CITY OF MAPLE PLAIN, MINNESOTA 2022 - 2026 UTILITY RATE STUDY

Prepared by AEM Financial Solutions, LLC

City of Maple Plain, Minnesota 2022 - 2026 Utility Rate Study Memo Table of Contents

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INTRODUCTORY SECTION

City of Maple Plain, MINNESOTA 2022 - 2026 UTILITY RATE STUDY



AEM Financial Solutions™

Honorable Mayor and City Council City of Maple Plain

Introduction

We have prepared the attached 2022 - 2026 Utility Rate Study for the City that is intended to give a big picture view of the financial status of the Water, Sewer and Stormwater Enterprise funds as they stand currently and how forecasted assumptions will change things five years from now. We have not examined the projection and do not express an opinion or any other form of assurance on the accompanying schedules or assumptions. Furthermore, there will usually be differences between the forecasted and actual results because events and circumstances frequently do not occur as expected and those differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report. The City's assumptions made are as follows:

Assumptions - Forecasting

- The 2021 budget along with 2021 rates and growth assumptions were used for projecting 2021 activity. For cashflow purposes, some modifications were made for debt requirements, capital purchases, and transfers reviewed with management.
- Normal operating expenses will increase by a 3.0 percent inflation rate from amounts budgeted in 2021.
- Municipal Wastewater Charges will increase by a 4.0 percent inflation rate from 2022 amounts provided by Metropolitan Council.
- Interest earned on cash held in the City's name is assumed to earn interest at a rate of 1.0 percent.
- Capital Assumptions:
 - Various utility infrastructure projects are planned for 2021, 2024, 2027 and 2030. The utility portion of the infrastructure projects are expected to be funded with the issuances of 15 year Utility Revenue Bonds.
 - Capital equipment and other capital maintenance are assumed to be purchased with cash reserves. The Water and Sewer funds have planned \$20,000 annually for capital equipment and maintenance.

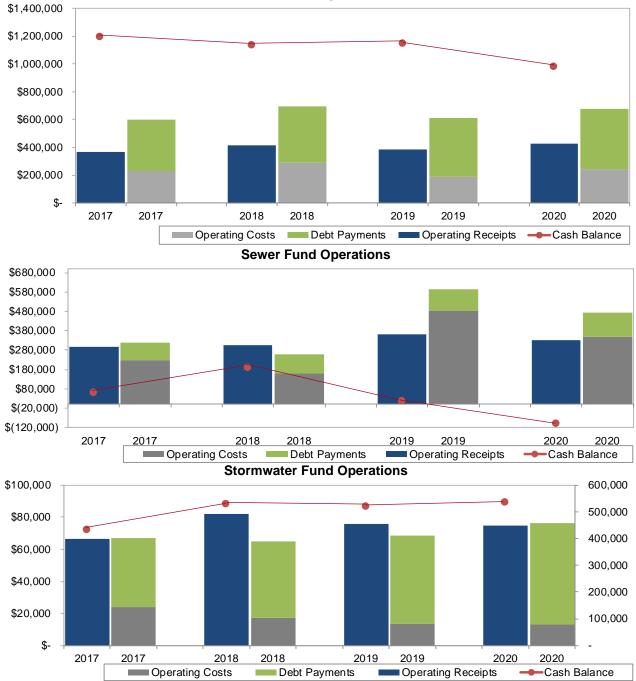
Assumptions - Other

- New connections are anticipated to increase at 1 percent per year through the life of the plan.
- For illustrative purposes, average quarterly bills are presented on pages 10 14. Average usage for residential and commercial users has been derived from 2020 actual usage with calculated outliers excluded from the average calculation. See the tables on page 10 -14 for the average usage per quarter.
- The target reserve balance is calculated by taking 100% of the following years debt payments and 50% of operating expenses.
- The City of Medina is billed for water services provided outside of the City. The outside city charges have been projected based on the total 2020 annual amount billed times the projected increase in usage rates.

Historical Information

- Utility rates have remained unchanged for several years. The most recent rate increases are noted below:
 - o In 2011, the water fixed fee was increased 5% and the water treatment plant fee was increased 25%.
 - \circ $\:$ In 2012, the sewer fixed fee was increased 23% $\:$
- Significant utility infrastructure capital activity has resulted in a steady increase of debt obligations payable from utility charges. Current debt obligations relate to the following capital projects:
 - Large Infrastructure projects were completed in 2013, 2014, 2016 and 2018.
 - The Water Treatment Plant was constructed in 2009.

The following charts offer a historical review of cash provided from utility operations. The gap between operating receipts, blue, and operating costs plus debt payments, gray and green, represents the use of cash reserves. Operating receipts do not include connection fees.



Water Fund Operations

Goals and Rate Changes

In the financial section, two scenarios are presented. Below is a summary of the projected rate increases and established goals for each scenario.

	5	Scenario 1			
Goal: Positive cash b	alances by 202	26 and minimu	im target rese	rve balance b	y 2030
	Proposed 2022	Proposed 2023	Proposed 2024	Proposed 2025	Proposed 2026
		Water Rates			
Proposed Rate Charge - Usage	25.0%	15.0%	10.0%	5.0%	3.0%
Proposed Rate Charge - Fixed	25.0%	15.0%	10.0%	5.0%	3.0%
		Sewer Rates			
Proposed Rate Charge - Usage	20.0%	12.0%	10.0%	5.0%	3.0%
Proposed Rate Charge - Fixed	20.0%	12.0%	10.0%	5.0%	3.0%
	Sto	rm Water Rate	S		
Proposed Rate Charge - Fixed	25.0%	15.0%	15.0%	10.0%	5.0%

	S	Scenario 2			
	Goal: Positive	e cash balanc	es by 2030		
	Proposed 2022	Proposed 2023	Proposed 2024	Proposed 2025	Proposed 2026
		Nater Rates			
Proposed Rate Charge - Usage	15.0%	12.0%	10.0%	5.0%	3.0%
Proposed Rate Charge - Fixed	15.0%	12.0%	10.0%	5.0%	3.0%
	Ś	Sewer Rates			
Proposed Rate Charge - Usage	15.0%	10.0%	10.0%	5.0%	3.0%
Proposed Rate Charge - Fixed	15.0%	10.0%	10.0%	5.0%	3.0%
	Stor	rm Water Rate	S		
Proposed Rate Charge - Fixed	15.0%	10.0%	10.0%	10.0%	10.0%

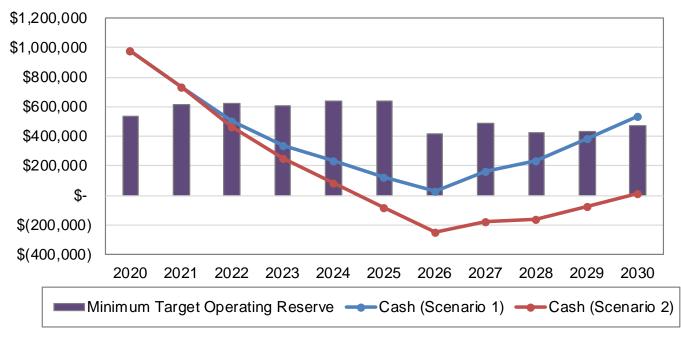
The first scenario proposes rate increases sufficient to generate a positive cash balance in the Water and Sewer fund by the year 2026 and meet minimum target cash balance projections by 2030.

The second scenario proposes rate increases sufficient to generate a positive cash balance in the Water and Sewer fund by the year 2030.

Cash Balance and Operations Projections

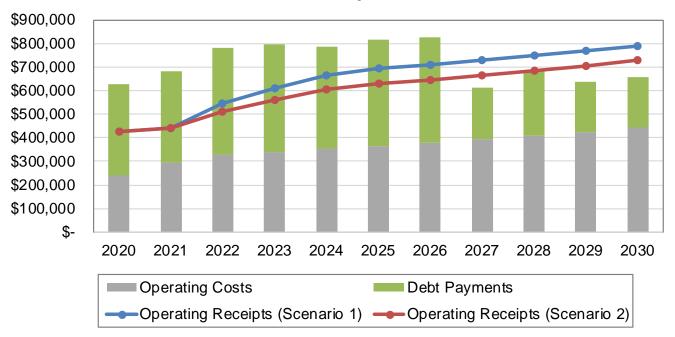
Based on the projected rate increases, below are the projected cash balance and operating results.

Water

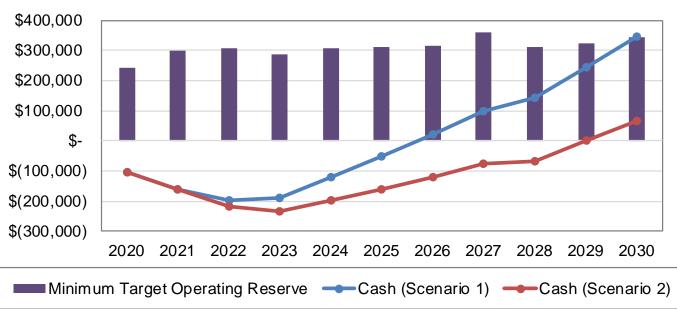


Water Fund Cash Balances

Water Fund Operations

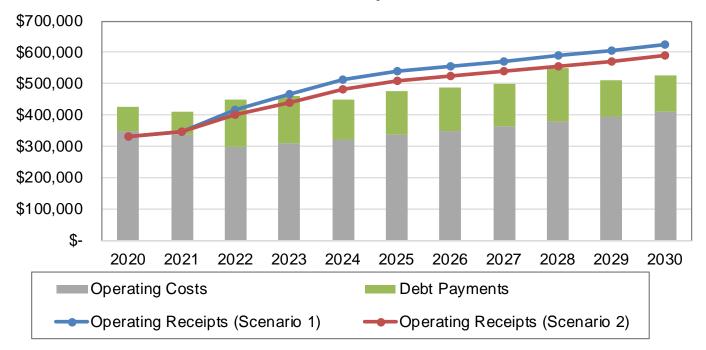


<u>Sewer</u>



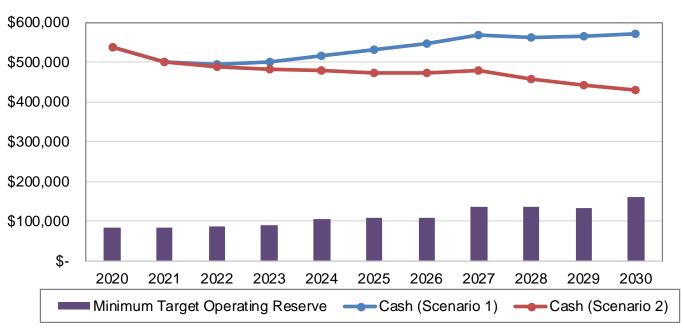
Sewer Fund Cash Balances

Sewer Fund Operations



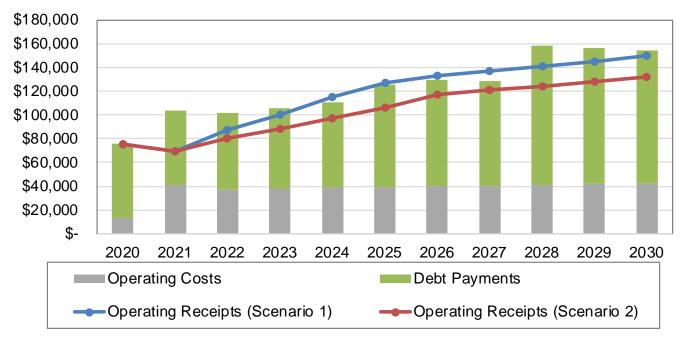
Cash Balance and Operations Projections - (Continued)

Stormwater



Stormwater Fund Cash Balances

Stormwater Fund Operations



Average Quarterly Bills

The tables below illustrate the average bill for residential and commercial costumers and the projected average quarterly and annual change.

