November 30, 2023

2023 SEWER USER RATE STUDY:

Town of Brookfield, WI

Test Year 2024 User Rate Study for Sanitary District No. 4 including Long Range Utility Cash Flow Analysis



Prepared by:

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SECTION 1 - EXECUTIVE SUMMARY

1.1 Introduction and Overview

The Town engaged Ehlers in 2023 to perform a Sewer User Rate Study (the "Study"). Sanitary District No. 4 consists of the operations of the Town's Sewer Utility. The sewer utility has historically performed well financially, but the Town is moving forward with a sewer interceptor project that will require an increase to user rates. The primary goals of the study are to 1) assess the current revenues of the utility in terms of meeting its annual revenue requirement needs; 2) develop user rate recommendations for the sewer utility that ensure user rates are fair and equitable to all customers and remain self-sufficient to meet operating and capital expenses.

Included with the Study, the Town engaged Ehlers to complete a long-range cash flow analysis for the utility which develops recommendations for future rate increases required to support the utility's Capital Improvement Plan ("CIP"), and projected increases to both utilities' operating budget. Lastly, the study develops recommendations about how to pay for capital projects in each year primarily through the use of existing reserves and available cashflow from user rates. This Executive Summary identifies the findings, recognizes the methodology used, and reviews the results of the Study completed for the Town.

1.2 Key Findings

- Sanitary sewer rates were last adjusted by approximately 18% in 2020.
- Historically, the utility has the following percentage of total sales revenue by customer class:
 - o 48% from Residential customers
 - 50% from Commercial customers
 - o 2% from common area and Public Authority customers
- Sewer customers currently pay a quarterly service (fixed) charge based on the size of their water meter and a volumetric rate of \$3.43 per 1,000 gallons of billable sewer consumption. The fixed charge for a 3/4" meter is presently \$30.55 per quarter.
 - Sewer usage is determined by the customer's water usage unless otherwise noted.
- The Town historically has cash funded sewer projects. In late 2023 the Town will issue 10-year General Obligation Notes to fund a \$1.9 million dollar interceptor project. The estimated principal and interest payments for the debt issuance is incorporated into this rate study.

- The remaining projects shown in the Capital Improvement Plan of this study are estimated to be cash funded projects of the utility.
- The utility has a current total restricted and unrestricted fund balance of approximately \$2.7 million. The study projects that over a 10-year period of time the fund balance within the utility will grow to approximately \$3.4 million, which continues to put the utility in a position to cash fund future capital projects as they occur.
- As part of the rate study process Ehlers conducted a presentation to the Town Board. The feedback through those meetings was to 1) try to fund capital projects with available reserves and cash to the extent possible; and 2) to keep user rate increases linear if possible over the 10-year planning period for the utility while keeping the total fund balance greater than a minimum target level of 6- months operating expenses and one year's debt service payment on outstanding debt.
- It is recommended that the Town Board consider a 25.00% increase to sewer user rates in 2024. It is further recommended that the Town consider future rate increases annually as shown in the cash flow analysis contained within this report.
- Over the planning period and several increases, the typical residential customer at average consumption will experience a 75.25% (\$55.46) increase to their total quarterly bill at the recommended rates for sewer. This is highlighted in TABLE 20 of the report.

Further description and analysis of these findings are found in this Executive Summary, the Study and its Sections.

1.3 Study Objectives

The Utilities are not subject to regulation from the Wisconsin Public Service Commission like the Water Utility. Therefore, when designing rates, we consider many generally accepted practices and industry standards. The subsequent guidelines were followed in completing the rate design portion of the Study.

- Rates should be fair and equitable to all customers
- Rates should be easy to administer and to understand
- Rates should be defendable

1.4 Study Purpose

Several goals were established for the Study, including:

- 1. Assess financial performance trends in recent past.
- 2. Develop user rates at a level where the utility is self-sufficient, meaning it is generating adequate revenues from user rates to pay for all outstanding financial obligations.

- 3. Develop user rates at a level the utility is able to take on the General Obligation Note issue in 2023 and cash fund future capital projects while retaining adequate cash to maintain certain benchmarked fund balance levels.
- 4. Incorporate the Town's CIP for the sewer utility.
- 5. Develop a rate structure that is fair and equitable for all customer classes.

1.5 Study Assumptions

- The study develops recommended user rates based on a 2024 test year.
- The recommended rates follow the Town's existing sewer rate and stormwater user rate structures.
- Flow projections are based on historical averages.
- After historical analysis, discussions with staff, and recent economic events no material growth assumptions were made for meter counts or flows during the planning period beyond 2024.
 - Planned future growth within the Town can be incorporated into future updates to this study, and recommendations on the need for future rate increases can also be further evaluated as necessary.
- Operating expenses beyond the 2024 budget were projected at 3.0% increases.

1.6 Study Methodology

Rate development and planning require projections of future revenue needs. To establish those revenue needs, there are two generally accepted methodologies, the cash and utility-based methods. Under the utility-based method, a revenue requirement is established for a test year using several components. These components include: the Utility's 2024 budgeted operation and maintenance expenses, transfers, depreciation, and a "fair" return on rate base. Conversely, the cash-based method looks at the Utility's 2024 budgeted operation and maintenance expenses, transfers, debt service and cash funded capital. The components added together less other revenues not generated through user rates serve as the requirement that should be recovered through user rates. This study uses the cash-based method for establishing the revenue requirement for the utility.

SECTION 2 - RECOMMENDATIONS

- Based on historical performance and the results of the Study, we recommend the Town adopt sewer rates for 2024 as outlined below and in the full report tables in TABLE 16.
- The Town should consider primarily using existing reserves and revenues generated through user rates to fund the bulk of the capital projects for the sewer utility
- The Town should implement an annual rate review process and consider the future rate increases that are outlined in the cash flow analysis.

A summary of the recommended current and future rate changes are summarized below along with the cash flow summary. These tables are also included in the sections of the full study.

Rate Summary (Quarterly Charges)

			2024
	Current	COS	Proposed
Domestic Sewer Customers			
Meter Size			
5/8	\$30.55	\$40.74	\$38.50
3/4	\$30.55	\$40.74	\$38.50
1	\$53.00	\$54.68	\$63.60
1.5	\$90.50	\$78.20	\$108.60
2	\$136.50	\$106.96	\$163.80
3	\$327.35	\$226.23	\$392.82
Volumetric Rate per 1000 Gal	\$3.43	\$4.26	\$4.26

Comparison of Existing and Proposed Bills

Town of Brookfield, WI

					Quarterly		
		_	Usage	Current	Proposed	Dollar	Percent
Customer	Usage Level	Meter Size	1,000 Gal	Bill	Bill	Change	Change
Residential	Low User	5/8	9.44	\$62.91	\$78.69	\$15.78	25.1%
Residential	Avg. User	5/8	12.58	\$73.70	\$92.09	\$18.39	25.0%
Residential	High User	5/8	15.73	\$84.49	\$105.49	\$21.00	24.9%
Commercial	Low User	3/4	78.31	\$299.14	\$372.09	\$72.95	24.4%
Commercial	Avg. User	3/4	104.41	\$388.68	\$483.29	\$94.61	24.3%
Commercial	High User	3/4	130.51	\$478.21	\$594.48	\$116.28	24.3%
Common Area	Low User	3/4	33.56	\$145.67	\$181.48	\$35.81	24.6%
Common Area	Avg. User	3/4	44.75	\$184.04	\$229.14	\$45.09	24.5%
Common Area	High User	3/4	55.94	\$222.42	\$276.79	\$54.38	24.4%
Public Authority	Low User	1.5	56.65	\$284.80	\$349.92	\$65.12	22.9%
Public Authority	Avg. User	1.5	75.53	\$349.57	\$430.36	\$80.79	23.1%
Public Authority	High User	1.5	94.41	\$414.33	\$510.80	\$96.46	23.3%

Notes:

1) Meter sizes chosen based on highest number of users for each class

2) Average user is defined as the total estimated test year flow for the class divided by the projected number of users in the class.

Sewer Utility Cash Flow Analysis - Projected 2024-2033

Town of Brookfield, WI

	Budget					Projec	cted				
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
evenues											
otal Revenues from User Rates ¹	\$1,242,621	\$1,353,680	\$1,421,364	\$1,492,432	\$1,537,205	\$1,583,321	\$1,630,821	\$1,679,745	\$1,730,138	\$1,782,042	\$1,835,
ercent Increase to User Rates	24.42%	7.00%	8.00%	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.0
umulative Percent Rate Increase	24.42%	33.13%	43.78%	50.97%	55.49%	60.16%	64.96%	69.91%	75.01%	80.26%	85.
ollar Amount Increase to Revenues	\$243,871	\$111,058	\$67,684	\$71,068	\$44,773	\$46,116	\$47,500	\$48,925	\$50,392	\$51,904	\$53,
ther Revenues											
Interest Income	\$38,327	\$38,422	\$38,518	\$38,615	\$38,711	\$38,808	\$38,905	\$39,002	\$39,100	\$39,198	\$39
Other Income	\$22,500	\$22,725	\$22,952	\$23,182	\$23,414	\$23,648	\$23,884	\$24,123	\$24,364	\$24,608	\$24
otal Other Revenues	\$60,827	\$61,147	\$61,471	\$61,797	\$62,125	\$62,456	\$62,789	\$63,125	\$63,464	\$63,806	\$64
otal Revenues	\$1,303,448	\$1,414,827	\$1,482,834	\$1,554,228	\$1,599,330	\$1,645,777	\$1,693,610	\$1,742,871	\$1,793,602	\$1,845,847	\$1,899,0
ess: Expenses											
perating and Maintenance	\$1,009,000	\$1,029,180	\$1,049,764	\$1,070,759	\$1,092,174	\$1,114,018	\$1,136,298	\$1,159,024	\$1,182,204	\$1,205,848	\$1,229
let Before Debt Service and Capital Expenditures	\$294,448	\$385,647	\$433,071	\$483,470	\$507,156	\$531,759	\$557,312	\$583,847	\$611,397	\$639,999	\$669,
lebt Service											
Existing Debt P&I	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
New (2024-2033) Debt Service P&I	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	
otal Debt Service	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	
ransfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ess: Capital Improvements	\$1,925,000	\$215,000	\$440,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175
ebt Issued/Grants/Aid	\$1,920,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
let Annual Cash Flow	\$34,128	(\$ 81,978)	(\$261,054)	\$53,345	\$81,406	\$105,759	\$126,687	\$154,222	\$183,272	\$213,874	\$494,6
estricted and Unrestricted Cash Balance:											
Balance at first of year	\$2,409,884	\$2,444,012	\$2,362,034	\$2,100,980	\$2,154,324	\$2,235,730	\$2,341,490	\$2,468,177	\$2,622,398	\$2,805,671	\$3,019,
Net Annual Cash Flow Addition/(subtraction)	\$34,128	(\$81,978)	(\$261,054)	\$53,345	\$81,406	\$105,759	\$126,687	\$154,222	\$183,272	\$213,874	\$494,
Balance at end of year	\$2,444,012	\$2,362,034	\$2,100,980	\$2,154,324	\$2,235,730	\$2,341,490	\$2,468,177	\$2,622,398	\$2,805,671	\$3,019,545	\$3,514,
				1.90	2.02	2.12	2.18	2.29	2.42		

2) Assumes 3.00% annual inflation beyond budget year.

