

Grand Rapids Water and Sewerage Customers:

This Citizen's Guide contains the City of Grand Rapids' preliminary Water/Sewer Rate Study for water and sewer utility rates (effective January 1, 2023). This marks the 46th annual water/sewer rate study report containing a comprehensive review of operating and capital costs and usage variation by customer community.

The 2022 preliminary rate study recommends rate increases of 5.68 percent to Water rates and 1.07 percent to Sewer service rates. The study sets the 2023 rates and continues to employ the three-year average of billed volume use to calculate annual rates. Comparatively, both identified system increases are less than the current rate of inflation, with annual inflation for the 12 months ending September 2022 at 8.2 percent.

Based on the 5.68 and 1.07 percent increases, the typical Grand Rapids customer will likely pay \$7.98 or 3.32 percent more for water and sewer services quarterly. Rates for retail customers living in Walker, Kentwood, Cascade Township, Grand Rapids Township and Tallmadge Township and wholesale customers living in East Grand Rapids, Ada, Gaines, Caledonia and Ottawa vary due to various allocations of capital infrastructure costs as well as usage trends that effect rates in each jurisdiction.

Both Systems experienced fluctuations in the three-year average of billed volume that made an impact in the rate changes. Billed volume is used in the rate study to forecast the next calendar year's expected revenue. In 2010, the rate study implemented a three-year average billed volume to smooth significant volume variances and prevent reactionary rate fluctuations. The Water System experienced a 1.42 percent decrease in the three-year average of billed volume, largely due to wet weather experienced during peak irrigation times. This results in an upward pressure on rates for the Water System. The Sewer System experienced a 0.89% decrease in the three-year average of billed volume but a 4.13 percent increase over 2021. Billed volume increased year-over-year largely due to the lifting of COVID-19 pandemic restrictions; however, the three-year average fell as 2022 volumes did not outpace 2019. With overall consumption down, this causes upward pressure on rates for the Sewer System as well.

Asset management remains a priority for both Systems, and asset additions, combined with the increase in the return-on-investment (ROI) rate, are the biggest drivers in this year's study. Investments in water main replacements in the City of Grand Rapids and investments in assets at the Livingston Pump Station and Wilson Pump Station that are shared among several partner communities were the major drivers for the Water System rate increase. Integrated system improvements at the Lake Michigan Filtration Plant (LMFP) such as switchgear replacements, revetment improvements and residual improvements also contributed to the increase. Furthermore, the Water System is continuing to focus on private lead service line replacements for City of Grand Rapids residents in accordance with the Environmental Protection Agency (EPA) and The State of Michigan Environment, Great Lakes & Energy Division (EGLE) regulatory requirements.

With the Sewer System, investments in sewer mains in the City of Grand Rapids, including the first phase of the shared Market Avenue Trunk Sewer Relocation project were major drivers in this year's study. There was also work at the Wastewater Resource Recovery Facility (WRRF) related to the Biodigestion Program. On the operations side, additional contract work related to the Grand Valley Regional Biosolids Authority (GVRBA) program, an uptick in Consumers Energy costs, and continued price increase of process chemicals are considerable outlays influencing Sewer rates. Rate impacts were mitigated by the reduction in debt service from the Combined Sewer Overflow (CSO) program, and a significant uptick in surcharge revenue from an increase in industrial waste concentration this year. The System also started to generate revenue from the Biodigester Program as well.

The Rate Study continues to employ an affordability program. This program, called the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker (CCCCB) utilize penalty fee revenue to assist with system affordability. During this rate study, \$130,446 was generated to support the ICB, the program specifically aimed to assist retail customers requiring assistance in payment of their water/sewer bills. This amount will again be supplemented with an additional appropriation of non-operating revenue. \$680,880 of CCCCCB funds were also used in this rate study to limit each retail customer service area revenue requirement change to a level in line with the overall systems' initial average change.

The report was released on November 15, 2022, which began a 20-day comment period for public comment. A copy of the annual rate study, along with explanatory materials, is filed with the City Clerk's Office, as well as available online at <https://www.grandrapidsmi.gov/rate-studies>. Customers wishing to make official comment on the report and rates may do so by sending a correspondence to the City Clerk's Office, 300 Monroe NW, Grand Rapids, MI 49503 or by sending an e-mail to info@grcity.us. This public comment period will end December 5, 2022. The Grand Rapids City Commission is anticipated to approve the rates through resolution on Tuesday, December 13, 2022.

