\$8,621	
VEHICLE REPAIR & MAINT-SEWER	4.0%	\$6,596	\$6,860	\$7,134	\$7,420	\$7,717	\$8,025	\$8,346	\$8,680	\$9,027	\$9,388	\$9,764	\$10,154	
EQUIPMENT REPAIR & MAINT-SEWER	4.0%	\$4,747	\$4,937	\$5,134	\$5,339	\$5,553	\$5,775	\$6,006	\$6,246	\$6,496	\$6,756	\$7,026	\$7,307	
VEHICLE LEASE-SEWER	4.0%	\$21,470	\$22,329	\$23,222	\$24,151	\$25,117	\$26,122	\$27,167	\$28,253	\$29,383	\$30,559	\$31,781	\$33,052	
EQUIPMENT LEASE	4.0%	\$3,179	\$3,306	\$3,439	\$3,576	\$3,719	\$3,868	\$4,023	\$4,184	\$4,351	\$4,525	\$4,706	\$4,894	
SALARIES-SEWER	4.0%	\$357,924	\$372,241	\$387,130	\$402,615	\$418,720	\$435,469	\$452,888	\$471,003	\$489,843	\$509,437	\$529,814	\$551,007	
SALARIES OVERTIME-SEWER	4.0%	\$10,691	\$11,119	\$11,563	\$12,026	\$12,507	\$13,007	\$13,527	\$14,068	\$14,631	\$15,216	\$15,825	\$16,458	
PAYROLL TAXES-SEWER	4.0%	\$27,466	\$28,565	\$29,708	\$30,896	\$32,132	\$33,417	\$34,754	\$36,144	\$37,590	\$39,093	\$40,657	\$42,283	
RETIREMENT-SEWER	4.0%	\$16,787	\$17,459	\$18,157	\$18,884	\$19,639	\$20,425	\$21,241	\$22,091	\$22,975	\$23,894	\$24,850	\$25,844	
PENSION EXPENSE-SEWER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UNIFORMS-SEWER	4.0%	\$628	\$654	\$680	\$707	\$735	\$765	\$795	\$827	\$860	\$895	\$930	\$966	
GROUP INSURANCE-SEWER	4.0%	\$79,978	\$83,178	\$86,505	\$89,965	\$93,563	\$97,306	\$101,198	\$105,246	\$109,456	\$113,834	\$118,388	\$123,123	
CAPITAL ASSET EXP-SEWER	4.0%	\$344,467	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
CAPITAL ASSET EXP EQUIPMENT-SEWER	N.A.	\$7,039	\$26,500	\$13,750	\$13,000	\$13,000	\$10,000	\$85,000	\$363,000	\$113,000	\$10,000	\$10,000	\$13,000	
PRINCIPAL EXPENSE-SEWER	0.0%	\$192,439	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
INTEREST EXPENSE-SEWER	0.0%	\$127,257	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
FISCAL AGENT FEES-SEWER	4.0%	\$1,500	\$1,560	\$1,622	\$1,687	\$1,755	\$1,825	\$1,898	\$1,974	\$2,053	\$2,135	\$2,220	\$2,309	
BAD DEBT EXPENSE-SEWER	4.0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
User Charge Analysis Services	5.0%	\$0	\$11,395	\$0	\$0	\$12,563	\$0	\$0	\$13,851	\$0	\$0	\$15,270	\$0	
Total CIP-related Payouts	N.A.	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	Table 5	
<b>Total Operating Costs</b>		<b>\$2,466,389</b>	<b>\$1,594,600</b>	<b>\$1,862,797</b>	<b>\$1,748,727</b>	<b>\$1,852,785</b>	<b>\$1,933,813</b>	<b>\$2,110,797</b>	<b>\$2,510,341</b>	<b>\$2,360,226</b>	<b>\$2,377,360</b>	<b>\$2,519,540</b>	<b>\$2,641,352</b>	
Net Income (or Loss)		-\$788,862	-\$7,541	\$867,923	\$909,935	\$935,488	\$990,455	\$955,942	\$706,251	\$1,014,559	\$1,160,437	\$1,190,031	\$1,248,912	
Working Capital Goal: 50%		In Dollars, That is:	\$1,233,195	\$797,300	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676

Notes: The Springfield treatment contract expense, highlighted gold and later green, calls for 8% increases for 2 years. I assumed 6% per year after that. Most expenses are expected to rise by four percent each year. The green highlighted expenses are expected to do that, plus rise as new customers connect and use more water. Also, principal and interest expenses are related to capital improvements, so those are handled in Table 5.



**Table 5 - Capital Improvement Program (CIP)  
Willard, MO, Sewer Rates Model 2024-3**

This table depicts capital improvements and their funding. Costs reflect inflation.	Years Following the Analysis Year (for Which Improvement Projects, Costs, Funding, etc. Have Been Projected)											
	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34
<b>Planned Spending, Debt-paid Portion of Projects (CIP costs to be funded with loans are shown in this section.)</b>												
94 Lift Station/Force Main	\$0	\$0	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadows 50% Construction	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Waste Water Treatment Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,878,328
<b>Total Debt-paid Portion of Projects</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,200,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$26,878,328</b>
<b>Planned Spending, Grant-paid Portion of Projects (CIP costs to be grant-funded are shown here.)</b>												
94 Lift Station/Force Main (EPA Grant)	\$0	\$2,756,152	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Meadows 50% Construction (ARPA Grant)	\$0	\$482,750	\$17,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Grant-paid Portion of Projects</b>	<b>\$0</b>	<b>\$3,238,902</b>	<b>\$17,250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Planned Spending, Cash-paid Portion of Projects (CIP costs to be funded from reserves are shown here.)</b>												
94 Lift Station/Force Main	\$0	\$222,168	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Assets (See City's Capital Improvements Plan for Details)	\$0	\$213,500	\$276,813	\$491,197	\$232,751	\$236,357	\$346,623	\$672,251	\$384,951	\$266,022	\$274,002	\$286,254
<b>Total Cash-paid Portion of Projects</b>	<b>\$0</b>	<b>\$435,668</b>	<b>\$276,813</b>	<b>\$491,197</b>	<b>\$232,751</b>	<b>\$236,357</b>	<b>\$346,623</b>	<b>\$672,251</b>	<b>\$384,951</b>	<b>\$266,022</b>	<b>\$274,002</b>	<b>\$286,254</b>
<b>Total CIP Costs</b>	<b>\$0</b>	<b>\$3,674,570</b>	<b>\$1,494,063</b>	<b>\$491,197</b>	<b>\$232,751</b>	<b>\$236,357</b>	<b>\$346,623</b>	<b>\$672,251</b>	<b>\$384,951</b>	<b>\$266,022</b>	<b>\$274,002</b>	<b>\$27,164,582</b>
<b>Debt Repayment</b>												
<b>Existing Debt Payments (Following is debt that was initiated during the test year or earlier.)</b>												
Water/Sewer 2014 and 2018 COPs, Sewer Portion	\$320,091	\$322,853	\$323,944	\$324,803	\$320,506	\$318,594	\$223,075	\$223,863	\$224,258	\$219,543	\$219,719	\$219,572
<b>New Debt Payments</b>												
(Following are payments for projects to be paid with new debt. It is assumed these will be loan/lease-financed for a term of 10 years at a 5.0% interest rate.)												
COP for 94 Lift Station, Meadows				\$155,405	\$155,405	\$155,405	\$155,405	\$155,405	\$155,405	\$155,405	\$155,405	\$155,405
<b>Total Debt Payments</b>	<b>\$320,091</b>	<b>\$322,853</b>	<b>\$323,944</b>	<b>\$480,209</b>	<b>\$475,912</b>	<b>\$473,999</b>	<b>\$378,480</b>	<b>\$379,268</b>	<b>\$379,661</b>	<b>\$374,949</b>	<b>\$375,124</b>	<b>\$374,977</b>
<b>Total CIP-related Payouts</b>	<b>\$320,091</b>	<b>\$3,997,423</b>	<b>\$1,818,006</b>	<b>\$971,405</b>	<b>\$708,663</b>	<b>\$710,356</b>	<b>\$725,103</b>	<b>\$1,051,519</b>	<b>\$764,612</b>	<b>\$640,970</b>	<b>\$649,127</b>	<b>\$27,539,559</b>
(This is the total cash required for this CIP and debt payment schedule. These amounts must come from utility income, reserves or outside sources, as shown in the next section.)												
<b>CIP Fund Sources (Following are the sources and amounts of funds expected to pay for the above CIP schedule.)</b>												
<b>Cash Reserves (Internal Funds)</b>												
Debt and CIP Reserves Starting Balance	\$0	-\$320,091	-\$1,085,014	-\$1,316,556	-\$1,447,322	-\$1,301,473	-\$1,087,917	-\$967,329	-\$1,531,716	-\$1,237,346	-\$751,193	-\$296,402
Working Capital Transferred In	\$0	\$0	\$390,914	\$866,970	\$883,459	\$949,941	\$867,450	\$506,479	\$1,089,616	\$1,151,070	\$1,118,941	\$1,188,006
Debt and CIP Reserves Interest Earned (or Paid)	\$0	-\$6,402	-\$21,700	-\$26,331	-\$28,946	-\$26,029	-\$21,758	-\$19,347	-\$30,634	-\$24,747	-\$15,024	-\$5,928
<b>Total Available Internal Funds</b>	<b>\$0</b>	<b>-\$326,492</b>	<b>-\$715,800</b>	<b>-\$475,917</b>	<b>-\$592,810</b>	<b>-\$377,561</b>	<b>-\$242,226</b>	<b>-\$480,196</b>	<b>-\$472,734</b>	<b>-\$110,223</b>	<b>\$352,724</b>	<b>\$885,676</b>
<b>Grant and Loan Proceeds (External Funds)</b>												
EPA and ARPA Grants for Lift Station and Meadows, Not Determined for WWTP	\$0	\$3,238,902	\$17,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Loan Originated in 10th Year												\$26,878,328
<b>Total Available External Funds</b>	<b>\$0</b>	<b>\$3,238,902</b>	<b>\$1,217,250</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$26,878,328</b>
<b>Total Available Funds</b>	<b>\$0</b>	<b>\$2,912,410</b>	<b>\$501,450</b>	<b>-\$475,917</b>	<b>-\$592,810</b>	<b>-\$377,561</b>	<b>-\$242,226</b>	<b>-\$480,196</b>	<b>-\$472,734</b>	<b>-\$110,223</b>	<b>\$352,724</b>	<b>\$27,764,003</b>
<b>Outcomes</b>												
(This CIP spending and funding plan will result in the following cash needs and ending balances each year.)												
<b>Total Available Funds</b>	<b>\$0</b>	<b>\$2,912,410</b>	<b>\$501,450</b>	<b>-\$475,917</b>	<b>-\$592,810</b>	<b>-\$377,561</b>	<b>-\$242,226</b>	<b>-\$480,196</b>	<b>-\$472,734</b>	<b>-\$110,223</b>	<b>\$352,724</b>	<b>\$27,764,003</b>
<b>Total CIP-related Payouts</b>	<b>\$320,091</b>	<b>\$3,997,423</b>	<b>\$1,818,006</b>	<b>\$971,405</b>	<b>\$708,663</b>	<b>\$710,356</b>	<b>\$725,103</b>	<b>\$1,051,519</b>	<b>\$764,612</b>	<b>\$640,970</b>	<b>\$649,127</b>	<b>\$27,539,559</b>
<b>Debt and CIP Reserves Ending Balances</b>	<b>-\$320,091</b>	<b>-\$1,085,014</b>	<b>-\$1,316,556</b>	<b>-\$1,447,322</b>	<b>-\$1,301,473</b>	<b>-\$1,087,917</b>	<b>-\$967,329</b>	<b>-\$1,531,716</b>	<b>-\$1,237,346</b>	<b>-\$751,193</b>	<b>-\$296,402</b>	<b>\$224,444</b>

Notes: The City has a capital improvements plan, from which the above project data came. EPA and ARPA grants have been acquired for the lift station and Meadows projects. I assumed the WWTP project will be funded 75% by SRF loans, and 25% by grants. However, that project, being scheduled for the last year of the modeling period, has no effect on this round of rates. Later rate analyses will pick up the effects of that project and calculate rates accordingly. Other projects are generally not eligible for grants and loans, so those are to be funded with utility reserves and incomes.

Table 5B: City's Sewer Capital Improvements (with edits by GettingGreatRates.com to make transfer to the models easier and clearer)

Year	Description	Capital Assets	Annual Sum		Annual Sum
		Equip	Cash Paid	Bigger Assets	COP Paid
2024	I&I	50,000	213,500		760,460
	Sewer Improvements	50,000			
	94 Lift Station/Force Main			277,710	
	Meadows 50% Construction			482,750	
	Pole Barn 40x20	10,000			
	Public Works Building	75,000			
	Vehicle Lease Equipment	7,000			
	Badger Box	7,500			
Missions Update	14,000				
2025	I&I	50,000	268,750		3,402,230
	Sewer Improvements	100,000			
	B-Lift Station Rewire	40,000			
	94 Lift Station/Force Main			2,984,980	
	Meadows 50% Construction			417,250	
	Replacement Pump-Lift Station	40,000			
	Easements	20,000			
	Equipment	5,000			
Jack Hammer Attachment (33 water-3 Generator)	3,750				
		10,000			
2026	I&I	50,000	463,000		
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	D-Lift Station	250,000			
	Computer (2)	3,000			
	Equipment	20,000			

Year	Description	Capital Assets	Annual Sum	Bigger Assets	Annual Sum
		Equip	Cash Paid		COP Paid
2027	I&I	50,000	213,000		-
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Computer (2)	3,000			
	Equipment	20,000			
2028	I&I	50,000	210,000		-
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Equipment	20,000			
2029	I&I	50,000	299,000		-
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Equipment	20,000			
	Backhoe (50% water-50%sewer)	75,000			
Missions Update	14,000				
2030	I&I	50,000	563,000		-
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Computer (2)	3,000			
	Equipment	20,000			
	Jetter/Vac Truck	350,000			
2031	I&I	50,000	313,000		-
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Computer (2)	3,000			
	Equipment	20,000			
	Sewer Camera	100,000			

<u>Year</u>	<u>Description</u>	<u>Capital Assets</u>	<u>Annual Sum</u>		<u>Annual Sum</u>
		<u>Equip</u>	<u>Cash Paid</u>	<u>Bigger Assets</u>	<u>COP Paid</u>
2032	I&I	50,000	210,000		-
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Equipment	20,000			
2033	I&I	50,000	210,000		-
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Equipment	20,000			
2034	I&I	50,000	213,000		20,000,000
	Sewer Improvements	100,000			
	Replacement Pump-Lift Station	40,000			
	Waste Water Treatment Plant			20,000,000	
	Computer (2)	3,000			
	Equipment	20,000			
			3,176,250		24,162,690

**Table 8 - Average Cost Classification**  
**Willard, MO, Sewer Rates Model 2024-3**

This table distributes costs from a representative year (the "average rate structure basis year) to fixed and variable categories (see Definitions) in order to calculate the "cost of service" rate structure for that year.

The average rate structure basis year runs from:				1/1/2028	through	12/31/2028
Cost Items During the Basis Year	Cost During Basis Year	Fixed Cost %	Variable Cost %	Fixed Cost	Variable Cost	
SUPPLIES-SEWER	\$19,163	50.0%	50.0%	\$9,581	\$9,581	
PERMIT FEES-SEWER	\$3,650	100.0%	0.0%	\$3,650	\$0	
BUILDING MAINTENANCE-SEWER	\$108	100.0%	0.0%	\$108	\$0	
CUSTODIAL SUPPLIES-SEWER	\$210	100.0%	0.0%	\$210	\$0	
MISCELLANEOUS EXPENSE-SEWER	\$0	100.0%	0.0%	\$0	\$0	
OFFICE SUPPLIES-SEWER	\$5,758	100.0%	0.0%	\$5,758	\$0	
POSTAGE-SEWER	\$16,054	100.0%	0.0%	\$16,054	\$0	
REPAIRS AND MAINTENANCE-SEWER	\$144,277	50.0%	50.0%	\$72,138	\$72,138	
SUPPLIES SMALL EQUIPMENT-SEWER	\$13,665	50.0%	50.0%	\$6,833	\$6,833	
HOOK UP EXPENSE-SEWER	\$0	36.4%	63.6%	\$0	\$0	
ADVERTISING-SEWER	\$128	100.0%	0.0%	\$128	\$0	
AUDIT EXPENSE-SEWER	\$9,514	100.0%	0.0%	\$9,514	\$0	
BANK/CREDIT CARD FEES-SEWER	\$29,187	36.4%	63.6%	\$10,624	\$18,563	
CONTRACT LABOR-SEWER	\$4,663	50.0%	50.0%	\$2,332	\$2,332	
DUES AND SUBSCRIPTIONS-SEWER	\$0	50.0%	50.0%	\$0	\$0	
EQUIPMENT RENTAL-SEWER	\$3,962	50.0%	50.0%	\$1,981	\$1,981	
INSURANCE-SEWER	\$52,287	100.0%	0.0%	\$52,287	\$0	
LEGAL-SEWER	\$27,172	100.0%	0.0%	\$27,172	\$0	
PROFESSIONAL-SEWER	\$55,863	50.0%	50.0%	\$27,931	\$27,931	
SAFETY PROGRAM-SEWER	\$707	50.0%	50.0%	\$353	\$353	
TRAVEL EXPENSE-SEWER	\$500	50.0%	50.0%	\$250	\$250	
TRAINING & EDUCATION-SEWER	\$1,241	50.0%	50.0%	\$621	\$621	
RENT-SEWER	\$1,521	100.0%	0.0%	\$1,521	\$0	
EQUIPMENT/SOFTWARE CONTRACTS-SEW...	\$15,064	100.0%	0.0%	\$15,064	\$0	
SPRINGFIELD SEWER CHARGES-SEWER with 8% Increases next 2 years, then 6% in years after that	\$732,451	0.0%	100.0%	\$0	\$732,451	
TELEPHONE-SEWER	\$2,698	100.0%	0.0%	\$2,698	\$0	
INTERNET-SEWER	\$7,113	100.0%	0.0%	\$7,113	\$0	
UTILITIES ELECTRIC-SEWER	\$106,522	0.0%	100.0%	\$0	\$106,522	
UTILITIES GAS-SEWER	\$846	100.0%	0.0%	\$846	\$0	
UTILITIES OTHER-SEWER	\$2,681	100.0%	0.0%	\$2,681	\$0	
VEHICLE EXPENSE FUEL-SEWER	\$13,993	50.0%	50.0%	\$6,997	\$6,997	
EQUIPMENT FUEL-SEWER	\$6,813	50.0%	50.0%	\$3,407	\$3,407	
VEHICLE REPAIR & MAINT-SEWER	\$8,025	50.0%	50.0%	\$4,013	\$4,013	
EQUIPMENT REPAIR & MAINT-SEWER	\$5,775	50.0%	50.0%	\$2,888	\$2,888	
VEHICLE LEASE-SEWER	\$26,122	50.0%	50.0%	\$13,061	\$13,061	
EQUIPMENT LEASE	\$3,868	50.0%	50.0%	\$1,934	\$1,934	
SALARIES-SEWER	\$435,469	50.0%	50.0%	\$217,734	\$217,734	
SALARIES OVERTIME-SEWER	\$13,007	50.0%	50.0%	\$6,504	\$6,504	

**Table 8 - Average Cost Classification**

Cost Items During the Basis Year	Cost During Basis Year	Fixed Cost %	Variable Cost %	Fixed Cost	Variable Cost
PAYROLL TAXES-SEWER	\$33,417	50.0%	50.0%	\$16,709	\$16,709
RETIREMENT-SEWER	\$20,425	50.0%	50.0%	\$10,212	\$10,212
PENSION EXPENSE-SEWER	\$0	50.0%	50.0%	\$0	\$0
UNIFORMS-SEWER	\$765	50.0%	50.0%	\$382	\$382
GROUP INSURANCE-SEWER	\$97,306	50.0%	50.0%	\$48,653	\$48,653
CAPITAL ASSET EXP-SEWER	\$0	50.0%	50.0%	\$0	\$0
CAPITAL ASSET EXP EQUIPMENT-SEWER	\$10,000	50.0%	50.0%	\$5,000	\$5,000
PRINCIPAL EXPENSE-SEWER	\$0	50.0%	50.0%	\$0	\$0
INTEREST EXPENSE-SEWER	\$0	50.0%	50.0%	\$0	\$0
FISCAL AGENT FEES-SEWER	\$1,825	50.0%	50.0%	\$912	\$912
BAD DEBT EXPENSE-SEWER	\$0	36.4%	63.6%	\$0	\$0
Annual Payment to R&R Reserve (Table 7)	\$0	50.0%	50.0%	\$0	\$0
User Charge Analysis Services	\$0	36.4%	63.6%	\$0	\$0
Total CIP-related Payouts, Less Capacity Charges From Tables 14 & 16 (This value can be negative)	\$670,273	50.0%	50.0%	\$335,136	\$335,136
<b>Grand Total Costs, Weighted Avg Percentages</b>	<b>\$2,604,086</b>	<b>36.5%</b>	<b>63.5%</b>	<b>\$950,988</b>	<b>\$1,653,098</b>

<b>Bases for Cost to Serve Rate Structure</b>		100%	\$2,604,086
Number Customers During Basis Year	3,931	Inflow and Infiltration for the test year is Estimated at	0%
Billed Volume, in Gallons, During Basis Year	235,797,165	Inflow and Infiltration is Estimated at This % of Average Cost (Marginal Cost)	66%
Average Fixed Cost per User per Month During Basis Year	\$20.16	At Recommended Unit Charge Rates, Resulting Marginal Cost of Unbilled-for Water	-\$321,108
Average Variable Cost to Produce per 1,000 Gallons During Basis Year	\$7.01	Test Year Customer Volume, in Gallons	223,076,139
Gallons per Billing Cycle Used by Average Residential Customer	4,230	+ Test Year Inflow and Infiltration, in Gallons	-80,977,539
		Total Test Year Volume, in Gallons, From Master Meter Readings	142,098,600

**Table 9 - Marginal Cost Classification**  
**Willard, MO, Sewer Rates Model 2024-3**

The utility incurs "marginal" costs. These costs are unavoidable. Thus, the utility must collect minimal fees from various customers to "break even" on a marginal cost basis. Costs vary by customer type and volume used.

Below, it is assumed that marginal variable costs are being calculated for: Inflow and Infiltration

(Fixed costs are irrelevant in this case)

The marginal rate structure basis year runs from: 1/1/2028 through 12/31/2028

Cost Items During the Basis Year	Fixed Cost	Variable Cost	Marginal Fixed Cost %	Marginal Variable Cost %	Marginal Fixed Cost	Marginal Variable Cost
SUPPLIES-SEWER	\$9,581	\$9,581	100%	100%	\$9,581	\$9,581
PERMIT FEES-SEWER	\$3,650	\$0	50%	50%	\$1,825	\$0
BUILDING MAINTENANCE-SEWER	\$108	\$0	0%	0%	\$0	\$0
CUSTODIAL SUPPLIES-SEWER	\$210	\$0	0%	0%	\$0	\$0
MISCELLANEOUS EXPENSE-SEWER	\$0	\$0	100%	100%	\$0	\$0
OFFICE SUPPLIES-SEWER	\$5,758	\$0	0%	0%	\$0	\$0
POSTAGE-SEWER	\$16,054	\$0	0%	0%	\$0	\$0
REPAIRS AND MAINTENANCE-SEWER	\$72,138	\$72,138	50%	50%	\$36,069	\$36,069
SUPPLIES SMALL EQUIPMENT-SEWER	\$6,833	\$6,833	50%	50%	\$3,416	\$3,416
HOOK UP EXPENSE-SEWER	\$0	\$0	50%	50%	\$0	\$0
ADVERTISING-SEWER	\$128	\$0	0%	0%	\$0	\$0
AUDIT EXPENSE-SEWER	\$9,514	\$0	0%	0%	\$0	\$0
BANK/CREDIT CARD FEES-SEWER	\$10,624	\$18,563	0%	0%	\$0	\$0
CONTRACT LABOR-SEWER	\$2,332	\$2,332	50%	50%	\$1,166	\$1,166
DUES AND SUBSCRIPTIONS-SEWER	\$0	\$0	0%	0%	\$0	\$0
EQUIPMENT RENTAL-SEWER	\$1,981	\$1,981	0%	0%	\$0	\$0
INSURANCE-SEWER	\$52,287	\$0	100%	100%	\$52,287	\$0
LEGAL-SEWER	\$27,172	\$0	0%	0%	\$0	\$0
PROFESSIONAL-SEWER	\$27,931	\$27,931	0%	0%	\$0	\$0
SAFETY PROGRAM-SEWER	\$353	\$353	0%	0%	\$0	\$0
TRAVEL EXPENSE-SEWER	\$250	\$250	100%	100%	\$250	\$250
TRAINING & EDUCATION-SEWER	\$621	\$621	100%	100%	\$621	\$621
RENT-SEWER	\$1,521	\$0	0%	0%	\$0	\$0
EQUIPMENT/SOFTWARE CONTRACTS-SEW...	\$15,064	\$0	0%	0%	\$0	\$0
SPRINGFIELD SEWER CHARGES-SEWER with 8% Increases next 2 years, then 6% in years after that	\$0	\$732,451	100%	100%	\$0	\$732,451
TELEPHONE-SEWER	\$2,698	\$0	0%	0%	\$0	\$0
INTERNET-SEWER	\$7,113	\$0	0%	0%	\$0	\$0
UTILITIES ELECTRIC-SEWER	\$0	\$106,522	100%	100%	\$0	\$106,522
UTILITIES GAS-SEWER	\$846	\$0	10%	10%	\$85	\$0
UTILITIES OTHER-SEWER	\$2,681	\$0	10%	10%	\$268	\$0
VEHICLE EXPENSE FUEL-SEWER	\$6,997	\$6,997	10%	10%	\$700	\$700
EQUIPMENT FUEL-SEWER	\$3,407	\$3,407	10%	10%	\$341	\$341
VEHICLE REPAIR & MAINT-SEWER	\$4,013	\$4,013	10%	10%	\$401	\$401
EQUIPMENT REPAIR & MAINT-SEWER	\$2,888	\$2,888	10%	10%	\$289	\$289
VEHICLE LEASE-SEWER	\$13,061	\$13,061	10%	10%	\$1,306	\$1,306

**Table 9 - Marginal Cost Classification**

Cost Items During the Basis Year	Fixed Cost	Variable Cost	Marginal Fixed Cost %	Marginal Variable Cost %	Marginal Fixed Cost	Marginal Variable Cost
EQUIPMENT LEASE	\$1,934	\$1,934	10%	10%	\$193	\$193
SALARIES-SEWER	\$217,734	\$217,734	10%	10%	\$21,773	\$21,773
SALARIES OVERTIME-SEWER	\$6,504	\$6,504	10%	10%	\$650	\$650
PAYROLL TAXES-SEWER	\$16,709	\$16,709	10%	10%	\$1,671	\$1,671
RETIREMENT-SEWER	\$10,212	\$10,212	10%	10%	\$1,021	\$1,021
PENSION EXPENSE-SEWER	\$0	\$0	10%	10%	\$0	\$0
UNIFORMS-SEWER	\$382	\$382	10%	10%	\$38	\$38
GROUP INSURANCE-SEWER	\$48,653	\$48,653	10%	10%	\$4,865	\$4,865
CAPITAL ASSET EXP-SEWER	\$0	\$0	50%	50%	\$0	\$0
CAPITAL ASSET EXP EQUIPMENT-SEWER	\$5,000	\$5,000	50%	50%	\$2,500	\$2,500
PRINCIPAL EXPENSE-SEWER	\$0	\$0	50%	50%	\$0	\$0
INTEREST EXPENSE-SEWER	\$0	\$0	50%	50%	\$0	\$0
FISCAL AGENT FEES-SEWER	\$912	\$912	50%	50%	\$456	\$456
BAD DEBT EXPENSE-SEWER	\$0	\$0	50%	50%	\$0	\$0
User Charge Analysis Services	\$0	\$0	50%	50%	\$0	\$0
Total CIP-related Payouts, Less Capacity Charges From Tables 14 & 16 (This value can be negative)	\$335,136	\$335,136	50%	50%	\$167,568	\$167,568
Grand Total All Costs	\$950,988	\$1,653,098			\$309,342	\$1,093,851
		\$2,604,086				\$1,403,193
<b>Marginal Fixed and Variable Cost Bases</b> (For the Customer Type(s) Listed Above)					Monthly Marginal Fixed Cost per Customer	Marginal Variable Cost per 1,000 Gallons
					\$6.56	
Marginal Fixed Cost as a Percent of Total Fixed Cost:					33%	\$4.64
Marginal Variable Cost as a Percent of Total Variable Cost:						66%



## Table 10 - Initial Rate Adjustments and Resulting Revenues Willard, MO, Sewer Rates Model 2024-3

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Residential	0	999	\$44,435	\$24.85	0.000	\$8.64	\$741	\$45,176
	1,000	1,999	\$223,557	\$24.85	0.000	\$8.64	\$776	\$224,333
	2,000	2,999	\$231,452	\$24.85	0.000	\$8.64	\$756	\$232,208
	3,000	3,999	\$206,138	\$24.85	0.000	\$8.64	\$649	\$206,787
	4,000	4,999	\$160,554	\$24.85	0.000	\$8.64	\$496	\$161,051
	5,000	5,999	\$115,221	\$24.85	0.000	\$8.64	\$353	\$115,575
	6,000	6,999	\$76,693	\$24.85	0.000	\$8.64	\$237	\$76,930
	7,000	7,999	\$52,746	\$24.85	0.000	\$8.64	\$164	\$52,909
	8,000	8,999	\$33,970	\$24.85	0.000	\$8.64	\$108	\$34,079
	9,000	9,999	\$26,177	\$24.85	0.000	\$8.64	\$83	\$26,260
	10,000	19,999	\$75,950	\$24.85	0.000	\$8.64	\$252	\$76,202
	20,000	29,999	\$15,841	\$24.85	0.000	\$8.64	\$57	\$15,898
	30,000	39,999	\$5,839	\$24.85	0.000	\$8.64	\$22	\$5,861
In-City Commercial	0	999	\$22,435	\$24.85	0.000	\$8.64	\$80	\$22,515
	1,000	1,999	\$17,505	\$24.85	0.000	\$8.64	\$49	\$17,554
	2,000	2,999	\$10,002	\$24.85	0.000	\$8.64	\$31	\$10,033
	3,000	3,999	\$7,734	\$24.85	0.000	\$8.64	\$25	\$7,759
	4,000	4,999	\$6,134	\$24.85	0.000	\$8.64	\$21	\$6,155
	5,000	5,999	\$5,691	\$24.85	0.000	\$8.64	\$19	\$5,710
	6,000	6,999	\$4,610	\$24.85	0.000	\$8.64	\$16	\$4,627
	7,000	7,999	\$4,103	\$24.85	0.000	\$8.64	\$15	\$4,118
	8,000	8,999	\$4,231	\$24.85	0.000	\$8.64	\$15	\$4,246
	9,000	9,999	\$3,802	\$24.85	0.000	\$8.64	\$14	\$3,815
	10,000	19,999	\$28,274	\$24.85	0.000	\$8.64	\$106	\$28,380
	20,000	29,999	\$20,503	\$24.85	0.000	\$8.64	\$78	\$20,581
	30,000	39,999	\$15,271	\$24.85	0.000	\$8.64	\$58	\$15,329
	40,000	49,999	\$11,847	\$24.85	0.000	\$8.64	\$44	\$11,891
	50,000	59,999	\$7,913	\$24.85	0.000	\$8.64	\$30	\$7,944
	60,000	69,999	\$6,591	\$24.85	0.000	\$8.64	\$25	\$6,616
	70,000	79,999	\$4,706	\$24.85	0.000	\$8.64	\$18	\$4,724
	80,000	89,999	\$3,817	\$24.85	0.000	\$8.64	\$15	\$3,832
	90,000	99,999	\$3,428	\$24.85	0.000	\$8.64	\$13	\$3,441
	100,000	199,999	\$17,966	\$24.85	0.000	\$8.64	\$71	\$18,037
200,000	299,999	\$7,389	\$24.85	0.000	\$8.64	\$29	\$7,418	
300,000	399,999	\$3,143	\$24.85	0.000	\$8.64	\$12	\$3,156	
400,000	499,999	\$1,149	\$24.85	0.000	\$8.64	\$5	\$1,153	
500,000	599,999	\$248	\$24.85	0.000	\$8.64	\$1	\$249	
600,000	699,999	\$0	\$24.85	0.000	\$8.64	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Residential	0	999	\$20,022	\$37.27	0.000	\$12.96	\$544	\$20,566
	1,000	1,999	\$113,500	\$37.27	0.000	\$12.96	\$559	\$114,059
	2,000	2,999	\$124,138	\$37.27	0.000	\$12.96	\$570	\$124,708
	3,000	3,999	\$114,077	\$37.27	0.000	\$12.96	\$504	\$114,581
	4,000	4,999	\$92,386	\$37.27	0.000	\$12.96	\$401	\$92,787
	5,000	5,999	\$67,186	\$37.27	0.000	\$12.96	\$293	\$67,478
	6,000	6,999	\$49,690	\$37.27	0.000	\$12.96	\$216	\$49,906
	7,000	7,999	\$34,513	\$37.27	0.000	\$12.96	\$153	\$34,666
	8,000	8,999	\$25,984	\$37.27	0.000	\$12.96	\$116	\$26,100
	9,000	9,999	\$19,327	\$37.27	0.000	\$12.96	\$88	\$19,414
	10,000	19,999	\$75,021	\$37.27	0.000	\$12.96	\$359	\$75,380
	20,000	29,999	\$23,783	\$37.27	0.000	\$12.96	\$118	\$23,901
	30,000	39,999	\$9,863	\$37.27	0.000	\$12.96	\$50	\$9,913
Rural Commercial	0	999	\$1,237	\$37.27	0.000	\$12.96	\$10	\$1,246
	1,000	1,999	\$2,337	\$37.27	0.000	\$12.96	\$9	\$2,346
	2,000	2,999	\$1,993	\$37.27	0.000	\$12.96	\$7	\$2,000
	3,000	3,999	\$1,278	\$37.27	0.000	\$12.96	\$5	\$1,283
	4,000	4,999	\$604	\$37.27	0.000	\$12.96	\$3	\$607
	5,000	5,999	\$705	\$37.27	0.000	\$12.96	\$3	\$708
	6,000	6,999	\$631	\$37.27	0.000	\$12.96	\$3	\$634
	7,000	7,999	\$623	\$37.27	0.000	\$12.96	\$3	\$625
	8,000	8,999	\$758	\$37.27	0.000	\$12.96	\$3	\$761
	9,000	9,999	\$526	\$37.27	0.000	\$12.96	\$2	\$528
	10,000	19,999	\$2,049	\$37.27	0.000	\$12.96	\$8	\$2,058
	20,000	29,999	\$463	\$37.27	0.000	\$12.96	\$2	\$465
	30,000	39,999	\$190	\$37.27	0.000	\$12.96	\$1	\$191
Total Rate Revenue at Current Rates			\$2,295,329	Total Rate Revenue at Modeled Rates			\$9,635	
Total Blended Rate Revenues for the Year								\$2,304,964

**Table 17 - Financial Capacity Indicators and Reserves  
Willard, MO, Sewer Rates Model 2024-3**

This table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the test year and the next 10 years.

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
<b>Customary Affordability Index</b>													
Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$55.46	\$68.05	\$70.77	\$73.60	\$76.54	\$79.60	\$82.79	\$86.10	\$89.54	\$93.13	\$96.65	\$100.73	
AMHI Within Service Area	\$79,951	\$83,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
Affordability Index: Current Rates First Column, Modeled Rates After That	0.83%	0.98%	0.98%	0.97%	0.97%	0.97%	0.97%	0.96%	0.96%	0.96%	0.96%	0.96%	
National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area (gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.													
<b>Low-income, Low-volume Affordability Index</b>													
Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$37.91	\$42.13	\$43.81	\$45.56	\$47.39	\$49.28	\$51.25	\$53.30	\$55.44	\$57.65	\$59.96	\$62.36	
Income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,628	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
Affordability for Low-income, Low-volume: Current Rates First Column, Modeled Rates After That	1.14%	1.24%	1.26%	1.28%	1.31%	1.33%	1.36%	1.38%	1.41%	1.43%	1.46%	1.48%	
This additional indicator of affordability assumes a residential customer with income at one-half the median household income above, that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow pay" and "no pay" compared to others, so this indicator goes to the "business sense" of the rates modeled here - in other words, raise this customer's bill too much and they are more likely to pay late or not pay.													
Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That	0.68	1.00	1.52	1.52	1.50	1.51	1.45	1.28	1.43	1.49	1.47	1.47	
Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red." Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.													
Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That	0.00	0.00	0.11	0.07	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A" above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below), it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.													
Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That	3.60	0.13	-2.26	-1.01	-1.20	-0.79	-0.32	0.23	-0.73	-0.15	1.17	2.57	
This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,150,793	\$361,931	\$354,390	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,150,793	\$361,931	\$354,390	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,150,793	\$361,931	\$354,390	\$806,457	\$822,689	\$845,493	\$855,995	\$906,307	\$1,045,522	\$953,511	\$931,620	\$957,716	\$1,004,019
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	-\$320,091	-\$1,085,014	-\$1,316,556	-\$1,447,322	-\$1,301,473	-\$1,087,917	-\$967,329	-\$1,531,716	-\$1,237,346	-\$751,193	-\$296,402	\$224,444
<b>Sum of All Reserves</b>	<b>\$1,150,793</b>	<b>\$41,840</b>	<b>-\$730,624</b>	<b>-\$485,157</b>	<b>-\$572,959</b>	<b>-\$375,080</b>	<b>-\$121,011</b>	<b>\$88,969</b>	<b>-\$276,545</b>	<b>-\$57,233</b>	<b>\$437,487</b>	<b>\$993,367</b>	<b>\$1,545,120</b>

**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Sewer Rates Model 2024-3**

The modeled rates will generate 53.2% more revenue per year than the rates at the end of the test year.