				Avera	age l	Jtility Bi	ll (So	cenario ^r	1)					
							١	Nater						
		rter 1		uarter 2		uarter 3		uarter 4				verage		Innual
		ge Bill		erage Bill		erage Bill		erage Bill				uarterly		hange
e .		400		2,700		1,700		10,500		al Annual		nge From		From
Category	Avg. G	Gallons	Avg	. Gallons	Avg	. Gallons	Avg	. Gallons	Avg.	. Charges	Pri	or Year	_ Pri	or Year
Residential	¢	07 57	¢	107 54	¢	101 24	¢	04.46	¢	200.60		N/A		N/A
Current (2021)	\$	87.57	\$	107.54	\$	101.34	\$	94.16	\$	390.60		N/A		N/A
2022	\$ 1	103.21	\$	128.17	\$	120.43	\$	111.44	\$	463.25	\$	18.16	\$	72.65
2023		114.94	\$	143.65	\$	134.74	\$	124.41	\$	517.74	\$	13.62	\$	54.49
2024		123.93	\$	155.51	\$	145.72	\$	134.35	\$	559.51	\$	10.44	\$	41.77
2025		128.88	\$	162.04	\$	151.75	\$	139.82	\$	582.49	\$	5.74	\$	22.98
2026		132.00	\$	166.15	\$	155.56	\$	143.26	\$	596.96	\$	3.62	\$	14.47
	·								·					
	Quar	rter 1	Q	uarter 2	Q	uarter 3	Q	uarter 4			A	verage	A	Innual
	Avera	ge Bill	Ave	erage Bill	Ave	erage Bill	Ave	erage Bill			Qı	uarterly	С	hange
	10,0	000	1	4,500	1	6,500	1	0,400	Tota	al Annual	Char	nge From	F	From
Category	Avg. G	Gallons	Avg	. Gallons	Avg	. Gallons	Avg	. Gallons	Avg.	Charges	Pri	or Year	Pri	or Year
Commercial														
Current (2021)	\$	96.16	\$	103.55	\$	136.40	\$	98.56	\$	434.67		N/A		N/A
2022	\$ 1	- 112.70	\$	- 121.94	\$	- 163.00	\$	- 115.70	\$	513.33	\$	19.67	\$	78.67
2022		125.11	\$	135.73	\$	182.95	\$	128.55	\$	572.33	\$	14.75	\$	59.00
2023		134.62	\$	146.30	φ \$	198.25	φ \$	128.35	φ \$	617.57	φ \$	11.31	\$	45.23
2024		139.85	э \$	140.30	э \$	206.66	ֆ \$	136.40	э \$	642.45	э \$	6.22	э \$	45.25 24.88
2025			э \$	152.12	э \$		э \$		э \$			0.22 3.92	э \$	
2020	φı	143.14	Φ	100.76	Ф	211.96	Ф	147.24	Ф	658.12	\$	3.92	Φ	15.67
							S	Sewer						
		rter 1		uarter 2		uarter 3		uarter 4				verage	A	Innual
		ge Bill	Ave	erage Bill		erage Bill		erage Bill				uarterly	С	hange
		400	1	2,700		1,700	1	10,500	Tota	al Annual	Char	nge From	I	From
											D:	or Year	Pri	or Year
Category		Gallons	Avg	. Gallons	Avg	. Gallons	Avg	. Gallons	Avg.	. Charges	PII			
Residential	Avg. G	Gallons						. Gallons						
	Avg. G		Avg \$	<u>. Gallons</u> 114.90	Avg \$	<u>. Gallons</u> 108.80	Avg \$		<u>Avg</u> \$	<u>Charges</u> 419.95		N/A		N/A
Residential Current (2021)	Avg. G \$	Gallons 94.77	\$	114.90	\$	108.80	\$	<u>. Gallons</u> 101.48	\$	419.95		N/A		
Residential Current (2021) 2022	<u>Avg. G</u> \$ \$ 1	<u>94.77</u> 94.77	\$	114.90 137.88	\$ \$	108.80 130.56	\$ \$	<u>. Gallons</u> 101.48 121.78	\$ \$	419.95 503.94	\$	N/A 21.00	\$	83.99
Residential Current (2021) 2022 2023	<u>Avg. G</u> \$ \$ 1 \$ 1	94.77 94.77 113.72 127.37	\$ \$ \$	114.90 137.88 154.43	\$ \$ \$	108.80 130.56 146.23	\$ \$ \$. Gallons 101.48 121.78 136.39	\$ \$ \$	419.95 503.94 564.41	\$ \$	N/A 21.00 15.12	\$ \$	83.99 60.47
Residential Current (2021) 2022 2023 2024	<u>Avg. G</u> \$ \$ 1 \$ 1 \$ 1 \$ 1	94.77 94.77 113.72 127.37 140.11	\$ \$ \$	114.90 137.88 154.43 169.87	\$ \$ \$ \$	108.80 130.56 146.23 160.85	\$ \$ \$. Gallons 101.48 121.78 136.39 150.03	\$ \$ \$ \$	419.95 503.94 564.41 620.85	\$ \$	N/A 21.00 15.12 14.11	\$ \$ \$	83.99 60.47 56.44
Residential Current (2021) 2022 2023 2024 2025	Avg. G \$ \$ \$ \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1	94.77 94.77 113.72 127.37 140.11 147.11	\$ \$ \$	114.90 137.88 154.43 169.87 178.36	\$ \$ \$ \$ \$	108.80 130.56 146.23 160.85 168.89	\$ \$ \$ \$ \$. Gallons 101.48 121.78 136.39 150.03 157.53	\$ \$ \$ \$ \$ \$	419.95 503.94 564.41 620.85 651.90	\$ \$ \$	N/A 21.00 15.12 14.11 7.76	\$ \$ \$	83.99 60.47 56.44 31.04
Residential Current (2021) 2022 2023 2024	Avg. G \$ \$ \$ \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1	94.77 94.77 113.72 127.37 140.11	\$ \$ \$ \$ \$	114.90 137.88 154.43 169.87	\$ \$ \$ \$	108.80 130.56 146.23 160.85	\$ \$ \$. Gallons 101.48 121.78 136.39 150.03	\$ \$ \$ \$	419.95 503.94 564.41 620.85	\$ \$	N/A 21.00 15.12 14.11	\$ \$ \$	83.99 60.47 56.44 31.04
Residential Current (2021) 2022 2023 2024 2025	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1	\$ \$ \$ \$ \$ \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2	\$ \$ \$ \$ \$ \$	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3	\$ \$ \$ \$ \$. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4	\$ \$ \$ \$ \$ \$	419.95 503.94 564.41 620.85 651.90	\$ \$ \$ \$ \$	N/A 21.00 15.12 14.11 7.76 4.89 verage	\$ \$ \$ \$ \$	83.99 60.47 56.44 31.04 19.56 .nnual
Residential Current (2021) 2022 2023 2024 2025	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 Quar Averag	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill	\$ \$ \$ \$ \$ \$	114.90 137.88 154.43 169.87 178.36 183.71	\$ \$ \$ \$ \$ \$	108.80 130.56 146.23 160.85 168.89 173.96	\$ \$ \$ \$ \$ \$ Ave	. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4 erage Bill	\$ \$ \$ \$ \$ \$	419.95 503.94 564.41 620.85 651.90	\$ \$ \$ \$ \$	N/A 21.00 15.12 14.11 7.76 4.89	\$ \$ \$ \$ \$	83.99 60.47 56.44 31.04 19.56
Residential Current (2021) 2022 2023 2024 2025	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 Quar Averag	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1	\$ \$ \$ \$ \$ \$ Q Ave	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2	\$ \$ \$ \$ \$ \$ Ave 1	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 erage Bill 6,500	\$ \$ \$ \$ \$ \$ Ave	. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	419.95 503.94 564.41 620.85 651.90	\$ \$ \$ \$ Qu Char	N/A 21.00 15.12 14.11 7.76 4.89 verage uarterly nge From	\$ \$ \$ \$ C	83.99 60.47 56.44 31.04 19.56 .nnual hange From
Residential Current (2021) 2022 2023 2024 2025 2026 Category	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill	\$ \$ \$ \$ \$ \$ \$ \$ \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill	\$ \$ \$ \$ \$ \$ Ave 1	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 trage Bill	\$ \$ \$ \$ \$ Ave	. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4 erage Bill	\$ \$ \$ \$ \$ \$	419.95 503.94 564.41 620.85 651.90 671.45	\$ \$ \$ \$ Qu Char	N/A 21.00 15.12 14.11 7.76 4.89 verage Jarterly	\$ \$ \$ \$ C	83.99 60.47 56.44 31.04 19.56 .nnual hange
