

**CITY COMMISSION AGENDA MEMO**  
**August 9, 2021**

**FROM:** Randy DeWitt, Assistant Director of Public Works  
**MEETING:** August 17, 2021  
**SUBJECT:** 2021 Water and Wastewater Utilities Update  
**PRESENTERS:** Randy DeWitt, Assistant Director of Public Works  
Robert Ott, Director of Public Works

**BACKGROUND**

Water and sewer rate charges have been adjusted annually since 2008 after nearly 17 years without an increase in water rates. The primary reason for increasing utility rates is to allow the City of Manhattan (City) to continue to meet the requirements of community growth, ensure adequate funding of all operations and maintenance activities, capital improvement program (CIP) and maintenance projects, retire debt on significant utility projects, provide financial support for the general operations of the City related to utility support functions, and maintain adequate cash reserves.

In 2015, City Administration conducted a Cost of Services (COS) Study with Carl Brown, of Carl Brown Consulting (CBC), to assess the state of the City's three (3) utility enterprise funds (Water, Wastewater and Stormwater) for adequacy of rates, rate structures, and fund reserve levels.

CBC recommended structural rate modifications that followed the 'cost-to-serve' philosophy with the following goals:

1. Generate sufficient revenues through fair and equitable rate structures that offset the actual fixed, variable, and capacity costs while ensuring that all customers pay accurate water and sewer bills that represent the true 'cost to serve'.
2. Develop a rate structure that reduces the effects and variability of climate-dependent consumption on generating revenues.
3. Maintain affordability of the average monthly bills to the customer base.
4. Develop and maintain adequate reserves within each fund based on agreed-to-target levels.
5. Develop fee structures that accurately capture the costs for a new customer's impact on the City's utilities.

The cost-to-serve basis is primarily considered the industrial standard for municipal water and sewer utility systems and is recommended by the American Water Works Association (AWWA).

The new rate structure was implemented in 2018, with the rate changes phased in over a period of three years to reduce the immediate impacts on lower usage customers. After the implementation, starting in 2020, annual rate increases were generally scheduled to be 3% for both the Water and Wastewater Funds, with the understanding that further adjustments may be necessary to suit the current needs of the funds.

Unfortunately, in 2019 it became apparent the sewer rates set for the Wastewater Fund during the COS Study were inadequate. The modeling that CBC used to set appropriate usage rates inaccurately projected sewer consumption. The model assumed increasing sewer use every year with growth in the customer base; however, with plumbing fixtures and water appliances becoming more efficient, trends in base water consumption have resulted in decreasing residential sewer use despite growth.

For 2020, in addition to the scheduled 3% rate increase, additional corrective rate increases were incorporated with the goal of generating \$1 million in additional revenues for the Wastewater Fund, which would ensure adequate reserves through 2030. The City Commission approved an alternate which generated the additional revenue equally from usage charges and monthly minimum charges, resulting in the average monthly sewer bill as shown below in Table 1.

**Table 1 - Impacts to Average Sewer Bill  
2020 Corrective Rate Increase**

Customer Category	Monthly Water Usage (Units)	2019 Sewer Monthly Bill	2020 Corrective Rate Increase		
			2020 Sewer Monthly Bill	2020 Monthly Difference	
Residential - Low	2	\$18.47	\$22.50	\$4.03	22%
Residential - Average	7	\$35.90	\$42.05	\$6.15	17%
Residential - High	20	\$35.90	\$42.05	\$6.15	17%
Business - Low	2	\$18.47	\$22.50	\$4.03	22%
Business - Medium	20	\$81.22	\$92.88	\$11.67	14%
Business - Average	50	\$190.97	\$215.63	\$24.65	13%

# DISCUSSION

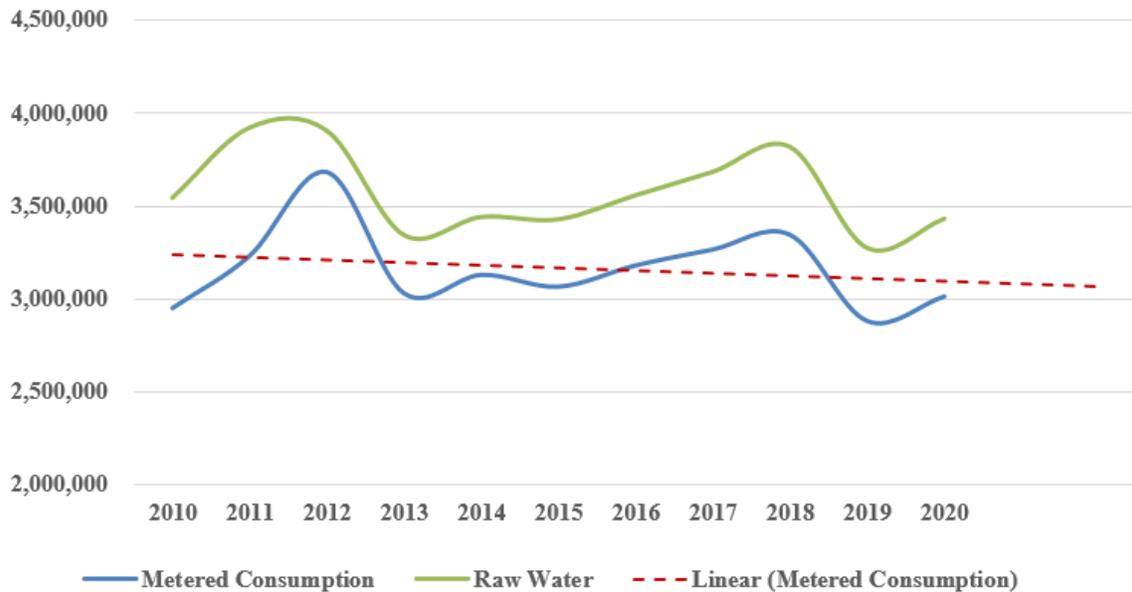
## Water Fund Update

2019 and 2020 were difficult years with respect to weather conditions (record annual rainfall amounts), and the pandemic having significant impact on consumption and usage revenues. The total 2019 water consumption was down approximately 15% from 2018. The total 2020 consumption increased from 2019; however, it was still significantly below the running 10-year average. In general, since 2010, water consumption has trended downward around 1% per year, as shown in Figure 1 below. This decline is despite growth in the number of customers inside the city and Blue Township.

This trend is similar to what has happened in sewer usage, with the continuous decline in the winter-quarter-average (WQA) base residential water consumption. Primarily, this is attributed to conservation through higher efficiency water appliances and plumbing fixtures, and irrigation systems.

The downward trend ultimately resulted in a combined budgeted revenue shortfall of approximately \$2.6 million for 2019 and 2020.

