



GRAND RAPIDS PUBLIC UTILITIES

Service is Our Nature

DOMESTIC WASTEWATER RATE DESIGN STUDY

Final Report

December 14, 2022



REPORT OUTLINE

Cover Letter

Section 1 - Introduction

Section 2 – Projected Operating Results – Existing Rates

Section 3 – Proposed Rates



December 14, 2022

Grand Rapids Public Utilities Commission
500 SE 4th Street
Grand Rapids, MN 55744

Subject: Domestic Wastewater Rate Study

Commission Members:

Dave Berg Consulting, LLC has undertaken a study of the retail rates GRPUC charges its customers for domestic wastewater services. This report summarizes the analysis undertaken and the resulting recommendations for changes to the existing rates.

Based on the financial needs of the domestic wastewater utility for the projected study period of 2023-2027, I am recommending annual 5% increases in overall wastewater rates each year. Additional rate design recommendations are presented in Section 3 of the report.

Thank you for the opportunity to be of service to GRPUC through the conduct of this study. I wish to express my appreciation for the valuable assistance I received from GRPUC staff relative to the execution of this study.

Sincerely,

Dave Berg Consulting, LLC

A handwritten signature in black ink, appearing to read 'David A. Berg', is written over a light gray rectangular background.

David A. Berg, PE
Principal

Dedicated to providing personal service to consumer-owned utilities

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Section 1

Introduction

The City of Grand Rapids, MN owns a municipal utility providing service to approximately 3,200 retail wastewater customers and wholesale service to 2 neighboring communities (LaPrairie and Cohasset). The wastewater utility is operated under the direction of the Grand Rapids Public Utilities Commission (GRPUC). This report has been prepared by Dave Berg Consulting, LLC to examine the rates and charges for domestic wastewater services in Grand Rapids. This study does not address wastewater treatment services to Blandin. The study includes projected operating results for 2022-2027 (Study Period). As a result of the analyses undertaken and reported on herein, wastewater rate recommendations have been developed for implementation by GRPUC.

Section 2

Projected Operating Results Existing Rates

The rates charged for domestic wastewater service by GRPUC, combined with other operating and non-operating revenues, must be sufficient to meet the cost of providing services to GRPUC's customers. This is necessary to ensure the long-term financial health of the GRPUC domestic wastewater utility. The cost of providing utility service consists of normal operating expenses for domestic wastewater systems, customer and A&G functions, system depreciation expenses, capital improvements and other non-operating expenses.

An analysis of the operating results for the GRPUC domestic wastewater utility during the 2022-2027 Study Period has been performed assuming the current retail rates and charges remain in effect through the Study Period. This analysis has been done to determine the overall need, if any, for additional revenue through rates to meet projected revenue requirements. The analyses and assumptions utilized in these projections are explained below.

Estimated Revenues – Existing Rates

Operating Revenues

GRPUC provides domestic wastewater services to residential, commercial and industrial customers. It also provides wholesale service to the communities of La Prairie and Cohasset. Total sales to GRPUC customers for the Study Period are assumed to increase by 1% each year through the Study Period.

Section 2

Exhibit 2-A is a summarized listing of GRPUC's historical and projected domestic wastewater operating results at existing rates. The historical and projected revenues from sales to different groups of customers are included as part of Utility Revenues. Utility revenues also include fees from septage haulers.

Other Operating Revenues

GRPUC also receives other miscellaneous operating revenue from other normal operating procedures. These other operating revenues include service connections, permit fees, merchandise and jobbing, jetting services, maintenance services, and other miscellaneous operating revenues. These revenues are also included in the Total Operating Revenues in Exhibit 2-A.

Revenue Requirements

Operating Expenses

Operating expenses for the domestic wastewater system are shown in Exhibit 2-A. Projections of operating expenses are based on budgeted amounts provided by GRPUC.

Depreciation

GRPUC has annual depreciation costs associated with domestic wastewater system investments. Depreciation during the Study Period is based on budgeted GRPUC amounts. Depreciation is a funded non-cash expense that generates monies available for annual capital improvements, debt principal payments and reserves.

Projected Operating Results – Existing Rates

Non-operating Income (Expenses)

GRPUC’s non-operating income and expenses are associated with penalties, interest expenses, bond fees, and costs and revenues associated with the combined service center.

Capital Improvements

GRPUC makes annual capital investments in its domestic wastewater system. The domestic wastewater utility also pays a share of improvements to the combined service center. The combined capital improvements for the domestic wastewater utility are shown in Table 2-1 below.