Rate Setting Methodology Background:

In 1976, the City undertook the task of establishing a methodology to be used annually to determine appropriate rates and charges for customers of the System. Prior to that time, the City had periodically adjusted rates for City users based on short-term projections of cash flow requirements and indexed suburban customer rates at a factor of two times the City rates. The rates that resulted from such adjustments did not adequately reflect the long term needs of the System and did not adequately reflect the variations in usage rates and operating and capital costs of providing service to the various suburban customer communities.

To remedy this and to establish a procedure for implementing annual rate adjustments, the City, in consultation with the customer communities with which it had retail and wholesale water and sewer service agreements, adopted a method of adjusting rates annually. The rate study methodology has four major objectives: (1) the methodology recognizes variations among the various communities; (2) the methodology produces adequate revenues over the period; (3) the methodology results in a wide variety of rate adjustments; and (4) the methodology operates in an open and transparent manner with information readily available to users. The City has conducted annual rate studies each year since 1978 and has adjusted rates accordingly.

The rate setting methodology is founded on the basic principle that rates will be set to meet revenue requirements as defined by historical costs adjusted by known cost increases and decreases. Also, a significant goal of the methodology was the proper allocation of costs and rates among the users in each of the customer communities served. In general, the costs of capital improvements which benefit specific customers of the System are allocated to those customers in the rate setting methodology, while the costs of capital improvements related to the operation of the entire System are allocated to all users.

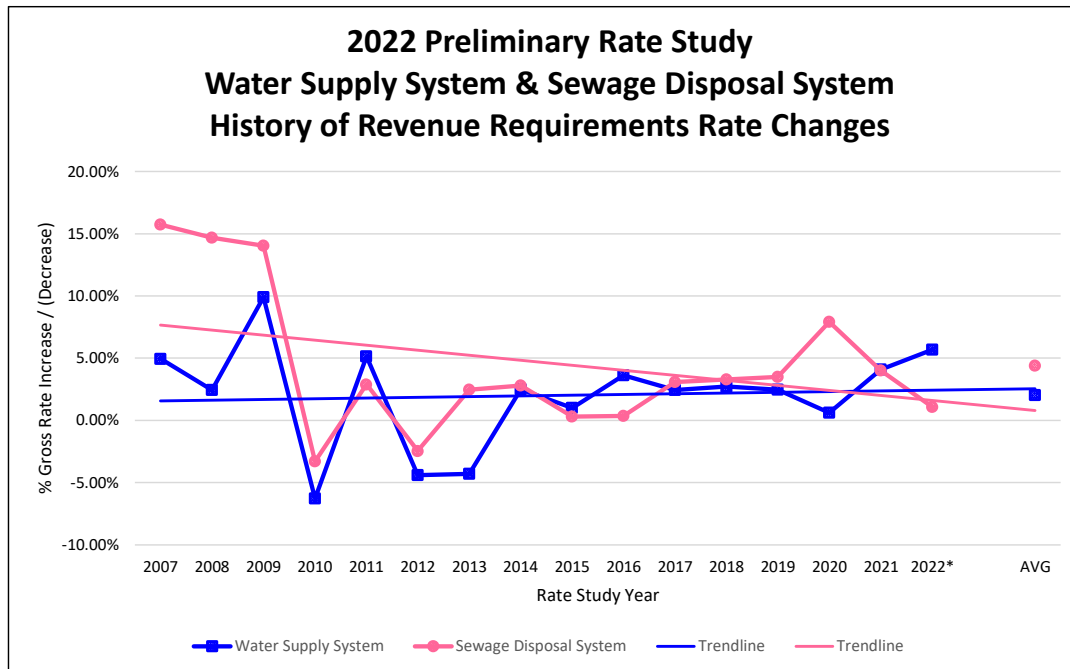
The annual rate analysis background material is assembled during the period from August through November of each year. The base period financial information consists of the actual revenues and expenses of the fiscal year ended on the most recent June 30th. Revenue requirements of the System are comprised of operating and maintenance expense, depreciation expense, a "return" on the net book value of fixed assets constructed and acquired utilizing the retained earnings of the System and certain debt service costs. Integrated connection fees are an offset to revenue requirements. The revenue requirement components are adjusted to reflect current unit cost data available during the pendency of the rate study. Rates are then calculated that will generate revenues equal to the net revenue requirement. New rates and charges are reported to the City Commission and customer communities through the Utility Advisory Board on or about November 15th each year with implementation on the following January 1st. The most recent rate structure herein will be presented to City Commission on November 15, 2022, for users within the City and customer communities.