Increase depicted to maintain with assumed O&M inflation Increase needed above inflationary adjustment Test Year 2024 Sanitary Sewer Utility Rate Study Section 1 – Sewer Utility Historical Analysis Town of Brookfield, WI

Table 1Sewer Rate Performance

Reve	nue Requirement					Est	Budget
Component	Description	2019	2020	2021	2022	2023	2024
Cash Basis							
1	Operating and Maintenance	\$850,930	\$1,604,112	\$1,138,464	\$950,898	\$1,103,200	\$1,009,000
2	Debt	\$0	\$0	\$0	\$0	\$0	\$255,319
3	Cash Funded Capital	\$1,062	\$468,283	\$12,508	\$6,974	\$225,400	\$5,000
	Less:						
	Other Revenue	\$0	\$0	\$0	\$0	\$22,500	\$22,500
	Interest Income	\$78,054	\$31,494	\$10,618	\$23,792	\$38,231	\$38,327
	Revenue Requirement (Costs less Other Income)	\$773,938	\$2,040,901	\$1,140,354	\$934,080	\$1,267,869	\$1,208,493
	User Rates Revenue	\$699,230	\$1,004,144	\$1,334,041	\$1,001,518	\$998,751	\$998,751
	Rate Adequacy	(\$74,708)	(\$1,036,757)	\$193,687	\$67,438	(\$269,118)	(\$209,742
	Rate Adjustment Needed	10.68%	103.25%	0.00%	0.00%	26.95%	21.00%



Table 2Sewer Utility Rate Performance Charts



Table 3Sewer Utility Cash Flow Analysis - Historical 2019-2023

		Act	ual		Estimated
	2019	2020	2021	2022	2023
Revenues					
Total Revenues from User Rates	\$699,230	\$1,004,144	\$1,334,041	\$1,001,518	\$998,75
Other Revenues					
Interest Income	\$78,054	\$31,494	\$10,618	\$23,792	\$38,231
Other Income	\$0	\$0	\$0	\$0	\$22,500
Total Other Revenues	\$78,054	\$31,494	\$10,618	\$23,792	\$60,731
Total Revenues	\$777,284	\$1,035,638	\$1,344,659	\$1,025,310	\$1,059,482
Less: Expenses					
Operating and Maintenance	\$850,930	\$1,604,112	\$1,138,464	\$950,898	\$1,103,200
PILOT Payment	\$0	\$0	\$0	\$0	\$0
Net Before Debt Service and Capital Expenditures	(\$73,646)	(\$568,474)	\$206,195	\$74,412	(\$43,718
Existing Debt P&I	\$0	\$0	\$0	\$0	\$0
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0
Less: Capital Improvements	\$1,062	\$468,283	\$12,508	\$6,974	\$225,400
Debt Issued/Grants/Aid	\$0	\$0	\$0	\$0	\$0
Reconcile to Audit	\$375,823	\$1,066,386	(\$613,455)	\$105,942	\$0
Net Annual Cash Flow	\$301,115	\$29,629	(\$419,768)	\$173,380	(\$269,118
Restricted and Unrestricted Cash Balance:					
Balance at first of year	\$2,594,646	\$2,895,761	\$2,925,390	\$2,505,622	\$2,679,002
Net Annual Cash Flow Addition/(subtraction)	\$301,115	\$29,629	(\$419,768)	\$173,380	(\$269,118
Balance at end of year	\$2,895,761	\$2,925,390	\$2,505,622	\$2,679,002	\$2,409,884
Notes:					



Table 4 Sewer Utility Financial Benchmarking Analysis

Town of Brookfield, WI

		Acti	ual		Estimated	Budget
	2019	2020	2021	2022	2023	2024
Target minimum cash balance						
Target minimum working capital - Ehlers ¹	917,577	688,801	590,343	693,775	898,840	931,388
Actual Days Cash Available - PSC ²	1,242	666	803	1,028	797	811
Actual Days Cash Available - Moody's ³	1,230	659	793	1,016	787	873
Target minimum working capital - S&P ⁴	1,230	659	793	1,016	787	873
Actual working conital cook balance	2 905 761	2 025 200	2 505 622	2 670 002	2 400 994	2 4 4 4 0 4 2
Actual working capital-cash balance	2,895,761	2,925,390	2,505,622	2,679,002	2,409,884	2,444,012
Over (Under) Ehlers target	1,978,185	2,236,589	1,915,279	1,985,227	1,511,043	1,512,624
Over (Under) PSC target (90 days)	1,152	576	713	938	707	721
Over (Under) Moody's target (150 days)	1,080	509	643	866	637	723
Over (Under) S&P target (150 days)	1,080	509	643	866	637	723
Notos						

Notes:

1) Target capital equals 6 mos of next year's operating expenses, including depreciation, plus 100% of debt.

2) PSC formula = O&M expense + taxes + interest on long term debt ÷ 365 to get expense per day. Then Unrestricted Cash ÷ expense per day

3) Moody's Formula = [(Unrestricted Cash + Liquid Investments) * 365 days] ÷ Total O&M Expenses less Depreciation

4) S&P Formula = [(Unrestricted Cash + Liquid Investments) * 365 days] ÷ Total O&M Expenses less Depreciation; include designated reserve funds: ERFs, RSFs, etc

Rate of Return 20,570,597 20,570,674 21,038,957 21,051,465 21,058,439 21,283,839 Total Plant in service end of year 20,570,674 21,038,957 21,051,465 21,058,439 21,283,839 Average Total Plant in Service 20,570,636 20,804,816 21,045,211 21,054,952 21,171,139 22,246,339 Average Utility Plant in Service 20,570,636 20,804,816 21,045,211 21,054,952 21,171,139 22,246,339 Average Utility Plant Accumulated Depreciation 12,035,494 12,252,235 12,477,081 12,692,569 12,976,919 13,254,961 Average Net Investment Rate Base (NIRB) 8,535,142 8,552,581 8,568,130 8,362,383 8,194,220 8,991,378 Net Operating Income (384,299) (831,009) (43,561) (179,168) (366,299) (21,921) ROR -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50% -9.72% -0.51% -2.14% 1,265,121 Operating Revenues 699,230 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121						-	
Total Plant in service end of year20,570,67421,038,95721,051,46521,058,43921,283,83923,208,839Average Total Plant in Service20,570,63620,804,81621,045,21121,054,95221,171,13922,246,339Average Utility Plant in Service20,570,63620,804,81621,045,21121,054,95221,171,13922,246,339Less: Utility Plant Accumulated Depreciation12,035,49412,252,23512,477,08112,692,56912,976,91913,254,961Average Net Investment Rate Base (NIRB)8,535,1428,552,5818,568,1308,362,3838,194,2208,991,378Net Operating Income(384,299)(831,009)(43,561)(179,168)(366,299)(21,921)ROR-4.50%-9.72%-0.51%-2.14%-4.47%-0.24%Typical2.50%Cost Recovery699,2301,004,1441,334,0411,001,5181,021,2511,265,121Operating Expenses incl. Depr & Amortization1,083,5291,835,1531,377,6021,180,6861,387,5501,287,042Cost Recovery0.650.550.970.850.740.98-0.98	Rate of Return						
Average Total Plant in Service 20,570,636 20,804,816 21,045,211 21,054,952 21,171,139 22,246,339 Average Utility Plant in Service 20,570,636 20,804,816 21,045,211 21,054,952 21,171,139 22,246,339 Less: Utility Plant Accumulated Depreciation 12,035,494 12,252,235 12,477,081 12,692,569 12,976,919 13,254,961 Average Net Investment Rate Base (NIRB) 8,535,142 8,552,581 8,568,130 8,362,383 8,194,220 8,991,378 Net Operating Income (384,299) (831,009) (43,561) (179,168) (366,299) (21,921) ROR -4.50% -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50% - <t< td=""><td>Total Plant in service beginning of year</td><td>20,570,597</td><td>20,570,674</td><td>21,038,957</td><td>21,051,465</td><td>21,058,439</td><td>21,283,839</td></t<>	Total Plant in service beginning of year	20,570,597	20,570,674	21,038,957	21,051,465	21,058,439	21,283,839
Average Utility Plant in Service 20,570,636 20,804,816 21,045,211 21,054,952 21,171,139 22,246,339 Less: Utility Plant Accumulated Depreciation 12,035,494 12,252,235 12,477,081 12,692,569 12,976,919 13,254,961 Average Net Investment Rate Base (NIRB) 8,535,142 8,552,581 8,568,130 8,362,383 8,194,220 8,991,378 Net Operating Income (384,299) (831,009) (43,561) (179,168) (366,299) (21,921) ROR -4.50% -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50% - - - - - - - - - - 20,5121 1,021,251 1,265,121 0.24% - 2.50% - - - - - - - - - - - - - - - - - -<	Total Plant in service end of year	20,570,674	21,038,957	21,051,465	21,058,439	21,283,839	23,208,839
Less: Utility Plant Accumulated Depreciation 12,035,494 12,252,235 12,477,081 12,692,569 12,976,919 13,254,961 Average Net Investment Rate Base (NIRB) 8,535,142 8,552,581 8,568,130 8,362,383 8,194,220 8,991,378 Net Operating Income (384,299) (831,009) (43,561) (179,168) (366,299) (21,921) ROR -4.50% -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50% - <td>Average Total Plant in Service</td> <td>20,570,636</td> <td>20,804,816</td> <td>21,045,211</td> <td>21,054,952</td> <td>21,171,139</td> <td>22,246,339</td>	Average Total Plant in Service	20,570,636	20,804,816	21,045,211	21,054,952	21,171,139	22,246,339
Less: Utility Plant Accumulated Depreciation 12,035,494 12,252,235 12,477,081 12,692,569 12,976,919 13,254,961 Average Net Investment Rate Base (NIRB) 8,535,142 8,552,581 8,568,130 8,362,383 8,194,220 8,991,378 Net Operating Income (384,299) (831,009) (43,561) (179,168) (366,299) (21,921) ROR -4.50% -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50% - <td>Ŭ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Ŭ						
Average Net Investment Rate Base (NIRB) 8,535,142 8,552,581 8,568,130 8,362,383 8,194,220 8,991,378 Net Operating Income (384,299) (831,009) (43,561) (179,168) (366,299) (21,921) ROR -4.50% -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50% - <	Average Utility Plant in Service	20,570,636	20,804,816	21,045,211	21,054,952	21,171,139	22,246,339
Net Operating Income (384,299) (831,009) (43,561) (179,168) (366,299) (21,921) ROR -4.50% -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50%	Less: Utility Plant Accumulated Depreciation	12,035,494	12,252,235	12,477,081	12,692,569	12,976,919	13,254,961
ROR -4.50% -9.72% -0.51% -2.14% -4.47% -0.24% Typical 2.50% 2.50% 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121 Operating Revenues 699,230 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121 Operating Expenses incl. Depr & Amortization 1,083,529 1,835,153 1,377,602 1,180,686 1,387,550 1,287,042 Cost Recovery 0.65 0.55 0.97 0.85 0.74 0.98	Average Net Investment Rate Base (NIRB)	8,535,142	8,552,581	8,568,130	8,362,383	8,194,220	8,991,378
Cost Recovery 699,230 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121 Operating Revenues 699,230 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121 Operating Expenses incl. Depr & Amortization 1,083,529 1,835,153 1,377,602 1,180,686 1,387,550 1,287,042 Cost Recovery 0.65 0.55 0.97 0.85 0.74 0.98	Net Operating Income	(384,299)	(831,009)	(43,561)	(179,168)	(366,299)	(21,921)
Cost Recovery 699,230 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121 Operating Expenses incl. Depr & Amortization 1,083,529 1,835,153 1,377,602 1,180,686 1,387,550 1,287,042 Cost Recovery 0.65 0.55 0.97 0.85 0.74 0.98	ROR	-4.50%	-9.72%	-0.51%	-2.14%	-4.47%	-0.24%
Operating Revenues 699,230 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121 Operating Expenses incl. Depr & Amortization 1,083,529 1,835,153 1,377,602 1,180,686 1,387,550 1,287,042 Cost Recovery 0.65 0.55 0.97 0.85 0.74 0.98	Typical	2.50%					
Operating Revenues 699,230 1,004,144 1,334,041 1,001,518 1,021,251 1,265,121 Operating Expenses incl. Depr & Amortization 1,083,529 1,835,153 1,377,602 1,180,686 1,387,550 1,287,042 Cost Recovery 0.65 0.55 0.97 0.85 0.74 0.98							
Operating Expenses incl. Depr & Amortization 1,083,529 1,835,153 1,377,602 1,180,686 1,387,550 1,287,042 Cost Recovery 0.65 0.55 0.97 0.85 0.74 0.98	Cost Recovery						
Cost Recovery 0.65 0.55 0.97 0.85 0.74 0.98	Operating Revenues	699,230	1,004,144	1,334,041	1,001,518	1,021,251	1,265,121
	Operating Expenses incl. Depr & Amortization	1,083,529	1,835,153	1,377,602	1,180,686	1,387,550	1,287,042
Cost Recovery w/o Depr. 0.82 0.63 117 1.05 0.93 1.25	Cost Recovery	0.65	0.55	0.97	0.85	0.74	0.98
	Cost Recovery w/o Depr.	0.82	0.63	1.17	1.05	0.93	1.25