Residential Current (2021) 2022 2023 2024 2025 2026 Category Commercial	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 Quar Averag 10,0 Avg. G	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill 000 Sallons	\$ \$ \$ \$ Ave Avg	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill 4,500 . Gallons	\$ \$ \$ \$ \$ Ave Ave	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 erage Bill 6,500 . Gallons	\$ \$ \$ \$ \$ Ave Avg	. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4 erage Bill 10,400 . Gallons	\$ \$ \$ \$ \$ Tot: Avg.	419.95 503.94 564.41 620.85 651.90 671.45 al Annual . Charges	\$ \$ \$ Qu Char Pri	N/A 21.00 15.12 14.11 7.76 4.89 verage Jarterly nge From or Year	\$ \$ \$ C Pri-	83.99 60.47 56.44 31.04 19.56 nnual hange From or Year
Residential Current (2021) 2022 2023 2024 2025 2026 Category	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 Quar Averag 10,0 Avg. G	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill 000	\$ \$ \$ \$ \$ \$ \$ \$ \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill 4,500	\$ \$ \$ \$ \$ \$ Ave 1	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 erage Bill 6,500	\$ \$ \$ \$ \$ Ave	. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4 erage Bill 10,400	\$ \$ \$ \$ \$ \$	419.95 503.94 564.41 620.85 651.90 671.45	\$ \$ \$ Qu Char Pri	N/A 21.00 15.12 14.11 7.76 4.89 verage uarterly nge From	\$ \$ \$ C Pri-	83.99 60.47 56.44 31.04 19.56 .nnual hange From
Residential Current (2021) 2022 2023 2024 2025 2026 Category Commercial Current (2021)	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 Quar Averag 10,0 Avg. G	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill 000 Gallons 98.43 -	\$ \$ \$ \$ \$ Ave Avg \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill 4,500 . Gallons 125.88	\$ \$ \$ \$ \$ Ave 1 Avg \$	108.80 130.56 146.23 160.85 168.89 173.96 Juarter 3 prage Bill 6,500 . Gallons 138.08	\$ \$ \$ \$ \$ Ave Avg \$. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4 erage Bill 10,400 . Gallons 100.87	\$ \$ \$ \$ Tota <u>Avg</u>	419.95 503.94 564.41 620.85 651.90 671.45 al Annual <u>Charges</u> 463.26	\$ \$ \$ Qu Char Pri	N/A 21.00 15.12 14.11 7.76 4.89 werage warterly nge From or Year N/A	\$ \$ \$ C Pri	83.99 60.47 56.44 31.04 19.56 nnual hange From or Year N/A
Residential Current (2021) 2022 2023 2024 2025 2026 Category Commercial Current (2021) 2022	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 Quar Averag 10,0 Avg. G \$ \$	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill 000 Sallons 98.43 - 118.12	\$ \$ \$ \$ \$ \$ Ave Avg \$ \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill 4,500 . Gallons 125.88	\$ \$ \$ \$ \$ Ave 1 Avg \$ \$	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 trage Bill 6,500 . Gallons 138.08 - 165.70	\$ \$ \$ \$ \$ Ave 1 Avg \$ \$. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 uarter 4 erage Bill 10,400 . Gallons 100.87 - 121.04	\$ \$ \$ \$ \$ Tota <u>Avg</u> \$ \$	419.95 503.94 564.41 620.85 651.90 671.45 al Annual <u>Charges</u> 463.26 555.91	\$ \$ \$ Char Pri	N/A 21.00 15.12 14.11 7.76 4.89 verage Jarterly oge From or Year N/A 23.16	\$ \$ \$ Pri- \$	83.99 60.47 56.44 31.04 19.56 Innual hange From or Year N/A 92.65
Current (2021) 2022 2023 2024 2025 2026 Category Commercial Current (2021) 2022 2023	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 Quar Averag 10,0 Averag 10,0 \$ 10,0 Averag 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill 000 Sallons 98.43 - 118.12 132.29	\$ \$ \$ \$ \$ Ave Avg \$ \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill 4,500 . Gallons - 125.88 - 151.06 169.18	\$ \$ \$ \$ \$ \$ Ave 1 Avg \$ \$	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 erage Bill 6,500 . Gallons - 138.08 - 165.70 185.58	\$ \$ \$ \$ \$ Ave 1 Avg \$ \$. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 warter 4 erage Bill 10,400 . Gallons 100.87 - 121.04 135.57	\$ \$ \$ \$ \$ Tot: <u>Avg</u> \$ \$	419.95 503.94 564.41 620.85 651.90 671.45 al Annual . Charges 463.26 555.91 622.62	\$ \$ \$ Char Pri \$	N/A 21.00 15.12 14.11 7.76 4.89 verage Jarterly nge From or Year N/A 23.16 16.68	\$ \$ \$ C Pri \$ \$	83.99 60.47 56.44 31.04 19.56 Innual hange From or Year N/A 92.65 66.71
Current (2021) 2022 2023 2024 2025 2026 Category Commercial Current (2021) 2022 2023 2026	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill 000 Sallons 98.43 - 118.12 132.29 145.52	\$ \$ \$ \$ \$ \$ Ave { Avg \$ \$ \$ \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill 4,500 . Gallons 125.88 - 151.06 169.18 186.10	\$ \$ \$ \$ \$ \$ Ave 1 Avg \$ \$ \$ \$	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 grage Bill 6,500 . Gallons 138.08 - 165.70 185.58 204.14	\$ \$ \$ \$ \$ \$ Ave 1 Avg \$ \$ \$ \$. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 warter 4 erage Bill 10,400 . Gallons 100.87 - 121.04 135.57 149.13	\$ \$ \$ \$ \$ Tot: <u>Avg</u> \$ \$ \$ \$	419.95 503.94 564.41 620.85 651.90 671.45 al Annual Charges 463.26 555.91 622.62 684.88	\$ \$ \$ Qu Char Pri \$ \$ \$	N/A 21.00 15.12 14.11 7.76 4.89 verage jarterly nge From or Year N/A 23.16 16.68 15.57	\$ \$ \$ C Pri \$ \$ \$	83.99 60.47 56.44 31.04 19.56 nnual hange From or Year N/A 92.65 66.71 62.26
Current (2021) 2022 2023 2024 2025 2026 Category Commercial Current (2021) 2022 2023	Avg. G \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 4verag 10,0 Averag 10,0 \$ 5 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$	94.77 94.77 113.72 127.37 140.11 147.11 151.53 rter 1 ge Bill 000 Sallons 98.43 - 118.12 132.29	\$ \$ \$ \$ \$ Ave Avg \$ \$	114.90 137.88 154.43 169.87 178.36 183.71 uarter 2 erage Bill 4,500 . Gallons - 125.88 - 151.06 169.18	\$ \$ \$ \$ \$ \$ Ave 1 Avg \$ \$	108.80 130.56 146.23 160.85 168.89 173.96 uarter 3 erage Bill 6,500 . Gallons - 138.08 - 165.70 185.58	\$ \$ \$ \$ \$ Ave 1 Avg \$ \$. Gallons 101.48 121.78 136.39 150.03 157.53 162.26 warter 4 erage Bill 10,400 . Gallons 100.87 - 121.04 135.57	\$ \$ \$ \$ \$ Tot: <u>Avg</u> \$ \$	419.95 503.94 564.41 620.85 651.90 671.45 al Annual . Charges 463.26 555.91 622.62	\$ \$ \$ Char Pri \$	N/A 21.00 15.12 14.11 7.76 4.89 verage Jarterly nge From or Year N/A 23.16 16.68	\$ \$ \$ C Pri \$ \$	83.99 60.47 56.44 31.04 19.56 nnual hange From or Year

