

Ridgetop

Wastewater Rate Study

2023

Prepared By:



City of Ridgetop 2023 Wastewater Rate Study

Executive Summary

Purpose

The purpose of this report is to present a comprehensive wastewater rate study for the City of Ridgetop (City) as it relates to the City's plans for:

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

Significant Events

- The City's customer base increased by 18 in Fiscal Year (FY) 2023, but future increases will be fewer unless new subdivisions are developed.
- The City's Wastewater Capital Improvement Plan includes six significant projects totaling \$1,031,000, financed via grants.
- The wastewater general expenses increased by 22% in FY 2023 due primarily to increases in maintenance and supplies.
- The City revenue is projected to grow less than 2% per year, while expenses are projected to grow about 7% per year.

Methodology

This report presents a comprehensive financial analysis of the City's wastewater system, including a historical four-year view and a five-year projection of revenue and expenses. A Five-Year Wastewater Capital Improvement Plan and the impact on deprecation are included. The City's Mayor, City Recorder, wastewater superintendent, and consulting engineer helped collect historical data and develop the Capital Improvement Plan, growth projections, financial projections, and final recommendations.

This study uses a Cash Flow Analysis and a Change in Net Position Analysis to determine the need for rate increases. Each indicates the financial stability of the City's wastewater system. Such information is compiled into Excel spreadsheets designed to function as financial models. Graphs and charts give a visual presentation of each analysis. The results of the Cash Flow Analysis and Change in Net Position Analysis determine the amount of rate increase needed.

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

Recommendation

Rate Increases

The following rate increases are recommended to (1) provide revenue to meet all wastewater operating expenses, including depreciation, (2) generate enough cash to fund the City's Wastewater Five-Year Capital Improvement Plan, and (3) comply with the Tennessee Comptroller's requirements regarding Change in Net Position. It is recommended to monitor and verify the projections presented in this report annually, react to unforeseen financial changes, and make corrections as necessary. The recommended rates are shown in **Figure 1**.

F	Proposed A	Annual Rate	Increases							
	2024 2025 2026 2027									
Wastewater	20%	5%	5%	5%						

Figure 1

Price elasticity is a measurement of how buyers respond to changes in price. Generally, as the price of a product increases, buyers will buy less of the product. The City may experience price elasticity with some of its customers. Since bills are based on water usage, some customers may request separate water meters for their irrigation system to reduce their bills. This report does not include a price elasticity analysis, nor does it anticipate customers requesting meters for irrigation purposes.

Customer Growth and Revenue Projections

Overview

The City depends on revenue from residential, commercial, and multi-unit apartment complex customers to pay for all wastewater system needs, including operation costs, maintenance, and construction projects. Projecting revenue over the next five years is critical for determining the sufficiency of current rates and the need for future rate increases. A review and analysis of the previous four years of records (FY 2019-2022) provide a reasonable basis for making projections concerning customer growth and revenue over the next five years (FY 2023-2027).

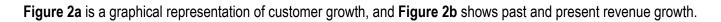
Customer Growth

The City has had sporadic customer growth over the past four years. Over the next five years, new customers are projected to grow at about two to seven customers per year.

Revenue Projections

Figure 2 shows the number of wastewater customers and the amount of revenue for the past four and the next five years.

		С	ustomers & F	Revenue (No	Rate Increas	ses)			
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Customers	475	506	514	519	537	539	543	550	557
New Customers		31	8	5	18	2	2	2	2
Lake Road							2	5	5
Revenue	\$418,043	\$429,732	\$438,591	\$455,164	\$446,329	\$447,829	\$450,829	\$456,079	\$461,329
Percent Change		2.8%	2.1%	3.8%	-1.9%	0.3%	0.7%	1.2%	1.2%



