CITY OF FRAMINGHAM

ENTERPRISE FUND REPORT



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INTRODUCTION

Each year in November, the City of Framingham submits its fiscal year budget and tax levy and rate information to the Department of Local Services (DLS) for revenue/budget approval and certification of the City's upcoming tax rate. In December, DLS notified us that the tax rate certification would be delayed until we balanced the estimated shortfall in the FY21 enterprise fund revenue. The original plan to deal with the water and sewer revenue shortfall was to amortize it over the subsequent three years, which is allowed. DLS agreed that we could amortize the FY20 revenue shortfall but determined the FY21 portion must be closed in the current year and not carried forward. DLS representatives suggested to appropriate city funds to close the projected \$2.5M gap. DLS mentioned the City's free cash balance of \$8 million as being available to appropriate. If we do not close the revenue shortfall with either the solution recommended by the Administration or an amended solution, the revenue shortfall will increase the tax levy by \$2.5 million – this would increase the average tax bill by \$84. At the tax rate hearing, we discussed the average tax bill decrease of \$13; this potential increase in the levy would change that estimate to a \$70 increase in the average residential tax bill.

Initially, when the Administration presented this matter to the City Council, the issue was tabled, and a report was required to be submitted to the Finance Subcommittee. This report intends to:

- Close the revenue shortfall
- Allocate back the Enterprise Fund indirect charge (overhead)
- Forecast a rate increase to complete the above two items
- Provide background information and alternative solutions

EXECUTIVE SUMMARY

Consumer demand for service fluctuates year to year depending on the season and weather patterns. For example, dry spring and summer seasons can impact the demand in a positive trend, as does a changing commercial consumption environment. Revenue swings affect the Enterprise Fund's Retained Earning balance; growing when billings exceed projections and declining when billings fall short of expectations. This pattern has existed for years. While other circumstances affect the Retained Earnings calculation, such as operating expense turn back of unexpended funds, revenue swings are the most important factor.

The calendar year of 2019 saw dramatic reductions to commercial consumption in Tiers 4 and 5 for both water and sewer services, exaggerated by a rainy weather season that lowered irrigation revenue. January through March 2020 billings showed signs of improvements in most billing tiers (all but Tier 1). A multi-year summary of water and sewer tier consumption is included in this package. Pandemic impacts reversed those gains. Included in this package is a schedule comparing 2019 to 2020 usage of the City's top users.

There are insufficient funds in the Enterprise Retained Earnings to close a projected \$2.5M revenue shortfall for FY21.

We have two challenges to address:

- Resolving the immediate \$2.5M revenue issue so DLS can certify our tax rate;
- Creating a sustainable billing methodology that will allow the City to remain fiscally strong during periods of economic instability.

Recommended actions include:

- 12% rate increase effective July 1, 2021 (first rate increase since July 2019). The estimated impact on the average residential quarterly water and sewer bill is \$25;
- Multi-year adjustment to Indirect Expenses
- Evaluation of alternative billing models with implementation targeted for July 1, 2022.
 We have included a summary of billing structures used by other Massachusetts Water Resources Authority (MWRA) communities.
- Review of eligibility criteria for the City's Water and Sewer Discount Program

BACKGROUND WATER & SEWER ENTERPRISE FUND

The Water and Sewer Enterprise Fund functions as a unique set of accounts with the majority of revenue generated by user fees (water and sewer bills based on the user's water consumption). The costs to purchase water from the MWRA, dispose of wastewater to the MWRA, operate water & sewer services, and maintain our infrastructure are paid from this fund.

ENTERPRISE FUND HISTORICAL BUDGET SUMMARY

| Expense Category | <u>FY17</u> | <u>FY18</u> | <u>FY19</u> | <u>FY20</u> | <u>FY21</u> |
|---|---------------|---------------|---------------|---------------|---------------|
| Operating Costs | \$ 10,032,424 | \$ 10,156,147 | \$ 10,292,599 | \$ 10,320,316 | \$ 9,510,164 |
| Debt Service | \$ 14,894,047 | \$ 16,281,677 | \$ 18,073,833 | \$ 19,478,169 | \$ 20,612,085 |
| MWRA Assessment | \$ 21,093,821 | \$ 21,160,480 | \$ 21,812,652 | \$ 22,123,854 | \$ 22,043,794 |
| Indirect Costs | \$ 3,071,894 | \$ 3,194,770 | \$ 3,322,561 | \$ 3,422,238 | \$ - |
| Total Budget | \$ 49,092,186 | \$ 50,793,074 | \$ 53,501,645 | \$ 55,344,577 | \$ 52,166,043 |
| Operating Expenses as a % of the total budget | 20% | 20% | 19% | 19% | 18% |
| Debt Service as a % of the total budget | 30% | 32% | 34% | 35% | 40% |
| MWRA as a & of the total budget | 43% | 42% | 41% | 40% | 42% |
| Indirect Costs as a % of the total budget | 6% | 6% | 6% | 6% | 0% |