**Figure 1 – Annual Water Consumption Trends  
(2010-2020)**



In 2020, revenues were below the budgeted amount by approximately \$1.2 million; however, substantial budget savings were achieved by deferring or financing several lower priority capital projects, saving approximately \$750,000. In total for 2020, expenditures were over \$1.0 million less than the budgeted amount. For 2021, the beginning fund balance was budgeted at \$7.0 million, and was achieved despite revenue shortfalls in 2020.

Additionally, in 2019 and 2020, the utility funds saw an increase in annual financial support to the General Fund, due to increases in the annual General Fund assessments and contributions to fund non-utility Capital Improvement Projects (CIP) in the equipment reserve fund. For 2021, the General Fund Transfer from the Water Fund was increased by \$450,000 to offset anticipated shortfalls in sales tax revenues due to the impacts of the pandemic. To date, the Water Fund has received minimal funds for pandemic relief.

For 2021, in the Water Fund, it appears target consumption and revenues will be near budgeted amounts, something that has not happened since 2018. Traditionally, Year-To-Date (YTD) water revenues through the end of July have been approximately 50% of the annual revenues. The 2021 budgeted water sales are \$11.28 million and through the end of July, total water revenues were approximately \$5.65 million, which is just over 50% YTD.

The YTD revenues, projecting for August sales, will be approximately \$7.07 million, or 63% of the annual budget. Traditionally, YTD revenues, through the end of August, have been equal to approximately 63% of the annual revenues.

Expenditures for 2021 have been closely monitored. For all divisions within the Water Fund, YTD expenses through June were below the budgeted amounts. Excluding any substantial unexpected or emergency expenses occurring, City staff does not anticipate any deviations from this through the end of the year. Furthermore, City staff is not currently projecting a need to pursue significant budget savings as done in the past by deferring or modifying lower priority CIP and maintenance projects.

### **Wastewater Fund Update**

Since the implementation of the aforementioned rate correction in 2020, revenues in the Wastewater Fund have been meeting expectations. This correction was necessitated due to substantial revenue shortfalls, which were primarily related to the trend of declining residential sewer usage during the previous 5 years. Additionally, anticipated revenues were significantly less than those projected by COS Study.

In 2020, revenues were higher than the budgeted amount by approximately \$0.5 million with budget savings also being achieved by several annual maintenance projects not being completed, and several lower priority capital projects being deferred. This resulted in approximate savings of \$550,000 for the 2020 budget. In total for 2020, expenditures were approximately \$1.0 million less than the budgeted amount. The 2021 beginning fund balance was budgeted to be \$1.1 million; however, the actual beginning fund balance was near \$2.9 million. It should be noted that the budgeted beginning fund balance did not include the additional \$1.0 million in revenue from the 2020 corrective rate increases.

As with the Water Fund, in 2019 and 2020, the Wastewater Fund saw a significant increase in annual financial support to the General Fund, with increases to the annual General Fund assessments and contributions to fund non-utility Capital Improvement Projects (CIP) in the equipment reserve fund. In 2021, the General Fund Transfer from the Wastewater Fund was also increased by nearly \$100,000 to offset anticipated shortfalls in sales tax revenues

due to the impacts of the pandemic. To date, the Wastewater Fund has received minimal funds for pandemic relief.

For 2021 in the Wastewater Fund, revenues are currently on track to slightly exceed budget projections. The 2021 budgeted sewer revenues are \$11.9 million and through the end of July, total sewer revenues were \$7.0 million, which is just under 60% YTD. Projected total revenues are currently estimated to be \$12.2 million.

Expenditures for 2021 have been closely reviewed. For all divisions within the Wastewater Fund, YTD expenses are below the budgeted amounts. The only significant unexpected expenditure thus far has been the February gas utility bill for the Wastewater Treatment Plant, which was impacted by the Midwest natural gas price increases during the February cold spell. Similar impacts to the gas utility bill occurred in the General Fund as well. The WWTP bill for February gas service was over \$117,000, whereas the February bill for 2020 was only \$2,400.

### **Recommended Rate Increases and Fund Balance Projections**

Looking forward to the 2022 Water and Wastewater Fund budgets, the factors that will ultimately lead to determining appropriate water and wastewater rate increases, consist of the following:

1. Large CIP projects, such as the Levee Improvements and the Joint Maintenance Facility, which have significant Water and Wastewater Fund contributions. This project will bid on August 19, 2021, so actual cost impacts to the funds will be known soon.
2. 2021 year-end water consumption and revenues meeting budgeted projections.
3. Incorporation of large CIP projects from the recently completed Water and Sewer Master Plan Update.
4. Making up for significant water revenue shortfalls from 2019 and 2020 which have contributed to the decrease in future cash reserve levels.
5. Meeting target fund balances for 2030.

City Administration has traditionally followed recommendations from previous COS Studies to determine the required water and sewer rate adjustments and cash reserve levels. The recommended fund balance is primarily based upon meeting the industry's recommended end-of-year cash balance to cover three (3) months of annual operating costs plus one (1) year of debt service and transfer payments (including the annual General Fund transfer), to ensure adequate revenues are achieved to fund the upcoming annual budget and maintain fund stability.

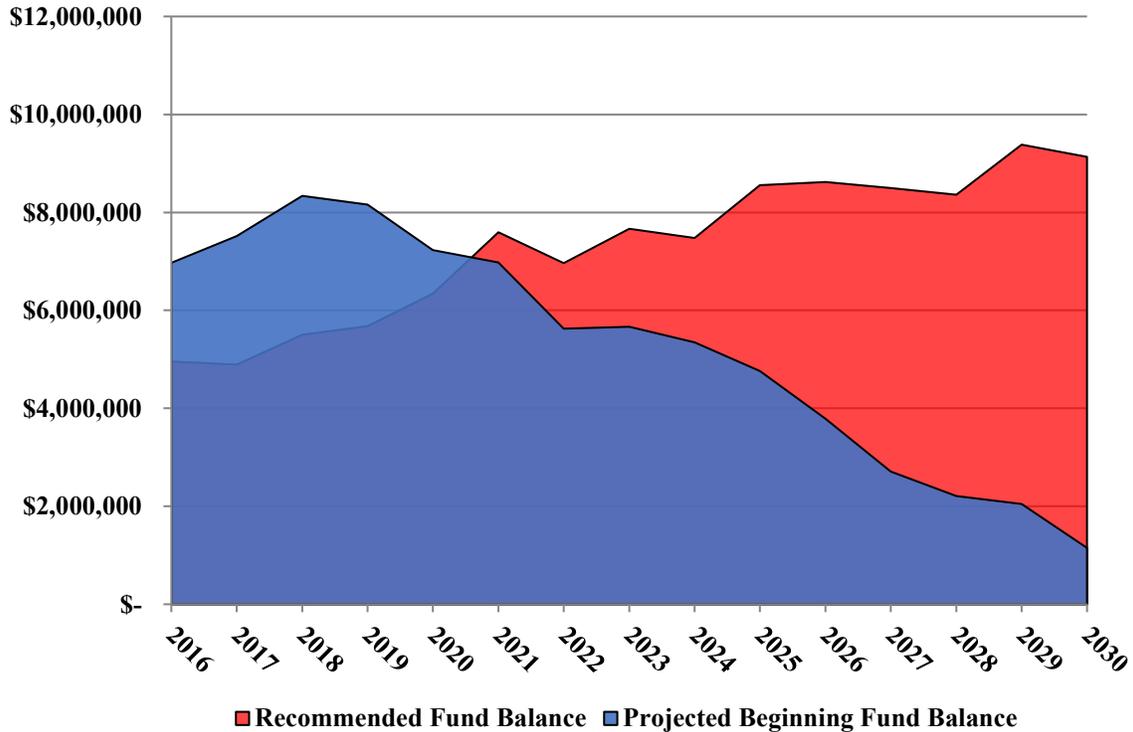
Rate increases are programmed into the Water and Wastewater Funds very carefully. Not only are rate increases necessary to ensure adequate revenues to offset expenditures for the upcoming budget years, but also to pay debt services for projects completed in the last 10-15 years that the City has committed to funding. These include projects funded by the Kansas Department of Health and Environment (KDHE) revolving fund loans.