**CITY OF GRAND RAPIDS, MICHIGAN
2022 PRELIMINARY WATER/SEWER RATE STUDY
HISTORY OF RATE CHANGES
FOR RATES EFFECTIVE JANUARY 1**

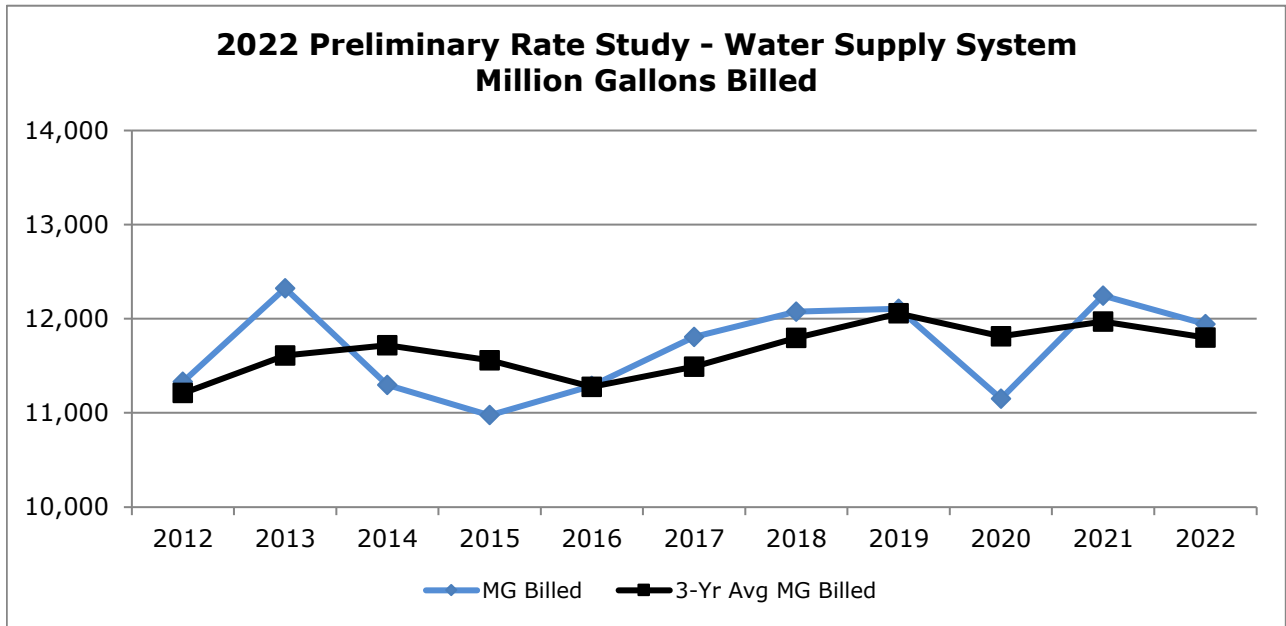
Rate Study Year	Water Supply System			Sewage Disposal System		
	Revenue Requirements	% change in RR over prev year	% gross rate incr (decr) **	Revenue Requirements	% change in RR over prev year	% gross rate incr (decr) **
2007	\$ 40,270,271	1.62%	4.95%	\$ 42,742,825	11.60%	15.73%
2008	42,017,680	4.34%	2.45%	47,092,925	10.18%	14.69%
2009	42,939,752	2.19%	9.89%	51,378,424	9.10%	14.04%
2010	41,200,107	-4.05%	-6.27%	49,673,390	-3.32%	-3.30%
2011	41,802,404	1.46%	5.15%	50,082,541	0.82%	2.89%
2012	39,247,442	-6.11%	-4.41%	48,183,681	-3.79%	-2.46%
2013	38,646,748	-1.53%	-4.30%	48,946,212	1.58%	2.46%
2014	40,055,985	3.65%	2.50%	49,962,043	2.08%	2.81%
2015	40,178,439	0.31%	1.00%	49,868,027	-0.19%	0.30%
2016	41,187,517	2.51%	3.63%	50,400,344	1.07%	0.36%
2017	42,828,972	3.99%	2.45%	52,319,981	3.81%	3.08%
2018	43,868,464	2.43%	2.71%	54,611,300	4.38%	3.28%
2019	45,752,997	4.30%	2.47%	56,969,417	4.32%	3.49%
2020	45,501,943	-0.55%	0.62%	61,242,290	7.50%	7.92%
2021	47,692,896	4.82%	4.08%	62,943,059	2.78%	4.00%
2022*	50,122,073	5.09%	5.68%	63,232,742	0.46%	1.07%
AVG	42,707,106	1.53%	2.04%	52,478,075	3.27%	4.40%