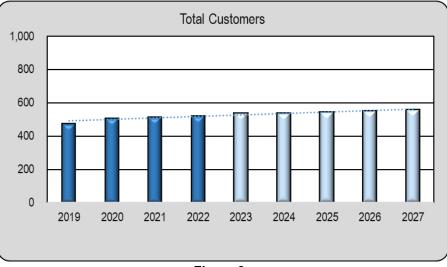
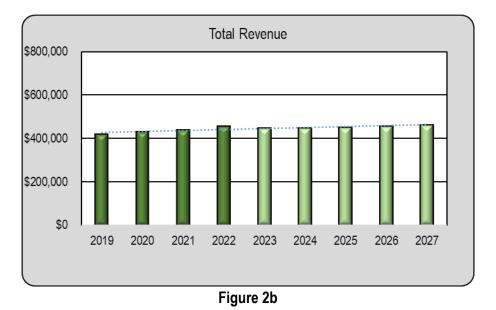


Figure 2a



Other Income

Figure 3 shows the City's wastewater system's income other than revenues. Tap fees will vary according to the number of new customers added to the system. Interest income increased in FY 2023 because of the increase in federal interest rates.

				Other Incom	ne							
	2019	2019 2020 2021 2022 2023 2024 2025 2026 2027										
Tap Fees			6,021	5,352	11,949	1,338	2,676	4,683	4,683			
Miscellaneous Income	10,882	1,482	76,091	28,450	13,135	10,000	10,000	10,000	10,000			
Interest Income	14,897	10,984	845	1,961	45,200	45,200	30,000	30,000	30,000			
Total Other Income	25,779	12,466	82,957	35,763	70,284	56,538	42,676	44,683	44,683			

Capital Improvement Plan

Overview

A Capital Improvement Plan (CIP) is typically an unaudited planning document used to identify needed capital improvements and other assets, financing methods, and annual depreciation calculation. Capital assets are defined as assets costing \$5,000 or more and have an estimated life of over three years. The City's Capital assets are recorded at either historical cost or estimated historical cost. Donated assets are valued at their estimated fair market value on the date donated. Net interest costs during construction periods are capitalized for assets acquired by issuing long-term debt. Major additions and betterments are capitalized, while expenditures for maintenance and repairs that do not add value to the purchase or materially extend asset lives are charged to operations as incurred.

Anticipated Projects

Figure 4 shows the estimated cost, financing method, and anticipated year(s) of expenditure.

Other Considerations

The CIP can serve as a planning document to be reviewed and updated annually. The plan should cover at least five years and include significant purchases. The CIP can also be used in annual budgets that include depreciation as an expense.

	Сар	ital Impro	vement Pl	an (CIP)				
		Financ	ced via:		Cost I	ncurred by	y Year	
Project	Est Cost	Cash	Grant	2023	2024	2025	2026	2027
Lake Rd Sewer Extension	420,000		420,000	70,000	350,000			
I&I Reduction / Sewer Rehabilitaiton	310,000		310,000		155,000	155,000		
Asset Management Program	109,000		109,000		109,000			
Unknown ARPA Sewer Project	122,000		122,000			80,000	42,000	
Equipment	70,000		70,000		70,000			
Miscellaneous	100,000	100,000		20,000	20,000	20,000	20,000	20,000
Total	1,131,000	100,000	1,031,000	90,000	704,000	255,000	62,000	20,000

Figure 4

Depreciation

Overview

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

Requirement

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

Calculating the Costs

Although there are several methods of determining depreciation, the "straight line" method is used. This calculation divides the cost of an asset by its estimated useful life, which may range from 5 to 50 years. The depreciation schedule lists all assets, their original costs, the years they entered service, and their useful lives. From that, the annual depreciation, the accumulated depreciation, and the book value are determined. When the accumulated depreciation of an item equals the original cost, the book value goes to zero, and the annual depreciation goes to zero. The yearly depreciation will stay the same or eventually go to zero unless new assets are added.

Other Considerations

All assets depreciate regardless of the method of financing, even if acquired with grants or purchased by developers. An asset begins to depreciate when placed into service, not when bought or under construction.

Figure 5 is a simplified schedule of depreciation showing the past five years and projections for the next five.

