

November 1, 2023

2024 Sewer User Rate Study Update:

City of Waukesha, Wisconsin

Cost of Service Sewer User Rate Update for a 2024 Test Year



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BUILDING COMMUNITIES. IT'S WHAT WE DO.

Sewer User Rate Study Update
Supporting Worksheets

City of Waukesha

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Table 1 - Comparison of Existing vs. Proposed Rates

	<u>Current Rates</u> Effective 1/1/2023	2024 <u>Proposed</u> Rates	<u>\$</u> Change	<u>%</u> Change
<u>City (Inside) User Charges</u>				
Monthly Fixed Charge	\$6.88	\$6.88	\$0.00	0.00%
Volumetric Charge per 1,000 gallons	\$10.48	\$10.48	\$0.00	0.00%
Quarterly flat charge (unmetered users only)	\$314.39	\$314.39	\$0.00	0.00%
Surcharge Rate BOD /lb	\$1.48	\$1.48	\$0.00	0.00%
Surcharge Rate SS /lb	\$0.71	\$0.71	\$0.00	0.00%
Surcharge Rate P /lb	\$13.39	\$13.39	\$0.00	0.00%
Surcharge Rate TKN /lb	\$2.31	\$2.31	\$0.00	0.00%
<u>Extraterritorial (Outside) User Charges</u>				
Monthly Fixed Charge	\$6.88	\$6.88	\$0.00	0.00%
Volumetric Charge per 1,000 gallons	\$14.02	\$14.02	\$0.00	0.00%
Quarterly flat charge (unmetered users only)	\$420.63	\$420.63	\$0.00	0.00%
<u>Hauled Waste Charges</u>				
Septic Tank Rate per 1,000 gallons	\$97.59	\$97.59	\$0.00	0.00%
Holding Tank Rate per 1,000 gallons	\$32.22	\$32.22	\$0.00	0.00%
Chemical Toilet Waste Rate per 1,000 gallons	\$241.18	\$241.18	\$0.00	0.00%
Annual Cost for Average Residential User (48,000 gallons/year)	\$585.55	\$585.55	\$0.00	0.00%
Monthly Cost	\$48.80	\$48.80	\$0.00	0.00%

Table 2 - Projected WWTF Flows and Loadings

Total	Equiv Customers	Flow (1,000 Gal)	BOD (Lbs)	SS (Lbs)	P (Lbs)	TKN (Lbs)
Residential	18,328	853,000	1,671,795	2,418,767	56,912	213,421
Commercial and Multi-Family ⁽¹⁾	2,198	643,000	1,260,216	1,823,291	42,901	160,879
Industrial	147	96,000	188,150	272,218	6,405	24,019
Public	108	58,000	113,674	164,465	3,870	14,512
Subtotal City Billable	20,781	1,650,000	3,233,835	4,678,740	110,088	412,830
Unmetered Customers	115	13,800	27,047	39,131	921	3,453
Outside Customers						
Residential	71	2,637	5,168	7,477	176	660
Commercial and Multi-Family	21	4,519	8,856	12,813	301	1,131
Industrial	2	139	273	395	9	35
Subtotal Outside Billable	94	7,295	14,297	20,685	487	1,825
High Strength Industrial						
Ventura Foods						
Excess Loadings			257,135	34,094	-	650
GE Medical Systems						
Excess Loadings			3,429	10,865	-	1,139
Waukesha Memorial Hospital						
Excess Loadings			31,270	25,513	-	8,697
Innio (GE/Waukesha Engine)						
Excess Loadings			-	-	-	718
Prolec-GE						
Excess Loadings			914	-	-	1,071
Lifeway Wisconsin, LLC						
Excess Loadings			566,116	241,029	4,020	20,649
DSM Food						
Excess Loadings			13,264	26,403	996	1,307
Midwest Finishing						
Excess Loadings			-	-	-	-
Gascoigne Co.						
Excess Loadings			458	-	1,498	-
Profile Finishing						
Excess Loadings			9	-	50	10
Eaton Badger						
Excess Loadings			-	-	939	-
Eaton Lincoln						
Excess Loadings			-	-	375	-
Class 2 Industrial Hauled Excess Loadings			1,239	-	179	959
Subtotal High Strength Industrial Billable			873,834	337,904	8,057	35,199
Septic Tank Waste		1,703	21,253	86,587	668	2,841
Chemical Toilet Waste		592	40,796	44,593	1,254	13,959
Holding Tank Waste		1,502	8,066	11,461	326	1,177
Subtotal Wastehaulers		3,797	70,114	142,641	2,248	17,978
Total Billable	20,875	1,674,892	4,219,127	5,219,101	121,800	471,285
I/I		1,212,853				
Total WTF		2,887,745				
Total For Rate Calcs	20,875	1,674,892	4,219,127	5,219,101	121,800	471,285

Notes:

(1) Includes customer connections and flows from the Village of Wales.