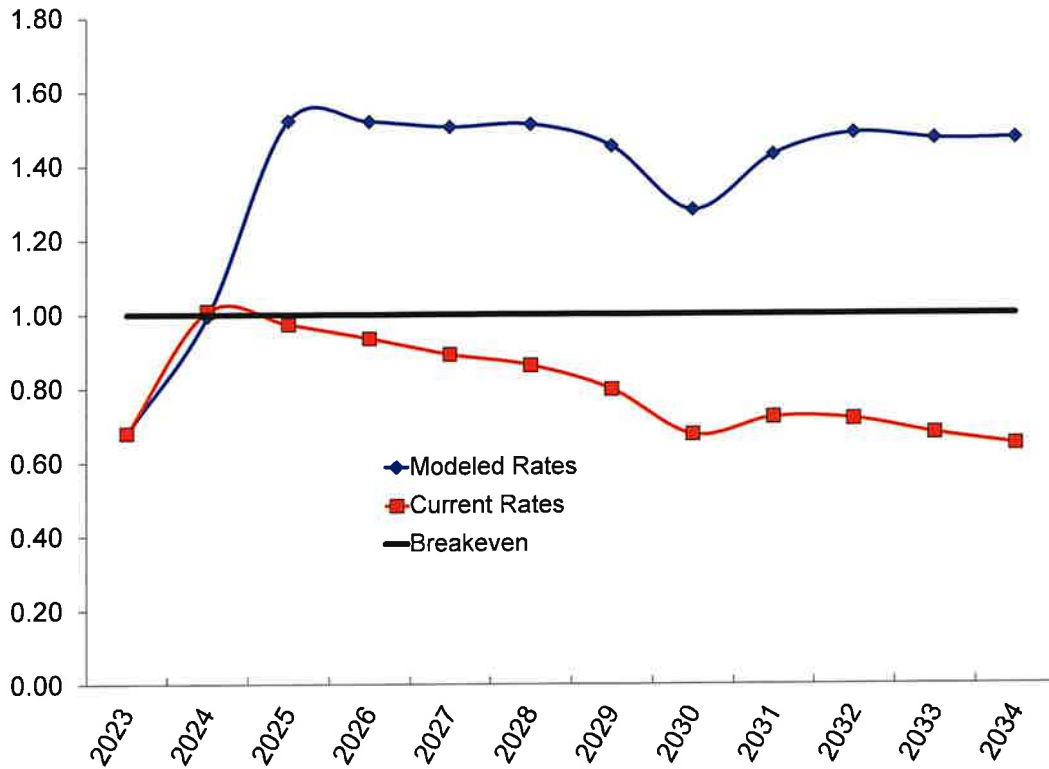
However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Residential	0	142	142	2,349	\$26.21	\$24.85	-\$1.36	-5%
	1,000	283	425	2,207	\$32.06	\$33.49	\$1.43	4%
	2,000	397	822	1,924	\$37.91	\$42.13	\$4.22	11%
	3,000	408	1,230	1,526	\$43.76	\$50.77	\$7.01	16%
	4,000	338	1,567	1,119	\$49.61	\$59.41	\$9.80	20%
	5,000	248	1,816	781	\$55.46	\$68.05	\$12.59	23%
	6,000	162	1,977	533	\$61.31	\$76.69	\$15.38	25%
	7,000	110	2,087	371	\$67.16	\$85.33	\$18.17	27%
	8,000	64	2,152	261	\$73.01	\$93.97	\$20.96	29%
	9,000	51	2,202	197	\$78.86	\$102.61	\$23.75	30%
	10,000	121	2,323	146	\$84.71	\$111.25	\$26.54	31%
	20,000	16	2,339	25	\$143.21	\$197.65	\$54.44	38%
30,000	5	2,344	9	\$201.71	\$284.05	\$82.34	41%	
In-City Commercial	0	59	59	174	\$26.21	\$24.85	-\$1.36	-5%
	1,000	30	89	115	\$32.06	\$33.49	\$1.43	4%
	2,000	13	102	85	\$37.91	\$42.13	\$4.22	11%
	3,000	9	111	72	\$43.76	\$50.77	\$7.01	16%
	4,000	6	117	63	\$49.61	\$59.41	\$9.80	20%
	5,000	5	122	57	\$55.46	\$68.05	\$12.59	23%
	6,000	3	125	52	\$61.31	\$76.69	\$15.38	25%
	7,000	2	127	49	\$67.16	\$85.33	\$18.17	27%
	8,000	3	131	46	\$73.01	\$93.97	\$20.96	29%
	9,000	3	133	43	\$78.86	\$102.61	\$23.75	30%
	10,000	11	144	41	\$84.71	\$111.25	\$26.54	31%
	20,000	7	152	29	\$143.21	\$197.65	\$54.44	38%
	30,000	5	157	22	\$201.71	\$284.05	\$82.34	41%
	40,000	5	162	17	\$260.21	\$370.45	\$110.24	42%
	50,000	2	164	11	\$318.71	\$456.85	\$138.14	43%
	60,000	2	167	9	\$377.21	\$543.25	\$166.04	44%
	70,000	1	168	7	\$435.71	\$629.65	\$193.94	45%
	80,000	1	169	6	\$494.21	\$716.05	\$221.84	45%
90,000	1	170	5	\$552.71	\$802.45	\$249.74	45%	
100,000	3	172	4	\$611.21	\$888.85	\$277.64	45%	
200,000	1	173	1	\$1,196.21	\$1,752.85	\$556.64	47%	
300,000	0	173	1	\$1,781.21	\$2,616.85	\$835.64	47%	

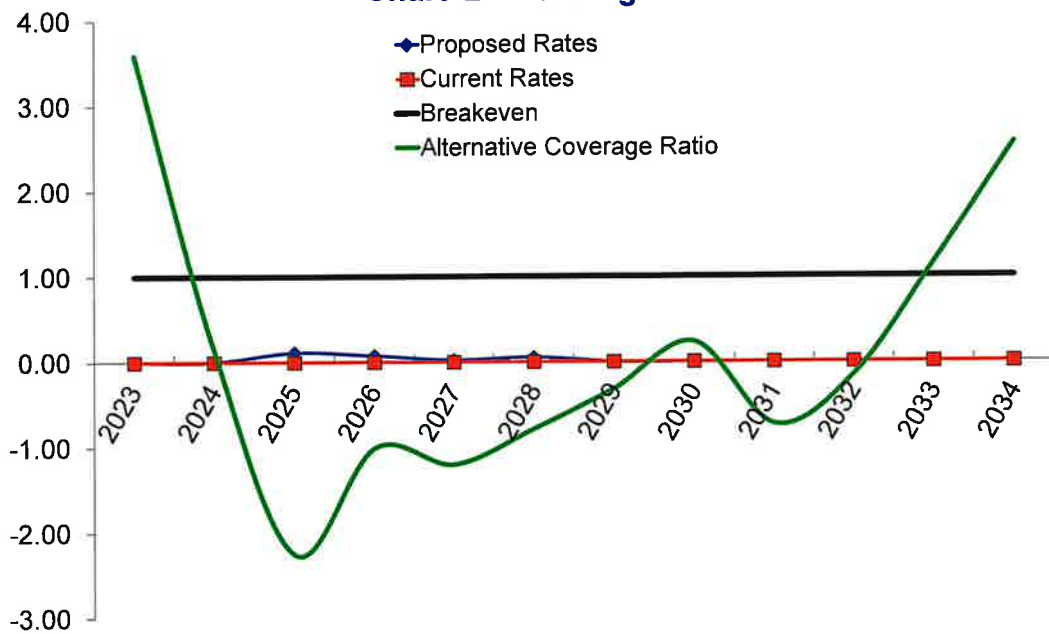
**Table 18 - Bills Before and After Rate Adjustments**

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential	0	59	59	1,171	\$28.52	\$37.27	\$8.75	31%
	1,000	109	167	1,112	\$34.88	\$50.23	\$15.35	44%
	2,000	180	347	1,004	\$41.24	\$63.19	\$21.95	53%
	3,000	194	541	824	\$47.61	\$76.15	\$28.54	60%
	4,000	168	709	630	\$53.97	\$89.11	\$35.14	65%
	5,000	121	829	462	\$60.33	\$102.07	\$41.74	69%
	6,000	89	919	342	\$66.70	\$115.03	\$48.33	72%
	7,000	58	976	252	\$73.06	\$127.99	\$54.93	75%
	8,000	42	1,019	194	\$79.42	\$140.95	\$61.53	77%
	9,000	29	1,048	152	\$85.79	\$153.91	\$68.12	79%
	10,000	87	1,135	123	\$92.15	\$166.87	\$74.72	81%
	20,000	21	1,156	36	\$155.78	\$296.47	\$140.69	90%
30,000	8	1,164	15	\$219.41	\$426.07	\$206.66	94%	
Rural Commercial	0	3	3	18	\$36.47	\$37.27	\$0.80	2%
	1,000	3	6	15	\$42.83	\$50.23	\$7.40	17%
	2,000	3	9	12	\$49.20	\$63.19	\$13.99	28%
	3,000	2	11	9	\$55.56	\$76.15	\$20.59	37%
	4,000	0	11	7	\$61.92	\$89.11	\$27.19	44%
	5,000	1	12	7	\$68.29	\$102.07	\$33.78	49%
	6,000	1	12	6	\$74.65	\$115.03	\$40.38	54%
	7,000	1	13	5	\$81.01	\$127.99	\$46.98	58%
	8,000	1	14	5	\$87.37	\$140.95	\$53.58	61%
	9,000	1	15	4	\$93.74	\$153.91	\$60.17	64%
	10,000	3	17	3	\$100.10	\$166.87	\$66.77	67%
20,000	0	18	1	\$163.73	\$296.47	\$132.74	81%	
No Charge ("Zero")	0	2	2	8	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	6	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	5	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	4	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	3	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	2	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	2	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	2	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	1	\$0.00	\$0.00	\$0.00	N.A.
	30,000	0	8	1	\$0.00	\$0.00	\$0.00	N.A.
40,000	0	8	0	\$0.00	\$0.00	\$0.00	N.A.	

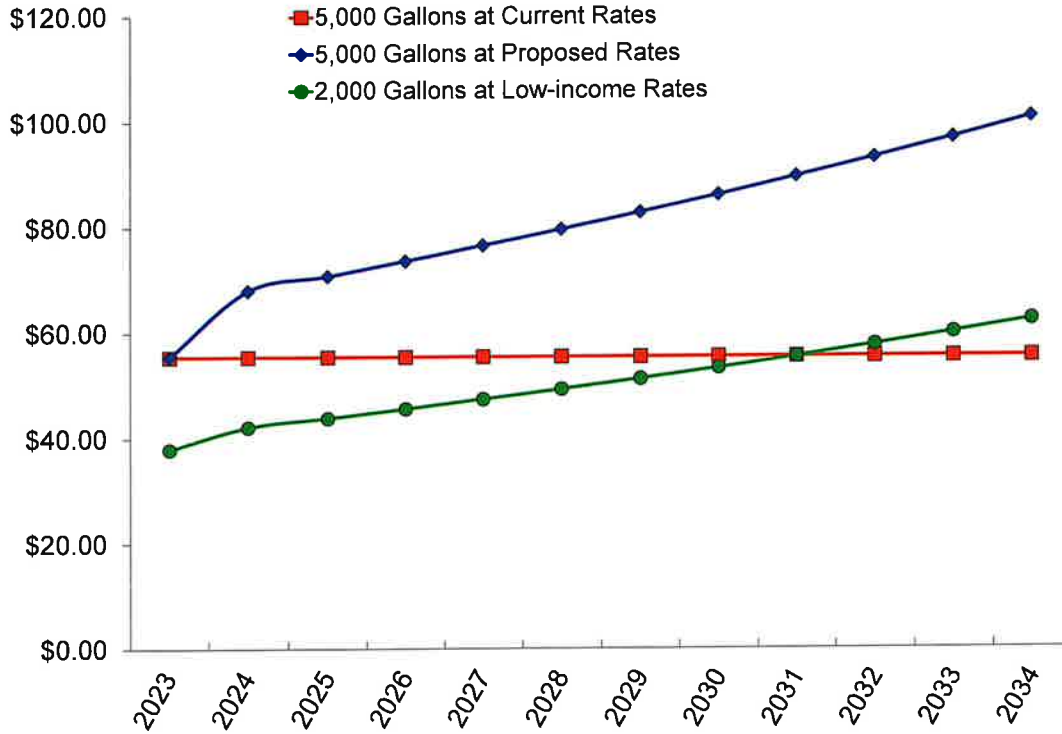
**Chart 1 - Operating Ratio**



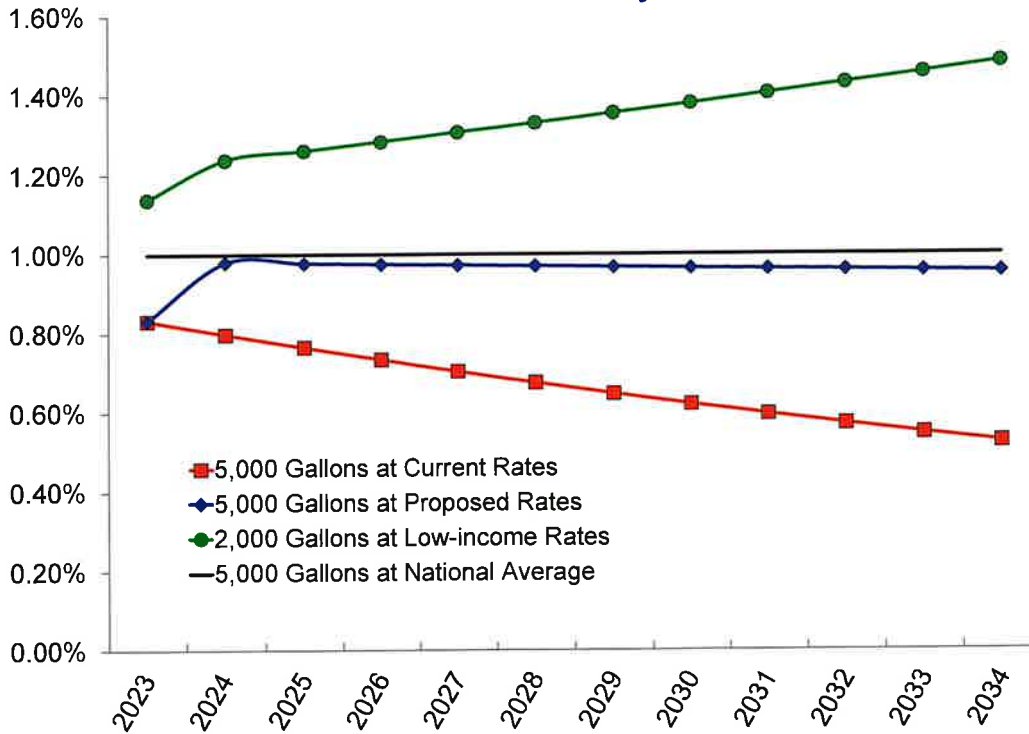
**Chart 2 - Coverage Ratio**



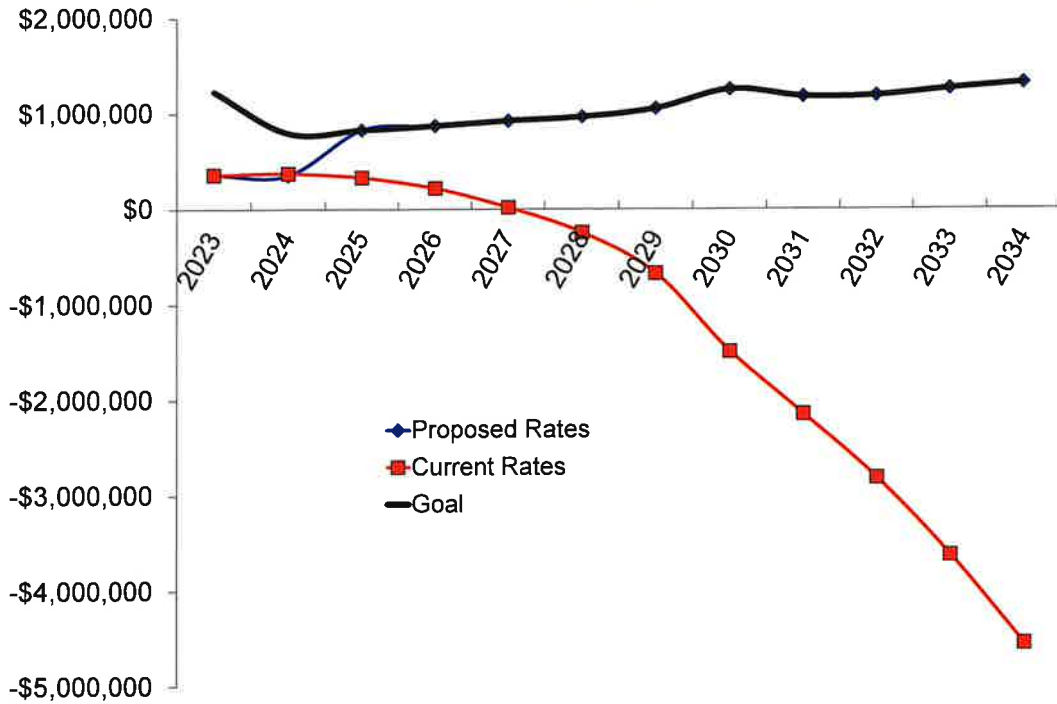
**Chart 3 - Residential Users' Bills**



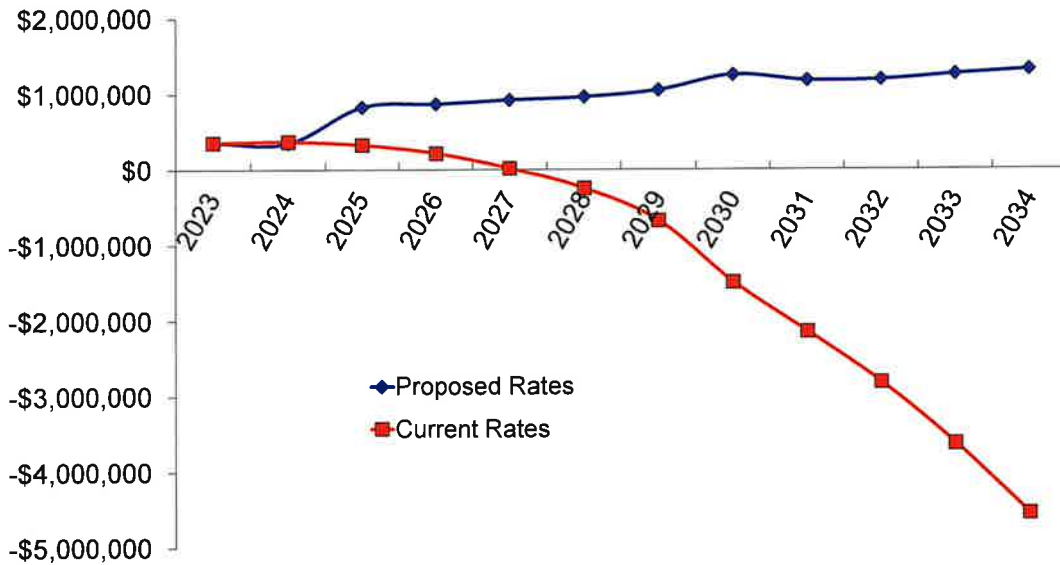
**Chart 4 - Affordability**



**Chart 5 - Working Capital vs Goal**

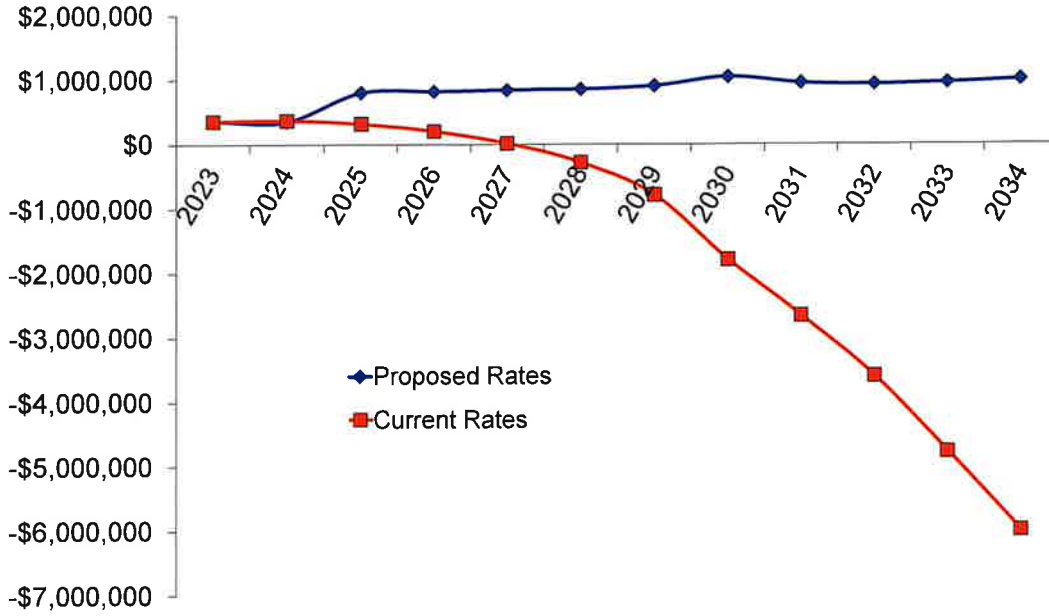


**Chart 6 - Value of Cash Assets Before Inflation**

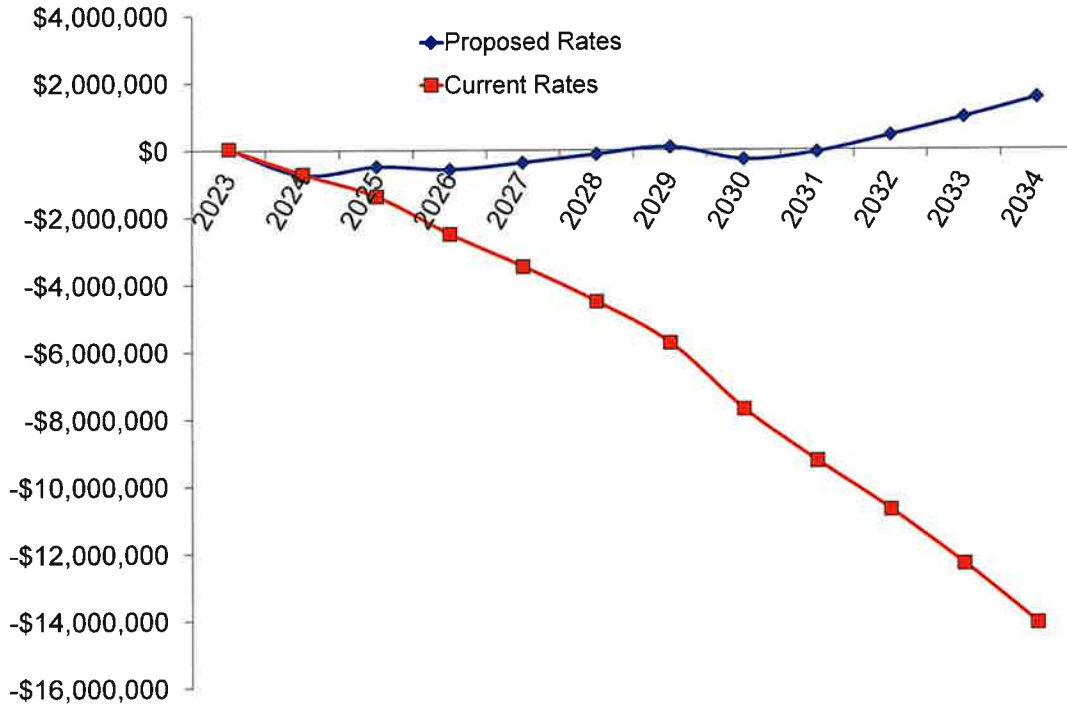




**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**



## Willard, MO, Sewer Rates Model 2024-4

This model is like Sewer Model 3 except it assumes out of City customers' rates would be "capped" like this; the minimum charge would be 22 percent higher than the in-City minimum, and the unit charge would be 35 percent higher than the in-City unit charge.

October 21, 2024

This rate analysis model was produced by

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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

## Table 10 - Initial Rate Adjustments and Resulting Revenues Willard, MO, Sewer Rates Model 2024-4

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Residential	0	999	\$44,435	\$26.31	0.000	\$9.15	\$784	\$45,220
	1,000	1,999	\$223,557	\$26.31	0.000	\$9.15	\$822	\$224,379
	2,000	2,999	\$231,452	\$26.31	0.000	\$9.15	\$801	\$232,252
	3,000	3,999	\$206,138	\$26.31	0.000	\$9.15	\$687	\$206,826
	4,000	4,999	\$160,554	\$26.31	0.000	\$9.15	\$526	\$161,080
	5,000	5,999	\$115,221	\$26.31	0.000	\$9.15	\$374	\$115,595
	6,000	6,999	\$76,693	\$26.31	0.000	\$9.15	\$251	\$76,944
	7,000	7,999	\$52,746	\$26.31	0.000	\$9.15	\$173	\$52,919
	8,000	8,999	\$33,970	\$26.31	0.000	\$9.15	\$115	\$34,085
	9,000	9,999	\$26,177	\$26.31	0.000	\$9.15	\$88	\$26,265
	10,000	19,999	\$75,950	\$26.31	0.000	\$9.15	\$267	\$76,217
	20,000	29,999	\$15,841	\$26.31	0.000	\$9.15	\$60	\$15,901
	30,000	39,999	\$5,839	\$26.31	0.000	\$9.15	\$23	\$5,862
In-City Commercial	0	999	\$22,435	\$26.31	0.000	\$9.15	\$85	\$22,520
	1,000	1,999	\$17,505	\$26.31	0.000	\$9.15	\$52	\$17,557
	2,000	2,999	\$10,002	\$26.31	0.000	\$9.15	\$33	\$10,035
	3,000	3,999	\$7,734	\$26.31	0.000	\$9.15	\$26	\$7,761
	4,000	4,999	\$6,134	\$26.31	0.000	\$9.15	\$22	\$6,156
	5,000	5,999	\$5,691	\$26.31	0.000	\$9.15	\$20	\$5,712
	6,000	6,999	\$4,610	\$26.31	0.000	\$9.15	\$17	\$4,628
	7,000	7,999	\$4,103	\$26.31	0.000	\$9.15	\$16	\$4,119
	8,000	8,999	\$4,231	\$26.31	0.000	\$9.15	\$16	\$4,247
	9,000	9,999	\$3,802	\$26.31	0.000	\$9.15	\$14	\$3,816
	10,000	19,999	\$28,274	\$26.31	0.000	\$9.15	\$112	\$28,386
	20,000	29,999	\$20,503	\$26.31	0.000	\$9.15	\$82	\$20,586
	30,000	39,999	\$15,271	\$26.31	0.000	\$9.15	\$61	\$15,332
	40,000	49,999	\$11,847	\$26.31	0.000	\$9.15	\$47	\$11,894
	50,000	59,999	\$7,913	\$26.31	0.000	\$9.15	\$32	\$7,945
	60,000	69,999	\$6,591	\$26.31	0.000	\$9.15	\$26	\$6,617
	70,000	79,999	\$4,706	\$26.31	0.000	\$9.15	\$19	\$4,726
	80,000	89,999	\$3,817	\$26.31	0.000	\$9.15	\$16	\$3,832
	90,000	99,999	\$3,428	\$26.31	0.000	\$9.15	\$14	\$3,442
100,000	199,999	\$17,966	\$26.31	0.000	\$9.15	\$75	\$18,041	
200,000	299,999	\$7,389	\$26.31	0.000	\$9.15	\$31	\$7,420	
300,000	399,999	\$3,143	\$26.31	0.000	\$9.15	\$13	\$3,157	
400,000	499,999	\$1,149	\$26.31	0.000	\$9.15	\$5	\$1,154	
500,000	599,999	\$248	\$26.31	0.000	\$9.15	\$1	\$249	
600,000	699,999	\$0	\$26.31	0.000	\$9.15	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Residential	0	999	\$20,022	\$32.10	0.000	\$12.35	\$512	\$20,534
	1,000	1,999	\$113,500	\$32.10	0.000	\$12.35	\$521	\$114,021
	2,000	2,999	\$124,138	\$32.10	0.000	\$12.35	\$523	\$124,661
	3,000	3,999	\$114,077	\$32.10	0.000	\$12.35	\$459	\$114,536
	4,000	4,999	\$92,386	\$32.10	0.000	\$12.35	\$364	\$92,749
	5,000	5,999	\$67,186	\$32.10	0.000	\$12.35	\$265	\$67,451
	6,000	6,999	\$49,690	\$32.10	0.000	\$12.35	\$196	\$49,886
	7,000	7,999	\$34,513	\$32.10	0.000	\$12.35	\$140	\$34,653
	8,000	8,999	\$25,984	\$32.10	0.000	\$12.35	\$106	\$26,090
	9,000	9,999	\$19,327	\$32.10	0.000	\$12.35	\$81	\$19,407
	10,000	19,999	\$75,021	\$32.10	0.000	\$12.35	\$332	\$75,353
	20,000	29,999	\$23,783	\$32.10	0.000	\$12.35	\$110	\$23,893
30,000	39,999	\$9,863	\$32.10	0.000	\$12.35	\$47	\$9,910	
Rural Commercial	0	999	\$1,237	\$32.10	0.000	\$12.35	\$9	\$1,246
	1,000	1,999	\$2,337	\$32.10	0.000	\$12.35	\$8	\$2,345
	2,000	2,999	\$1,993	\$32.10	0.000	\$12.35	\$7	\$2,000
	3,000	3,999	\$1,278	\$32.10	0.000	\$12.35	\$5	\$1,282
	4,000	4,999	\$604	\$32.10	0.000	\$12.35	\$3	\$607
	5,000	5,999	\$705	\$32.10	0.000	\$12.35	\$3	\$708
	6,000	6,999	\$631	\$32.10	0.000	\$12.35	\$3	\$633
	7,000	7,999	\$623	\$32.10	0.000	\$12.35	\$3	\$625
	8,000	8,999	\$758	\$32.10	0.000	\$12.35	\$3	\$761
	9,000	9,999	\$526	\$32.10	0.000	\$12.35	\$2	\$528
	10,000	19,999	\$2,049	\$32.10	0.000	\$12.35	\$8	\$2,057
	20,000	29,999	\$463	\$32.10	0.000	\$12.35	\$2	\$465
30,000	39,999	\$190	\$32.10	0.000	\$12.35	\$1	\$191	
Total Rate Revenue at Current Rates			\$2,295,329	Total Rate Revenue at Modeled Rates			\$9,634	
Total Blended Rate Revenues for the Year								\$2,304,964

**Table 17 - Financial Capacity Indicators and Reserves**  
**Willard, MO, Sewer Rates Model 2024-4**

This table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the test year and the next 10 years.

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
<b>Customer Affordability Index</b>													
Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$55.46	\$72.05	\$74.95	\$77.94	\$81.06	\$84.30	\$87.68	\$91.18	\$94.83	\$98.62	\$102.57	\$106.67	
AMHI Within Service Area	\$79,951	\$83,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
Affordability Index: Current Rates First Column, Modeled Rates After That	0.83%	1.04%	1.03%	1.03%	1.03%	1.03%	1.02%	1.02%	1.02%	1.02%	1.01%	1.01%	
National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area (gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.													
<b>Low-income, Low-volume Affordability Index</b>													
Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$37.51	\$44.61	\$46.40	\$48.25	\$50.18	\$52.19	\$54.28	\$56.45	\$58.71	\$61.06	\$63.50	\$66.04	
Income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,828	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
Affordability for Low-income, Low-volume: Current Rates First Column, Modeled Rates After That	1.14%	1.31%	1.34%	1.36%	1.38%	1.41%	1.44%	1.46%	1.49%	1.52%	1.54%	1.57%	
This additional indicator of affordability assumes a residential customer with income at one-half the median household income above, that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow pays" and "no pays" compared to others, so this indicator goes to the "business sense" of the rates modeled here. In other words, raise this customer's bill too much and they are more likely to pay late or not pay.													
Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That	0.68	1.00	1.52	1.52	1.50	1.51	1.45	1.28	1.43	1.49	1.47	1.47	
Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red." Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.													
Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That	0.00	0.00	0.11	0.07	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A" above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below), it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.													
Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That	3.60	0.13	-2.26	-1.01	-1.20	-0.79	-0.32	0.23	-0.73	-0.16	1.16	2.56	
This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,150,793	\$361,931	\$354,389	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,150,793	\$361,931	\$354,389	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,150,793	\$361,931	\$354,389	\$806,457	\$822,689	\$845,493	\$855,995	\$906,307	\$1,045,522	\$953,511	\$931,620	\$957,716	\$1,004,019
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	-\$320,091	-\$1,085,014	-\$1,316,710	-\$1,447,641	-\$1,301,968	-\$1,088,601	-\$968,214	-\$1,532,816	-\$1,238,675	-\$752,767	-\$299,237	\$222,333
<b>Sum of All Reserves</b>	<b>\$1,150,793</b>	<b>\$41,840</b>	<b>-\$730,624</b>	<b>-\$485,311</b>	<b>-\$573,278</b>	<b>-\$375,575</b>	<b>-\$121,694</b>	<b>\$87,184</b>	<b>-\$277,645</b>	<b>-\$58,562</b>	<b>\$435,913</b>	<b>\$991,533</b>	<b>\$1,543,009</b>

**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Sewer Rates Model 2024-4**

The modeled rates will generate 53.2% more revenue per year than the rates at the end of the test year.

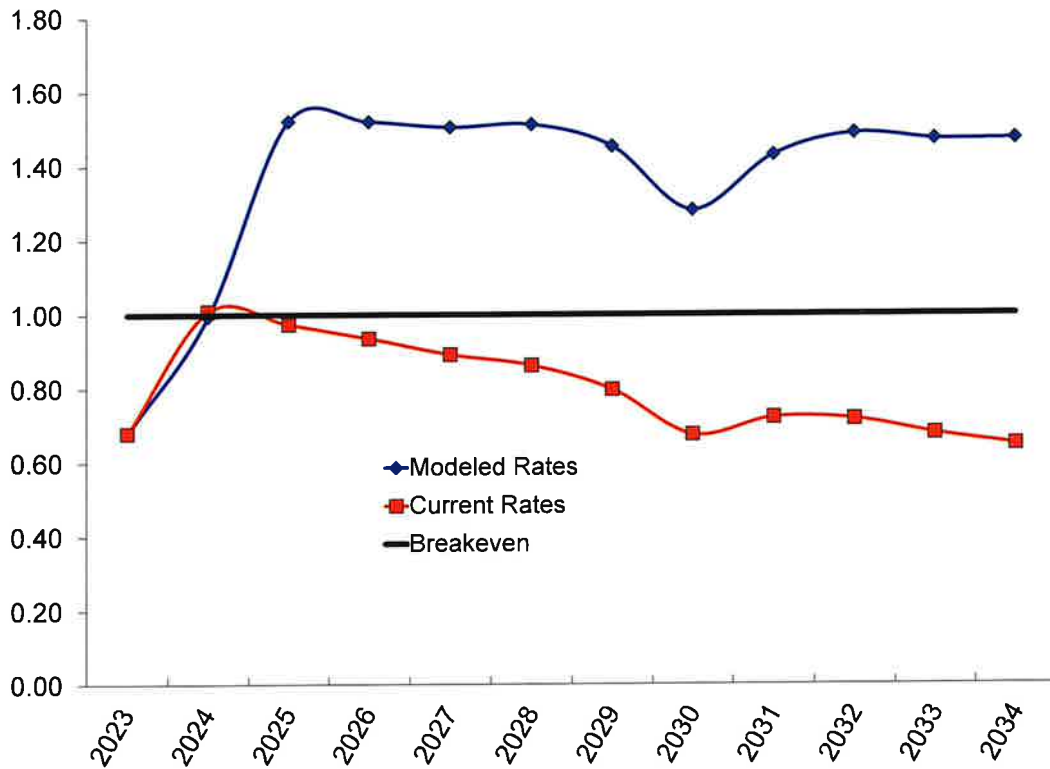
However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Residential	0	142	142	2,349	\$26.21	\$26.31	\$0.10	0%
	1,000	283	425	2,207	\$32.06	\$35.46	\$3.40	11%
	2,000	397	822	1,924	\$37.91	\$44.61	\$6.70	18%
	3,000	408	1,230	1,526	\$43.76	\$53.76	\$10.00	23%
	4,000	338	1,567	1,119	\$49.61	\$62.91	\$13.30	27%
	5,000	248	1,816	781	\$55.46	\$72.06	\$16.60	30%
	6,000	162	1,977	533	\$61.31	\$81.21	\$19.90	32%
	7,000	110	2,087	371	\$67.16	\$90.36	\$23.20	35%
	8,000	64	2,152	261	\$73.01	\$99.51	\$26.50	36%
	9,000	51	2,202	197	\$78.86	\$108.66	\$29.80	38%
	10,000	121	2,323	146	\$84.71	\$117.81	\$33.10	39%
	20,000	16	2,339	25	\$143.21	\$209.31	\$66.10	46%
	30,000	5	2,344	9	\$201.71	\$300.81	\$99.10	49%
In-City Commercial	0	59	59	174	\$26.21	\$26.31	\$0.10	0%
	1,000	30	89	115	\$32.06	\$35.46	\$3.40	11%
	2,000	13	102	85	\$37.91	\$44.61	\$6.70	18%
	3,000	9	111	72	\$43.76	\$53.76	\$10.00	23%
	4,000	6	117	63	\$49.61	\$62.91	\$13.30	27%
	5,000	5	122	57	\$55.46	\$72.06	\$16.60	30%
	6,000	3	125	52	\$61.31	\$81.21	\$19.90	32%
	7,000	2	127	49	\$67.16	\$90.36	\$23.20	35%
	8,000	3	131	46	\$73.01	\$99.51	\$26.50	36%
	9,000	3	133	43	\$78.86	\$108.66	\$29.80	38%
	10,000	11	144	41	\$84.71	\$117.81	\$33.10	39%
	20,000	7	152	29	\$143.21	\$209.31	\$66.10	46%
	30,000	5	157	22	\$201.71	\$300.81	\$99.10	49%
	40,000	5	162	17	\$260.21	\$392.31	\$132.10	51%
	50,000	2	164	11	\$318.71	\$483.81	\$165.10	52%
	60,000	2	167	9	\$377.21	\$575.31	\$198.10	53%
	70,000	1	168	7	\$435.71	\$666.81	\$231.10	53%
	80,000	1	169	6	\$494.21	\$758.31	\$264.10	53%
	90,000	1	170	5	\$552.71	\$849.81	\$297.10	54%
	100,000	3	172	4	\$611.21	\$941.31	\$330.10	54%
200,000	1	173	1	\$1,196.21	\$1,856.31	\$660.10	55%	
300,000	0	173	1	\$1,781.21	\$2,771.31	\$990.10	56%	

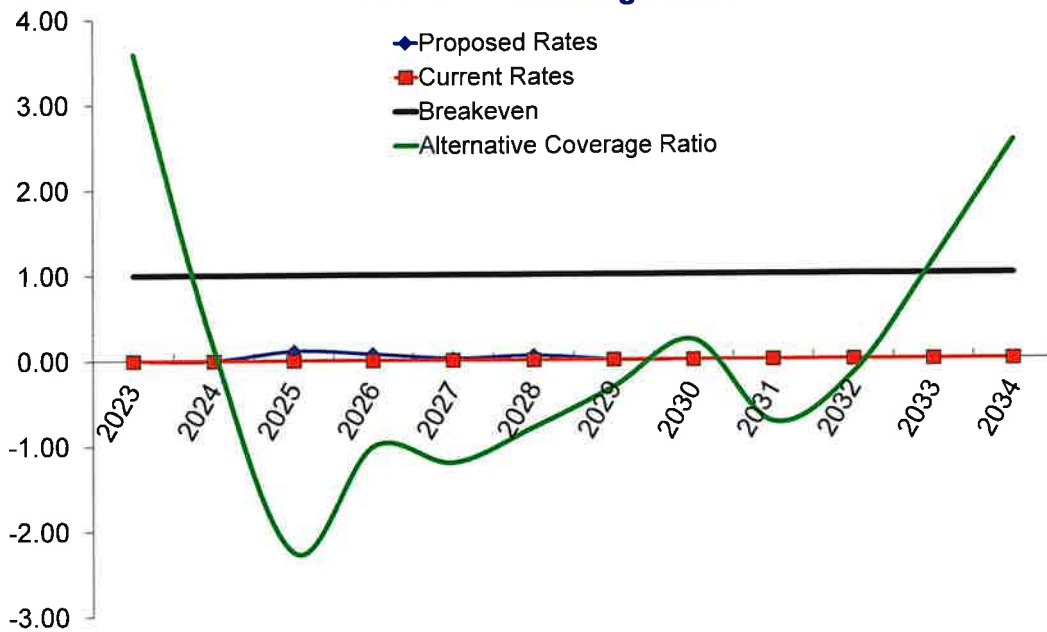
**Table 18 - Bills Before and After Rate Adjustments**

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential	0	59	59	1,171	\$28.52	\$32.10	\$3.58	13%
	1,000	109	167	1,112	\$34.88	\$44.45	\$9.57	27%
	2,000	180	347	1,004	\$41.24	\$56.81	\$15.56	38%
	3,000	194	541	824	\$47.61	\$69.16	\$21.55	45%
	4,000	168	709	630	\$53.97	\$81.51	\$27.54	51%
	5,000	121	829	462	\$60.33	\$93.86	\$33.53	56%
	6,000	89	919	342	\$66.70	\$106.22	\$39.52	59%
	7,000	58	976	252	\$73.06	\$118.57	\$45.51	62%
	8,000	42	1,019	194	\$79.42	\$130.92	\$51.50	65%
	9,000	29	1,048	152	\$85.79	\$143.27	\$57.49	67%
	10,000	87	1,135	123	\$92.15	\$155.63	\$63.48	69%
	20,000	21	1,156	36	\$155.78	\$279.15	\$123.37	79%
30,000	8	1,164	15	\$219.41	\$402.68	\$183.27	84%	
Rural Commercial	0	3	3	18	\$36.47	\$32.10	-\$4.37	-12%
	1,000	3	6	15	\$42.83	\$44.45	\$1.62	4%
	2,000	3	9	12	\$49.20	\$56.81	\$7.61	15%
	3,000	2	11	9	\$55.56	\$69.16	\$13.60	24%
	4,000	0	11	7	\$61.92	\$81.51	\$19.59	32%
	5,000	1	12	7	\$68.29	\$93.86	\$25.58	37%
	6,000	1	12	6	\$74.65	\$106.22	\$31.57	42%
	7,000	1	13	5	\$81.01	\$118.57	\$37.56	46%
	8,000	1	14	5	\$87.37	\$130.92	\$43.55	50%
	9,000	1	15	4	\$93.74	\$143.27	\$49.54	53%
	10,000	3	17	3	\$100.10	\$155.63	\$55.53	55%
20,000	0	18	1	\$163.73	\$279.15	\$115.42	70%	
No Charge ("Zero")	0	2	2	8	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	6	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	5	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	4	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	3	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	2	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	2	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	2	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	1	\$0.00	\$0.00	\$0.00	N.A.
	30,000	0	8	1	\$0.00	\$0.00	\$0.00	N.A.
40,000	0	8	0	\$0.00	\$0.00	\$0.00	N.A.	