Table 2-1
Capital Improvements

Capital Item	2022	2023	2024	2025	2026	2027
Wastewater Capital	\$333,289	\$1,027,300	\$720,067	\$694,100	\$846,435	\$525,000
Service Center Capital	<u>\$10,975</u>	<u>\$70,050</u>	<u>\$15,000</u>	<u>\$3,000</u>	<u>\$3,000</u>	<u>\$3,000</u>
Total	\$344,289	\$1,097,350	\$735,067	\$697,100	\$849,435	\$528,000

Debt Service

GRPUC had a large debt issue partially payable by the domestic wastewater utility that was paid in full in February of 2022. The domestic wastewater utility is also responsible for payment of a portion of two General Obligation bonds issued in 2021 and a Clean Water Revolving fund from 2009. Additionally, it is estimated that \$2.0 million in new debt will be issued in late 2023 to support ongoing capital improvements. Table 2-2 summarizes the current and planned debt service for the domestic wastewater utility.

Section 2

Table 2-2
Annual Debt Service

Item	2022	2023	2024	2025	2026	2027
Current Interest	\$36,434	\$36,410	\$20,957	\$27,378	\$22,670	\$17,806
Current Principal	\$553,414	\$180,519	\$185,788	\$189,464	\$165,572	\$171,094
Planned Interest	-	-	\$90,000	\$87,980	\$85,870	\$83,665
Planned Principal	-	-	<u>\$48,878</u>	<u>\$46,898</u>	<u>\$49,008</u>	<u>\$51,213</u>
Total Debt	\$589,848	\$216,929	\$341,623	\$351,720	\$323,121	\$323,778

Projected Operating Results – Existing Rates

Based on the assumptions outlined above, the resulting projected operating results assuming continued application of the existing retail rates are summarized below in Table 2-3. A summary presentation of the historical and projected operating results is also shown in Exhibit 2-A

Projected Operating Results – Existing Rates

Table 2-3
Projected Operating Results
Existing Rates

Year	2022	2023	2024	2025	2026	2027
Operating Revenues	\$1,857,414	\$1,875,029	\$1,892,336	\$1,909,774	\$1,927,476	\$1,945,311
Less Operating Expenses	(1,739,764)	(1,925,685)	(1,685,572)	(1,751,177)	(1,817,935)	(1,892,360)
Less Non -Operating Expenses	<u>(81,595)</u>	<u>(86,371)</u>	<u>(162,550)</u>	<u>(168,633)</u>	<u>(160,547)</u>	<u>(155,261)</u>
Net Income	36,054	(137,027)	44,213	(10,037)	(51,006)	(102,310)
Net Income as Percent of Revenues	1.9%	-7.3%	2.3%	-0.5%	-2.6%	-5.3%

Cash Reserves

A summary of the impact of the projected operating results on GRPUC's cash reserves for the Study Period is shown at the end of Exhibit 2-A and in Table 2-3 below.

As shown below, under existing retail rates and estimated revenue requirements over the Study Period, the cash reserves for the domestic wastewater utility are projected to decrease from \$900,000 to **negative** \$1.6 million by the end of the Study Period. As a percentage of operating revenues, reserves are projected to decrease from 49% to **negative** 83% during the Study Period.

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Table 2-3
Projected Cash Reserves
Existing Rates

Year	2022	2023	2024	2025	2026	2027
Beginning Balance	\$904,673	\$280,237	\$933,198	\$296,946	\$(336,782)	\$(1,118,796)
Plus Net Income	36,054	(137,027)	44,213	(10,037)	(51,006)	(102,310)
Less Capital Improvements	(344,289)	(1,097,350)	(735,067)	(697,100)	(849,435)	(528,000)
Less ERP Project Costs	-	(80,833)	-	-	-	-
Plus Depreciation/Amortization	237,213	248,690	285,268	309,770	333,007	361,321
Plus Available Bond Funds	-	1,900,000	-	-	-	-
Less Existing Debt Principal	(553,414)	(180,519)	(185,788)	(189,464)	(165,572)	(171,094)
Less New Debt Principal	=	=	<u>(44,878)</u>	<u>(46,898)</u>	<u>(49,008)</u>	<u>(51,213)</u>
Ending Balance	\$280,237	\$933,198	\$296,946	\$(336,782)	\$(1,118,796)	\$(1,610,092)
Reserves as % of Operating Revenue	15.1%	49.8%	15.7%	-17.6%	-58.0%	-82.8%

Grand Rapids Public Utilities Commission
Domestic Wastewater Operating Results at Existing Rates

