



Date:	July 18, 2023
Prepared By:	Stephen Larson, Finance Director
Subject:	FY2024 Proposed Utility Rate Changes

In 2022, the City of Smithville contracted with Raftelis Financial Consultants to create a utility rate study. That rate study outlined projected rate adjustments over the next five years.

Staff are proposing a 15% increase in both the monthly fixed water fee and the monthly water volume rate (charged per 1,000 gallons of water used) and a 15% increase in the monthly fixed wastewater fee, and the monthly wastewater volume rate (charged per 1,000 gallons of wastewater used).

Capital projects are the primary driver of the proposed rate adjustments, but there are other needs that influence utility rates. There are several requested items for the FY2024 proposed budget in the CWWS Fund, which includes:

- **Wastewater Treatment Plant Operator:** With staffing for the Wastewater Treatment Plant has not been increased since 2004, the Utilities Department is requesting the addition of a Wastewater Treatment Plant Operator. This position would work towards improving lift station maintenance, sewer camera/videoing, hydrant/valve exercising, gathering GIS location data, and fire hydrant replacement. As the City has grown, daily wastewater workload has increased, which calls for an additional FTE. This position is estimated to cost \$62,000 annually in salary and benefits.
- **Sewer Jetter Machine:** The Utilities Department is requesting a new setter jetter to clean clogged sewer lines, perform preventative maintenance, and clean up streets after water breaks occur. The current jetter is over 20 years old and has 1,100 hours of run time and has required four pump rebuilds. If the jetter is not functioning properly, the City must hire a company to clean the sewer lines (which typically costs about \$1,000 each time to clean a line). The jetter was identified for replacement in the City's long-term equipment replacement plan. The sewer jetter machine is expected to cost \$200,000 to acquire.
- **Field Gymmy Tires:** During the development of the FY2024 proposed budget, Utilities staff evaluated the lifespan of the City's sludge applicator, which was determined to be 40 years old. Right now, the sludge applicator is about 20

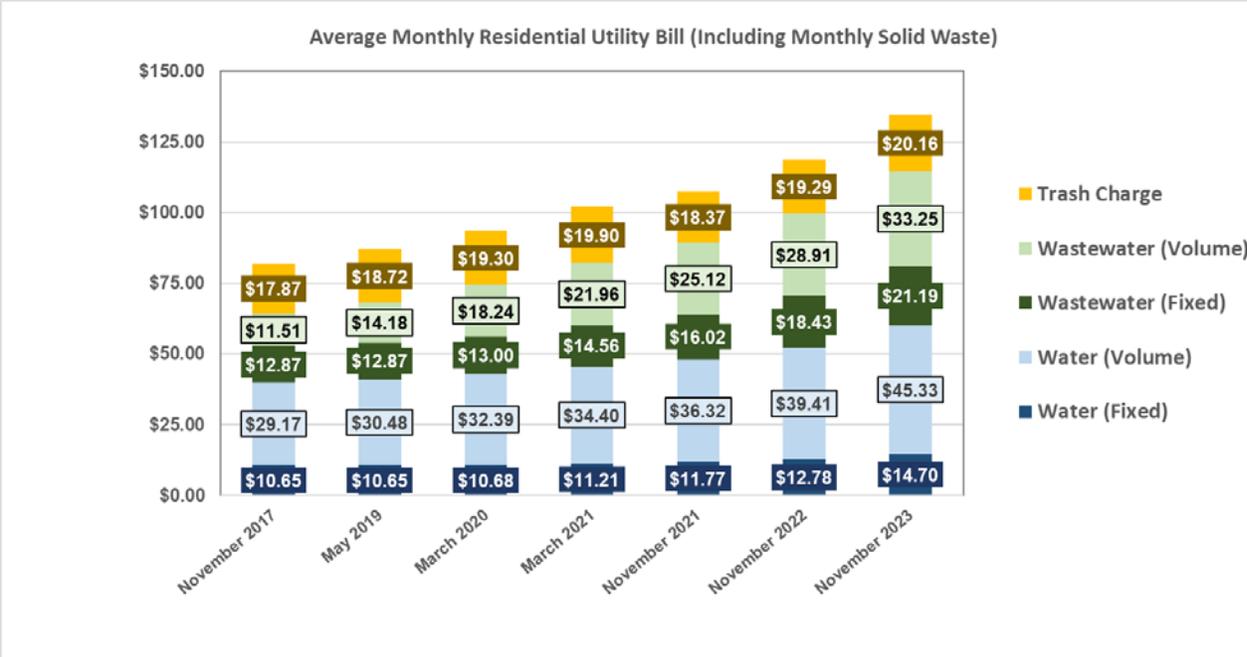
years old, so the applicator has half its life remaining. However, the applicator does need routine maintenance which would include the replacement of the applicator's four tires and replacement/rebuilding of some hydraulic cylinders. This is estimated to cost \$10,000 and would be a one-time purchase.