**Chart 1 - Operating Ratio**

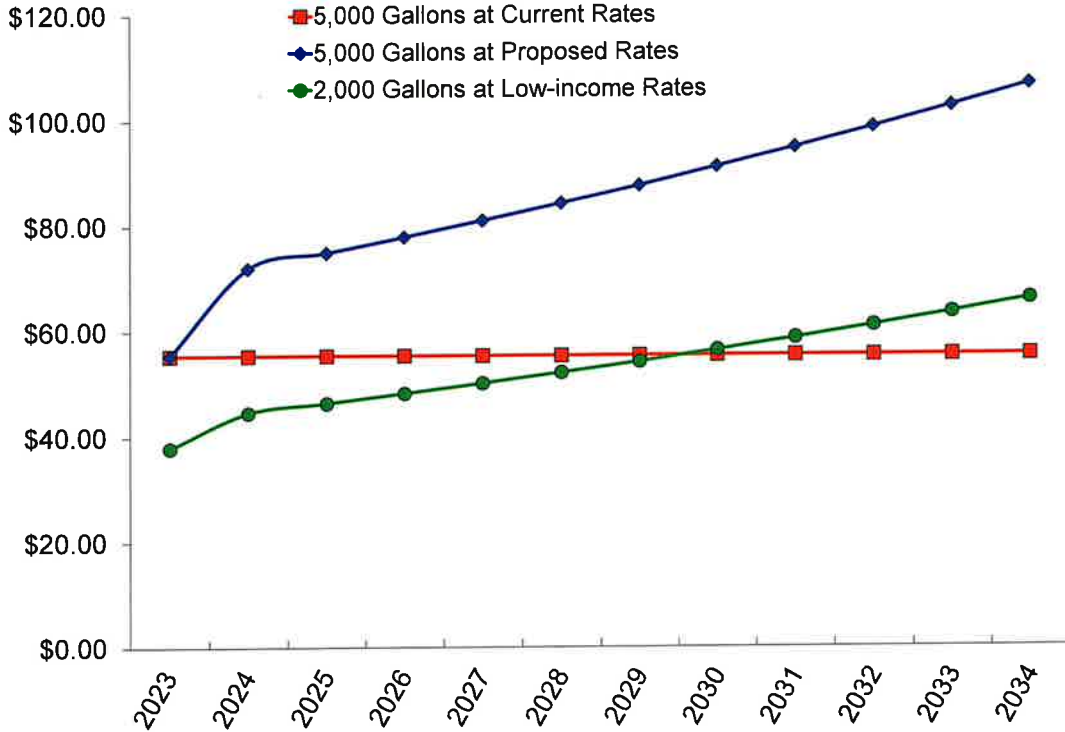


**Chart 2 - Coverage Ratio**

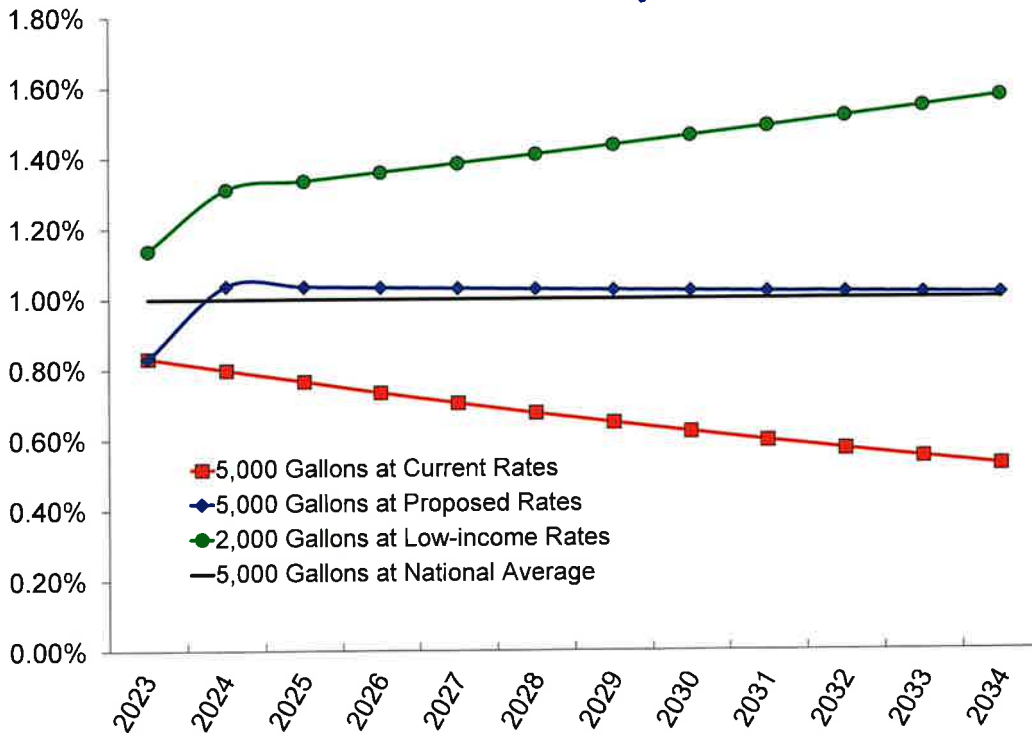




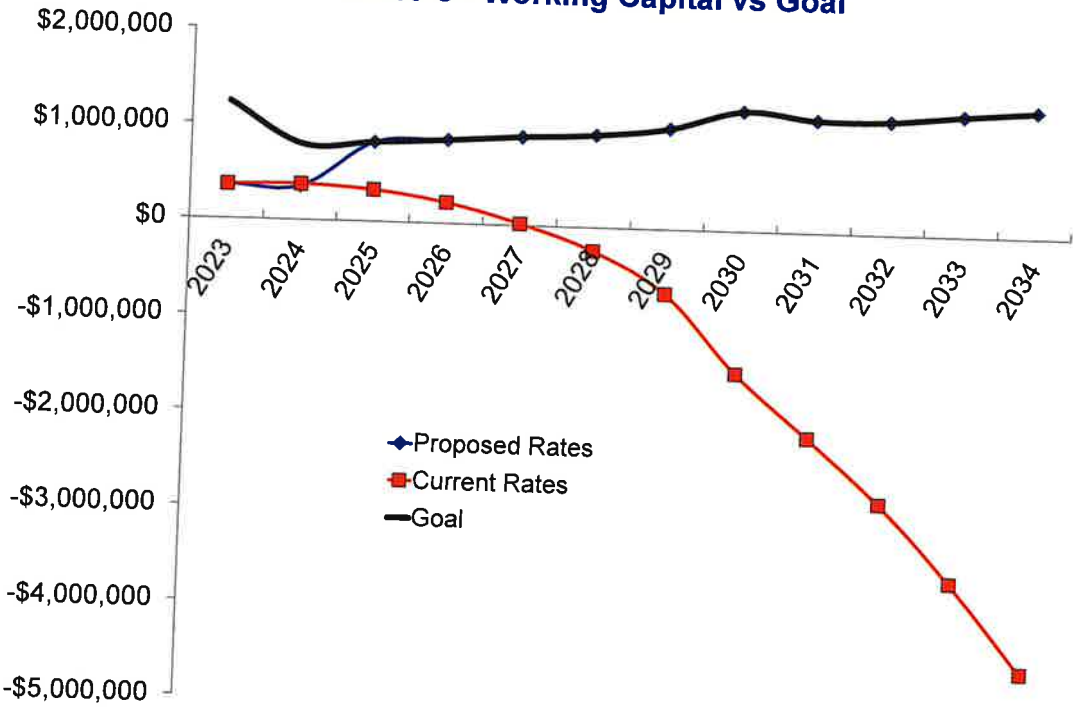
**Chart 3 - Residential Users' Bills**



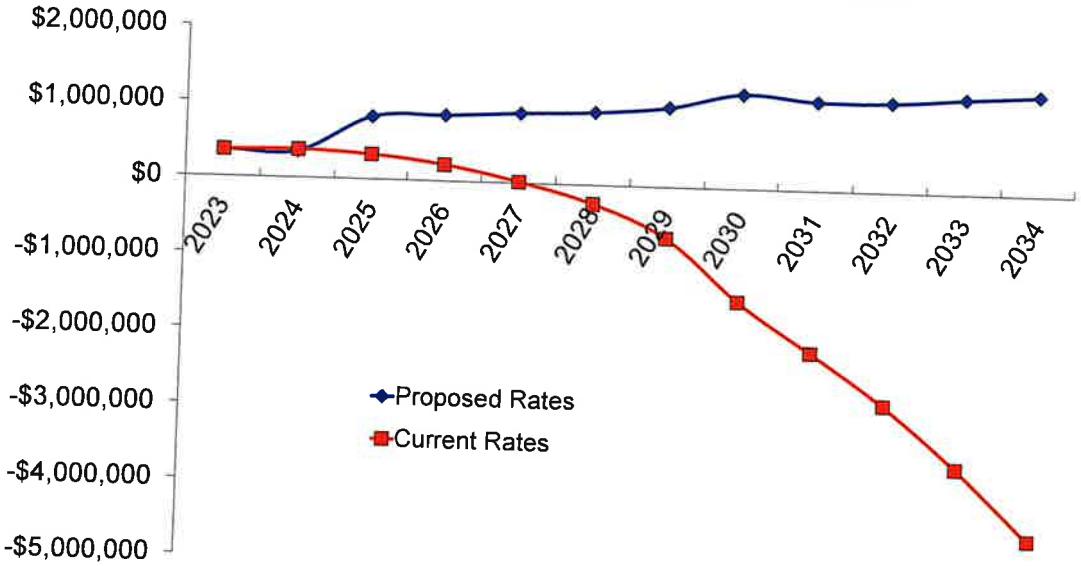
**Chart 4 - Affordability**



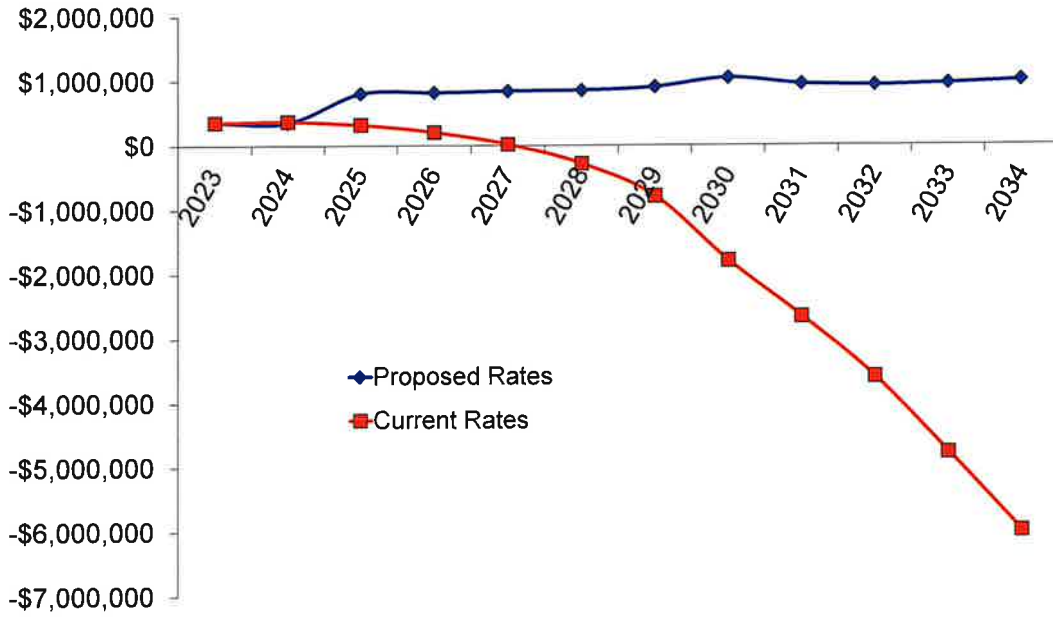
**Chart 5 - Working Capital vs Goal**



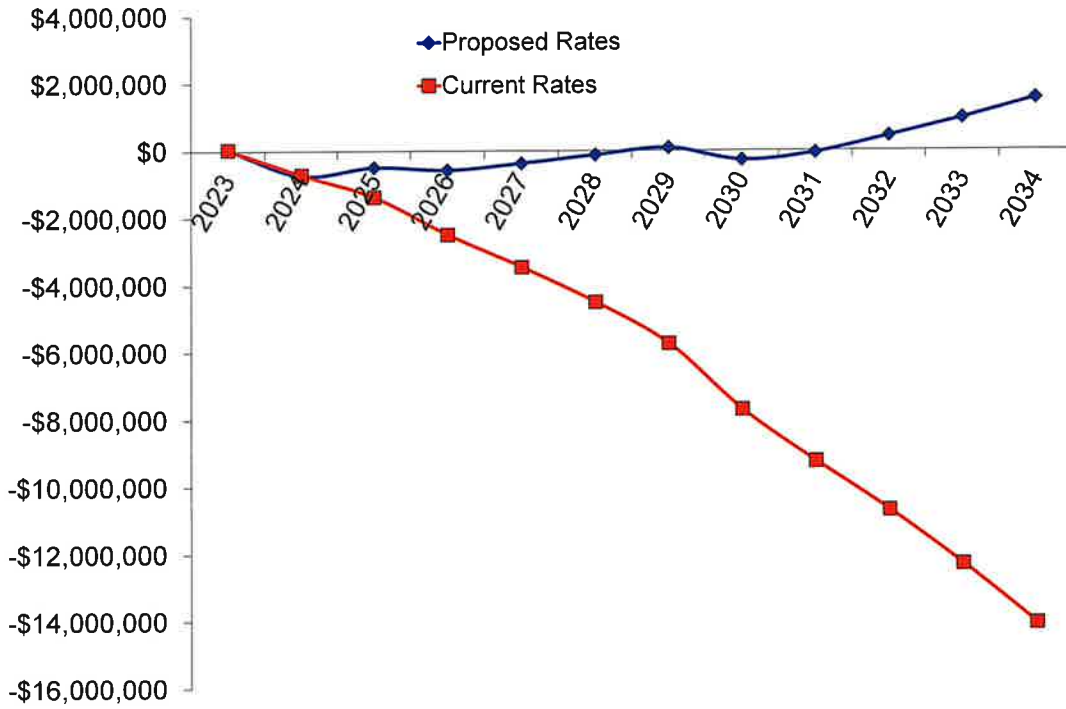
**Chart 6 - Value of Cash Assets Before Inflation**



**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**



Supplement 1 to Water and Sewer Rate Analysis Report 3  
Willard, Missouri

Prepared November 6, 2024, Carl Brown, President  
GettingGreatRates.com

This supplemental report is a companion to the report dated October 21, 2024. It covers two additional sewer rate structure models requested by the City Administrator. Those are sewer rates where out-of-City customers pay minimum and unit charges that are ten percent higher than in-City rates, and where they pay the same rates as in-City customers.

The prior full report included models of water rates in these structures, but it did not cover these structures for sewer rates. The new models in this supplemental report are called, "Willard, MO, Sewer Rates Model 2024-5" which depicts out-of-City rates at ten percent higher than in-City rates, and "Willard, MO, Sewer Rates Model 2024-6" which depicts out-of-City rates equal to the in-City rates. Those are the only differences, so little else needs to be discussed in this supplement.

Comparing the Bill Effects of the Sewer Rate Alternatives

Altogether, this supplemental report and the prior report now cover four alternative sewer rate structures. The following table compares some of their results.

**Table 18C - Bill Comparisons Among the Sewer Rate Alternatives**  
This table compares the annual cost of 5,000 gallons of sewer service per month under the rates in the four rate structures.

Customer, Rate Class or Meter Size	Number of 5,000 Gallon Customers	Sewer Model 3 Annual Cost	Sewer Model 4			Sewer Model 5			Sewer Model 6		
			Annual Cost	\$ Diff. from Model 3	% Diff. From Model 3	Annual Cost	\$ Diff. from Model 3	% Diff. From Model 3	Annual Cost	\$ Diff. from Model 3	% Diff. From Model 3
In-City Residential	248	\$815.96	\$864.76	\$48.80	6%	\$921.46	\$105.50	13%	\$951.71	\$135.75	17%
In-City Commercial	5	\$815.96	\$864.76	\$48.80	6%	\$921.46	\$105.50	13%	\$951.71	\$135.75	17%
Rural Residential	121	\$1,223.94	\$1,126.37	-\$97.56	-8%	\$1,013.61	-\$210.33	-17%	\$951.71	-\$272.23	-22%
Rural Commercial	1	\$1,223.94	\$1,126.37	-\$97.56	-8%	\$1,013.61	-\$210.33	-17%	\$951.71	-\$272.23	-22%

Note 1: You could interpret this table like this. Under the Sewer Model 4 rates, as compared to the Model 3 (recommended) rates, an In-City residential customer’s annual bill would need to be \$48.80 higher so a Rural Residential customer’s annual bill could be \$97.56 lower. Under Sewer Model 5, an In-City residential customer’s bill would need to be \$105.50 higher so a Rural Residential customer’s bill could be \$210.33 lower. And under Sewer Model 6, an In-City residential customer’s bill would need to be \$135.75 higher so a Rural Residential customer’s bill could be \$272.23 lower.

Note 2: These comparisons are only for 5,000 gallons of use per month. Because the alternative rate structures are quite different from each other, the bill changes for other volumes of use would be quite different. To make those comparisons, refer to Table 18 of each of the models in the original report and this supplemental report.

### Rate Affordability

The Affordability Index (AI) for these rates appears in Table 17 of each of the attached models. The Affordability Index is also shown graphically in Chart 4 of each of the models. To make comparisons easier, the following table lists the current rate’s AI, and the AI of each of the models’ rates in 2025 after rate adjustments have been made.

Model	Affordability Index in Percent		Increase over 2023 AI
	2023	2025	
Sewer Model 2024-3	0.83%	0.98%	117.29%
Sewer Model 2024-4	0.83%	1.03%	124.31%
Sewer Model 2024-5	0.83%	1.10%	132.46%
Sewer Model 20204-6	0.83%	1.14%	136.81%

## How to Implement a Set of Rates

How to implement rates from Sewer Models 3 and 4 was covered in the original report. To implement rates from Sewer Model 5 or 6, follow the steps that start on page 17 of the original report, except adopt the rates in one of the following tables, as you choose.

Table G: Rates From Sewer Model 5

Table G: System Development Fees; Minimum and Unit Charges; No Usage Allowance, Calculated by the Willard, MO, Sewer Rates Model 2024-5					
Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons	
All	In-City	\$28.04	0.000	\$9.75	
All	Out-of-City	\$30.84	0.000	\$10.73	

Table H: Rates From Sewer Model 6

Table H: System Development Fees; Minimum and Unit Charges; No Usage Allowance, Calculated by the Willard, MO, Sewer Rates Model 2024-6					
Water Meter Size	Customer Class	Monthly Minimum Charge, Including Peak Capacity	Usage Allowance in 1,000s	Unit Charge per 1,000 Gallons	
All	In-City	\$28.96	0.000	\$10.07	
All	Out-of-City	\$28.96	0.000	\$10.07	

## Closing

**Like the recommended rates, either of these sets of rates will eventually cover all costs and arrive at the appropriate reserves in ten years.**



## Willard, MO, Sewer Rates Model 2024-4

This model is like Sewer Model 3 except it assumes out of City customers' rates would be "capped" like this; the minimum charge would be 22 percent higher than the in-City minimum, and the unit charge would be 35 percent higher than the in-City unit charge.

November 6, 2024

This rate analysis model was produced by  
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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

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**Table 10 - Initial Rate Adjustments and Resulting Revenues**  
**Willard, MO, Sewer Rates Model 2024-4**

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Residential	0	999	\$44,435	\$26.31	0.000	\$9.15	\$784	\$45,220
	1,000	1,999	\$223,557	\$26.31	0.000	\$9.15	\$822	\$224,379
	2,000	2,999	\$231,452	\$26.31	0.000	\$9.15	\$801	\$232,252
	3,000	3,999	\$206,138	\$26.31	0.000	\$9.15	\$687	\$206,826
	4,000	4,999	\$160,554	\$26.31	0.000	\$9.15	\$526	\$161,080
	5,000	5,999	\$115,221	\$26.31	0.000	\$9.15	\$374	\$115,595
	6,000	6,999	\$76,693	\$26.31	0.000	\$9.15	\$251	\$76,944
	7,000	7,999	\$52,746	\$26.31	0.000	\$9.15	\$173	\$52,919
	8,000	8,999	\$33,970	\$26.31	0.000	\$9.15	\$115	\$34,085
	9,000	9,999	\$26,177	\$26.31	0.000	\$9.15	\$88	\$26,265
	10,000	19,999	\$75,950	\$26.31	0.000	\$9.15	\$267	\$76,217
	20,000	29,999	\$15,841	\$26.31	0.000	\$9.15	\$60	\$15,901
	30,000	39,999	\$5,839	\$26.31	0.000	\$9.15	\$23	\$5,862
In-City Commercial	0	999	\$22,435	\$26.31	0.000	\$9.15	\$85	\$22,520
	1,000	1,999	\$17,505	\$26.31	0.000	\$9.15	\$52	\$17,557
	2,000	2,999	\$10,002	\$26.31	0.000	\$9.15	\$33	\$10,035
	3,000	3,999	\$7,734	\$26.31	0.000	\$9.15	\$26	\$7,761
	4,000	4,999	\$6,134	\$26.31	0.000	\$9.15	\$22	\$6,156
	5,000	5,999	\$5,691	\$26.31	0.000	\$9.15	\$20	\$5,712
	6,000	6,999	\$4,610	\$26.31	0.000	\$9.15	\$17	\$4,628
	7,000	7,999	\$4,103	\$26.31	0.000	\$9.15	\$16	\$4,119
	8,000	8,999	\$4,231	\$26.31	0.000	\$9.15	\$16	\$4,247
	9,000	9,999	\$3,802	\$26.31	0.000	\$9.15	\$14	\$3,816
	10,000	19,999	\$28,274	\$26.31	0.000	\$9.15	\$112	\$28,386
	20,000	29,999	\$20,503	\$26.31	0.000	\$9.15	\$82	\$20,586
	30,000	39,999	\$15,271	\$26.31	0.000	\$9.15	\$61	\$15,332
	40,000	49,999	\$11,847	\$26.31	0.000	\$9.15	\$47	\$11,894
	50,000	59,999	\$7,913	\$26.31	0.000	\$9.15	\$32	\$7,945
	60,000	69,999	\$6,591	\$26.31	0.000	\$9.15	\$26	\$6,617
	70,000	79,999	\$4,706	\$26.31	0.000	\$9.15	\$19	\$4,726
	80,000	89,999	\$3,817	\$26.31	0.000	\$9.15	\$16	\$3,832
90,000	99,999	\$3,428	\$26.31	0.000	\$9.15	\$14	\$3,442	
100,000	199,999	\$17,966	\$26.31	0.000	\$9.15	\$75	\$18,041	
200,000	299,999	\$7,389	\$26.31	0.000	\$9.15	\$31	\$7,420	
300,000	399,999	\$3,143	\$26.31	0.000	\$9.15	\$13	\$3,157	
400,000	499,999	\$1,149	\$26.31	0.000	\$9.15	\$5	\$1,154	
500,000	599,999	\$248	\$26.31	0.000	\$9.15	\$1	\$249	
600,000	699,999	\$0	\$26.31	0.000	\$9.15	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Residential	0	999	\$20,022	\$32.10	0.000	\$12.35	\$512	\$20,534
	1,000	1,999	\$113,500	\$32.10	0.000	\$12.35	\$521	\$114,021
	2,000	2,999	\$124,138	\$32.10	0.000	\$12.35	\$523	\$124,661
	3,000	3,999	\$114,077	\$32.10	0.000	\$12.35	\$459	\$114,536
	4,000	4,999	\$92,386	\$32.10	0.000	\$12.35	\$364	\$92,749
	5,000	5,999	\$67,186	\$32.10	0.000	\$12.35	\$265	\$67,451
	6,000	6,999	\$49,690	\$32.10	0.000	\$12.35	\$196	\$49,886
	7,000	7,999	\$34,513	\$32.10	0.000	\$12.35	\$140	\$34,653
	8,000	8,999	\$25,984	\$32.10	0.000	\$12.35	\$106	\$26,090
	9,000	9,999	\$19,327	\$32.10	0.000	\$12.35	\$81	\$19,407
	10,000	19,999	\$75,021	\$32.10	0.000	\$12.35	\$332	\$75,353
	20,000	29,999	\$23,783	\$32.10	0.000	\$12.35	\$110	\$23,893
30,000	39,999	\$9,863	\$32.10	0.000	\$12.35	\$47	\$9,910	
Rural Commercial	0	999	\$1,237	\$32.10	0.000	\$12.35	\$9	\$1,246
	1,000	1,999	\$2,337	\$32.10	0.000	\$12.35	\$8	\$2,345
	2,000	2,999	\$1,993	\$32.10	0.000	\$12.35	\$7	\$2,000
	3,000	3,999	\$1,278	\$32.10	0.000	\$12.35	\$5	\$1,282
	4,000	4,999	\$604	\$32.10	0.000	\$12.35	\$3	\$607
	5,000	5,999	\$705	\$32.10	0.000	\$12.35	\$3	\$708
	6,000	6,999	\$631	\$32.10	0.000	\$12.35	\$3	\$633
	7,000	7,999	\$623	\$32.10	0.000	\$12.35	\$3	\$625
	8,000	8,999	\$758	\$32.10	0.000	\$12.35	\$3	\$761
	9,000	9,999	\$526	\$32.10	0.000	\$12.35	\$2	\$528
	10,000	19,999	\$2,049	\$32.10	0.000	\$12.35	\$8	\$2,057
	20,000	29,999	\$463	\$32.10	0.000	\$12.35	\$2	\$465
30,000	39,999	\$190	\$32.10	0.000	\$12.35	\$1	\$191	
Total Rate Revenue at Current Rates			\$2,295,329	Total Rate Revenue at Modeled Rates			\$9,634	
							Total Blended Rate Revenues for the Year	\$2,304,964

**Table 17 - Financial Capacity Indicators and Reserves  
Willard, MO, Sewer Rates Model 2024-4**

This table depicts the affordability of future rates, the financial health of the system, and the ending balances in various (assumed) accounts for the test year and the next 10 years.

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
Customary Affordability Index	Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$55.46	\$72.06	\$74.95	\$77.94	\$81.06	\$84.30	\$87.68	\$91.18	\$94.83	\$98.62	\$102.57	\$106.67
	AMHI Within Service Area	\$79,951	\$83,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563
	Affordability Index: Current Rates First Column, Modeled Rates After That	0.83%	1.04%	1.03%	1.03%	1.03%	1.03%	1.02%	1.02%	1.02%	1.02%	1.01%	1.01%
	National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area ( gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.												
Low-income, Low-volume Affordability Index	Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$37.91	\$44.61	\$46.40	\$48.25	\$50.18	\$52.19	\$54.28	\$56.45	\$58.71	\$61.06	\$63.50	\$66.04
	Income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,626	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417
	Affordability for Low-income, Low-volume: Current Rates First Column, Modeled Rates After That	1.14%	1.31%	1.34%	1.36%	1.36%	1.41%	1.44%	1.46%	1.49%	1.52%	1.54%	1.57%
This additional indicator of affordability assumes a residential customer with income at one-half the median household income above, that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "low pays" and "no pays" compared to others, so this indicator goes to the "business sense" of the rates modeled here: in other words, raise this customer's bill too much and they are more likely to pay late or not pay.													
<b>Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That</b>													
	0.68	1.00	1.52	1.52	1.50	1.51	1.45	1.28	1.43	1.49	1.47	1.47	
Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red." Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.													
<b>Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That</b>													
	0.00	0.00	0.11	0.07	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A" above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below,) it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.													
<b>Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That</b>													
	3.60	0.13	-2.26	-1.01	-1.20	-0.79	-0.32	0.23	-0.73	-0.16	1.16	2.56	
This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,150,793	\$361,931	\$354,389	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,150,793	\$361,931	\$354,389	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,150,793	\$361,931	\$354,389	\$806,457	\$822,689	\$845,483	\$855,995	\$906,307	\$1,045,522	\$953,511	\$931,620	\$957,716	\$1,004,019
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	-\$320,091	-\$1,085,014	-\$1,316,710	-\$1,447,641	-\$1,301,968	-\$1,088,601	-\$968,214	-\$1,532,816	-\$1,238,675	-\$752,767	-\$298,237	\$222,333
<b>Sum of All Reserves</b>	<b>\$1,150,793</b>	<b>\$41,840</b>	<b>-\$730,624</b>	<b>-\$485,311</b>	<b>-\$573,278</b>	<b>-\$375,575</b>	<b>-\$121,694</b>	<b>\$87,184</b>	<b>-\$277,645</b>	<b>-\$58,962</b>	<b>\$435,913</b>	<b>\$961,533</b>	<b>\$1,543,000</b>

**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Sewer Rates Model 2024-4**

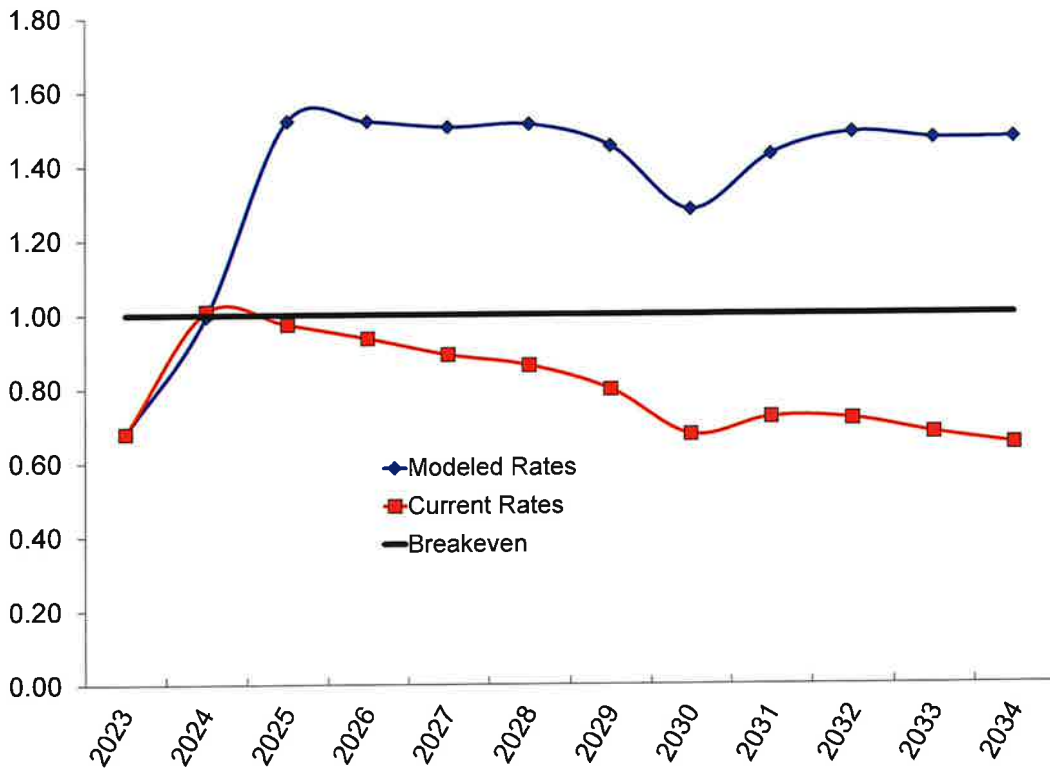
The modeled rates will generate 53.2% more revenue per year than the rates at the end of the test year. However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Residential	0	142	142	2,349	\$26.21	\$26.31	\$0.10	0%
	1,000	283	425	2,207	\$32.06	\$35.46	\$3.40	11%
	2,000	397	822	1,924	\$37.91	\$44.61	\$6.70	18%
	3,000	408	1,230	1,526	\$43.76	\$53.76	\$10.00	23%
	4,000	338	1,567	1,119	\$49.61	\$62.91	\$13.30	27%
	5,000	248	1,816	781	\$55.46	\$72.06	\$16.60	30%
	6,000	162	1,977	533	\$61.31	\$81.21	\$19.90	32%
	7,000	110	2,087	371	\$67.16	\$90.36	\$23.20	35%
	8,000	64	2,152	261	\$73.01	\$99.51	\$26.50	36%
	9,000	51	2,202	197	\$78.86	\$108.66	\$29.80	38%
	10,000	121	2,323	146	\$84.71	\$117.81	\$33.10	39%
	20,000	16	2,339	25	\$143.21	\$209.31	\$66.10	46%
30,000	5	2,344	9	\$201.71	\$300.81	\$99.10	49%	
In-City Commercial	0	59	59	174	\$26.21	\$26.31	\$0.10	0%
	1,000	30	89	115	\$32.06	\$35.46	\$3.40	11%
	2,000	13	102	85	\$37.91	\$44.61	\$6.70	18%
	3,000	9	111	72	\$43.76	\$53.76	\$10.00	23%
	4,000	6	117	63	\$49.61	\$62.91	\$13.30	27%
	5,000	5	122	57	\$55.46	\$72.06	\$16.60	30%
	6,000	3	125	52	\$61.31	\$81.21	\$19.90	32%
	7,000	2	127	49	\$67.16	\$90.36	\$23.20	35%
	8,000	3	131	46	\$73.01	\$99.51	\$26.50	36%
	9,000	3	133	43	\$78.86	\$108.66	\$29.80	38%
	10,000	11	144	41	\$84.71	\$117.81	\$33.10	39%
	20,000	7	152	29	\$143.21	\$209.31	\$66.10	46%
	30,000	5	157	22	\$201.71	\$300.81	\$99.10	49%
	40,000	5	162	17	\$260.21	\$392.31	\$132.10	51%
	50,000	2	164	11	\$318.71	\$483.81	\$165.10	52%
	60,000	2	167	9	\$377.21	\$575.31	\$198.10	53%
	70,000	1	168	7	\$435.71	\$666.81	\$231.10	53%
	80,000	1	169	6	\$494.21	\$758.31	\$264.10	53%
90,000	1	170	5	\$552.71	\$849.81	\$297.10	54%	
100,000	3	172	4	\$611.21	\$941.31	\$330.10	54%	
200,000	1	173	1	\$1,196.21	\$1,856.31	\$660.10	55%	
300,000	0	173	1	\$1,781.21	\$2,771.31	\$990.10	56%	

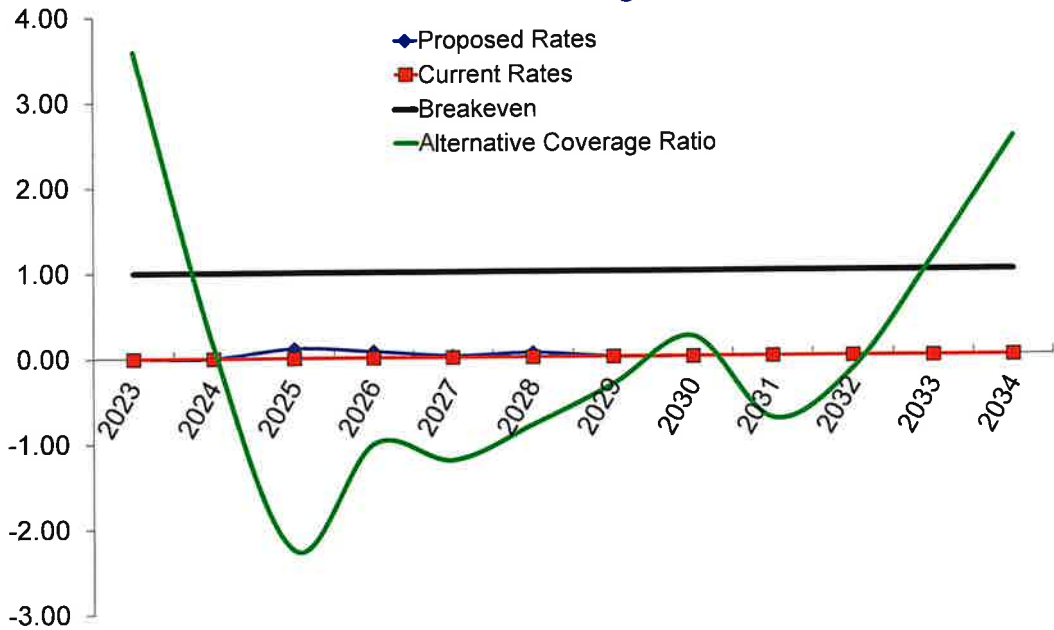
**Table 18 - Bills Before and After Rate Adjustments**

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential	0	59	59	1,171	\$28.52	\$32.10	\$3.58	13%
	1,000	109	167	1,112	\$34.88	\$44.45	\$9.57	27%
	2,000	180	347	1,004	\$41.24	\$56.81	\$15.56	38%
	3,000	194	541	824	\$47.61	\$69.16	\$21.55	45%
	4,000	168	709	630	\$53.97	\$81.51	\$27.54	51%
	5,000	121	829	462	\$60.33	\$93.86	\$33.53	56%
	6,000	89	919	342	\$66.70	\$106.22	\$39.52	59%
	7,000	58	976	252	\$73.06	\$118.57	\$45.51	62%
	8,000	42	1,019	194	\$79.42	\$130.92	\$51.50	65%
	9,000	29	1,048	152	\$85.79	\$143.27	\$57.49	67%
	10,000	87	1,135	123	\$92.15	\$155.63	\$63.48	69%
	20,000	21	1,156	36	\$155.78	\$279.15	\$123.37	79%
	30,000	8	1,164	15	\$219.41	\$402.68	\$183.27	84%
Rural Commercial	0	3	3	18	\$36.47	\$32.10	-\$4.37	-12%
	1,000	3	6	15	\$42.83	\$44.45	\$1.62	4%
	2,000	3	9	12	\$49.20	\$56.81	\$7.61	15%
	3,000	2	11	9	\$55.56	\$69.16	\$13.60	24%
	4,000	0	11	7	\$61.92	\$81.51	\$19.59	32%
	5,000	1	12	7	\$68.29	\$93.86	\$25.58	37%
	6,000	1	12	6	\$74.65	\$106.22	\$31.57	42%
	7,000	1	13	5	\$81.01	\$118.57	\$37.56	46%
	8,000	1	14	5	\$87.37	\$130.92	\$43.55	50%
	9,000	1	15	4	\$93.74	\$143.27	\$49.54	53%
10,000	3	17	3	\$100.10	\$155.63	\$55.53	55%	
20,000	0	18	1	\$163.73	\$279.15	\$115.42	70%	
No Charge ("Zero")	0	2	2	8	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	6	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	5	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	4	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	3	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	2	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	2	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	2	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	1	\$0.00	\$0.00	\$0.00	N.A.
	30,000	0	8	1	\$0.00	\$0.00	\$0.00	N.A.
40,000	0	8	0	\$0.00	\$0.00	\$0.00	N.A.	