EXPENSE COMPONENTS

MWRA

Forty-two percent (42%) of costs within the FY21 Enterprise Fund are paid to the MWRA to purchase its potable water for consumption and the conveyance and treatment of its wastewater. The annual MWRA water assessment is calculated based on Framingham's portion of MWRA's total water sales, as determined by actual metered water provided to Framingham the previous calendar year. The sewer assessment is a little more complicated and is based on a three-year rolling average of metered flow, contributing population, peak monthly wastewater flow, and wastewater chemical and biological characteristics.

The City has the ability to mitigate a portion of these increases by supporting an annual program that upgrades its water distribution system to minimize water loss (and its associated revenue) by reducing water main breaks and leaks and by upgrading its wastewater collection system to eliminate sources of extraneous flows from groundwater and stormwater. However, the MWRA wholesale rate setting has a zero-sum outcome, meaning that each member communities gain or loss in water or wastewater volumes is balanced by the losses and gains of other communities. For example, Framingham has reduced its water consumption from the MWRA over the past few years, but so have other communities. Therefore, our rate has not directly reflected the reduction in water use.

DEBT SERVICE

The City pays for capital improvements made to the water and wastewater system by borrowing funds with payment schedules dependent on the type of investment (equipment purchases 8 years, design of projects 5 years, and construction activities funded over 20 years). Budgeted debt service is the total of existing debt and anticipated debt on previously approved but not yet financed projects. Many appropriations are drawn over time as project designs are developed, necessary easements are researched and obtained, projects are bid, and work advances to construction. The majority of construction projects typically span at least two construction seasons, and therefore, the financing spans multiple years. Debt Service represents 40% of the Enterprise Fund FY21 budget.

Last month the City issued bonds at very favorable rates, 1.38%. Plans to refinance 2009, 2010, and 2011 debt are expected to generate \$1.45 million in savings over the debt's remaining life (average six years).

OPERATING COSTS

In 2020, the City distributed an average of 5.78 million gallons per day (mgd) of potable water to Framingham's residents and businesses for an annual total of 2.11 billion gallons. In addition, through November 2020, an average of approximately 6.33 mgd of wastewater was collected from the residents and businesses of Framingham and conveyed to the MWRA for an annual total of 2.1 billion gallons. Representing 18% of FY21's Enterprise Fund Budget, operating costs include the personnel, equipment, services, and materials to provide for the daily operation, maintenance, and repair to the water distribution infrastructure that includes: 280 miles of

pipe, service connections, 2,000 hydrants, 4,800 gate valves, 22,000 meters, 4 pumping stations, 3 booster stations, and 7 above-ground water tanks having a storage capacity of nearly 9 million gallons, and the daily operation, maintenance, and repair to the wastewater collection system which consists of 226 miles of gravity mains, 18 miles of force mains, 43 pump stations, 6,600 manholes, and over 40 miles of cross country sewer-line easements.

The operations team addresses emergencies and performs preventative maintenance functions. Data points on their 2020 performance include:

- 49 water system failures
- 652 water service calls
- 238 sewer incidents requiring an immediate jet truck response
- 254 fire hydrant repairs
- 55 manhole repairs

INDIRECT COSTS

In addition to the employees who are dedicated to Enterprise Fund functions, other municipal staff support the Public Works Department's daily operation and are funded through indirect costs. Examples of these services include the Treasurer's Department that receives and processes all water and wastewater payments and the Human Resource Department, which facilitates hiring, benefits program administration, and employee relation needs. Historically, six percent (6%) of Enterprise Fund spending reimburses the General Fund for these functions.

The approved FY21 budget did not include an interfund transfer for Indirect Costs.

REVENUE SOURCES

In addition to invoicing customers for water & sewer consumption, two significant revenue sources exist within the Enterprise Fund: Ashland Trunk Line Fees and Inflow and Infiltration Fees.