- **Lab Equipment:** Staff from the Water Treatment Plant requesting funds to purchase a Laboratory Laser Turbidimeter for \$5,200. The current turbidimeter was purchased in 2011 and replacement parts for the machine are now obsolete. In addition to this request, utilities staff are also requesting a backup titrator for \$6,300. The utilities department is required by the State of Missouri to test for chlorine dioxide and chlorite daily and the department does not have a reliable backup instrument if the current titrator fails. These requests total \$11,500.
- **Water Treatment Facility Lighting Replacement:** In 2023, a portion of the existing lighting at the WTP was updated to more energy efficient LED fixtures in the high service pump area, pipe gallery, and Morton building. Utilities staff would like to update the remaining lighting to reduce maintenance costs and provide energy savings. This cost estimate to complete the remaining lighting is \$8,000.
- **Water Treatment Plant HVAC System Replacement:** The current HVAC system at the WTP was installed in 1993 with the expansion of the treatment facility. The current HVAC system is undersized for the needs of the facility. Staff have been using portable heaters during the winter and portable air conditions in the summer months to help maintain comfortable temperatures in the laboratory area.

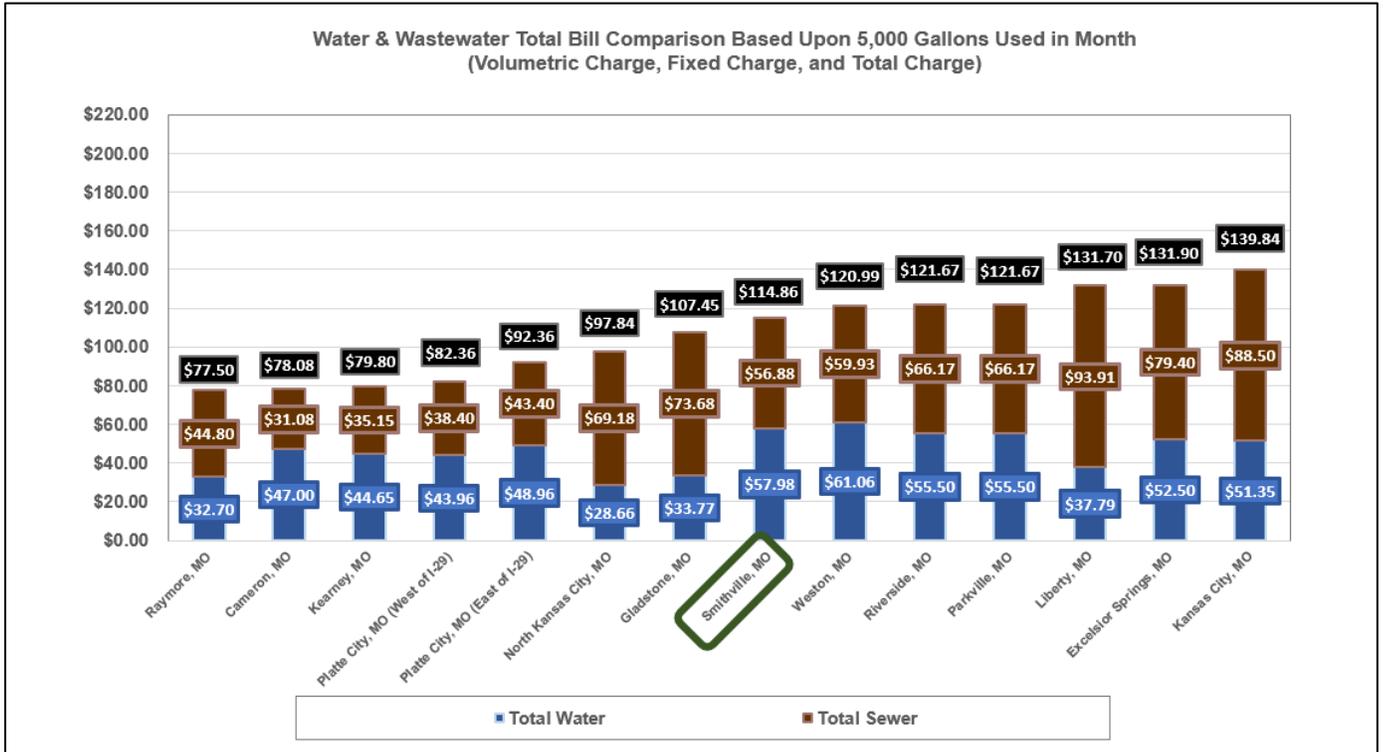
CWWS Fund cashflow is projected to reach a five-year low during FY2027 at \$740,000 in fund balance which would drop below the recommended operating reserve of 20%. However, this timeframe is still multiple years away and staff will continue to monitor the cashflow to ensure reserve levels are met. One factor to keep in mind is that capital project construction timelines are likely to be extended which further pushes out cashflow. The below chart has a large upward arc starting in 2029 because projects have not yet been slotted. Projects for 2029 will come into focus as staff develop the FY2025 – FY2029 CIP in the next budget cycle.