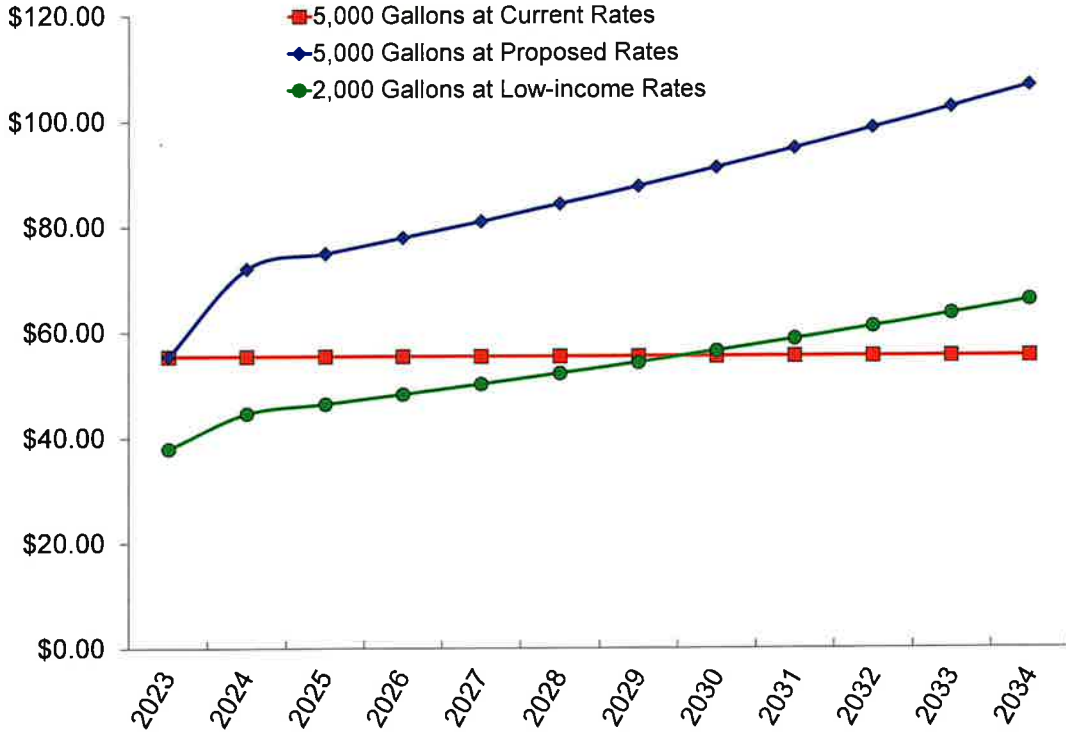
**Chart 1 - Operating Ratio**



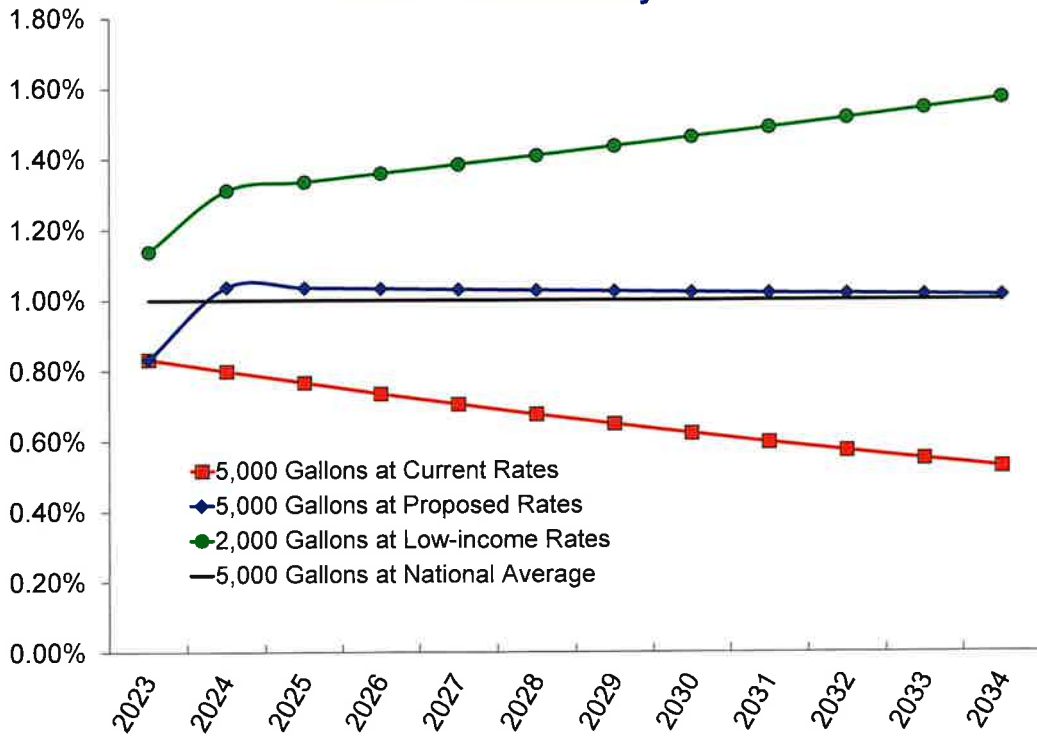
**Chart 2 - Coverage Ratio**



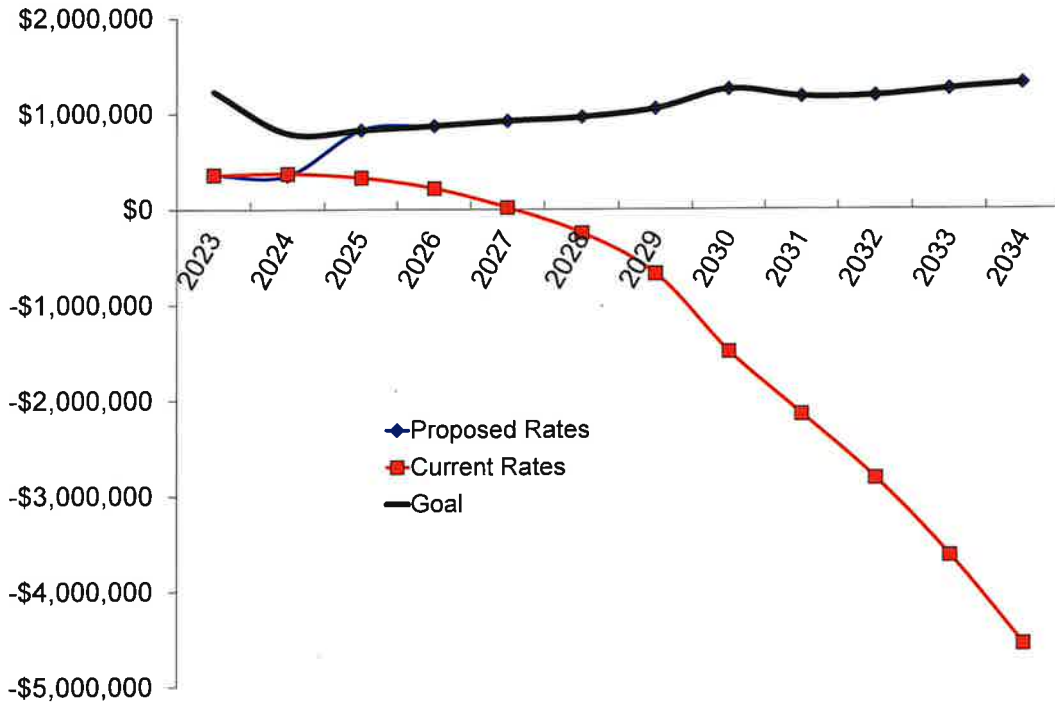
**Chart 3 - Residential Users' Bills**



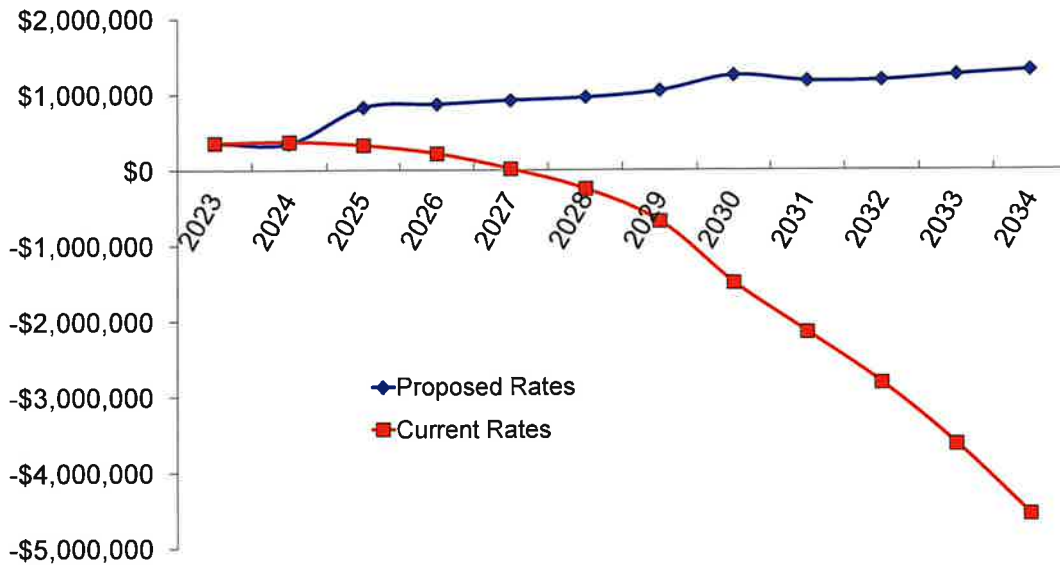
**Chart 4 - Affordability**



**Chart 5 - Working Capital vs Goal**

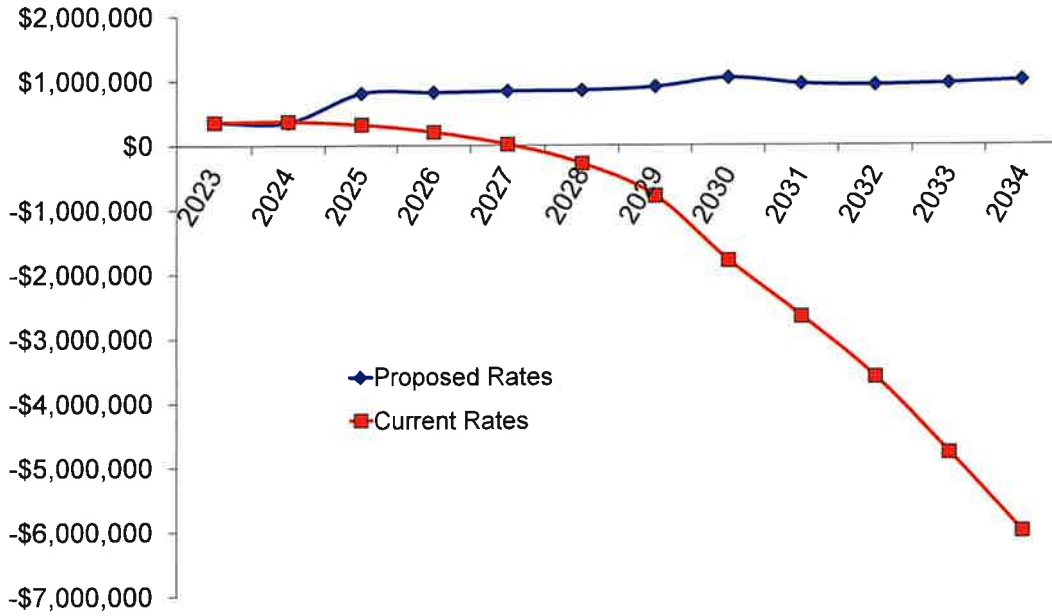


**Chart 6 - Value of Cash Assets Before Inflation**

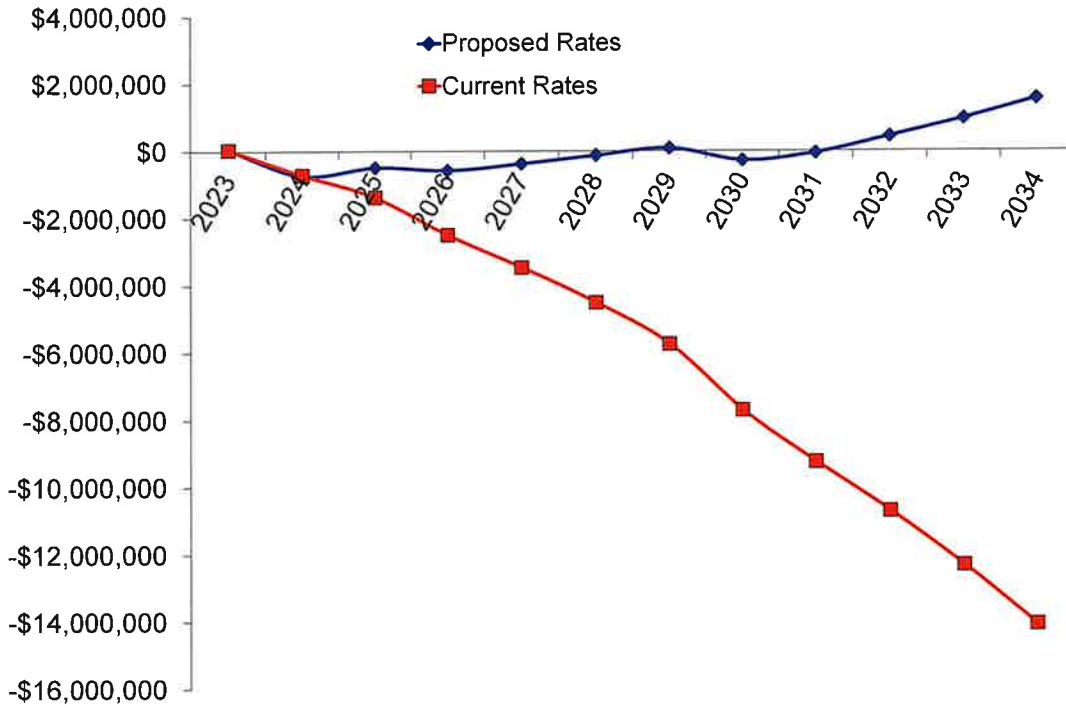




**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**





## Willard, MO, Sewer Rates Model 2024-5

This model is like Sewer Model 3 except it assumes out of City customers' rates would be "capped" like this; the minimum and unit charges would both be 10 percent higher than the in-City rates.

November 6, 2024

This rate analysis model was produced by  
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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

**Table 10 - Initial Rate Adjustments and Resulting Revenues**  
**Willard, MO, Sewer Rates Model 2024-5**

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Residential	0	999	\$44,435	\$28.04	0.000	\$9.75	\$836	\$45,271
	1,000	1,999	\$223,557	\$28.04	0.000	\$9.75	\$875	\$224,433
	2,000	2,999	\$231,452	\$28.04	0.000	\$9.75	\$853	\$232,305
	3,000	3,999	\$206,138	\$28.04	0.000	\$9.75	\$732	\$206,871
	4,000	4,999	\$160,554	\$28.04	0.000	\$9.75	\$560	\$161,114
	5,000	5,999	\$115,221	\$28.04	0.000	\$9.75	\$399	\$115,620
	6,000	6,999	\$76,693	\$28.04	0.000	\$9.75	\$267	\$76,960
	7,000	7,999	\$52,746	\$28.04	0.000	\$9.75	\$185	\$52,930
	8,000	8,999	\$33,970	\$28.04	0.000	\$9.75	\$122	\$34,093
	9,000	9,999	\$26,177	\$28.04	0.000	\$9.75	\$93	\$26,271
	10,000	19,999	\$75,950	\$28.04	0.000	\$9.75	\$285	\$76,235
	20,000	29,999	\$15,841	\$28.04	0.000	\$9.75	\$64	\$15,905
30,000	39,999	\$5,839	\$28.04	0.000	\$9.75	\$24	\$5,864	
In-City Commercial	0	999	\$22,435	\$28.04	0.000	\$9.75	\$91	\$22,526
	1,000	1,999	\$17,505	\$28.04	0.000	\$9.75	\$55	\$17,560
	2,000	2,999	\$10,002	\$28.04	0.000	\$9.75	\$35	\$10,037
	3,000	3,999	\$7,734	\$28.04	0.000	\$9.75	\$28	\$7,763
	4,000	4,999	\$6,134	\$28.04	0.000	\$9.75	\$23	\$6,158
	5,000	5,999	\$5,691	\$28.04	0.000	\$9.75	\$22	\$5,713
	6,000	6,999	\$4,610	\$28.04	0.000	\$9.75	\$18	\$4,629
	7,000	7,999	\$4,103	\$28.04	0.000	\$9.75	\$17	\$4,120
	8,000	8,999	\$4,231	\$28.04	0.000	\$9.75	\$17	\$4,248
	9,000	9,999	\$3,802	\$28.04	0.000	\$9.75	\$15	\$3,817
	10,000	19,999	\$28,274	\$28.04	0.000	\$9.75	\$120	\$28,394
	20,000	29,999	\$20,503	\$28.04	0.000	\$9.75	\$88	\$20,591
	30,000	39,999	\$15,271	\$28.04	0.000	\$9.75	\$65	\$15,336
	40,000	49,999	\$11,847	\$28.04	0.000	\$9.75	\$50	\$11,897
	50,000	59,999	\$7,913	\$28.04	0.000	\$9.75	\$34	\$7,947
	60,000	69,999	\$6,591	\$28.04	0.000	\$9.75	\$28	\$6,619
	70,000	79,999	\$4,706	\$28.04	0.000	\$9.75	\$20	\$4,727
	80,000	89,999	\$3,817	\$28.04	0.000	\$9.75	\$17	\$3,833
90,000	99,999	\$3,428	\$28.04	0.000	\$9.75	\$15	\$3,443	
100,000	199,999	\$17,966	\$28.04	0.000	\$9.75	\$80	\$18,046	
200,000	299,999	\$7,389	\$28.04	0.000	\$9.75	\$33	\$7,422	
300,000	399,999	\$3,143	\$28.04	0.000	\$9.75	\$14	\$3,158	
400,000	499,999	\$1,149	\$28.04	0.000	\$9.75	\$5	\$1,154	
500,000	599,999	\$248	\$28.04	0.000	\$9.75	\$1	\$249	
600,000	699,999	\$0	\$28.04	0.000	\$9.75	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
Rural Residential	0	999	\$20,022	\$30.84	0.000	\$10.73	\$450	\$20,472
	1,000	1,999	\$113,500	\$30.84	0.000	\$10.73	\$463	\$113,963
	2,000	2,999	\$124,138	\$30.84	0.000	\$10.73	\$472	\$124,610
	3,000	3,999	\$114,077	\$30.84	0.000	\$10.73	\$417	\$114,494
	4,000	4,999	\$92,386	\$30.84	0.000	\$10.73	\$332	\$92,718
	5,000	5,999	\$67,186	\$30.84	0.000	\$10.73	\$242	\$67,428
	6,000	6,999	\$49,690	\$30.84	0.000	\$10.73	\$179	\$49,869
	7,000	7,999	\$34,513	\$30.84	0.000	\$10.73	\$127	\$34,640
	8,000	8,999	\$25,984	\$30.84	0.000	\$10.73	\$96	\$26,080
	9,000	9,999	\$19,327	\$30.84	0.000	\$10.73	\$73	\$19,399
	10,000	19,999	\$75,021	\$30.84	0.000	\$10.73	\$297	\$75,318
	20,000	29,999	\$23,783	\$30.84	0.000	\$10.73	\$98	\$23,880
30,000	39,999	\$9,863	\$30.84	0.000	\$10.73	\$41	\$9,904	
Rural Commercial	0	999	\$1,237	\$30.84	0.000	\$10.73	\$8	\$1,245
	1,000	1,999	\$2,337	\$30.84	0.000	\$10.73	\$7	\$2,344
	2,000	2,999	\$1,993	\$30.84	0.000	\$10.73	\$6	\$1,999
	3,000	3,999	\$1,278	\$30.84	0.000	\$10.73	\$4	\$1,282
	4,000	4,999	\$604	\$30.84	0.000	\$10.73	\$3	\$607
	5,000	5,999	\$705	\$30.84	0.000	\$10.73	\$3	\$708
	6,000	6,999	\$631	\$30.84	0.000	\$10.73	\$2	\$633
	7,000	7,999	\$623	\$30.84	0.000	\$10.73	\$2	\$625
	8,000	8,999	\$758	\$30.84	0.000	\$10.73	\$2	\$761
	9,000	9,999	\$526	\$30.84	0.000	\$10.73	\$2	\$528
	10,000	19,999	\$2,049	\$30.84	0.000	\$10.73	\$7	\$2,056
	20,000	29,999	\$463	\$30.84	0.000	\$10.73	\$2	\$465
30,000	39,999	\$190	\$30.84	0.000	\$10.73	\$1	\$191	
Total Rate Revenue at Current Rates			\$2,295,329	Total Rate Revenue at Modeled Rates			\$9,634	
Total Blended Rate Revenues for the Year								\$2,304,963

**Table 17 - Financial Capacity Indicators and Reserves  
Willard, MO, Sewer Rates Model 2024-5**

This table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the last year and the next 10 years

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting		
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34		
<b>Capacity Indicators</b>														
Customer Affordability Index	Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$55.46	\$70.79	\$79.86	\$83.05	\$86.38	\$89.83	\$93.43	\$97.16	\$101.05	\$105.09	\$109.29	\$113.67	
	AMHI Within Service Area	\$79,951	\$81,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
	Affordability Index: Current Rates First Column, Modeled Rates After That	0.83%	1.11%	1.10%	1.10%	1.10%	1.09%	1.09%	1.09%	1.09%	1.08%	1.08%	1.08%	
	National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
	Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area (gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.													
Low-income, Low-volume Affordability Index	Monthly Bill for a 2,000 gal per Month, Low-Income Residential Customer	\$37.91	\$47.54	\$49.44	\$51.42	\$53.47	\$55.61	\$57.84	\$60.15	\$62.56	\$65.06	\$67.66	\$70.37	
	income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,828	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
	Affordability for Low-Income, Low-volume: Current Rates First Column, Modeled Rates After That	1.14%	1.40%	1.42%	1.45%	1.48%	1.50%	1.53%	1.56%	1.59%	1.62%	1.64%	1.67%	
This additional indicator of affordability assumes a residential customer with income at one-half the median household income above that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow payers" and "no payers" compared to others, so this indicator goes to the "business sense" of the rates modeled here. In other words, raise the customer's bill too much and they are more likely to pay late or not pay.														
Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That		0.68	1.00	1.52	1.52	1.50	1.51	1.45	1.28	1.43	1.49	1.47	1.47	
Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red." Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.														
Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That		0.00	0.00	0.11	0.07	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A" above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below,) it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.														
Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That		3.60	0.13	-2.26	-1.01	-1.21	-0.79	-0.32	0.23	-0.73	-0.16	1.16	2.56	
This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.														
Reserves		Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
	Cash and Cash Equivalents	\$1,150,793	\$361,931	\$354,389	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
	Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Undedicated Cash Assets	\$1,150,793	\$361,931	\$354,389	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
	Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,150,793	\$361,931	\$354,389	\$806,457	\$822,699	\$845,493	\$855,995	\$906,307	\$1,045,522	\$953,511	\$931,620	\$957,716	\$1,004,019
	Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Debt and CIP Reserves	\$0	-\$320,091	-\$1,085,014	-\$1,316,658	-\$1,447,948	-\$1,302,444	-\$1,089,259	-\$969,066	-\$1,533,875	-\$1,239,955	-\$754,282	-\$300,003	\$220,300
Sum of All Reserves		\$1,150,793	\$41,840	-\$730,625	-\$485,460	-\$573,585	-\$376,052	-\$122,353	\$86,332	-\$278,705	-\$59,842	\$434,368	\$959,767	\$1,540,976

**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Sewer Rates Model 2024-5**

The modeled rates will generate **53.2%** more revenue per year than the rates at the end of the test year. However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

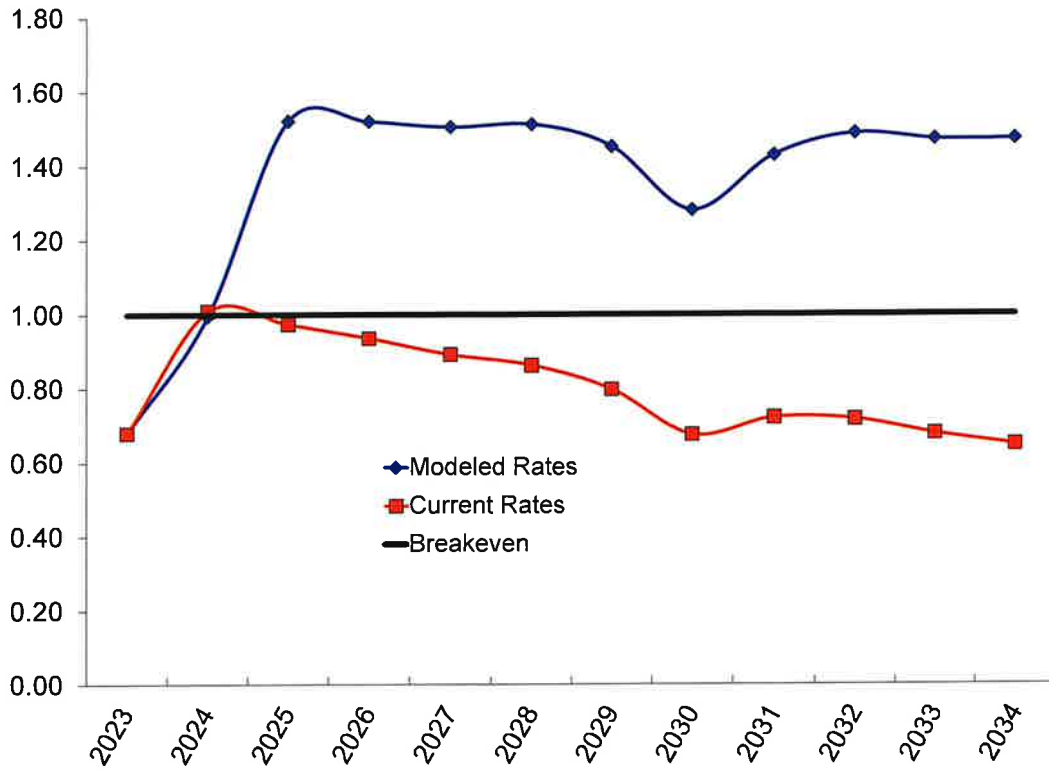
Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Residential	0	142	142	2,349	\$26.21	\$28.04	\$1.83	7%
	1,000	283	425	2,207	\$32.06	\$37.79	\$5.73	18%
	2,000	397	822	1,924	\$37.91	\$47.54	\$9.63	25%
	3,000	408	1,230	1,526	\$43.76	\$57.29	\$13.53	31%
	4,000	338	1,567	1,119	\$49.61	\$67.04	\$17.43	35%
	5,000	248	1,816	781	\$55.46	\$76.79	\$21.33	38%
	6,000	162	1,977	533	\$61.31	\$86.54	\$25.23	41%
	7,000	110	2,087	371	\$67.16	\$96.29	\$29.13	43%
	8,000	64	2,152	261	\$73.01	\$106.04	\$33.03	45%
	9,000	51	2,202	197	\$78.86	\$115.79	\$36.93	47%
	10,000	121	2,323	146	\$84.71	\$125.54	\$40.83	48%
	20,000	16	2,339	25	\$143.21	\$223.04	\$79.83	56%
30,000	5	2,344	9	\$201.71	\$320.54	\$118.83	59%	
In-City Commercial	0	59	59	174	\$26.21	\$28.04	\$1.83	7%
	1,000	30	89	115	\$32.06	\$37.79	\$5.73	18%
	2,000	13	102	85	\$37.91	\$47.54	\$9.63	25%
	3,000	9	111	72	\$43.76	\$57.29	\$13.53	31%
	4,000	6	117	63	\$49.61	\$67.04	\$17.43	35%
	5,000	5	122	57	\$55.46	\$76.79	\$21.33	38%
	6,000	3	125	52	\$61.31	\$86.54	\$25.23	41%
	7,000	2	127	49	\$67.16	\$96.29	\$29.13	43%
	8,000	3	131	46	\$73.01	\$106.04	\$33.03	45%
	9,000	3	133	43	\$78.86	\$115.79	\$36.93	47%
	10,000	11	144	41	\$84.71	\$125.54	\$40.83	48%
	20,000	7	152	29	\$143.21	\$223.04	\$79.83	56%
	30,000	5	157	22	\$201.71	\$320.54	\$118.83	59%
	40,000	5	162	17	\$260.21	\$418.04	\$157.83	61%
	50,000	2	164	11	\$318.71	\$515.54	\$196.83	62%
	60,000	2	167	9	\$377.21	\$613.04	\$235.83	63%
	70,000	1	168	7	\$435.71	\$710.54	\$274.83	63%
	80,000	1	169	6	\$494.21	\$808.04	\$313.83	64%
	90,000	1	170	5	\$552.71	\$905.54	\$352.83	64%
	100,000	3	172	4	\$611.21	\$1,003.04	\$391.83	64%
200,000	1	173	1	\$1,196.21	\$1,978.04	\$781.83	65%	
300,000	0	173	1	\$1,781.21	\$2,953.04	\$1,171.83	66%	

**Table 18 - Bills Before and After Rate Adjustments**

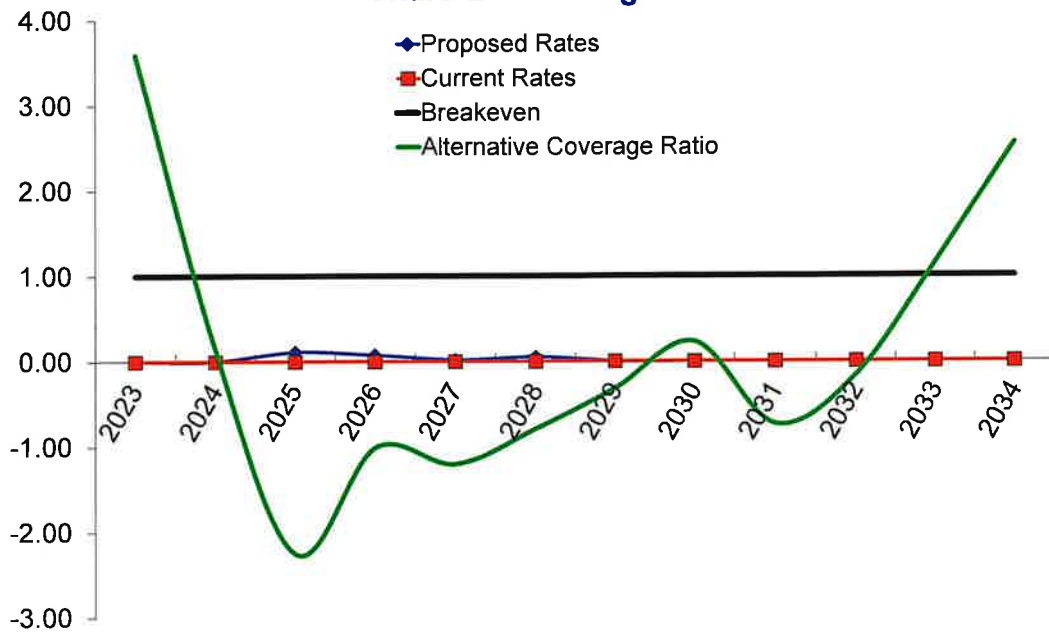
Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential	0	59	59	1,171	\$28.52	\$30.84	\$2.32	8%
	1,000	109	167	1,112	\$34.88	\$41.57	\$6.69	19%
	2,000	180	347	1,004	\$41.24	\$52.29	\$11.05	27%
	3,000	194	541	824	\$47.61	\$63.02	\$15.41	32%
	4,000	168	709	630	\$53.97	\$73.74	\$19.77	37%
	5,000	121	829	462	\$60.33	\$84.47	\$24.13	40%
	6,000	89	919	342	\$66.70	\$95.19	\$28.50	43%
	7,000	58	976	252	\$73.06	\$105.92	\$32.86	45%
	8,000	42	1,019	194	\$79.42	\$116.64	\$37.22	47%
	9,000	29	1,048	152	\$85.79	\$127.37	\$41.58	48%
	10,000	87	1,135	123	\$92.15	\$138.09	\$45.94	50%
	20,000	21	1,156	36	\$155.78	\$245.34	\$89.56	57%
	30,000	8	1,164	15	\$219.41	\$352.59	\$133.18	61%
Rural Commercial	0	3	3	18	\$36.47	\$30.84	-\$5.63	-15%
	1,000	3	6	15	\$42.83	\$41.57	-\$1.27	-3%
	2,000	3	9	12	\$49.20	\$52.29	\$3.10	6%
	3,000	2	11	9	\$55.56	\$63.02	\$7.46	13%
	4,000	0	11	7	\$61.92	\$73.74	\$11.82	19%
	5,000	1	12	7	\$68.29	\$84.47	\$16.18	24%
	6,000	1	12	6	\$74.65	\$95.19	\$20.54	28%
	7,000	1	13	5	\$81.01	\$105.92	\$24.91	31%
	8,000	1	14	5	\$87.37	\$116.64	\$29.27	33%
	9,000	1	15	4	\$93.74	\$127.37	\$33.63	36%
	10,000	3	17	3	\$100.10	\$138.09	\$37.99	38%
20,000	0	18	1	\$163.73	\$245.34	\$81.61	50%	
No Charge ("Zero")	0	2	2	8	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	6	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	5	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	4	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	3	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	2	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	2	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	2	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	1	\$0.00	\$0.00	\$0.00	N.A.
30,000	0	8	1	\$0.00	\$0.00	\$0.00	N.A.	
40,000	0	8	0	\$0.00	\$0.00	\$0.00	N.A.	



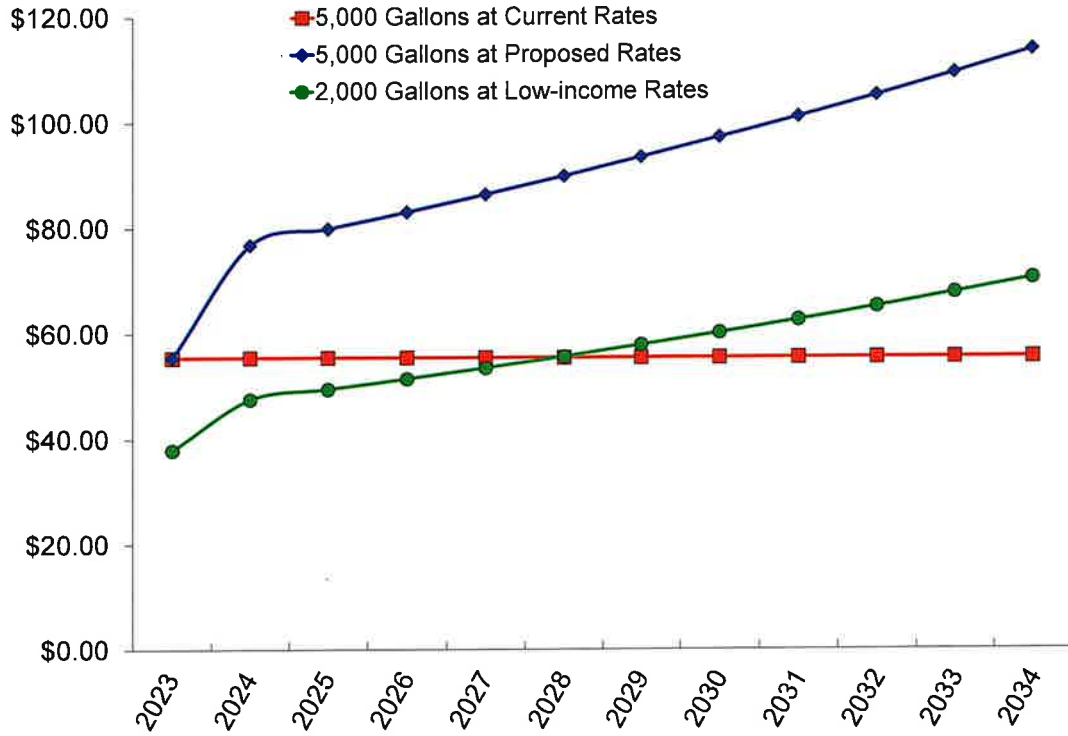
**Chart 1 - Operating Ratio**



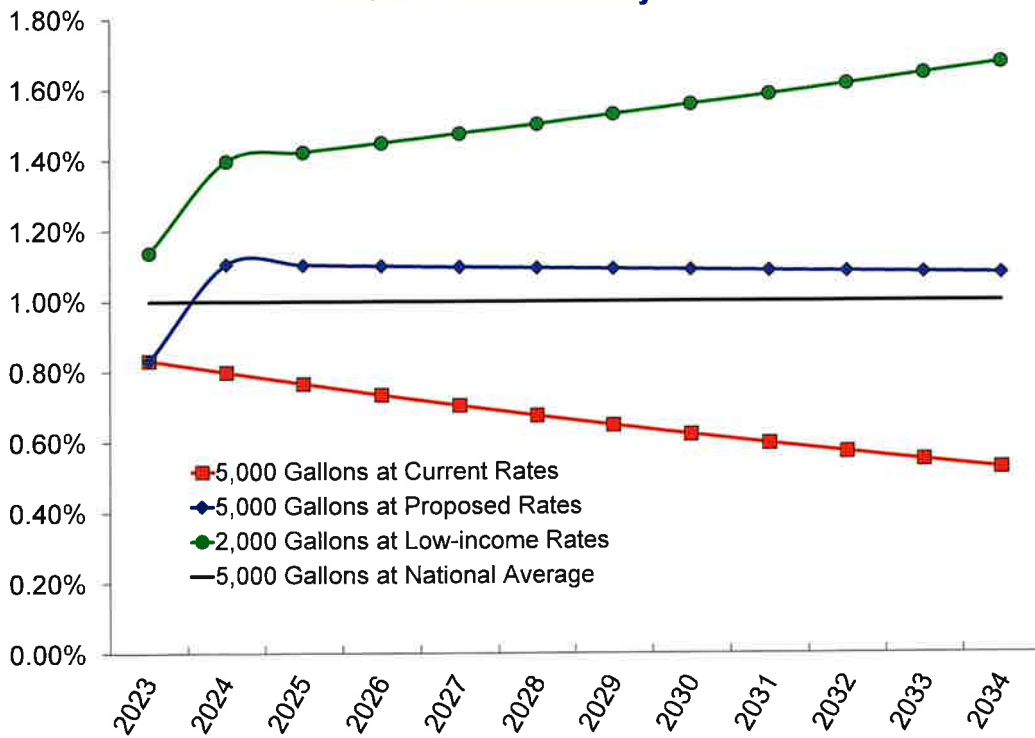
**Chart 2 - Coverage Ratio**



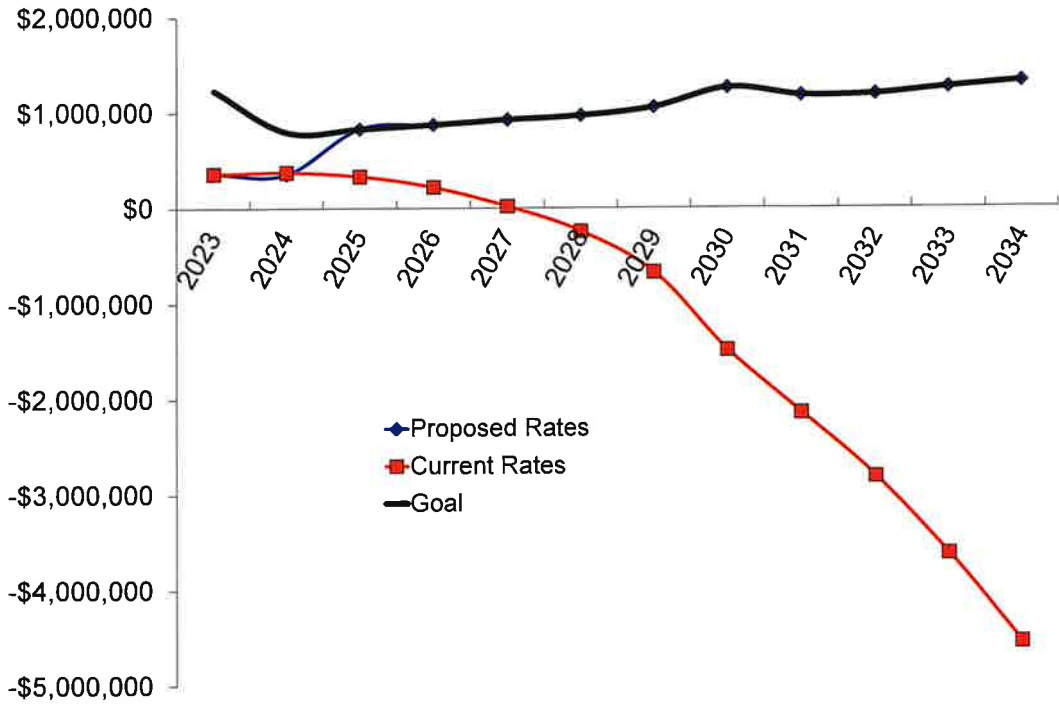
**Chart 3 - Residential Users' Bills**



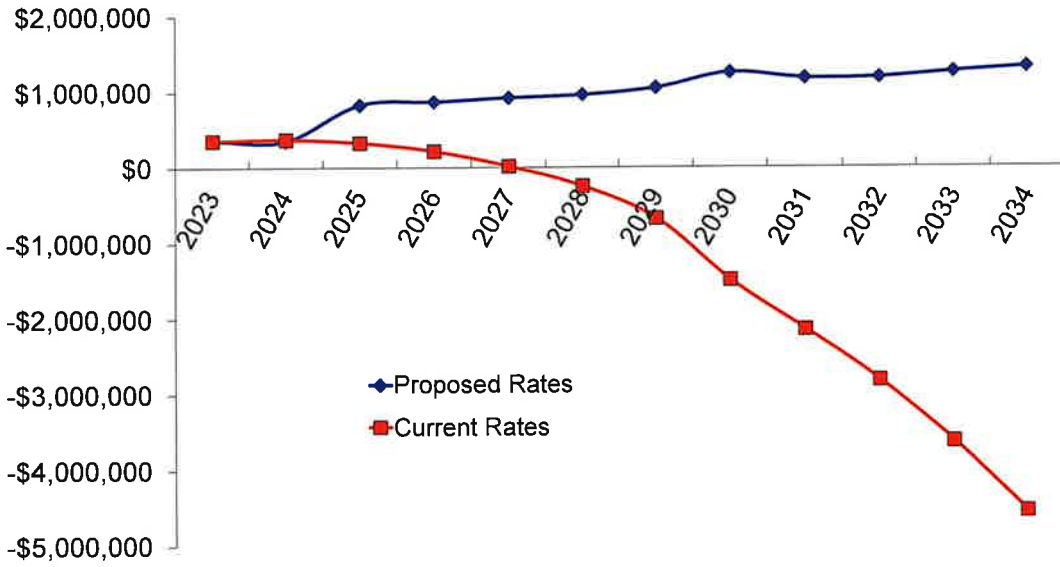
**Chart 4 - Affordability**



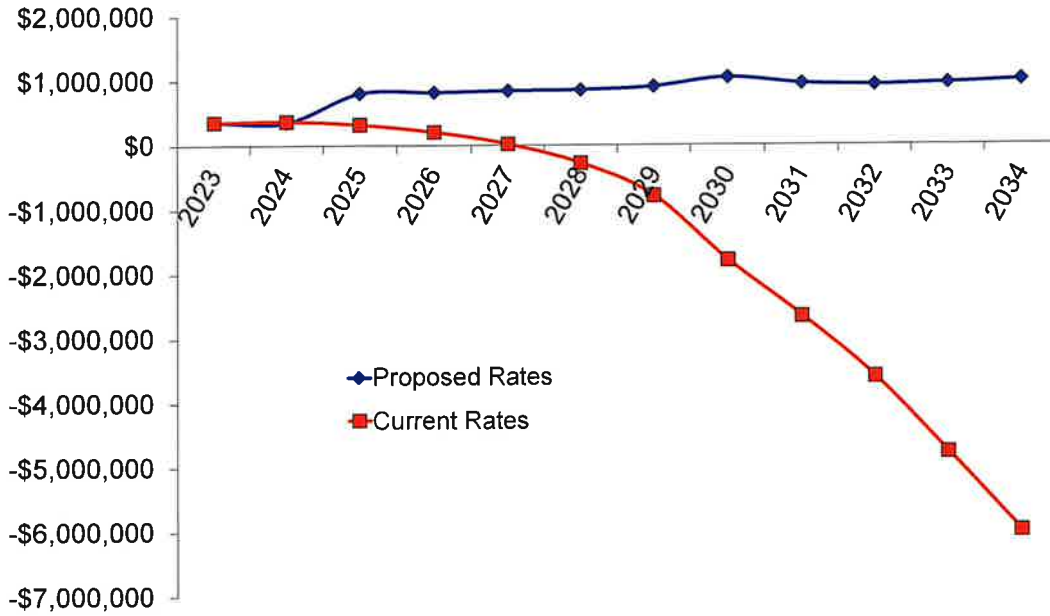
**Chart 5 - Working Capital vs Goal**



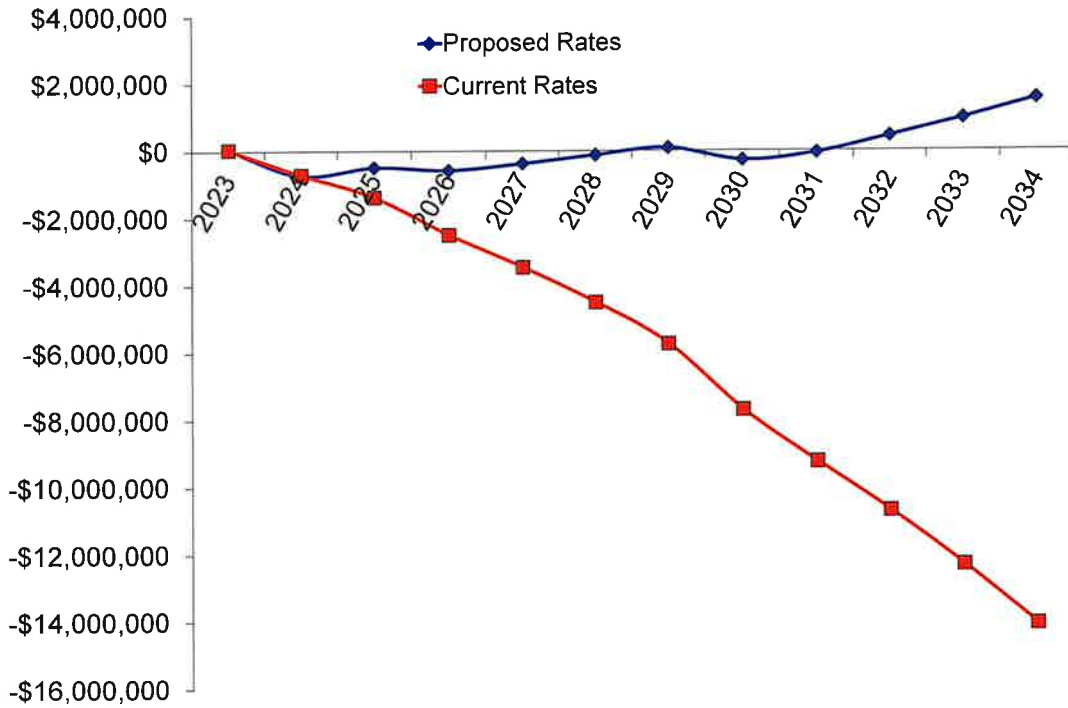
**Chart 6 - Value of Cash Assets Before Inflation**



**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**



## Willard, MO, Sewer Rates Model 2024-6

This model is like Sewer Model 3 except it assumes out of City customers would pay the same rates as in-City customers.

November 6, 2024

This rate analysis model was produced by

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Note: This document is a print out of the spreadsheet model used to calculate new user charge and other rates and fees for the next 10 years. These calculations are complex and are based upon many conditions and assumptions. These issues, and others, are described in a narrative report that accompanies this model.

CBGreatRates© Version 8.3

## Table 10 - Initial Rate Adjustments and Resulting Revenues Willard, MO, Sewer Rates Model 2024-6

This table calculates new user charge rates and the revenues they would generate if adjusted during the "Analysis Year."

After rate adjustments are made, customers will be billed monthly.

Following are Blended Sales Revenues: Sales at the current (Test Year) rates (gray highlighted column) will apply until rates are adjusted. Sales at the modeled rates (yellow highlighted column) would apply after the modeled rates are adopted. Adding both together, the "blended" sales revenues show in the right-most column.