	Historical					Projected						
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
OPERATING REVENUES												
Utility Revenues												
City	\$ 1,400,265	\$ 1,451,844	\$ 1,526,688	\$ 1,470,730	\$ 1,552,917	\$ 1,572,118	\$ 1,588,171	\$ 1,603,998	\$ 1,619,941	\$ 1,636,133	\$ 1,652,443	
Rural	148,245	140,786	148,936	145,720	137,664	149,071	150,633	152,113	153,609	155,119	156,644	
Septage haulers	85,508	101,253	111,071	154,531	155,932	124,335	124,335	124,335	124,335	124,335	124,335	
Total Utility Revenues	\$ 1,634,018	\$ 1,693,883	\$ 1,786,695	\$ 1,770,981	\$ 1,846,513	\$ 1,845,524	\$ 1,863,139	\$ 1,880,446	\$ 1,897,884	\$ 1,915,586	\$ 1,933,421	
Other Operating Revenues												
Other	\$ 26,582	\$ 30,448	\$ 15,928	\$ 24,298	\$ 18,094	\$ 11,890	\$ 11,890	\$ 11,890	\$ 11,890	\$ 11,890	\$ 11,890	
Penalties	5,247	5,625	5,492	1,157	1,676	-	-	-	-	-	-	
Total Operating Revenues	\$ 1,665,847	\$ 1,729,956	\$ 1,808,115	\$ 1,796,436	\$ 1,866,283	\$ 1,857,414	\$ 1,875,029	\$ 1,892,336	\$ 1,909,774	\$ 1,927,476	\$ 1,945,311	
OPERATING EXPENSES												
Collection												
Operations												
Supervision and engineering	\$ 35,092	\$ 30,099	\$ 26,323	\$ 26,143	\$ 25,032	\$ 25,902	\$ 26,679	\$ 28,012	\$ 29,413	\$ 30,884	\$ 32,428	
Crew personnel						132,696	136,677	143,511	150,686	158,220	166,132	
Records						2,700	2,835	2,920	3,008	3,098	3,191	
Inspections	19,908	11,122	640	330	1,012	1,000	1,050	1,082	1,114	1,147	1,182	
Thawing mains & services						500	525	541	557	574	591	
Locating expense	1,090	-	9,136	9,877	10,100	14,000	14,420	15,141	15,898	16,693	17,528	
Service on customer premises	9,928	72	359	424	556	700	721	757	795	835	876	
Mapping	1,644	18,809	28,554	30,779	30,810	28,680	29,540	31,017	32,568	34,197	35,907	
Small tools	2,326	1,070	488	919	2,059	1,200	1,260	1,298	1,337	1,377	1,418	
Safety	2,948	3,709	2,042	3,467	4,076	6,000	6,300	6,489	6,684	6,884	7,091	
Seminar/training	25	6,632	7,600	1,262	5,659	6,300	6,615	6,813	7,018	7,228	7,445	
Uniforms expense						200	210	216	223	230	236	
Miscellaneous meetings						150	158	162	167	172	177	
Other	2,443	97	69	87	95	-	-	-	-	-	-	
Stores	13,335	2,583	85	3,056	5,400	2,761	2,899	2,986	3,076	3,168	3,263	
Power purchased	2,037	13,654	14,397	14,327	15,439	14,465	15,188	15,644	16,113	16,597	17,095	
Maintenance												
Lift stations	39,114	48,596	40,003	38,225	94,555	33,000	34,650	35,690	36,760	37,863	38,999	
Mains	38,848	41,583	34,383	81,457	74,472	284,968	412,466	124,840	128,585	132,443	136,416	
Services	6,653	3,497	5,685	7,323	4,733	8,400	8,820	9,085	9,357	9,638	9,927	
Miscellaneous	1,592	3,535	195	330	6,897	-	3,600	3,708	3,819	3,934	4,052	
Total Collection Expenses	\$ 176,983	\$ 185,058	\$ 169,959	\$ 218,006	\$ 280,895	\$ 563,621	\$ 704,613	\$ 429,912	\$ 447,178	\$ 465,180	\$ 483,952	
Domestic Wastewater Treatment												
Domestic plant	\$ 71,997	\$ 98,442	\$ 88,623	\$ 80,610	\$ 88,786	79,763	83,788	86,359	89,012	91,752	94,581	
Domestic portion of sec plant/serv center	452,935	445,364	431,736	433,422	464,234	496,756	496,756	496,756	496,756	496,756	496,756	
Domestic portion of sludge disposal	-	-	-	-	-	44,000	44,000	44,000	44,000	44,000	44,000	
Total Domestic Plant Expenses	\$ 524,932	\$ 543,806	\$ 520,359	\$ 514,032	\$ 553,020	\$ 620,519	\$ 624,544	\$ 627,115	\$ 629,769	\$ 632,508	\$ 635,337	
Other Operating Expenses												
Customer accounts expense	\$ 67,549	\$ 69,584	\$ 75,564	\$ 65,153	\$ 96,181	\$ 69,762	\$ 73,767	\$ 77,982	\$ 82,440	\$ 87,152	\$ 92,135	
Truck expense - operation						3,600	0	0	0	0	0	
Administrative and general	232,836	233,050	242,805	209,342	263,013	245,048	274,072	265,295	282,021	300,087	319,614	
Depreciation - wastewater collection	127,333	139,524	142,340	190,015	236,713	236,713	248,190	284,768	309,270	332,507	360,821	
Depreciation - other	16,395	16,519	15,984	17,288	17,727	-	-	-	-	-	-	
Amortization - intangibles	5,948	5,868	5,457	4,786	4,852	500	500	500	500	500	500	
Service center	22,098	17,749	21,258	18,027	20,514	-	-	-	-	-	-	
Total Other Operating Expenses	\$ 472,159	\$ 482,294	\$ 503,408	\$ 504,611	\$ 639,000	\$ 555,624	\$ 596,528	\$ 628,546	\$ 674,231	\$ 720,246	\$ 773,071	
Total Operating Expenses	\$ 1,174,074	\$ 1,211,158	\$ 1,193,726	\$ 1,236,649	\$ 1,472,915	\$ 1,739,764	\$ 1,925,685	\$ 1,685,572	\$ 1,751,177	\$ 1,817,935	\$ 1,892,360	