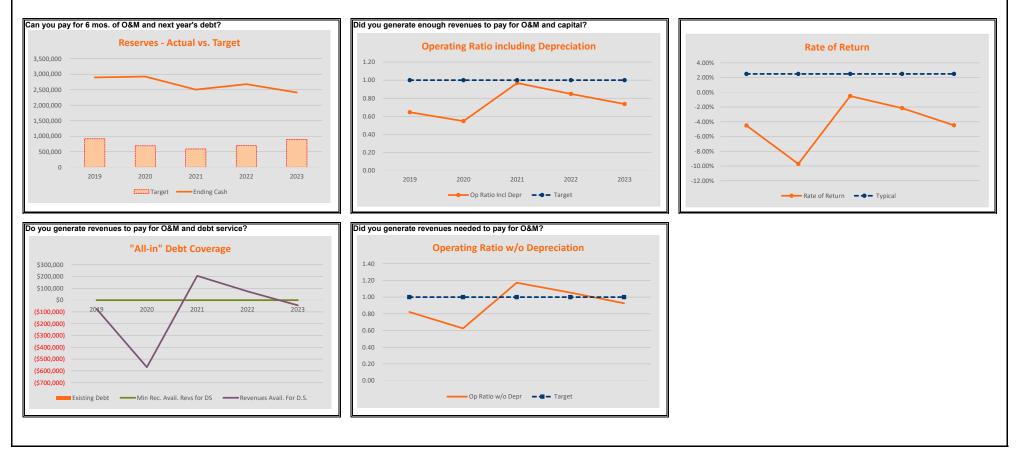
Notes:

This operating ratio indicates whether operating revenues (mostly charges to customers) were sufficient to cover operations and capital (in the form of depreciation) for the water and/or wastewater utility in the fiscal year. A ratio of less than 1 could be a sign of financial concern. In general, this ratio should be higher than 1 to accommodate future capital investments.



Table 5Sewer Utility Financial Health Charts







Test Year 2024 Sanitary Sewer Utility Rate Study Section 2 – Sewer Utility Long Range Cash Flow and Rate Study Town of Brookfield, WI

Courser I Itility Constal I												
Sewer Utility Capital I	mprovem	ient Pla										
Town of Brookfield, WI												
Projects	Funding	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Totals
nterceptor Repair/Relining - Phase 1,2, & 5	G.O. Debt	1,920,000	0	0	0							1,920,00
nterceptor Repair/Relining - Phase 3	Cash	0	175,000	0	0							175,00
nterceptor Repair/Relining - Phase 4	Cash	0	0	190,000	0							190,00
/ehicle Replacement - Pick up	Cash	0	20,000	0	0							20,00
Barker Rd parking Lot Replacement	Cash	5,000	20,000	0	0							25,00
Lift Station Update	Cash	0	0	250,000	0							250,00
CIP Placeholder for Future Years	Cash				175,000	175,000	175,000	175,000	175,000	175,000	175,000	
ctual CIP Costs		1,925,000	215,000	440,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	2,580,0
		00/	00/	09/	0%	0.9/	00/	09/	09/	01/	00/	
Percent Inflation		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
nflated Project Costs		1,925,000	215,000	440,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	3,805,0
Sources of Funding		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
G.O. Debt		1,920,000	0	0	0	0	0	0	0	0	0	1,920,00
Revenue Debt		0	0	0	0	0	0	0	0	0	0	
Grants/Aids		0	0	0	0	0	0	0	0	0	0	
Special Assessment		0	0	0	0	0	0	0	0	0	0	
User Fees		0	0	0	0	0	0	0	0	0	0	
Tax Levy		0	0	0	0	0	0	0	0	0	0	
Equipment Replacement Fund		0	0	0	0	0	0	0	0	0	0	
Cash		5,000	215,000	440,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	1,885,00
otal		1,925,000	215,000	440,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	3,805,0



Table 7 Sewer Utility Projected Debt Service Payments (PROPOSED)

Town of Brookfield, WI

NAME AMT DATED MATURE RATE		GO Pron 202 \$2,000 12/21/ 12/1 5.00	3A),000 /2023 /33		PROP	OSED Sew	er Utility [Debt Service Sum	mary
Year	Principal	Est. Rate ¹	Interest	Total	Total Prin	Total Int	Total P&I	Prin Outstanding	Year
2024	165,000	5.00%	90,319	255,319	165,000	90,319	255,319	1,835,000	2024
2025	165,000	5.00%	87,625	252,625	165,000	87,625	252,625	1,670,000	2025
2026	175,000	5.00%	79,125	254,125	175,000	79,125	254,125	1,495,000	2026
2027	185,000	5.00%	70,125	255,125	185,000	70,125	255,125	1,310,000	2027
2028	190,000	5.00%	60,750	250,750	190,000	60,750	250,750	1,120,000	2028
2029	200,000	5.00%	51,000	251,000	200,000	51,000	251,000	920,000	2029
2030	215,000	5.00%	40,625	255,625	215,000	40,625	255,625	705,000	2030
2031	225,000	5.00%	29,625	254,625	225,000	29,625	254,625	480,000	2031
2032	235,000	5.00%	18,125	253,125	235,000	18,125	253,125	245,000	2032
2033	245,000	5.00%	6,125	251,125	245,000	6,125	251,125	0	2033
TOTALS	2,000,000		533,444	2,533,444	2,000,000	533,444	2,533,444		TOTALS

Notes:

