



# City of Cambridge

## Executive Department

**YI-AN HUANG**  
City Manager

March 20, 2023

To the Honorable, the City Council:

The establishment of the FY24 Water/Sewer rates comes as consumption is beginning to show evidence of a return to pre-COVID levels, which directly impact water and sewer revenues. This has allowed for a modest increase in rates for FY24.

In March of each year, the City Council establishes water and sewer rates, which determine water and sewer revenues for the next fiscal year. Because of the timing requirements, water and sewer rates are set prior to the adoption of both the Cambridge budget and Massachusetts Water Resources Authority (MWRA) budget; therefore, revenue needs are based upon estimated expenditures. Generally, water and sewer rates have been established so that revenues generated by them, when combined with other related revenue sources, cover projected annual costs.

Projected operating and capital expenditures reflect important investments in water quality, stormwater treatment, and infrastructure. In 2019, the Cambridge Water Department initiated the development of a “PFAS reduction plan.” With approval from the Massachusetts Department of Environmental Protection (MassDEP), a bench scale pilot study was developed to determine the best filter media to reduce Per- and Polyfluoroalkyl compound (PFAS) levels. Results indicated that granular activated carbon (GAC) to be the best method to significantly reduce Cambridge’s PFAS concentrations.

In FY23, \$2.4 million from the Water Fund balance was used to purchase water from the Massachusetts Water Resources Authority (MWRA) as a precautionary measure due to concerns about above-average PFAS levels in Cambridge water and supply chain delays for receiving the city’s new Granular Activated Carbon (GAC) filter media. In addition, \$700,000 from the Water Fund Balance was also appropriated to purchase in house PFAS testing equipment. In February 2023 the Water Department completed the replacement of the filter media in all 6 filters.

The FY24 Sewer Budget reflects savings resulting from reduced bond issuance and receiving a low interest rate (3.06%) on sewer bonds sold earlier this month. It should be noted that the Sewer Budget is comprised mostly of fixed costs such as debt service and the MWRA assessment, which totals 85% of the total Sewer Budget.

The Water/Sewer bills that will be issued in July will be for the usage period April-June 2023 and will reflect the new sewer rate. The water rate reflects a moderate increase from FY23.



## **RECOMMENDATIONS**

The City administration and City Council continue to recognize the importance of minimizing increases in water and sewer rates. I recommend that the City Council approve a 6.6% increase in the water consumption block rate and an 5.1% increase in the sewer use block rate, resulting in a 5.43% increase in the combined rate for the period beginning April 1, 2023, and ending March 31, 2024. The water rate increase has been minimal for over a decade in which the water rate has increased by a very small percentage or not at all. In last year's recommendation, the projected FY24 rate increases for water, sewer, and combined were 3.78%, 7.0%, and 6.33%, respectively, based on March 2022 consumption rates and projected budgets.

## **WATER**

Two major factors determine the rate necessary to generate enough revenues: water consumption and the budget. The FY24 Water Operating Budget reflects an increase from the FY23 Budget primarily due to costs related to salaries and benefits, chemical supply costs, as well as capital budget increases.

The FY24 capital allocation is \$3,205,000 using pay-as-you-go capital funding based on current revenues. FY24 capital projects consist of significant improvements to our water system including water mains; Fresh Pond Master Plan implementation and reservation projects; reservoir gaging station maintenance; upcountry watershed improvements; and watershed consulting services.

Water and sewer revenues are generally linked to water consumption, with sewer costs comprising approximately 77.7% of total water and sewer expenditures. Year to date (YTD) water consumption is 4.1% higher in FY23 compared to FY22.

Table 4 on page 5 indicates the details of Water Fund projected revenues and expenditures for FY23-28. Table 7 on page 8 shows actual Water Fund balances for FY18-22 and the projected balance for FY23.

## **SEWER**

The FY24 Sewer Budget reflects a \$4,893,992 increase from the FY23 Projected Budget. This includes the MWRA assessment, debt service payments, capital, and the sewer component of the Public Works budget. Debt service on sewer bonds and the MWRA assessment account for 85% of the total FY24 Sewer Budget.

The preliminary FY24 MWRA assessment is scheduled to increase by \$2,022,663 or 7.1% from the final FY23 assessment. The MWRA rate increase projected for the City is subject to change based on the MWRA budget, which is adopted later in spring 2023. These changes have typically been minor in past years. Unlike the water budget, sewer revenues are credited to the general fund and not to a separate proprietary fund that can be drawn upon if the need arises.

Included in the sewer budget are debt service costs attributable to the \$34,140,000 general obligation bonds (net of premium) issued in March 2023, used to fund sewer projects in Alewife, Central Square, the Port, and River Street as well as capital repairs.

The FY24 capital allotment of \$3,000,000 in sewer revenues will continue to finance the remedial reconstruction program.