The monthly cost impact to the average utility bill is presented in the chart below. This is based upon *data gathered from the utility billing system* for the average residential monthly water usage and average residential monthly wastewater usage.



In addition, a jurisdiction comparison chart indicating water and wastewater charges for a 5,000-gallon user is presented below. 5,000 gallons is selected as a flat, round, “comparable “friendly number because some jurisdictions charge by cubic feet for water used, rather than gallons used.



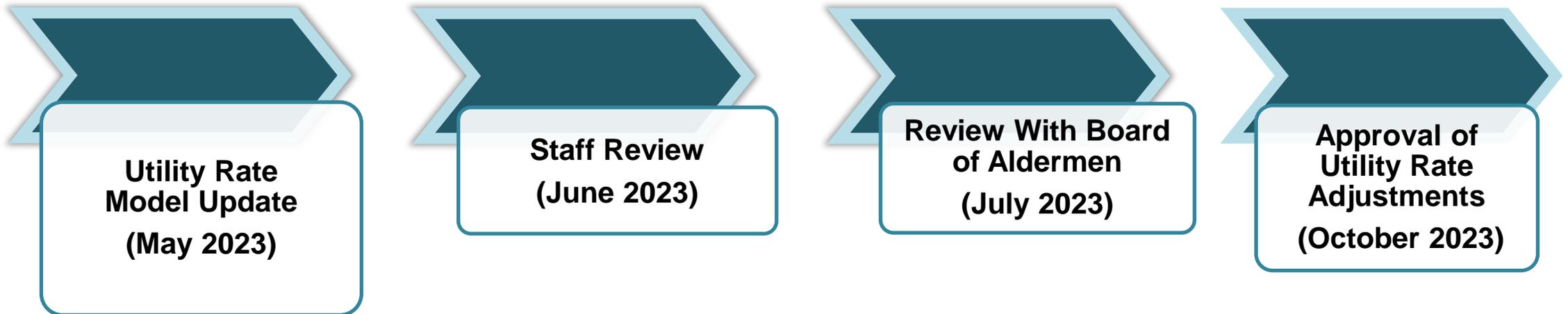
As seen in the chart, Smithville continues to be competitive with surrounding jurisdictions. Geographically close towns and cities, such as Weston, Riverside, and Parkville, as of now, have more expensive utility bills when considering usage of 5,000 gallons.



FY2024 Proposed Utility Rate Adjustments



Utility Rate Adjustments – Review Process



Developing the CWWWS Fund Budget

- Utility rate adjustments are ***necessary to fund the following items:***
 - ✓ Ongoing Water & Sewer “Pay-As-You-Go” (Cash Funded) Capital Improvement Projects Recommended from Water and Wastewater Master Plans
 - ✓ Future Water & Sewer Debt Financed Projects (WTP & WWTP Plant Expansion Projects) Recommended from Water and Wastewater Master Plans.
 - ✓ Increased Expenses for Operational Maintenance and Repairs for the CWWWS System
 - ✓ Additional Staffing Request (Additional FTE - Wastewater Treatment Plant Operator Position is Requested)
 - ✓ Equipment Upgrades (such as Sewer Jetter, Lab/Titrator Equipment) & CWWWS Building Improvements (WTP Lighting and New HVAC)