1) Rate assumes

2) Rate assumes



Table 8Sewer Utility Cash Flow Analysis - Projected 2024-2033

24 ,242,621 24.42% 5243,871 \$38,327 \$22,500 \$60,827 303,448 009,000 294,448	2025 \$1,353,680 7.00% 33.13% \$111,058 \$38,422 \$22,725 \$61,147 \$1,414,827 \$1,414,827 \$1,029,180 \$385,647	2026 \$1,421,364 43.78% \$67,684 \$38,518 \$22,952 \$61,471 \$1,482,834 \$1,049,764 \$433,071	2027 \$1,492,432 5.00% 50.97% \$71,068 \$38,615 \$23,182 \$61,797 \$1,554,228 \$1,070,759 \$483,470	2028 \$1,537,205 3.00% 55.49% \$44,773 \$38,711 \$23,414 \$62,125 \$1,599,330 \$1,599,330 \$1,092,174 \$507,156	2029 \$1,583,321 3.00% 60.16% \$46,116 \$38,808 \$23,648 \$62,456 \$1,645,777 \$1,645,777 \$1,114,018 \$531,759	2030 \$1,630,821 3.00% 64.96% \$47,500 \$38,905 \$23,884 \$62,789 \$1,693,610 \$1,136,298 \$557,312	2031 \$1,679,745 3.00% 69.91% \$48,925 \$39,002 \$24,123 \$63,125 \$1,742,871 \$1,742,871 \$1,759,024 \$583,847	2032 \$1,730,138 3.00% 75.01% \$50,392 \$39,100 \$24,364 \$63,464 \$1,793,602 \$1,182,204 \$611,397	2033 \$1,782,042 3.00% 80.26% \$51,904 \$39,198 \$24,608 \$63,806 \$1,845,847 \$1,205,848 \$639,999	2034 \$1,835,3 85.6 \$53, \$39,3 \$24,1 \$64, \$1,899,6 \$1,229,3 \$669,6
24.42% 24.42% \$243,871 \$38,327 \$22,500 \$60,827 303,448 009,000 294,448	7.00% 33.13% \$111,058 \$38,422 \$22,725 \$61,147 \$1,414,827 \$1,029,180 \$385,647	8.00% 43.78% \$67,684 \$38,518 \$22,952 \$61,471 \$1,482,834 \$1,049,764	5.00% 50.97% \$71,068 \$38,615 \$23,182 \$61,797 \$1,554,228 \$1,070,759	3.00% 55.49% \$44,773 \$38,711 \$23,414 \$62,125 \$1,599,330 \$1,092,174	3.00% 60.16% \$46,116 \$38,808 \$23,648 \$62,456 \$1,645,777 \$1,114,018	3.00% 64.96% \$47,500 \$38,905 \$23,884 \$62,789 \$1,693,610 \$1,136,298	3.00% 69.91% \$48,925 \$39,002 \$24,123 \$63,125 \$1,742,871 \$1,159,024	3.00% 75.01% \$50,392 \$39,100 \$24,364 \$63,464 \$1,793,602 \$1,182,204	3.00% 80.26% \$51,904 \$39,198 \$24,608 \$63,806 \$1,845,847 \$1,205,848	3.0 85.6 \$53,4 \$39,; \$24,; \$64, \$1,899,6 \$1,229,9
24.42% 24.42% \$243,871 \$38,327 \$22,500 \$60,827 303,448 009,000 294,448	7.00% 33.13% \$111,058 \$38,422 \$22,725 \$61,147 \$1,414,827 \$1,029,180 \$385,647	8.00% 43.78% \$67,684 \$38,518 \$22,952 \$61,471 \$1,482,834 \$1,049,764	5.00% 50.97% \$71,068 \$38,615 \$23,182 \$61,797 \$1,554,228 \$1,070,759	3.00% 55.49% \$44,773 \$38,711 \$23,414 \$62,125 \$1,599,330 \$1,092,174	3.00% 60.16% \$46,116 \$38,808 \$23,648 \$62,456 \$1,645,777 \$1,114,018	3.00% 64.96% \$47,500 \$38,905 \$23,884 \$62,789 \$1,693,610 \$1,136,298	3.00% 69.91% \$48,925 \$39,002 \$24,123 \$63,125 \$1,742,871 \$1,159,024	3.00% 75.01% \$50,392 \$39,100 \$24,364 \$63,464 \$1,793,602 \$1,182,204	3.00% 80.26% \$51,904 \$39,198 \$24,608 \$63,806 \$1,845,847 \$1,205,848	3.(85.(\$53, \$39, \$24, \$64, \$1,899,(\$1,229,
24.42% \$243,871 \$38,327 \$22,500 \$60,827 303,448 009,000 294,448	33.13% \$111,058 \$38,422 \$22,725 \$61,147 \$1,414,827 \$1,029,180 \$385,647	43.78% \$67,684 \$38,518 <u>\$22,952</u> \$61,471 \$1,482,834 \$1,049,764	50.97% \$71,068 \$38,615 \$23,182 \$61,797 \$1,554,228 \$1,070,759	55.49% \$44,773 \$38,711 \$23,414 \$62,125 \$1,599,330 \$1,092,174	60.16% \$46,116 \$38,808 \$23,648 \$62,456 \$1,645,777 \$1,114,018	64.96% \$47,500 \$38,905 \$23,884 \$62,789 \$1,693,610 \$1,136,298	69.91% \$48,925 \$39,002 \$24,123 \$63,125 \$1,742,871 \$1,742,871 \$1,159,024	75.01% \$50,392 \$39,100 \$24,364 \$63,464 \$1,793,602 \$1,182,204	80.26% \$51,904 \$39,198 \$24,608 \$63,806 \$1,845,847 \$1,205,848	85.(\$53, \$24, \$64, \$1,899,(\$1,229,
\$243,871 \$38,327 \$22,500 \$60,827 303,448 009,000 294,448	\$111,058 \$38,422 \$22,725 \$61,147 \$1,414,827 \$1,029,180 \$385,647	\$67,684 \$38,518 \$22,952 \$61,471 \$1,482,834 \$1,049,764	\$71,068 \$38,615 \$23,182 \$61,797 \$1,554,228 \$1,070,759	\$44,773 \$38,711 \$23,414 \$62,125 \$1,599,330 \$1,092,174	\$46,116 \$38,808 \$23,648 \$62,456 \$1,645,777 \$1,114,018	\$47,500 \$38,905 \$23,884 \$62,789 \$1,693,610 \$1,136,298	\$48,925 \$39,002 \$24,123 \$63,125 \$1,742,871 \$1,159,024	\$50,392 \$39,100 \$24,364 \$63,464 \$1,793,602 \$1,182,204	\$51,904 \$39,198 \$24,608 \$63,806 \$1,845,847 \$1,205,848	\$53, \$39, \$24, \$64, \$1,899,6 \$1,229,
\$38,327 \$22,500 \$60,827 303,448 009,000 294,448	\$38,422 \$22,725 \$61,147 \$1,414,827 \$1,029,180 \$385,647	\$38,518 <u>\$22,952</u> \$61,471 \$1,482,834 \$1,049,764	\$38,615 \$23,182 \$61,797 \$1,554,228 \$1,070,759	\$38,711 \$23,414 \$62,125 \$1,599,330 \$1,092,174	\$38,808 \$23,648 \$62,456 \$1,645,777 \$1,114,018	\$38,905 \$23,884 \$62,789 \$1,693,610 \$1,136,298	\$39,002 \$24,123 \$63,125 \$1,742,871 \$1,159,024	\$39,100 \$24,364 \$63,464 \$1,793,602 \$1,182,204	\$39,198 \$24,608 \$63,806 \$1,845,847 \$1,205,848	\$39, \$24, \$64, \$1,899,6 \$1,229,
\$22,500 \$60,827 303,448 009,000 294,448	\$22,725 \$61,147 \$1,414,827 \$1,029,180 \$385,647	\$22,952 \$61,471 \$1,482,834 \$1,049,764	\$23,182 \$61,797 \$1,554,228 \$1,070,759	\$23,414 \$62,125 \$1,599,330 \$1,092,174	\$23,648 \$62,456 \$1,645,777 \$1,114,018	\$23,884 \$62,789 \$1,693,610 \$1,136,298	\$24,123 \$63,125 \$1,742,871 \$1,159,024	\$24,364 \$63,464 \$1,793,602 \$1,182,204	\$24,608 \$63,806 \$1,845,847 \$1,205,848	\$24,i \$64, \$1,899,6 \$1,229,i
\$22,500 \$60,827 303,448 009,000 294,448	\$22,725 \$61,147 \$1,414,827 \$1,029,180 \$385,647	\$22,952 \$61,471 \$1,482,834 \$1,049,764	\$23,182 \$61,797 \$1,554,228 \$1,070,759	\$23,414 \$62,125 \$1,599,330 \$1,092,174	\$23,648 \$62,456 \$1,645,777 \$1,114,018	\$23,884 \$62,789 \$1,693,610 \$1,136,298	\$24,123 \$63,125 \$1,742,871 \$1,159,024	\$24,364 \$63,464 \$1,793,602 \$1,182,204	\$24,608 \$63,806 \$1,845,847 \$1,205,848	\$24, \$64, \$1,899,6 \$1,229,
\$60,827 303,448 009,000 294,448	\$61,147 \$1,414,827 \$1,029,180 \$385,647	\$61,471 \$1,482,834 \$1,049,764	\$61,797 \$1,554,228 \$1,070,759	\$62,125 \$1,599,330 \$1,092,174	\$62,456 \$1,645,777 \$1,114,018	\$62,789 \$1,693,610 \$1,136,298	\$63,125 \$1,742,871 \$1,159,024	\$63,464 \$1,793,602 \$1,182,204	\$63,806 \$1,845,847 \$1,205,848	\$64, \$1,899,6 \$1,229,
303,448 009,000 294,448	\$1,414,827 \$1,029,180 \$385,647	\$1,482,834	\$1,554,228	\$1,599,330 \$1,092,174	\$1,645,777 \$1,114,018	\$1,693,610 \$1,136,298	\$1,742,871 \$1,159,024	\$1,793,602 \$1,182,204	\$1,845,847 \$1,205,848	\$1,899,6 \$1,229,
009,000 294,448	\$1,029,180 \$385,647	\$1,049,764	\$1,070,759	\$1,092,174	\$1,114,018	\$1,136,298	\$1,159,024	\$1,182,204	\$1,205,848	\$1,229,
294,448	\$385,647	.,,,		.,,,		. , ,		.,,,	.,,,	
294,448	\$385,647	.,,,		.,,,		. , ,		.,,,	.,,,	
		\$433,071	\$483,470	\$507,156	\$531,759	\$557,312	\$583,847	\$611,397	\$639,999	\$669,0
\$0										
\$0										
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	
255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
925,000	\$215,000	\$440,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175
920,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
34,128	(\$81,978)	(\$261,054)	\$53,345	\$81,406	\$105,759	\$126,687	\$154,222	\$183,272	\$213,874	\$494,6
409,884	\$2,444,012	\$2,362,034	\$2,100,980	\$2,154,324	\$2,235,730	\$2,341,490	\$2,468,177	\$2,622,398	\$2,805,671	\$3,019
\$34,128	(\$81,978)	(\$261,054)	\$53,345	\$81,406	\$105,759	\$126,687	\$154,222	\$183,272	\$213,874	\$494
444,012	\$2,362,034	\$2,100,980	\$2,154,324	\$2,235,730	\$2,341,490	\$2,468,177	\$2,622,398	\$2,805,671	\$3,019,545	\$3,514
1.15	1.53	1.70	1.90	2.02	2.12	2.18	2.29	2.42	2.55	
99 3 4 \$4	\$0 25,000 20,000 4,128 09,884 34,128 44,012	\$0 \$0 25,000 \$215,000 20,000 \$0 4,128 (\$81,978) 09,884 \$2,444,012 34,128 (\$81,978) 44,012 \$2,362,034 1.15 1.53	\$0 \$0 \$0 25,000 \$215,000 \$440,000 20,000 \$0 \$0 4,128 (\$81,978) (\$261,054) 09,884 \$2,444,012 \$2,362,034 34,128 (\$81,978) (\$261,054) 1.15 1.53 1.70	\$0 \$0 \$0 \$0 25,000 \$215,000 \$440,000 \$175,000 20,000 \$0 \$0 \$0 4,128 (\$81,978) (\$261,054) \$53,345 09,884 \$2,444,012 \$2,362,034 \$2,100,980 34,128 (\$81,978) (\$261,054) \$53,345 44,012 \$2,362,034 \$2,100,980 \$2,154,324 1.15 1.53 1.70 1.90 Legend:	\$0 \$0 \$0 \$0 \$0 25,000 \$215,000 \$440,000 \$175,000 \$175,000 20,000 \$0 \$0 \$0 \$0 4,128 (\$81,978) (\$261,054) \$53,345 \$81,406 09,884 \$2,444,012 \$2,362,034 \$2,100,980 \$2,154,324 34,128 (\$81,978) (\$261,054) \$53,345 \$81,406 44,012 \$2,362,034 \$2,100,980 \$2,154,324 \$81,406 1.15 1.53 1.70 1.90 2.02 Legend:	\$0 \$0 \$0 \$0 \$0 \$0 \$0 25,000 \$215,000 \$440,000 \$175,000 \$175,000 \$175,000 20,000 \$0 \$0 \$0 \$0 \$0 \$0 4,128 (\$81,978) (\$261,054) \$53,345 \$81,406 \$105,759 09,884 \$2,444,012 \$2,362,034 \$2,100,980 \$2,154,324 \$2,235,730 34,128 (\$81,978) \$2,362,034 \$2,100,980 \$2,154,324 \$2,235,730 44,012 \$2,362,034 \$2,100,980 \$2,154,324 \$2,235,730 \$2,341,490 1.15 1.53 1.70 1.90 2.02 2.12 Legend:	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 25,000 \$215,000 \$440,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 20,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 4,128 (\$81,978) (\$261,054) \$53,345 \$81,406 \$105,759 \$126,687 09,884 \$2,444,012 \$2,362,034 \$2,100,980 \$2,154,324 \$2,235,730 \$2,341,490 34,128 (\$81,978) \$2,362,034 \$2,100,980 \$2,154,324 \$2,235,730 \$2,341,490 \$44,012 \$2,362,034 \$2,100,980 \$2,154,324 \$2,235,730 \$2,341,490 \$2,362,034 \$2,100,980 \$2,154,324 \$2,235,730 \$2,341,490 \$2,468,177 1.15 1.53 1.70 1.90 2.02 2.12 2.18 Legend:	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 25,000 \$215,000 \$440,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$0 <td>\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 25,000 \$215,000 \$440,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$0</td> <td>\$0 <th< td=""></th<></td>	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 25,000 \$215,000 \$440,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$175,000 \$0	\$0 <th< td=""></th<>



Table 9Sewer Utility Financial Benchmarking Analysis Projected 2024 - 2033

	Budget					Projected				
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Target minimum cash balance										
Target minimum working capital - Ehlers ¹	931,388	948,563	966,589	976,170	990,590	1,009,603	1,023,215	1,036,553	1,049,624	813,806
Actual Days Cash Available - PSC ²	811	772	679	689	708	734	765	805	853	909
Actual Days Cash Available - Moody's ³	873	826	719	723	736	757	783	816	856	904
Target minimum working capital - S&P ⁴	873	826	719	723	736	757	783	816	856	904
Actual working capital-cash balance	2,444,012	2,362,034	2,100,980	2,154,324	2,235,730	2,341,490	2,468,177	2,622,398	2,805,671	3,019,545
Over (Under) Ehlers target	1,512,624	1,413,471	1,134,391	1,178,155	1,245,140	1,331,886	1,444,962	1,585,845	1,756,047	2,205,739
Over (Under) PSC target (90 days)	721	682	589	599	618	644	675	715	763	819
Over (Under) Moody's target (150 days)	723	676	569	573	586	607	633	666	706	754
Over (Under) S&P target (150 days)	723	676	569	573	586	607	633	666	706	754
4) S&P Formula = [(Unrestricted Cash + Liquid I	ivestments) *	ooo daysj ÷ T			epreciation; in	iciude designa	aleu reserve f	unus: ERFS, f	STS, elc	
Rate of Return Total Plant in service beginning of year	21 283 830	23,208,839	23,423,839	23,863,839	24,038,839	24,213,839	24,388,839	24,563,839	24.738.839	24.913.839
Total Plant in service end of year		23,423,839	23,863,839	24,038,839	24,213,839	24,388,839	24,563,839	24,738,839	24.913.839	25,088,839
Average Total Plant in Service		23,316,339	23,643,839		24,126,339	, ,	24,476,339	24,651,339	24,826,339	25,001,339
	, ,		, ,	,,	,,	,,	,,	_ ,,,	_ ,,,,,	,,
Average Utility Plant in Service	22,246,339	23,316,339	23,643,839	23,951,339	24,126,339	24,301,339	24,476,339	24,651,339	24,826,339	25,001,339
Less: Utility Plant Accumulated Depreciation	13,254,961	13,583,307	13,922,420	14,274,588	14,633,253	14,998,415	15,370,074	15,748,230	16,132,883	16,524,032
Average Net Investment Rate Base (NIRB)	8,991,378	9,733,032	9,721,419	9,676,751	9,493,086	9,302,924	9,106,265	8,903,109	8,693,456	8,477,307
Net Operating Income	(21,921)	18,878	55,440	92,687	109,779	127,789	146,748	166,689	187,645	209,652
ROR	-0.24%		0.57%	0.96%	1.16%	1.37%	1.61%	1.87%	2.16%	2.47%
Typical	2.50%									
	l	l								



Cost Recovery										
Operating Revenues	1,265,121	1,376,405	1,444,316	1,515,614	1,560,618	1,606,969	1,654,705	1,703,868	1,754,502	1,806,650
Operating Expenses incl. Depr & Amortization	1,287,042	1,357,526	1,388,876	1,422,927	1,450,839	1,479,180	1,507,957	1,537,180	1,566,857	1,596,998
Cost Recovery	0.98	1.01	1.04	1.07	1.08	1.09	1.10	1.11	1.12	1.13
Cost Recovery w/o Depr.	1.25	1.34	1.38	1.42	1.43	1.44	1.46	1.47	1.48	1.50

Notes:

This operating ratio indicates whether operating revenues (mostly charges to customers) were sufficient to cover operations and capital (in the form of depreciation) for the water and/or wastewater utility in the fiscal year. A ratio of < 1 could be a sign of financial concern. In general, this ratio should be > 1 to accommodate future capital investments.