The City Council has authorized significant investments in the water and sewer systems to ensure Cambridge continues to benefit from a healthy and environmentally sound water and sewer system. In addition to the projects currently under way, the City's five-year capital plan cost (FY24-28) calls for an additional investment of approximately \$200,081,336 (primarily sewer, \$177,656,336) in the water and sewer systems. The City carefully monitors the issuance of debt to fund authorized sewer projects and takes advantage of State MWRA interest free loans and grants to ensure that debt service cost increases, which impact the sewer rate, remain moderate.

The FY24-28 capital plan includes other projects that may be eligible for subsidized loans from the state. As in past years, it is not certain that these projects will receive state subsidies and the debt service on these projects has been calculated based on funding through general obligation bonds. If state subsidies become available to the City, they will be used to lower the sewer rate in future years. Table 5 on page 6 shows the detail of sewer-related expenditures and revenues for FY23-28.

### **COMBINED WATER & SEWER**

The table below reflects the projected combined water and sewer metered revenue requirements needed to cover water and sewer expenditures.

**TABLE 1**

	<b>FY23 Projected</b>	<b>FY24 Budget</b>	<b>% Change</b>
Water	\$17,200,000	\$18,335,733	6.60%
Sewer	\$63,014,349	\$66,237,256	5.11%
Combined Water / Sewer Revenue	\$80,214,349	\$84,572,989	5.43%

FY24 budgeted revenues are based on FY23 projected collections and reflect our practice of conservative revenue projections.

The table below reflects the FY23 actual and FY24 proposed water and sewer rates.

**TABLE 2**

	<b>Annual Consumption*</b>	<b>FY23 Water Rate</b>	<b>FY24 Proposed Water Rate</b>	<b>FY23 Sewer Rate</b>	<b>FY24 Proposed Sewer Rate</b>
<b>Block 1</b>	0 - 40 CcF	\$3.11	\$3.32	\$14.59	\$15.34
<b>Block 2</b>	41 - 400 CcF	\$3.33	\$3.55	\$15.42	\$16.21
<b>Block 3</b>	401 - 2,000 CcF	\$3.54	\$3.77	\$16.57	\$17.42
<b>Block 4</b>	2,001 - 10,000 CcF	\$3.76	\$4.01	\$17.84	\$18.75
<b>Block 5</b>	Over 10,000 CcF	\$4.08	\$4.35	\$18.96	\$19.93

\*All rates are per CcF. CcF is an abbreviation of 100 cubic feet. One CcF is approximately 750 gallons.

The table below reflects the average change to combined water and sewer residential bills.

**TABLE 3**

<b>Residential Type</b>	<b>FY23 Average</b>	<b>FY24 Projected</b>	<b>Annual Variance</b>	<b>% Change</b>
Single Family	\$1,066	\$1,124	\$58	5.43%
Two Family	\$1,415	\$1,492	\$77	5.43%
Three Family	\$2,085	\$2,198	\$113	5.43%

**SENIOR DISCOUNT PROGRAM**

There are currently 2,642 homeowners who qualify for the age 65+ water/sewer 15% discount (not to exceed \$90 annually), which is not tied to the homeowner's income.

There are also 54 elderly homeowners who qualify for an income-based discount of 30% (not to exceed \$180 annually). To qualify for the 30% discount, a homeowner must be 65 or older and must have been granted the Clause 41C elderly real estate exemption. For FY23, the income guidelines are as follows: single, income of \$30,228 with assets of \$60,453 or less; married, income of \$45,343 with assets of \$83,123 or less.

**FUTURE OUTLOOK FOR RATES**

Overall, the City has been extremely successful over the past five years in producing moderate water and sewer rate increases. The average annual increases for the FY20-24 period are as follows: water, 1.9%; sewer, 6.9%; and combined, 5.7%. The average annual increases for the FY15-24 period are as follows: water, 1.0%; sewer, 6.5%; and combined, 5.1%.

Tables 4, 5, 6 and 7 contain five-year forecasts for water, sewer, and combined revenue estimates as well as Water Fund balances for the past five years and the projected FY23 Fund Balance. The City will continue to review appropriate use of Fund Balance for a specific project, or to lower the rate.

As can be seen in Table 6, the annual combined water/sewer rate is projected to increase by an average of approximately 6.2% for FY24-28. The projected increase is the result of the City's commitment to bonding sewer infrastructure improvement projects and increases in the MWRA assessment. If the increases in MWRA assessment are moderate, the rate increases that are shown will be lowered. Conversely, if consumption decreases, there will be a negative effect on water and sewer revenues.

Our water and sewer program is structured to produce reasonable rate increases in the future. The goal of the City Administration and City Council is to minimize the effects of water and sewer rate increases on residents as much as possible, while continuing to provide major investment in our infrastructure.

Very truly yours,



Yi-An Huang  
City Manager

Attachment(s)