As previously mentioned, the Water and Wastewater Fund forecasts include planned 3% rate increases for 2022 and beyond. For 2021, the City Commission authorized an additional 3% rate increase, for a total of 6%, to start generating sufficient revenues to pay for the Water and Wastewater Fund shares of the Levee Improvements Projects.

In Figure 2A below, the projected fund balance and recommended beginning fund balance for the Water Fund have been provided with the standard 3% rate increase forecasted for 2022. This figure does not include cost estimates for the projects recommended within the Master Plan Update.

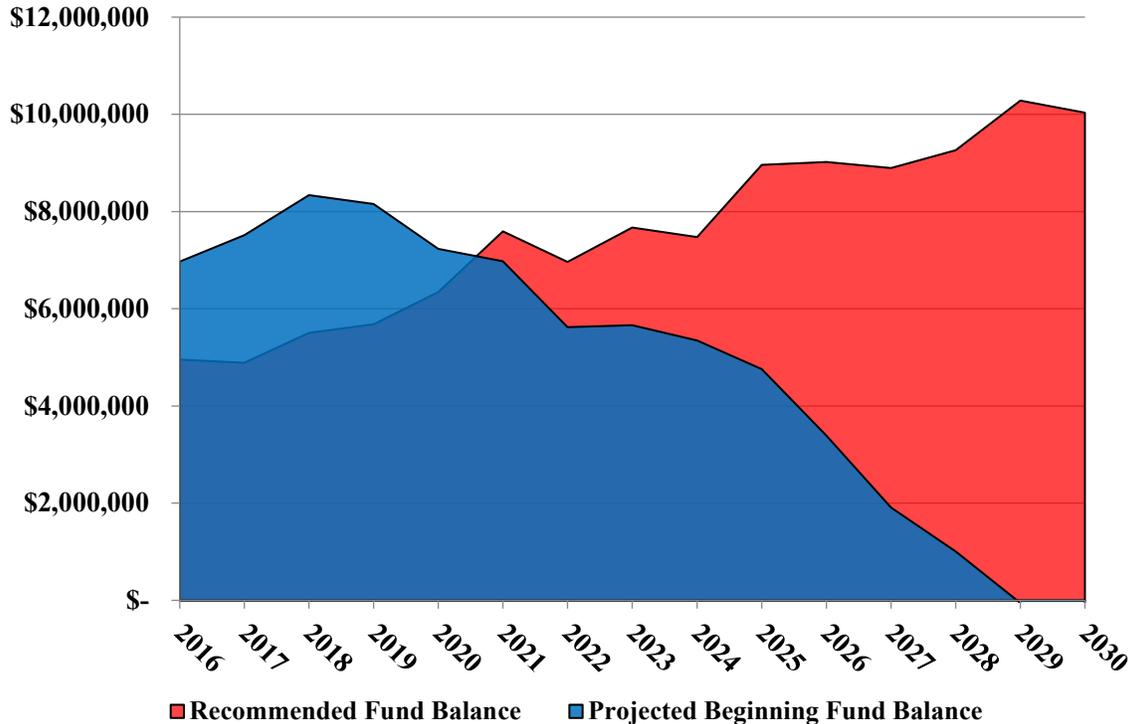
For the Water Fund, the beginning fund balances in Figure 2A also reflects lower consumption growth in future years, based on recent trends. As seen below, the projected beginning fund balance continues to decline in the out years and is approximately \$1.2 million in 2030, which is far below the recommended fund balance of \$9.1 million.

**Figure 2A – Recommended vs. Proposed Water Fund Balance Projections (2016-2030)**



To further illustrate the need to consider a corrective rate change for the Water Fund starting in 2022, Figure 2B represents the projected and recommended beginning fund balance after City staff has updated the forecast to include the estimated costs of projects recommended in the Water Master Plan Update. Under this scenario, the Water Fund shows a projected negative fund balance by 2030 with only the scheduled 3% rate increases beyond 2021.

**Figure 2B –Proposed Water Fund Balance Projections  
w/ Water Master Plan Update CIP Project Estimates Included  
(2016-2030)**



To ensure adequate revenue and reserve levels are attained, City staff has developed multiple corrective rate increase scenarios to illustrate the additional revenues, starting in 2022, that will be necessary to improve the fund balance by 2030. Those scenarios are summarized as follows:

- Scenario A would add approximately \$1.4 million in annual revenue.
- Scenario B would add approximately \$1.2 million in annual revenue.
- Scenario C would add approximately \$1.0 million in annual revenue.