Depreciation										
2019 2020 2021 2022 2023 2024 2025 2026 2027										
Scheduled Depreciation	109,727	108,025	113,506	114,272	107,819	95,351	95,351	95,351	95,351	
New Depreciation					1,000	19,038	33,013	38,475	41,000	
Total Depreciation	109,727	108,025	113,506	114,272	108,819	114,389	128,364	133,826	136,351	

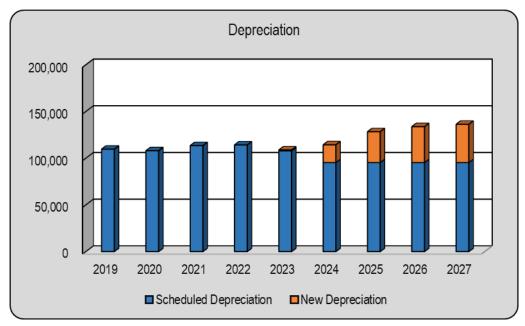


Figure 5

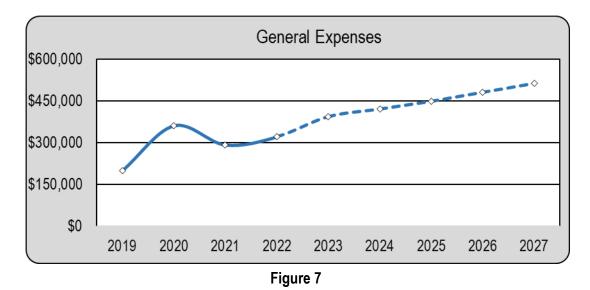
General Expenses

Methodology

A work session was held with the City's Mayor, City Recorder, wastewater superintendent, and engineering consultant to make projections of each line item in the general expenses. **Figure 6** presents a summary and graphical representation of general expenses.

			Gene	ral Expense	es				
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Salaries	72,051	65,620	54,895	69,639	98,283	102,214	106,303	110,555	114,977
Employee Benefits	17,265	18,203	8,052	17,334	13,362	14,698	16,168	17,785	19,563
Utilities		220	401	1,212	990	1,020	1,050	1,082	1,114
Maintenance & Supplies	11,744	38,255	78,292	93,772	135,023	148,525	163,378	179,716	197,687
Office Expense	3,876	2,508	4,518	4,797	10,236	10,000	10,500	11,025	11,576
Vehicle Expense	590	751	513	4,058	2,985	3,134	3,291	3,456	3,628
Insurance	540	9,550	7,726	6,834	14,217	14,644	15,083	15,535	16,001
Metro & Goodlettsville	63,780	78,976	73,608	71,751	69,203	74,047	77,750	81,637	85,719
Treatment additive	12,800	16,478	10,486	23,968	19,226	19,803	20,397	21,009	21,639
Professional services	15,432	121,371	51,032	23,355	25,208	27,729	30,502	33,552	36,907
Rent	2,400	2,400	2,400	3,815	3,815	3,815	3,815	3,815	3,815
Miscellaneous	22	6,701	154	403	443	488	536	590	649
Total	200,500	361,033	292,077	320,938	392,991	420,117	448,772	479,756	513,277
Percent Change		80%	-19%	10%	22%	7%	7%	7%	7%

Figure 7 is a graphical representation of how expenses changed over the last five years and are projected to increase by about five percent over the next five years.



Other Considerations

General expenses can vary from year to year. A significant repair and maintenance item or a need to buy large quantities of materials and supplies can make a big difference in accounting for general expenses, impacting Cash Flow and the Change in Net Position.

Cash Flow Analysis

Overview

It is essential for the City to know the amount of cash on hand and if cash reserves are growing or depleting. Cash is necessary for the utility's operational and maintenance needs and capital expenses to preserve its infrastructure, retain its staff, deliver customer services, and maintain a healthy cash reserve. Therefore, it is essential to predict anticipated expenditures and how much cash the utility expects to receive from its customers and other sources. Such an examination is called a Cash Flow Analysis. If the projected cash flow is detrimental to the City's wastewater and/or operations, rate increase(s) are needed.

Methodology

The Cash Flow Analysis is configured like a budget showing the amount of cash at the beginning of the fiscal year, the amount of income (including customer charges and other revenue sources), and general expenses. Adding income, subtracting expenses, and adding developer contributions provide the cash available for capital expenses or adding to the cash reserves. The City operates on an accrual accounting basis, so a reconciliation line is included. Still, it isn't easy to project the accrual adjustment (reconciliation of operating income and expenses) for future years, which is not included in the projected years. The cash at the end of one year becomes the amount of cash at the beginning of the following year.