Utilities Operational Staff

Five Year CIP – CWWS Fund

Capital Improvement Project	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Interconnect Mains at 144th Street/169 Highway (Construction)	\$55,000	-	-	-	-
Highway 92 & Commercial Street Waterline (Engineering)	\$125,000	-	-	-	-
Owens Branch Gravity Line Phase #1, Line #1 (Construction)	\$2,200,000	-	-	-	-
144 th Street Lift Station (Construction)	\$1,700,000	-	-	-	-
West Bypass of the 144 th Street Lift Station (Construction)	\$2,200,000	-	-	-	-
Maple Lane & River Crossing 12" Waterline (50% of Construction)	\$700,000	-	-	-	-
Smith's Fork Force Main (Construction)	\$300,000	-	-	-	-
McDonalds/Central Bank Lift Station (Engineering)	\$100,000	-	-	-	-
Smith's Fork Park Waterline (Construction)	\$170,000	-	-	-	-
Headworks Bar Screen (Construction)	\$325,000	-	-	-	-
Stonebridge Lift Station (Engineering)	\$250,000	-	-	-	-
Stonebridge Lift Station (Construction)	\$500,000	-	-	-	-
Grand Total (Net Cost)	\$8,625,000	See Next Page			

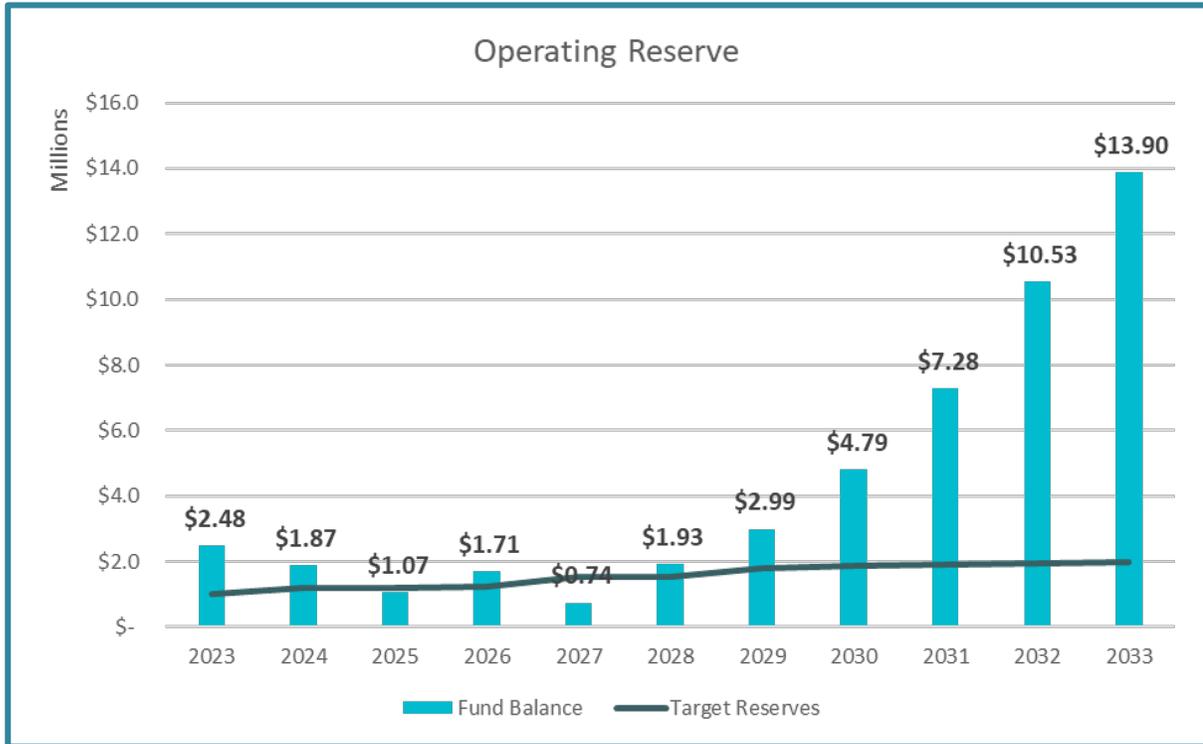
**Projects with a GREEN background are new to the 5 Year CWWS CIP*

Five Year CIP – CWWS Fund (Continued)