Grand Rapids Public Utilities Commission
Domestic Wastewater Operating Results at Existing Rates

	Historical					Projected					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
NET OPERATING INCOME	\$ 491,773	\$ 518,798	\$ 614,389	\$ 559,787	\$ 393,368	\$ 117,649	\$ (50,656)	\$ 206,764	\$ 158,596	\$ 109,541	\$ 52,951
NON-OPERATING INCOME (EXPENSES)											
Gain (loss) on property disposition	\$ 3,000	\$ (94,827)	\$ 5,000	\$ -	\$ 27,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Penalties	-	-	-	-	-	12,297	11,600	11,600	11,600	11,600	11,600
Interest expense	(20,134)	(18,979)	(18,078)	(16,107)	(17,471)	(36,434)	(36,410)	(20,957)	(27,378)	(22,670)	(17,806)
Less new debt interest	-	-	-	-	-	-	-	(90,000)	(87,980)	(85,870)	(83,665)
Interest expense customer deposits	-	-	-	-	-	(1,160)	(1,160)	(1,160)	(1,160)	(1,160)	(1,160)
Bond fees	(183)	(324)	(285)	(605)	(233)	(500)	(500)	(500)	(500)	(500)	(500)
Amortization of debt premiums and discounts	(146)	(146)	(146)	(146)	(146)	-	-	-	-	-	-
Amortization of regulatory asset	(374)	(374)	(374)	(374)	(1,016)	-	-	-	-	-	-
Lease revenues combined service center	20,927	2,983	5,845	4,794	3,266	5,113	3,600	3,600	3,600	3,600	3,600
CSC Bldg & Grounds Expenses	-	-	-	-	-	(60,910)	(63,501)	(65,133)	(66,815)	(65,546)	(67,330)
Total Non-Operating Revenues (Expenses)	\$ 3,090	\$ (111,667)	\$ (8,038)	\$ (12,438)	\$ 11,900	\$ (81,595)	\$ (86,371)	\$ (162,550)	\$ (168,633)	\$ (160,547)	\$ (155,261)
NET INCOME	\$ 494,863	\$ 407,131	\$ 606,351	\$ 547,349	\$ 405,268	\$ 36,054	\$ (137,027)	\$ 44,213	\$ (10,037)	\$ (51,006)	\$ (102,310)
as a percent of Operating Revenues	29.7%	23.5%	33.5%	30.5%	21.7%	1.9%	-7.3%	2.3%	-0.5%	-2.6%	-5.3%
CASH RESERVES											
Beginning of Year						\$ 904,673	\$ 280,237	\$ 933,198	\$ 296,946	\$ (336,782)	\$ (1,118,796)
Plus Net Income						36,054	(137,027)	44,213	(10,037)	(51,006)	(102,310)
Less Capital Improvements						(344,289)	(1,097,350)	(735,067)	(697,100)	(849,435)	(528,000)
Less ERP Project Costs						-	(80,833)	-	-	-	-
Plus Depreciation/Amortization						237,213	248,690	285,268	309,770	333,007	361,321
Plus Available Bond Funds						-	1,900,000	-	-	-	-
Less Debt Service Principal						(553,414)	(180,519)	(185,788)	(189,464)	(165,572)	(171,094)
Less New Debt Principal (1)						-	-	(44,878)	(46,898)	(49,008)	(51,213)
End of Year					\$ 904,673	\$ 280,237	\$ 933,198	\$ 296,946	\$ (336,782)	\$ (1,118,796)	\$ (1,610,092)
As a percent of revenue					48.5%	15.1%	49.8%	15.7%	-17.6%	-58.0%	-82.8%

(1) Assumes \$2.0 million bond issue in late 2023.

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Proposed Rates

Changes to rates are generally based on the overall need for revenues to fund operating expenses and maintain adequate cash reserve balance. The projected operating results at existing rates as presented in Section 2 of this report outline the overall revenue needs of the domestic wastewater utility. Those projections plus additional factors described below have been considered in developing the proposed rates summarized in this section of the report.

Proposed Rates

Revenue Needs

In Section 2, it shows that GRPUC's projected annual change in domestic wastewater net income, assuming continuation of the existing retail rates, declines from 1.9% of revenue in 2022 to **negative** 5.3% of revenue in 2027. Additionally, it also shows GRPUC's projected cash reserves decline from \$900,000 to **negative** \$1.6 million by the end of the Study Period. Based on these projected results, annual rate increases of 5% for each year 2023-2027 are recommended.