Other Considerations

A better understanding of cash flow can help in developing a multi-year capital improvement plan and financing future projects.

Cash Flow – with No Rate Increase

Figure 8 shows the projected Cash Flow Analysis with no rate increases. This analysis indicates that the City's income is insufficient to pay operating expenses during FY 2027. Thus indicating a need for a rate increase.

		C	Cash Flow	No Rate Ir	ncreases				
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Cash Beginning Jul 1	648,399	722,014	674,391	572,242	970,141	1,065,413	1,051,313	1,067,696	1,060,352
			Reve	nue / Incom	е				
Revenue	418,043	429,732	438,591	455,164	446,329	447,829	450,829	456,079	461,329
Other Income	25,779	12,466	82,957	35,763	70,284	56,538	42,676	44,683	44,683
Total Income	443,822	442,198	521,548	490,927	516,613	504,367	493,505	500,762	506,012
			E	Expenses					
General Expenses	200,500	361,033	292,077	320,938	392,991	420,117	448,772	479,756	513,277
In Lieu of Tax	8,978	8,978	9,453	8,350	8,350	8,350	8,350	8,350	8,350
Debt	100,269	81,684	126,075						
Total Expenses	309,747	451,695	427,605	329,288	401,341	428,467	457,122	488,106	521,627
Income Less Expenses	134,075	(9,497)	93,943	161,639	115,272	75,900	36,383	12,656	(15,615)
		· · ·	Capi	tal Financing	3				· · ·
Grants					70,000	614,000	235,000	42,000	
			Capi	tal Expense	S				
Capital Expenses	62,340	30,351	171,790	100,555	90,000	704,000	255,000	62,000	20,000
Annual Gain - (Loss)	71,735	(39,848)	(77,847)	61,084	95,272	(14,100)	16,383	(7,344)	(35,615)
Accrual Adjustment	1,880	(7,775)	(24,302)	336,815					
Cash Ending Jun 30	722,014	674,391	572,242	970,141	1,065,413	1,051,313	1,067,696	1,060,352	1,024,738

Figure 8a is a graphical representation showing the past and projected Cash Flow.

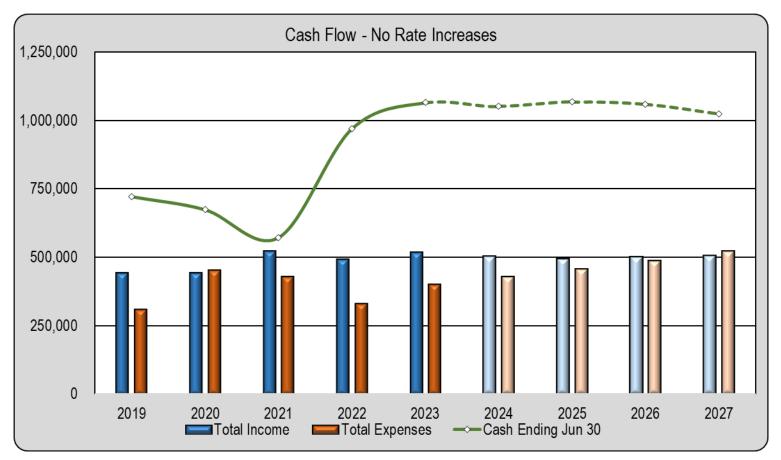


Figure 8a

Change in Net Position Analysis

Overview

Net position is generally defined as assets less liabilities. The City's wastewater assets include all cash (unrestricted and restricted), land, and the "net value" of everything owned, such as pipes in the ground, tanks, pumps, buildings, furniture, vehicles, and other purchases that are necessary to the operation of the utility. The net value is defined as the original cost of a capital asset less its accumulated depreciation. Each year, the Change in Net Position (CNP) varies because the amount of cash varies due to revenue and general expenses changing. Also, the net capital asset value changes because new capital assets are purchased and depreciated, and possibly some are totally depreciated. The CNP is calculated in a section of the City's audit report called "Statement of Revenues, Expenses, and Changes in the Net Position." The CNP Analysis in this report contains the same data and information in that section of the audit report.