Table 3 - Allocation of Costs to Function

	Flow		BOD		TSS		P		TKN		
	2024 Budget	%	Cost - User Charge	Cost - Customer	%	Cost	%	Cost	%	Cost	
			50.0%	50.0%							
Operating & Maintenance											
Sewer Maintenance (7384)											
110 Personal Services											
51110 Salaries	\$522,229	100.0%	\$261,115	\$261,115	0.0%	\$0	0.0%	\$0	\$0	\$0	\$0
51210 Wages Permanent	\$0	100.0%	\$0	\$0	0.0%	\$0	0.0%	\$0	\$0	\$0	
51220 Overtime	\$21,000	100.0%	\$10,500	\$10,500	0.0%	\$0	0.0%	\$0	\$0	\$0	
51250 Wages Temporary	\$0	100.0%	\$0	\$0	0.0%	\$0	0.0%	\$0	\$0	\$0	
51510 Social Security	\$41,559	100.0%	\$20,780	\$20,780	0.0%	\$0	0.0%	\$0	\$0	\$0	
51520 Retirement	\$37,488	100.0%	\$18,744	\$18,744	0.0%	\$0	0.0%	\$0	\$0	\$0	
51540 Health Insurance	\$135,297	100.0%	\$67,649	\$67,649	0.0%	\$0	0.0%	\$0	\$0	\$0	
51550 Life Insurance	\$1,045	100.0%	\$523	\$523	0.0%	\$0	0.0%	\$0	\$0	\$0	
51560 Dental Insurance	\$5,689	100.0%	\$2,845	\$2,845	0.0%	\$0	0.0%	\$0	\$0	\$0	
120 Contractual Services											
52190 Other Professional Services	\$0	100.0%	\$0	\$0	0.0%	\$0	0.0%	\$0	\$0	\$0	
52210 Water And Sewer	\$0	100.0%	\$0	\$0	0.0%	\$0	0.0%	\$0	\$0	\$0	
52220 Electric	\$152,000	100.0%	\$76,000	\$76,000	0.0%	\$0	0.0%	\$0	\$0	\$0	
52240 Heat	\$1,015	100.0%	\$508	\$508	0.0%	\$0	0.0%	\$0	\$0	\$0	
52410 Vehicle Maintenance	\$50,000	100.0%	\$25,000	\$25,000	0.0%	\$0	0.0%	\$0	\$0	\$0	
52435 Conveyance Maintenance	\$125,000	100.0%	\$62,500	\$62,500	0.0%	\$0	0.0%	\$0	\$0	\$0	
52490 Pump Station Maintenance	\$100,000	100.0%	\$50,000	\$50,000	0.0%	\$0	0.0%	\$0	\$0	\$0	
130 Supplies and Expenses											
53510 Gasoline, Oil, Grease Etc.	\$30,000	100.0%	\$15,000	\$15,000	0.0%	\$0	0.0%	\$0	\$0	\$0	
53940 Other (Manhole repairs, inspect)	\$75,000	100.0%	\$37,500	\$37,500	0.0%	\$0	0.0%	\$0	\$0	\$0	
Subtotal Sewer Maintenance	\$1,297,322	100.0%	\$648,661	\$648,661	0.0%	\$0	0.0%	\$0	0.0%	\$0	
Sewer Plant Operations (7388)											
110 Personal Services											
51110 Salaries	\$960,425	40.0%	\$192,085	\$192,085	25.0%	\$240,106	25.0%	\$240,106	5.0%	\$48,021	5.0%
51170 Accrued Compensatory time	\$0	40.0%	\$0	\$0	25.0%	\$0	25.0%	\$0	5.0%	\$0	5.0%
51180 Accrued Vacation	\$0	40.0%	\$0	\$0	25.0%	\$0	25.0%	\$0	5.0%	\$0	5.0%
51190 Sick Leave Accrual	\$0	40.0%	\$0	\$0	25.0%	\$0	25.0%	\$0	5.0%	\$0	5.0%
51210 Wages Permanent	\$0	40.0%	\$0	\$0	25.0%	\$0	25.0%	\$0	5.0%	\$0	5.0%
51220 Overtime	\$80,000	40.0%	\$16,000	\$16,000	25.0%	\$20,000	25.0%	\$20,000	5.0%	\$4,000	5.0%
51250 Wages Temporary	\$21,168	40.0%	\$4,234	\$4,234	25.0%	\$5,292	25.0%	\$5,292	5.0%	\$1,058	5.0%
51510 Social Security	\$79,898	40.0%	\$15,980	\$15,980	25.0%	\$19,975	25.0%	\$19,975	5.0%	\$3,995	5.0%