* Revenue Requirements per the 2022 Preliminary Rate Study.

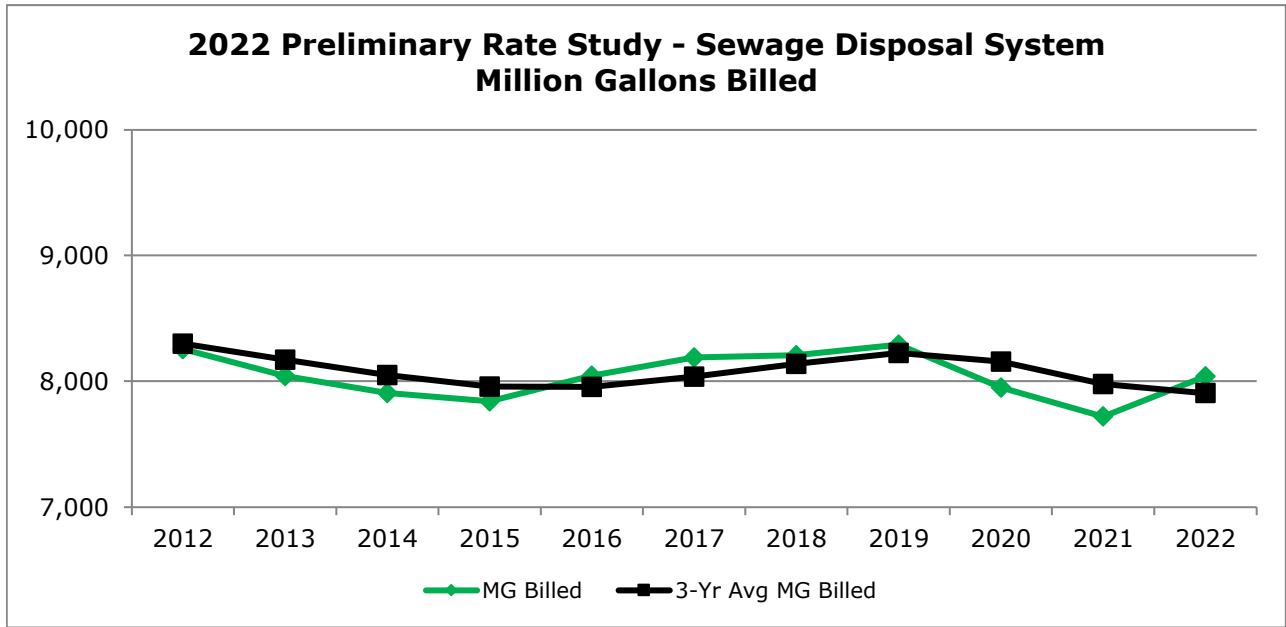
** The percentage gross rate increase (decrease) differs from the annual percentage change in Revenue Requirements due to differences in usage volumes/customers/application of Circuit Breaker.
-Annual inflation for the 12 months ending September 2022 was 8.2%



* Revenue Requirements per the 2022 Preliminary Rate Study.