Methodology

The CNP Analysis differs from the Cash Flow Analysis in that it includes depreciation as an operating expense but does not include capital expenses or principal debt payments. Also, for purposes of financial statement review by the Tennessee Comptroller of the Treasury's Tennessee Board of Utility Regulation (TBUR), Tennessee law requires transfers, grants, and contributions to be excluded (subtracted) from a utility's "Financial" CNP to arrive at the "Statutory" CNP.

Requirement

The CNP line item in the CNP Analysis is essential because, according to TCA § 68-221-1010 (included at the end of this report), the City would be subject to actions by the TBUR if the "Statutory" CNP is negative for two consecutive years. The City had three consecutive years of negative CNP in FY 2020-2022 and received an order from the WWFB to correct the violation of State Law.

Without any future rate increases, the Change in Net Position becomes very low and is projected to be negative in FY 2027.

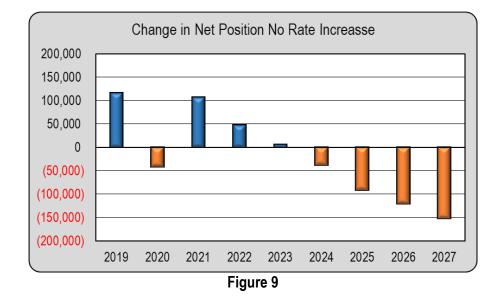
Other Considerations

The CNP Analysis generally controls the rate increase amount if needed.

Change in Net Position – with No Rate Increase

Figure 9 shows the projected CNP with no rate increases.

		Chang	ge in Net F	Position No	Rate Incre	ases					
	2019	2020	2021	2022	2023	2024	2025	2026	2027		
			Re	venue / Incor	ne						
Revenue	418,043	429,732	438,591	455,164	446,329	447,829	450,829	456,079	461,329		
Other Income	25,779	12,466	82,957	35,763	70,284	56,538	42,676	44,683	44,683		
Total Income	443,822	442,198	521,548	490,927	516,613	504,367	493,505	500,762	506,012		
Expenses											
General Expenses	200,500	361,033	292,077	320,938	392,991	420,117	448,772	479,756	513,277		
Depreciation	109,727	108,025	113,506	114,272	108,819	114,389	128,364	133,826	136,351		
In Lieu of Tax	8,978	8,978	9,453	8,350	8,350	8,350	8,350	8,350	8,350		
Interest Expense	7,816	5,280									
Total Expenses	327,021	483,316	415,036	443,560	510,161	542,855	585,486	621,932	657,978		
Income Less Expenses	116,801	(41,118)	106,512	47,367	6,452	(38,488)	(91,981)	(121,170)	(151,966)		
·	Change in Net Position										
Change in Net Position	116,801	(41,118)	106,512	47,367	6,452	(38,488)	(91,981)	(121,170)	(151,966)		



Rate Increase Recommendation

Overview

The determination of the rate increase needed is based on a review of the two analyses presented in this report: the Cash Flow Analysis and the Change in Net Position Analysis. Although the Cash Flow Analysis (**Figure 8**) shows future cash balances as positive, the CNP Analysis (**Figure 9**) projects a negative CNP in FY 2024 - 2027. As such, there is a need for rate increases.

Cash Flow Analysis – with Rate Increases in FY 2024-2027

Figure 10 shows the projected Cash Flow reflecting the impact of the recommended additional rate increase of 20% in FY 2024 and 5% each year after that.