51520 Retirement	\$71,727	40.0%	\$14,345	\$14,345	25.0%	\$17,932	25.0%	\$17,932	5.0%	\$3,586	5.0%
51540 Health Insurance	\$269,697	40.0%	\$53,939	\$53,939	25.0%	\$67,424	25.0%	\$67,424	5.0%	\$13,485	5.0%
51550 Life Insurance	\$2,052	40.0%	\$410	\$410	25.0%	\$513	25.0%	\$513	5.0%	\$103	5.0%
51560 Dental Insurance	\$10,212	40.0%	\$2,042	\$2,042	25.0%	\$2,553	25.0%	\$2,553	5.0%	\$511	5.0%
120 Contractual Services											
52190 Lab Testing	\$30,000	0.0%	\$0	\$0	30.0%	\$9,000	20.0%	\$6,000	27.5%	\$8,250	22.5%
52210 Water And Sewer	\$46,644	100.0%	\$23,322	\$23,322	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.0%
52220 Electric	\$996,336	17.5%	\$87,179	\$87,179	57.5%	\$572,893	15.0%	\$149,450	5.0%	\$49,817	5.0%
52240 Heat	\$169,992	25.0%	\$21,249	\$21,249	25.0%	\$42,498	25.0%	\$42,498	12.5%	\$21,249	12.5%
52410 Vehicle Maintenance	\$35,000	25.0%	\$4,375	\$4,375	25.0%	\$8,750	25.0%	\$8,750	12.5%	\$4,375	12.5%
52430 PLC System Maint	\$30,000	25.0%	\$3,750	\$3,750	25.0%	\$7,500	25.0%	\$7,500	12.5%	\$3,750	12.5%
52450 Grounds Maintenance & Improv	\$66,000	25.0%	\$8,250	\$8,250	25.0%	\$16,500	25.0%	\$16,500	12.5%	\$8,250	12.5%
52490 Equipment Maintenance	\$230,000	15.0%	\$17,250	\$17,250	30.0%	\$69,000	30.0%	\$69,000	12.5%	\$28,750	12.5%
52990 Environmental Permit Fee	\$15,000	25.0%	\$1,875	\$1,875	25.0%	\$3,750	25.0%	\$3,750	12.5%	\$1,875	12.5%
130 Supplies and Expenses											
53140 Small Equipment	\$5,000	15.0%	\$375	\$375	30.0%	\$1,500	30.0%	\$1,500	12.5%	\$625	12.5%
53420 Chemistry/Lab/Medical Supplies	\$40,000	0.0%	\$0	\$0	25.0%	\$10,000	25.0%	\$10,000	25.0%	\$10,000	25.0%
53422 WWTP Processing Chemicals	\$635,000	0.0%	\$0	\$0	50.0%	\$317,500	25.0%	\$158,750	25.0%	\$158,750	0.0%
53440 Janitorial Supplies	\$10,000	10.0%	\$500	\$500	25.0%	\$2,500	25.0%	\$2,500	20.0%	\$2,000	20.0%
53460 Clothing And Uniforms	\$12,800	10.0%	\$640	\$640	25.0%	\$3,200	25.0%	\$3,200	20.0%	\$2,560	20.0%
53490 Other Operating Supplies	\$0	10.0%	\$0	\$0	25.0%	\$0	25.0%	\$0	20.0%	\$0	20.0%
53510 Gasoline, Oil, Grease Etc.	\$17,000	10.0%	\$850	\$850	25.0%	\$4,250	25.0%	\$4,250	20.0%	\$3,400	20.0%
53620 Consumable Tools	\$8,000	10.0%	\$400	\$400	25.0%	\$2,000	25.0%	\$2,000	20.0%	\$1,600	20.0%
53910 Sludge Disposal	\$165,000	0.0%	\$0	\$0	55.0%	\$90,750	40.0%	\$66,000	5.0%	\$8,250	0.0%
150 Fixed Charges											
55110 Property/Boiler Ins. & Expense	\$80,000	20.0%	\$8,000	\$8,000	20.0%	\$16,000	20.0%	\$16,000	20.0%	\$16,000	20.0%
Subtotal Sewer Plant Operations	\$4,086,951	23.3%	\$477,051	\$477,051	38.0%	\$1,551,386	23.0%	\$941,443	9.9%	\$404,260	5.8%