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year
In-City Residential	0	999	\$44,435	\$28.96	0.000	\$10.07	\$863	\$45,298
	1,000	1,999	\$223,557	\$28.96	0.000	\$10.07	\$904	\$224,462
	2,000	2,999	\$231,452	\$28.96	0.000	\$10.07	\$881	\$232,333
	3,000	3,999	\$206,138	\$28.96	0.000	\$10.07	\$756	\$206,895
	4,000	4,999	\$160,554	\$28.96	0.000	\$10.07	\$578	\$161,133
	5,000	5,999	\$115,221	\$28.96	0.000	\$10.07	\$412	\$115,633
	6,000	6,999	\$76,693	\$28.96	0.000	\$10.07	\$276	\$76,969
	7,000	7,999	\$52,746	\$28.96	0.000	\$10.07	\$191	\$52,936
	8,000	8,999	\$33,970	\$28.96	0.000	\$10.07	\$126	\$34,097
	9,000	9,999	\$26,177	\$28.96	0.000	\$10.07	\$97	\$26,274
	10,000	19,999	\$75,950	\$28.96	0.000	\$10.07	\$294	\$76,244
	20,000	29,999	\$15,841	\$28.96	0.000	\$10.07	\$66	\$15,907
	30,000	39,999	\$5,839	\$28.96	0.000	\$10.07	\$25	\$5,864
In-City Commercial	0	999	\$22,435	\$28.96	0.000	\$10.07	\$94	\$22,529
	1,000	1,999	\$17,505	\$28.96	0.000	\$10.07	\$57	\$17,562
	2,000	2,999	\$10,002	\$28.96	0.000	\$10.07	\$36	\$10,038
	3,000	3,999	\$7,734	\$28.96	0.000	\$10.07	\$29	\$7,763
	4,000	4,999	\$6,134	\$28.96	0.000	\$10.07	\$24	\$6,158
	5,000	5,999	\$5,691	\$28.96	0.000	\$10.07	\$22	\$5,714
	6,000	6,999	\$4,610	\$28.96	0.000	\$10.07	\$19	\$4,630
	7,000	7,999	\$4,103	\$28.96	0.000	\$10.07	\$17	\$4,120
	8,000	8,999	\$4,231	\$28.96	0.000	\$10.07	\$17	\$4,249
	9,000	9,999	\$3,802	\$28.96	0.000	\$10.07	\$16	\$3,817
	10,000	19,999	\$28,274	\$28.96	0.000	\$10.07	\$124	\$28,398
	20,000	29,999	\$20,503	\$28.96	0.000	\$10.07	\$90	\$20,594
	30,000	39,999	\$15,271	\$28.96	0.000	\$10.07	\$67	\$15,338
	40,000	49,999	\$11,847	\$28.96	0.000	\$10.07	\$51	\$11,898
	50,000	59,999	\$7,913	\$28.96	0.000	\$10.07	\$36	\$7,949
	60,000	69,999	\$6,591	\$28.96	0.000	\$10.07	\$29	\$6,620
	70,000	79,999	\$4,706	\$28.96	0.000	\$10.07	\$21	\$4,727
	80,000	89,999	\$3,817	\$28.96	0.000	\$10.07	\$18	\$3,834
	90,000	99,999	\$3,428	\$28.96	0.000	\$10.07	\$15	\$3,443
100,000	199,999	\$17,966	\$28.96	0.000	\$10.07	\$82	\$18,049	
200,000	299,999	\$7,389	\$28.96	0.000	\$10.07	\$34	\$7,423	
300,000	399,999	\$3,143	\$28.96	0.000	\$10.07	\$15	\$3,158	
400,000	499,999	\$1,149	\$28.96	0.000	\$10.07	\$5	\$1,154	
500,000	599,999	\$248	\$28.96	0.000	\$10.07	\$1	\$249	
600,000	699,999	\$0	\$28.96	0.000	\$10.07	\$0	\$0	

**Table 10 - Initial Rate Adjustments and Resulting Revenues**

Customer Class, Rate Class or Meter Size	Volume Range Bottom (in Gallons)	Volume Range Top (in Gallons)	Sales This Year at Current Rates	Basic Minimum Charge	New Usage Allowance in 1,000s	New Unit Charge per 1,000 Gallons	Sales This Year at Modeled Rates	Total "Blended" Sales This Year	
Rural Residential	0	999	\$20,022	\$28.96	0.000	\$10.07	\$423	\$20,445	
	1,000	1,999	\$113,500	\$28.96	0.000	\$10.07	\$434	\$113,934	
	2,000	2,999	\$124,138	\$28.96	0.000	\$10.07	\$443	\$124,581	
	3,000	3,999	\$114,077	\$28.96	0.000	\$10.07	\$392	\$114,469	
	4,000	4,999	\$92,386	\$28.96	0.000	\$10.07	\$312	\$92,697	
	5,000	5,999	\$67,186	\$28.96	0.000	\$10.07	\$227	\$67,413	
	6,000	6,999	\$49,690	\$28.96	0.000	\$10.07	\$168	\$49,858	
	7,000	7,999	\$34,513	\$28.96	0.000	\$10.07	\$119	\$34,632	
	8,000	8,999	\$25,984	\$28.96	0.000	\$10.07	\$90	\$26,074	
	9,000	9,999	\$19,327	\$28.96	0.000	\$10.07	\$68	\$19,395	
	10,000	19,999	\$75,021	\$28.96	0.000	\$10.07	\$279	\$75,300	
20,000	29,999	\$23,783	\$28.96	0.000	\$10.07	\$92	\$23,874		
30,000	39,999	\$9,863	\$28.96	0.000	\$10.07	\$39	\$9,902		
Rural Commercial	0	999	\$1,237	\$28.96	0.000	\$10.07	\$8	\$1,244	
	1,000	1,999	\$2,337	\$28.96	0.000	\$10.07	\$7	\$2,344	
	2,000	2,999	\$1,993	\$28.96	0.000	\$10.07	\$6	\$1,999	
	3,000	3,999	\$1,278	\$28.96	0.000	\$10.07	\$4	\$1,282	
	4,000	4,999	\$604	\$28.96	0.000	\$10.07	\$2	\$606	
	5,000	5,999	\$705	\$28.96	0.000	\$10.07	\$3	\$708	
	6,000	6,999	\$631	\$28.96	0.000	\$10.07	\$2	\$633	
	7,000	7,999	\$623	\$28.96	0.000	\$10.07	\$2	\$625	
	8,000	8,999	\$758	\$28.96	0.000	\$10.07	\$2	\$761	
	9,000	9,999	\$526	\$28.96	0.000	\$10.07	\$2	\$527	
	10,000	19,999	\$2,049	\$28.96	0.000	\$10.07	\$7	\$2,056	
20,000	29,999	\$463	\$28.96	0.000	\$10.07	\$2	\$464		
30,000	39,999	\$190	\$28.96	0.000	\$10.07	\$1	\$191		
Total Rate Revenue at Current Rates			\$2,295,329	Total Rate Revenue at Modeled Rates			\$9,630		
								Total Blended Rate Revenues for the Year	\$2,304,959

**Table 17 - Financial Capacity Indicators and Reserves  
Willard, MO, Sewer Rates Model 2024-6**

The table depicts the affordability of future rates, the financial health of the system and the ending balances in various (assumed) accounts for the last year and the next 10 years.

	Test Year Starting	0 Year Starting	1st Year Starting	2nd Year Starting	3rd Year Starting	4th Year Starting	5th Year Starting	6th Year Starting	7th Year Starting	8th Year Starting	9th Year Starting	10th Year Starting	
	1/1/23	1/1/24	1/1/25	1/1/26	1/1/27	1/1/28	1/1/29	1/1/30	1/1/31	1/1/32	1/1/33	1/1/34	
<b>Capacity Indicators</b>													
<b>Customary Affordability Index</b>													
Monthly Bill for a 5,000 gal per Month, Small Meter Residential Customer	\$55.46	\$79.31	\$82.48	\$85.78	\$89.21	\$92.78	\$96.49	\$100.35	\$104.36	\$108.54	\$112.88	\$117.40	
AMHI Within Service Area	\$79,951	\$83,360	\$86,914	\$90,621	\$94,485	\$98,514	\$102,714	\$107,094	\$111,661	\$116,422	\$121,387	\$126,563	
Affordability Index: Current Rates First Column, Modeled Rates After That	0.83%	1.14%	1.14%	1.14%	1.13%	1.13%	1.13%	1.12%	1.12%	1.12%	1.12%	1.11%	
National Average Affordability Index: Commonly Accepted but Not Statistically Verifiable	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
Affordability Index (AI) goes to the willingness and ability of customers to pay. AI is the cost of 60,000 gallons of residential service per year (5,000 gallons per month) divided by the Annual Median Household Income (AMHI) in the service area ( gleaned from Census data or a survey). Rates near 1.0% are common in the U.S. and are generally considered affordable. Most grant agencies will decline to award grants if the AI is less than 1.5 to 2.0%, unless other eligibility criteria considered along with the AI make an applicant eligible.													
<b>Low-income, Low-volume Affordability Index</b>													
Monthly Bill for a 2,000 gal per Month, Low-income Residential Customer	\$37.91	\$49.10	\$51.05	\$53.11	\$55.23	\$57.44	\$59.74	\$62.13	\$64.61	\$67.20	\$69.88	\$72.68	
Income at One-half the AMHI and Rising at One-half the Rate Above	\$39,975	\$40,625	\$41,698	\$42,587	\$43,495	\$44,422	\$45,370	\$46,337	\$47,325	\$48,334	\$49,364	\$50,417	
Affordability for Low-income, Low-volume: Current Rates First Column, Modeled Rates After That	1.14%	1.44%	1.47%	1.50%	1.52%	1.55%	1.58%	1.61%	1.64%	1.67%	1.70%	1.73%	
This additional indicator of affordability assumes a residential customer with income at one-half the median household income above, that income is growing at one-half the rate of the median household income and the customer uses 2,000 gallons per month. Such a customer is likely either a minimum wage or near-minimum wage worker, or is retired and living only on Social Security benefits. Such customers are more commonly the "slow payers" and "no payers" compared to others, so this indicator goes to the "business sense" of the rates modeled here. In other words, raise this customer's bill too much and they are more likely to pay late or not pay.													
<b>Estimated Operating Ratio: Current Rates First Column, Modeled Rates After That</b>	0.68	1.00	1.52	1.52	1.50	1.51	1.45	1.28	1.43	1.49	1.47	1.47	
Operating ratio (OR) is a measure of the utility's ability to pay its operating expenses using only current incomes. A 1.0 OR is break even. Below 1.0 indicates operating in the "red." Generally, the OR should be at least 1.15 for large systems, 1.30 or more for medium-sized systems and perhaps as high as 2.0 for small systems. Note: If the utility has or will have reserves (below), it has more ability to pay its operating costs than this calculation of OR implies.													
<b>Estimated Coverage Ratio: Current Rates First Column, Modeled Rates After That</b>	0.00	0.00	0.11	0.07	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
Coverage Ratio (CR) goes to the ability of the utility to pay its debt payments out of current incomes. CR applies only to years with debt service. A "N/A" above indicates there was not, or in a future year there will not be debt during that year. 1.0 is break even - just enough net revenue to pay debt. Generally, the CR should be at least 1.25. Note: If the utility has or will have other available reserves (shown below), it has more ability to make debt payments than the CR implies. That is covered by the Alternative Coverage Ratio that follows next.													
<b>Alternative Coverage Ratio: Current Rates First Column, Modeled Rates After That</b>	3.60	0.13	-2.26	-1.01	-1.21	-0.80	-0.33	0.21	-0.75	-0.18	1.13	2.53	
This Alternative Coverage Ratio (ACR) is based on the same notion as the classic coverage ratio above, except it includes reserves that are available to pay debt service. With the classic CR, a utility could build reserves early on with current net revenues, but then future rates may not be high enough to show a strong CR. The classic CR could even go negative. But in reality, the utility could have quite strong reserves with which to pay debt. Thus, the Alternative Coverage Ratio can be a better indicator of a utility's true ability to pay debt.													
<b>Reserves</b>													
	Balance Ending on 12/31/22	Balance Ending on 12/31/23	Balance Ending on 12/31/24	Balance Ending on 12/31/25	Balance Ending on 12/31/26	Balance Ending on 12/31/27	Balance Ending on 12/31/28	Balance Ending on 12/31/29	Balance Ending on 12/31/30	Balance Ending on 12/31/31	Balance Ending on 12/31/32	Balance Ending on 12/31/33	Balance Ending on 12/31/34
Cash and Cash Equivalents	\$1,150,793	\$361,931	\$354,387	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Other Liquid Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Undedicated Cash Assets	\$1,150,793	\$361,931	\$354,387	\$831,399	\$874,363	\$926,393	\$966,906	\$1,055,399	\$1,255,170	\$1,180,113	\$1,188,680	\$1,259,770	\$1,320,676
Total Cash Assets Discounted for Inflation (Future Unrestricted Purchasing Power)	\$1,150,793	\$361,931	\$354,387	\$806,457	\$822,689	\$845,493	\$855,995	\$906,307	\$1,045,522	\$953,511	\$931,620	\$957,716	\$1,004,019
Repair & Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt and CIP Reserves	\$0	-\$320,091	-\$1,085,014	-\$1,317,788	-\$1,449,871	-\$1,305,431	-\$1,093,383	-\$874,406	-\$1,540,512	-\$1,247,975	-\$763,777	-\$311,069	\$207,562
<b>Sum of All Reserves</b>	\$1,150,793	\$41,840	-\$730,627	-\$486,389	-\$575,508	-\$379,039	-\$126,477	\$80,993	-\$285,341	-\$67,862	\$424,903	1048,701	\$1,528,238



**Table 18 - Bills Before and After Rate Adjustments  
Willard, MO, Sewer Rates Model 2024-6**

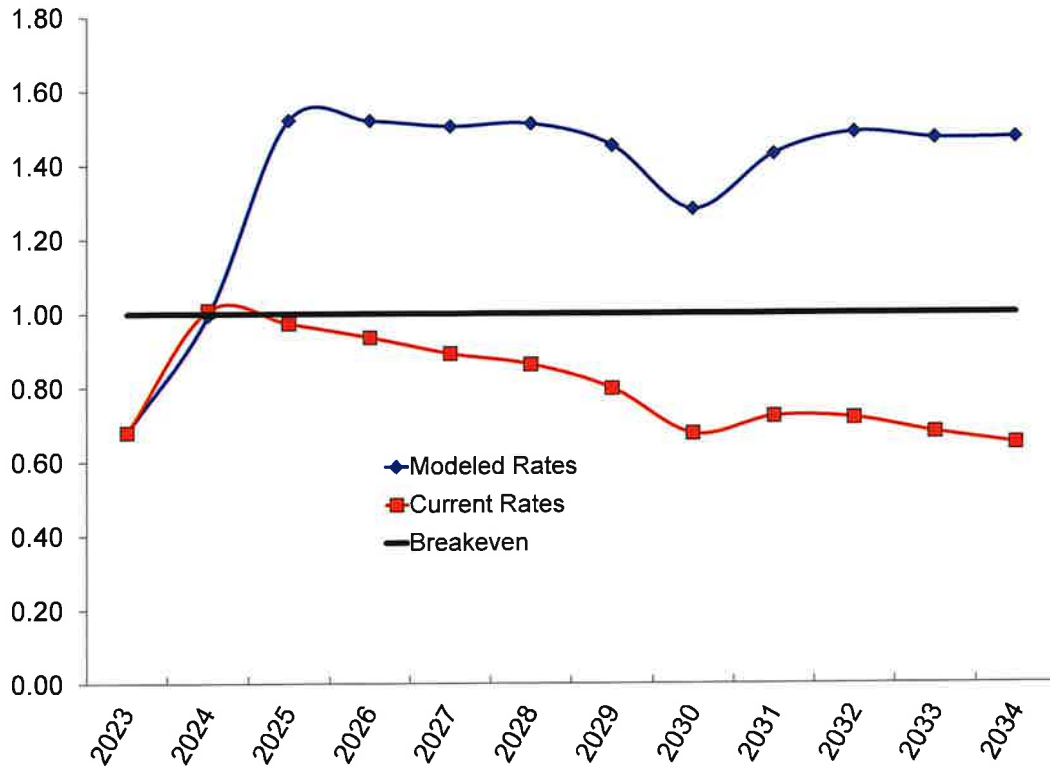
The modeled rates will generate 53.1% more revenue per year than the rates at the end of the test year. However, due to rate restructuring, individual bills would change as shown in the following table. Note: The actual rates to adopt or consider are included in the narrative report.

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
In-City Residential	0	142	142	2,349	\$26.21	\$28.96	\$2.75	10%
	1,000	283	425	2,207	\$32.06	\$39.03	\$6.97	22%
	2,000	397	822	1,924	\$37.91	\$49.10	\$11.19	30%
	3,000	408	1,230	1,526	\$43.76	\$59.17	\$15.41	35%
	4,000	338	1,567	1,119	\$49.61	\$69.24	\$19.63	40%
	5,000	248	1,816	781	\$55.46	\$79.31	\$23.85	43%
	6,000	162	1,977	533	\$61.31	\$89.38	\$28.07	46%
	7,000	110	2,087	371	\$67.16	\$99.45	\$32.29	48%
	8,000	64	2,152	261	\$73.01	\$109.52	\$36.51	50%
	9,000	51	2,202	197	\$78.86	\$119.59	\$40.73	52%
	10,000	121	2,323	146	\$84.71	\$129.66	\$44.95	53%
	20,000	16	2,339	25	\$143.21	\$230.36	\$87.15	61%
30,000	5	2,344	9	\$201.71	\$331.06	\$129.35	64%	
In-City Commercial	0	59	59	174	\$26.21	\$28.96	\$2.75	10%
	1,000	30	89	115	\$32.06	\$39.03	\$6.97	22%
	2,000	13	102	85	\$37.91	\$49.10	\$11.19	30%
	3,000	9	111	72	\$43.76	\$59.17	\$15.41	35%
	4,000	6	117	63	\$49.61	\$69.24	\$19.63	40%
	5,000	5	122	57	\$55.46	\$79.31	\$23.85	43%
	6,000	3	125	52	\$61.31	\$89.38	\$28.07	46%
	7,000	2	127	49	\$67.16	\$99.45	\$32.29	48%
	8,000	3	131	46	\$73.01	\$109.52	\$36.51	50%
	9,000	3	133	43	\$78.86	\$119.59	\$40.73	52%
	10,000	11	144	41	\$84.71	\$129.66	\$44.95	53%
	20,000	7	152	29	\$143.21	\$230.36	\$87.15	61%
	30,000	5	157	22	\$201.71	\$331.06	\$129.35	64%
	40,000	5	162	17	\$260.21	\$431.76	\$171.55	66%
	50,000	2	164	11	\$318.71	\$532.46	\$213.75	67%
	60,000	2	167	9	\$377.21	\$633.16	\$255.95	68%
	70,000	1	168	7	\$435.71	\$733.86	\$298.15	68%
	80,000	1	169	6	\$494.21	\$834.56	\$340.35	69%
	90,000	1	170	5	\$552.71	\$935.26	\$382.55	69%
	100,000	3	172	4	\$611.21	\$1,035.96	\$424.75	69%
200,000	1	173	1	\$1,196.21	\$2,042.96	\$846.75	71%	
300,000	0	173	1	\$1,781.21	\$3,049.96	\$1,268.75	71%	

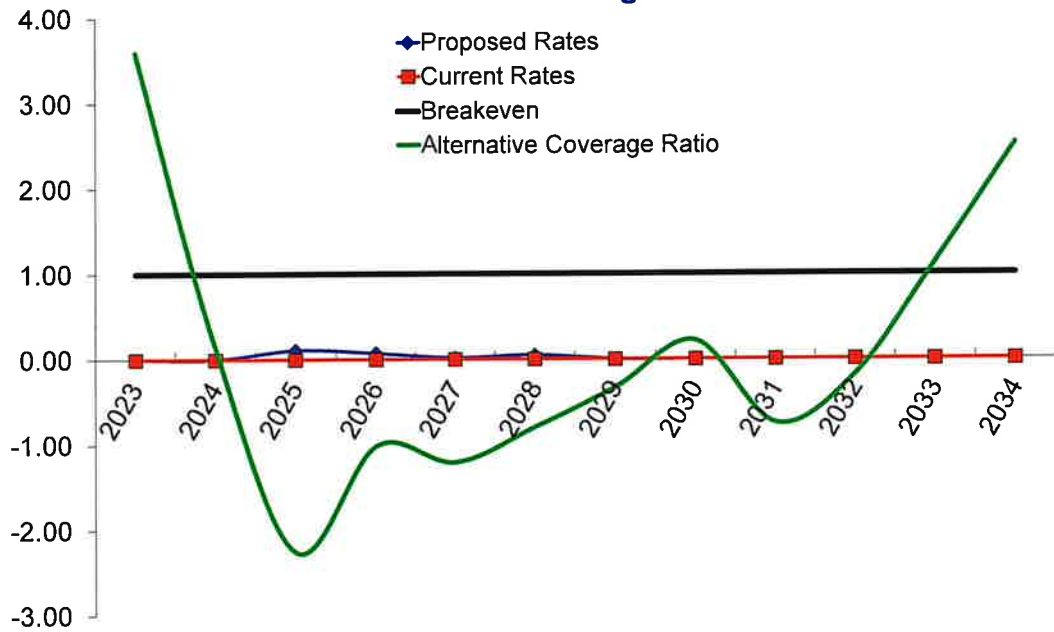
**Table 18 - Bills Before and After Rate Adjustments**

Customer, Rate Class or Meter Size	Gallons of Use	Customers Using at Least This Volume But Not the Next	Customers Using This Volume or Less	Customers Using This Volume or More	Bill at Now Current Rates	Bill at Modeled Rates	Modeled Bill Increase or Decrease (-)	Modeled Bill Percentage Increase or Decrease (-)
Rural Residential	0	59	59	1,171	\$28.52	\$28.96	\$0.44	2%
	1,000	109	167	1,112	\$34.88	\$39.03	\$4.15	12%
	2,000	180	347	1,004	\$41.24	\$49.10	\$7.85	19%
	3,000	194	541	824	\$47.61	\$59.17	\$11.56	24%
	4,000	168	709	630	\$53.97	\$69.24	\$15.27	28%
	5,000	121	829	462	\$60.33	\$79.31	\$18.98	31%
	6,000	89	919	342	\$66.70	\$89.38	\$22.68	34%
	7,000	58	976	252	\$73.06	\$99.45	\$26.39	36%
	8,000	42	1,019	194	\$79.42	\$109.52	\$30.10	38%
	9,000	29	1,048	152	\$85.79	\$119.59	\$33.80	39%
	10,000	87	1,135	123	\$92.15	\$129.66	\$37.51	41%
	20,000	21	1,156	36	\$155.78	\$230.36	\$74.58	48%
30,000	8	1,164	15	\$219.41	\$331.06	\$111.65	51%	
Rural Commercial	0	3	3	18	\$36.47	\$28.96	-\$7.51	-21%
	1,000	3	6	15	\$42.83	\$39.03	-\$3.80	-9%
	2,000	3	9	12	\$49.20	\$49.10	-\$0.10	0%
	3,000	2	11	9	\$55.56	\$59.17	\$3.61	6%
	4,000	0	11	7	\$61.92	\$69.24	\$7.32	12%
	5,000	1	12	7	\$68.29	\$79.31	\$11.02	16%
	6,000	1	12	6	\$74.65	\$89.38	\$14.73	20%
	7,000	1	13	5	\$81.01	\$99.45	\$18.44	23%
	8,000	1	14	5	\$87.37	\$109.52	\$22.14	25%
	9,000	1	15	4	\$93.74	\$119.59	\$25.85	28%
10,000	3	17	3	\$100.10	\$129.66	\$29.56	30%	
20,000	0	18	1	\$163.73	\$230.36	\$66.63	41%	
No Charge ("Zero")	0	2	2	8	\$0.00	\$0.00	\$0.00	N.A.
	1,000	1	3	6	\$0.00	\$0.00	\$0.00	N.A.
	2,000	1	4	5	\$0.00	\$0.00	\$0.00	N.A.
	3,000	1	5	4	\$0.00	\$0.00	\$0.00	N.A.
	4,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	5,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	6,000	0	5	3	\$0.00	\$0.00	\$0.00	N.A.
	7,000	0	6	3	\$0.00	\$0.00	\$0.00	N.A.
	8,000	1	6	2	\$0.00	\$0.00	\$0.00	N.A.
	9,000	0	6	2	\$0.00	\$0.00	\$0.00	N.A.
	10,000	1	7	2	\$0.00	\$0.00	\$0.00	N.A.
	20,000	0	7	1	\$0.00	\$0.00	\$0.00	N.A.
	30,000	0	8	1	\$0.00	\$0.00	\$0.00	N.A.
40,000	0	8	0	\$0.00	\$0.00	\$0.00	N.A.	

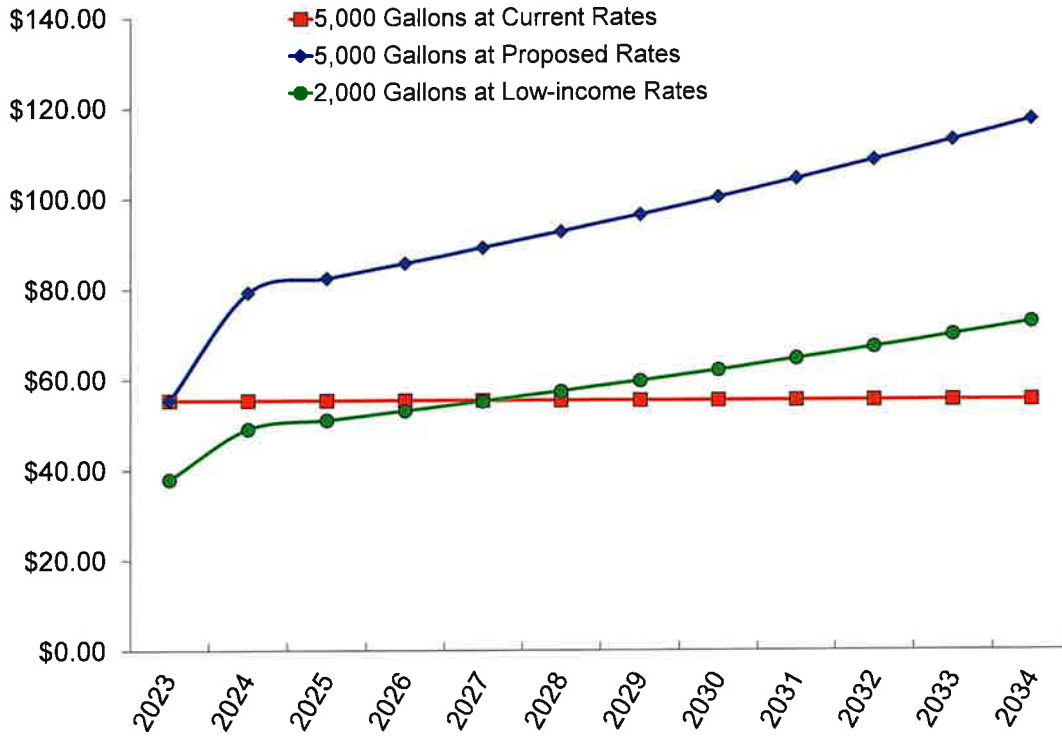
**Chart 1 - Operating Ratio**



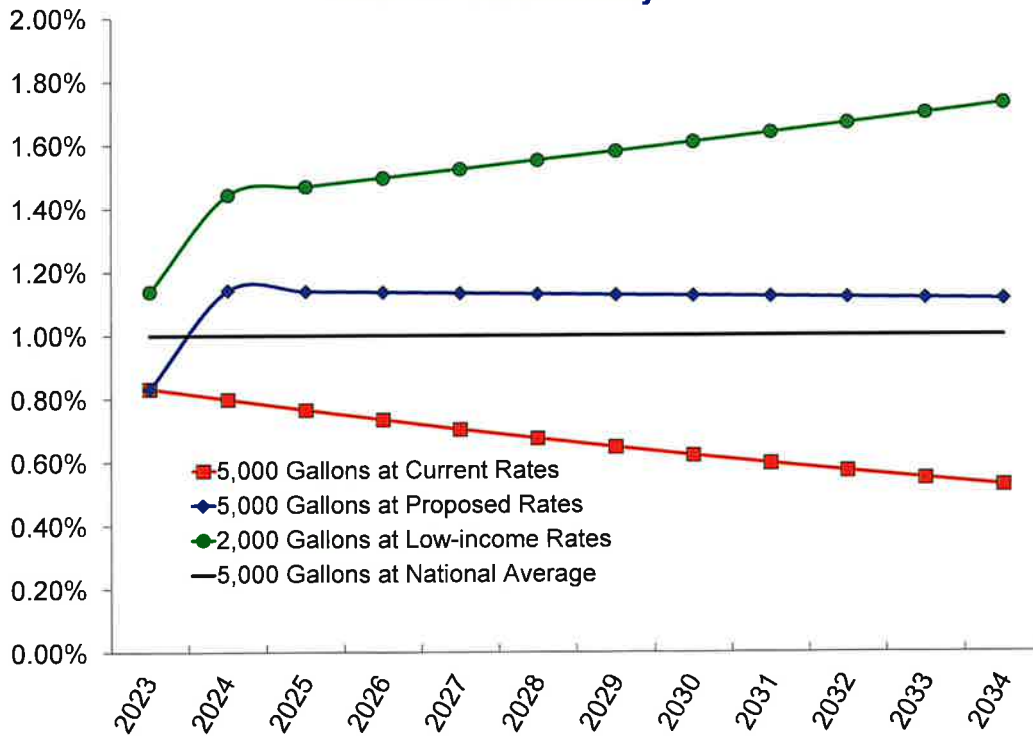
**Chart 2 - Coverage Ratio**



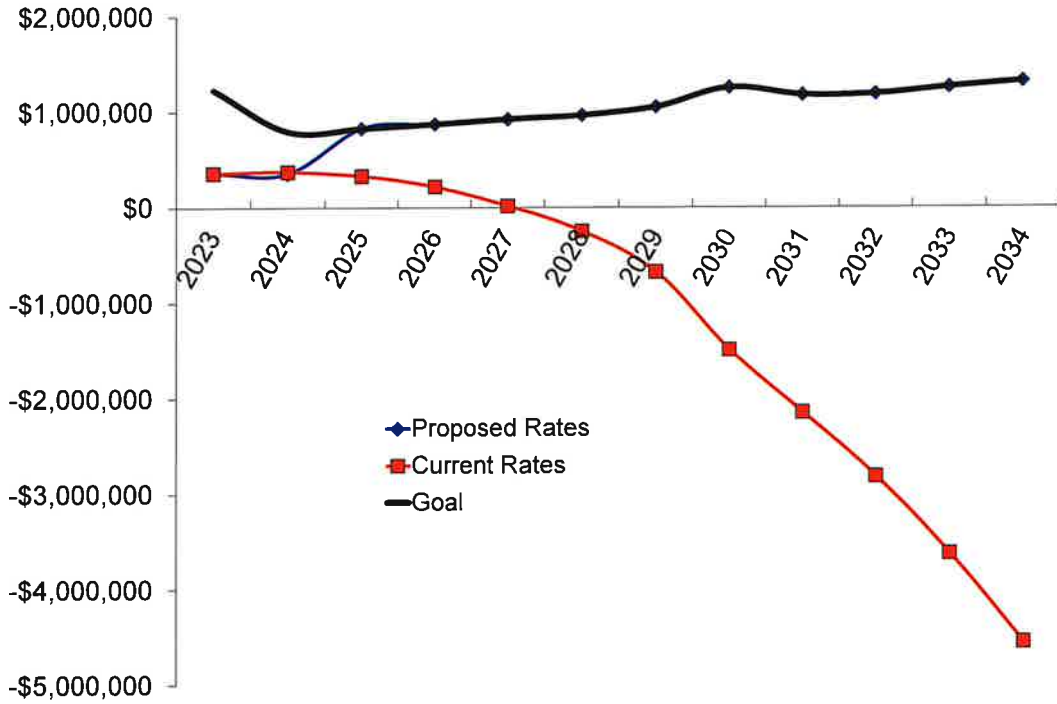
**Chart 3 - Residential Users' Bills**



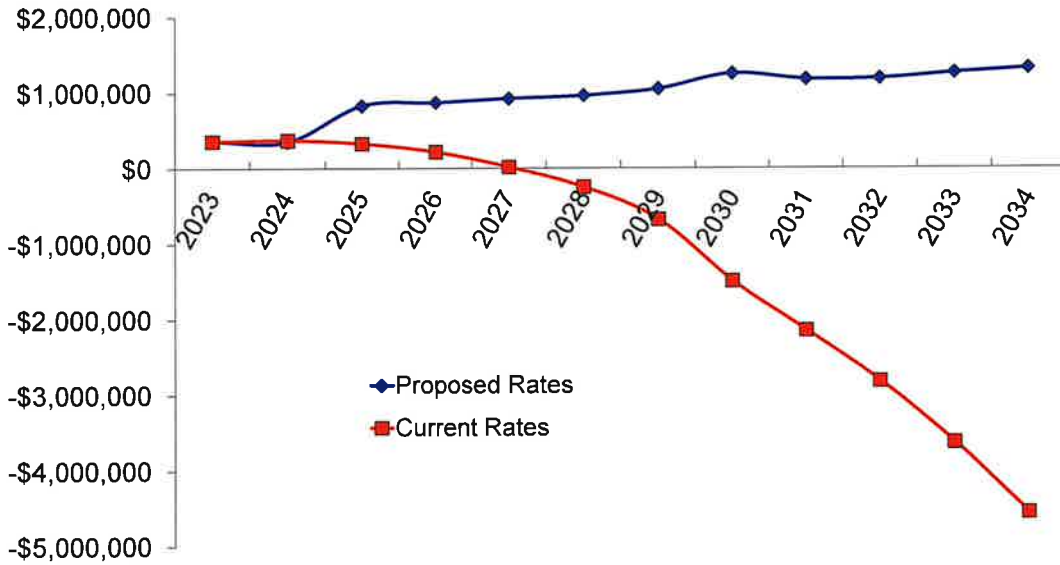
**Chart 4 - Affordability**



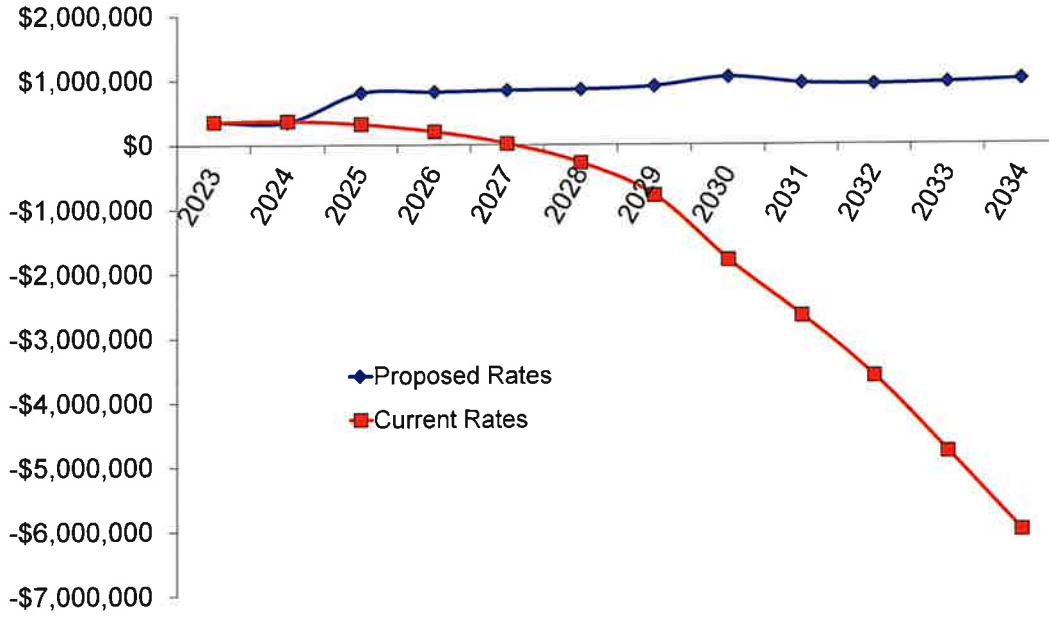
**Chart 5 - Working Capital vs Goal**



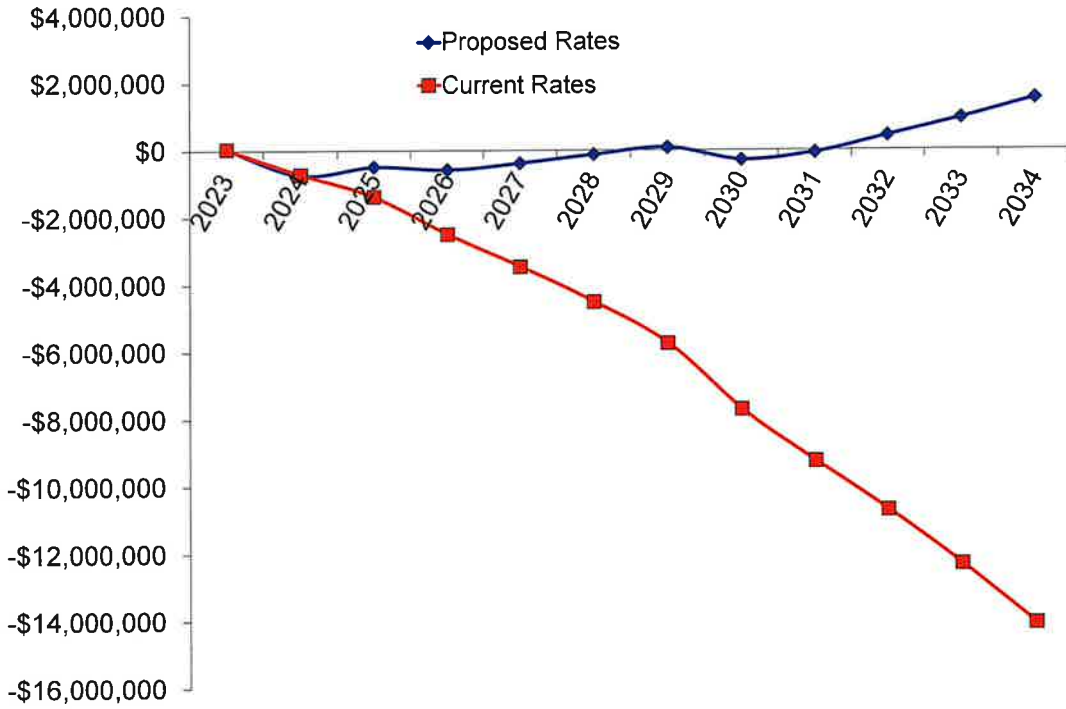
**Chart 6 - Value of Cash Assets Before Inflation**



**Chart 7 - Value of Cash Assets After Inflation**



**Chart 8 - Sum of All Reserves**



# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #8

### **An Ordinance of the City of Willard, Missouri, Amending Title VII Utilities, Chapter 710, Sewer Use and Sewer Rates, Article VII Wastewater Charges and Rates**

**FIRST READ: 11/12/2024**

**SECOND READ: 11/25/2024**

**BILL NO.: 24-47**

**ORDINANCE NO.: 241028A**

**AN ORDINANCE OF THE CITY OF WILLARD, MISSOURI, AMENDING TITLE VII UTILITIES, CHAPTER 710, SEWER USE AND SEWER RATES, ARTICLE VII WASTEWATER CHARGES AND RATES**

WHEREAS, the City of Willard owns and operates a wastewater collection and treatment system permitted by the State of Missouri; and

WHEREAS, the City of Willard has caused to be conducted a rate analysis to determine whether the current rate structure is adequate to cover operating and maintenance costs for the water system of the City of Willard; and

WHEREAS, the results of which have caused the City of Willard to determine a need to amend Chapter 710 of the Municipal Code to update the sewer rates for both in-City and non-City customers to ensure the proper maintenance and operation of the municipal sewer system;

NOW THEREFORE, BE IT ORDAINED AND RESOLVED BY THE BOARD OF ALDERMEN FOR THE CITY OF WILLARD, GREENE COUNTY, MISSOURI, AS FOLLOWS:

**Section 1:** The City does hereby amend **Title VII Utilities, Chapter 710 Sewer Use and Sewer Rates, Article VII Wastewater Charges and Rates** of the Municipal Code of the City of Willard, effective **October 28, 2024**, as follows:

- a. There shall be assessed to each **in-City user** of the Publicly Owned Treatment Works (POTW) a **minimum charge of twenty-five dollars and sixty-seven cents (\$25.67)** per month, and a **volume charge of eleven dollars and seventy-two cents (\$11.72) per one thousand (1,000) gallons** or fractional part thereof, with no usage allowance.
- b. There shall be assessed to each **non-City user** of the POTW a **minimum charge of thirty-eight dollars and fifty cents (\$38.50)** per month, and to each non-City user, a **volume charge of seventeen dollars and fifty-eight cents (\$17.58) per one thousand (1,000) gallons** or fractional part thereof, with no usage allowance.

These rates shall be reviewed annually before the end of each fiscal year.

Recommendations for any rate adjustments shall be presented to the Board of Aldermen as part of the upcoming fiscal year's budget consideration. Any proposed rate changes



shall thereafter be timely presented in a public hearing, allowing for their implementation at the beginning of the upcoming fiscal year or as soon thereafter as feasible.

**Section 2:** Definitions: An **in-City user** shall be defined as a user located within the incorporated city limits at the time of billing. A **non-City user** shall be defined as a user located outside the incorporated city limits at the time of billing.

**Section 3:** In addition to the above charges, all other provisions of Chapter 710 not specifically amended by this ordinance shall remain in full force and effect.

**Section 4:** The terms of this ordinance shall take effect from and after its passage by the Board of Aldermen and approval by the Mayor.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **28<sup>th</sup>** day of **October 2024**.