* Volumes were restated from these Rate Studies to reflect actual billings without adjustment for accrued revenues.



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**CITY OF GRAND RAPIDS, MICHIGAN
2022 PRELIMINARY WATER/SEWER RATE STUDY
SUMMARY OF REVENUE REQUIREMENT CHANGES
FOR RATES EFFECTIVE JANUARY 1, 2023**

	<u>WATER (1)</u>		<u>SEWER (1)</u>		
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>	
RETAIL COMMUNITIES	GRAND RAPIDS	\$ 1,740,355	6.27%	\$ 528,951	1.27%
	WALKER	57,121	1.50%	14,984	0.27%
	NET OF CONTRIBUTION OF:	(181,741)			
	KENTWOOD	200,019	4.25%	88,770	1.71%
	CASCADE TWP	137,344	3.76%	52,124	1.71%
	GRAND RAPIDS TWP	160,044	6.27%	50,307	1.71%
	TALLMADGE TWP	7,941	3.31%	8,231	1.71%
WRIGHT TWP	N/A	N/A	(45,285)	-13.59%	
WHOLESALE COMMUNITIES	EAST GRAND RAPIDS	3,577	0.41%	12,761	0.99%
	ADA TWP	123,810	8.85%	6,865	0.44%
	OTTAWA COUNTY	83,034	3.40%	NA	NA
	GAINES TWP	N/A	N/A	(42,901)	-12.05%
	CALEDONIA TWP	N/A	N/A	(2,878)	-1.34%
<hr/>					
SYSTEM	\$ 2,694,987	5.68%	\$ 671,929	1.07%	
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(1) Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study (Includes consideration for relief from CCCCB).

DISCLOSE RELIEF PROVIDED BY CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER (CCCB)

	<u>WATER</u>		<u>SEWER</u>	
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>
SYSTEM REVENUE REQUIREMENT	\$ 50,122,073	5.68%	\$ 63,232,742	1.07%
ADD: CCCCB RELIEF	280,729	0.59%	400,151	0.64%
SYSTEM CHANGE- WITHOUT RELIEF	<u>\$ 50,402,802</u>	<u>6.27%</u>	<u>\$ 63,632,893</u>	<u>1.71%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
2022 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
FOR RATES EFFECTIVE JANUARY 1, 2023**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2022</u>	<u>2023</u>	<u>DOLLARS</u>	<u>PERCENT</u>
GRAND RAPIDS				
WATER	\$ 99.90	\$ 106.14	\$ 6.24	6.25%
SEWER	140.64	142.38	1.74	1.24%
	<u>\$ 240.54</u>	<u>\$ 248.52</u>	<u>\$ 7.98</u>	3.32%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 99.36	\$ 100.83	\$ 1.47	1.48%
SEWER	163.26	163.65	0.39	0.24%
	<u>\$ 262.62</u>	<u>\$ 264.48</u>	<u>\$ 1.86</u>	0.71%
RATIO TO GR	1.09	1.06		
KENTWOOD				
WATER	\$ 101.37	\$ 105.75	\$ 4.38	4.32%
SEWER	97.98	99.45	1.47	1.50%
	<u>\$ 199.35</u>	<u>\$ 205.20</u>	<u>\$ 5.85</u>	2.93%
RATIO TO GR	0.83	0.83		
CASCADE TWP				
WATER	\$ 139.89	\$ 145.20	\$ 5.31	3.80%
SEWER	188.19	191.22	3.03	1.61%
	<u>\$ 328.08</u>	<u>\$ 336.42</u>	<u>\$ 8.34</u>	2.54%
RATIO TO GR	1.36	1.35		
GRAND RAPIDS TWP				
WATER	\$ 111.81	\$ 118.77	\$ 6.96	6.22%
SEWER	152.04	154.56	2.52	1.66%
	<u>\$ 263.85</u>	<u>\$ 273.33</u>	<u>\$ 9.48</u>	3.59%
RATIO TO GR	1.10	1.10		
TALLMADGE TWP				
WATER	\$ 90.96	\$ 94.86	\$ 3.90	4.29%
SEWER	269.91	274.41	4.50	1.67%
	<u>\$ 360.87</u>	<u>\$ 369.27</u>	<u>\$ 8.40</u>	2.33%
RATIO TO GR	1.50	1.49		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER
QUARTERLY CONSUMPTION OF: WATER- 30.00 UNITS OR 22,440 GALLONS
SEWER - 21.00 UNITS OR 15,708 GALLONS
NO. OF MONTHS: 3