Leverage										
Total Long-Term Debt	1,835,000	1,670,000	1,495,000	1,310,000	1,120,000	920,000	705,000	480,000	245,000	0
Total Net Assets	10,592,157	10,561,833	10,576,666	10,637,842	10,725,583	10,841,180	10,986,208	11,162,274	11,370,894	11,613,619
Debt-to Equity Ratio	0.17	0.16	0.14	0.12	0.10	0.08	0.06	0.04	0.02	0.00

Notes:

This indicator measures the existing level of leveraging of assets, and is used by funders and rating agencies to evaluate the risk of providing additional loans to the utility. The ratio indicates the amount of long-term debt that exists for every \$1 of assets (fund equity). A utility with a ratio > 1 has more long-term debt than equity in the system's assets. There are no natural benchmarks for this indicator, and funders and rating agencies will assess this ratio in various ways. In general, the higher this ratio, the more likely the utility will be considered to be over-leveraged and the more difficult it will be for the utility to obtain additional loans. Net Assets are equal to the Net Investment Rate Base of the utility.

Condition of Assets:

Condition of Assets.											
Accumulated Depreciation Expense	13,254,961	13,583,307	13,922,420	14,274,588	14,633,253	14,998,415	15,370,074	15,748,230	16,132,883	16,524,032	
Average Total Plant in Service	22,246,339	23,316,339	23,643,839	23,951,339	24,126,339	24,301,339	24,476,339	24,651,339	24,826,339	25,001,339	
Asset Depreciation	37.34%	36.81%	37.06%	37.34%	37.75%	38.16%	38.57%	38.98%	39.39%	39.79%	

Notes:

This indicator of infrastructure condition estimates the portion of the average expected life of the utility's physical assets that has already passed. As this ratio approaches 100%, the capital assets become fully depreciated, and infrastructure needs replacement or rehabilitation. The accuracy of this indicator

relies heavily on the accuracy of the depreciation schedule, and historic pricing likely distorts this indicator (newer utilities may be slightly disadvantaged as a result).



Table 10Sewer Utility Long-Range Planning Analysis

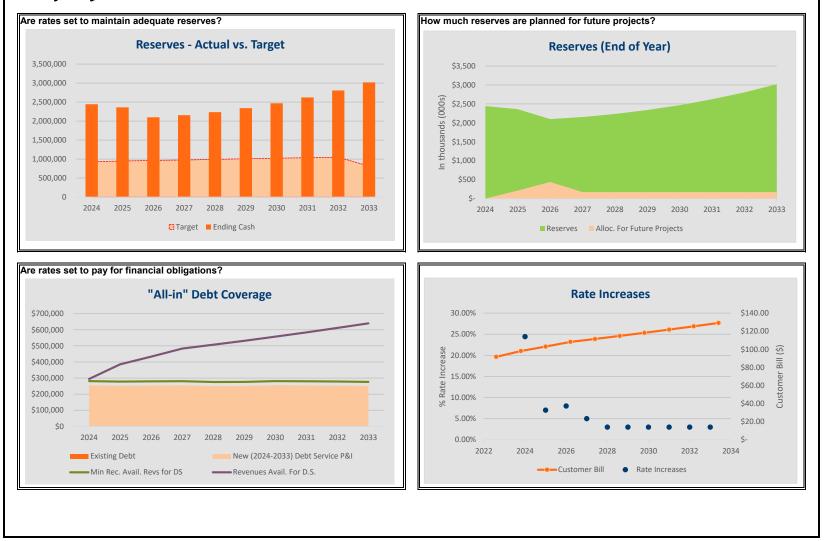




Table 11Projected Test Year 2024 Billable Flows

		Flow (1,00	00 Gal)	
	2021	2022	2023	2024
Inside Customers				
Residential	85,535	80,759	86,425	88,585
Commercial	103,208	104,896	102,645	103,158
Common Area	404	339	349	358
Public Authority	2,011	1,929	2,064	2,115
Subtotal Inside Customers	191,158	187,922	191,483	194,216
Unmetered Customers				
Subtotal Unmetered Customers	10,058	10,058	10,058	10,058
Subtotal Unmetered Customers	10,058	10,058	10,058	10,058
				204,274
Total For Rate Calcs				



Table 12Projected Test Year 2024 Meter Counts

Town of Brookfield, WI

		Total Meters Inside	Customers		
Meter Size	Residential	Commercial	Common Area	Public Authority	Total
5/8	136	1	0	0	137
3/4	1,757	103	1	0	1,861
1	2	60	0	2	64
1.5	0	48	0	5	53
2	0	33	1	0	34
3	0	2	0	0	2
	1,895	247	2	7	2,151
		Tota	al Inside Customers	2,151	

		ustomers	Inside C			
Total	Public Authority	Common Area	Commercial	Residential	Equiv. Ratio	Meter Size
137.	-	-	1.0	136.0	1.0	5/8
1,861.	-	1.0	103.0	1,757.0	1.0	3/4
110.	3.5	-	103.8	3.5	1.7	1
157.	14.8	-	142.2	-	3.0	1.5
151.	-	4.5	147.4	-	4.5	2
21.	-	-	21.4	-	10.7	3
2,439.	18.3	5.5	518.9	1,896.5		

Notes:

1. 3/4" customer count includes 135 un-metered customers.



Table 13Historical Expenses and 2024 Adopted Budget for Sewer Utility

Account	Account	2021	2022	2023	YTD	2024
Number	Description	ACTUAL	ACTUAL	ESTIMATE	ACTUAL	BUDGET
403000	Sewer Depreciation	253,430	229,788	284,350	0	278,04
408000	Sewer-taxes	4,451	4,361	5,300	3,177	5,30
820000	Supervision and Labor	24,933	25,179	26,000	22,568	27,00
821000	Power & Fuel for pumping	35,760	7,505	8,000	5,727	8,50
822000	Sewerage treating	461,057	442,536	440,000	380,641	482,00
826000	Other chemicals for treatment	4,446	6,779	5,000	2,348	5,50
827000	Other operation supplies and expenses	2,915	4,299	3,000	2,333	3,00
828000	Transportation expenses	3,506	3,637	4,000	3,075	4,50
831000	Maintenance of collection system	452,332	331,688	480,200	122,965	340,00
832000	Maintenance of collection system pumping equip	17,489	899	10,000	0	10,00
834000	Maint of general plant STR & EQ	4,000	0	0	0	
840000	Billing, collection and accounting	6,170	10,708	6,500	3,275	6,50
850000	General and Admin Salaries	22,604	20,688	23,000	15,197	23,50
851000	Office supplies and expenses	9,572	4,760	7,000	5,949	7,00
852000	Outside services employed	8,718	14,214	18,000	18,222	19,00
853000	Insurance expenses	12,778	16,844	15,000	7,458	15,00
854000	Employee pensions & benefits	52,588	41,509	44,200	22,710	44,20
856000	Misc General	19,997	16,265	8,000	4,530	8,00
	Total	1,396,746	1,181,659	1,387,550	620,175	1,287,04

Table 14

		Allocati	on Perce	entages		WWTF	Customer		
		Flow	Cst	Cnn	2024 Budget	Flow	Billing	Meter/Conn	
Operating & N									
<u>Acct #</u>	Acct Description	700/	1 - 0/	1 - 0/	ćr 200	¢2 710	670F	ć70	
408000 820000	Sewer-taxes	70% 70%	15% 15%	15% 15%	\$5,300	\$3,710	\$795	\$79. \$4.05	
820000	Supervision and Labor Power & Fuel for pumping	70%	15%	15%	\$27,000 \$8,500	\$18,900 \$5,950	\$4,050 \$1,275	\$4,05 \$1,27	
822000	Sewerage treating	70%	15%	15%	\$482,000	\$3,50	\$72,300	\$72,30	
826000	Other chemicals for treatment	70%	15%	15%	\$5,500	\$3,850	\$825	\$82	
827000	Other operation supplies and expenses	70%	15%	15%	\$3,000	\$2,100	\$450	\$45	
828000	Transportation expenses	70%	15%	15%	\$4,500	\$3,150	\$675	\$67	
831000	Maintenance of collection system	70%	15%	15%	\$340,000	\$238,000	\$51,000	\$51,00	
832000	Maintenance of collection system pumping equip	70%	15%	15%	\$10,000	\$7,000	\$1,500	\$1,50	
834000	Maint of general plant STR & EQ	70%	15%	15%	\$0	\$0	\$0	\$	
840000	Billing, collection and accounting	70%	15%	15%	\$6,500	\$4,550	\$975	\$97	
850000	General and Admin Salaries	70%	15%	15%	\$23,500	\$16,450	\$3,525	\$3,52	
851000	Office supplies and expenses	70%	15%	15%	\$7,000	\$4,900	\$1,050	\$1,05	
852000	Outside services employed	70%	15%	15%	\$19,000	\$13,300	\$2,850	\$2,85	
853000	Insurance expenses	70%	15%	15%	\$15,000	\$10,500	\$2,250	\$2,25	
856000 otal O & M	Misc General	70% 70%	15% 15%	15% 15%	\$8,000 \$1,009,000	\$5,600 \$706,300	\$1,200 \$151,350	\$1,20 \$151,350	
apital Costs Debt Cash Finance	d Capital	70% 70%	15% 15%	15% 15%	\$255,319 \$0	\$178,724 \$0	\$38,298 \$0	\$38,298 \$0	
otal Capital C	osts	70%	15%	15%	\$255,319	\$178,724	\$38,298	\$38,298	
ubtotal Revei	nue Requirements				\$1,264,319	\$885,024	\$189,648	\$189,648	
ther Income									
Charges on E	xcess Loadings	70%	15%	15%	(\$11,500)	(\$8,050)	(\$1,725)	(\$1,725	
Penalties/Otl	her Operating Revenues	70%	15%	15%	(\$11,000)	(\$7,700)	(\$1,650)	(\$1,650	
otal Other Inc	come	70%	15%	15%	(\$22,500)	(\$15,750)	(\$3,375)	(\$3,375	
otal Net Rev	venue Requirements				\$1,241,819	\$869,274	\$186,273	\$186,273	
ummary									
llocation of C	Costs to Function and Classification for Inside Rates								
					2024 Budget	Flow	Billing	Meter/Conn	
	O&M and Replacement	70%	15%	15%	\$1,009,000	\$706,300	\$151,350	\$151,350	
	Capital	70%	15%	15%	\$255,319	\$178,724	\$38,298	\$38,298	
	Other Revenues	70%	15%	15%	(\$22,500)	(\$15,750)	(\$3,375)	(\$3,375	
	Total	70%	15%	15%	1,241,819	869,274	186,273	186,273	