Recommended Rates

Exhibit 3-A shows the existing and recommended rates for domestic wastewater for each year from 2023-2027. Specific rate recommendations are outlined below.

Customer Charges

Under the current domestic wastewater rate structure, all customers pay a monthly customer charge ranging from \$11.02 per month to \$12.14 per month. There is no

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variation in customer charges for larger customers vs. smaller customers. GRPUC existing water rates differentiate monthly customer charges based on meter/service size. It is recommended that the domestic wastewater customer charges be based on the same meter/service sizes as each customer has for water service. In Exhibit 3-A a new series of customer charges based on size are summarized at the bottom of the exhibit.

LaPrairie and Cohasset

GRPUC provides wastewater service to the neighboring communities of LaPrairie and Cohasset. These communities are wholesale wastewater customers, they have their own collection systems and deliver wastewater to the GRPUC system for treatment. The current rates paid by these communities are lower than rates paid by GRPUC's regular retail customers to reflect the fact that they do not require use of entire GRPUC collection system to deliver their wastewater for treatment. An analysis has been undertaken to examine the discount for these communities as compared to the existing Residential commodity rate. Based on information provided by GRPUC staff, an estimate of the wastewater collection system dedicated to GRPUC retail customers and to LaPrairie and Cohasset was made. The System Investment in Table 3-1 shows these values. Based on annual values of 3% depreciation, 2% interest and 5% O&M, the total annual fixed cost for each entity was calculated. This fixed cost divided by sales results in the allocated fixed cost per unit for each group. A comparison of the LaPrairie and Cohasset values to the GRPUC value arrives at a cost-based reduction in commodity cost for each community. This cost-based reduction is an indication of how much lower the commodity rate could be for LaPrairie and Cohasset based their allocated system usage. A comparison of the cost-based reduction to the actual commodity rate reduction shows that LaPrairie's current rate reduction of \$1.79/unit is very close to the calculated cost-based reduction of \$1.78/unit. For Cohasset, their current rate reduction of \$1.69/unit exceeds the cost-based reduction of \$0.95/unit. To reflect this analysis, the rate increases for Cohasset exceed the LaPrairie and overall increases as presented in Exhibit 3-A.

**Table 3-1
LaPrairie and Cohasset**

Item	GRPUC Total	Cohasset	LaPrairie
System Investment	\$ 5,649,642	\$427,588	\$7,695
3% Depreciation	\$169,489	\$12,828	\$231
2% Interest	\$112,993	\$8,552	\$154
5% O&M	<u>\$282,482</u>	<u>\$21,379</u>	<u>\$385</u>
Total Fixed Cost	\$564,964	\$42,759	\$769
Sales	304,606	47,055	10,701
Fixed Cost/Unit	\$1.85	\$0.91	\$0.07
Cost Reduction/Unit	n/a	\$0.95	\$1.78
Current Commodity Rate	\$4.44	\$2.75	\$2.65
Current Reduction	n/a	\$1.69	\$1.79

Projected Operating Results – Proposed Rates

Based on the proposed rates outlined above, the resulting projected operating results are summarized below in Table 3-2. A summary presentation of the operating results is shown in Exhibit 3-B.

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Table 3-2
Projected Operating Results
Proposed Rates

Year	2022	2023	2024	2025	2026	2027
Operating Revenues	\$1,857,414	\$1,967,502	\$2,080,082	\$2,200,382	\$2,329,451	\$2,463,563
Less Operating Expenses	(1,739,764)	(1,925,685)	(1,685,572)	(1,751,177)	(1,817,935)	(1,892,360)
Less Non -Operating Expenses	<u>(81,595)</u>	<u>(86,371)</u>	<u>(162,550)</u>	<u>(168,633)</u>	<u>(160,547)</u>	<u>(155,261)</u>
Net Income	36,054	(44,554)	231,959	280,572	350,969	415,942
Net Income as Percent of Revenues	1.9%	-2.3%	11.2%	12.8%	15.1%	16.9%

Cash Reserves

A summary of the impact of the projected operating results with the proposed rate adjustments on GRPUC's cash reserves for the Study Period is shown at the end of Exhibit 3-B and in Table 3-3 below. As shown below, with the recommended increases, the reserve levels reach negative 4.8% of operating revenue in 2027.