Each scenario was further evaluated on the alternatives, based on which component of the rate structure the additional revenue is generated from, as follows:

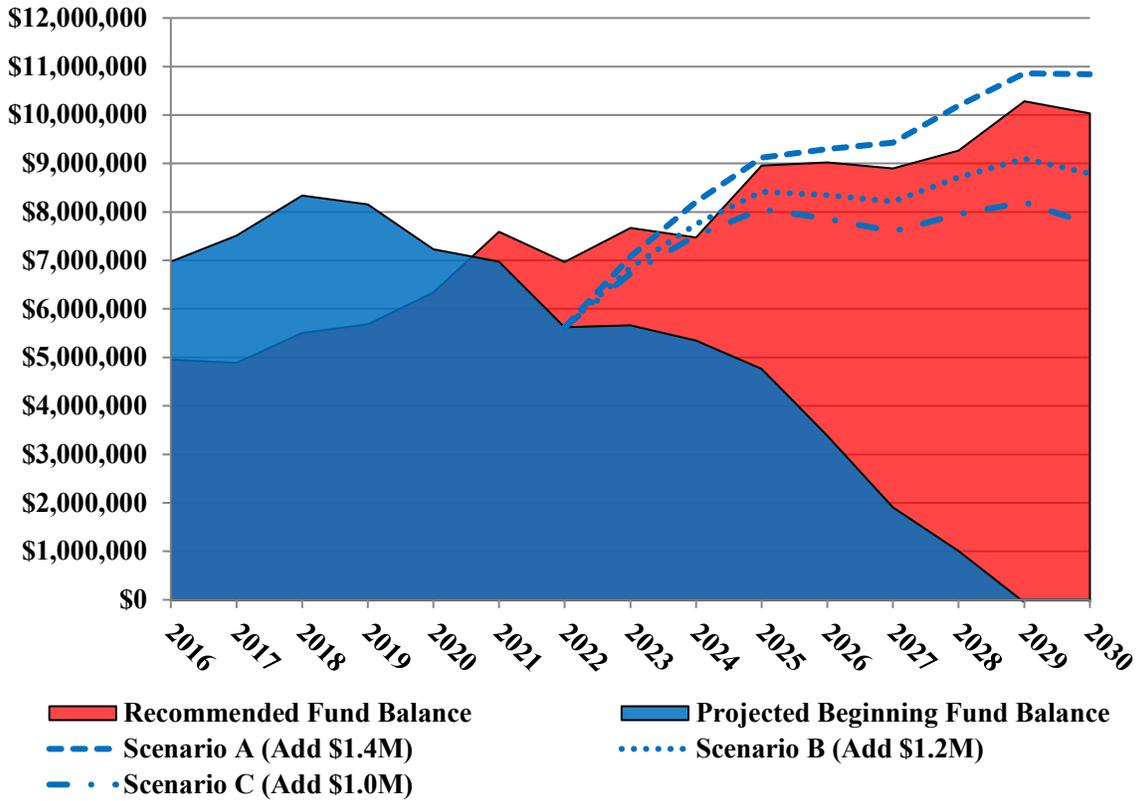
- Alternate 1: 50% from usage charges and 50% from monthly minimum charges.
- Alternate 2: 75% from usage charges and 25% from monthly minimum charges.
- Alternate 3: 25% from usage charges and 75% from monthly minimum charges.

These are the same alternative used to assess the Wastewater Fund corrective rate change in 2020. Like the Wastewater Fund, City staff determined that Alternate 3 is unfavorable. Even though this alternative generates the most consistent stream of revenue by increasing the monthly minimum charges that customers pay regardless of usage, it also has the highest impact on the lowest usage customers, which is generally considered the least able to afford the impacts of the rate change, including elderly and low-income customers. As

such, Alternate 3 has not been included in this memo. These alternatives are discussed further below within the Customer Impacts section.

Figure 2C below shows the projected fund balance with the additional revenues and includes the Water Master Plan Update CIP project estimates. Figure 2C shows that to ensure the 2030 fund balance meets recommended levels, City staff estimates approximately \$1.4 million in revenue (Scenario A) must be generated starting in 2022.

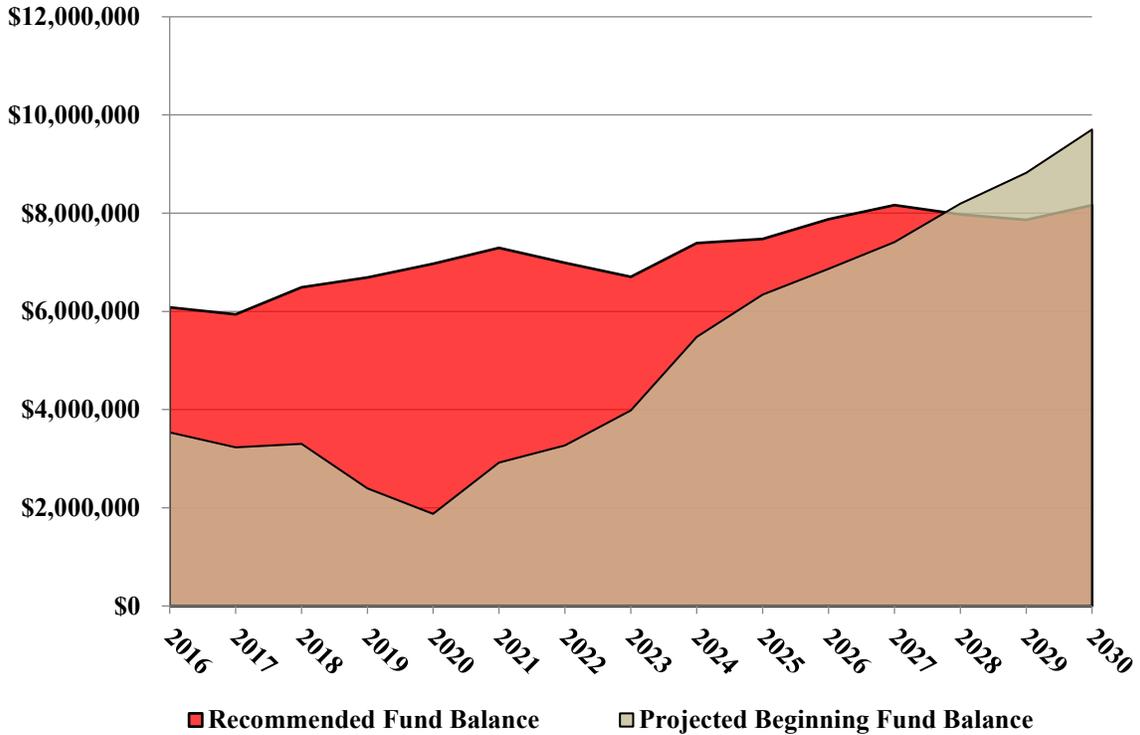
**Figure 2C – Proposed Water Fund Balance Projections – Scenarios A, B, and C (2016-2030)**