Capital Improvement Project	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
McDonalds/Central Bank Lift Station (Construction)	-	\$500,000	-	-	-
Highway 92 & Commercial Street Waterline (Construction)	-	\$300,000	-	-	-
Owens Branch Gravity Line Phase #1, Line #2 (Engineering)	-	\$600,000	-	-	-
Owens Branch Gravity Line Phase #1, Line #2 (Construction)	-	-	\$2,500,000	-	-
Water Plant Expansion (Engineering)	-	-	\$2,100,000	-	-
Wastewater Treatment Plan Expansion (Construction)	-	-	\$3,000,000	\$3,000,000	-
<i>Future Water and Wastewater Project Funding</i>	-	-	-	\$2,000,000	-
Water Plant Expansion, Phase I (Construction)	-	-	-	-	\$7,500,000
<i>Future Water and Wastewater Project Funding</i>	-	-	-	-	\$2,000,000
Grand Total (Net Cost)	-	\$1,400,000	\$7,600,000	\$5,000,000	\$9,500,000

*Projects with a **GREEN** background are new to the 5 Year CWWS CIP

Long Term CWWS Cash Flow



- Cashflow chart, which is sourced from the utility rate study, reaches a *five-year low* at \$740,000 in FY2027, which is just slightly below the CWWS Fund reserve target of 20%.
- Model assumes ongoing rate adjustments for water and wastewater rates each year.
- Large upward arc appears in 2029 and continues onto 2033 because capital projects are not yet slotted into the model for this time period.

Proposed Changes – Water Fixed Rates

Water Rates	FY2023 (Current)	FY2024 (Proposed)
Monthly Water Fixed Charge (3/4" and 1" Residential Meter)	\$12.78 / Month	\$14.70 / Month
Senior Monthly Water Fixed Charge (3/4" and 1" Residential Meter)	\$11.77 / Month	\$12.50 / Month*

15% Proposed Increase on the Monthly Water Fixed Charge.

***Senior Rate retains the 15% discount from the regular rate.**

Proposed Changes – Water Volume Rates

Water Rates	FY2023 (Current)	FY2024 (Proposed)
Monthly Water Volume Charge	\$9.04 Per 1,000 Gallons Used	\$10.40 Per 1,000 Gallons Used
Wholesale Water Rate	\$5.40 Per 1,000 Gallons Used	\$6.21 Per 1,000 Gallons Used

15% Proposed Increase on the Monthly Water Volume Charge (Including Wholesale Rate at Which Water is Sold to PWSD #8)

Proposed Changes - Wastewater Fixed Rates

Wastewater Rate	FY2023 (Current)	FY2024 (Proposed)
Monthly Wastewater Fixed Charge (3/4" and 1" Residential Meter)	\$18.43 / Month	\$21.19 / Month
Senior Monthly Wastewater Fixed Charge (3/4" and 1" Residential Meter)	\$16.02 / Month	\$18.01 / Month*

15% Proposed Increase on the Monthly Wastewater Fixed Charge

**Senior Rate retains the 15% discount from the regular rate.*

Proposed Changes - Wastewater Volume Rates

Wastewater Rate	FY2023 (Current)	FY2024 (Proposed)
Monthly Wastewater Volume Charge	\$7.69 Per 1,000 Gallons Used	\$8.84 Per 1,000 Gallons Used

15% Proposed Increase on the Monthly Wastewater Volume Charge

Proposed Changes - Wastewater Fixed Rates

Wastewater Rate	FY2023 (Current)	FY2024 (Proposed)
“Sewer Only” Customers Flat Monthly Rate (Outside City Limits)	\$64.00 / Month	\$81.68 / Month**

***Flat Rate May Only be Changed By Ordinance (Section 705.040 of the City Code of Ordinances). This fee is charged for 64 utility accounts. \$81.68 is 1.5 times the average monthly wastewater bill in the City.*