Table 3 - Allocation of Costs to Function

	Flow		BOD		TSS		P		TKN			
	2024 Budget	%	Cost - User Charge	Cost - Customer	%	Cost	%	Cost	%	Cost		
Pre-treatment Sampling (7381)												
110 Personal Services												
51110 Salaries	\$167,552	15.0%	\$12,566	\$12,566	25.0%	\$41,888	20.0%	\$33,510	20.0%	\$33,510	20.0%	\$33,510
51210 Wages Permanent	\$0	15.0%	\$0	\$0	25.0%	\$0	20.0%	\$0	20.0%	\$0	20.0%	\$0
51220 Overtime	\$450	15.0%	\$34	\$34	25.0%	\$113	20.0%	\$90	20.0%	\$90	20.0%	\$90
51510 Social Security	\$12,852	15.0%	\$964	\$964	25.0%	\$3,213	20.0%	\$2,570	20.0%	\$2,570	20.0%	\$2,570
51520 Retirement	\$11,592	15.0%	\$869	\$869	25.0%	\$2,898	20.0%	\$2,318	20.0%	\$2,318	20.0%	\$2,318
51540 Health Insurance	\$54,564	15.0%	\$4,092	\$4,092	25.0%	\$13,641	20.0%	\$10,913	20.0%	\$10,913	20.0%	\$10,913
51550 Life Insurance	\$1,136	15.0%	\$85	\$85	25.0%	\$284	20.0%	\$227	20.0%	\$227	20.0%	\$227
51560 Dental Insurance	\$2,280	15.0%	\$171	\$171	25.0%	\$570	20.0%	\$456	20.0%	\$456	20.0%	\$456
120 Contractual Services												
52190 Pre-Treatment Sampling	\$14,500	15.0%	\$1,088	\$1,088	25.0%	\$3,625	20.0%	\$2,900	20.0%	\$2,900	20.0%	\$2,900
52410 Vehicle Maintenance	\$1,500	15.0%	\$113	\$113	25.0%	\$375	20.0%	\$300	20.0%	\$300	20.0%	\$300
52430 Computer Hardware Maint	\$0	15.0%	\$0	\$0	25.0%	\$0	20.0%	\$0	20.0%	\$0	20.0%	\$0
130 Supplies and Expenses												
53120 Office Supplies	\$100	15.0%	\$8	\$8	25.0%	\$25	20.0%	\$20	20.0%	\$20	20.0%	\$20
53220 Subscriptions-Office	\$0	15.0%	\$0	\$0	25.0%	\$0	20.0%	\$0	20.0%	\$0	20.0%	\$0
53260 Advertising	\$50	15.0%	\$4	\$4	25.0%	\$13	20.0%	\$10	20.0%	\$10	20.0%	\$10
53510 Gasoline, Oil, Grease Etc.	\$1,400	15.0%	\$105	\$105	25.0%	\$350	20.0%	\$280	20.0%	\$280	20.0%	\$280
Subtotal Pretreatment Sampling	\$ 267,976.00	15.0%	\$20,098	\$20,098	25.0%	\$66,994	20.0%	\$53,595	20.0%	\$53,595	20.0%	\$53,595
Subtotal Collector and Treatment	\$ 5,652,249.00	40.5%	\$1,145,810	\$1,145,810	28.6%	\$1,618,380	17.6%	\$995,038	8.1%	\$457,855	5.1%	\$289,355
Sewer Administration (7380)												
110 Personal Services												
51110 Salaries	\$697,493	40.5%	\$141,394	\$141,394	28.6%	\$199,710	17.6%	\$122,789	8.1%	\$66,500	5.1%	\$35,707
51180 Accrued Vacation	\$0	40.5%	\$0	\$0	28.6%	\$0	17.6%	\$0	8.1%	\$0	5.1%	\$0
51190 Sick Leave Accrual	\$0	40.5%	\$0	\$0	28.6%	\$0	17.6%	\$0	8.1%	\$0	5.1%	\$0
51210 Wages Permanent	\$0	40.5%	\$0	\$0	28.6%	\$0	17.6%	\$0	8.1%	\$0	5.1%	\$0
51220 Overtime	\$3,000	40.5%	\$608	\$608	28.6%	\$859	17.6%	\$528	8.1%	\$243	5.1%	\$154
51510 Social Security	\$53,588	40.5%	\$10,863	\$10,863	28.6%	\$15,344	17.6%	\$9,434	8.1%	\$4,341	5.1%	\$2,743
51520 Retirement	\$48,154	40.5%	\$9,762	\$9,762	28.6%	\$13,788	17.6%	\$8,477	8.1%	\$3,901	5.1%	\$2,465
51525 Retirement-GASB 68	\$0	40.5%	\$0	\$0	28.6%	\$0	17.6%	\$0	8.1%	\$0	5.1%	\$0