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP-				
SEWER (No. of REU 1.00)	<u>\$ 197.16</u>	<u>\$ 170.37</u>	<u>\$ (26.79)</u>	-13.59%

**CITY OF GRAND RAPIDS, MICHIGAN
2022 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON COMMERCIAL USERS
BY CUSTOMER COMMUNITY
FOR RATES EFFECTIVE JANUARY 1, 2023**

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2022</u>	<u>2023</u>	<u>DOLLARS</u>	<u>PERCENT</u>
GRAND RAPIDS				
WATER	\$ 502.95	\$ 537.27	\$ 34.32	6.82%
SEWER	946.92	959.79	12.87	1.36%
	<u>\$ 1,449.87</u>	<u>\$ 1,497.06</u>	<u>\$ 47.19</u>	3.25%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 457.15	\$ 464.41	\$ 7.26	1.59%
SEWER	763.83	766.23	2.40	0.31%
	<u>\$ 1,220.98</u>	<u>\$ 1,230.64</u>	<u>\$ 9.66</u>	0.79%
RATIO TO GR	0.84	0.82		
KENTWOOD				
WATER	\$ 439.07	\$ 457.71	\$ 18.64	4.25%
SEWER	697.56	709.95	12.39	1.78%
	<u>\$ 1,136.63</u>	<u>\$ 1,167.66</u>	<u>\$ 31.03</u>	2.73%
RATIO TO GR	0.78	0.78		
CASCADE TWP				
WATER	\$ 608.08	\$ 631.45	\$ 23.37	3.84%
SEWER	853.14	868.26	15.12	1.77%
	<u>\$ 1,461.22</u>	<u>\$ 1,499.71</u>	<u>\$ 38.49</u>	2.63%
RATIO TO GR	1.01	1.00		
GRAND RAPIDS TWP				
WATER	\$ 499.37	\$ 531.87	\$ 32.50	6.51%
SEWER	695.67	708.30	12.63	1.82%
	<u>\$ 1,195.04</u>	<u>\$ 1,240.17</u>	<u>\$ 45.13</u>	3.78%
RATIO TO GR	0.82	0.83		
TALLMADGE TWP				
WATER	\$ 559.76	\$ 580.64	\$ 20.88	3.73%
SEWER	1,886.88	1,919.10	32.22	1.71%
	<u>\$ 2,446.64</u>	<u>\$ 2,499.74</u>	<u>\$ 53.10</u>	2.17%
RATIO TO GR	1.69	1.67		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE COMMERCIAL CUSTOMER
QUARTERLY CONSUMPTION OF : WATER- 208.00 UNITS OR 155,584 GALLONS
SEWER - 198.00 UNITS OR 148,104 GALLONS
NO. OF MONTHS: 3

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP				
SEWER (No. of REU 1.00)	<u>\$ 197.16</u>	<u>\$ 170.37</u>	<u>\$ (26.79)</u>	-13.59%

**CITY OF GRAND RAPIDS, MICHIGAN
2022 PRELIMINARY WATER/SEWER RATE STUDY
WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2023**