Approved as to Form: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Troy Smith, Mayor

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

**BLANK RATES DRAFT TO BE UPDATED IF NEW RATES ARE APPLIED**

**FIRST READ: 11/12/2024**

**SECOND READ: 11/25/2024**

**BILL NO.: 24-47**

**ORDINANCE NO.: 241028A**

**AN ORDINANCE OF THE CITY OF WILLARD, MISSOURI, AMENDING TITLE VII UTILITIES, CHAPTER 710, SEWER USE AND SEWER RATES, ARTICLE VII WASTEWATER CHARGES AND RATES**

WHEREAS, the City of Willard owns and operates a wastewater collection and treatment system permitted by the State of Missouri; and

WHEREAS, the City of Willard has caused to be conducted a rate analysis to determine whether the current rate structure is adequate to cover operating and maintenance costs for the water system of the City of Willard; and

WHEREAS, the results of which have caused the City of Willard to determine a need to amend Chapter 710 of the Municipal Code to update the sewer rates for both in-City and non-City customers to ensure the proper maintenance and operation of the municipal sewer system;

NOW THEREFORE, BE IT ORDAINED AND RESOLVED BY THE BOARD OF ALDERMEN FOR THE CITY OF WILLARD, GREENE COUNTY, MISSOURI, AS FOLLOWS:

**Section 1:** The City does hereby amend **Title VII Utilities, Chapter 710 Sewer Use and Sewer Rates, Article VII Wastewater Charges and Rates** of the Municipal Code of the City of Willard, effective **October 28, 2024**, as follows:

- a. There shall be assessed to each **in-City user** of the Publicly Owned Treatment Works (POTW) a **minimum charge of** \_\_\_\_\_ (**\$ .** ) per month, and a **volume charge of** \_\_\_\_\_ (**\$ .** ) **per one thousand (1,000) gallons** or fractional part thereof, with no usage allowance.
- b. There shall be assessed to each **non-City user** of the POTW a **minimum charge of** \_\_\_\_\_ (**\$ .** ) per month, and to each non-City user, a **volume charge of** \_\_\_\_\_ (**\$ .** ) **per one thousand (1,000) gallons** or fractional part thereof, with no usage allowance.

These rates shall be reviewed annually before the end of each fiscal year. Recommendations for any rate adjustments shall be presented to the Board of Aldermen as part of the upcoming fiscal year’s budget consideration. Any proposed rate changes shall thereafter be timely presented in a public hearing, allowing for their implementation at the beginning of the upcoming fiscal year or as soon thereafter as feasible.

**Section 2:** Definitions: An **in-City user** shall be defined as a user located within the incorporated city limits at the time of billing. A **non-City user** shall be defined as a user located outside the incorporated city limits at the time of billing.

**Section 3:** In addition to the above charges, all other provisions of Chapter 710 not specifically amended by this ordinance shall remain in full force and effect.

**Section 4:** The terms of this ordinance shall take effect from and after its passage by the Board of Aldermen and approval by the Mayor.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **28<sup>th</sup>** day of **October 2024**.

Approved as to Form: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Troy Smith, Mayor

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #9

**Approve a Letter Allowing the Mayor to Grant Wesley Young the Authority to Bind the City of Willard to All Legal Agreements and Subsequent Versions of Program Licenses Presented on Behalf of the Apple Developer Program**

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## To Whom It May Concern,

This letter serves as formal authorization for Wesley Young to represent the City of Willard in all matters regarding the Apple Developer Program. By this delegation, I, Mayor Troy Smith, hereby grant Wesley Young the authority to bind the City of Willard to all legal agreements and subsequent versions of program licenses presented on behalf of the Apple Developer Program.

The City of Willard expresses its intent to participate in the Apple Developer Program and, by this letter, confirms the enrollment of Wesley Young under enrollment ID 432FV7QFJS.

### Delegation of Authority

I, Troy Smith, Mayor of the City of Willard, delegate to Wesley Young the authority to execute all necessary documents related to the Apple Developer Program on behalf of the City of Willard. This includes the authority to sign both current and subsequent versions of any required agreements under this program.

Should further information or clarification be required, please do not hesitate to contact me directly.

Sincerely,

Troy Smith  
Mayor, City of Willard

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### Authorized Representative

Wesley Young  
City Administrator, City of Willard  
224 W Jackson, Willard MO 65781  
417-742-3033  
ca@cityofwillard.org

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# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Delegating Official

Troy Smith

Mayor, City of Willard

224 W Jackson, Willard MO 65781

417-742-3033

[tsmith@cityofwillard.org](mailto:tsmith@cityofwillard.org)

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SIGNATURE

**Attested by:**

---

City Clerk

(SEAL)

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #10

### **A Resolution Authorizing the Mayor to Enter into a Financial Services Agreement with Piper Sandler for Lease-Purchase Financing for the Sewer System Improvements**

## **City of Willard, Missouri Resolution No. 24-08**

### **A Resolution of the Board of Aldermen of the City of Willard, Missouri, Authorizing the Mayor to Enter into a Financial Services Agreement with Piper Sandler for Lease-Purchase Financing for the Sewer System Improvements**

**WHEREAS**, this Financial Services Agreement by and between the City of Willard, Missouri and Piper Sandler & Co. will serve as a mutual agreement with respect to the terms and conditions of the engagement with the financial services provider, effective on the date this agreement is executed; and

**WHEREAS**, the Services to be Provided are a Lease-Purchase Financing for Sewer System Improvements in an approximate amount not to exceed \$1,250,000 and any additional issues to be identified in an amendment to the agreement; and

**WHEREAS**, the Scope of Services to be provided respecting the issue(s) may consist of the following:

1. Evaluate options or alternatives with respect to the proposed new issue(s),
2. Consult with and/or advise the City of Willard on actual or potential changes in market place practices, market conditions or other matters that may have an impact on the Issues or Products.
3. Assist in establishing a plan of financing
4. Assist in establishing the structure , timing, terms and other similar matters concerning the Issue
5. Prepare the financing schedule
6. Provide assistance as to scheduling, coordinating and meeting procedural requirements relating to any required bond referendum
7. Consult and meet with representatives and agents or consultants with respect to the Issue
8. Attend meetings of the governing body, as requested
9. Advise on the manner of sale of the Issue, including a direct placement or a public offering
10. Coordinate working group sessions, closing, delivery of the new issue and transfer of funds
11. Prepare a closing memorandum or transaction summary

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF WILLARD, MISSOURI AS FOLLOWS:**



Recognizes the need for the Mayor to enter into the Financial Services Agreement with Piper Sandler & Co.

**Dated:** This the **12<sup>th</sup> day of November 2024** by the Board of Aldermen of the City of Willard, Missouri.

---

Troy Smith, Mayor

---

Attested by Janice Gargus, City Clerk

## FINANCIAL SERVICES AGREEMENT

This Financial Services Agreement, (the Agreement) is entered into on \_\_\_\_\_, 2024 by and between City of Willard, Missouri (the Client) and Piper Sandler & Co. (Piper Sandler or the Financial Services Provider). This Agreement will serve as our mutual agreement with respect to the terms and conditions of our engagement as your financial services provider, effective on the date this Agreement is executed (the Effective Date).

### **I. Scope of Services.**

- (A) **Services to be provided.** Piper Sandler is engaged by the Client to provide services with respect to the planned issuance of the Client's lease-purchase financing for sewer system improvements in an approximate amount not to exceed \$1,250,000 (the Issue(s)) and any additional issues to be identified in an amendment to the Agreement.
- (B) **Scope of Services.** The Scope of Services to be provided respecting the Issue(s) may consist of the following, if directed by the Client:
1. Evaluate options or alternatives with respect to the proposed new Issue(s),
  2. Consult with and/or advise the Client on actual or potential changes in market place practices, market conditions or other matters that may have an impact on the Issues or Products.
  3. Assist the Client in establishing a plan of financing
  4. Assist the Client in establishing the structure, timing, terms and other similar matters concerning the Issue
  5. Prepare the financing schedule
  6. Provide assistance as to scheduling, coordinating and meeting procedural requirements relating to any required bond referendum
  7. Consult and meet with representatives of the Client and its agents or consultants with respect to the Issue
  8. Attend meetings of the Client's governing body, as requested
  9. Advise the Client on the manner of sale of the Issue, including a direct placement or a public offering
  10. Coordinate working group sessions, closing, delivery of the new Issue and transfer of funds
  11. Prepare a closing memorandum or transaction summary

**For Services Respecting Official Statement.** Piper Sandler has not assumed responsibility for preparing or certifying as to the accuracy or completeness of any preliminary or final official statement, other than with respect to written information about Piper Sandler as the municipal advisor if provided by Piper Sandler in writing for inclusion in such documents.

**II. Limitations on Scope of Services.** In order to clarify the extent of our relationship, Piper Sandler is required under MSRB Rule G-42<sup>1</sup> to describe any limitations on the scope of the activities to be performed for you. Accordingly, the Scope of Services are subject to the following limitations:

The Scope of Services is limited solely to the services described herein and is subject to limitations set forth within the descriptions of the Scope of Services. Any duties created by this Agreement do not extend beyond the Scope of Services or to any other contract, agreement, relationship, or understanding, if any, of any nature between the Client and the Financial Services Provider.

Unless explicitly directed by you in writing, the Scope of Services does not include evaluating advice or recommendations received by you from third parties.

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<sup>1</sup> See MSRB Rule G-42(c)(v).

The Scope of Services does not include tax, legal, accounting or engineering advice with respect to any Issue or Product or in connection with any opinion or certificate rendered by counsel or any other person at closing and does not include review or advice on any feasibility study.

**III. Amending Scope of Services.** The Scope of Services may be changed only by written amendment or supplement. The parties agree to amend or supplement the Scope of Services promptly to reflect any material changes or additions to the Scope of Services.

**IV. Compensation.** Compensation will be based on a fixed fee of \$20,000 and contingent on closing. Compensation is payable in immediately available funds at closing.

**V. IRMA Matters.** If the Client has designated Piper Sandler as its independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption"), the extent of the IRMA exemption is limited to the Scope of Services and any limitations thereto. Any reference to Piper Sandler, its personnel and its role as IRMA in the written representation of the Client contemplated under SEC Rule 15Ba1-1(d)(3)(vi)(B) is subject to prior approval by Piper Sandler and Client agrees not to represent, publicly or to any specific person, that Piper Sandler is Client's IRMA with respect to any aspect of municipal financial products or the issuance of municipal securities, or with respect to any specific municipal financial product or any specific issuance of municipal securities, outside the Scope of Services without Piper Sandler's prior written consent.

**VI. Piper Sandler's Regulatory Duties When Servicing the Client.** MSRB Rule G-42 requires that Piper Sandler undertake certain inquiries or investigations of and relating to the Client in order for Piper Sandler to fulfill certain aspects of the fiduciary duty owed to the Client. Such inquiries generally are triggered: (a) by the requirement that Piper Sandler know the essential facts about the Client and the authority of each person acting on behalf of the Client so as to effectively service the relationship with the Client, to act in accordance with any special directions from the Client, to understand the authority of each person acting on behalf of the Client, and to comply with applicable laws, regulations and rules; (b) when Piper Sandler undertakes a determination of suitability of any recommendation made by Piper Sandler to the Client, if any or by others that Piper Sandler reviews for the Client, if any; (c) when making any representations, including with regard to matters pertaining to the Client or any Issue or Product; and (d) when providing any information in connection with the preparation of the preliminary or final official statement, including information about the Client, its financial condition, its operational status and its municipal securities or municipal financial products. Specifically, Client agrees to provide to Piper Sandler any documents on which the Client has relied in connection with any certification it may make with respect to the accuracy and completeness of any Official Statement for the Issue.

Client agrees to cooperate, and to cause its agents to cooperate, with Piper Sandler in carrying out these duties to inquire or investigate, including providing to Piper Sandler accurate and complete information and reasonable access to relevant documents, other information and personnel needed to fulfill such duties.

In addition, the Client agrees that, to the extent the Client seeks to have Piper Sandler provide advice with regard to any recommendation made by a third party, the Client will provide to Piper Sandler written direction to do so as well as any information it has received from such third party relating to its recommendation.

**VII. Expenses.** Piper Sandler will be responsible for all of Piper Sandler's out-of-pocket expenses. In the event a new issue of securities is contemplated by this Agreement, Client will be responsible for the payment of all fees and expenses commonly known as costs of issuance, including but not limited to: publication expenses, local legal counsel, bond counsel, ratings, credit enhancement, travel associated with securing any rating or credit enhancement, printing of bonds, printing and distribution of required disclosure documents, trustee fees, paying agent fees, CUSIP registration, and the like.

**VIII. Term of Agreement.** The term of this Agreement shall begin on the Effective Date and ends, unless earlier terminated as provided below, or on closing of bonds.

This Agreement may be terminated with or without cause by either party upon the giving of at least thirty

(30) days prior written notice to the other party of its intention to terminate, specifying in such notice the effective date of such termination. All fees due to Piper Sandler shall be due and payable upon termination. Upon termination, the obligations of Piper Sandler under this Agreement, including any amendment shall terminate immediately and Piper Sandler shall thereafter have no continuing fiduciary or other duties to the Client. The provisions of Sections IV, VII, XII, XIV, XV and XVII shall survive termination of this Agreement.

**IX. Independent Contractor.** The Financial Services Provider is an independent contractor and nothing herein contained shall constitute or designate the Financial Services Provider or any of its employees or agents as employees or agents of the Client.

**X. Entire Agreement/Amendments.** This Agreement, including any amendments and Appendices hereto which are expressly incorporated herein, constitute the entire Agreement between the parties hereto and sets forth the rights, duties, and obligations of each to the other as of this date. Any prior agreements, promises, negotiations, or representations not expressly set forth in this Agreement are of no force and effect. This Agreement may not be modified except by a writing executed by both the Financial Services Provider and Client.

**XI. Required Disclosures.** MSRB Rule G-42 requires that Piper Sandler provide you with disclosures of material conflicts of interest and of information regarding certain legal events and disciplinary history. Such disclosures are provided in Piper Sandler's Disclosure Statement attached as Appendix A to this Agreement.

**XII. Limitation of Liability.** In the absence of willful misconduct, bad faith, gross negligence or reckless disregard of obligations or duties hereunder on the part of Piper Sandler or any of its associated persons, Piper Sandler and its associated persons shall have no liability to the Client for any act or omission in the course of, or connected with, rendering services hereunder, or for any error of judgment or mistake of law, or for any loss arising out of any issuance of municipal securities, any municipal financial product or any other investment, or for any financial or other damages resulting from the Client's election to act or not to act, as the case may be, contrary to any advice or recommendation provided by Piper Sandler to the Client. No recourse shall be had against Piper Sandler for loss, damage, liability, cost or expense (whether direct, indirect or consequential) of the Client arising out of or in defending, prosecuting, negotiating or responding to any inquiry, questionnaire, audit, suit, action, or other proceeding brought or received from the Internal Revenue Service in connection with any Issue or Product, if any or otherwise relating to the tax treatment of any Issue or Product if any, or in connection with any opinion or certificate rendered by counsel or any other party. Notwithstanding the foregoing, nothing contained in this paragraph or elsewhere in this Agreement shall constitute a waiver by Client of any of its legal rights under applicable U.S. federal securities laws or any other laws whose applicability is not permitted to be contractually waived, nor shall it constitute a waiver or diminution of Piper Sandler's fiduciary duty to Client under Section 15B(c)(1), if applicable, of the Securities Exchange Act of 1934, as amended, and the rules thereunder.

**XIII. Indemnification.** Unless prohibited by law, the Client hereby indemnifies and holds harmless the Financial Services Provider, each individual, corporation, partnership, trust, association or other entity controlling the Financial Services Provider, any affiliate of the Financial Services Provider or any such controlling entity and their respective directors, officers, employees, partners, incorporators, shareholders, trustees and agents (hereinafter the "Indemnitees") against any and all liabilities, penalties, suits, causes of action, losses, damages, claims, costs and expenses (including, without limitation, fees and disbursements of counsel) or judgments of whatever kind or nature (each a "Claim"), imposed upon, incurred by or asserted against the Indemnitees arising out of or based upon (i) any allegation that any information in the Preliminary Official Statement or Final Official Statement contained (as of any relevant time) an untrue statement of a material fact or omitted (as of any relevant time) or omits to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

**XIV. Official Statement.** The Client acknowledges and understands that state and federal laws relating to disclosure in connection with municipal securities, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the Client and that the failure of the Financial Services Provider to advise the Client respecting these laws shall not constitute a breach by the Financial Services Provider or any of its duties and responsibilities under this Agreement.

The Client acknowledges that any Official Statement distributed in connected with an issuance of securities are statements of the Client and not of Piper Sandler.

**XV. Notices.** Any written notice or communications required or permitted by this Agreement or by law to be served on, given to, or delivered to either party hereto, by the other party shall be in writing and shall be deemed duly served, given, or delivered when personally delivered to the party to whom it is addressed or in lieu of such personal services, when deposited in the United States' mail, first-class postage prepaid, addressed to the Client at:

City of Willard  
224 W Jackson, P.O. Box 187  
Willard, MO 65781

Wesley Young, City Administrator  
417 742-5304  
[CA@cityofwillard.org](mailto:CA@cityofwillard.org)

Carolyn Halverson, Chief Financial Officer  
417 742-5301  
[cfo@cityofwillard.org](mailto:cfo@cityofwillard.org)

Or to the Financial Services Provider at:

Piper Sandler & Co.  
11635 Rosewood Street  
Leawood, KS 66211

Todd Goffoy, Managing Director  
913 345-3373  
[Todd.Goffoy@psc.com](mailto:Todd.Goffoy@psc.com)

With a copy to:

Piper Sandler & Co.  
Legal Department  
800 Nicollet Mall, Suite 900  
Minneapolis, MN 55402

**XVI. Consent to Jurisdiction; Service of Process.** The parties each hereby (a) submits to the jurisdiction of any State or Federal court sitting in the state of Missouri for the resolution of any claim or dispute with respect to or arising out of or relating to this Agreement or the relationship between the parties (b) agrees that all claims with respect to such actions or proceedings may be heard and determined in such court, (c) waives the defense of an inconvenient forum, (d) agrees not to commence any action or proceeding relating to this Agreement other than in a State or Federal court sitting in the state of Missouri and (e) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

**XVII. Choice of Law.** This Agreement shall be construed and given effect in accordance with the laws of the state of Missouri.

**XVIII. Counterparts; Severability.** This Agreement may be executed in two or more separate counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any term or provision of this Agreement which is invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction.

**XIX. Waiver of Jury Trial.** THE PARTIES EACH HEREBY AGREES TO WAIVE ANY RIGHT TO A TRIAL BY JURY WITH RESPECT TO ANY CLAIM, COUNTERCLAIM OR ACTION ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THE RELATIONSHIP BETWEEN THE PARTIES. PARTIES AGREE TO WAIVE CONSEQUENTIAL AND PUNITIVE DAMAGES.

**XX. No Third Party Beneficiary.** This Agreement is made solely for the benefit of the parties and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, is intended to confer on any person, other than the parties and their respective successors and permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

**XXI. Authority.** The undersigned represents and warrants that they have full legal authority to execute this Agreement on behalf of the Client. The following individual(s) at the Client have the authority to direct Piper Sandler's performance of its activities under this Agreement:

Wesley Young, City Administrator  
Carolyn Halverson, Chief Financial Officer

The following individuals at Piper Sandler have the authority to direct Piper Sandler's performance of its activities under this Agreement:

Todd Goffoy, Managing Director

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above written. By the signature of its representative below, each party affirms that it has taken all necessary action to authorize said representative to execute this Agreement.

PIPER SANDLER & Co.

By: Todd Goffoy  
Todd Goffoy  
Its: Managing Director  
Date: \_\_\_\_\_

ACCEPTED AND AGREED:

CITY OF WILLARD, MISSOURI

By: \_\_\_\_\_  
Troy Smith  
Its: Mayor  
Date: \_\_\_\_\_

Piper Sandler & Co. is registered with the U.S. Securities and Exchange Commission and the Municipal Securities Rulemaking Board ("MSRB"). A brochure is posted on the website of the MSRB, at [www.msrb.org](http://www.msrb.org) that describes the protections that may be provided by MSRB rules and how to file a complaint with an appropriate regulatory authority.

## APPENDIX A – DISCLOSURE STATEMENT

Municipal Securities Rulemaking Board Rule G-42 (the Rule) requires that Piper Sandler provide you with the following disclosures of material conflicts of interest and of information regarding certain legal events and disciplinary history. Accordingly, this Appendix A provides information regarding conflicts of interest and legal or disciplinary events of Piper Sandler required to be disclosed pursuant to MSRB Rule G-42(b) and (c)(ii).

(A) **Disclosures of Conflicts of Interest.** The Rule requires that Piper Sandler provide to you disclosures relating to any actual or potential material conflicts of interest, including certain categories of potential conflicts of interest identified in the Rule, if applicable. If no such material conflicts of interest are known to exist based on the exercise of reasonable diligence by us, Piper Sandler is required to provide a written statement to that effect.

Accordingly, we make the following disclosures with respect to material conflicts of interest in connection with the Scope of Services under the Agreement, together with explanations of how we address or intend to manage or mitigate each conflict. To that end, with respect to all of the conflicts disclosed below, we mitigate such conflicts through our adherence to our fiduciary duty to you in connection with municipal advisory activities, which includes a duty of loyalty to you in performing all municipal advisory activities for the Client. This duty of loyalty obligates us to deal honestly and with the utmost good faith with you and to act in your best interests without regard to our financial or other interests. In addition, as a broker dealer with a client oriented business, our success and profitability over time is based on assuring the foundations exist of integrity and quality of service. Furthermore, Piper Sandler's supervisory structure, utilizing our long-standing and comprehensive broker-dealer supervisory processes and practices, provides strong safeguards against individual representatives of Piper Sandler potentially departing from their regulatory duties due to personal interests. The disclosures below describe, as applicable, any additional mitigations that may be relevant with respect to any specific conflict disclosed below.

**Compensation-Based Conflicts.** The fees due under the Agreement are in a fixed amount established at the outset of the Agreement. The amount is usually based upon an analysis by the Client and Piper Sandler of, among other things, the expected duration and complexity of the transaction and the Scope of Services to be performed by Piper Sandler. This form of compensation presents the appearance of a conflict or a potential conflict of interest because, if the transaction requires more work than originally contemplated, Piper Sandler may suffer a loss. Thus, Piper Sandler may have an incentive to recommend less time-consuming alternatives, or fail to do a thorough analysis of alternatives. In addition, contingent-based compensation, i.e. based upon the successful delivery of the Issue while customary in the municipal securities market, may present the appearance of a conflict or the potential for a conflict because it could create an incentive for Piper Sandler to recommend unnecessary financings or financings that are disadvantageous to the Client. This conflict of interest is mitigated by our duty of care and fiduciary duty and the general mitigations related to our duties to you, as described above.

**Transactions in Client's Securities.** As a municipal advisor, Piper Sandler cannot act as an underwriter in connection with the same issue of bonds for which Piper Sandler is acting as a municipal advisor. From time to time, Piper Sandler or its affiliates may submit orders for and acquire your securities issued in an Issue under the Agreement from members of the underwriting syndicate, either for its own trading account or for the accounts of its customers. Again, while we do not believe that this activity creates a material conflict of interest, we note that to mitigate any perception of conflict and to fulfill Piper Sandler's regulatory duties to the Client, Piper Sandler's activities are engaged in on customary terms through units of Piper Sandler that operate independently from Piper Sandler's municipal advisory business, thereby eliminating the likelihood that such investment activities would have an impact on the services provided by Piper Sandler to you under the Agreement.

(B) **Disclosures of Information Regarding Legal Events and Disciplinary History.** The Rule requires that all municipal advisors provide to their clients certain disclosures of legal or disciplinary events material to a client's evaluation of the municipal advisor or the integrity of the municipal advisor's management or advisory personnel. Accordingly, Piper Sandler sets out below required disclosures and related information in connection with such disclosures.

- I. **Material Legal or Disciplinary Event.** There are no legal or disciplinary events that are material to the Client's evaluation of Piper Sandler or the integrity of Piper Sandler's management or advisory personnel disclosed, or that should be disclosed, on any Form MA or Form MA-I filed with the SEC.
- II. **Most Recent Change in Legal or Disciplinary Event Disclosure.** Piper Sandler has not made any material legal or disciplinary event disclosures on Form MA or any Form MA-I filed with the SEC.

(C) **How to Access Form MA and Form MA-I Filings.** Piper Sandler's most recent Form MA and each most recent Form MA-I filed with the SEC are available on the SEC's EDGAR system at <http://www.sec.gov/edgar/searchedgar/companysearch.html>. The Form MA and the Form MA-I include information regarding legal events and disciplinary history about municipal advisor firms and their personnel, including information about any criminal actions, regulatory actions, investigations, terminations, judgments, liens, civil judicial actions, customer complaints, arbitrations and civil litigation. The SEC permits certain items of information required on Form MA or MA-I to be provided by reference to such required information already filed by Piper Sandler in its capacity as a broker-dealer on Form BD or Form U4 or as an investment adviser on Form ADV, as applicable. Information provided by Piper Sandler on Form BD or Form U4 is publicly accessible through reports generated by BrokerCheck at <http://brokercheck.finra.org>, and Piper Sandler's most recent Form ADV is publicly accessible at the Investment Adviser Public Disclosure website at <http://www.adviserinfo.sec.gov>. For purposes of accessing such BrokerCheck reports or Form ADV, Piper Sandler's CRD number is 665.

(D) **Future Supplemental Disclosures.** As required by the Rule, this Section 5 may be supplemented or amended, from time to time as needed, to reflect changed circumstances resulting in new conflicts of interest or changes in the conflicts of interest described above, or to provide updated information with regard to any legal or disciplinary events of Piper Sandler. Piper Sandler will provide you with any such supplement or amendment as it becomes available throughout the term of the Agreement.



# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #11

### **Parks Department Proposal for Special Event Fees and Cost Recovery in Willard**

## **Proposal for Special Event Fees and Cost Recovery in Willard**

**Introduction:** Special events in the City of Willard play a vital role in building community spirit, attracting visitors, and supporting local businesses. From parades and festivals to charity runs, these events enhance the quality of life for residents and visitors alike. However, events that require road closures and significant city resources involve substantial costs, particularly in the form of police and parks department support.

This proposal outlines two fee options for event organizers based on the length of road closures, ensuring both the financial sustainability of city services and continued support for community events. Additionally, we propose a system for event organizers to apply for fee waivers based on organizational status, with special consideration given to student-led or charitable events.

### **Current Costs:**

- **Police Department:** \$600 for planning and the first hour of road closure (covers personnel, equipment, and traffic management).
- **Parks Department:** \$390 for event planning, coordination with the police, and logistical support such as setup and teardown.

### **Proposed Fee Structure Based on Event Duration:**

#### **1. Full Cost Recovery (100% Cost) – Events Exceeding 90 Minutes of Road Closure**

- **Fee:** \$990 (Police \$600 + Parks \$390)
- **Eligibility:** Any event requiring more than 90 minutes of road closure.

Events that need road closures for more than 90 minutes will incur the full cost recovery fee. These events typically involve larger gatherings, require more extensive planning, and often attract significant crowds, which increases the demand on both police and parks services. Examples include:

- Parades
- Festivals or multi-day events
- Road races and marathons
- Large public celebrations (e.g., holiday events)

**Rationale:** These large-scale events involve complex logistics and demand significant personnel and resources from both the police and parks departments. Full cost recovery ensures that the city can maintain service levels without burdening taxpayers for the operational costs associated with these longer, high-impact events.

**Benefits:**

- Ensures proper staffing and service quality without stretching city budgets.
- Maintains fiscal responsibility by recouping all direct costs from event organizers.
- Encourages efficient event planning by having organizers account for the full operational impact of extended road closures.

**2. Half Cost Recovery (50% Cost) – Events Under 90 Minutes of Road Closure**

- **Fee:** \$495 (Police \$300 + Parks \$195)
- **Eligibility:** Any event requiring less than 90 minutes of road closure.

Events with road closures under 90 minutes will qualify for the reduced fee. These events are typically smaller in scale, require fewer resources, and have a shorter impact on traffic flow and city operations. Examples include:

- Short charity walks or runs
- Small-scale community parades
- Pop-up markets with brief road closures

**Rationale:** Smaller events still bring value to the community, but they do not necessitate the same level of resource allocation as larger events. Offering a 50% cost recovery for these shorter events encourages more local engagement, particularly from smaller organizations or community groups that may have limited budgets. This structure also reflects the reduced time and resources required by city staff for these events.

**Benefits:**

- Promotes local engagement by reducing financial barriers for smaller events.
- Recognizes the reduced operational strain of shorter events while still recouping part of the cost.
- Encourages community-driven activities that foster a sense of belonging without imposing heavy costs on the organizers.

**3. Partial Cost Recovery (Dependent on Board Determination) – All Events**

- **Fee:** (Dependent on Board Determination)
- **Eligibility:** Any Event approved by the Board. Events that are supported by the organizing party through the use of off-duty officers or trained volunteers. Initial planning and organizing costs to the City will still be incurred, however time of event costs will be covered in full or partially by the organizing group.

**Rationale:** These events bring value to the community, but the City recognizes that outside support from organizing groups lowers the fiscal impact to the city. Offering cost recovery on a sliding scale determined by the Board of Alders encourages more local engagement and volunteerism, again benefiting smaller organizations or community groups that may have limited budgets but strong support networks. This structure also reflects the reduced time and resources required by city staff for these events.

**Benefits:**

- Promotes local engagement by reducing financial barriers for smaller events.
- Recognizes the reduced operational strain of shorter events while still recouping part of the cost.
- It encourages community-driven activities that foster a sense of belonging without imposing heavy costs on the organizers.

**Fee Waiver Application Process:** In addition to the tiered fee structure, we recommend introducing an application process for fee waivers. This would allow event organizers to apply for partial or full fee waivers based on the nature of the event and the status of their organization.

Fee waivers would be considered for:

- **Non-profit organizations:** Charitable events organized by recognized 501(c)(3) organizations that directly benefit the community or a cause.
- **Student-led events:** Special consideration for events planned by students, particularly school groups, student organizations, or youth-led initiatives that contribute to civic engagement and community service.
- **Public benefit events:** Events that provide clear and direct benefits to the local community, such as fundraisers for community improvements, public health initiatives, or educational campaigns.

Each waiver request would be reviewed based on the following criteria:

- **Event impact on the community:** Does the event serve a broader public interest or target a specific cause beneficial to the community?
- **Organizational status:** Is the event organized by a non-profit or public school/student group?
- **Financial capacity:** Does the organizing group have the resources to cover fees without a waiver?

**Conditions for Partial Waivers:** Waivers for part of the costs (for police officers, reserve officers, or Parks staff attendants) during the time of the event will be considered if the organizing group provides:

**Fee Waiver Process:**

This process will allow qualifying groups to apply for partial or full waivers of city fees based on their organizational status and the community benefit of their event.

**Waiver Criteria:**

- **Non-profits:** Charitable events organized by recognized 501(c)(3) organizations.
- **Student-led events:** Special consideration will be given to student organizations or youth-led initiatives.
- **Public benefit:** Events that provide clear value to the Willard community (e.g., charity fundraisers, public health events).

**Conditions for Partial Waivers:** Waivers for part of the costs (for police officers, reserve officers, or Parks staff attendants) during the time of the event will be considered if the organizing group provides:

- **Volunteers:** Properly trained volunteers to assist with traffic management or other event needs.
- **Off-duty officers:** If off-duty police officers are secured by the organizing group.

**Vehicle Operation Costs:** If the group's volunteers or off-duty officers are using City of Willard vehicles, the cost for the operation of those vehicles will **not** be waived. This ensures that city resources such as fuel, maintenance, and wear-and-tear on vehicles are covered by the event organizers.

**Formal Request Process:**

To ensure proper planning and coordination for events, the following guidelines must be adhered to:

1. **Request Deadline:** A formal request for road closures and fee waivers must be submitted to the Chief of Police/Parks Director **no less than 60 days** prior to the event.
  - The Chief of Police/Parks Director will submit the request to the Board of Aldermen for final approval.
  - If a fee waiver is requested, the organizing group will be **required** to present their rationale directly to the Board of Aldermen.

2. **Late Requests:** If a request for a waiver is submitted **less than 45 days** before the event, or if modifications to the waiver or staffing needs occur after the initial submission, the organizing group will incur additional costs. These additional fees will be calculated at the rates stated in the Event Fee Sheet and will cover the added administrative burden and any increased staffing or planning needs.

The waiver process ensures that deserving organizations, particularly those serving youth or public welfare causes, can host their events without being deterred by cost. However, it is also designed to prevent abuse by requiring transparent applications and clear justifications for the fee waiver.

**Conclusion:** The proposed fee structure and waiver application system provide a balanced approach to event cost recovery. By differentiating between events based on the length of road closures, the City of Willard can both recover the costs of larger, resource-intensive events and support smaller, community-driven activities at a reduced rate. Introducing a waiver process also acknowledges the contributions of non-profits, students, and community-oriented organizations, ensuring that financial barriers do not prevent these groups from contributing to Willard's vibrant event calendar.

**Recommendation:** We recommend the adoption of this fee structure and formal waiver process to maintain the high level of service provided by the police and parks departments. Additionally, setting clear guidelines for submitting waiver requests and accommodating volunteer resources ensures that event organizers and the city can work collaboratively to host successful, cost-effective events.

Sports	Credit Card Fee	2024 Fee	2024 Late Fee	Change for '25	Notes
Soccer	3.00%	\$ 50.00	\$ 20.00	\$ 25.00	7 Game Season
Volleyball	3.00%	\$ 50.00	\$ 20.00	\$ 25.00	7 Game Season
Flag Football	3.00%	\$ 50.00	\$ 20.00	\$ 25.00	7 Game Season
Soccer	3.00%	\$ 50.00	\$ 20.00	\$ 25.00	7 Game Season
Basketball	3.00%	\$ 50.00	\$ 20.00	\$ 25.00	7 Game Season
Baseball #1	3.00%	\$ 50.00	\$ 20.00	\$ 25.00	7 Game Season
Baseball #2	3.00%	\$ 50.00	\$ 20.00	\$ 25.00	5 Game Season
Soccer Team Registration	3.00%				7 Game Season
Baseball Team Registration	3.00%				7 Game Season
Volleyball Team Registration	3.00%				7 Game Season
Basketball Team Registration	3.00%				7 Game Season
Adult Team VB	3.00%	\$ 250.00	\$ 50.00		7 Game Season
Adult Softball	3.00%	\$ 300.00	\$ 50.00		7 Game Season
Adult Mens Basketball	3.00%	\$ 300.00	\$ 50.00		7 Game Season
<b>Fitness Programs</b>					
Per Course Fee (8 classes)		PRN: Set by instructors			
<b>Races</b>					
Family Fun Run 13 Under	3.00%	\$ 15.00	\$ 10.00		
Family Fun Run 13+	3.00%	\$ 25.00	\$ 10.00		
Adventure Race	3.00%	\$ 35.00	\$ 15.00		
Fitness Challenge	3.00%	\$ 10.00	\$ -		
Disc Golf Tournament	3.00%	\$ 25.00	\$ 15.00		
<b>Youth Programs Childcare</b>					
Summer Camp	3.00%	\$ 40.00	\$ 125.00		Admin. Fee \$20.00*
No lunch provided by parent fee	3.00%	\$10 daily			\$ 50.00
Summer Camp - State Assistance	3.00%				
Out of School Days	3.00%	\$ 25.00			
Winter Camp	3.00%	\$ 25.00			
Spring Break Camp	3.00%	\$ 25.00			
Kids/Parents Night Out	3.00%	\$ 20.00			
After School Care Program		\$ -	230 monthly		\$ 25.00 \$ 20.00
Late Pick-up fee after 6 pm		\$10 every 10 minutes			
Middle School Adventure Camp	3.00%	\$ 200.00	\$ 50.00		\$ 20.00
<b>Youth Programs</b>					
Tumbling Toddlers	3.00%	\$ 40.00	\$ 10.00		
Youth Yoga	3.00%	\$ 40.00	\$ 10.00		
Basketball Camp	3.00%	\$ 55.00	\$ 10.00		
<b>Adult Programs</b>					
Paint Night-Simple		\$ 15.00	\$ 15.00		
Paint Night-Complex		\$ 30.00	\$ 30.00		
Craft Night-Simple		\$ 15.00	\$ 15.00		
Craft Night-Complex		\$ 30.00	\$ 30.00		

\* Includes administrative fees and camp shirt  
 Lunch is 1 uncrustable, one bottle water, one (1oz) bag chips  
 \* Includes administrative fees and camp shirt

MS aged children - themed based on skills required  
 4 Week Session  
 4 Week Session

Aquatics	Credit Card Fee	General Public	WAC Member		*We no longer offer membership/employee discounts for rentals	
Children 3 under	3.00%	\$ -	\$ -			
Non-Swimmer Fee	3.00%	\$ 2.00	\$ -			
Ages 4+	3.00%	\$ 6.00	\$ -		90 days of pool service (weather permitting)	increase of \$1
Ages 55+	3.00%	\$ 4.00	\$ -			
Aqua Fitness Classes	3.00%	\$ 5.00	\$ -			
Swim Team	3.00%	\$ 125.00	\$ 125.00			
Lap Swim	3.00%	\$ 5.00	\$ -			
Doggie Dive	3.00%	\$ 10.00	\$ 10.00			
Group Swim Lessons	3.00%	\$ 45.00	\$ 35.00			
Private Swim Lessons	3.00%	\$ 125.00	\$ 100.00		30 minute lessons, 5 lessons total	
Party Pad #1	3.00%	\$ 35.00	\$ 35.00		\$35/ hour, can bring own food and non alcohol beverage	Cost covers reservation of picnic tables and shade. Swimmers and non-swimmers cost per attendee.
75 people or less WAC Rental	3.00%	\$ 400.00	\$ 400.00		Private Party	
76-150 people WAC Rental	3.00%	\$ 450.00	\$ 450.00		Private Party	
151+ people WAC Rental	3.00%	\$ 500.00	\$ 500.00		Private Party	
<b>Training/Certification</b>						
Lifeguard-Employee	3.00%	\$ 125.00			Certification	
Lifeguard-Non-employee	3.00%	\$ 250.00			Certification	
<b>Special Programs</b>						
<b>New Programs</b>						
<b>Rentals</b>	<b>Credit Card Fee</b>	<b>2024 Fee Per Hour</b>	<b>2024 All Day Fee 12+ Hours)</b>	<b>After Hours Rental</b>		
Community Building	3.00%	\$ 45.00	\$ 450.00			
Big Gym	3.00%	\$ 45.00	\$ 450.00	\$65/hour		
Small Gym	3.00%	\$ 40.00	\$ 400.00	\$60/hour		
Full Rec Facility	3.00%		\$ 150.00	185.00		
Balloon Arch (balloons and set up <b>not</b> included)	3.00%		\$50 Flat Fee			
Balloon Arch (balloons and set up included)	3.00%		\$100 Flat Fee			
Big Pavilion	3.00%	\$ 20.00				
Small Pavilion	3.00%	\$ 15.00				
Baseball Fields	3.00%	\$ 40.00	\$ 400.00			
Soccer	3.00%	\$ 40.00	\$ 400.00			

\*Relative to other communities fees

**Payment and Refund Policy for Facility Rentals**  
**1. Deposits and Payment Terms:** For rentals exceeding \$150, a 50% deposit is required at the time of booking. The remaining balance must be paid in full 14 days prior to the rental date. If the full payment is not received by the 14-day deadline, the reservation will be **cancelled without a refund.**  
**2. Late Reservations:** For rentals made less than 14 days before the reservation date, full payment is required at the time of booking, regardless of the total rental cost.  
**3. Rentals Under \$150:** For rentals with a total cost of \$150 or less, full payment is due at the time of booking.  
**4. Cancellation and Refund Policy:** No refunds will be issued for cancellations made with less than 24 hours notice before the rental date.  
**5. Reschedule policy:** if customer reschedules with less than 24 hours notice, there will be a 50% reschedule fee.





# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #12

### **An Ordinance to Establish a Reimbursement Policy for City Employees by Adding a New Subsection to Title I Government Code, Chapter 117 Personnel and Safety Manuals**



## Subject: Recommendation for Updating City Reimbursement and Training Policies

### Purpose

This memo recommends updates to the City of Willard's existing Reimbursement and Training & Conference policies. These proposed policies provide greater clarity, accountability, and alignment with best practices for government operations. The updates are designed to ensure responsible management of City resources while supporting employee needs and operational efficiency.

### Proposed Policy Updates

1. **Reimbursement Policy:** The proposed updates emphasize the use of City fleet vehicles, a clear documentation and approval process, adherence to federal and state guidelines for mileage and meal rates, and specific documentation requirements for reimbursement. Notably, this policy clarifies that employees are expected to use City vehicles when available, prioritizing resources for those with the greatest travel needs. It also outlines expectations for appropriate vehicle use, coordination with supervisors, and escalation processes if vehicle conflicts arise.
2. **Training and Conference Policy:** The updated policy ensures that training and conference attendance aligns with both professional development goals and City priorities. It outlines a structured approval process, reimbursement limits, and the responsibility for timely cancellation to avoid unnecessary expenses.

### Options for Board Consideration

1. **Approve as Written:** The Board may choose to approve the proposed policies as drafted, allowing for immediate adoption and implementation.
2. **Modify Based on Discussion:** The Board may discuss and recommend modifications to the policies, which can be adjusted based on Board input.
3. **Do Not Approve:** The Board may opt not to approve these proposed policy changes, retaining the current policies.

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Recommendation

I recommend approving the proposed policies as written or with any modifications deemed appropriate by the Board. These updates will provide clear, effective guidelines for City operations, increase accountability, and support efficient resource allocation.

Please let me know if additional information or clarification on these proposals is needed for the upcoming meeting.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Wesley Young', is written over a light blue grid background.

Wesley Young, MPA, CPM  
City Administrator  
City of Willard

## City of Willard Reimbursement Policy

### Purpose

This policy establishes guidelines for the reimbursement of legitimate and necessary expenses incurred by City of Willard employees while performing their official duties. It ensures that expenses are consistent with federal and state guidelines and supports responsible use of City funds.

### Scope

This policy applies to all employees eligible for reimbursement when conducting official City business. All reimbursements require prior approval from the employee's supervisor or department head and are subject to budget availability.

### Policy Guidelines

#### 1. Eligible Expenses

- **Travel Expenses:** Travel for official City business may include costs for lodging, transportation, meals, and other necessary incidental expenses. All travel expenses must align with pre-approved City business needs.
- **Mileage:** Employees authorized to use their personal vehicles for City business are reimbursed at the Missouri state-approved mileage rate, calculated using the shortest distance between the departure point (home or duty station) and the destination. Mileage should be documented and include the date, purpose, and total distance.
- **Meals:** Meals will be reimbursed based on federal per diem rates for meals, with itemized receipts required for each meal. Alcohol expenses will not be reimbursed. Please refer to the table below for current rates.
- **Conference and Professional Development Fees:** Employees attending pre-approved training, conferences, or professional development activities may be reimbursed for expenses, including registration, travel, lodging, and meals.
- **Miscellaneous Work Expenses:** Reasonable and necessary expenses like parking fees or business telephone calls may be reimbursed if directly related to City duties.