51540 Health Insurance	\$176,013	40.5%	\$35,681	\$35,681	28.6%	\$50,397	17.6%	\$30,986	8.1%	\$14,258	5.1%	\$9,011
51550 Life Insurance	\$1,211	40.5%	\$245	\$245	28.6%	\$347	17.6%	\$213	8.1%	\$98	5.1%	\$62
51551 Life Insurance-GASB 75	\$35,000	40.5%	\$7,095	\$7,095	28.6%	\$10,021	17.6%	\$6,162	8.1%	\$2,835	5.1%	\$1,792
51560 Dental Insurance	\$7,383	40.5%	\$1,497	\$1,497	28.6%	\$2,114	17.6%	\$1,300	8.1%	\$598	5.1%	\$378
51570 OPEB Expense	\$100,000	40.5%	\$20,272	\$20,272	28.6%	\$28,632	17.6%	\$17,604	8.1%	\$8,100	5.1%	\$5,119
120 Contractual Services												
52130 Accounting And Auditing	\$116,828	40.5%	\$23,683	\$23,683	28.6%	\$33,451	17.6%	\$20,567	8.1%	\$9,464	5.1%	\$5,981
52131 Utility Billing	\$843,000	40.5%	\$170,891	\$170,891	28.6%	\$241,372	17.6%	\$148,404	8.1%	\$68,286	5.1%	\$43,156
52135 Consulting	\$100,000	40.5%	\$20,272	\$20,272	28.6%	\$28,632	17.6%	\$17,604	8.1%	\$8,100	5.1%	\$5,119
52180 Management Services	\$33,619	40.5%	\$6,815	\$6,815	28.6%	\$9,626	17.6%	\$5,918	8.1%	\$2,723	5.1%	\$1,721
52190 Other Other Professional Services	\$120,000	40.5%	\$24,326	\$24,326	28.6%	\$34,359	17.6%	\$21,125	8.1%	\$9,720	5.1%	\$6,143
52250 Telephone	\$20,000	40.5%	\$4,054	\$4,054	28.6%	\$5,726	17.6%	\$3,521	8.1%	\$1,620	5.1%	\$1,024
52270 Trunk Radio System Startup F	\$642	40.5%	\$130	\$130	28.6%	\$184	17.6%	\$113	8.1%	\$52	5.1%	\$33
52430 Computer Hardware Maint	\$500	40.5%	\$101	\$101	28.6%	\$143	17.6%	\$88	8.1%	\$41	5.1%	\$26
130 Supplies and Expenses												
53110 Postage and Box Rent	\$1,000	40.5%	\$203	\$203	28.6%	\$286	17.6%	\$176	8.1%	\$81	5.1%	\$51
53120 Office Supplies	\$2,400	40.5%	\$487	\$487	28.6%	\$687	17.6%	\$423	8.1%	\$194	5.1%	\$123
53130 Printing/Photocopying	\$6,000	40.5%	\$1,216	\$1,216	28.6%	\$1,718	17.6%	\$1,056	8.1%	\$486	5.1%	\$307
53135 Internal Printing	\$5,380	40.5%	\$1,091	\$1,091	28.6%	\$1,540	17.6%	\$947	8.1%	\$436	5.1%	\$275
53220 Subscriptions-Office	\$600	40.5%	\$122	\$122	28.6%	\$172	17.6%	\$106	8.1%	\$49	5.1%	\$31
53240 Membership Dues	\$3,500	40.5%	\$710	\$710	28.6%	\$1,002	17.6%	\$616	8.1%	\$284	5.1%	\$179
53250 Conference And Training	\$15,000	40.5%	\$3,041	\$3,041	28.6%	\$4,295	17.6%	\$2,641	8.1%	\$1,215	5.1%	\$768
53260 Advertising	\$5,000	40.5%	\$1,014	\$1,014	28.6%	\$1,432	17.6%	\$880	8.1%	\$405	5.1%	\$256
53940 Other Chg	\$1,000	40.5%	\$203	\$203	28.6%	\$286	17.6%	\$176	8.1%	\$81	5.1%	\$51
150 Fixed Charges												
55120 Auto And Fleet Insurance	\$13,000	40.5%	\$2,635	\$2,635	28.6%	\$3,722	17.6%	\$2,289	8.1%	\$1,053	5.1%	\$666
55160 Workman's Comp Insurance	\$54,800	40.5%	\$11,109	\$11,109	28.6%	\$15,691	17.6%	\$9,647	8.1%	\$4,439	5.1%	\$2,805
55190 General Liability Insurance	\$48,000	40.5%	\$9,730	\$9,730	28.6%	\$13,744	17.6%	\$8,450	8.1%	\$3,888	5.1%	\$2,457