Table 15Rate Computation Worksheet

ed Charges (Annual)				
<u>Charge Type</u>		<u>Costs</u>	Billable Units	<u>Rate</u>
Customer Charge		\$186,272.92	2,151	\$86.60
Meter/Connection Charge	2	\$186,272.92	2,439	\$76.37
	Equiv	Meter/Connection	Customer	Total
Meter Size	<u>Ratio</u>	<u>Charge</u>	<u>Charge</u>	Fixed Charge
5/8	1	\$76.37	\$86.60	\$162.97
3/4	1	\$76.37	\$86.60	\$162.97
1	1.73	\$132.12	\$86.60	\$218.72
1.5	2.962	\$226.21	\$86.60	\$312.81
2	4.468	\$341.22	\$86.60	\$427.82
3	10.715	\$818.30	\$86.60	\$904.90
lumetric Charges				
			Billable Units	
arge Type		Cost	<u>(1,000 Gal or lbs)</u>	Rate/Unit
Flow Charge per 1000 Gal		\$869,274	204,274	\$4.26
tal Volumetric Rate per 1	000 Gal			\$4.26
ate Summary				
ed charge per connectior	ו			\$162.97
tal Volumetric Rate per 1	000 Gal			\$4.26



Table 16Rate Summary (Quarterly Charges)

	Current	COS	Proposed
omestic Sewer Customers			
Meter Size			
5/8	\$30.55	\$40.74	\$38.50
3/4	\$30.55	\$40.74	\$38.50
1	\$53.00	\$54.68	\$63.60
1.5	\$90.50	\$78.20	\$108.60
2	\$136.50	\$106.96	\$163.80
3	\$327.35	\$226.23	\$392.82
Volumetric Rate per 1000 Gal	\$3.43	\$4.26	\$4.26



Table 17Revenue Summary (Proposed Rates)

				Annual
		Units	Rate	Total
Fixed Charge				
	Meter Size			
	5/8	137	\$38.50	\$21,098
	3/4	1,861	\$38.50	\$286,594
	1	64	\$63.60	\$16,282
	1.5	53	\$108.60	\$23 <i>,</i> 023
	2	34	\$163.80	\$22,277
	3	2	\$392.82	\$3,143
Subtotal		2,151		372,416
/olumetric Charges				
Residential	Flow (000 gal)	88,585	\$4.26	\$377,372
Commercial	Flow (000 gal)	103,158	\$4.26	\$439,453
Common Area	Flow (000 gal)	358	\$4.26	\$1,525
Public Authority	Flow (000 gal)	2,115	\$4.26	\$9,010
Unmetered Customers	Flow (000 gal)	10,058	\$4.26	\$42,845
Subtotal		204,274		\$870,205
Fotal Revenues				\$1,242,621
Revenue Requirements				\$1,241,819
Difference				\$802



Table 18Test Year Cash Flow Analysis

Town of Brookfield, WI

	2024
Cash Sources	
Revenues from User Rates ⁽¹⁾	\$1,242,621
Other Income ⁽²⁾	\$22,500
Investment Income on Unrestricted Cash	\$38,327
Total Cash Sources	\$1,303,448
Cash Uses	
0&M	\$1,009,000
Net Before Debt Service	\$294,448
Debt Service	
General Obligation Debt Service P&I	\$255,319
Total Debt Service	\$255,319
Cash Funded Capital	\$5,000
Transfer in/(out)	\$0
Net Cash Flow	\$34,128
Total Unrestricted Cash Balance	
Beginning Year Est. Balance	\$2,412,012
Net Additions (Subtractions)	\$34,128
End of Year Unrestricted Cash Balance	\$2,446,140

Notes:

1) Full year of revenues from proposed user rates

2) Miscellaneous revenue, high strength loading revenues, and late fees.



Table 19Comparison of Existing and Proposed Bills

Town of Brookfield, WI

			Quarterly							
Customer	Usage Level	Meter Size	Usage 1,000 Gal	Current Bill	Proposed Bill	Dollar Change	Percent Change			
Residential	Low User	5/8	9.44	\$62.91	\$78.69	\$15.78	25.1%			
Residential	Avg. User	5/8	12.58	\$73.70	\$92.09	\$18.39	25.0%			
Residential	High User	5/8	15.73	\$84.49	\$105.49	\$21.00	24.9%			
Commercial	Low User	3/4	78.31	\$299.14	\$372.09	\$72.95	24.4%			
Commercial	Avg. User	3/4	104.41	\$388.68	\$483.29	\$94.61	24.3%			
Commercial	High User	3/4	130.51	\$478.21	\$594.48	\$116.28	24.3%			
Common Area	Low User	3/4	33.56	\$145.67	\$181.48	\$35.81	24.6%			
Common Area	Avg. User	3/4	44.75	\$184.04	\$229.14	\$45.09	24.5%			
Common Area	High User	3/4	55.94	\$222.42	\$276.79	\$54.38	24.4%			
Public Authority	Low User	1.5	56.65	\$284.80	\$349.92	\$65.12	22.9%			
Public Authority	Avg. User	1.5	75.53	\$349.57	\$430.36	\$80.79	23.1%			
Public Authority	High User	1.5	94.41	\$414.33	\$510.80	\$96.46	23.3%			

Notes:

1) Meter sizes chosen based on highest number of users for each class

2) Average user is defined as the total estimated test year flow for the class divided by the projected number of users in the class.



Table 20Projected Impact of CIP on Typical Residential Utility Bill

Town of Brookfield, WI

	Water					Sewer												
Year	Increase	Water Vol. Charge ¹	Water User Charge ²	Utility Bill (Quarterly)	Change Over Prior Year	Increase	Sewer Vol. Charge ³	Sewer User Charge ³		Utility Bill (Quarterly)	Over	ange Prior ear		Utility Bil (Annual)	C	Change Dver Prior Year	% of MHI (110,616)	Year
		Tiered	Serv.				<u>1,000 Gal</u>	Gen Service					Γ		Ī			
2023		1.78	30.30	\$ 52.69			3.43	30.55	\$	73.70				\$ 505.5	7		0.46%	2023
2024	0.00%	1.78	30.30	\$ 52.69	\$-	24.42%	4.27	38.01	\$	91.70	\$	18.00		\$ 577.5	5 \$	71.98	0.52%	2024
2025	0.00%	1.78	30.30	\$ 52.69	\$ -	7.00%	4.57	40.67	\$	98.11	\$	6.42		\$ 603.2	2 \$	25.67	0.55%	2025
2026	0.00%	1.78	30.30	\$ 52.69	\$ -	5.00%	4.79	42.70	\$	103.02	\$	4.91		\$ 622.8	5 \$	19.62	0.56%	2026
2027	0.00%	1.78	30.30	\$ 52.69	\$ -	5.00%	5.03	44.84	\$	108.17	\$	5.15		\$ 643.4	5 \$	20.60	0.58%	2027
2028	0.00%	1.78	30.30	\$ 52.69	\$ -	3.00%	5.19	46.18	\$	111.42	\$	3.25		\$ 656.4	3 \$	12.98	0.59%	2028
2029	0.00%	1.78	30.30	\$ 52.69	\$ -	3.00%	5.34	47.57	\$	114.76	\$	3.34		\$ 669.8	0 \$	13.37	0.61%	2029
2030	0.00%	1.78	30.30	\$ 52.69	\$ -	3.00%	5.50	49.00	\$	118.20	\$	3.44		\$ 683.5	7 \$	13.77	0.62%	2030
2031	0.00%	1.78	30.30	\$ 52.69	\$ -	3.00%	5.67	50.47	\$	121.75	\$	3.55		\$ 697.7	6 \$	14.18	0.63%	2031
2032	0.00%	1.78	30.30	\$ 52.69	\$-	3.00%	5.84	51.98	\$	125.40	\$	3.65		\$ 712.3	7 \$	14.61	0.64%	2032
2033	0.00%	1.78	30.30	\$ 52.69	\$ -	3.00%	6.01	53.54	\$	129.16	\$	3.76		\$727.4	1 \$	15.05	0.66%	2033
Total Chang	ge over plann	ing period			\$-						\$	55.46			\$	221.85		

Notes:

1. Current water volumetric rate is \$1.78 per 1,000 gallons.

2. The water user charges include a quarterly service charge of 30.30 for a 5/8 inch meter.

3. The current Sewer volumetric rate is \$3.43 per 1,000 gallons and a service charge of \$30.55 for 5/8 inch meter.

4. The usage is assumed to be 12,580 Gallons per quarter.

5. 2026 is the end of the current CIP Planning period.



Test Year 2024 Sanitary Sewer Utility Rate Study Section 3 – Presentations to Town Board Town of Brookfield, WI



Town of Brookfield, WI 2023 Sewer Utility Long-Range Cash Flow Analysis & User Rate Study Update

November 7, 2023

Why are we here?

- Sewer Utility contemplating future capital investment
- Ehlers to identify fiscal sustainability
- Our Process
 - ✓ Historical Rate Performance
 - ✓ Future Projections
 - ➢ O&M, Depreciation, and PILOT
 - Funding Project(s): Debt vs. Cash
 - ✓ Rate Impact



Sewer: Historical Rate Performance

Shown with no increase												
Reve	nue Requirement					Est	Budget					
Component	Description	2019	2020	2021	2022	2023	2024					
Cash Basis												
1	Operating and Maintenance	\$850,930	\$1,604,112	\$1,138,464	\$950,898	\$1,103,200	\$1,009,000					
2	Debt	\$0	\$0	\$0	\$0	\$0	\$255,319					
3	Cash Funded Capital	\$1,062	\$468,283	\$12,508	\$6,974	\$225,400	\$5,000					
	Less:											
	Other Revenue	\$0	\$0	\$0	\$0	\$22,500	\$22,500					
	Interest Income	\$78,054	\$31,494	\$10,618	\$23,792	\$38,231	\$38,327					
	Revenue Requirement (Costs less Other Income)	\$773,938	\$2,040,901	\$1,140,354	\$934,080	\$1,267,869	\$1,208,493					
	User Rates Revenue	\$699,230	\$1,004,144	\$1,334,041	\$1,001,518	\$998,751	\$998,751					
	Rate Adequacy	(\$74,708)	(\$1,036,757)	\$193,687	\$67,438	(\$269,118)	(\$209,742)					
	Rate Adjustment Needed	10.68%	103.25%	0.00%	0.00%	26.95%	21.00%					



Sewer: Historical Financial Indicators



- Target minimum reserve level = 6 mo's O&M plus next year's debt service payment
- In 2023
 - ✓ Target balance of approx. \$900k
 - ✓ Est. Balance of approx. \$2.4 mill



Sewer: Targeted Future Minimum Reserves

	Budget	Projected										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
Target minimum cash balance												
Target minimum working capital - Ehlers ¹	931,388	948,563	966,589	976,170	990,590	1,009,603	1,023,215	1,036,553	1,049,624	813,806		
Actual Days Cash Available - PSC ²	812	806	762	797	841	877	919	954	998	1,033		
Actual Days Cash Available - Moody's ³	873	863	809	839	877	907	942	969	1,003	1,029		
Target minimum working capital - S&P ⁴	873	863	809	839	877	907	942	969	1,003	1,029		

Notes:

1) Target capital equals 6 mos of next year's operating expenses, including depreciation, plus 100% of debt.