Average Quarterly Bills (Continued)

Category Average Residential \$ Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$ 2026 \$ Qual Average 10 Category Category Avg. 0 Commercial \$ Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	age Bill 8.91 11.14 12.81 14.73 16.20 17.01 arter 1 age Bill 0,000	Total Annual Avg. Charges \$ 35.64 \$ 44.55 \$ 51.23 \$ 58.92 \$ 64.81 \$ 68.05 Total Annual Avg. Charges \$ 324.00 \$ 405.00 \$ 465.75 \$ 535.61 \$ 589.17	Qu Chai Pri \$ \$ \$ \$ \$ \$ Chai	verage Jarterly nge From or Year N/A 2.23 1.67 1.92 1.47 0.81 verage Jarterly nge From or Year N/A 20.25 15.19 17.47	C Pri \$ \$ \$ \$ \$ C	Annual change From ior Year N/A 8.91 6.68 7.68 5.89 3.24 Annual change From ior Year N/A 81.00 60.75			
Category Average Residential Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$ 2026 \$ Quation Average Average \$ Category Average Commercial Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	age Bill 8.91 11.14 12.81 14.73 16.20 17.01 arter 1 age Bill 0,000 Gallons 81.00 101.25 116.44 133.90 147.29	Avg. Charges \$ 35.64 \$ 44.55 \$ 51.23 \$ 58.92 \$ 64.81 \$ 68.05 Total Annual Avg. Charges \$ 324.00 \$ 405.00 \$ 465.75 \$ 535.61 \$ 589.17	Qu Chai Pri \$ \$ \$ \$ Chai Pri \$ \$ \$	N/A 2.23 1.67 1.92 1.47 0.81 verage uarterly nge From or Year N/A 20.25 15.19	C Pri \$ \$ \$ Pri \$ \$	change From ior Year N/A 8.91 6.68 7.68 5.89 3.24 Annual change From ior Year N/A 81.00 60.75			
Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$ 2026 \$ Qual Avera 10 Avera 10 Avera 10 Avera 10 2022 2023 \$ 2022 \$ 2022 \$ 2022 \$ 2023 \$ 2024 \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	8.91 11.14 12.81 14.73 16.20 17.01 arter 1 age Bill 0,000 Gallons 81.00 101.25 116.44 133.90 147.29	\$ 35.64 \$ 44.55 \$ 51.23 \$ 58.92 \$ 64.81 \$ 68.05 Total Annual <u>Avg. Charges</u> \$ 324.00 \$ 405.00 \$ 405.75 \$ 535.61 \$ 589.17	\$ \$ \$ Qu Chau Pri \$ \$	2.23 1.67 1.92 1.47 0.81 verage Jarterly nge From or Year N/A 20.25 15.19	\$ \$ \$ Pri \$ \$	8.91 6.68 7.68 5.89 3.24 Annual change From ior Year N/A 81.00 60.75			
2022 \$ 2023 \$ 2024 \$ 2025 \$ 2026 \$ Qual Averation 10 Averation Category Averation 10 Averation 10 2022 2022 \$ 2022 \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	11.14 12.81 14.73 16.20 17.01 arter 1 age Bill 0,000 <u>Gallons</u> 81.00 101.25 116.44 133.90 147.29	\$ 44.55 \$ 51.23 \$ 58.92 \$ 64.81 \$ 68.05 Total Annual <u>Avg. Charges</u> \$ 324.00 \$ 405.00 \$ 465.75 \$ 535.61 \$ 589.17	\$ \$ \$ Qu Chau Pri \$ \$	2.23 1.67 1.92 1.47 0.81 verage Jarterly nge From or Year N/A 20.25 15.19	\$ \$ \$ Pri \$ \$	8.91 6.68 7.68 5.89 3.24 Annual change From ior Year N/A 81.00 60.75			
2023 \$ 2024 \$ 2025 \$ 2026 \$ Qual Avera 10 Avera Category Avg. (Commercial) Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	12.81 14.73 16.20 17.01 arter 1 age Bill 0,000 Gallons 81.00 101.25 116.44 133.90 147.29	\$51.23 \$58.92 \$64.81 \$68.05 Total Annual <u>Avg. Charges</u> \$324.00 \$405.00 \$465.75 \$535.61 \$589.17	\$ \$ \$ Qu Chau Pri \$ \$	1.67 1.92 1.47 0.81 verage uarterly nge From or Year N/A 20.25 15.19	\$ \$ \$ Pri \$ \$	6.68 7.68 5.89 3.24 Annual Change From for Year N/A 81.00 60.75			
Category Avera 10 Avg. (Commercial Avg. (Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	age Bill 0,000 <u>Gallons</u> 81.00 101.25 116.44 133.90 147.29	Avg. Charges \$ 324.00 \$ 405.00 \$ 465.75 \$ 535.61 \$ 589.17	Qı Chai Pri \$ \$ \$	N/A 20.25 15.19	C Pri \$	change From ior Year N/A 81.00 60.75			
Commercial S Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	81.00 101.25 116.44 133.90 147.29	\$ 324.00 \$ 405.00 \$ 465.75 \$ 535.61 \$ 589.17	\$ \$	N/A 20.25 15.19	\$	N/A 81.00 60.75			
Current (2021) \$ 2022 \$ 2023 \$ 2024 \$ 2025 \$	101.25 116.44 133.90 147.29	\$ 405.00 \$ 465.75 \$ 535.61 \$ 589.17	\$ \$	20.25 15.19	\$	81.00 60.75			
2023 \$ 2024 \$ 2025 \$	116.44 133.90 147.29	\$ 465.75\$ 535.61\$ 589.17	\$ \$	15.19	\$	60.75			
	101.00	\$ 618.63	Э \$	13.39 7.36	↓ \$ \$	69.86 53.56 29.46			
					Т	OTAL			
Avera 9,	arter 1 age Bill ,400	Quarter 2 Average Bill 12,700	Ave	uarter 3 erage Bill 1,700	Qı Ave	uarter 4 erage Bill 0,500	Total Annual	Average Quarterly Change From	Annual Change From
	Gallons	Avg. Gallons	Avg.	Gallons	Avg.	. Gallons	Avg. Charges	Prior Year	Prior Year
Residential Current (2021) \$	191.25	\$ 231.35	\$	219.05	\$	204.55	\$ 846.19	N/A	N/A
2023 \$ 2024 \$ 2025 \$	228.07 255.12 278.77 292.19 300.53	 \$ 277.19 \$ 310.88 \$ 340.11 \$ 356.60 \$ 366.87 	\$ \$ \$ \$ \$	262.13 293.78 321.30 336.85 346.53	\$ \$ \$ \$	244.36 273.61 299.11 313.55 322.53	 \$ 1,011.74 \$ 1,133.38 \$ 1,239.28 \$ 1,299.19 \$ 1,336.46 	 \$ 41.39 \$ 30.41 \$ 26.47 \$ 14.98 \$ 9.32 	 \$ 165.55 \$ 121.64 \$ 105.90 \$ 59.91 \$ 37.27
Avera 10	arter 1 age Bill),000 Gallons	Quarter 2 Average Bill 14,500 Avg. Gallons	Ave 1	uarter 3 erage Bill 6,500 . Gallons	Ave 1	uarter 4 erage Bill 0,400 . Gallons	Total Annual Avg. Charges	Average Quarterly Change From Prior Year	Annual Change From Prior Year
Commercial Avg. (Cultorio	Aug. Callons	,y.	Salong	, wg.	. Suloii	rug. onarges		
	275.59	\$ 310.43	\$	355.48	\$	280.43	\$ 1,221.93	N/A	N/A
2022 \$	332.07	\$ 374.24	\$	429.95	\$	337.99	\$ 1,474.25	\$ 63.08	\$ 252.32
	373.83	\$ 421.35	\$	484.97	\$	380.56	\$ 1,660.71	\$ 46.61	\$ 186.46
2024 \$	414.04	\$ 466.31	\$	536.29	\$	421.43	\$ 1,838.06	\$ 44.34	\$ 177.36
2025 \$	439.93	\$ 494.82	\$	568.30	\$	447.70	\$ 1,950.75	\$ 28.17	\$ 112.68
2026 \$	455.18	\$ 511.71	\$	587.39	\$	463.18	\$ 2,017.45	\$ 16.68	\$ 66.71

Average Quarterly Bills (Continued)

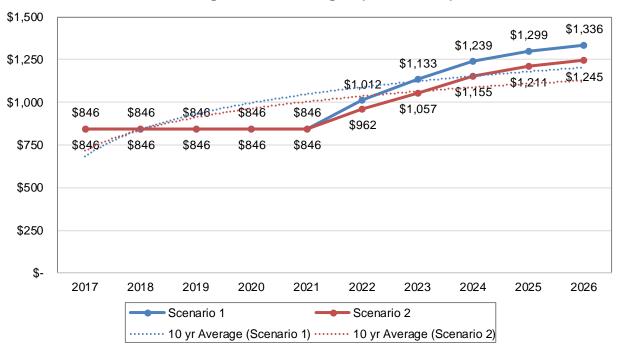
	Average Utility					Utility B	/ Bill (Scenario 2)								
							/	Vater							
	Q	uarter 1	Q	uarter 2	Q	uarter 3	Q	uarter 4			A	verage	A	nnual	
	Av	erage Bill	Ave	erage Bill	Ave	erage Bill	Ave	erage Bill			Q	uarterly	С	hange	
		9,400		12,700		11,700		10,500		al Annual	Cha	nge From		From	
Category	Avg	g. Gallons	Avg	. Gallons	Avg	g. Gallons	Avg	. Gallons	Avg	. Charges	Pri	or Year	Pri	or Year	
Residential															
Current (2021)	\$	87.57	\$	107.54	\$	101.34	\$	94.16	\$	390.60		N/A		N/A	
0000	•	00.05	•	440.00	•	440 70	•	404 50	•	10.1.10	•	40.00	•	77.00	
2022	\$	96.95	\$	119.92	\$	112.79	\$	104.53	\$	434.19	\$	10.90	\$	77.80	
2023	\$	105.59	\$	131.31	\$	123.33	\$	114.07	\$	474.29	\$	10.03	\$	71.57	
2024	\$	113.64	\$	141.94	\$	133.16	\$	122.98	\$	511.72	\$ \$	19.38	\$	66.80	
2025	\$ \$	118.08	\$ \$	147.78	\$ \$	138.57	\$ \$	127.88	\$ \$	532.31	э \$	14.50	\$ \$	36.74 23.15	
2026	Ф	120.87	Ф	151.47	Ф	141.98	Ф	130.96	Ф	545.28	Ф	8.39	Ф	23.15	
	Q	uarter 1	Q	uarter 2	Q	uarter 3	Q	uarter 4			A	verage	Д	nnual	
	Av	erage Bill	Ave	erage Bill	Ave	erage Bill	Average Bill				Quarterly		С	hange	
		10,000		14,500		16,500		10,400	Tot	al Annual		nge From		From	
Category	Avç	g. Gallons	Ave	. Gallons	Ave	. Gallons	Ave	. Gallons	Avg	. Charges	Pri	or Year	Pri	or Year	
Commercial															
Current (2021)	\$	96.16	\$	103.55	\$	136.40	\$	98.56	\$	434.67		N/A		N/A	
2022	\$	106.08	\$	114.58	\$	152.36	\$	108.84	\$	481.87	\$	11.80	\$	47.20	
2023	\$	115.21	\$	124.73	\$	167.04	\$	118.30	\$	525.29	\$	10.86	\$	43.42	
2024	\$	123.74	\$	134.21	\$	180.75	\$	127.13	\$	565.82	\$	10.13	\$	40.53	
2025	\$	128.42	\$	139.42	\$	188.28	\$	131.99	\$	588.11	\$	5.57	\$	22.29	
2026	\$	131.37	\$	142.70	\$	193.03	\$	135.05	\$	602.15	\$	3.51	\$	14.04	
							C	Sewer							

							5	Sewer						
	Q	uarter 1	Q	uarter 2	Quarter 3		Q	uarter 4			A	verage	A	nnual
	Ave	erage Bill	Ave	erage Bill	Ave	erage Bill	Ave	erage Bill			Qı	uarterly	С	hange
		9,400	1	2,700		11,700		10,500	Tot	al Annual	Chai	nge From	l	rom
Category	Avg	g. Gallons	Avg	. Gallons	Avg	. Gallons	Avg	. Gallons	Avg	. Charges	Pri	or Year	Pri	or Year
Residential														
Current (2021)	\$	94.77	\$	114.90	\$	108.80	\$	101.48	\$	419.95		N/A		N/A
2022	\$	108.99	\$	132.14	\$	125.12	\$	116.70	\$	482.94	\$	15.75	\$	62.99
2023	\$	119.88	\$	145.35	\$	137.63	\$	128.37	\$	531.24	\$	12.07	\$	48.29
2024	\$	131.87	\$	159.88	\$	151.40	\$	141.21	\$	584.36	\$	13.28	\$	53.12
2025	\$	138.47	\$	167.88	\$	158.96	\$	148.27	\$	613.58	\$	7.30	\$	29.22
2026	\$	142.62	\$	172.91	\$	163.73	\$	152.72	\$	631.99	\$	4.60	\$	18.41
	Q	uarter 1	Q	uarter 2	Q	uarter 3	Q	uarter 4			A	verage	A	nnual
	Ave	erage Bill	Ave	erage Bill	Ave	erage Bill	Average Bill				Quarterly		С	hange
		10,000	1	14,500		16,500		10,400	Total Annua		Change From		I	From
Category	Avg	g. Gallons	Avg	. Gallons	Avg	. Gallons	Avg	. Gallons	Avg	. Charges	Pri	or Year	Pri	or Year
Commercial														
Current (2021)	\$	98.43	\$	125.88	\$	138.08	\$	100.87	\$	463.26		N/A		N/A
2022	\$	113.19	\$	144.76	\$	158.79	\$	116.00	\$	532.75	\$	17.37	\$	69.49
2023	\$	124.51	\$	159.24	\$	174.67	\$	127.60	\$	586.02	\$	13.32	\$	53.27
2024	\$	136.97	\$	175.16	\$	192.14	\$	140.36	\$	644.63	\$	14.65	\$	58.60
2025	\$	143.81	\$	183.92	\$	201.75	\$	147.38	\$	676.86	\$	8.06	\$	32.23
2026	\$	148.13	\$	189.44	\$	207.80	\$	151.80	\$	697.16	\$	5.08	\$	20.31