**Table 3-3
Projected Cash Reserves
Proposed Rates**

Year	2022	2023	2024	2025	2026	2027
Beginning Balance	\$904,673	\$280,237	\$1,025,670	\$577,164	\$234,045	\$(145,995)
Plus Net Income	36,054	(44,554)	231,959	280,572	350,969	415,942
Less Capital Improvements	(344,289)	(1,097,350)	(735,067)	(697,100)	(849,435)	(528,000)
Less ERP Project Costs	-	(80,833)	-	-	-	-
Plus Depreciation/Amortization	237,213	248,690	285,268	309,770	333,007	361,321
Plus Available Bond Funds	-	1,900,000	-	-	-	-
Less Existing Debt Principal	(553,414)	(180,519)	(185,788)	(189,464)	(165,572)	(171,094)
Less New Debt Principal	-	-	<u>(44,878)</u>	<u>(46,898)</u>	<u>(49,008)</u>	<u>(51,213)</u>
Ending Balance	\$280,237	\$1,025,670	\$577,164	\$234,045	\$(145,995)	\$(119,038)
Reserves as % of Operating Revenue	15.1%	52.1%	27.7%	10.6%	-6.3%	-4.8%

Residential Bill Impact

Table 4-4 below summarizes the impact on monthly bills for different size residential customers. An average GRPUC residential customer consumes approximately 3000 gallons per month. For that average size customer, the first year bill increase is \$1.20 per month. For all customer usages shown, the annual increases are between 4.8% and 5.2% through 2027.

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Table 3-4
Monthly Wastewater Bill Comparisons

Residential Usage (gallons)	2,000	3,000	6,000
Current Rate	\$19.90	\$24.34	\$37.66
2023 Proposed	20.86	25.54	39.58
2024 Proposed	21.88	26.82	41.64
2025 Proposed	22.98	28.17	43.74
2026 Proposed	24.16	29.59	45.88
2027 Proposed	25.36	31.04	48.08

Blandin Wastewater Treatment Billing

GRPUC bills its largest customer, Blandin, for Blandin's direct use of the GRPUC wastewater treatment facility for treating its industrial wastewater stream. Blandin is billed monthly for its share of actual wastewater treatment plant operating expenses. Analysis and creation of this monthly bill is a labor intensive activity for GRPUC billing personnel. It is recommended that GRPUC engage in discussions with Blandin to simplify this billing process. At the beginning of each year, GRPUC and Blandin would estimate and agree to a flat monthly payment by Blandin for estimated treatment services. At the end of the year, GRPUC would detail the actual costs for the year and present to Blandin for review. If the total estimated payments by Blandin exceed actual annual costs, GRPUC would issue a credit to Blandin the overpayment. If the estimated payments are less than the actual costs, Blandin would pay GRPUC for the total underpayment. This allows GRPUC to compile the detailed costs on an annual basis rather than on a monthly basis and Blandin would only need to review annual costs rather than monthly costs. The option also exists that for any credit owed Blandin, it could be spread over the next 6 monthly estimated bills and any under payment by Blandin could also be spread over 6 monthly bills as an additional amount owed.

Grand Rapids Public Utilities Commission
Existing and Proposed Rates

Class	Current Rate	2023 Proposed Rate	2024 Proposed Rate	2025 Proposed Rate	2026 Proposed Rate	2027 Proposed Rate
City Residential						
Customer Charge	11.02	n/a	n/a	n/a	n/a	n/a
Commodity Charge	4.44	4.68	4.94	5.19	5.43	5.68
City Commercial						
Customer Charge	11.02	n/a	n/a	n/a	n/a	n/a
Commodity Charge	4.90	4.99	5.17	5.37	5.54	5.71
City Commercial 2nd Meter						
Commodity Charge	4.90	4.99	5.17	5.37	5.54	5.71
City Commercial - Blandin Flow						
Commodity Charge	4.90	4.99	5.17	5.37	5.54	5.71
City Industrial						
Customer Charge	11.02	n/a	n/a	n/a	n/a	n/a
Commodity Charge	4.90	4.99	5.17	5.37	5.54	5.71
Rural Residential						
Customer Charge	12.04	n/a	n/a	n/a	n/a	n/a
Commodity Charge	4.90	4.99	5.17	5.37	5.54	5.71
Rural Commercial						
Customer Charge	12.04	n/a	n/a	n/a	n/a	n/a
Commodity Charge	5.36	5.45	5.63	5.83	6.00	6.17
Rural Industrial (LaPrairie)						
Customer Charge	11.73	n/a	n/a	n/a	n/a	n/a
Commodity Charge	2.65	2.75	2.88	3.02	3.17	3.33
Rural Industrial (Cohasset)						
Customer Charge	12.14	n/a	n/a	n/a	n/a	n/a
Commodity Charge	2.75	2.90	3.05	3.20	3.36	3.55
Customer Charges						
Residential/Commercial/Industrial						
5/8-3/4 inch	n/a	11.50	12.00	12.60	13.30	14.00
1 inch	n/a	13.00	15.00	17.00	19.00	21.00
1 1/4 inch	n/a	15.00	17.00	19.00	21.50	24.00
1 1/2 inch	n/a	17.00	20.00	23.00	26.00	29.00
2 inch	n/a	20.00	25.00	30.00	40.00	50.00
3 inch	n/a	25.00	30.00	35.00	45.00	55.00
4 inch	n/a	35.00	45.00	55.00	65.00	75.00
6 inch	n/a	50.00	60.00	70.00	75.00	85.00

Grand Rapids Public Utilities Commission
Domestic Wastewater Operating Results at Proposed Rates