#### 2. Non-Eligible Expenses

- Personal expenses not directly related to City business (e.g., commuting costs between home and the office during normal work hours) are non-reimbursable.
- Alcoholic beverages and any related charges are not reimbursable.

### **3. Travel Using City Vehicles**

- To minimize travel-related costs, employees are required to use a City-provided vehicle for travel to the greatest extent possible. City fleet vehicles should be made available where feasible, with priority given to those traveling the greatest reimbursable distances.
- Employees may only use a City vehicle that is both appropriate and available for their department's needs. For example, City Hall employees are not authorized to use Police Department vehicles, and Public Works employees should not use specialized vehicles, such as dump trucks, unless necessary for the specific work assignment.
- Employees must coordinate with their supervisor and/or colleagues who may be assigned a City vehicle to reserve an appropriate vehicle in advance. If issues with vehicle availability or assignment cannot be resolved through these channels, the employee's supervisor should consult the CFO or City Administrator to determine the best course of action.
- If a City vehicle is unavailable and the employee must use their personal vehicle, they may be eligible for mileage reimbursement, per the guidelines outlined in this policy. However, if it is determined that the employee did not make a reasonable attempt to secure an appropriate City vehicle prior to official travel, mileage reimbursement may be denied.

### **4. Advance Payment Policy**

The City of Willard is a reimbursement-only entity and does not typically offer advance payments. However, at the discretion of the City Administrator or CFO, advance payments for specific items (e.g., conference registration fees) may be authorized. If an employee fails to attend without prior cancellation, they may be required to reimburse the City for any advance payments incurred, including cancellation fees. Habitual non-attendance or failure to cancel may result in a loss of City-paid advance privileges and potential disciplinary action.

### **5. Documentation Requirements**

Employees must maintain complete and accurate documentation for all expenses.

Reimbursement requests must include itemized receipts, a completed reimbursement form, and a description of the expense. Non-itemized receipts will not be accepted for reimbursement.

**6. Reimbursement Process**

Reimbursement requests should be submitted within 30 days of incurring the expense. Approved reimbursements will be processed through payroll within two pay cycles of submission.

**7. Accountability**

Employees are expected to adhere strictly to this policy. Misuse, including submission of fraudulent claims, may lead to disciplinary action up to and including termination.

**Policy Review**

This policy will be reviewed annually to ensure compliance with federal, state, and municipal guidelines.



## Meals and incidental expenses (M&IE) rates and breakdown



The M&IE total is the full daily amount for a single calendar day when that day is neither the first nor last day of travel. The amount received on the first and last day of travel equals 75% of the M&IE total. See [M&IE Breakdowns](#) for information related to the individual meal amounts.

Filter results

Primary destination	County	M&IE total	Breakfast	Lunch	Dinner	Incidental expenses	First and last day of travel
Standard Rate	Applies for all locations without specified rates	\$68	\$16	\$19	\$28	\$5	\$51.00
Kansas City	Jackson / Clay / Cass / Platte	\$80	\$20	\$22	\$33	\$5	\$60.00
St. Louis	St. Louis / St. Louis City / St. Charles	\$86	\$22	\$23	\$36	\$5	\$64.50



**First Reading: 11/12/2024**  
**Bill No.: 24-59**

**Second Reading: 11/25/2024**  
**Ordinance No.: 241112A**

**AN ORDINANCE TO ESTABLISH A REIMBURSEMENT POLICY FOR CITY EMPLOYEES BY ADDING A NEW SUBSECTION TO TITLE I GOVERNMENT CODE, CHAPTER 117 PERSONNEL AND SAFETY MANUALS.**

**WHEREAS**, the City of Willard recognizes the need for employees to occasionally incur expenses while conducting official City business; and

**WHEREAS**, it is in the public interest to establish a clear and consistent policy governing reimbursement for these expenses to ensure accountability, transparency, and responsible use of City funds; and

**WHEREAS**, adherence to standardized guidelines for mileage, travel, meals, and other work-related expenses aligns with state and federal best practices and promotes fairness in managing public resources; and

**WHEREAS**, the City of Willard seeks to balance fiscal responsibility with supporting its employees in fulfilling their official duties effectively;

**NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF WILLARD, MISSOURI**, as follows:

**Section 1. Title and Section**

The City does hereby create section 121 within Title 1 Government Code, Chapter 117 Personnel and Safety Manuals entitled City of Willard Meetings and Conferences Policy. This section shall be titled “Reimbursement Policy.”

**Section 2. Purpose**

The purpose of this section is to establish guidelines for the reimbursement of legitimate and necessary expenses incurred by City employees while performing official City duties, ensuring alignment with federal and state guidelines and responsible management of City funds.

**Section 3. Scope**

This section applies to all City employees eligible for reimbursement when conducting official City business. All reimbursements require prior approval from the employee’s supervisor or department head and are subject to budget availability.

**Section 4. Policy Provisions**

## A. Eligible Reimbursable Expenses

1. **Travel Expenses:** Travel for official City business may include costs for lodging, transportation, meals, and other necessary incidental expenses incurred as part of approved City travel.
2. **Mileage:** Employees authorized to use their personal vehicles for City business may be reimbursed at the Missouri state-approved mileage rate, calculated using the shortest distance between the departure point (home or duty station) and the destination. Mileage claims must be documented and include the date, purpose, and total distance traveled.
3. **Meals:** Meals will be reimbursed based on federal per diem rates. Alcoholic beverages will not be reimbursed. Itemized receipts are required for each meal expense; non-itemized receipts are not eligible for reimbursement.
4. **Miscellaneous Work Expenses:** Additional reasonable and necessary expenses such as parking fees or business telephone calls may be reimbursed if directly related to City duties.

## B. Travel Using City Vehicles

1. **City Vehicle Requirement:** To minimize travel-related costs, employees are required to use a City-provided vehicle for travel to the greatest extent possible. City fleet vehicles should be made available where feasible, with priority given to those traveling the greatest reimbursable distances.
2. **Appropriate Vehicle Use:** Employees may only use a City vehicle that is both appropriate and available for their department's needs. For example, City Hall employees are not authorized to use Police Department vehicles, and Public Works employees should not use specialized vehicles, such as dump trucks, unless necessary for the specific work assignment.
3. **Coordination and Escalation:** Employees must coordinate with their supervisor and/or colleagues who may be assigned a City vehicle to reserve an appropriate vehicle in advance. If issues with vehicle availability or assignment cannot be resolved through these channels, the employee's supervisor should consult the CFO or City Administrator to determine the best course of action.
4. **Mileage Reimbursement Denial:** If a City vehicle is available but an employee chooses to use a personal vehicle without first making a reasonable attempt to secure an appropriate City vehicle, mileage reimbursement may be denied.

**C. Documentation Requirements**

1. **Submission Requirements:** Employees must maintain complete and accurate documentation for all expenses. Reimbursement requests must include itemized receipts, a completed reimbursement form, and a description of the expense. A copy of the agenda should also be provided if one has been provided at the event.
2. **Submission Deadline:** Reimbursement requests should be submitted within 30 days of incurring the expense. Approved reimbursements will be processed through accounts payable within two board meetings of submission.

**D. Accountability and Enforcement**

Employees are expected to adhere strictly to the provisions of this policy. Misuse of funds, including submission of fraudulent claims, may result in disciplinary action up to and including termination, as deemed appropriate by the City Administrator or the Board of Aldermen.

**Section 5. Compliance and Enforcement**

Failure to comply with the provisions of Section 117.120 and Section 117.121 may result in denial of reimbursement and potential disciplinary action, up to and including termination, as deemed appropriate by the City Administrator or the Board of Aldermen.

**Section 6. Effective Date**

This ordinance shall be in full force and effect from and after its passage and approval.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **25<sup>th</sup> day of November 2024.**

Approved as to Form: \_\_\_\_\_  
Nate Dally, City Attorney

Approved By: \_\_\_\_\_  
Troy Smith, Mayor

Attested By: \_\_\_\_\_  
Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #13

### **An Ordinance to Establish a Training and Conference Policy for City Employees by Adding a New Subsection to Title I Government Code, Chapter 117 Personnel and Safety Manuals**

**First Reading: 11/12/2024**  
**Bill No.: 24-60**

**Second Reading: 11/25/2024**  
**Ordinance No.: 241112B**

**AN ORDINANCE TO ESTABLISH A TRAINING AND CONFERENCE POLICY FOR CITY EMPLOYEES BY ADDING A NEW SUBSECTION TO TITLE I GOVERNMENT CODE, CHAPTER 117 PERSONNEL AND SAFETY MANUALS.**

**WHEREAS**, the City of Willard is committed to the professional development of its employees to enhance their skills, knowledge, and service capabilities for the benefit of the City and its residents; and

**WHEREAS**, the City of Willard seeks to promote the professional development of its employees and support the responsible use of City resources in the conduct of City business; and

**WHEREAS**, it is necessary to establish a clear and consistent policy for attendance at training, conferences, and professional development events to ensure alignment with City goals, effective use of City funds, and accountability;

**NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF WILLARD, MISSOURI**, as follows:

**Section 1. Title and Section**

The City does hereby create section 120 within Title 1 Government Code, Chapter 117 Personnel and Safety Manuals entitled City of Willard Meetings and Conferences Policy. This section shall be titled "Training and Conference Policy."

**Section 2. Purpose**

The purpose of this section is to provide guidelines for employee participation in training, conferences, and professional development activities that support their roles and enhance City operations.

**Section 3. Scope**

This section applies to all City of Willard employees authorized to attend training, conferences, or professional development activities related to their job duties or the operational needs of the City.

**Section 4. Policy Provisions**

**A. Approval Process**

1. **Pre-Approval Requirement:** Employees must obtain prior written approval from their immediate supervisor and the City Administrator before committing to any training, conference, or professional development event.
2. **Alignment with City Priorities:** Approval shall be granted based on the event's relevance to the employee's current role, benefit to the City, and budget availability.
3. **Budget and Funding:** Attendance is subject to funding availability within the City's approved budget for professional development.

## **B. Eligible Expenses**

1. **Registration Fees:** The City may cover registration or course fees for approved training, conferences, or professional development activities.
2. **Travel and Lodging:** Reasonable travel expenses, including mileage, lodging, and transportation costs, may be reimbursed if incurred as part of approved travel.
3. **Meals:** Meal expenses shall be reimbursable based on federal per diem rates. Alcoholic beverages are not eligible for reimbursement.
4. **Miscellaneous Expenses:** Other reasonable and necessary expenses directly related to the event may be considered for reimbursement with prior approval.

## **C. Travel and Conference Advance Payment**

1. **Advance Payment Limitations:** The City of Willard generally operates as a reimbursement-only entity. However, at the discretion of the City Administrator or CFO, advance payments for specific items (e.g., registration fees) may be approved.
2. **Failure to Attend:** Employees who do not attend an approved event or fail to cancel timely may be required to reimburse the City for any advance payments, including fees incurred due to late cancellation. Repeated failure to attend or cancel events may result in revocation of advance payment privileges and potential disciplinary action.

## **D. Accountability and Follow-Up**

1. **Documentation and Reporting:** Employees shall submit itemized receipts for all expenses and complete the required reimbursement form within 30 days following the event.
2. **Post-Event Sharing:** Employees may be required to share insights or training outcomes with their department or other relevant City personnel, where applicable, to maximize the benefit of professional development opportunities.

**Section 5. Compliance and Enforcement**

Failure to comply with the provisions of this policy may result in denial of reimbursement and potential disciplinary action, up to and including termination, as deemed appropriate by the City Administrator or the Board of Aldermen.

**Section 6. Effective Date**

This ordinance shall be in full force and effect from and after its passage and approval.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **25<sup>th</sup> day of November 2024.**

Approved as to Form: \_\_\_\_\_  
Nate Dally, City Attorney

Approved By: \_\_\_\_\_  
Troy Smith, Mayor

Attested By: \_\_\_\_\_  
Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



## Agenda Item #14

### **An Ordinance Revising and Replacing Section 400.200 of the City Code**



**AN ORDINANCE REVISING AND REPLACING SECTION 400.200 OF THE CITY CODE**

**WHEREAS**, Schools are encouraged and allowed in the R-1 zone and,

**WHEREAS**, proper signage is important for the identification and identity of the school and,

**WHEREAS**, signage for schools may exceed the size defined by the R-1 zone,

**WHEREAS**, a variance may be needed to address the issue,

**NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF THE CITY OF WILLARD,  
AS FOLLOWS:**

**SECTION 1. REPEAL SECTION 400.200**

Section 400.200 is hereby repealed in its entirety

**SECTION 2. REPLACEMENT OF SECTION 400.200**

Section 400.200 is hereby replace with the following:

**Section 400.200 Appeals Pertaining To Zoning Regulations.  
[Ord. No. 020227 §1(3.7), 2-27-2002]**

- A. *Appeal From Administrative Order.* The Board of Adjustment shall hear and decide appeals where it is alleged there is error in any order, requirement, decision or determination made by an Administrative Official in the enforcement of the applicable zoning provisions of this Chapter.
- B. *When Appeals May Be Taken.* An appeal may be taken to the Board of Adjustment by any person aggrieved, by any neighborhood organization as defined in Section 32.105, RSMo., representing such person, or by an officer, department, board or agency of the City of Willard affected by a decision of an Administrative Official. An appeal must be made within fifteen (15) days after the date of the decision or order appealed. Appeals shall be taken by filing with the City Clerk a written notice of appeal specifying the grounds for the appeal. The City Clerk shall enter the date of filing on the notice of appeal and shall transmit to the Chair of the Board of Adjustment the notice of appeal and all papers and materials constituting the record upon which the action appealed from was taken.
- C. *When Appeals To Stay Proceedings.* A notice of appeal properly filed as herein provided shall stay all proceedings in furtherance of the action appealed from, unless the officer from whom the appeal is taken certifies to the Board of Adjustment, after the notice of appeal has been filed, that by reason of acts stated in the certificate a stay would, in the opinion of the officer, cause imminent peril to life or property. In such a case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board of Adjustment or by a proper court order.
- D. *Hearing On Appeals.* The Board of Adjustment shall hold a public hearing on all appeals in accordance with the provisions of Section **400.360(A)**.
- E. *Board Of Adjustment Decision On Appeal.*

1. A motion to reverse, affirm or modify the order, requirement or decision appealed from shall include, so far as practical, a written statement of the specific reasons or findings of fact that support the motion. The concurring vote of four (4) members of the Board of Adjustment shall be necessary to reverse any order, requirement or decision or to decide in favor of the applicant on any matter upon which it is required to pass.
2. Within thirty (30) days after the hearing on an appeal, the Board of Adjustment shall file with the City its findings of fact and decision with respect to the appeal. The City Clerk shall transmit by mail a copy of the decision to the appellant and to each other person who requests in writing to be notified.

**Section 400.200 Variances Pertaining To Zoning Regulations.**  
**[Ord. No. 020227 §1(3.8), 2-27-2002]**

- A. *Jurisdiction And Authority.* The Board of Adjustment shall exercise the authority to vary the strict or literal terms of the applicable zoning provisions of this Chapter in accordance with the standards set forth in Subsection (C). A variance is the remedy created by this power and is part of the Board's appellate jurisdiction. It is a discretionary privilege which is granted because strict and literal enforcement of certain provisions of this Chapter would, due to special conditions peculiar to a particular property, result in unusual difficulty or hardship.
- B. *Authorized Variances.* Variances from the zoning regulations and restrictions contained in this Chapter may be granted by the Board of Adjustment in the following instances:
  1. A variance of the applicable bulk regulations for buildings and structures, including maximum height, lot coverage, floor area ratio, required yard areas and other required open space.
  2. A variance of the applicable minimum requirements for lot size, width and depth and setbacks from lot lines.
  3. A variance of the applicable off-street parking and off-street loading requirements and ratios.
  4. A variance of the landscaping and buffer yard requirements.
  5. A variance for sign requirements in a R-1 Zone for schools
- C. *Standards For Grant Of Variance.* The Board of Adjustment may grant a variance if it concludes that strict enforcement of the ordinance would result in practical difficulties or undue hardship for the applicant and, by granting the variance, the spirit of the ordinance will be observed, public safety and welfare will be secured and substantial justice will be done. The Board of Adjustment may reach these conclusions if it finds in writing that:
  1. The particular physical surroundings, shape or topographical condition of the specific property involved would result in undue hardship upon the owner as distinguished from a mere inconvenience if the strict letter of the regulations were carried out;
  2. The conditions of which the applicant complains is one suffered by the applicant and would not be applicable to other property in the same zoning classification;
  3. The property in question cannot yield a reasonable return or the applicant cannot make reasonable use of his/her property if strict compliance with the regulations is required;
  4. The hardship relates to the applicant's land, rather than personal circumstances;
  5. The alleged hardship has not been created by any person presently having an interest in the property;

6. The granting of the variance will not be detrimental to the public welfare or injurious to other property or improvements in the area in which the property is located; and
  7. The variance will not nullify the intent and purpose of the Willard Land Development Regulations and the Willard Comprehensive Plan.
  8. *School signage is needed and deemed reasonable for the application.*
- D. *Application For Variance.* An application for a variance shall be submitted to the City Clerk. The City Clerk shall transmit the application and all papers and materials constituting the record to the Board of Adjustment.
- E. *Hearing On Variances.* The Board of Adjustment shall hold a public hearing on any application for variance in accordance with the provisions of Section **400.360(A)**.
- F. *Board Of Adjustment Decision On Variances.*
1. In deciding on variances, the Board of Adjustment shall take a separate vote on each of the seven (7) required findings stated in Subsection (C). The affirmative vote of four (4) members of the Board shall be required on each separate finding. Insofar as is practical, a motion to make an affirmative finding on each of the requirements shall include a written statement of the specific reasons or findings of fact supporting the motion.
  2. A motion to deny a variance may be made on the basis that any one (1) or more of the seven (7) requirements set forth in Subsection (C) are not satisfied or that the application is incomplete. Such motion, insofar as is practical, shall include a written statement of the specific reasons or findings of fact that support the motion. A motion to deny a variance is adopted as the Board of Adjustment's decision if supported by more than one (1) affirmative vote.
  3. In granting a variance, the Board of Adjustment may impose such reasonable conditions to ensure that the use of the property to which the variance applies will be as compatible as practical with surrounding properties.
  4. A variance may be issued for a specified or indefinite duration.
  5. The nature of the variance shall be entered upon the permit. All such conditions are enforceable in the same manner as any applicable requirement of this Chapter.

**Section 400.210 Recordation of Order of The Board of Adjustment.**  
**[Ord. No. 020227 §1(3.9), 2-27-2002]**

Whenever the Board of Adjustment shall have acted upon an appeal, request or variance, the Board shall cause its order granting or denying said appeal or application to be recorded in the records of the Greene County Recorder of Deeds. However, no order shall be recorded until the order has become final by the passage of thirty (30) days from the date said order is filed with the City Clerk without an action being filed in a court of competent jurisdiction challenging the issuance of said order or until a court of competent jurisdiction upholds said order if it is challenged within the thirty (30) day period.

**Section 400.220 Judicial Review — Board of Adjustment Action.**  
**[Ord. No. 020227 §1(3.10), 2-27-2002]**

Any person aggrieved, any neighborhood organization as defined in Section 32.105, RSMo., by any decision of the Board of Adjustment made under the provisions of this Article may seek judicial review of such decision in accordance with the provisions of Section 89.110, RSMo.

**Section 400.230 Appeals Pertaining To Subdivision Regulations.**  
**[Ord. No. 020227 §1(3.11), 2-27-2002]**

- A. *Jurisdiction.* The Board of Aldermen shall hear and decide:
1. Appeals where it is alleged there is error in any order, requirement, decision or determination made by an Administrative Official in the interpretation of the applicable subdivision regulations of this Chapter or the requisite standards of Chapter **405**, Design Standards for Public Improvements.
  2. Appeals of the decision of the Planning and Zoning Commission disapproving a site plan for simple land development or disapproving an application for minor subdivision or disapproving a preliminary plat or final plat for major subdivision pursuant to the requirements of this Chapter.
- B. *When Appeals May Be Taken.* An appeal under the provisions of Subsection **(A)(1)** above may be taken to the Board of Aldermen by any person aggrieved. Appeals must be made in accordance with the following:
1. *Appeal from administrative order.* An appeal of any order, requirement, decision or determination made by an Administrative Official must be made within fifteen (15) business days after the date of the decision or order appealed.
  2. *Appeal from decision of Planning and Zoning Commission.* An appeal of any decision of the Planning and Zoning Commission must be made within sixty (60) days of the date of the decision appealed.
  3. *Filing of appeals.* Appeals shall be taken by filing with the City Clerk a written notice of appeal specifying the grounds for the appeal. The City Clerk shall enter the date of filing on the notice of appeal and shall transmit to the Board of Aldermen the notice of appeal and all papers and materials constituting the record upon which the action appealed from was taken.
- C. *Board Of Aldermen Decision On Appeal.*
1. Action by the Board of Aldermen to reverse or modify a decision of an Administrative Official shall require an affirmative vote of not less than two-thirds (2/3) of the entire membership of the Board.
  2. Action by the Board of Aldermen to override a decision of the Planning and Zoning Commission disapproving any development plan for simple land development, application for minor subdivision or preliminary or final plat for major subdivision shall be made in accordance with the provisions for appeals prescribed in the following applicable Sections of this Chapter:
    - a. For simple land development in accordance with Section 400.990(7).
    - b. For minor subdivision in accordance with Section **400.1020(C)**.
    - c. For major subdivision preliminary plat in accordance with Section **400.1080(E)**.
    - d. For major subdivision final plat in accordance with Section **400.1110(C)**.

**Section 400.240 Variances Pertaining To Subdivision Regulations.**  
**[Ord. No. 020227 §1(3.12), 2-27-2002]**

- A. *Purpose And Intent.* It is the purpose and intent of this variance procedure to provide relief from unusual hardship, inequitable construction procedures or public improvement design standards which may be impractical and other conditions which occur with a specific parcel of land, but do not occur in the normal subdivision and land development process.

- B. *Authority.* The Board of Aldermen shall exercise the authority to vary the strict or literal terms of the subdivision requirements of this Chapter and the requisite improvement standards of Chapter 405, Design Standards for Public Improvements in accordance with the procedures and standards set forth in Subsection (C). The Board of Aldermen shall not consider a variance unless and until it has received in writing the recommendation of the Planning and Commission.
- C. *Standards For Grant Of Variance.* No variance shall be granted unless it is found that:
1. There are special and unusual circumstances or conditions affecting said property such that the strict application of the regulations from which the variance is requested would deprive the owner of reasonable use of said property and is not the mere grant of a privilege;
  2. The variance is necessary for the preservation and enjoyment of a substantial property right of the owner;
  3. The granting of the variance would not be detrimental to the public safety, convenience or welfare or be injurious to other property in the vicinity; and
  4. The granting of the variance would not be in conflict with the intent of the subdivision and platting provisions of this Chapter.
- D. *Application Procedure.* An application for a variance shall be submitted to the City Clerk. The application shall indicate the specific provisions from which a variance is requested and the reasons for such request. Variance requests shall be reviewed in accordance with the following procedures:
1. Applications for variances may be submitted for Commission review concurrently with the final plat for minor subdivision or with the preliminary plat for major subdivision or with the site plan for simple land development requiring public improvements. Following public hearing, the Commission shall review and make recommendation on the variance request concurrently with action on the final plat if a minor subdivision or preliminary plat if a major subdivision or the site plan if a simple land development.
  2. Requests for variances independent of plat review or site plan review shall show just cause why such request was not made at the time of plat review or development plan review. Public hearing shall be held on all such requests in accordance with the requirements of Section 400.360(B).
- E. *Hearing On Variances.* The Planning and Zoning Commission shall hold a public hearing on all variance requests. Notice of hearing shall be made in accordance with the provisions of Section 400.360(B).
- F. *Decision On Variances.*
1. *Commission action.* After the public hearing has been completed, the Commission shall make recommendation to approve or deny the variance request. The recommendations of the Commission shall be made in accordance with the findings required in Subsection (C). Insofar as is practical, a motion to recommend approval or denial of a variance shall include a written statement of the specific reasons or findings of fact supporting the motion. The record of the Commission's findings and recommendation shall be sent to the Board of Aldermen within thirty (30) days of the Commission's decision.
  2. *Board of Aldermen action.* The Board of Aldermen shall approve or disapprove the request for variance. The decision of the Board of Aldermen shall be made in accordance with the findings required in Subsection (C). Insofar as is practical, a motion to recommend approval or denial of a variance shall include a written statement of the specific reasons or findings of fact supporting the motion.

G. *Recordation Of Variance.* When the Board of Aldermen has approved a variance from the regulations in accordance with this Section, the variance shall be recorded in the records of the Greene County Recorder of Deeds. However, no variance shall be recorded until the variance has become final by the passage of thirty (30) days from the date said variance is filed with the City Clerk without an action being filed in a court of competent jurisdiction challenging the approval of said variance or until a court of competent jurisdiction upholds said variance if it is challenged within the thirty (30) day period.

**Section 400.250 Appeal of Order of Tree Board.**

**[Ord. No. 020227 §1(3.13), 2-27-2002]**

- A. *Authority.* The Board of Aldermen shall hear and decide appeals to any order or ruling of the Tree Board. Action by the Board of Aldermen to reverse or modify a ruling or order of the Tree Board shall require the affirmative vote of a majority of the Board of Aldermen.
- B. *When Appeals May Be Taken.* An appeal of any order or ruling of the Tree Board must be made within fifteen (15) working days after the date of the ruling or order appealed.
- C. *Filing Of Appeals.* Appeals shall be taken by filing with the City Clerk a written notice of appeal specifying the grounds for the appeal. The City Clerk shall enter the date of filing on the notice of appeal and shall transmit to the Board of Aldermen the notice of appeal and all papers and materials constituting the record upon which the action appealed from was taken.

**Section 400.260 When Appeals and Variances Not Allowed.**

**[Ord. No. 020227 §1(3.14), 2-27-2002]**

No appeal, request or variance application to the Board of Adjustment and no appeal or variance application to the Board of Aldermen shall be allowed with respect to the same request prior to the expiration of six (6) months from the date of the ruling of the Board of Adjustment or the date of the ruling of the Board of Aldermen unless a substantial change of circumstances or conditions can be demonstrated by the applicant.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri, on the 12<sup>th</sup> day of November 2024.

Approved as to Form: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Troy Smith, Mayor

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #16

## An Ordinance Revising and Replacing Section 400.480 of the City Code

**AN ORDINANCE REVISING AND REPLACING SECTION 400.480 OF THE CITY CODE**

**WHEREAS**, the M-1 zone needs a revision and,

**WHEREAS**, current zoning does not define needed items,

**NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF THE CITY OF WILLARD, AS FOLLOWS:**

**SECTION 1. REPEAL SECTION 400.480**

Section 400.480 is hereby repealed in its entirety

**SECTION 2. REPLACEMENT OF SECTION 400.480**

Section 400.890 is hereby replace with the following:

Section 400.480 "**M-1" Light Industrial District.**

- A. *Purpose.* The "M-1" Light Industrial District is intended to allow for industrial operations and related activities that do not create nuisances and hazards. Industrial operations and activities are permitted provided they are conducted inside a building, although outdoor storage is permitted subject to limitations. The following uses are permitted in the "M-1" District:
- 1a. Any use permitted in a C-2 Zoning District. [**Ord. No. 130610D §1, 6-10-2013**]
  - 1b. Accessory uses in accordance with Article VI, Section 400.520. [**Ord. No. 130610D §1, 6-10-2013**]
  2. Ambulance service offices or garages.
  3. Any storage, manufacturing, processing, assembly, packaging, servicing, testing or repair of goods and materials and business and sales offices accessory thereto.
  4. Any establishment which provides supplies and/or services primarily to commercial and industrial customers, such as sign shops, janitorial services, packaging or shipping services, photocopying, publishing, blueprinting and similar uses.
  5. Bakeries.
  6. Funeral homes, mortuaries and crematoriums.
  7. Governmental buildings and uses.
  8. Heating, air-conditioning and plumbing sales and service.
  9. Hardware, home improvement and building supply stores.
  10. Heavy machinery and equipment sales, rental and service.



11. Laundry, dry cleaning and carpet cleaning services.
  12. Manufactured home sales and rental, but not including the use of a manufactured home as a residence.
  13. Pest control services.
  14. Police and fire stations.
  15. Recording studios.
  16. Schools, business, industrial and trade.
  17. Retail sales of products produced by the principal use, provided that the gross amount of floor area devoted to sales and display does not exceed twenty-five percent (25%) of the gross floor area of the structure.
  18. Veterinary clinics, animal hospitals and kennels.
  19. Warehousing, storage and distribution centers.
  20. Type I wireless facilities in accordance with Article VI, Section 400.600.
  21. Type III wireless facilities in accordance with Article VI Section 400.600, provided wireless towers sixty (60) feet or greater in height allow collocation of at least one (1) additional provider's facilities.
  22. Type IV wireless facilities in accordance with Article VI, Section 400.600, provided wireless towers are set back from any residential district at least two (2) feet for every one (1) foot of tower height and allow collocation of at least one (1) additional provider's facilities or at least two (2) additional provider's facilities if the tower height is one hundred twenty (120) feet or greater.
  23. Towers, other than wireless facilities, less than one hundred (100) feet in height and related facilities in accordance with Article VI, Section 400.600.
  24. Water reservoirs, water standpipes and elevated and ground-level water storage tanks.
  25. Television and radio studios with transmitting facilities.
  26. (Reserved)
  27. Medical marijuana cultivation facility. **[Ord. No. 190923, 9-23-2019]**
  28. Medical marijuana-infused products manufacturing facility. **[Ord. No. 190923, 9-23-2019]**
  29. Personal Self Storage Facilities: A building or buildings, commonly referred to as mini-storage, composed of individual, self-contained units available on a rental basis for storage of business and household goods, usually on a short-term basis (often month-to-month).
  30. Car Wash
- B. Conditional Uses. Certain non-conforming uses may be located within the district by written permission by the Board of Aldermen after written notice to all landowners within one hundred eighty-five (185) feet of the proposed use, followed by a public hearing; provided, that in the Board of Aldermen's judgment, such use will not seriously injure the appropriate use of neighboring property and will conform to the general intent and purpose of this Chapter, and, further provided that such use shall comply with the height, area and other regulations of the district in which they may be located, as well as any additional restrictions as may be ordered. **[Ord. No. 181220E, 12-20-2018; Ord. No. 201214A,**

12-28-2020]

C. *Use Limitations.*

1. There shall be no offensive noise, dust, smoke, odors, heat or glare noticeable at or beyond the property line.
2. All operations and activities, except off-street parking, loading and storage, shall be conducted wholly inside a building or buildings.
3. Storage may be maintained outside a building in side yards or rear yards if such storage area is screened from public streets and from other property, except property located in an "M-2" District. All outdoor storage shall be at least one hundred (100) feet from any residence district.
4. No building shall be used for residential purposes, except that a guard or caretaker employed on the premises and his/her family, may reside on the premises.

D. *Lot Size, Bulk And Open Space Requirements.*

Minimum lot area	None
Minimum lot width	None
Minimum lot depth	None
Maximum structure height	50 feet
Maximum floor area ratio	0.50

**Minimum Yard Requirements**

Front yard	25 feet
Rear yard	30 feet
Side yard	20 feet
Maximum lot coverage	50%

E. *Open Space Requirements.* Not less than fifteen percent (15%) of the total lot area shall be devoted to open space including required yards and buffer yards. Open space shall not include areas covered by buildings or structures, parking, loading and other paved areas and internal streets. Open space shall contain living ground cover.

F. *Design Requirements.*

1. A site plan meeting the requirements of Article **XIV** shall be submitted and approved for all uses.
2. All development shall meet the buffer yard and landscaping requirements in accordance with Article **VIII**.
3. All off-street parking, vehicular use and loading areas shall be screened from residential uses in accordance with Article **VIII**.

4. Refuse storage areas and mechanical and electrical equipment shall be screened from view.
5. Lighting shall be designed so as to reflect away from adjacent residential districts.
6. All parking and loading areas shall be provided in accordance with the requirements set forth in Article IX.
- G. Standards For Medical Marijuana-Infused Products Manufacturing And Cultivation Facilities. No building shall be constructed, altered or used as a medical marijuana-infused products manufacturing or cultivation facility without complying with the following regulations of this Subsection: **[Ord. No. 190923, 9-23-2019]**
  1. Distance Requirement. Measurements shall be made from the center threshold of the main public entrances of such premises by the most direct walking route.
    - a. Type 1. No extraction facility using combustible or hazardous gases shall be located within one thousand (1,000) feet of a then-existing elementary or secondary school, or child day-care center. There shall be no distance requirement for a church.
    - b. Type 2. No post-extraction or cultivation facilities that do not use combustible or hazardous gases shall be located within five hundred (500) feet of a then-existing elementary or secondary school, or child day-care center. There shall be no distance requirement for a church.
  2. Operations Or Storage. All operations and all storage of materials, products, or equipment shall be within a fully secured area inside the building structure.
  3. On-Site Usage Prohibited. No marijuana may be smoked, ingested, or otherwise consumed on the premises of any medical marijuana-infused products manufacturing or cultivation facility.
  4. Display Of License Required. The medical marijuana-infused products manufacturing or cultivation facility license issued by the State of Missouri shall be displayed in a prominent place in plain view near the front entrance of the facility.
  5. Site Plan Review Required. Any plans for a medical marijuana-infused products or cultivation facility shall meet the requirements of Article III, Section 400.340, and Article XIV, Section 400.1160, of the Willard Municipal Code and all related building codes currently adopted by the City of Willard.
  6. Waste generated by facilities shall be disposed of in accordance with requirements promulgated by the Department of Health and Senior Services and other applicable Federal, State and local laws, whichever shall be more restrictive, to prevent exposure to the public or create a nuisance.
  7. Odor Control. No facility shall emit any odor of marijuana which is capable of being smelled by a person of ordinary senses outside of the boundary of the lot on which the facility is located. If a facility is located in a multiple-tenant building, the testing facility shall not emit any odor of marijuana which is capable of being detected by a person of ordinary senses outside of the tenant space in which the facility is located.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri, on the **12<sup>th</sup> day of November 2024.**

Approved as to Form: \_\_\_\_\_  
Nate Dally, City Attorney

Approved By: \_\_\_\_\_  
Troy Smith, Mayor

Attested By: \_\_\_\_\_  
Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #15

## **An Ordinance Revising and Replacing Section 400.470 of the City Code**

**First Reading: 10/28/24**  
**Bill No: 24-51**

**Second Reading: 11/12/24**  
**Ordinance No: 241111A**

**AN ORDINANCE REVISING AND REPLACING SECTION 400.470 OF THE CITY CODE**

**WHEREAS**, the C-2 zone is under review and,

**WHEREAS**, current zoning needs changes, and

**NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF THE CITY OF WILLARD, AS FOLLOWS:**

**SECTION 1. REPEAL SECTION 400.470**

Section 400.470 is hereby repealed in its entirety

**SECTION 2. REPLACEMENT OF SECTION 400.470**

**Section 400.470. "C-2" General Business District. [Ord. No. 020227 §1(5.8), 2-27-2002; Ord. No. 021111 §1, 11-11-2002]**

A. *Permitted Uses.* The "C-2" District is designed for those business and commercial uses that draw their customers from motorists on the highway or for whom location on a highway or arterial street is necessary. The district also provides for the location of commercial activities that involve outdoor storage of materials and goods. The following uses are permitted in the "C-2" General Business District:

1. All uses permitted in the "C-1" Neighborhood Commercial District.
2. Agriculture implements & sales and service.
3. Arcades and game rooms, bowling alleys, theaters, skating rinks and other such similar places of commercial entertainment, provided that no such building or premises is closer than one hundred (100) feet to the boundary of any residence district.
4. Banks and financial institutions, including automatic teller machines and drive-through facilities.
5. Boat sales and rental.
- ~~6. Car wash.~~
6. Clinics, dental laboratories and similar medical service facilities.
7. Funeral home.
8. Greenhouse, nursery or garden stores, on-premises sales permitted.
9. Health and fitness centers, including dance studios.
10. Hardware, home improvement and builder supply stores.

11. Heating, air-conditioning and plumbing stores.
12. Library, museum, art gallery and similar uses.
13. Liquor store and tavern.
14. Manufactured home sales and rental, but not including the use of a manufactured home as a residence.
15. Monument sales, outside storage permitted.
16. Motels and hotels, when located on a State or Federal highway.
17. New or used automobile, recreational vehicle or motorcycle sales and service facilities, outside storage permitted, but excluding the wrecking of motor vehicles.
18. Offices, clerical, research and services not related to goods and merchandise, such as offices of attorneys, physicians, engineers, accountants, insurance agents, stock brokers, travel agents, telecommunications and Internet services and government.
19. Off-street parking facilities.
20. Pest control services.
21. Public and private parks, playgrounds and golf courses, including miniature golf courses and driving ranges.
22. Restaurants, including drive-in facilities.
23. General retail sales and rental of goods, merchandise and equipment.<sup>1</sup>
24. Residential dwellings existing at the time the district was mapped.
25. Service stations or gas stations, including repair shops.
26. Schools, professional, business and trade.
27. Veterinarian, animal hospital or kennel, provided that no such building, kennel or exercise runway is closer than three hundred (300) feet to the boundary of any residence district.
28. Towers, other than wireless facilities, less than one hundred (100) feet in height and related facilities, provided telecommunication towers comply with Article VI, Section 400.600.
29. Type I wireless facilities in accordance with Article VI, Section 400.600.
30. Type III wireless facilities in accordance with Article VI, Section 400.600, provided wireless towers sixty (60) feet or greater in height allow collocation of at least one (1) additional provider's facilities.
31. Type IV wireless facilities in accordance with Article VI, Section 400.600, provided wireless towers are set back from any residential district at least two (2) feet for every one (1) foot of tower height and allow collocation of at least one (1) additional provider's facilities or at least two (2) additional provider's facilities if the tower height is one hundred twenty (120) feet or greater.

32. Water reservoirs, water standpipes and elevated and ground-level water storage tanks.

33. (Reserved)

34. Medical marijuana dispensaries. [Ord. No. 190923, 9-23-2019]

35. Medical marijuana testing facility. [Ord. No. 190923, 9-23-2019]

B. Conditional Uses. Certain non-conforming uses may be located within the district by written permission by the Board of Aldermen after written notice to all landowners within one hundred eighty-five (185) feet of the proposed use, followed by a public hearing; provided, that in the Board of Aldermen's judgment, such use will not seriously injure the appropriate use of neighboring property and will conform to the general intent and purpose of this

1. **Editor's Note: Former Subsection (A)(25), regarding personal self-service storage facilities, which immediately followed, was repealed 12-20-2018 by Ord. No. 181220E. Remaining Subsections were renumbered from (A)(26) — (A)(34) to (A)(25) — (A)(33).**



Chapter, and, further provided that such use shall comply with the height, area and other regulations of the district in which they may be located, as well as any additional restrictions as may be ordered. [Ord. No. 181220E, 12-20-2018; Ord. No. 201214A, 12-28-2020]

C. *Lot Size, Bulk And Open Space Requirements.*

Minimum lot area	None
Minimum lot width	None
Minimum lot depth	None
Maximum structure height	45 feet
Maximum floor area ratio	1.0

**Minimum Yard Requirements**

Front yard	25 feet
Rear yard	None
Side yard	None
Maximum building coverage (including accessory structures)	50%

D. *Open Space Requirements.* Not less than twenty percent (20%) of the total lot area shall be devoted to open space including required yards and buffer yards. Open space shall not include areas covered by buildings or structures, parking, loading and other paved areas and internal streets. Open space shall contain living ground cover.

E. *Design Requirements.*

1. A site plan meeting the requirements of Article XIV shall be submitted and approved for all uses.
2. All development shall meet the buffer yard and landscaping requirements in accordance with Article VIII.
3. All off-street parking, vehicular use and loading areas shall be screened from residential uses in accordance with Article VIII.
4. Refuse storage areas, storage for maintenance, mechanical and electrical equipment or other equipment incidental to uses shall be screened from view.
5. Lighting shall be designed so as to reflect away from adjacent residential districts.
6. All parking and loading areas shall be provided in accordance with the requirements set forth in Article IX.
7. All outdoor storage, except the storage of motor vehicles in operating condition, shall be enclosed by screening. Off-street parking and loading spaces and the storage of motor vehicles in operating condition shall be enclosed when such use abuts a residence

district or is separated from a residence district by only an alley.