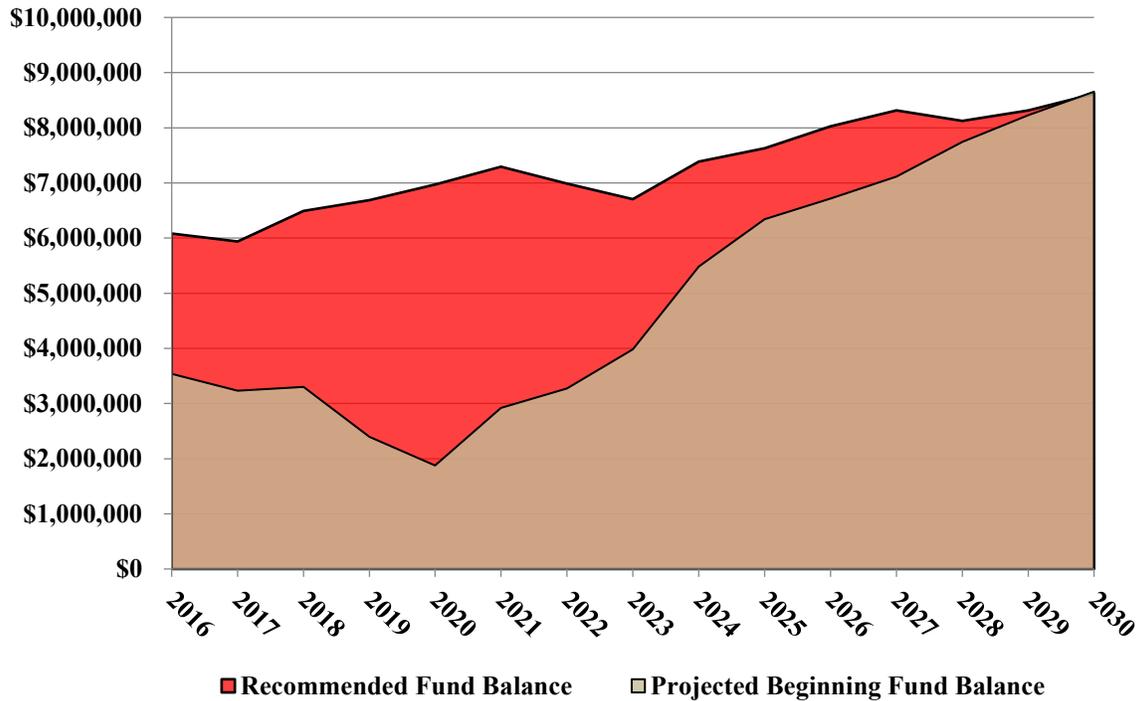
If an additional \$1.2 million in revenues (Scenario B) were generated the projected fund balance for 2030 is approximately \$8.8 million, which is 87% of the recommended fund balance. If an additional \$1.0 million in revenues (Scenario C) were generated the projected fund balance for 2030 is approximately \$7.8 million, which is 77% of the recommended fund balance.

For the Wastewater Fund, Figures 3A and 3B show the projected beginning fund balance is trending in a positive direction with the standard 3% rate increases in the out years. The 2030 beginning fund balance is projected to be approximately \$9.8 million, which is above the recommended fund balance of \$8.2 million. Figure 3A does not include the projects recommended within the Master Plan Update, while Figure 3B does. In either scenario, the projected fund balance is meeting desired levels.

**Figure 3A – Recommended vs. Proposed Wastewater Fund Balance Projections (2016-2030)**



**Figure 3B – Recommended vs. Proposed Wastewater Fund Balance Projections  
w/ Water Master Plan Update CIP Project Estimates Included  
(2016-2030)**



As previously mentioned, revenues generated in the current and future years must pay for annual operations, plus the debt service for CIP projects that have already been completed. The health of the Water and Wastewater Funds, specifically the generation of adequate revenues and reserve levels, is used to determine the City’s eligibility for applying for low interest revolving loan fund programs.

When City staff presented the proposed 2021 rate increases to the City Commission on December 1, 2020, it was discussed the Water Fund may very likely require a corrective rate increase, in lieu of the scheduled 3% increase, to ensure adequate revenues and reserve levels could be attained. The similar actions taken in 2020 for the Wastewater Fund appear to have been justified and effective.

**Customer Impacts**

Typically, when assessing water and wastewater rates adjustments, the standard is to look at the average residential and commercial/business customer. The American Water Works Association (AWWA) has established industrial standard averages for monthly water usage at seven (7) units per month for residential customers and 50 units per month for commercial/business customers. In Table 2 below, the impacts of the proposed 3% water increases for 2022 on the average residential and commercial/business customer has been provided. In Tables 3A, 3B, and 3C, customer impacts for each scenario and alternative have been provided as well.

To further analyze the impacts on other typical customers, City staff reviewed several other customer categories and provided the average monthly billing impacts from low and high usage residential customers, as well as low, medium, and high usage commercial/business customers. The following assumptions were made in determining these impacts:

1. The typical meter size for a residential customer is either 5/8 inch or 3/4 inch.
2. The typical meter size for low, medium, average, and high water usage commercial/business customer is 3/4 inch, 1 inch and 6 inch, respectively.
3. The sewer usage for a high-water usage residential customer (20 units) will still be only seven (7) units due to the WQA being used as the basis of billing sewer usage.

In the tables below, Via Christi Hospital was used for the high-volume water usage scenario (2,500 units of usage). Other users, such as KSU's main campus, Manhattan Country Club, and Colbert Hills Golf Course, utilize over 10,000 units of water during peak summer irrigation months.

**Table 2 - Impacts to Average Water Bill  
Proposed 3% Rate Increase**

Customer Category	Monthly Water Usage (Units)	Current Water Monthly Bill	3% Increase		
			Proposed Water Monthly Bill	Proposed Monthly Difference (\$)	Proposed Annual Difference (\$)
Residential - Low	2	\$16.89	\$17.40	\$0.51	\$6.08
Residential - Average	7	\$29.99	\$30.89	\$0.90	\$10.80
Residential - High	20	\$64.05	\$65.97	\$1.92	\$23.06
Business - Low	2	\$18.76	\$19.32	\$0.56	\$6.75
Business - Medium	20	\$65.92	\$67.90	\$1.98	\$23.73
Business - Average	50	\$147.62	\$152.05	\$4.43	\$53.14
Business - High	2,500	\$6,759.14	\$6,961.91	\$202.77	\$2,433.29