Average Quarterly Bills (Continued)

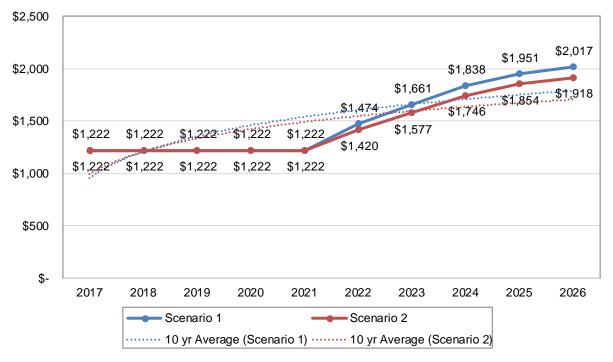
		Ave	erage Utility B	II (Scenario	2)		
			orm				
Category	Quarterly Average Bill	Total Annual Avg. Charges	Average Quarterly Change From Prior Year	Annual Change From Prior Year			
Residential Current (2021)	\$ 8.91	\$ 35.64	N/A	N/A			
2022 2023 2024 2025 2026	\$ 10.25 \$ 11.27 \$ 12.40 \$ 13.64 \$ 15.00	\$ 40.99 \$ 45.08 \$ 49.59 \$ 54.55 \$ 60.01	\$ 1.34 \$ 1.02 \$ 1.13 \$ 1.24 \$ 1.36	\$ 5.35 \$ 4.10 \$ 4.51 \$ 4.96 \$ 5.46			
Category Commercial	Quarter 1 Average Bill 10,000 Avg. Gallons	Total Annual Avg. Charges	Average Quarterly Change From Prior Year	Annual Change From Prior Year			
Current (2021)	\$ 81.00	\$ 324.00	N/A	N/A			
2022 2023 2024 2025 2026	\$ 93.15 \$ 102.47 \$ 112.71 \$ 123.98 \$ 136.38	 \$ 372.60 \$ 409.86 \$ 450.85 \$ 495.93 \$ 545.52 	\$ 12.15 \$ 9.32 \$ 10.25 \$ 11.27 \$ 12.40	\$ 48.60 \$ 37.26 \$ 40.99 \$ 45.08 \$ 49.59			
				TOTAL			
Category	Quarter 1 Average Bill 9,400 Avg. Gallons	Quarter 2 Average Bill 12,700 Avg. Gallons	Quarter 3 Average Bill 11,700 Avg. Gallons	Quarter 4 Average Bill 10,500 Avg. Gallons	Total Annual Avg. Charges	Average Quarterly Change From Prior Year	Annual Change From Prior Year
Residential Current (2021)	\$ 191.25	\$ 231.35	\$ 219.05	\$ 204.55	\$ 846.19	N/A	N/A
2022 2023 2024 2025 2026	 \$ 217.07 \$ 238.28 \$ 260.25 \$ 272.74 \$ 280.50 	 \$ 263.19 \$ 289.46 \$ 316.55 \$ 331.86 \$ 341.39 	 \$ 249.05 \$ 273.77 \$ 299.29 \$ 313.74 \$ 322.72 	 \$ 232.37 \$ 255.25 \$ 278.92 \$ 292.35 \$ 300.69 	 \$ 961.68 \$ 1,056.76 \$ 1,155.00 \$ 1,210.70 \$ 1,245.31 	\$ 28.87 \$ 23.77 \$ 24.56 \$ 13.92 \$ 8.65	 \$ 115.49 \$ 95.08 \$ 98.24 \$ 55.70 \$ 34.62
Category	Quarter 1 Average Bill 10,000 Avg. Gallons	Quarter 2 Average Bill 14,500 Avg. Gallons	Quarter 3 Average Bill 16,500 Avg. Gallons	Quarter 4 Average Bill 10,400 Avg. Gallons	Total Annual Avg. Charges	Average Quarterly Change From Prior Year	Annual Change From Prior Year
Commercial Current (2021)	\$ 275.59	\$ 310.43	\$ 355.48	\$ 280.43	\$ 1,221.93	N/A	N/A
2022 2023 2024 2025 2026	\$ 320.53 \$ 356.17 \$ 394.60 \$ 419.53 \$ 434.16	\$ 360.60 \$ 400.41 \$ 443.27 \$ 470.63 \$ 486.80	 \$ 412.40 \$ 458.15 \$ 506.79 \$ 537.32 \$ 555.49 	 \$ 326.09 \$ 362.34 \$ 401.39 \$ 426.66 \$ 441.50 	 \$ 1,419.62 \$ 1,577.06 \$ 1,746.06 \$ 1,854.14 \$ 1,917.95 	\$ 49.42 \$ 39.36 \$ 42.25 \$ 27.02 \$ 15.95	 \$ 197.69 \$ 157.45 \$ 168.99 \$ 108.08 \$ 63.81

The Charts below illustrate the average annual charges per customer, with historical and projected bills.



Average Annual Charges (Residential)

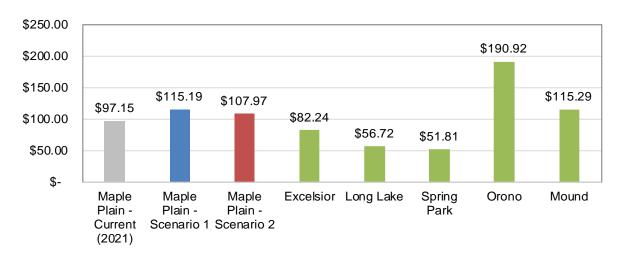
Average Annual Charges (Commercial)



Comparison to other Cities

Comparison of A (Sc	-	uarterly W and Scena			Bill										
		Average	Quarter	ly Bill (11,000) Gallor	าร)									
Category	gory Water Sewer Total														
Maple Plain - Current (2021)	\$	97.15	\$	104.53	\$	201.68									
Maple Plain - Scenario 1		115.19		125.44	\$	240.62									
Maple Plain - Scenario 2		107.97		120.21	\$	228.18									
Excelsior	\$	82.24	\$	95.57	\$	177.81									
Long Lake	\$	56.72	\$	110.90	\$	167.62									
Spring Park	\$	51.81	\$	93.26	\$	145.07									
Orono	\$	190.92	\$	222.24	\$	413.16									
Mound	\$	115.29	\$	136.98	\$	252.27									

Note: Spring Park and Orono, like Maple Plain, have a water treatment plant.



Water Comparison to other Cities

Sewer Comparison to other Cities



FINANCIAL SECTION

City of Maple Plain, MINNESOTA 2022 - 2026 UTILITY RATE STUDY

City of Maple Plain, Minnesota Water Fund Cash Flow Projections Scenario 1 For the Years Ending December 31, 2022 through 2030

						RATE S	TUDY PROJEC	CTIONS					
		Actual results		Budget	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Projected Rate Increase													
Usage rates					25%	15%	10%	5%	3%				
Fixed					25%	15%	10%	5%	3%				
Cash Flows from Operating Activities													
Receipts from customers and users	A (/A 700	• • • • • • • • •	*			• • • • • • • •	• • • • • • •	* ***		A 700 570		• ===	• === ===
Receipts from customers	\$ 416,796	\$ 387,324	\$ 428,657	441,504	,	\$ 612,001	+	\$ 692,232	,		+,		\$ 787,097
Penalties Other revenues	- 12,031	-	-	3,240	3,920	3,920	3,920	3,920	3,920	3,920	3,920	3,920	3,920
Payments to suppliers/service providers	(208,809)	(133,265)	(234,624)	(290,800)	- (327,504)	(339,516)	(352,105)	(365,303)	(379,139)	(393,643)	- (408,847)	- (424,789)	- (441,505)
Payments to employees	(79,060)	(56,948)	(5,516)	(230,000)	(327,304)	(333,310)	(332,103)	(303,303)	(373,133)	(393,043)	(400,047)	(424,703)	(441,303)
Net cash from operating activities	140,958	197,111	188,517	149,564	221,007	276,404	315,489	330,849	334,967	338,846	342,578	346,139	349,512
						· ·	·						
Cash Flows from Noncapital Financing Activities													
Transfers to other funds	(54.250)	(52 504)	(54.070)	(50.007)									
⁽¹⁾ Transfers for debt obligations Transfers for capital and other	(54,350) 30,600	(53,524) 30,600	(54,273) 30,600	(53,807) 27,800	-	-	-	-	-	-	-	-	-
Net cash from noncapital financing activities	(23,750)	(22,924)	(23,673)	(26,007)				-	<u> </u>				<u> </u>
	(20,100)	(22,024)	(20,010)	(20,001)									
Cash Flows from Capital and Related Financing Activities													
Acquisition of capital assets	(360,122)	(114,145)	-	(450,000)		-	(250,000)		-	(500,000)			(355,000)
Capital Reserve	(300,122)	(114,143)		(430,000)	(20,000)	(20,000)		(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Connection fees received	14,849	266,278	21,000	-	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Special assessments received	40,460	48,183	32,045	19,175	19,175	29,898	29,898	29,898	29,898	29,898	29,898	29,898	29,898
Proceeds of long-term debt, net of issuance costs	475,644	-	-	449,966	-	-	250,000	-	-	500,000	-	-	355,000
Interest paid on long-term debt	(76,255)	(89,433)	(80,301)	(73,808)	(92,420)	(78,320)	(68,612)	(66,220)	(56,170)	(45,909)	(54,038)	(48,350)	(44,100)
Principal paid on long-term debt	(278,000)	(282,000)	(306,000)	(315,000)	(361,000)	(377,800)	(364,250)	(385,917)	(392,967)	(172,017)	(226,500)	(165,000)	(170,000)
Net cash from capital and related financing activities	(183,424)	(171,117)	(333,256)	(369,667)	(454,245)	(446,221)	(422,964)	(442,238)	(439,238)	(208,027)	(270,639)	(203,452)	(204,202)
Cash Flows from Investing Activities													
Investment earnings and other activity	7,179	6,518	3,025	-	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181
						· ·							
Net Increase (Decrease)													
In Cash and Cash Equivalents	(59,037)	9,588	(165,387)	(246,111)	(229,058)	(165,636)	(103,294)	(107,209)	(100,091)	135,000	76,119	146,868	149,491
Cash and Cash Equivalents, January 1	1,192,591	1,133,554	1,143,142	977,755	731,644	502,587	336,950	233,656	126,447	26,357	161,357	237,476	384,344
	.		• • • • • • • • • •	• =•••••	* 500 507	• • • • • • • • •	• • • • • • • • •	• ····		* 404.057	• • • • • • • • •		A 500.005
Cash and Cash Equivalents, December 31	\$ 1,133,554	\$ 1,143,142	\$ 977,755	\$ 731,644	\$ 502,587	\$ 336,950	\$ 233,656	\$ 126,447 \$	\$ 26,357	\$ 161,357	\$ 237,476	\$ 384,344	\$ 533,835
Minimum Target Operating Reserve		-	\$ 536,398	\$ 617,172	\$ 625,878	\$ 608,915	\$ 634,789	\$ 638,706	\$ 414,747	\$ 484,961	\$ 425,745	\$ 434,853	\$ 470,694
Cash in Excess of Reserve		-	\$ 441,357	\$ 114,472	\$-	\$-	\$-	\$ - \$	<u>-</u>	<u>\$</u> -	\$ -	\$-	\$ 63,141
Average Quarterly bill (11,000 gallons)			_	\$ 97.15	\$ 115.19	\$ 128.72	\$ 139.09	\$ 144.79	\$ 148.39				
			-										
Average percentage increase					15.7%	10.5%	7.5%	3.9%	2.4%				
Average quarterly dollar increase Average annual dollar increase					\$ 18.04 \$ 72.15		,						
Average annual Uolian Increase					φ 12.15	φ 34. 11	φ 41.49	\$ 22.82	p 14.37				

(1) Transfers for debt service are expected to end in 2021, the related debt service payments will be made directly from the fund.