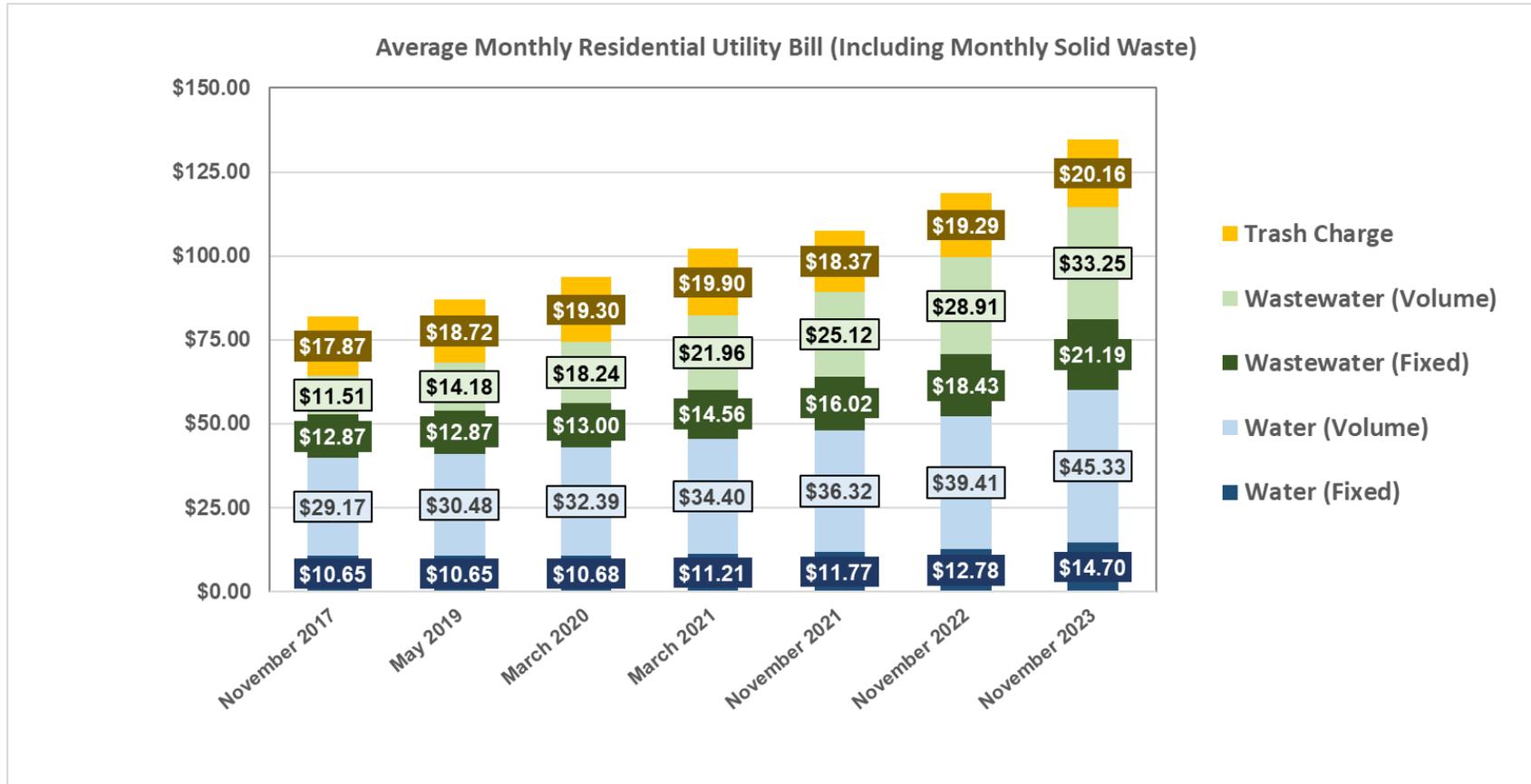
Proposed Changes - Sanitation Fees

Monthly Trash Charge	FY2023 (Current)	FY2024 (Proposed)
Monthly Trash Charge	\$19.29 / Month	\$20.16 / Month
Senior Discount	\$16.40 / Month	\$16.40 / Month*