		Ca	sh Flow (\	With Rate	ncreases)				
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Cash Beginning Jul 1	648,399	722,014	674,391	572,242	970,141	1,065,413	1,140,879	1,274,478	1,414,448
			Reve	enue / Incom	e				
Revenue	418,043	429,732	438,591	455,164	446,329	537,395	568,045	603,393	640,855
Rate Increase						20%	5%	5%	5%
Other Income	25,779	12,466	82,957	35,763	70,284	56,538	42,676	44,683	44,683
Total Income	443,822	442,198	521,548	490,927	516,613	593,933	610,721	648,076	685,538
			E	Expenses					
General Expenses	200,500	361,033	292,077	320,938	392,991	420,117	448,772	479,756	513,277
In Lieu of Tax	8,978	8,978	9,453	8,350	8,350	8,350	8,350	8,350	8,350
Debt	100,269	81,684	126,075						
Total Expenses	309,747	451,695	427,605	329,288	401,341	428,467	457,122	488,106	521,627
Income Less Expenses	134,075	(9,497)	93,943	161,639	115,272	165,466	153,598	159,970	163,911
		X	Capi	tal Financing]				
Grants					70,000	614,000	235,000	42,000	
			Capi	tal Expense	5				
Capital Expenses	62,340	30,351	171,790	100,555	90,000	704,000	255,000	62,000	20,000
Annual Gain - (Loss)	71,735	(39,848)	(77,847)	61,084	95,272	75,466	133,598	139,970	143,911
Accrual Adjustment	1,880	(7,775)	(24,302)	336,815					
Cash Ending Jun 30	722,014	674,391	572,242	970,141	1,065,413	1,140,879	1,274,478	1,414,448	1,558,359

Figure 10a is a graphical representation of the Cash Flow with the recommended rate increases.

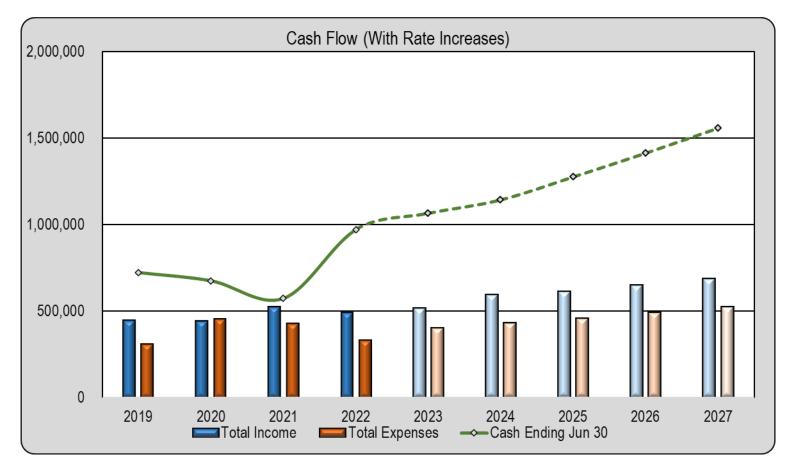


Figure 10a

Change in Net Position Analysis – with Rate Increase

		•							
		Change	e in Net Po	sition (With	n Rate Incr	eases)			
	2019	2020	2021	2022	2023	2024	2025	2026	2027
			Re	venue / Incor	ne				
Revenue	418,043	429,732	438,591	455,164	446,329	537,395	568,045	603,393	640,855
Other Income	25,779	12,466	82,957	35,763	70,284	56,538	42,676	44,683	44,683
Total Income	443,822	442,198	521,548	490,927	516,613	593,933	610,721	648,076	685,538
Expenses									
General Expenses	200,500	361,033	292,077	320,938	392,991	420,117	448,772	479,756	513,277
Depreciation	109,727	108,025	113,506	114,272	108,819	114,389	128,364	133,826	136,351
In Lieu of Tax	8,978	8,978	9,453	8,350	8,350	8,350	8,350	8,350	8,350
Interest Expense	7,816	5,280							
Total Expenses	327,021	483,316	415,036	443,560	510,161	542,855	585,486	621,932	657,978
			Chan	ge in Net Pos	sition				
Change in Net Position	116,801	(41,118)	106,512	47,367	6,452	51,077	25,235	26,144	27,560

Figure 11 shows the projected CNP reflecting the impact of the recommended rate increases.

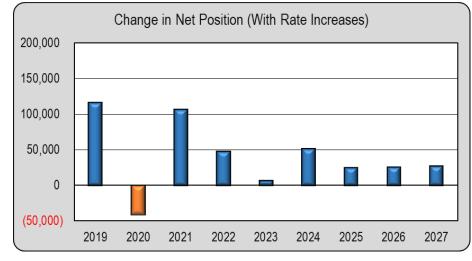


Figure 11

Sample Monthly Wastewater Bills

Figure 12 shows monthly bills for Inside City Residential rates impacted by the recommended rates by presenting the Monthly Charges for varying usage levels.