City of Maple Plain, Minnesota Sewer Fund Cash Flow Projections Scenario 1 For the Years Ending December 31, 2022 through 2030

						RATE S	TUDY PROJE	CTIONS					
		Actual results		Budget	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Projected Rate Increase					00%	100/	10%	50/	00/				
Usage rates					20% 20%	12% 12%	10% 10%	5% 5%	3% 3%				
Fixed Cash Flows from Operating Activities					20%	12%	10%	5%	3%				
Receipts from customers and users													
Receipts from customers	\$ 304.653	\$ 359.604	\$ 330.657	\$ 347.646	\$ 416.553	\$ 466.833	\$ 513.603	\$ 539.518	\$ 555.808	\$ 572.483	\$ 589.657	\$ 607.347	\$ 625.567
Penalties	φ 304,033	\$ 339,004	\$ 330,037	\$ 347,040 5,000	3,719	3,719	3,719	\$ 539,518 3,719	\$ 555,808 3,719	3,719	3,719	3,719	\$ 025,507 3,719
Other revenues	8,822	-	-	5,000	3,719	5,719	3,719	3,719	3,719	3,719	3,719	3,719	3,719
Payments to suppliers/service providers	(140,513)	- (464,126)	- (344,107)	(333,434)	(298,635)	- (310,777)	(323,430)	(336,616)	(350,360)	(364,685)	- (379,615)	- (395,178)	- (411,402)
Payments to employees	(140,513)	(404,120)	(344,107) (4,878)	(333,434) (2,370)	(296,033)	(310,777)	(323,430)	(330,010)	(350,300)	(304,065)	(379,015)	(395,176)	(411,402)
Net cash from operating activities	154,432	(123,014)	(18,328)	16.842	121,637	159.775	193.892	206.621	209.167	211,516	213,761	215.888	217,884
Net cash from operating activities	154,432	(123,014)	(10,320)	10,042	121,037	159,775	193,692	200,021	209,167	211,510	213,701	215,000	217,004
Cash Flows from Noncapital Financing Activities													
Transfers to other funds													
⁽¹⁾ Transfers for debt obligations	(47,010)	(51,310)	(50,510)	(51,251)		-	-	-	-		-	-	-
Cash Flaure from Capital and Delated Financian Activities													
Cash Flows from Capital and Related Financing Activities	(165.050)	(47 700)		(225.000)			(160,000)			(220,000)			(200,000)
Acquisition of capital assets Capital Reserve	(165,050)	(47,782)	-	(325,000)	(20,000)	- (20,000)	(160,000) (20,000)	(20,000)	(20,000)	(320,000) (20,000)	- (20,000)	(20,000)	(300,000) (20,000)
Connection fees received	3,285	- 78,995	- 6,570	-	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Special assessments received	19,411	33,729	18,217	- 11,694	- 11,694	20,354	- 20,354	20,354	20,354	- 20,354	20,354	20,354	- 20,354
Proceeds of long-term debt, net of issuance costs	218,408	33,729	10,217	362,775	11,094	20,334	160,000	20,354	20,354	320,000	20,334	20,354	300,000
Interest paid on long-term debt	(19,420)	- (27,361)	(25,035)	(23,945)	- (43,853)	(35,959)	(32,083)	(33,163)	(29,398)	(25,543)	(30,443)	(26,933)	(24,671)
Principal paid on long-term debt	(35,000)	(35,000)	(50,000)	(50,000)	(107,000)	(114,800)	(95,000)	(105,667)	(107,467)	(109,267)	(141,000)	(87,000)	(92,000)
r molpai paid on ong-term debt	(33,000)	(33,000)	(30,000)	(30,000)	(107,000)	(114,000)	(93,000)	(105,007)	(107,407)	(109,207)	(141,000)	(07,000)	(92,000)
Net cash from capital and related financing activities	21,634	2,581	(50,248)	(24,476)	(159,159)	(150,405)	(126,729)	(138,476)	(136,511)	(134,456)	(171,089)	(113,579)	(116,318)
Cash Flows from Investing Activities													
Investment earnings and other activity	1,065	834	337	-	621	626	632	638	644	649	655	661	667
Net Increase (Decrease)													
In Cash and Cash Equivalents	130,121	(170,909)	(118,749)	(58,884)	(36,901)	9,996	67,795	68,783	73,300	77,710	43,327	102,970	102,234
Cash and Cash Equivalents, January 1	56,557	186,678	15,769	(102,980)	(161,864)	(198,765)	(188,769)	(120,974)	(52,191)	21,109	98,820	142,147	245,117
		100,010	10,100	(102,000)	(101,001)	(100,100)	(100,100)	(120,011)	(02,101)		00,020		210,111
Cash and Cash Equivalents, December 31	\$ 186,678	\$ 15,769	\$ (102,980)	\$ (161,864)	\$ (198,765)	\$ (188,769)	\$ (120,974)	\$ (52,191)	\$ 21,109	\$ 98,820	\$ 142,147	\$ 245,117	\$ 347,351
Minimum Target Operating Reserve		-	\$ 241,847	\$ 300,170	\$ 306,147	\$ 288,798	\$ 307,137	\$ 312,044	\$ 317,152	\$ 361,250	\$ 311,522	\$ 322,372	\$ 343,190
		_											
Cash in Excess of Reserve		=	\$ -	<u>\$</u> -	\$-	\$ -	\$ -	\$-	\$ -	\$ -	\$ -	\$ -	\$ 4,161
Average monthly bill (4,500 gallons)			=	<u>\$ 104.53</u>	\$ 125.44	\$ 140.49	\$ 154.54	\$ 162.26	\$ 167.13				
Average percentage increase					17%	11%	9 %	5%	3%				
Average quarterly dollar increase					\$ 20.91	\$ 15.05	\$ 14.05	\$ 7.73					
Average annual dollar increase					\$ 83.62	\$ 60.21	-	\$ 30.91					
-													

(1) Transfers for debt service are expected to end in 2021, the related debt service payments will be made directly from the fund.

City of Maple Plain, Minnesota Stormwater Fund Cash Flow Projections Scenario 1 For the Years Ending December 31, 2022 through 2030

						RATE S	TUDY PROJEC	TIONS					
	A	Actual results		Budget	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Dreiested Date Increase													
Projected Rate Increase Fixed					25%	15%	15%	10%	5%				
Cash Flows from Operating Activities					2070	1070	1370	1070	570				
Receipts from customers and users													
Receipts from customers	\$ 81,876	\$ 76,093 \$	5 74,923	\$ 69,649	\$ 86,897	\$ 100,000	\$ 115,001	\$ 126,551	\$ 132,936	\$ 136,925	\$ 141,032	\$ 145,263	\$ 149,621
Penalties	-	-	-	-	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079
Other revenues	8,822	-	-	-	-	-	-	-	-	-	-	-	-
Payments to suppliers/service providers	(17,342)	(13,258)	(13,137)	(41,036)	(37,535)	(38,096)	(38,673)	(39,268)	(39,882)	(40,513)	(41,163)	(41,832)	(42,522)
Payments to employees	(31)	(63)	-	-		-	-	-	-	-	-	-	-
Net cash from operating activities	73,325	62,772	61,786	28,613	50,442	62,983	77,407	88,362	94,134	97,491	100,949	104,511	108,178
Cash Flows from Noncapital Financing Activities													
Transfers to other funds													
Transfers for debt obligations	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfers for capital and other		-	-	-		-	-	-	-		-	-	-
Net cash from noncapital financing activities	-	-	-	-		-	-	-			-	-	<u> </u>
Cash Flows from Capital and Related Financing Activities													
Acquisition of capital assets	(161,382)	(46,720)	-	(200,000)	-	-	(170,000)	-	-	(320,000)	-	-	(300,000)
Capital Reserve	-	-	-	-	(5,000)	(5,000)		(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	
Connection fees received	-	-	-	-	-	-	-	-	-	-	-	-	-
Special assessments received	17,214	26,943	16,380	10,317	10,317	14,815	14,815	14,815	14,815	14,815	14,815	14,815	14,815
Proceeds of long-term debt, net of issuance costs	213,554	-	-	188,745	-	-	170,000	-	-	320,000	-	-	300,000
Interest paid on long-term debt	(17,513)	(25,296)	(23,144)	(22,288)	(24,497)	(22,963)	(21,756)	(25,266)	(23,601)	(21,861)	(29,081)	(26,701)	(24,305)
Principal paid on long-term debt	(30,000)	(30,000)	(40,000)	(40,000)	(40,000)	(45,000)	(50,000)	(61,333)	(66,333)	(66,333)	(87,667)	(87,667)	(87,667)
Net cash from capital and related financing activities	21,873	(75,073)	(46,764)	(63,226)	(59,180)	(58,147)	(61,941)	(76,784)	(80,119)	(78,379)	(106,933)	(104,553)	(102,156)
Cash Flows from Investing Activities													
Investment earnings and other activity	2,991	2,901	1,455	-	1,478	1,487	1,496	1,506	1,516	1,525	1,535	1,545	1,555
Net Increase (Decrease)													
In Cash and Cash Equivalents	98,189	(9,400)	16,477	(34,613)	(7,260)	6,323	16,963	13,084	15,530	20,637	(4,449)	1,503	7,577
Cash and Cash Equivalents, January 1	430,619	528,808	519,408	535,885	501,272	494,012	500,335	517,298	530,382	545,912	566,549	562,100	563,603
Cash and Cash Equivalents, December 31	\$ 528,808	\$ 519,408 \$	535,885	\$ 501,272	\$ 494,012	\$ 500,335	\$ 517,298	\$ 530,382	\$ 545,912	\$ 566,549	\$ 562,100	\$ 563,603	\$ 571,180
Minimum Target Operating Reserve			<u>_</u>	\$ 83,264	\$ 87,011	\$ 91,093	\$ 106,234	\$ 109,876	\$ 108,451	\$ 137,329	\$ 135,284	\$ 133,233	\$ 159,821
Cash in Excess of Reserve				\$ 418,008	\$ 407,002	\$ 109.213	\$ 411,064	\$ 420 506	\$ 137.461	\$ 429,219	\$ 426.816	\$ 430 370	\$ 111 359
			_	φ +10,000	φ 407,002	φ +03,2+3	φ 411,004	φ 420,000	φ +07,101	ψ 423,213	ψ 420,010	φ 400,070	φ 411,000
Average quarterly bill			_	\$ 8.91	\$ 11.14	\$ 12.81	\$ 14.73	\$ 16.20	\$ 17.01				
Average percentage increase					20%	13%	13%	9%	5%				
Average quarterly dollar increase					\$ 2.23				\$ 0.81				
Average annual dollar increase					\$ 8.91	\$ 6.68	\$ 7.68	\$ 5.89	\$ 3.24				