4.5% Proposed Increase on the Monthly Trash Charge

**No Proposed Increase on Senior Discount Rate as Result of Negotiations with GFL Sanitation*

Average Monthly Utility Bill



November 2017
\$82.06

May 2019
\$86.89

March 2020
\$93.61

March 2021
\$102.03

November 2021
\$107.60

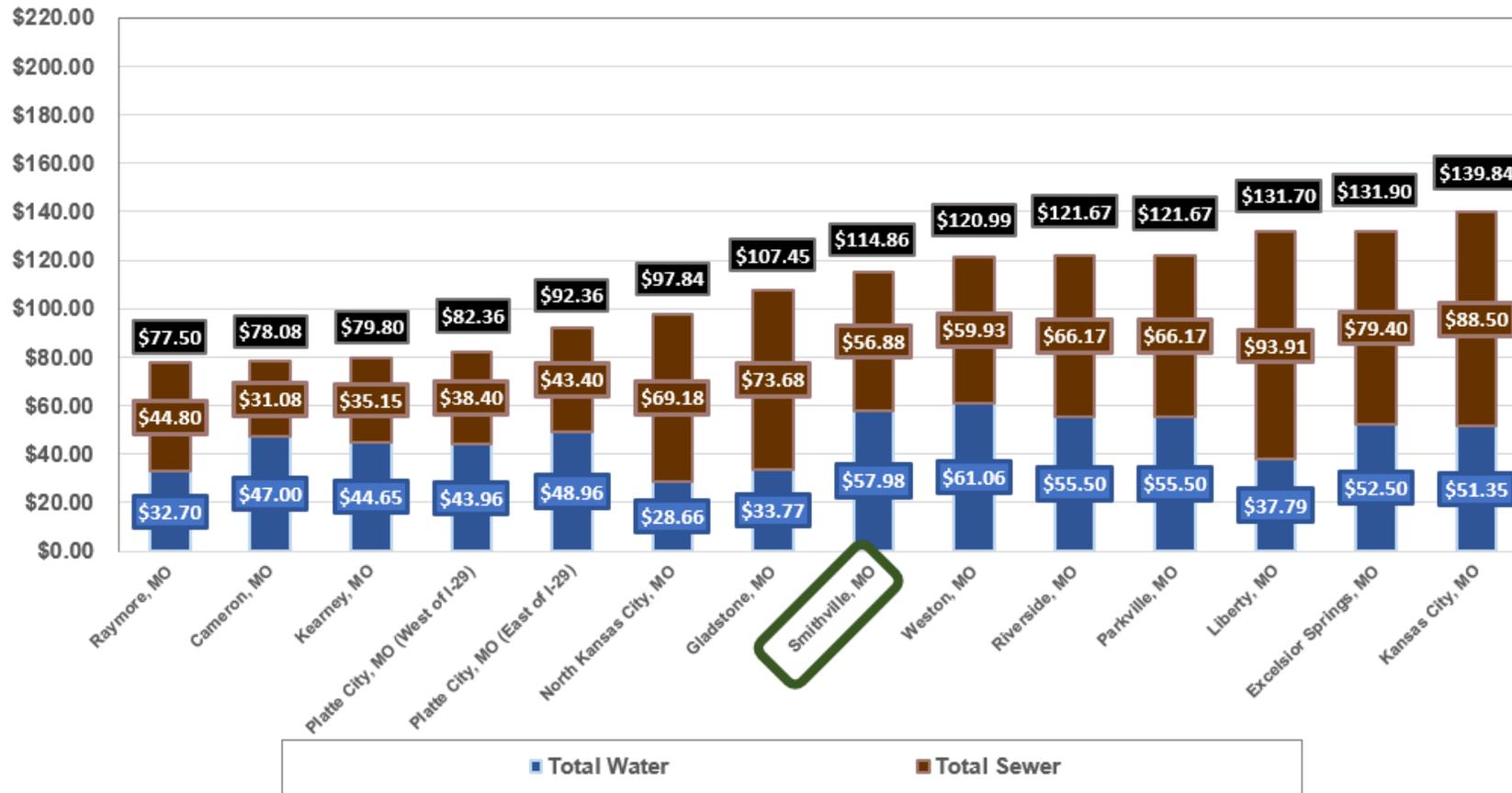
November 2022
\$118.83

November 2023
(Proposed)
\$134.63

Water Usage Assumption: **4,360** Gallons. Wastewater Usage Assumption: **3,760** Gallons.

City Comparison – Utility Bills

Water & Wastewater Total Bill Comparison Based Upon 5,000 Gallons Used in Month
(Volumetric Charge, Fixed Charge, and Total Charge)



5,000 Gallons Monthly Usage is the Assumption Used in Chart

FY2024 Budget Process Schedule

- FY2024 Operating Budget and 5 Year CIP Review: 1st Discussion (**August 15**)
- FY2024 Operating Budget and 5 Year CIP Review: 2nd Discussion - If Needed (**September 5**)
- Public Hearing for Sewer Rates as Required by Missouri State Statute (**October 3**)
- Adopt Water & Wastewater Utility Rates by Board Resolution (**October 17**)
- Adopt the FY2024 Operating and Capital Budget on 2nd Reading (**October 17**)