2) PSC formula = O&M expense + taxes + interest on long term debt ÷ 365 to get expense per day. Then Unrestricted Cash ÷ expense per day

3) Moody's Formula = [(Unrestricted Cash + Liquid Investments) * 365 days] ÷ Total O&M Expenses less Depreciation

4) S&P Formula = [(Unrestricted Cash + Liquid Investments) * 365 days] ÷ Total O&M Expenses less Depreciation; include designated reserve funds: ERFs, RSFs, etc



Future Capital

Projects	Funding	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Totals
Interceptor Repair/Relining - Phase 1,2, & 5	G.O. Debt	1,920,000	0	0	0							1,920,000
Interceptor Repair/Relining - Phase 3	Cash	0	175,000	0	0							175,000
Interceptor Repair/Relining - Phase 4	Cash	0	0	190,000	0							190,000
Vehicle Replacement - Pick up	Cash	0	20,000	0	0							20,000
Barker Rd parking Lot Replacement	Cash	5,000	20,000	0	0							25,000
Lift Station Update	Cash	0	0	250,000	0							250,000
CIP Placeholder for Future Years	Cash				175,000	175,000	175,000	175,000	175,000	175,000	175,000	
Actual CIP Costs		1,925,000	215,000	440,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	2,580,000

Sources of Funding	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
G.O. Debt	1,920,000	0	0	0	0	0	0	0	0	0	1,920,000
Revenue Debt	0	0	0	0	0	0	0	0	0	0	0
Grants/Aids	0	0	0	0	0	0	0	0	0	0	0
Special Assessment	0	0	0	0	0	0	0	0	0	0	0
User Fees	0	0	0	0	0	0	0	0	0	0	0
Tax Levy	0	0	0	0	0	0	0	0	0	0	0
Equipment Replacement Fund	0	0	0	0	0	0	0	0	0	0	0
Cash	5,000	215,000	440,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	1,885,000
Total	1,925,000	215,000	440,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	3,805,000



Calculated 2024 Sewer Rates

		2024
Current	COS	Proposed
\$30.55	\$40.74	\$40.00
\$30.55	\$40.74	\$40.00
\$53.00	\$54.68	\$54.68
\$90.50	\$78.20	\$90.50
\$136.50	\$106.96	\$136.50
\$327.35	\$226.23	\$327.35
\$3.43	\$4.26	\$4.26
	\$30.55 \$30.55 \$53.00 \$90.50 \$136.50 \$327.35	\$30.55 \$40.74 \$30.55 \$40.74 \$53.00 \$54.68 \$90.50 \$78.20 \$136.50 \$106.96 \$327.35 \$226.23



Calculated 2024 Sewer Rates

			Quarterly							
		_	Usage	Current	Proposed	Dollar	Percent			
Customer	Usage Level	Meter Size	1,000 Gal	Bill	Bill	Change	Change			
Residential	Low User	5/8	9.44	\$62.91	\$80.19	\$17.28	27.5%			
Residential	Avg. User	5/8	12.58	\$73.70	\$93.59	\$19.89	27.0%			
Residential	High User	5/8	15.73	\$84.49	\$106.99	\$22.50	26.6%			
Commercial	Low User	3/4	78.31	\$299.14	\$373.59	\$74.45	24.9%			
Commercial	Avg. User	3/4	104.41	\$388.68	\$484.79	\$96.11	24.7%			
Commercial	High User	3/4	130.51	\$478.21	\$595.98	\$117.78	24.6%			
Common Area	Low User	3/4	33.56	\$145.67	\$182.98	\$37.31	25.6%			
Common Area	Avg. User	3/4	44.75	\$184.04	\$230.64	\$46.59	25.3%			
Common Area	High User	3/4	55.94	\$222.42	\$278.29	\$55.88	25.1%			
Public Authority	Low User	1.5	56.65	\$284.80	\$331.82	\$47.02	16.5%			
Public Authority	Avg. User	1.5	75.53	\$349.57	\$412.26	\$62.69	17.9%			
Public Authority	High User	1.5	94.41	\$414.33	\$492.70	\$78.36	18.9%			



Rate Comparison

Municipality	Quarterly Residential Customer Charge	Volume Charge Rate/1,000 gal	Typical Total Quarterly Charge*
City of Waukesha Inside	\$20.64	\$10.48	\$205.27
Menomonee Falls	\$72.92	\$7.21	\$163.05
City of Pewaukee	\$141.00	Flat Fee	\$141.00
City of Brookfield	\$70.00	\$4.41	\$125.13
Village of Pewaukee		\$8.65	\$108.13
Town of Brookfield	\$30.55	\$3.43	\$73.43
Proposed -Town of Brookfield	\$40.00	\$4.26	\$93.25



Potential Future Cash Flow Scenarios

- <u>Scenario 1</u>: Implement rates to recover full revenue requirement in 2024, continued linear increase to cash fund CIP
- <u>Scenario 2</u>: Spread out 2024 increase over 2-years and then continue with linear increase to cash fund CIP
- <u>Scenario 3</u>: Implement rates to recover full revenue requirement in 2024, continue rate increases to obtain \$5.0 million fund balance by 2034



Sewer: Scenario 1

	Budget					Proje	cted				
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenues											
Total Revenues from User Rates ¹	\$1,244,252	\$1,355,425	\$1,423,196	\$1,494,356	\$1,539,186	\$1,585,362	\$1,632,923	\$1,681,910	\$1,732,368	\$1,784,339	\$1,837,869
Percent Increase to User Rates	24.58%	7.00%	5.00%	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Percent Rate Increase Dollar Amount Increase to Revenues	24.58% \$245,501	33.30% \$111,173	39.97% \$67,771	46.96% \$71,160	51.37% \$44,831	55.92% \$46,176	60.59% \$47,561	65.41% \$48,988	70.37% \$50,457	75.48% \$51,971	80.75% \$53,530
Other Revenues											
Interest Income	\$38,327	\$38,422	\$38,518	\$38,615	\$38,711	\$38,808	\$38,905	\$39,002	\$39,100	\$39,198	\$39,296
Other Income	\$22,500	\$22,725	\$22,952	\$23,182	\$23,414	\$23,648	\$23,884	\$24,123	\$24,364	\$24,608	\$24,854
Total Other Revenues	\$60,827	\$61,147	\$61,471	\$61,797	\$62,125	\$62,456	\$62,789	\$63,125	\$63,464	\$63,806	\$64,150
Total Revenues	\$1,305,079	\$1,416,572	\$1,484,667	\$1,556,152	\$1,601,311	\$1,647,818	\$1,695,712	\$1,745,036	\$1,795,832	\$1,848,144	\$1,902,019
Less: Expenses											
Operating and Maintenance	\$1,009,000	\$1,029,180	\$1,049,764	\$1,070,759	\$1,092,174	\$1,114,018	\$1,136,298	\$1,159,024	\$1,182,204	\$1,205,848	\$1,229,965
Net Before Debt Service and Capital Expenditures	\$296,079	\$387,392	\$434,903	\$485,393	\$509,137	\$533,800	\$559,414	\$586,012	\$613,628	\$642,296	\$672,053
Debt Service											
Existing Debt P&I	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New (2024-2033) Debt Service P&	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	\$0
Total Debt Service	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	\$0
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less: Capital Improvements	\$1,925,000	\$215,000	\$440,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Debt Issued/Grants/Aid	\$1,920,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Annual Cash Flow	\$35,759	(\$80,233)	(\$259,222)	\$55,268	\$83,387	\$107,800	\$128,789	\$156,387	\$185,503	\$216,171	\$497,053
Restricted and Unrestricted Cash Balance:											
Balance at first of year	\$2,409,884	\$2,445,643	\$2,365,410	\$2,106,188	\$2,161,456	\$2,244,843	\$2,352,643	\$2,481,432	\$2,637,819	\$2,823,322	\$3,039,493
Net Annual Cash Flow Addition/(subtraction)	\$35,759	(\$80,233)	(\$259,222)	\$55,268	\$83,387	\$107,800	\$128,789	\$156,387	\$185,503	\$216,171	\$497,053
Balance at end of year	\$2,445,643	\$2,365,410	\$2,106,188	\$2,161,456 Page 43	\$2,244,843	\$2,352,643	\$2,481,432	\$2,637,819	\$2,823,322	\$3,039,493	\$3,536,546
"All-in"Debt Coverage	1.16	1.53	1.71	Page 43	2.03	2.13	2,19	2.30	2.42	2.56	NA
PUBLIC FINANCE ADVISORS											

PUBLIC FINANCE ADVISOR

Sewer: Scenario 2

	Budget					Projec	ted				
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenues											
Total Revenues from User Rates ¹	\$1,174,438	\$1,376,479	\$1,445,303	\$1,495,888	\$1,540,765	\$1,586,988	\$1,634,598	\$1,683,635	\$1,734,145	\$1,786,169	\$1,839,754
Percent Increase to User Rates	15.00%	15.00%	5.00%	3.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Percent Rate Increase	15.00%	32.25%	38.86%	43.72%	48.03%	52.48%	57.05%	61.76%	66.61%	71.61%	76.76%
Dollar Amount Increase to Revenues	\$175,688	\$202,041	\$68,824	\$50,586	\$44,877	\$46,223	\$47,610	\$49,038	\$50,509	\$52,024	\$53,585
Other Revenues											
Interest Income	\$38,327	\$38,422	\$38,518	\$38,615	\$38,711	\$38,808	\$38,905	\$39,002	\$39,100	\$39,198	\$39,296
Other Income	\$22,500	\$22,725	\$22,952	\$23,182	\$23,414	\$23,648	\$23,884	\$24,123	\$24,364	\$24,608	\$24,854
Total Other Revenues	\$60,827	\$61,147	\$61,471	\$61,797	\$62,125	\$62,456	\$62,789	\$63,125	\$63,464	\$63,806	\$64,150
Total Revenues	\$1,235,265	\$1,437,626	\$1,506,773	\$1,557,685	\$1,602,890	\$1,649,444	\$1,697,387	\$1,746,761	\$1,797,609	\$1,849,974	\$1,903,904
Less: Expenses											
Operating and Maintenance	\$1,009,000	\$1,029,180	\$1,049,764	\$1,070,759	\$1,092,174	\$1,114,018	\$1,136,298	\$1,159,024	\$1,182,204	\$1,205,848	\$1,229,965
Net Before Debt Service and Capital Expenditures	\$226,265	\$408,446	\$457,010	\$486,926	\$510,716	\$535,426	\$561,089	\$587,737	\$615,404	\$644,126	\$673,938
Debt Service											
Existing Debt P&I	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New (2024-2033) Debt Service P&I	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	\$0
Total Debt Service	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	\$0
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less: Capital Improvements	\$1,925,000	\$215,000	\$440,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Debt Issued/Grants/Aid	\$1,920,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Annual Cash Flow	(\$34,055)	(\$ 59,179)	(\$237,115)	\$56,801	\$84,966	\$109,426	\$130,464	\$158,112	\$187,279	\$218,001	\$498,938
Restricted and Unrestricted Cash Balance:											
Balance at first of year	\$2,409,884	\$2,375,829	\$2,316,650	\$2,079,535	\$2,136,336	\$2,221,302	\$2,330,728	\$2,461,192	\$2,619,304	\$2,806,583	\$3,024,584
Net Annual Cash Flow Addition/(subtraction)	(\$34,055)	(\$59,179)	(\$237,115)	\$56,801	\$84,966	\$109,426	\$130,464	\$158,112	\$187,279	\$218,001	\$498,938
Balance at end of year	\$2,375,829	\$2,316,650	\$2,079,535	\$2,13 6,996	44 \$2,221,302	\$2,330,728	\$2,461,192	\$2,619,304	\$2,806,583	\$3,024,584	\$3,523,522
"All-in"Debt Coverage	0.89	1.62	1.80	1.91	2.04	2.13	2.19	2.31	2.43	2.56	NA