City of Maple Plain, Minnesota Water Fund Cash Flow Projections - Detailed Scenario 2 For the Years Ending December 31, 2022 through 2030

	RATE STUDY PROJECTIONS												
		Actual results		Budget	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Designate d Data la secona													
Projected Rate Increase Usage rates					15%	12%	10%	5%	3%				
Fixed					15%	12%	10%	5%	3%				
Cash Flows from Operating Activities					10.00	.270		0,0	0,0				
Receipts from customers and users													
Receipts from customers	\$ 416,796	\$ 387,324	\$ 428,657	\$ 441,504	\$ 509,084	\$ 558,585	\$ 604,782	\$ 630,369	\$ 646,455	\$ 665,849	\$ 685,824	\$ 706,399	\$ 727,591
Penalties	-	-	-	3,240	3,920	3,920	3,920	3,920	3,920	3,920	3,920	3,920	3,920
Other revenues	12,031	-	-	-	-	-	-	-	-	-	-	-	-
Payments to suppliers/service providers	(208,809)	(133,265)	(234,624)	(290,800)	(327,504)	(339,516)	(352,105)	(365,303)	(379,139)	(393,643)	(408,847)	(424,789)	(441,505)
Payments to employees	(79,060)	(56,948)	(5,516)	(4,380)	-	-	-	-	-		-	-	-
Net cash from operating activities	140,958	197,111	188,517	149,564	185,500	222,988	256,596	268,985	271,236	276,125	280,897	285,530	290,006
Cash Flows from Noncapital Financing Activities													
Transfers to other funds													
⁽¹⁾ Transfers for debt obligations	(54,350)	(53,524)	(54,273)	(53,807)	-	-	-	-	-	-	-	-	-
Transfers for capital and other	30.600	30,600	30,600	27.800	-	-	-	-	-	-	-	-	-
Net cash from noncapital financing activities	(23,750)	(22,924)	(23,673)	(26,007)	-	-	-	-	-	-	-	-	-
	i												
Cash Flows from Capital and Related Financing Activities													
Acquisition of capital assets	(360,122)	(114,145)		(450,000)		-	(250,000)			(500,000)	-	-	(355,000)
Capital Reserve	(300,122)	(114,140)	_	(400,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Connection fees received	14,849	266,278	21,000	-	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Special assessments received	40,460	48,183	32,045	19,175	19,175	29,898	29,898	29,898	29,898	29,898	29,898	29,898	29,898
Proceeds of long-term debt, net of issuance costs	475,644			449,966	-		250,000			500,000			355,000
Interest paid on long-term debt	(76,255)	(89,433)	(80,301)	(73,808)	(92,420)	(78,320)	(68,612)	(66,220)	(56,170)	(45,909)	(54,038)	(48,350)	(44,100)
Principal paid on long-term debt	(278,000)	(282,000)	(306,000)	(315,000)	(361,000)	(377,800)	(364,250)	(385,917)	(392,967)	(172,017)	(226,500)	(165,000)	(170,000)
Net cash from capital and related financing activities	(183,424)	(171,117)	(333,256)	(369,667)	(454,245)	(446,221)	(422,964)	(442,238)	(439,238)	(208,027)	(270,639)	(203,452)	(204,202)
Cook Flows from Investing Activities													
Cash Flows from Investing Activities Investment earnings and other activity	7,179	6,518	3,025		4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181
investment earnings and other activity	7,179	0,516	3,025		4,101	4,101	4,101	4,101	4,101	4,101	4,101	4,101	4,101
Net Increase (Decrease)													
In Cash and Cash Equivalents	(59,037)	9,588	(165,387)	(246,111)	(264,565)	(219,052)	(162,187)	(169,073)	(163,821)	72,279	14,438	86,259	89,985
Cash and Cash Equivalents, January 1	1,192,591	1,133,554	1,143,142	977,755	731,644	467,079	248,027	85,840	(83,233)	(247,054)	(174,775)	(160,336)	(74,078)
Cash and Cash Equivalents, Sandary 1	1,192,391	1,100,004	1,143,142	511,155	731,044	407,079	240,027	00,040	(00,200)	(247,004)	(174,773)	(100,000)	(14,070)
Cash and Cash Equivalents, December 31	\$ 1,133,554	\$ 1,143,142	\$ 977,755	\$ 731,644	\$ 467,079	\$ 248,027	\$ 85,840	\$ (83,233)	\$ (247,054)	\$ (174,775)	\$ (160,336)	\$ (74,078)	\$ 15,907
Minimum Target Operating Reserve			\$ 536,398	\$ 617,172	\$ 625,878	\$ 608,915	\$ 634,789	\$ 638,706	\$ 414,747	\$ 484,961	\$ 425,745	\$ 434,853	\$ 470,694
			¢ 444.057	¢ 444.470	¢	¢	¢	¢	¢	¢	¢	¢	¢
Cash in Excess of Reserve			\$ 441,357	\$ 114,472	<u> </u>	ə -	ş -	\$-	\$ -	<u> </u>	р -	ð -	<u>ə -</u>
Average Quarterly bill (11,000 gallons)			=	<u>\$ 97.15</u>	\$ 107.97	\$ 117.93	\$ 127.22	\$ 132.33	<u>\$ 135.55</u>				
Average percentage increase					10.0%	8.4%	7.3%	3.9%	2.4%				
Average quarterly dollar increase					\$ 10.82								
Average annual dollar increase					\$ 43.29								

(1) Transfers for debt service are expected to end in 2021, the related debt service payments will be made directly from the fund.

City of Maple Plain, Minnesota Sewer Fund Cash Flow Projections Scenario 2 For the Years Ending December 31, 2022 through 2030

	RATE STUDY PROJECTIONS												
		Actual results		Budget	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Device to d Date Increases													
Projected Rate Increase Usage rates					15%	10%	10%	5%	3%				
Fixed					15%	10%	10%	5%	3%				
Cash Flows from Operating Activities					1070	1070	1070	570	570				
Receipts from customers and users													
Receipts from customers	\$ 304,653	\$ 359.604	\$ 330.657	\$ 347,646	\$ 399.313	\$ 439.427	\$ 483.371	\$ 507,760	\$ 523.091	\$ 538,784	\$ 554,948	\$ 571.596	\$ 588.744
Penalties	-	-	-	5,000	3,719	3,719	3,719	3,719	3,719	3,719	3,719	3,719	3,719
Other revenues	8,822	-	-	-	-	-	-	-	-	-	-	-	-
Payments to suppliers/service providers	(140,513)	(464,126)	(344,107)	(333,434)	(298,635)	(310,777)	(323,430)	(336,616)	(350,360)	(364,685)	(379,615)	(395,178)	(411,402)
Payments to employees	(18,530)	(18,492)	(4,878)	(2,370)	-	-	-	-	-	-	-	-	-
Net cash from operating activities	154,432	(123,014)	(18,328)	16,842	104,397	132,369	163,660	174,863	176,450	177,818	179,051	180,137	181,061
Cash Flows from Noncapital Financing Activities													
Transfers to other funds													
⁽¹⁾ Transfers for debt obligations	(47.010)	(51,310)	(50,510)	(51,251)	_	_		_		_		_	
	(47,010)	(31,310)	(00,010)	(01,201)							_	_	
Cash Flows from Capital and Related Financing Activities													
Acquisition of capital assets	(165,050)	(47,782)	-	(325,000)	-	-	(160,000)	-	-	(320,000)	-	-	(300,000)
Capital Reserve	-	-	-	-	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Connection fees received	3,285	78,995	6,570	-	-	-	-	-	-	-	-	-	-
Special assessments received	19,411	33,729	18,217	11,694	11,694	20,354	20,354	20,354	20,354	20,354	20,354	20,354	20,354
Proceeds of long-term debt, net of issuance costs	218,408	-	-	362,775	-	-	160,000	-	-	320,000	-	-	300,000
Interest paid on long-term debt	(19,420)	(27,361)	(25,035)	(23,945)	(43,853)	(35,959)	(32,083)	(33,163)	(29,398)	(25,543)	(30,443)	(26,933)	(24,671)
Principal paid on long-term debt	(35,000)	(35,000)	(50,000)	(50,000)	(107,000)	(114,800)	(95,000)	(105,667)	(107,467)	(109,267)	(141,000)	(87,000)	(92,000)
Net cash from capital and related financing activities	21,634	2,581	(50,248)	(24,476)	(159,159)	(150,405)	(126,729)	(138,476)	(136,511)	(134,456)	(171,089)	(113,579)	(116,318)
Cash Flows from Investing Activities													
Investment earnings and other activity	1,065	834	337	-	621	626	632	638	644	649	655	661	667
Net Increase (Decrease)	100.101	(170,000)	(110 710)	(50.00.0)	(54.444)	(17, 110)	07 500	07.005	40 500		0.040	07.040	05 440
In Cash and Cash Equivalents	130,121	(170,909)	(118,749)	(58,884)	(54,141)	(17,410)	37,563	37,025	40,583	44,012	8,618	67,219	65,410
Cash and Cash Equivalents, January 1	56,557	186,678	15,769	(102,980)	(161,864)	(216,005)	(233,415)	(195,852)	(158,827)	(118,244)	(74,232)	(65,614)	1,605
Cash and Cash Equivalents, December 31	\$ 186,678	\$ 15,769	\$ (102,980)	\$ (161,864)	\$ (216,005)	\$ (233,415)	\$ (195,852)	\$ (158,827)	\$ (118,244)	\$ (74,232)	\$ (65,614)	\$ 1,605	\$ 67,016
Minimum Target Operating Reserve			\$ 241,847	\$ 300,170	\$ 306,147	\$ 288,798	\$ 307,137	\$ 312,044	\$ 317,152	\$ 361,250	\$ 311,522	\$ 322,372	\$ 322,372
		_											
Cash in Excess of Reserve		=	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	<u>\$ -</u>	\$ -	\$ -	\$ -	<u>\$ -</u>
Average monthly bill (4,500 gallons)			:	\$ 104.53	\$ 120.21	\$ 132.23	\$ 145.45	\$ 152.73	\$ 157.31				
Average percentage increase					13%	9 %	9 %	5%	3%				
Average quarterly dollar increase					<i>v</i>	\$ 12.02							
Average annual dollar increase					\$ 62.72	\$ 48.08	\$ 52.89	\$ 29.09	\$ 18.33				

(1) Transfers for debt service are expected to end in 2021, the related debt service payments will be made directly from the fund.