	Historical					Projected					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
OPERATING REVENUES											
Utility Revenues											
City	\$ 1,400,265	\$ 1,451,844	\$ 1,526,688	\$ 1,470,730	\$ 1,552,917	\$ 1,572,118	\$ 1,671,342	\$ 1,773,648	\$ 1,883,368	\$ 2,001,125	\$ 2,122,176
Rural	148,245	140,786	148,936	145,720	137,664	149,071	159,935	170,209	180,790	192,101	205,162
Septage haulers	85,508	101,253	111,071	154,531	155,932	124,335	124,335	124,335	124,335	124,335	124,335
Total Utility Revenues	\$ 1,634,018	\$ 1,693,883	\$ 1,786,695	\$ 1,770,981	\$ 1,846,513	\$ 1,845,524	\$ 1,955,612	\$ 2,068,192	\$ 2,188,492	\$ 2,317,561	\$ 2,451,673
Other Operating Revenues											
Other	\$ 26,582	\$ 30,448	\$ 15,928	\$ 24,298	\$ 18,094	\$ 11,890	\$ 11,890	\$ 11,890	\$ 11,890	\$ 11,890	\$ 11,890
Penalties	5,247	5,625	5,492	1,157	1,676	-	-	-	-	-	-
Total Operating Revenues	\$ 1,665,847	\$ 1,729,956	\$ 1,808,115	\$ 1,796,436	\$ 1,866,283	\$ 1,857,414	\$ 1,967,502	\$ 2,080,082	\$ 2,200,382	\$ 2,329,451	\$ 2,463,563
OPERATING EXPENSES											
Collection											
Operations											
Supervision and engineering	\$ 35,092	\$ 30,099	\$ 26,323	\$ 26,143	\$ 25,032	\$ 25,902	\$ 26,679	\$ 28,012	\$ 29,413	\$ 30,884	\$ 32,428
Crew personnel						132,696	136,677	143,511	150,686	158,220	166,132
Records						2,700	2,835	2,920	3,008	3,098	3,191
Inspections	19,908	11,122	640	330	1,012	1,000	1,050	1,082	1,114	1,147	1,182
Thawing mains & services						500	525	541	557	574	591
Locating expense	1,090	-	9,136	9,877	10,100	14,000	14,420	15,141	15,898	16,693	17,528
Service on customer premises	9,928	72	359	424	556	700	721	757	795	835	876
Mapping	1,644	18,809	28,554	30,779	30,810	28,680	29,540	31,017	32,568	34,197	35,907
Small tools	2,326	1,070	488	919	2,059	1,200	1,260	1,298	1,337	1,377	1,418
Safety	2,948	3,709	2,042	3,467	4,076	6,000	6,300	6,489	6,684	6,884	7,091
Seminar/training	25	6,632	7,600	1,262	5,659	6,300	6,615	6,813	7,018	7,228	7,445
Uniforms expense						200	210	216	223	230	236
Miscellaneous meetings						150	158	162	167	172	177
Other	2,443	97	69	87	95	-	-	-	-	-	-
Stores	13,335	2,583	85	3,056	5,400	2,761	2,899	2,986	3,076	3,168	3,263
Power purchased	2,037	13,654	14,397	14,327	15,439	14,465	15,188	15,644	16,113	16,597	17,095
Maintenance											
Lift stations	39,114	48,596	40,003	38,225	94,555	33,000	34,650	35,690	36,760	37,863	38,999
Mains	38,848	41,583	34,383	81,457	74,472	284,968	412,466	124,840	128,585	132,443	136,416
Services	6,653	3,497	5,685	7,323	4,733	8,400	8,820	9,085	9,357	9,638	9,927
Miscellaneous	1,592	3,535	195	330	6,897	-	3,600	3,708	3,819	3,934	4,052
Total Collection Expenses	\$ 176,983	\$ 185,058	\$ 169,959	\$ 218,006	\$ 280,895	\$ 563,621	\$ 704,613	\$ 429,912	\$ 447,178	\$ 465,180	\$ 483,952
Domestic Wastewater Treatment											
Domestic plant	\$ 71,997	\$ 98,442	\$ 88,623	\$ 80,610	\$ 88,786	79,763	83,788	86,359	89,012	91,752	94,581
Domestic portion of sec plant/serv center	452,935	445,364	431,736	433,422	464,234	496,756	496,756	496,756	496,756	496,756	496,756
Domestic portion of sludge disposal	-	-	-	-	-	44,000	44,000	44,000	44,000	44,000	44,000
Total Domestic Plant Expenses	\$ 524,932	\$ 543,806	\$ 520,359	\$ 514,032	\$ 553,020	\$ 620,519	\$ 624,544	\$ 627,115	\$ 629,769	\$ 632,508	\$ 635,337
Other Operating Expenses											
Customer accounts expense	\$ 67,549	\$ 69,584	\$ 75,564	\$ 65,153	\$ 96,181	\$ 69,762	\$ 73,767	\$ 77,982	\$ 82,440	\$ 87,152	\$ 92,135
Truck expense - operation						3,600	0	0	0	0	0
Administrative and general	232,836	233,050	242,805	209,342	263,013	245,048	274,072	265,295	282,021	300,087	319,614
Depreciation - wastewater collection	127,333	139,524	142,340	190,015	236,713	236,713	248,190	284,768	309,270	332,507	360,821
Depreciation - other	16,395	16,519	15,984	17,288	17,727	-	-	-	-	-	-
Amortization - intangibles	5,948	5,868	5,457	4,786	4,852	500	500	500	500	500	500
Service center	22,098	17,749	21,258	18,027	20,514	-	-	-	-	-	-
Total Other Operating Expenses	\$ 472,159	\$ 482,294	\$ 503,408	\$ 504,611	\$ 639,000	\$ 555,624	\$ 596,528	\$ 628,546	\$ 674,231	\$ 720,246	\$ 773,071
Total Operating Expenses	\$ 1,174,074	\$ 1,211,158	\$ 1,193,726	\$ 1,236,649	\$ 1,472,915	\$ 1,739,764	\$ 1,925,685	\$ 1,685,572	\$ 1,751,177	\$ 1,817,935	\$ 1,892,360