**Table 3A - Impacts to Average Water Bill  
Scenario A**

Customer Category	Monthly Water Usage (Units)	Current Water Monthly Bill	Alternate A1 (50/50)				Alternate A2 (75/25)			
			Proposed Water Monthly Bill	Proposed Monthly Difference (\$)	Monthly Increase (%)	Proposed Annual Difference	Proposed Water Monthly Bill	Proposed Monthly Difference	Monthly Increase (%)	Proposed Annual Difference
Residential - Low	2	\$16.89	\$20.64	\$3.75	22%	\$44.98	\$19.42	\$2.53	15%	\$30.40
Residential - Average	7	\$29.99	\$35.24	\$5.25	18%	\$63.06	\$34.49	\$4.50	15%	\$53.98
Residential - High	20	\$64.05	\$73.22	\$9.17	14%	\$110.06	\$73.66	\$9.61	15%	\$115.29
Business - Low	2	\$18.76	\$23.01	\$4.25	23%	\$51.04	\$21.57	\$2.81	15%	\$33.77
Business - Medium	20	\$65.92	\$75.60	\$9.68	15%	\$116.12	\$75.81	\$9.89	15%	\$118.66
Business - Average	50	\$147.62	\$167.17	\$19.55	13%	\$234.63	\$169.76	\$22.14	15%	\$265.72
Business - High	2,500	\$6,759.14	\$7,568.86	\$809.72	12%	\$9,716.61	\$7,773.01	\$1,013.87	15%	\$12,166.45

**Table 3B – Impacts to Average Water Bill  
Scenario B**

Customer Category	Monthly Water Usage (Units)	Current Water Monthly Bill	Alternate B1 (50/50)				Alternate B2 (75/25)			
			Proposed Water Monthly Bill	Proposed Monthly Difference (\$)	Monthly Increase (%)	Proposed Annual Difference	Proposed Water Monthly Bill	Proposed Monthly Difference	Monthly Increase (%)	Proposed Annual Difference
Residential - Low	2	\$16.89	\$20.09	\$3.20	19%	\$39.07	\$19.09	\$2.20	13%	\$26.35
Residential - Average	7	\$29.99	\$34.50	\$4.51	15%	\$56.36	\$33.89	\$3.90	13%	\$46.78
Residential - High	20	\$64.05	\$71.97	\$7.92	12%	\$101.32	\$72.38	\$8.33	13%	\$99.92
Business - Low	2	\$18.76	\$22.39	\$3.63	19%	\$44.23	\$21.20	\$2.44	13%	\$29.27
Business - Medium	20	\$65.92	\$74.27	\$8.35	13%	\$106.48	\$74.49	\$8.57	13%	\$102.84
Business - Average	50	\$147.62	\$164.54	\$16.92	11%	\$218.79	\$166.81	\$19.19	13%	\$230.29
Business - High	2,500	\$6,759.14	\$7,462.24	\$703.10	10%	\$9,223.23	\$7,637.83	\$878.69	13%	\$10,544.26

**Table 3C - Impacts to Average Water Bill  
Scenario C**

Customer Category	Monthly Water Usage (Units)	Current Water Monthly Bill	Alternate C1 (50/50)				Alternate C2 (75/25)			
			Proposed Water Monthly Bill	Proposed Monthly Difference (\$)	Monthly Increase (%)	Proposed Annual Difference	Proposed Water Monthly Bill	Proposed Monthly Difference	Monthly Increase (%)	Proposed Annual Difference
Residential - Low	2	\$16.89	\$19.83	\$2.94	17%	\$35.33	\$18.92	\$2.03	12%	\$24.32
Residential - Average	7	\$29.99	\$34.18	\$4.19	14%	\$50.27	\$33.59	\$3.60	12%	\$43.19
Residential - High	20	\$64.05	\$71.47	\$7.42	12%	\$89.09	\$71.74	\$7.69	12%	\$92.23
Business - Low	2	\$18.76	\$22.10	\$3.34	18%	\$40.04	\$21.01	\$2.25	12%	\$27.01
Business - Medium	20	\$65.92	\$73.74	\$7.82	12%	\$93.81	\$73.83	\$7.91	12%	\$94.92
Business - Average	50	\$147.62	\$163.56	\$15.94	11%	\$191.22	\$165.33	\$17.71	12%	\$212.57
Business - High	2,500	\$6,759.14	\$7,425.31	\$666.17	10%	\$7,994.03	\$7,570.24	\$811.10	12%	\$9,733.16

Table 4 below has been provided to show a summary of the potential impacts to the average monthly water bill for each alternative and customer class. The summary includes impacts by percentage and dollar amounts.

**Table 4 - Impacts to Average Water Bill – Summary of Scenarios**

Customer Category	Monthly Increase (%)					
	Alternate A1	Alternate A2	Alternate B1	Alternate B2	Alternate C1	Alternate C2
Residential - Low	22%	15%	19%	13%	17%	12%
Residential - Average	18%	15%	15%	13%	14%	12%
Residential - High	14%	15%	12%	13%	12%	12%
Business - Low	23%	15%	19%	13%	18%	12%
Business - Medium	15%	15%	13%	13%	12%	12%
Business - Average	13%	15%	11%	13%	11%	12%
Business - High	12%	15%	10%	13%	10%	12%

Customer Category	Monthly Increase (\$)					
	Alternate A1	Alternate A2	Alternate B1	Alternate B2	Alternate C1	Alternate C2
Residential - Low	\$3.75	\$2.53	\$3.20	\$2.20	\$2.94	\$2.03
Residential - Average	\$5.25	\$4.50	\$4.51	\$3.90	\$4.19	\$3.60
Residential - High	\$9.17	\$9.61	\$7.92	\$8.33	\$7.42	\$7.69
Business - Low	\$4.25	\$2.81	\$3.63	\$2.44	\$3.34	\$2.25
Business - Medium	\$9.68	\$9.89	\$8.35	\$8.57	\$7.82	\$7.91
Business - Average	\$19.55	\$22.14	\$16.92	\$19.19	\$15.94	\$17.71
Business - High	\$809.72	\$1,013.87	\$703.10	\$878.69	\$666.17	\$811.10

Determining which alternative is “fair” can be viewed in two ways. If the monthly cost increase in dollars is considered, Alternate 1 would appear to be “fairest” because it impacts the average residential customer and the lower usage commercial customer by only a few dollars per month and the total monthly increase to higher volume customers is less. However, if the percentage of the monthly increase is considered, Alternate 2 would appear the “fairest” because it impacts all customer classes by the same percentage.

In Table 5 below, the impacts of the currently proposed recommended 3% wastewater increases for 2022 on the average residential and commercial/business customer has been provided.

**Table 5 - Impacts to Average Sewer Bill  
Proposed 3% Rate Increase**

Customer Category	Monthly Water Usage (Units)	Current Sewer Monthly Bill	3% Increase		
			Proposed Sewer Monthly Bill	Proposed Monthly Difference	Proposed Annual Difference
Residential - Low	2	\$23.85	\$24.57	\$0.72	\$8.59
Residential - Average	7	\$44.57	\$45.91	\$1.34	\$16.05
Residential - High	20	\$44.57	\$45.91	\$1.34	\$16.05
Business - Low	2	\$23.85	\$24.57	\$0.72	\$8.59
Business - Medium	20	\$98.45	\$101.41	\$2.95	\$35.44
Business - Average	50	\$228.57	\$235.42	\$6.86	\$82.28
Business - High	2,500	\$10,987.94	\$11,317.58	\$329.64	\$3,955.66

For both the Water and Wastewater Funds, all other charges, such as system development charges, and miscellaneous program fees and surcharges, shall be increase by the forecasted 3%.