Table 3 - Allocation of Costs to Function

	Flow		BOD		TSS		P		TKN			
	2024 Budget	%	Cost - User Charge	Cost - Customer	%	Cost	%	Cost	%	Cost		
184 Interdepartmental Charges												
78422 Data Processing-Allocated	\$272,060	40.5%	\$55,151	\$55,151	28.6%	\$77,898	17.6%	\$47,894	8.1%	\$22,038	5.1%	\$13,928
78650 Employee Safety Programs	\$14,000	40.5%	\$2,838	\$2,838	28.6%	\$4,009	17.6%	\$2,465	8.1%	\$1,134	5.1%	\$717
78690 Other Employee Benefits	\$0	40.5%	\$0	\$0	28.6%	\$0	17.6%	\$0	8.1%	\$0	5.1%	\$0
89280 TranSkivt	\$30,000	40.5%	\$6,082	\$6,082	28.6%	\$8,590	17.6%	\$5,281	8.1%	\$2,430	5.1%	\$1,536
Subtotal	\$ 2,828,171.00	40.5%	\$573,320	\$573,320	28.6%	\$809,776	17.6%	\$497,879	8.1%	\$229,093	5.1%	\$144,782
Total O & M	\$ 8,480,420.00	40.5%	\$1,719,130	\$1,719,130	28.6%	\$2,428,156	17.6%	\$1,492,918	8.1%	\$ 686,948.20	5.1%	\$ 434,137.19
Capital Costs												
Depreciation	\$6,194,736	40.5%	\$2,511,564	\$0	28.6%	\$1,773,708	17.6%	\$1,090,539	8.1%	\$501,799	5.1%	\$317,126
Return on Investment (ROI)	\$7,145,946	40.5%	\$2,897,218	\$0	28.6%	\$2,046,063	17.6%	\$1,257,993	8.1%	\$578,850	5.1%	\$365,822
Total Capital Costs	\$13,340,682		\$5,408,782	\$0		\$3,819,770		\$2,348,532		\$1,080,649		\$682,948
Subtotal Revenue Requirements	\$21,821,102		\$7,127,913	\$1,719,130		\$6,247,926		\$3,841,450		\$ 1,767,597.22		\$1,117,085
Other Income												
Delinquent Fees	(\$60,000)	40.5%	(\$12,163)	(\$12,163)	28.6%	(\$17,179)	17.6%	(\$10,563)	8.1%	(\$4,860)	5.1%	(\$3,072)
Pre-Treatment Charges - Public Charges	(\$57,000)	40.5%	(\$11,555)	(\$11,555)	28.6%	(\$16,321)	17.6%	(\$10,034)	8.1%	(\$4,617)	5.1%	(\$2,918)
Investment Income	\$0	40.5%	\$0	\$0	28.6%	\$0	17.6%	\$0	8.1%	\$0	5.1%	\$0
Total Other Income	(\$117,000)		(\$23,718)	(\$23,718)		(\$33,500)		(\$20,597)		(\$9,477)		(\$5,990)
Total Net Revenue Requirements	\$21,704,102		\$7,104,195	\$1,695,413		\$6,214,426		\$3,820,853		\$1,758,120		\$1,111,096
Summary												
Allocation of Costs to Function and Classification for City Rates												
			Flow	Fixed		BOD		SS		P		TKN
O&M and Replacement	\$8,480,420		\$1,719,130	\$1,719,130		\$2,428,156		\$1,492,918		\$686,948		\$434,137
Capital	\$13,340,682		\$5,408,782	\$0		\$3,819,770		\$2,348,532		\$1,080,649		\$682,948
Other Revenues	(\$117,000)		(\$23,718)	(\$23,718)		(\$33,500)		(\$20,597)		(\$9,477)		(\$5,990)
Total	21,704,102		7,104,195	1,695,413		6,214,426		3,820,853		1,758,120		1,111,096
Allocation of Costs to Function and Classification for Extraterritorial Rates												
			Flow	Fixed		BOD		SS		P		TKN
Total Allocation for City Rates	\$21,704,102		\$7,104,195	\$1,695,413		\$6,214,426		\$3,820,853		\$1,758,120		\$1,111,096
Deduct ROI for City	(\$7,145,946)		(\$2,897,218)	\$0		(\$2,046,063)		(\$1,257,993)		(\$578,850)		(\$365,822)
Add ROI for Computation of Extra Rates	\$16,673,874	40.5%	\$6,760,176	\$0	28.6%	\$4,774,146	17.6%	\$2,935,317	8.1%	\$1,350,651	5.1%	\$853,584
Total	31,232,030		10,967,152	1,695,413		8,942,510		5,498,177		2,529,920		1,598,858

Table 4 - Comparison of Operating Expenses and Customer Flows and Loadings

2023-2024 Operating and Maintenance Comparison

Operating and Maintenance Category	2023	2024	Difference	Percentage Change
Sewer Maintenance	\$ 1,291,434	\$ 1,297,322	\$5,888	0.46%
Sewer Plant Operations	\$ 4,109,817	\$ 4,086,951	(\$22,866)	-0.56%
Pre-treatment Sampling	\$ 262,520	\$ 267,976	\$5,456	2.08%
Subtotal Collection and Treatment	\$ 5,663,771	\$ 5,652,249	(\$11,522)	-0.20%
Sewer Administration	\$ 2,862,764	\$ 2,828,171	(\$34,593)	-1.21%
Total Operating and Maintenance Expenses	\$ 8,526,535	\$ 8,480,420	(\$46,115)	-0.54%

2022-2023 Billable Flows Comparison

Customer Class	Billable Flow (1,000 Gal)		Difference (1,000 gal)	Percentage Change
	2023	2024		
Residential	863,000	853,000	(10,000)	-1.16%
Commercial and Multi-Family	642,000	643,000	1,000	0.16%
Industrial	86,500	96,000	9,500	10.98%
Public	59,000	58,000	(1,000)	-1.69%
Septic Tank Waste	4,941	1,703	(3,238)	-65.53%
Holding Tank Waste	4,132	1,502	(2,630)	-63.65%
Total	1,659,573	1,653,205	(6,367)	-0.38%

Total Loadings all Customer Classes	2023	2024	Difference (Lbs)	Percentage Change
BOD (Lbs)	4,102,831	4,219,127	116,296	2.83%
TSS (Lbs)	5,277,334	5,219,101	(58,233)	-1.10%
P (Lbs)	127,332	121,800	(5,532)	-4.34%
TKN (Lbs)	464,657	471,285	6,627	1.43%

Table 5 - Wastewater Utility Assets and Depreciation

Estimated Asset Detail at 12/31/22

Description	Original Cost ⁽¹⁾	Accumulated Depreciation ⁽²⁾	Est. 2023	Est. 2024	Est. Accumulated Depreciation at 12/31/2024	Net Book Value
Subtotal	\$213,303,422	\$74,781,292	\$5,720,547	\$5,720,547	\$86,222,386	\$127,081,036
2023 Capital Projects ⁽³⁾	\$19,453,000		\$237,095	\$474,189	\$711,284	\$18,741,717
2024 Capital Projects ⁽³⁾	\$13,172,000		\$0	\$195,951	\$195,951	\$12,976,050
Total	\$245,928,422		\$5,957,642	\$6,194,736	\$87,129,620	\$158,798,802

Notes:
 (1) From City of Waukesha 12/31/2022 Fixed Asset Master List.
 (2) At 12/31/2022
 (3) Source: City Finance Department.