Grand Rapids Public Utilities Commission
 Domestic Wastewater Operating Results at Proposed Rates

	Historical					Projected					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
NET OPERATING INCOME	\$ 491,773	\$ 518,798	\$ 614,389	\$ 559,787	\$ 393,368	\$ 117,649	\$ 41,817	\$ 394,509	\$ 449,205	\$ 511,516	\$ 571,203
NON-OPERATING INCOME (EXPENSES)											
Gain (loss) on property disposition	\$ 3,000	\$ (94,827)	\$ 5,000	\$ -	\$ 27,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Penalties	-	-	-	-	-	12,297	11,600	11,600	11,600	11,600	11,600
Interest expense	(20,134)	(18,979)	(18,078)	(16,107)	(17,471)	(36,434)	(36,410)	(20,957)	(27,378)	(22,670)	(17,806)
Less new debt interest	-	-	-	-	-	-	-	(90,000)	(87,980)	(85,870)	(83,665)
Interest expense customer deposits	-	-	-	-	-	(1,160)	(1,160)	(1,160)	(1,160)	(1,160)	(1,160)
Bond fees	(183)	(324)	(285)	(605)	(233)	(500)	(500)	(500)	(500)	(500)	(500)
Amortization of debt premiums and discounts	(146)	(146)	(146)	(146)	(146)	-	-	-	-	-	-
Amortization of regulatory asset	(374)	(374)	(374)	(374)	(1,016)	-	-	-	-	-	-
Lease revenues combined service center	20,927	2,983	5,845	4,794	3,266	5,113	3,600	3,600	3,600	3,600	3,600
CSC Bldg & Grounds Expenses	-	-	-	-	-	(60,910)	(63,501)	(65,133)	(66,815)	(65,546)	(67,330)
Total Non-Operating Revenues (Expenses)	\$ 3,090	\$ (111,667)	\$ (8,038)	\$ (12,438)	\$ 11,900	\$ (81,595)	\$ (86,371)	\$ (162,550)	\$ (168,633)	\$ (160,547)	\$ (155,261)
NET INCOME	\$ 494,863	\$ 407,131	\$ 606,351	\$ 547,349	\$ 405,268	\$ 36,054	\$ (44,554)	\$ 231,959	\$ 280,572	\$ 350,969	\$ 415,942
as a percent of Operating Revenues	29.7%	23.5%	33.5%	30.5%	21.7%	1.9%	-2.3%	11.2%	12.8%	15.1%	16.9%
CASH RESERVES											
Beginning of Year						\$ 904,673	\$ 280,237	\$ 1,025,670	\$ 577,164	\$ 234,045	\$ (145,995)
Plus Net Income						36,054	(44,554)	231,959	280,572	350,969	415,942
Less Capital Improvements						(344,289)	(1,097,350)	(735,067)	(697,100)	(849,435)	(528,000)
Less ERP Project Costs						-	(80,833)	-	-	-	-
Plus Depreciation/Amortization						237,213	248,690	285,268	309,770	333,007	361,321
Plus Available Bond Funds						-	1,900,000	-	-	-	-
Less Debt Service Principal						(553,414)	(180,519)	(185,788)	(189,464)	(165,572)	(171,094)
Less New Debt Principal (1)						-	-	(44,878)	(46,898)	(49,008)	(51,213)
End of Year					\$ 904,673	\$ 280,237	\$ 1,025,670	\$ 577,164	\$ 234,045	\$ (145,995)	\$ (119,038)
As a percent of revenue					48.5%	15.1%	52.1%	27.7%	10.6%	-6.3%	-4.8%

(1) Assumes \$2.0 million bond issue in late 2023.