- F. Standard For Medical Marijuana Dispensary And Testing Facilities. No building shall be constructed, altered or used as a medical marijuana dispensary or testing facility without complying with the following regulations of this Subsection: **[Ord. No. 190923, 9-23-2019]**
1. Distance Requirement. No medical marijuana dispensary or testing facility shall be located within three hundred (300) feet of a then-existing elementary or secondary school, or child day-care center. Measurements shall be made from the center threshold of the main public entrances of such premises by the most direct walking route. There shall be no distance requirement for a church.
  2. On-Site Usage Prohibited. No marijuana may be smoked, ingested, or otherwise consumed on the premises of a medical marijuana dispensary or testing facility building.
  3. Hours Of Operation. All sales or distribution of medical marijuana and any other products at medical marijuana dispensaries shall take place between the hours of 8:00 A.M. and 10:00 P.M.
  4. Display Of License Required. The medical marijuana dispensary or testing facility license issued by the State of Missouri shall be displayed in a prominent place in plain view near the front entrance of the facility.
  5. Zoning Limitations. Medical marijuana dispensaries or testing facilities shall be limited to the C-2 General Business District located in the City of Willard.
  6. Site Plan Review. Any plans for a medical marijuana dispensary or testing facility shall meet the requirements of Article III, Section 400.340, and Article XIV, Section 400.1160, of the Willard Municipal Code and all related building codes currently adopted by the City of Willard.
  7. Waste generated by facilities shall be disposed of in accordance with requirements promulgated by the Department of Health and Senior Services and other applicable Federal, State and local laws, whichever shall be more restrictive, to prevent exposure to the public or create a nuisance.
  8. Odor Control. No facility shall emit any odor of marijuana which is capable of being smelled by a person of ordinary senses outside of the boundary of the lot on which the facility is located. If a facility is located in a multiple-tenant building, the facility shall not emit any odor of marijuana which is capable of being detected by a person of ordinary senses outside of the tenant space in which the facility is located.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **12<sup>th</sup> day of November 2024.**

Approved as to Form: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Troy Smith, Mayor

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #17

## **An Ordinance Revising and Replacing Section 400.510 of the City Code**

**First Reading: 10/28/24**

**Second Reading: 11/12/24**

**Bill No: 24-53**

**Ordinance No: 241111C**

**AN ORDINANCE REVISING AND REPLACING SECTION 400.510 OF THE CITY CODE.**

**WHEREAS**, the city needs diversity of housing to sustain growth, and,

**WHEREAS**, the city wants to incentivize the infill of property, and

**WHEREAS**, mixed use zoning allows for diversity of development,

**NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF THE CITY OF WILLARD, AS FOLLOWS:**

**SECTION 1. REPEAL SECTION 400.510**

Section 400.510 is hereby repealed in its entirety

**SECTION 2. REPLACEMENT OF SECTION 400.510**

Section 400.510 is hereby replaced with the following:

**Section 400.510 - MIXED USE DISTRICT (MU)**

**Authority:** Upon enactment of an ordinance by the Board of Aldermen, a development plan for a Mixed-Use District may be approved in any district in the City of Willard, subject to the procedures and standards in this Section.

- A. **Purpose:** The intent of the **Mixed Use (MU) District** is to encourage more creative and imaginative design than generally is not possible under conventional zoning regulations. It is intended to permit, upon application and upon approval of site and use plans, the creation of MU districts. MU Zones have been established to encourage creative and efficient planning and development of land within our community by providing greater flexibility in the use of and placement of buildings and structures on the land, the consolidation and preservation of community-valued view corridors, open spaces and trails. Proposed developments should be designed to maximize the integration of improvements into the natural and proposed landscape, thereby minimizing the visual impact on both view corridors/viewsheds as well as from property to property within the community. These MU provisions are intended to create a more attractive, walkable, desirable environment within the City.

**B. REZONE APPROVAL PROCESS:**

**Application for zone change:** Any person desiring to develop property under the provisions of this article shall first file an application for a zone change on the standard form provided by the City.

**Staff developer review:** *Prior* to the review of the MU Development plan and text by the Planning Commission, the applicant shall schedule a meeting with the planning department. **Staff Developer Meetings will be held on Wednesdays and require a week scheduling notice.** Upon receiving an appointment notice, the planning department will invite all necessary staff and other agencies for the scheduled applicant meeting. The zone change application shall include a conceptual plan and

supporting text materials which describe the proposed land uses, density and the proposal's relationship to the City comprehensive plan, as well as elevations of proposed buildings within the development. After the Staff Developer Meeting, the staff shall furnish to the applicant any comments regarding the zone change request that may help the applicant in preparing the request for submission. Staff shall hold such meetings with the applicant as are deemed necessary for proper review.

**Public Hearing By Planning Commission, With Review And Recommendation:** The Planning Commission will schedule a public hearing to consider the proposed zone change and shall review the conceptual plan, supporting text materials and staff comments for compliance with applicable general plan policies. The Planning Commission shall also make recommendations concerning the zone change request which will be forwarded to the Board of Aldermen

1. **Review by Board of Aldermen:** The Board of Aldermen will receive the recommendations of the Planning Commission and schedule a public meeting to consider official action on the zone change request.
2. **Decision Of Board of Aldermen:** The Board of Aldermen may approve, modify and approve, or deny the zone change request.

**C. PERMITTED USES:**

- "Home occupations", as defined in **Section 400.540** of this title.
- Multiple-family residential uses.
- Single-family residential uses.
- Townhouse and condominiums

Any combination of the above uses, **or other uses** that may be determined by the Planning Commission to be compatible and in harmony with each other according to the designated and approved development.

**D. GENERAL REQUIREMENTS:**

1. **Application And Plan:** The applicant will submit an application for a zone change on the standard zone change application form of the City, along with a site conceptual development plan, as outlined in this article, for a Mixed Use Development
2. **Planning Staff Review:** *Prior* to the review of the Preliminary Development plan and text by the Planning Commission, the applicant shall schedule a meeting with the planning department. **Staff Developer Meetings will be held on Wednesdays and require a week scheduling notice.** Upon receiving an appointment notice, the planning department will invite all necessary staff and other agencies for the scheduled applicant meeting. After the Staff Developer Meeting, the staff shall furnish to the applicant any comments regarding the zone change request that may help the applicant in preparing the request for submission. Staff shall hold such meetings with the applicant as are deemed necessary for proper review.
3. **Conceptual Development Plan:** All requests shall be accompanied by a colored site development plan and written text for the entire property proposed to be developed.
4. **Ownership:** A planned unit development shall be in single or corporate ownership at the time of application, or the subject of an application filed jointly by all owners of the property.
5. **Open Spaces:** Preservation, maintenance and ownership of open spaces within the development shall be accomplished by:
  - a. Dedication of land as a public park or parkway system; or
  - b. Granting to the City a permanent open space easement on or over the said private open spaces to guarantee that the open space will remain perpetually in common use, with ownership and maintenance being the responsibility of a homeowner's association

- established with articles of association and bylaws which are satisfactory to the Board of Aldermen; or
- c. Creating and complying with bylaws which provide for the payment of common expenses for the upkeep of the common areas and facilities.

**E. CONTENT OF WRITTEN TEXT/SITE PLAN:**

**Use Of Land:** The applicant shall prepare a site plan and written text that show and clearly explain the projected use of land including percentages of land devoted to various types of land use, such as building coverage, parking area, landscaped area, etc.

**Buildings:** The text shall indicate the type, character and proposed height of all buildings. The plot plan, elevations and perspective drawings shall be prepared by the applicant to help the Planning Commission and Board of Aldermen better understand the proposal. (Elevations may not be required when applying for a residential - single lot development.)

**Density:** The density in terms of dwelling units per gross acre of land shall be indicated.

**Common And Open Spaces:** The location of any proposed school sites, churches, parks and other common or open spaces shall be identified.

**Phasing Plan:** A phasing plan, if the development is proposed to be developed in phases, shall be submitted.

**Topography:** Topography at contour intervals of two feet (2') shall be submitted.

**Natural Features:** Schematic diagram showing significant natural features such as stands of trees, sinkholes, wetlands, rock outcroppings, etc.

**Landscape Plan:** A landscape plan showing the general location of the lawn area, shrubs, trees and fencing shall be submitted. (This may be part of the site or plot plan.) All landscaping shall be maintained by the governing body of the subdivision. All plants and trees shall be cared for and properly maintained. Any dead plants or trees shall be replaced within 30 days per **Section 400 Article VIII**

**Developable Area Reserved For Landscaping:** The amount of developable land area reserved for landscaping shall be indicated (with a minimum of 20 percent of the site area developed as landscaping).

**Utilities Underground:** All utilities shall be underground unless otherwise approved by the Planning Commission. Transformer equipment shall be screened from the streets and from adjacent properties.

**Refuse Storage Areas:** Refuse storage areas shall be screened so that materials stored within these areas shall not be visible from access streets, freeways and adjacent properties. Storage or refuse areas shall not be located within required building setbacks nor within utility easements.

**Lighting Plan:** The plans submitted shall include a general lighting plan indicating the location of lights to be installed on site. Design shall follow **Section 400.1370**

**Turning Spaces:** Safe and convenient turning space shall be provided for cars, sewer vehicles, refuse collection vehicles, fire-fighting equipment, etc., at the end of private drives and dead-end streets.

**Traffic Conditions:** A traffic analysis and street study shall be done by a certified engineer showing the effect of the development on traffic conditions on new and abutting streets shall be shown. The traffic analysis must extend from the proposed subdivision to the nearest arterial. The analysis shall be done on all accesses to the project and note loads on all affected streets. Existing traffic counts may be estimated from a study of the area served by the subject road or by counting vehicles consistent with good engineering practice.

**Layout:** The layout of the site with respect to locations and dimensions of vehicular and pedestrian entrances, exits, driveways and walkways.

**Off Street Parking:** The arrangement and adequacy of off-street parking facilities & guest Parking per **Article IX**

**Offsite Improvement Guarantees:** See section **400.1460**

**Planning Objectives:** The text material shall set forth planning objectives to be accomplished through the development of the project and show that the requested MU zoning is in conformance with the City general plan and complies with the requested zoning designation.

**Public Improvements:** All public improvements shall comply with **Section 400.1430**

**Improvements:** Location, grades, widths, and type of improvements proposed for all streets.

**Line Locations:** A plan showing the location of all water, sewer and drainage lines in and through the project.

**Deed Restrictions; Covenants:** Copies of all deed restrictions, restrictive covenants, bylaws, architectural controls or other requirements that may be appurtenant to the proposed development.

**Signage:** The size, location, design and nature of signs, if any, and the intensity and direction of area flood lighting shall be detailed in the text materials. Lighting shall be in accordance with **Section 400.Article X**

**Grading And Drainage Plan:** A grading and drainage plan shall be submitted with the site development plan. A **SWPPP** Plan shall be provided detailing silt fencing, track pads and stormwater drain protection.

**Stormwater Plan:** An engineered stormwater plan will be produced by a registered engineer to evaluate potential flows and develop a stormwater drainage plan. Detention, retention and release shall be determined through this reporting. The stormwater drainage report shall be conducted in accordance with and shall include all applicable information, maps, calculations and other materials as specified in Chapter **405** Design Standards for Public Improvements, Article **V**, Stormwater Design Standards — General Provisions.

If the proposed development is located within a flood hazard area, the stormwater drainage report shall provide all applicable information as specified in the Article **XVII**, Section 400.1520 (Floodplain Management Regulations).

**Geotechnical Report:** A geotechnical report identifying any possible flood, slope, faulting, soils or other related hazards on the site shall be submitted with the application

## **F. DEVELOPMENT GOALS:**

The procedures herein established are intended to substitute procedural protections for substantive regulations in recognition of the fact that traditional density, bulk, spacing and use regulations, which may be useful in protecting the character of substantially developed areas, may impose inappropriate and unduly rigid restrictions upon the development or redevelopment of parcels which lend themselves to an individual, planned approach. In addition, a development plan should be designed to ensure that the following general goals will be achieved

1. The proposed development may differ from the provisions of the other zoning districts of this Chapter but are congruent with the spirit and intent of this Chapter and the Willard Comprehensive Plan.
2. The development will efficiently utilize the available land and will protect and preserve, to the extent possible, natural features of the land such as trees, streams and topographic features.
3. The development shall provide for harmonious and coherent site and building design that creates a sense of place.
4. The development will be in an area in which transportation, Police and fire protection, other public facilities and public utilities, including sewerage, are or will be available and adequate



for the uses proposed; provided however, that the applicant may make provision for such facilities or utilities which are not presently available.

5. In determining whether a proposed MU District should be approved, the Planning and Zoning Commission and the Board of Aldermen should consider the extent to which the proposed development plan is consistent with the Willard Comprehensive Plan and the other adopted plans and policies of the City.
6. To achieve these purposes, the requirements for a MU District may vary from and be either more or less restrictive than the requirements of other district regulations in this Article.

G. ***Effect Of MU District Approval.*** Approval of a MU Zoning District shall constitute an amendment to the zoning ordinance. Designation of a property as a MU District in accordance with an approved development plan shall supersede all existing and prior zoning classifications. Such property shall for zoning purposes be identified by the letters MU followed by an identifying number.

H. ***Procedure.*** Conceptual Development Applications for MU District designation shall be submitted pursuant to a three-step review process as specified in this Section. The process shall include:

1. Staff Developer Review Completed
2. A Conceptual Development Plan; and
3. A Final Development Plan.

#### I. APPLICATION FOR CONCEPTUAL DEVELOPMENT PLAN

**In addition to this section, Conceptual Development Plans shall follow Sections 400.510.D, E & J for design criteria**

**Building Coverage:** The land coverage by all buildings shall not exceed Sixty percent (60%) of the net lot or parcel acreage unless approved by the Board of Aldermen.

**Open Space:** Open space is defined as landscaping, approved trails, parks, park connectors, recreation areas, and designated open space. Detention areas, floodplains, and non developable land shall not be counted in the open space requirement

**Minimum Lot Size:** The minimum lot size in single-family residential subdivisions with private individual lots (no common area within lots) is Seven thousand (7,000) square feet; provided, **that at least twenty percent (20%) of the total project is developed and maintained as common open landscape or recreation area.** Areas of density greater than 3 houses per acre may be reviewed in accordance with this chapter

**Starting Density:** 3 houses per acre

**J. Bonus Density:** The density of a planned unit mixed use development shall conform to the density limitations of the general plan, except that the Board of Aldermen upon recommendation of the Planning Commission may approve a density greater than the general plan designation where the following findings are made:

1. The proposed dwellings are platted for individual ownership of the dwelling units, and
2. The density and building scale of the proposed units are similar in scale to an adjoining developed parcel or is considered in scale with the surrounding area and fits harmoniously into the neighborhood, **but in no case shall exceed six (6.2) dwelling units per acre.**

To be considered for density increases, the applicant will include, as part of the development design, any of the following credits:

- **Landscaping Along Periphery Of Development:** A common area landscaped strip of twenty five feet (25') shall be created along the periphery of the development and surrounds at least Seventy percent (70%) of the development. Walking paths, benches and gathering places may be integrated into this open space. An approved subdivision sign shall be constructed within the landscaping strip. All open space and landscaping shall be maintained regularly. Any landscaping plants that die shall be replaced within 30 days. All landscaping will be owned and maintained by the HOA or designated party.
  - **An increase of half a dwelling unit to one dwelling unit per acre may be added to the minimum density for the development.**
  
- **Tree Lined Streets:** Tree lined streets for all streets (internal and periphery) to provide shade for sidewalks and to reduce solar heat gain. If all streets within the development, on both sides of the streets, will have a landscape strip between the curb and sidewalk planted with shade trees at forty-five-foot (45') spacing or less, with trees that are of twenty four inch (24") box containers with a minimum of one and one-half inch (1 1/2") caliper, All tree installations shall follow **Section 400.770** for installation and setbacks. Trees shall be maintained until established, dead trees shall be replaced within 30 days of notice. All trees shall be maintained by the HOA or designated party.
  - **An increase of half a dwelling unit to one dwelling unit per acre may be added to the minimum density for the development**
  - **Qualifying trees-400.510.K.3.C - APPROVED LANDSCAPING PLANTS.docx**
  
- **Walking Trail of 12' of concrete to be installed:** Where designated, a walking trail shall be established and designed to provide access to open space and connectivity to adjacent properties. Trails shall be installed in accordance with the City of Willard trails specifications and master trails plan. All approved trails and easements shall be dedicated to the City of Willard for maintenance and upkeep
  - **An increase of one dwelling unit per acre may be added to the minimum density for the development**
  
- **Interconnectivity** Interconnectivity of existing subdivisions is a priority. The connection of surrounding subdivisions to the new development is important. Credit will be given for the cost of installation of 1500 feet of Five foot (5) sidewalk within the city right of way of an existing subdivision.
  - **An increase of half a dwelling unit to one dwelling unit per acre may be added to the minimum density for the development**
  
- **Increased Recreational Facilities:** Additional designated approved recreational amenities, above the requirements as already set forth for planned unit development, may receive an increase in density, as approved by the Planning Commission and Board of Aldermen in accordance with this chapter.
  - **An increase of half a dwelling unit to one dwelling unit per acre may be added to the minimum density for the development**
  
- **Architectural design:** If the project is submitted and approved for architectural design standards designated by the City of Willard. This includes multiple floor plans and sliding

square footage. Adding affordable housing options and ADA Accessible units as part of the project will add to your possible total.

- **An increase of half a dwelling unit to one dwelling unit per acre may be added to the minimum density for the development**
- **Pocket Parks and Park Connectors:** In accordance with section 405.115 the developer may establish a pocket park with available public connections for the entertainment and utilization of the public. Design and installation shall follow Willard Park standards. upon approval of conceptual design.
- **An increase of half a dwelling unit to one dwelling unit per acre may be added to the minimum density for the development**
- **Mixed Use:** The project will be evaluated on its use of multiple zones i.e. residential, commercial, R-3 etc. Project will be graded on use and design of mixed uses.
- **Combined Uses:** Bonus points will be awarded from use of combined uses within the project. Points will be given on design criteria, layout, height, location and accessibility.
- **An increase of half a dwelling unit to one dwelling unit per acre may be added to the minimum density for the development**

#### **K- Preferred Developers**

**Upon submission of the conceptual development plan, the project will be graded on the following items.**

- 1. Diversity of Design**
- 2. Bonus Density**
- 3. Active Transportation and Interconnectivity**
- 4. Recreation Areas**
- 5. Mixed Use**

**Preferred developers will be eligible for**

- **Expedited Permitting Processes**
- **Preferred Plan Review**
- **Block Inspection Times**
- **Standard Permits on Homes**

**L. Setbacks:** The setbacks for all Planned Unit Developments will be as follows:

- a. **Front Yard:** Front yard setbacks shall be a minimum of twenty feet (20'). ~~The street side of corner lots, shall be the same as the front yard setback.~~ Approved Corner lot side setbacks may be adjusted to be less than 20 feet if the property meets the intersection sight triangle requirements
- b. **Building, Parking Required:** The front yard setback area shall not be used for long term parking of any motor vehicles, or for required additional visitor parking, except for the driveway directly in front of the garage or carport of the dwelling unit.

c. **Side Setbacks:** Side yard setbacks on interior lot lines shall be a minimum of five feet (5') on one side and ten feet (10') on the opposite side for all dwellings, with a minimum of fifteen feet (15') between homes. Side yard setbacks on exterior lot lines (boundary lines) shall be a minimum of ten feet (10').

d. **Rear Setbacks:** Rear yard setbacks shall be a minimum of ten feet (10').

\*Setbacks differing from the above standards will require approval of the Board of Aldermen. In all cases building and fire codes will be satisfied.

3. **Parking Requirements:** The parking requirements of **Section 400 Article IX** of this title shall apply.

4. **Signs And Advertising:** The requirements of **Article X** of this code shall apply, except that in large residential planned unit developments (*those containing more than 200 dwelling units*), the *Planning Commission may approve an overall sign scheme for the project which may exceed the restrictions.*

5. **Height Restrictions:** No building shall be erected to a height greater than thirty-five feet (35') **unless specifically approved as part of the mixed-use plan**

6. **Size Requirement:** Each Planned Unit Development Zone shall contain a minimum of ~~twenty thousand (28,000) square feet and four (4) dwelling units.~~ 7000 square feet

7. **Open Space Requirement:** All planned unit developments shall have a minimum of Forty percent (40%) of the developable site area developed and maintained as landscaped or natural open space. **Floodways unless altered (LOMAR) and slopes that exceed a specific percentage are not considered developable.** The applicant of the requested MU Zone shall show what areas are to be landscaped and what areas are to be left in a natural state. The Board of Aldermen shall determine if the proposed landscaped areas and the areas proposed to be left in a natural state will satisfy the Forty percent (40%) landscape or natural open space requirement. In any event, all landscaped and open green space areas shall be kept in a weed free condition. All proposed structures, future structures, roads and parking areas are excluded from the calculations used to satisfy this requirement.

8. **Time Limitations:** Building permits for construction within MU Zones must be obtained within eighteen (18) months of the approval of a zone change to planned unit development - single lots. If eighteen (18) months elapsed without the issuance of building permits for the construction of the approved plans within the MU Zone, all conceptual and preliminary plan approvals shall be deemed null and void, unless an extension is granted. The applicant shall request an extension on an approved development plan prior to the expiration of the eighteen (18) month time limit. The Planning Director may approve a six (6) month extension on an approved development plan. In the case that a second six (6) month extension is needed, the applicant shall request a second extension on the approved development plan prior to the expiration of the first six (6) month extension time limit. The Board of Aldermen will approve or deny the requested second extension on the development plan. In the case that an approved development plan does expire, the zoning of the property shall remain a planned unit development, but no construction will be allowed on the property until a new plan is submitted and approved by the Planning Commission and the Board of Aldermen.

9. **Recreation Or Playground Areas:** In developments with five (5) or more units, there shall be provided usable recreation or playground areas with a total minimum area of one thousand (1,000) square feet for five (5) units and an additional two hundred (200) square feet for each unit over five (5) units. No side measurement of each usable recreation or playground area shall be less than twenty feet (20') in width/length. At least fifty percent (50%) of the usable area shall be in the form of open playground and green space.

M. **Planning Commission Submittal-** Upon completion of the Staff Developer Review and submittal of the Conceptual Development application, the Director of Development shall forward to the Planning and Zoning Commission for public hearing as required by **Section 400.360** with written comments with respect to the proposed planned development and shall also provide such recommendations as may

inform and assist the applicant in preparing an application for approval of a MU District. The Planning commission may Refuse, Modify or Accept proposed submittal per Section **400.510.F.1-6**

- N. **Board of Aldermen Submittal:** After giving the notice required by Section **400.360** of the Willard Land Development Regulations, a public hearing on the proposed conceptual development plan shall be set, advertised and conducted by the Board of Aldermen within forty-five (45) days of action or failure to act by the Planning and Zoning Commission. Within thirty (30) days following the conclusion of the public hearing, unless a delay is requested by the applicant, the Board of Aldermen may Approve with or without modifications, Deny, or Refer Preliminary Development Plan back to the Planning Commission for further consideration.
- O. **Installation of Approved Utilities according to the Conceptual Development Plan**
1. All utilities and infrastructure shall be installed and inspected for compliance to city codes or
    - a. **Per Section 400.1430** the developer may bond for infrastructure of the development to delay installation. In no case will the Final Development Plan or Final Plat be approved without the installation of all defined utilities.
  2. As built drawings shall be submitted and approved to be in accordance with city statute.
  3. **Per Section 400.1450** a warranty bond in the amount approved by the board of aldermen to guarantee that the developer will correct all defects in such improvements or facilities that occur within two (2) years after the offer of dedication of such facilities or improvements is accepted by the City.
- P. **Final Action by the Planning Commission:** The Planning and Zoning Commission shall review the proposed final development plan for compliance to conformity of the approved conceptual plan. The final development plan shall be inspected to ensure that all conditions, regulations, ordinances, and codes have been satisfied as requested. If the final development plan has been found to be in compliance the planning commission shall recommend approval of a MU District and approval of the final development plan.
- Q. **Final Action by Board of Aldermen.** Within forty-five (45) days following the submission by the applicant or referral from the Planning and Zoning Commission of a complete application for the Final Development Plan or such longer period as may be agreed to by the applicant, the Board of Aldermen shall review the plan with respect to its conformity to the approved conceptual development plan; with respect to the merit or lack of merit of any departure of the final development plan from the conceptual development plan; and with respect to compliance of the final development plan with any conditions imposed by approval of the conceptual, State and City codes, ordinances and regulations. If the Final Development Plan is found to be in compliance the Board of Aldermen shall approve the Plan. The Board of Aldermen's action shall constitute final approval of the final development plan.

In any case, where the Board of Aldermen finds that the final development plan lacks substantial conformity to the preliminary development plan and does not merit approval, it shall not be approved. The failure of the Board of Aldermen to act within the aforesaid period shall be deemed a denial of the final development plan as submitted.

- R. **Building And Other Permits.** Upon, but not before, receiving notice that the final development plan has been approved and upon application by the applicant, all appropriate officials of the City may issue building and other permits to the applicant for development, construction and other work in the area encompassed by the approved final development plan; provided however, that no such permit shall be issued unless the appropriate official is first satisfied that the requirements of any codes or ordinances of the City have been met which are applicable to the permit sought.
- S. **Adjustments To Plan During Development.** During the construction of a planned development, the Board of Aldermen may authorize minor adjustments to the final development plan when such

adjustments appear necessary considering technical or engineering considerations first discovered during actual development. Such minor adjustments must be brought to the Board of Aldermen's attention and must be voted on to be approved and made a part of the final development plan.

- T. ***Amendments To Final Development Plan.*** In addition to the minor adjustments authorized by Subsection (K) above, an approved final development plan may be amended, varied or altered in the same manner and subject to the same limitations as any other regulation established by this Article. In addition, an approved final development plan may be amended or altered pursuant to the procedures established by this Section for its original approval.
- U. ***Compliance With Final Development Plan.*** The construction and operation of a planned development shall be in compliance with the approved final development plan at all times.

#### **400.511 - MULTIPLE FAMILY DEVELOPMENT STANDARDS:**

##### **A. Multifamily MU shall follow sections D, E, and L for design along with the following:**

1. The density and building scale of the proposed units are similar in scale to an adjoining developed parcel or is considered in scale with the surrounding area and fits harmoniously into the neighborhood, as determined by the Board of Aldermen but in no case shall exceed a twenty five percent (25%) dwelling units per acre increase as stated in the general plan
2. **Setbacks:** The setbacks for all planned unit developments - multiple family will be as follows, unless an approved setback alternative plan is granted by the Planning Commission and approved by the City Council:
  - a. **Front Yard:** Front yard setbacks shall be a minimum of twenty feet (20'). The street side of corner lots shall be the same as the front yard setback.
  - b. **Building, Parking Required:** The front yard setback area shall not be used for long term parking of any motor vehicles, or for required additional visitor parking, except for the driveway directly in front of the garage or carport of the dwelling unit.
  - c. **Side And Rear Setbacks:** Side and rear setbacks on interior lot lines shall be a minimum of ten feet (10') for all dwellings.
3. **Group Dwellings:** In group dwellings, no two (2) buildings may be located closer together than ten feet (10') for one- story buildings, fifteen feet (15') for two-story buildings, and twenty feet (20') for approved three-story (or more) buildings.
4. **Two-Story Buildings:** For two-story (or more) buildings, the side and rear setbacks shall be at least twenty-five feet (25') along the boundary of a Single-Family Zone, and twenty feet

##### **B. PLAN REVIEW CONFERENCE:**

1. **Required:** Following the approval of the Planned Unit Development - Residential Zone change and upon request for issuance of any building permit therein, the developer and contractor and the planning staff shall meet to review the requirements of the zone change and to make sure that the developer and contractor are aware of the conditions under which the zone change was granted.
2. **Plans Stamped and Signed:** At the plan review conferences, the plans will be stamped and signed by the staff, developer and contractor as the official set of construction plans from which the work will be performed.
3. **Changes or Modifications:** Any changes or modifications to the approved plan for development during the period of construction shall first be re-submitted to the planning staff for approval and if deemed significant and at the discretion of the staff, returned to the Planning Commission for their review and recommendations and to the Board of Aldermen for a public meeting to consider official action on the zone change as provided for in section S. of this article.

**Section 400.510.K.3.C - APPROVED LANDSCAPING PLANTS**  
**TREE AND SHRUB SUGGESTIONS FOR PROPERTIES WITHIN THE CITY OF WILLARD**

**LARGE TREES:**

Bald Cypress, *Taxodium distichum*,  
Black Oak, *Quercus veluntina*  
Bur Oak, *Quercus macrocarpa*  
Chinkapin Oak, *Quercus muehlenbergii*  
Northern Red Oak, *Quercus rubra*  
Swamp White Oak, *Quercus bicolor*  
White Oak, *Quercus alba*  
Willow Oak, *Quercus phellos*  
Tulip (Yellow) Poplar, *Liriodendron tulipifera*  
American Basswood, *Tilia Americana*  
Northern Catalpa, *Catalpa speciose*  
Sugar Maple, *Acer saccharum*  
London Plane Tree, *Platanus x acerifolia*  
Ginko, *Ginko biloba*  
Blackgum, *Nyssa sylvatica*  
Kentucky Coffee Tree, *Gymnocladus dioicus*  
Norway Spruce, *Picea abies*  
Pecan, *Carya illinoensis*

**SMALL TO MEDIUM TREES**

Persimmon, *Diospyrus virginiana*  
Flowering Dogwood, *Cornus florida*  
Blackhaw, *Viburnum prunifolium*  
Ohio Buckeye, *Aesculus glabra*  
Red Buckeye, *Aesculus pavia*  
Redbud, *Cercis Canadensis*  
Serviceberry, *Amelanchier arborea*  
American Holly, *Ilex opaca*  
Deciduous Holly, *Ilex decidua*

Flowering Crabapple (*Malus*-cultivars)  
Sassafras, *Sassafras albidum*  
Zelkova serrata  
Black or Rusty Blackhaw, *Nyssa sylvatica*  
Eastern Wahoo, *Euonymus Atropurpureus*  
Hawthorn (Numerous species and cultivars)

### **SHRUBS**

Rhododendrons-Numerous species will grow here, but they must be planted in shaded sites.

Barberry  
Buddleja (Butterfly Bush)  
Lilac  
Spiraea (Numerous species)  
Quince  
Forsythia  
Hydrangea (Native is very hardy)  
Ribes (Aromatic spineless)  
Viburnum (Numerous species, Leatherleaf is a good one)  
Weigela

### **Prohibited Trees/Shrubs**

More importantly than preferred trees would be a strict prohibition on trees categorized as invasive by the Missouri Department of Conservation.

As of January 2022, the Missouri Department of Conservation (MDC) had identified the following as the top ten most invasive trees in Missouri:

1. Callery Pear (*Pyrus calleryana*): Also known as Bradford Pear or Cleveland Select
2. Tree of Heaven (*Ailanthus altissima*)
3. Siberian Elm (*Ulmus pumila*)
4. Japanese Honeysuckle (*Lonicera japonica*)
5. Autumn Olive (*Elaeagnus umbellata*)
6. Common Buckthorn (*Rhamnus cathartica*)
7. Chinese Privet (*Ligustrum sinense*)
8. Amur Honeysuckle (*Lonicera maackii*)
9. European Buckthorn (*Rhamnus frangula*)
10. Russian Olive (*Elaeagnus angustifolia*)



Read and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri, on the 12<sup>th</sup> day of **November 2024**.

Approved as to Form: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Troy Smith, Mayor

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #18

## **An Ordinance Revising and Replacing Section 400.890 of the City Code**

**AN ORDINANCE REVISING AND REPLACING SECTION 400.890 OF THE CITY CODE**

**WHEREAS**, Schools are encouraged and allowed in the R-1 zone and,

**WHEREAS**, proper signage is important for the identification and identity of the school and,

**NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF THE CITY OF WILLARD, AS FOLLOWS:**

**SECTION 1. REPEAL SECTION 400.890**

Section 400.890 is hereby repealed in its entirety

**SECTION 2. REPLACEMENT OF SECTION 400.890**

Section 400.890 is hereby replace with the following:

**Section 400.890 Signs Permitted in "R-1," "R-2" and "R-4" Residence Districts.**

- A. Unless otherwise provided in Section **400.860**, the following signs shall be permitted in the "R-1," "R-2" and "R-4" Residence Districts:
1. One (1) non-illuminated name plate or sign for each dwelling unit, not exceeding one (1) square foot in area, indicating the name of the occupant. Such signs must be attached to the principal structure, be parallel with the wall to which it is attached, and no part of said sign may extend into any required yard setback.
  2. One (1) non-illuminated name plate or identification sign not exceeding twelve (12) square feet in area for buildings other than dwellings, provided that said sign shall be attached to and parallel with the front wall of the building.
  3. One (1) white, illuminated, on-premises church or school bulletin board not exceeding eighteen (18) square feet in area.
  4. Non-illuminated real estate sale or lease sign or signs not exceeding a total area of twelve (12) square feet pertaining to the sale or rental of the property on which said sign is located.
  5. Signage for schools including wall, illuminated and pedestal signs not exceeding 40 square feet

Read twice and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri, on the **12<sup>th</sup> day of November 2024.**

Approved as to Form by: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Troy Smith, Mayor

Attested By: \_\_\_\_\_

Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #19

## **An Ordinance Revising and Replacing Section 705.090 of the City Code**

**First Reading: 10/28/24**

**Second Reading: 11/12/24**

**Bill No: 24-55**

**Ordinance No: 241111E**

**AN ORDINANCE REVISING AND REPLACING SECTION 705.090 OF THE CITY CODE**

**WHEREAS,** The city has approved new connection fees and

**WHEREAS,** connection and capacity table were added to the section

**NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF THE CITY OF WILLARD, AS FOLLOWS:**

**SECTION 1. REVISE SECTION 705.090**

**Section 705.090** is hereby revised

**Section 705.095** is hereby added

**SECTION 2. REVISION OF SECTION 705.090**

**Section 705.090. Connection To System — Fees. [Ord. No. 071113B §11, 11-13-2007; Ord. No. 092710 §1, 8-13-2010; Ord. No. 100913 §12, 9-13-2010]**

- A. No connections with a water main shall be made by any person other than a City employee. All such connections shall be made by or under the supervision of the Public Works Director. Applications for such connections must be made to the City Clerk.
- B. No fee shall be paid for the connection, as each new owner of a site where there has not previously been a water meter installed shall pay the City the costs for the meter. Fees for the installation of said meter shall be paid according to the schedule established below. The cost for the meter and the cost of installation shall be paid prior to obtaining water service. **[Ord. No. 210111B, 1-11-2021]**

<b>Meter Size</b>	<b>Fee</b>
¾ inch	\$ 650.00
1 inch	\$ 750.00
2 inches	\$1,550.00
4 inches	\$5,500.00
6 inches	\$9,950.00

These charges shall be for installation of the meter pit and all necessary hardware, including the appropriate meter size. In the event the request is only for the standard ¾" meter, the charge will be six hundred fifty dollars (\$650.00). For all meter installations larger than 2", shall be high low meter sets.

- C. Any person outside the City limits that requests permission to connect to the Waterworks

System must: (1) file an application for a special connection permit; and (2) execute and file with the Recorder of Deeds an irrevocable consent to annex into the City limits pertaining to their property. [Ord. No. 201214E, 12-28-2020]

**Section 705.095 Water Capacity Fees**

Meter Size	Capacity Fee
1 inch	\$800.00
2 inches	\$1,700.00
4 inches	\$4,100.00
6 inches	\$9,600.00
Over 6 inches	Priced per Project

- A. For all information regarding capacity and facility fees See Section 500.115

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri, on the **12<sup>th</sup> day of November 2024.**

Approved as to Form: \_\_\_\_\_  
Nate Dally, City Attorney

Approved By: \_\_\_\_\_  
Troy Smith, Mayor

Attested By: \_\_\_\_\_  
Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #20

## **An Ordinance Revising and Replacing Section 705.125 of the City Code**



**First reading: 10/28/24**

**Bill No.: 24-56**

**Second Reading: 11/12/24**

**Ordinance No.: 241111F**

**AN ORDINANCE REVISING AND REPLACING SECTION 705.125 OF THE CITY CODE**

**Section 705.110. Plumbing To Be in Compliance with Ordinances Before Water Turned On in New Construction. [Ord. No. 071113B §14, 11-13-2007; Ord. No. 100913 §15, 9-13-2010; Ord. No. 140922C §1, 9-22-2014; Ord. No. 161114F §1, 11-28-2016]**

- A. No water shall be turned on for service in new construction in which the plumbing does not comply with the ordinances of the City; provided that water may be turned on for construction work in unfinished buildings, subject to the provisions of this Article.
- B. All plumbing fixtures and methods of installation shall comply with the requirements of the applicable City ordinances.

**Section 705.120. Prohibited Use of Water from System Unless Metered. [Ord. No. 071113B §15, 11-13-2007; Ord. No. 092710 §1, 8-13-2010; Ord. No. 100913 §16, 9-13-2010]**

- A. It is hereby declared unlawful and an offense for any person or persons to knowingly use water from the said municipal system unless said water is metered as provided herein.
- B. No water from the City water supply shall be turned on for service into any premises by any person but the Director of Public Works or some person authorized by him to perform this service, except in case of emergency.
- C. No person shall attach a device to a water line to receive water without benefit of a meter installed by the City. Also, no person shall damage or destroy City owned property such as the water meter or the electronic radio transmitter. Such will be a direct violation of this Article and will be subject to a citation and fine as defined in Section 705.160.

**Section 705.125 Bulk Water**

- A. All bulk water shall be metered using a hydrant meter in conjunction with an approved double check valve, air gap or approved backflow device.**
- B. Meter rental: A \$1300.00 deposit shall be given for the use of the bulk water meter. The user shall define the project duration up to a maximum of 4 weeks. The user will then pay \$50.00 per week for the rental of the bulk meter**

**Section 705.130. Water Not To Be Resold or Distributed. [Ord. No. 071113B §16, 11-13-2007; Ord. No. 100913 §17, 9-13-2010]**

No water shall be resold or distributed by the recipient thereof for the City supply to any premises other than that for which application has been made and the meter installed, except in case of emergency.

**Section 705.140. Water Meters Installed Remain Property of City — Unlawful To Damage,**

**Etc., Property of Water System. [Ord. No. 071113B §17, 11-13-2007; Ord. No. 100913 §18, 9-13-2010]**

All water meters installed as herein provided are hereby declared to be and to remain the exclusive property of the City of Willard, Missouri, and it is hereby declared unlawful and an offense for any persons to damage, destroy, steal, or tamper with in any manner whatsoever with any water meter or with any other part of said water system.

Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the **12<sup>th</sup> day of November 2024.**

Approved as to Form by: \_\_\_\_\_

Nate Dally, City Attorney

Approved By: \_\_\_\_\_

Troy Smith, Mayor

Attested By: \_\_\_\_\_

Janie Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #21

## **An Ordinance Revising and Replacing Section 710.475 of the City Code**

**First Reading: 10/28/24**  
**Bill No: 24-57**

**Second Reading: 11/12/24**  
**Ordinance No:241111G**

**AN ORDINANCE REVISING AND REPLACING SECTION 710.475 OF THE CITY CODE**

**WHEREAS,** The city has approved new capacity fees and

**WHEREAS,** connection and capacity table were added to the section

**NOW, THEREFORE BE IT ORDAINED BY THE BOARD OF THE CITY OF WILLARD, AS FOLLOWS:**

**SECTION 1. REVISE SECTION 710.475**

Section 710.475 is hereby revised

**SECTION 2. REVISION OF SECTION 710.475**

**Section 710.475. Sewer-~~Impact~~ Capacity Fees. [Ord. No. 190408E, 4-22-2019]**

- A. Schedule Established. Notwithstanding any other provision of this Code to the contrary, there is hereby established a charge to every new or expanded user of the POTW of the City, which is in addition to the other fees and charges under this Article. An expanded user of the POTW is a user which increases the size or number of water meters serving its property or premises. The sewer impact fee will be in accordance with the following sewer impact fee schedule and shall be based on the water meter(s) size serving the property or premises. [Ord. No. 220228C, 2-28-2022]

<b>Sewer Capacity Fee Schedule</b>	
<b>Meter Size (inches)</b>	<b>Capacity Fee</b>
3/4	\$1,000.00
1	\$3,000.00
2	\$7,200.00
4	\$22,500.00
6	\$45,500.00
Anything larger than 6 inches	Fees to be determined upon request

- B. New Users. New users of the POTW will not be assessed a sewer capacity fee in the following instances:
  - 1. ~~If an unexpired building permit was in existence for the user's property or premises on September 19, 1990.~~

2. If the user's property or premises was served by the POTW, or if the new user occupied a structure in and had previously been assessed for a joint sanitary sewer district, on the effective date of the ordinance from which this Section derives.
  3. If there was a break in sewer service to the user's property or premises for less than two (2) years.
  4. If the metered water usage on the user's property or premises is solely for the purpose of fire protection or landscape irrigation.
- C. Rules And Regulations. The Director will have authority to establish rules and regulations pertaining to sewer impact fees set forth in this Section in order to carry out the intent of the Section. Such rules and regulations must be placed on file with the City Clerk ten (10) days before they become effective. A permit to connect to the POTW shall not be issued by the City or any other agency acting on behalf of the City with respect to the issuance of permits to connect to the sewer system, unless the sewer impact fee set forth in this Section has been paid.
- D. Increase In Size or Number of Water Meters. Any user who increases the size or number of water meters serving its property or premises shall pay a fee equal to the difference between the sewer impact fee for the meter which existed prior to the increase, and the sewer impact fee for the newly installed meter.

**Section 710.476 Sewer Connection Fee Table**

<b>Sewer Connection Table</b>	
<b>Meter Size</b>	<b>Connection Fee</b>
3/4"	\$200.00
1"	\$350.00
2"	\$500.00
4"	\$850.00
6"	\$1,050.00
8"	\$1,550.00
Over 8"	Priced per Project

**For all sewer capacity and facility information See Section 500.115**

**Read two times and passed at a meeting of the Board of Aldermen of the City of Willard, Missouri on the 12<sup>th</sup> day of November 2024.**

Approved as to Form: \_\_\_\_\_  
Nate Dally, City Attorney

Approved By: \_\_\_\_\_  
Troy Smith, Mayor

Attested By: \_\_\_\_\_  
Janice Gargus, City Clerk

# CITY OF WILLARD, MISSOURI

224 W. Jackson Street P.O. Box 187 Willard, MO 65781 417-742-3033 417-742-3080 Fax



Agenda Item #22

## Sanitary Sewer Project Status

**CITY OF WILLARD**  
**INTERNAL MEMORANDUM**

**DATE:** November 12, 2024

**TO:** Mayor Smith and BOA

**FROM:** S. D. Bodenhamer

**RE:** Sanitary Sewer Project Status

COMMUNITY FUNDING PARTNERSHIP (94 Lift Station and Force Main)

Status of components:

- Filed our 2<sup>nd</sup> Semi-Annual Progress report and amended work plan with the USEPA.
- Preparing our second reimbursement request with the USEPA.

MEADOWS CONNECTION TO CITY OF SPRINGFIELD

Status of components:

- Awaiting reply to Construction Permit application from the Missouri Department of Natural Resources.

FINANCING

Carolyn and I had a conference call with Piper, the firm that has our 2018 Certificates of Participation. We inquired if Piper would finance an additional \$750K to \$1.25 M to cover our matching fund obligations. Such obligations will be determined after the 94 Lift Station and Force Main and the Meadows Gravity Line are bid for construction. The results of the conversation are as follows:

- Piper is favorable to financing such request as an Equipment Lease separate from of 2018 Certificates of Participation.
- We will present the following documents at the November 25, 2024, BOA Meeting for approval.
  - Piper/City of Willard engagement letter modifications.
  - Reimbursement Resolution