**Affordability**

The ‘affordability’ of water and wastewater utilities is very good for Manhattan customers. Figures 4A and 4B below have been provided to show a comparison of the average monthly water and sewer bill for the typical residential customer (7 units per month) for Manhattan, and water and sewer utilities for other cities in Kansas. The comparisons include all Kansas First Class Cities, and some of the larger Second-Class Cities (McPherson, Gardner, Bonner Springs, and Hays). This comparison uses 2021 water and sewer rates for all other utility systems versus Manhattan’s 2022 bills, with the recommended rate increase of 3%, and the corrective rate increase scenario alternates for the Water Fund.

For 2022, many of those systems will undoubtedly increase rates; however, City staff is not knowledgeable of those exact increases. The comparison expresses that in relation to other utilities, the average monthly residential water bill rates in Manhattan is one of the lowest amongst our peer municipalities and the sewer bill rates fall in the middle third.

For any potential corrective rate increase for the Water Fund, it can be noted that even for Scenarios A1 and C1, the average monthly water bill for the typical residential customer will still be in the lower third of all municipal water systems. For Scenarios A2 and C2, the average monthly water bill for the typical residential customer will still be in the middle third of all municipal water systems.

Figure 4A – Comparison of Average Monthly Residential Water Bill

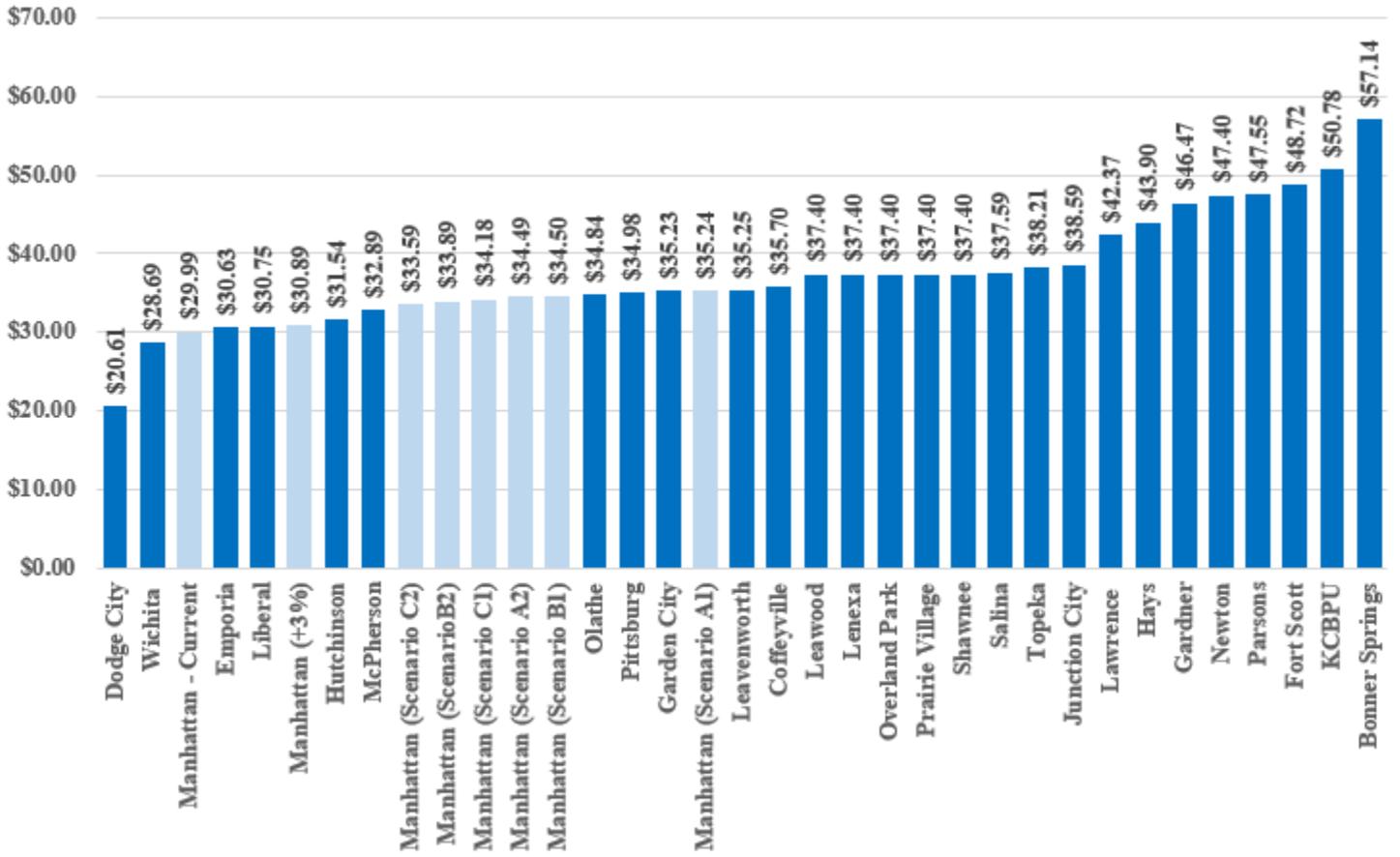
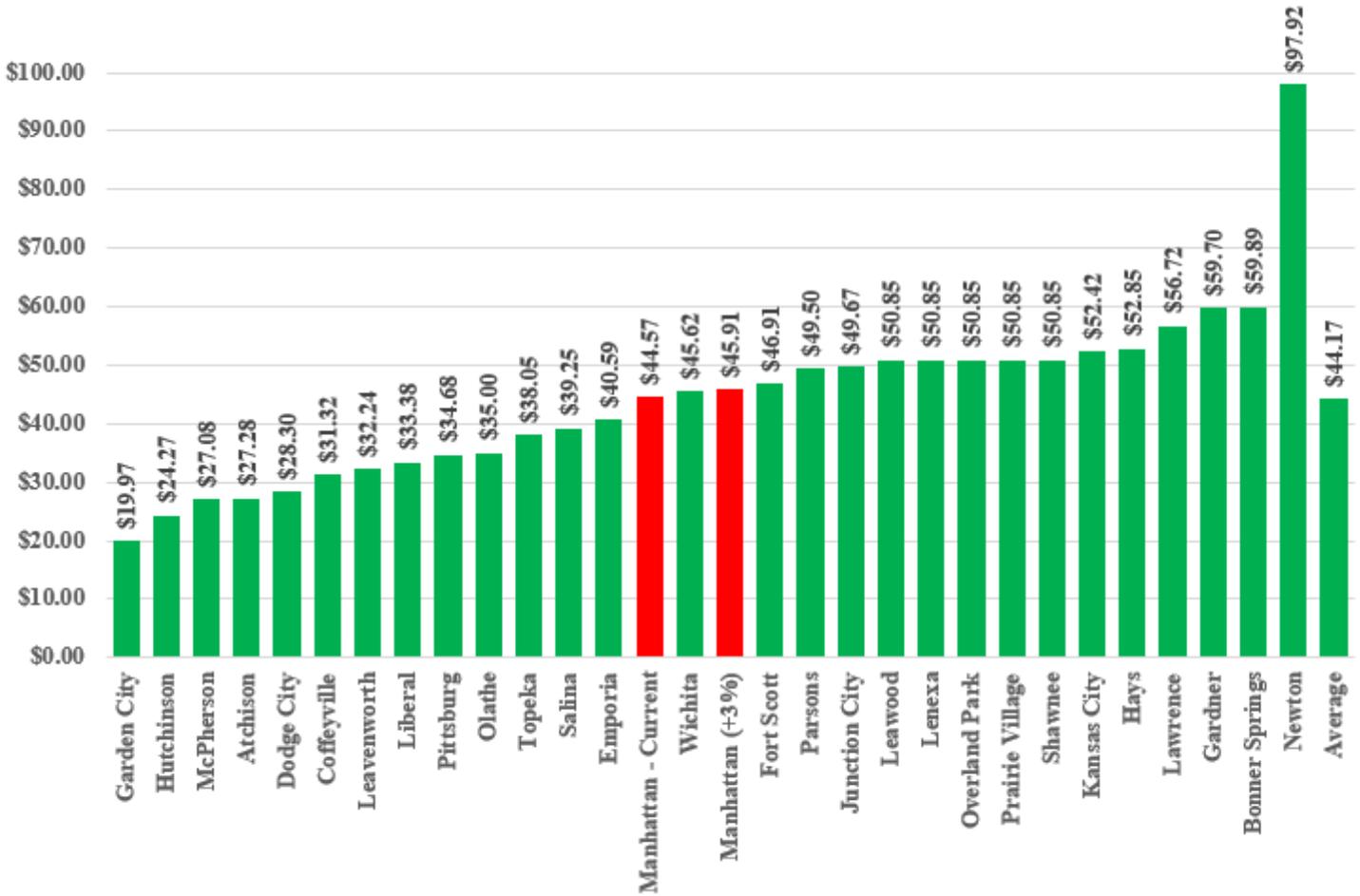