Sewer: Scenario 3

	Budget					Projec	cted				
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenues											
Total Revenues from User Rates ¹	\$1,244,252	\$1,393,427	\$1,532,770	\$1,647,728	\$1,697,159	\$1,748,074	\$1,800,516	\$1,854,532	\$1,910,168	\$1,967,473	\$2,026,497
Percent Increase to User Rates	24.58%	10.00%	10.00%	7.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Percent Rate Increase	24.58%	37.04%	50.74%	62.05%	66.91%	71.92%	77.07%	82.39%	87.86%	93.49%	99.30%
Dollar Amount Increase to Revenues	\$245,501	\$149,175	\$139,343	\$114,958	\$49,432	\$50,915	\$52,442	\$54,015	\$55,636	\$57,305	\$59,024
Other Revenues											
Interest Income	\$38,327	\$38,422	\$38,518	\$38,615	\$38,711	\$38,808	\$38,905	\$39,002	\$39,100	\$39,198	\$39,296
Other Income	\$22,500	\$22,725	\$22,952	\$23,182	\$23,414	\$23,648	\$23,884	\$24,123	\$24,364	\$24,608	\$24,854
Total Other Revenues	\$60,827	\$61,147	\$61,471	\$61,797	\$62,125	\$62,456	\$62,789	\$63,125	\$63,464	\$63,806	\$64,150
Total Revenues	\$1,305,079	\$1,454,575	\$1,594,241	\$1,709,524	\$1,759,284	\$1,810,530	\$1,863,306	\$1,917,657	\$1,973,632	\$2,031,279	\$2,090,647
Less: Expenses											
Operating and Maintenance	\$1,009,000	\$1,029,180	\$1,049,764	\$1,070,759	\$1,092,174	\$1,114,018	\$1,136,298	\$1,159,024	\$1,182,204	\$1,205,848	\$1,229,965
Net Before Debt Service and Capital Expenditures	\$296,079	\$425,395	\$544,477	\$638,765	\$667,110	\$696,513	\$727,008	\$758,634	\$791,428	\$825,430	\$860,681
Debt Service											
Existing Debt P&I	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New (2024-2033) Debt Service P&I	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	\$0
Total Debt Service	\$255,319	\$252,625	\$254,125	\$255,125	\$250,750	\$251,000	\$255,625	\$254,625	\$253,125	\$251,125	\$0
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less: Capital Improvements	\$1,925,000	\$215,000	\$440,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Debt Issued/Grants/Aid	\$1,920,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Annual Cash Flow	\$35,759	(\$42,230)	(\$149,648)	\$208,640	\$241,360	\$270,513	\$296,383	\$329,009	\$363,303	\$399,305	\$685,681
Restricted and Unrestricted Cash Balance:											
Balance at first of year	\$2,409,884	\$2,445,643	\$2,403,412	\$2,253,764	\$2,462,405	\$2,703,765	\$2,974,277	\$3,270,660	\$3,599,669	\$3,962,972	\$4,362,277
Net Annual Cash Flow Addition/(subtraction)	\$35,759	(\$42,230)	(\$149,648)	\$208,640	\$241,360	\$270,513	\$296,383	\$329,009	\$363,303	\$399,305	\$685,681
Balance at end of year	\$2,445,643	\$2,403,412	\$2,253,764	\$2,462,40,45	\$2,703,765	\$2,974,277	\$3,270,660	\$3,599,669	\$3,962,972	\$4,362,277	\$5,047,958

Discussion and Action Items

- Consider appropriate rate action for 2024
- Consensus on desired reserve amount
- Future rate adjustments to fund CIP projects and overall funding strategy
- Identify other ratemaking goals (if any)



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Questions?



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Town of Brookfield, WI 2023 Sewer Utility Long-Range Cash Flow Analysis & User Rate Study FINAL

December 5, 2023

Calculated 2024 Sewer Rates

			2024
	Current	cos	Proposed
Domestic Sewer Customers			
Meter Size			
5/8	\$30.55	\$40.74	\$38.50
3/4	\$30.55	\$40.74	\$38.50
1	\$53.00	\$54.68	\$63.60
1.5	\$90.50	\$78.20	\$108.60
2	\$136.50	\$106.96	\$163.80
3	\$327.35	\$226.23	\$392.82
Volumetric Rate per 1000 Gal	\$3.43	\$4.26	\$4.26



Calculated 2024 Sewer Rates

		_	Quarterly							
		_	Usage	Current	Proposed	Dollar	Percent			
Customer	Usage Level	Meter Size	1,000 Gal	Bill	Bill	Change	Change			
Residential	Low User	5/8	9.44	\$62.91	\$78.69	\$15.78	25.1%			
Residential	Avg. User	5/8	12.58	\$73.70	\$92.09	\$18.39	25.0%			
Residential	High User	5/8	15.73	\$84.49	\$105.49	\$21.00	24.9%			
Commercial	Low User	3/4	78.31	\$299.14	\$372.09	\$72.95	24.4%			
Commercial	Avg. User	3/4	104.41	\$388.68	\$483.29	\$94.61	24.3%			
Commercial	High User	3/4	130.51	\$478.21	\$594.48	\$116.28	24.3%			
Common Area	Low User	3/4	33.56	\$145.67	\$181.48	\$35.81	24.6%			
Common Area	Avg. User	3/4	44.75	\$184.04	\$229.14	\$45.09	24.5%			
Common Area	High User	3/4	55.94	\$222.42	\$276.79	\$54.38	24.4%			
Public Authority	Low User	1.5	56.65	\$284.80	\$349.92	\$65.12	22.9%			
Public Authority	Avg. User	1.5	75.53	\$349.57	\$430.36	\$80.79	23.1%			
Public Authority	High User	1.5	94.41	\$414.33	\$510.80	\$96.46	23.3%			



Rate Comparison - Residential

Municipality	-	arterly Residential Justomer Charge	Volume Charge Rate/1,000 gal			Typical Total arterly Charge*
Menomonee Falls	\$	72.92	\$	7.21	\$	186.33
City of Waukesha Inside	\$	20.64	\$	10.48	\$	185.49
City of Pewaukee	\$	141.00		Flat Fee	\$	141.00
City of Brookfield	\$	70.00	\$	4.41	\$	139.37
Village of Pewaukee			\$	8.65	\$	136.06
Proposed -Town of Brookfield	\$	38.50	\$	4.26	\$	105.51
Town of Brookfield	\$	30.55	\$	3.43	\$	84.50

*High average Residential user at 15,730 gallons per quarter.



Rate Comparison - Commercial

Municipality	y Commercial mer Charge	Volume Charge Rate/1,000 gal	Typical Total Quarterly Charge*	
City of Waukesha Inside	\$ 20.64	\$ 10.48	\$	1,388.38
Village of Pewaukee		\$ 8.65	\$	1,128.91
Menomonee Falls	\$ 72.92	\$ 7.21	\$	1,013.90
City of Brookfield	\$ 70.00	\$ 4.41	\$	645.55
Proposed -Town of Brookfield	\$ 38.50	\$ 4.26	\$	594.47
Town of Brookfield	\$ 30.55	\$ 3.43	\$	478.20

*High average Commercial user at 130,510 gallons per quarter. The City of Pewaukee only posts Residential sewer rates so they are not included in this comparison of Commercial customers.



Rate Comparison – Public Authority

Municipality	Author	terly Public ity Customer Charge	Volume Charge Rate/1,000 gal	ypical Total rterly Charge*
City of Waukesha Inside	\$	20.64	\$ 10.48	\$ 1,010.06
Village of Pewaukee			\$ 8.65	\$ 816.65
Menomonee Falls	\$	72.92	\$ 7.21	\$ 753.62
Proposed -Town of Brookfield	\$	108.60	\$ 4.26	\$ 510.79
City of Brookfield	\$	70.00	\$ 4.41	\$ 486.35
Town of Brookfield	\$	90.50	\$ 3.43	\$ 414.33

*High average Public Authority user at 94,410 gallons per quarter. The City of Pewaukee only posts Residential sewer rates so they are not included in this comparison of Public Authority customers.



Sewer Utility Long Range Cash Flow

- Implement rates to recover full revenue requirement in 2024, continued linear increase to cash fund CIP
- Future rate adjustments to fund CIP projects and overall funding strategy



Sewer Utility Long Range Cash Flow

	Budget Projected										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenues											
Total Revenues from User Rates ¹	\$1,244,252	\$1,355,425	\$1,423,196	\$1,494,356	\$1,539,186	\$1,585,362	\$1,632,923	\$1,681,910	\$1,732,368	\$1,784,339	\$1,837,869
Percent Increase to User Rates	24.58%	7.00%	5.00%	5.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Percent Rate Increase Dollar Amount Increase to Revenues	24.58% \$245,501	33.30% \$111,173	39.97% \$67,771	46.96% \$71,160	51.37% \$44,831	55.92% \$46,176	60.59% \$47,561	65.41% \$48,988	70.37% \$50,457	75.48% \$51,971	80.75% \$53,530
Other Revenues											
Interest Income	\$38,327	\$38,422	\$38,518	\$38,615	\$38,711	\$38,808	\$38,905	\$39,002	\$39,100	\$39,198	\$39,296
Other Income Total Other Revenues	\$22,500 \$60,827	\$22,725 \$61,147	\$22,952 \$61,471	\$23,182 \$61,797	\$23,414 \$62,125	\$23,648 \$62,456	\$23,884 \$62,789	\$24,123 \$63,125	\$24,364 \$63,464	\$24,608 \$63,806	\$24,854 \$64,150
Total Revenues	\$1,305,079	\$1,416,572	\$1,484,667	\$1,556,152	\$1,601,311	\$1,647,818	\$1,695,712	\$1,745,036	\$1,795,832	\$1,848,144	\$1,902,019
Less: Expenses											
Operating and Maintenance	\$1,009,000	\$1,029,180	\$1,049,764	\$1,070,759	\$1,092,174	\$1,114,018	\$1,136,298	\$1,159,024	\$1,182,204	\$1,205,848	\$1,229,965
Net Before Debt Service and Capital Expenditures	\$296,079	\$387,392	\$434,903	\$485,393	\$509,137	\$533,800	\$559,414	\$586,012	\$613,628	\$642,296	\$672,053
Debt Service											
Existing Debt P&I	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New (2024-2033) Debt Service P& Total Debt Service	\$255,319 \$255,319	\$252,625 \$252,625	\$254,125 \$254,125	\$255,125 \$255,125	\$250,750 \$250,750	\$251,000 \$251,000	\$255,625 \$255,625	\$254,625 \$254,625	\$253,125 \$253,125	\$251,125 \$251,125	<u>\$0</u> \$0
	\$200,010	\$252,525	\$204,120	\$200,120	\$200,100	\$251,000	\$200,020	\$204,020	\$200,120	\$201,120	••
Transfer In (Out)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less: Capital Improvements	\$1,925,000	\$215,000	\$440,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Debt Issued/Grants/Aid	\$1,920,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Annual Cash Flow	\$35,759	(\$80,233)	(\$259,222)	\$55,268	\$83,387	\$107,800	\$128,789	\$156,387	\$185,503	\$216,171	\$497,053
Restricted and Unrestricted Cash Balance:											
Balance at first of year Net Annual Cash Flow Addition/(subtraction)	\$2,409,884 \$35,759	\$2,445,643 (\$80,233)	\$2,365,410 (\$259,222)	\$2,106,188 \$55,268	\$2,161,456 \$83,387	\$2,244,843 \$107,800	\$2,352,643 \$128,789	\$2,481,432 \$156,387	\$2,637,819 \$185,503	\$2,823,322 \$216,171	\$3,039,493 \$497,053
Balance at end of year	\$35,759 \$2,445,643	(\$80,233) \$2,365,410	(\$259,222) \$2,106,188	\$2,161,456	\$83,387 \$2,244,843	\$2,352,643	\$128,789	\$2,637,819	\$185,503	\$3,039,493	\$497,053 \$3,536,546
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"All-in"Debt Coverage	1.16	1.53	1.71	1.90	2.03	2.13	2.19	2.30	2.42	2.56	NA

Discussion and Action Items

• Consider appropriate rate action for 2024



TONIGHT's ACTION: Consensus on Sewer rate approach

Questions?