City of Maple Plain, Minnesota Stormwater Fund Cash Flow Projections Scenario 2 For the Years Ending December 31, 2022 through 2030

	RATE STUDY PROJECTIONS												
	A	ctual results		Budget	Estimated								
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Projected Rate Increase													
Fixed					15%	10%	10%	10%	10%				
Cash Flows from Operating Activities					1070			1070					
Receipts from customers and users													
Receipts from customers	\$ 81,876	\$ 76,093 \$	74,923	\$ 69,649	\$ 80,001	\$ 88,035	\$ 96,839	\$ 106,523	\$ 117,176	\$ 120,691	\$ 124,312	\$ 128,041	\$ 131,882
Penalties	-	-	-	-	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079
Other revenues	8,822	-	-	-	-	-	-	-	-	-	-	-	-
Payments to suppliers/service providers	(17,342)	(13,258)	(13,137)	(41,036)	(37,535)	(38,096)	(38,673)	(39,268)	(39,882)	(40,513)	(41,163)	(41,832)	(42,522)
Payments to employees	(31)	(63)	-	-	-	-	-	-	-	-	-	-	-
Net cash from operating activities	73,325	62,772	61,786	28,613	43,546	51,019	59,246	68,334	78,373	81,257	84,228	87,288	90,439
Orach Flaura from Namannital Financian Asticitian													
Cash Flows from Noncapital Financing Activities Transfers to other funds													
Transfers for debt obligations						-							
Transfers for capital and other													
Net cash from noncapital financing activities				-									-
Net cash from noncapital financing activities		-				-	-	-			-	-	-
Cash Flows from Capital and Related Financing Activities													
Acquisition of capital assets	(161,382)	(46,720)	-	(200,000)	-	-	(170,000)	-	-	(320,000)	-	-	(300,000)
Capital Reserve	-	-	-	-	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Connection fees received	-	-	-	-	-	-	-	-	-	-	-	-	-
Special assessments received	17,214	26,943	16,380	10,317	10,317	14,815	14,815	14,815	14,815	14,815	14,815	14,815	14,815
Proceeds of long-term debt, net of issuance costs	213,554	-	-	188,745	-	-	170,000	-	-	320,000	-	-	300,000
Interest paid on long-term debt	(17,513)	(25,296)	(23,144)	(22,288)	(24,497)	(22,963)	(21,756)	(25,266)	(23,601)	(21,861)	(29,081)	(26,701)	(24,305)
Principal paid on long-term debt	(30,000)	(30,000)	(40,000)	(40,000)	(40,000)	(45,000)	(50,000)	(61,333)	(66,333)	(66,333)	(87,667)	(87,667)	(87,667)
Net cash from capital and related financing activities	21,873	(75,073)	(46,764)	(63,226)	(59,180)	(58,147)	(61,941)	(76,784)	(80,119)	(78,379)	(106,933)	(104,553)	(102,156)
Cash Flows from Investing Activities	0.001	0.004	4 455		4 470	4 407	4 400	4 500	4 5 4 0	4 505	4 505	4 5 4 5	4 555
Investment earnings and other activity	2,991	2,901	1,455	<u> </u>	1,478	1,487	1,496	1,506	1,516	1,525	1,535	1,545	1,555
Net Increase (Decrease)													
In Cash and Cash Equivalents	98,189	(9,400)	16,477	(34,613)	(14,156)	(5,641)	(1,199)	(6,944)	(231)	4,403	(21,170)	(15,719)	(10,162)
	,	(-,,		(- //	(,,	(-,-)	())	((-)	,	(, -)	(- , - ,	
Cash and Cash Equivalents, January 1	430,619	528,808	519,408	535,885	501,272	487,116	481,475	480,276	473,332	473,101	477,504	456,334	440,615
Cash and Cash Equivalents, December 31	\$ 528,808	\$ 519,408 \$	535.885	\$ 501,272	\$ 487,116	\$ 481,475	\$ 480,276	\$ 473,332	\$ 473,101	\$ 477,504	\$ 456,334	\$ 440,615	\$ 430,453
Minimum Target Operating Reserve		\$	82,806	\$ 83,264	\$ 87,011	\$ 91,093	\$ 106,234	\$ 109,876	\$ 108,451	\$ 137,329	\$ 135,284	\$ 133,233	\$ 159,821
Cash in Excess of Reserve		\$	453,079	\$ 418,008	\$ 400,106	\$ 390,382	\$ 374,042	\$ 363,456	\$ 364,650	\$ 340,175	\$ 321,050	\$ 307,382	\$ 270,632
Average quarterly bill			_	<u>\$ 8.91</u>	\$ 10.25	\$ 11.27	\$ 12.40	\$ 13.64	\$ 15.00				
Average percentage increase					13%	9%	9%	9%	9%				
Average quarterly dollar increase						\$ 1.02							
Average annual dollar increase					\$ 5.35	\$ 4.10	\$ 4.51	\$ 4.96	\$ 5.46				

City of Maple Plain, Minnesota Debt Payment Schedule For the Years Ending December 31, 2022 through 2030

	Maturity Year		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	fear	·	2021	2022	2023	2024	2025	2020	2027	2020	2029	2030
Water Fund												
GO Bonds, Series 2013A	2021	\$	45,630	-	-	-	-	-	-	-	-	-
G.O. Water Revenue Note 2007	2027		227,241	226,941	227,555	227,061	227,482	227,795	-	-	-	-
GO Bonds, Series 2021B	2028		-	104,407	89,278	63,601	61,039	60,475	59,809	63,038	-	-
GO Bonds, Series 2014A	2035		37,775	37,150	36,400	35,650	34,900	34,150	33,400	37,575	36,675	35,775
GO Bonds, Series 2016A	2037		43,738	43,363	42,988	47,450	46,750	46,050	45,350	49,600	48,800	47,950
GO Bonds, Series 2018A	2039		34,425	33,825	33,225	32,625	32,025	31,425	30,825	35,150	34,400	33,650
GO Bonds, Series 2021A	2042		-	7,735	26,675	26,475	26,275	26,075	25,875	25,675	25,475	30,225
GO Bonds, Series 2024*	2045*		-	-	-	-	23,667	23,167	22,667	22,167	21,667	21,167
GO Bonds, Series 2027*	2048*		-	-	-	-	-	-	-	47,333	46,333	45,333
GO Bonds, Series 2030*	2050*		-	-	-	-	-	-	-	-	-	-
Total Principal and Interest Payments			388,809	453,421	456,121	432,862	452,138	449,137	217,926	280,538	213,350	214,100
Sewer Fund												
GO Bonds. Series 2013A	2021		20,126	-	-	-	-	-	-	-	-	-
GO Bonds, Series 2021B	2028		-	91,675	78,390	55,845	53,595	53,100	52,515	55,350	_	-
GO Bonds, Series 2014A	2020		29,906	29,406	28,806	28,206	27,606	27,006	26,406	25,806	25,206	29,531
GO Bonds, Series 2016A	2000		7,319	7,256	7,194	7,113	7,013	6,913	6,813	6,713	6,613	6,506
GO Bonds, Series 2018A	2039		16,594	16,294	15,994	15,694	15,394	15,094	14,794	14,494	14,194	13,894
GO Bonds, Series 2021A	2042		-	6,222	20,375	20,225	20,075	19,925	19,775	24,600	24,400	24,180
GO Bonds. Series 2024*	2045*		-	-			15,147	14,827	14,507	14,187	13,867	13,547
GO Bonds, Series 2027*	2048*		-			-	-	-	-	30,293	29,653	29,013
GO Bonds, Series 2030*	2050*		-	-	-	-	-	-	-	-	-	
Total Principal and Interest Payments			73,945	150,853	150,759	127,083	138,830	136,865	134,810	171,443	113,933	116,671
Stormwater Fund												
GO Bonds. Series 2014A	2035		38,413	37,788	37,038	36,288	35,538	39,713	38,813	37,913	37,013	36,113
GO Bonds, Series 2016A	2035		7,444	7,381	7,319	7,238	7,138	7,038	6,938	6,838	6,738	6,631
GO Bonds, Series 2018A	2039		16,431	16,131	15,831	15,531	15,231	14,931	14,631	14,331	14,031	13,731
GO Bonds, Series 2010A	2033		-	3,197	2,775	2,700	2,600	2,500	2,400	2,300	2,200	2,090
GO Bonds, Series 2021A GO Bonds, Series 2024*	2042		-	-	2,115	2,700	16,093	15,753	15,413	15,073	14,733	14,393
GO Bonds, Series 2024 GO Bonds, Series 2027*	2045		-			-	-	-	-	30,293	29.653	29.013
GO Bonds, Series 2027 GO Bonds, Series 2030*	2048 2050*		-	-	-	-	-		-	50,235	20,000	20,010
Total Principal and Interest Payments	2000	\$	62,288 \$	64,497 \$	62,963 \$	61,757 \$	76,600 \$	79,935 \$	78,195 \$	106,748 \$	104,368 \$	101,971
i otal Ennopal and interest Eaynellts		φ	υ2,200 Φ	04,437 Q	U2,900 Q	01,707 \$	70,000 \$	19,900 \$	10,190 \$	100,740 Q	10 4 ,300 ֆ	101,971

* 2024, 2027 and 2030 GO Bonds maturity dates and payment schedules are estimated