Figure 4B – Comparison of Average Monthly Residential Sewer Bill



**2022 Budget**

There have been no significant changes or increases proposed for the 2022 operations and maintenance budgets for the Water and Wastewater Fund. Public Works Administration has included requests for the following two (2) new personnel additions:

*Wastewater Treatment Plant (WWTP) Maintenance Worker:* There are currently two WWTP Biosolids/Lift Station Technicians within the WWTP organizational chart. One is focused primarily on lift station maintenance, and the other is primarily focused on the biosolids program. The Biosolids Technician currently spends approximately 9-10 months of the year focused on maintaining the biosolids farm area grounds and equipment, prepping the farm/equipment for two application seasons, and assisting the Environmental Compliance Manager with the annual Biosolids Report. The Lift Station Technician supervises the Biosolids Technician and spends 100% of his daily tasks on lift station maintenance. Maintaining lift stations requires at least two staff members for 50% of the tasks, both physically and for safety. Traditionally, the Biosolids Technician has been relied upon to assist with lift station maintenance; however, current biosolids program responsibilities prevent this position from providing the necessary level of assistance to lift

station maintenance. To conduct all necessary lift station maintenance, WWTP maintenance staff must be pulled from their required duties. Therefore, additional dedicated lift station maintenance staff will need to be added. This new position will have an estimated annual budget impact to the Wastewater Fund of under \$50,000.

*Water/Wastewater Engineer:* There are currently no engineers within the Public Works Department dedicated to the design, management, and general oversight of water and sanitary sewer utility capital improvement and maintenance projects. Oversight of nearly all water and sanitary sewer projects is done by the Assistant Director of Public Works, including all projects at the Water and Wastewater Treatment Plants. To ensure the most efficient completion of projects, and so the Assistant Director can focus on higher-level administrative duties, these project tasks need to be moved to a dedicated engineering position. Based on the quantity of large water and wastewater capital improvement projects in the coming years, it is anticipated that additional staff will likely be needed. This new position will have an estimated annual budget impact to the Water and Wastewater Funds of approximately \$100,000, shared equally by each fund.

**Conclusion:**

For the Wastewater Fund, City staff recommends no deviation from the planned 3% rate increases in 2022.

For the Water Fund, it is further recommended that the City Commission strongly consider a corrective rate adjustment in 2022. At a minimum, to ensure the Water Fund projected beginning fund balance does not continue trending downward in the coming years, the corrective rate adjustment should be set to generate at least an additional \$1.0 million in revenue starting in 2022. City staff is not recommending any ‘phasing in’ of these rate changes.

Public Works Administration’s goal is to ensure that both the Water and Wastewater Funds maintain fully funded budgets with reserve levels that meet recommended industry practices. This goal should be obtainable by appropriate rate setting and revenue generation without needing to reduce staffing and essential services or deferring critical capital improvement and maintenance projects. With that goal in mind, Public Works staff fully supports any corrective rate changes be set to generate an additional \$1.4 million in revenue starting in 2022. Any recommendation to pursue this scenario would be made with the understanding that if revenues within the Water Fund appear to be exceeding this goal, future rate increases would be reduced (i.e., less than the forecasted 3% annually) or avoided to reduce the burden on customers.

## **FINANCING**

For 2022, an overall increase of rates and charges for the Water and Wastewater Funds is currently forecasted to be 3%. City staff is currently requesting rates and charges for the Wastewater Fund match the forecast and that the City Commission consider a corrective rate change for the Water Fund, with the goal of generating a specific amount of additional revenues starting in 2022, with several scenario alternates having been provided by staff for discussion. City staff will make final recommendations to modify water and sewer rates and charges at a later date, prior to the end of the current calendar year.

## **ALTERNATIVE**

Since this is a discussion item, no alternatives have been provided.

## **RECOMMENDATION**

City Administration recommends the Commission provide feedback regarding the recommended fee increases. City staff will make final recommendations for revisions to applicable sections of Chapter 32 of the Code of Ordinances to modify water and sewer rates and charges at a later date, before the end of the current calendar year when there will be better data available on revenues and expenses.

## **POSSIBLE MOTION**

Since this is a discussion item, no alternatives have been provided.

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