WATER RATES

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 2.31	\$ 1.90	\$ 1.80	\$ 2.47	\$ 2.13	\$ 2.72	NA
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 12.28	\$ 14.61	\$ 17.25	\$ 23.70	\$ 18.29	\$ 4.42	NA
1"	B	\$ 18.93	\$ 23.07	\$ 27.77	\$ 39.23	\$ 29.61	\$ 4.96	NA
1-1/4"	C	\$ 27.48	\$ 33.95	\$ 41.29	\$ 59.20	\$ 44.17	\$ 5.65	NA
1-1/2"	D	\$ 37.93	\$ 47.25	\$ 57.81	\$ 83.61	\$ 61.97	\$ 6.49	NA
2"	E	\$ 64.53	\$ 81.10	\$ 99.87	\$ 145.74	\$ 107.27	\$ 8.64	NA
3"	F	\$ 140.53	\$ 177.81	\$ 220.05	\$ 323.25	\$ 236.69	\$ 14.77	NA
4"	G	\$ 246.93	\$ 313.21	\$ 388.30	\$ 571.76	\$ 417.88	\$ 23.36	NA
6" & Over	H	\$ 550.93	\$ 700.05	\$ 869.01	\$ 1,281.81	\$ 935.57	\$ 47.89	NA

SEWER RATES

	<u>METER CODE</u>	<u>GRAND RAPIDS</u>	<u>WALKER</u>	<u>KENTWOOD</u>	<u>CASCADE</u>	<u>GR. RAPIDS TOWNSHIP</u>	<u>TALLMADGE TOWNSHIP</u>	<u>WRIGHT TOWNSHIP</u>
COMMODITY CHARGE (HCF)		\$ 4.45	\$ 3.01	\$ 3.37	\$ 3.34	\$ 2.75	\$ 8.96	NA
REU Charge (Monthly) *		NA	NA	NA	NA	NA	NA	\$ 56.79
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 16.31	\$ 33.48	\$ 9.56	\$ 40.36	\$ 32.27	\$ 28.75	NA
1"	B	\$ 26.23	\$ 56.75	\$ 14.23	\$ 68.98	\$ 54.60	\$ 48.34	NA
1-1/4"	C	\$ 38.98	\$ 86.67	\$ 20.23	\$ 105.78	\$ 83.31	\$ 73.53	NA
1-1/2"	D	\$ 54.56	\$ 123.24	\$ 27.56	\$ 150.76	\$ 118.40	\$ 104.32	NA
2"	E	\$ 94.23	\$ 216.32	\$ 46.23	\$ 265.25	\$ 207.72	\$ 182.69	NA
3"	F	\$ 207.56	\$ 482.28	\$ 99.56	\$ 592.36	\$ 462.92	\$ 406.60	NA
4"	G	\$ 366.23	\$ 854.62	\$ 174.23	\$ 1,050.31	\$ 820.20	\$ 720.07	NA
6" & Over	H	\$ 819.56	\$ 1,918.44	\$ 387.56	\$ 2,358.76	\$ 1,841.00	\$ 1,615.72	NA

* REU - Residential Equivalent Unit (Wright Township Only)

FIRE PROTECTION RATES- ALL GOVERNMENTAL UNITS

6"	H	\$ 21.35		10"	J	\$ 59.35
8"	I	\$ 37.88		12"	K	\$ 85.41

NOTE: Monthly defined as 1/12th of 365 days.

**CITY OF GRAND RAPIDS, MICHIGAN
2022 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2023**

	<u>2022</u>	<u>2023</u>	<u>PERCENTAGE CHANGE</u>
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$15,106.00	\$14,452.00	-4.33%
- COMMODITY (100 CF)	\$1.20	\$1.22	1.67%
SEWER - SERVICE (MONTHLY)	\$1,851.00	\$1,853.00	0.11%
- COMMODITY (MG)	\$2,891.00	\$2,920.00	1.00%
ADA TWP			
WATER - SERVICE	\$47,613.00	\$56,931.00	19.57%
- COMMODITY	\$1.38	\$1.40	1.45%
SEWER - SERVICE	\$39,377.00	\$38,466.00	-2.31%
- COMMODITY	\$3,883.00	\$3,947.00	1.65%
OTTAWA COUNTY			
WATER - SERVICE	\$172.00	\$736.00	327.91%
- COMMODITY	\$1.28	\$1.32	3.13%
GAINES TWP			
SEWER - SERVICE	\$1,590.00	\$1,488.00	-6.42%
- COMMODITY	\$2,885.00	\$2,528.00	-12.37%
CALEDONIA TWP			
SEWER - SERVICE	\$786.00	\$704.00	-10.43%
- COMMODITY	\$7,941.00	\$7,868.00	-0.92%

NOTE: Monthly defined as 1/12th of 365 days.