Table 6 - Recovery of Depreciation and ROI

Return on Investment - City Customers

Asset Costs	\$245,928,422
Accumulated Depreciation	<u>\$87,129,620</u>
Estimated Test Year Net Investment Rate Base (NIRB)	\$158,798,802

Return on Investment (ROI) % 4.50%

ROI for test year \$7,145,946

Depreciation Expense for test year \$6,194,736

Total Capital Recovery \$13,340,682

Return on Investment - Extraterritorial Customers

Asset Costs	\$245,928,422
Accumulated Depreciation	<u>\$87,129,620</u>
Estimated Test Year Net Investment Rate Base (NIRB)	\$158,798,802

Return on Investment (ROI) % 10.50%

ROI for test year \$16,673,874

Depreciation Expense for test year \$6,194,736

Total Capital Recovery \$22,868,610

Table 7 - Rate Computation Worksheet

	City (Inside) Rates			Extraterritorial (Outside) Rates		
	Costs	Billable Units	City Rate	Costs	Billable Units	Extra. Rate
Fixed Charges						
Fixed Charge	1,695,413	20,781	\$81.58	1,695,413	20,781	\$81.58
Volumetric Charges						
Flow Charge per 1,000 gallons	7,104,195	1,678,424	\$4.23	10,967,152	1,674,892	\$6.55
BOD Charge per lb.	6,214,426	4,226,050	\$1.47	8,942,510	4,219,127	\$2.12
TSS Charge per lb.	3,820,853	5,229,117	\$0.73	5,498,177	5,219,101	\$1.05
P Charge per lb.	1,758,120	122,036	\$14.41	2,529,920	121,800	\$20.77
TKN Charge per lb.	1,111,096	472,169	\$2.35	1,598,858	471,285	\$3.39
BOD Charge per 1,000 gallons			\$2.88			\$4.15
TSS Charge per 1,000 gallons			\$2.07			\$2.99
P Charge per 1,000 gallons			\$0.96			\$1.39
TKN Charge per 1,000 gallons			\$0.59			\$0.85
Total Volumetric Rate per 1,000 gal			\$10.74			\$15.92
Wastehauler Charges						
Septic Charges						
Flow Charge per 1,000 gallons			\$4.23			\$6.55
BOD Charge per 1,000 gallons			\$18.35			\$26.44
TSS Charge per 1,000 gallons			\$37.14			\$53.55
P Charge per 1,000 gallons			\$5.65			\$8.14
TKN Charge per 1,000 gallons			\$3.93			\$5.66
Total			\$69.29			\$100.34
Holding Tank Charges						
Flow Charge per 1,000 gallons			\$4.23			\$6.55
BOD Charge per 1,000 gallons			\$7.90			\$11.38
TSS Charge per 1,000 gallons			\$5.58			\$8.04
P Charge per 1,000 gallons			\$3.12			\$4.50
TKN Charge per 1,000 gallons			\$1.84			\$2.66
Total			\$22.68			\$33.13
Chemical Toilet Waste Charges						
Flow Charge per 1,000 gallons			\$4.23			\$6.55
BOD Charge per 1,000 gallons			\$101.33			\$146.05
TSS Charge per 1,000 gallons			\$55.03			\$79.35
P Charge per 1,000 gallons			\$30.52			\$44.00
TKN Charge per 1,000 gallons			\$55.48			\$79.99
Total			\$246.59			\$355.93
Rate Summary						
Fixed charge per connection			City (Inside) \$81.58			Extraterritorial (Outside) \$81.58
Rate per 1,000 gallons			\$10.74			\$15.92
BOD rate per lb.			\$1.47			\$2.12
TSS rate per lb.			\$0.73			\$1.05
P rate per lb.			\$14.41			\$20.77
TKN rate per lb.			\$2.35			\$3.39

Table 8 - Rate Summary

	<u>COS</u>	<u>Proposed</u>
City (Inside)		
Fixed charge per connection (annual)	\$81.58	\$82.52
Volumetric Rate per 1,000 Gallons	\$10.74	\$10.48
BOD rate per lb.	\$1.47	\$1.48
TSS rate per lb.	\$0.73	\$0.71
P rate per lb.	\$14.41	\$13.39
TKN rate per lb.	\$2.35	\$2.35
Unmetered quarterly flat charge	\$322.10	\$314.39
Extraterritorial (Outside)		
Fixed charge per connection (annual)	\$81.58	\$82.52
Volumetric Rate per 1,000 Gallons	\$15.92	\$14.02
BOD rate per lb.	\$2.12	\$2.12
TSS rate per lb.	\$1.05	\$1.05
P rate per lb.	\$20.77	\$20.77
TKN rate per lb.	\$3.39	\$3.39
Unmetered quarterly flat charge	\$477.72	\$420.63
Wastehauler		
Septic Rate per 1,000 Gallons	\$100.34	\$97.59
Chemical Toilet Rate per 1,000 Gallons	\$246.59	\$241.18
Holding Tank Rate per 1,000 Gallons	\$33.13	\$32.22