	Ra	te Schedule					Ra	te Schedule		
Current 202	3 Rates	FY 20	024 Rates			FY 2024 I	Rates	FY 20)25 Rates	
				% Inc.						% Inc.
Customer Charge	\$34.50	Customer Charge	\$41.40	20%		Customer Charge	\$41.40	Customer Charge	\$43.47	5%
	<u>Per 1,000 gal.</u>		Per 1,000 gal.				<u>Per 1,000 gal.</u>		Per 1,000 gal.	
	\$5.60		\$6.72	20%			\$6.72		\$7.06	5%
Water Sold	Monthly	Monthly		Percent	ĺ	Water Sold	Monthly	Monthly		Percent
(Gallons)	Charge	Charge	Difference	Increase		(Gallons)	Charge	Charge	Difference	Increase
2,000	\$45.70	\$54.84	\$9.14	20.0%		2,000	\$54.84	\$57.58	\$2.74	5.0%
5,000	\$62.50	\$75.00	\$12.50	20.0%		5,000	\$75.00	\$78.75	\$3.75	5.0%
7,000	\$73.70	\$88.44	\$14.74	20.0%		7,000	\$88.44	\$92.86	\$4.42	5.0%
10,000	\$90.50	\$108.60	\$18.10	20.0%		10,000	\$108.60	\$114.03	\$5.43	5.0%
15,000	\$118.50	\$142.20	\$23.70	20.0%		15,000	\$142.20	\$149.31	\$7.11	5.0%
20,000	\$146.50	\$175.80	\$29.30	20.0%		20,000	\$175.80	\$184.59	\$8.79	5.0%

Comparison with Other Utilities

Figure 13 shows a comparison of monthly wastewater bills for a Residential customer with 5,000 gallons of usage.

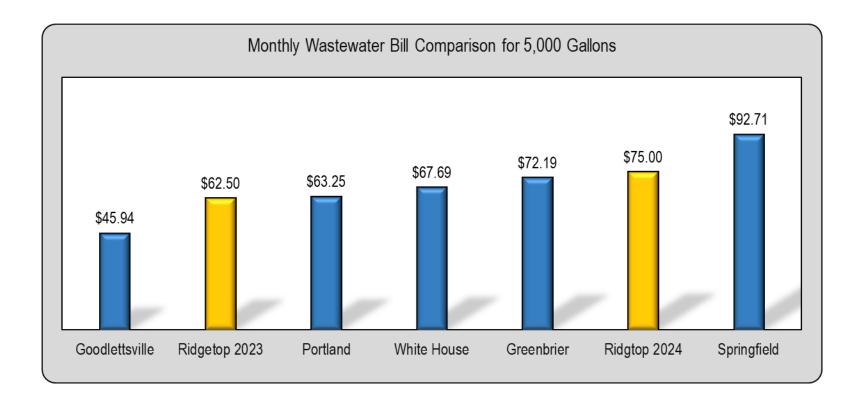


Figure 13

Tenn. Code Ann. § 68-221-1010

Current through the 2021 First Extraordinary and the 2021 Regular Sessions.

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

(a)

(1) Within sixty (60) days from the time that an audit of a water system or wastewater facility is filed with the comptroller of the treasury, the comptroller of the treasury shall file with the board the audited annual financial report of any water system or wastewater facility that has a deficit total net position in any one (1) year, has a negative change in net position for two (2) consecutive years, or is currently in default on any of its debt instruments. For purposes of this section, "change in net position" means total revenues less all grants, capital contributions, and expenses.

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

(b)

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

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

(A) Fund operation, maintenance, principal and interest obligations and adequate depreciation to recover the cost of the water system or wastewater facility over its useful life;

(B) Liquidate in an orderly fashion any deficit in total net position; and

(C) Cure a default on any indebtedness of the water system and wastewater facility.

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

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

(d)

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

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

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