Table 9 - Revenue Check (Based on COS)

		Units	Rate	Annual Total
Fixed Charge				
Residential	cust	18,328	\$81.58	\$1,495,285
Commercial and Multi-Family	cust	2,198	\$81.58	\$179,323
Industrial	cust	147	\$81.58	\$11,993
Public	cust	108	\$81.58	\$8,811
Subtotal		20,781		\$1,695,413
Volumetric Charges-Inside Customers				
Residential	Flow (000 gal)	853,000	\$10.74	\$9,158,330
Commercial & Multiple	Flow (000 gal)	643,000	\$10.74	\$6,903,642
Industrial	Flow (000 gal)	96,000	\$10.74	\$1,030,715
Public	Flow (000 gal)	58,000	\$10.74	\$622,723
Septic Waste Haulers	Flow (000 gal)	1,703	\$69.29	\$118,035
Chemical Toilet Waste Haulers	Flow (000 gal)	592	\$246.59	\$145,996
Holding Tank Waste Haulers	Flow (000 gal)	1,502	\$22.68	\$34,055
Subtotal		1,653,797		\$18,013,496
Industrial Excess BOD	Lbs	873,834	\$1.47	\$1,284,977
Industrial Excess TSS	Lbs	337,904	\$0.73	\$246,902
Industrial Excess P	Lbs	8,057	\$14.41	\$116,072
Industrial Excess TKN	Lbs	35,199	\$2.35	\$82,831
Subtotal		1,254,994		\$1,730,782
Unmetered Customers	cust	115	\$1,288.39	\$148,165
Volumetric Charges-Outside Customers				
Residential	Flow (000 gal)	2,637	\$15.92	\$41,988
Commercial & Multiple	Flow (000 gal)	4,519	\$15.92	\$71,954
Industrial	Flow (000 gal)	139	\$15.92	\$2,217
Subtotal				\$116,159
Total Revenues				\$21,704,015
Revenue Requirements				\$21,704,102
Difference				(\$87)

Table 10 - Revenue Summary

		Units	Rate	Annual Total
Fixed Charge				
Residential	cust	18,328	\$82.52	\$1,512,427
Commercial and Multi-Family	cust	2,198	\$82.52	\$181,379
Industrial	cust	147	\$82.52	\$12,130
Public	cust	108	\$82.52	\$8,912
Subtotal		20,781		\$1,714,848
Volumetric Charges - Inside Customers				
Residential	Flow (000 gal)	853,000	\$10.48	\$8,939,440
Commercial & Multiple	Flow (000 gal)	643,000	\$10.48	\$6,738,640
Industrial	Flow (000 gal)	96,000	\$10.48	\$1,006,080
Public	Flow (000 gal)	58,000	\$10.48	\$607,840
Septic Waste Haulers	Flow (000 gal)	1,703	\$97.59	\$166,234
Holding Tank Waste Haulers	Flow (000 gal)	1,502	\$32.22	\$48,390
Chemical Toilet Waste Haulers	Flow (000 gal)	592	\$241.18	\$142,792
Subtotal		1,653,205		\$17,649,415
Industrial Excess BOD	Lbs	873,834	\$1.48	\$1,293,274
Industrial Excess TSS	Lbs	337,904	\$0.71	\$239,912
Industrial Excess P	Lbs	8,057	\$13.39	\$107,882
Industrial Excess TKN	Lbs	35,199	\$2.35	\$82,719
Subtotal		1,254,994		\$1,723,787
Unmetered Customers	cust	115	\$1,257.56	\$144,619
Volumetric Charges - Outside Customers				
Residential	Flow (000 gal)	2,637	\$14.02	\$36,968
Commercial & Multiple	Flow (000 gal)	4,519	\$14.02	\$63,351
Industrial	Flow (000 gal)	139	\$14.02	\$1,952
Subtotal				\$102,270
Total Revenues				\$21,334,939
Revenue Requirements COS				\$21,704,102
Difference				(\$369,163)
Revenues as % of COS				98.3%

Table 11 - Test Year Cash Flow Analysis

	2024
Cash Sources	
Revenues from User Rates ⁽¹⁾	\$21,334,939
Allowance for Unknowns (ie. Timing of billing, customer loss)	(\$320,024)
Other Income ⁽²⁾	\$117,000
Investment Income on Unrestricted Cash ⁽³⁾	\$1,232,687
Other Fees ⁽⁴⁾	\$60,000
Total Cash Sources	\$22,424,602
Cash Uses	
O&M	\$8,480,420
Net Before Debt Service	\$13,944,182
Debt Service	
Total Debt Service	\$9,359,592
Capital Outlay (non reserve)	\$13,261,250
Addition to Replacement Fund	\$250,000
Net Cash Flow	(\$8,926,660)

Notes:

- (1) Estimated user rate projections assume that user rates are taking effect 1/1.
- (2) Subtotal delinquent fees plus pre-treatment sampling fees.
- (3) Estimate of investment income assuming an interest rate of 1.5%.
- (4) Other charges includes connection fees, impact fees and special assessments.