ASHLAND TRUNK LINE REVENUE

An Intermunicipal Agreement was executed in 2007 with the Town of Ashland to transport wastewater through our system to the MWRA connection at Arthur Street. Framingham receives revenue from the Town of Ashland based on a formula included in the agreement. Essentially, Ashland contributes to the operating costs of Framingham's wastewater system based on the volume of Ashland's wastewater that is discharged to and conveyed by Framingham's system. This payment is approximately \$1.0M annually.

INFLOW & INFILTRATION FEES

Framingham also receives revenue to identify and eliminate sources of extraneous non-wastewater flows, known as Infiltration and Inflow, from groundwater and stormwater sources to the wastewater system. These fees are paid for by certain new development projects and or

renovations—a recent surge of large development projects generated sizable payments to the City.

USER FEES

Determination of water and sewer rates (user fees) considers all of the above revenue and expense categories. In its simplest form, revenue from water and sewer customers is calculated as follows:

Budgeted Spending less Other Revenue Sources equals Revenue Needed from Water and Sewer Rates

Despite the simple calculation, actual revenue forecasting is significantly more complex. Weather patterns (wet versus dry spring and summers) vary, and commercial and residential customers' demands fluctuate. Some manufacturing customers revamp their processing lines changing their typical usage patterns for a period of time. Businesses close, new development occurs, water conservation devices are installed, and these changes are difficult to predict.

The final quarter of FY20 and the outlook for FY21 are further impacted by significant consumption changes resulting from the pandemic. A majority of office environments continue to work remotely, restaurants are still experiencing capacity constraints, and dramatic changes in retail and hotel operations all present water consumption changes.

We have closely monitored our monthly billing data, particularly since the pandemic began: trying to gauge its impact on the bottom line. Adding to the complexity of this process are our quarterly billing cycles. See below for information on the schedule for billing most customers. (Large commercial customers are billed monthly.)

| Bill Date | Time Periods Billed | Bill Date | Time Periods Billed |
|---------------|--------------------------------|----------------|---------------------------------|
| January 15th | October, November, December | July 15th | April, May, June |
| February 15th | November, December, January | August 15th | May, June, July |
| March 15th | December, January, February | September 15th | June, July, August |
| April 15th | January, February, March | October 15th | July, August, September |
| May 15th | February, March, April | November 15th | August, September, October |
| June 15th | March, April, May | December 15th | September, October, November |

FY21 REVENUE FORECAST

Despite these complications, we have completed a forecast for FY21, estimating \$46.9M in water and sewer rate revenue. A copy of the forecast is included as an attachment to this package. This forecast falls \$2.3M short of the revenue needed to cover budgeted expenses.

The sudden and significant change in customer consumption patterns have highlighted a shortcoming of our current billing methodology: the allocation of rates between the tiers is too

heavily weighted towards tiers four and five: both on water and sewer. Billing additional units (Our billing unit of measure. One unit is 748 gallons) in tiers one and two does not offset the revenue lost by fewer units in tier four and five. A preliminary review of billing models used by other MWRA communities highlights diversity in billing strategies. We plan to investigate alternative billing frameworks.

The development of new residential housing in Framingham brings new customers and increased billing. Several large projects have come online, ramping up their occupancy and, therefore, their water and sewer needs. Alta-Union House (93% occupied), the Buckley (63% leased), and Modera (25% rented) will be large users of Framingham services.

Other smaller revenue sources are captured within the Miscellaneous Revenue category. These charges include backflow device testing, broken meter replacement, new connection fees, and others.

FY22 AND OUT YEAR FORECASTS

We will be preparing a recommended FY22 Operating Budget proposal over the coming weeks. Until the budget proposal is fully developed, we will rely on existing financial models to forecast rate growth. The Chief Financial Officer's Office and the Public Works Department have developed a long-term financial model that provides a detailed analysis of water and wastewater forecasted enterprise fund financial performance. This model incorporates all expense categories and all revenue streams. The goal of the model is to estimate the revenue to be generated from water and wastewater rates.

FY22 RATE FORECAST

| Expenses: | FY22 | | Less: Revenue Sources/Offsets | FY22 | |
|---|------|------------|------------------------------------|------|------------|
| MWRA | \$ | 23,008,479 | Additional Revenue-New Development | \$ | 122,182 |
| Debt Service | \$ | 20,834,815 | Miscellaneous Revenue Sources | \$ | 742,796 |
| Operating Expenses (incl Small Capital) | \$ | 9,753,764 | Inflow & Infiltration Fees | \$ | 306,060 |
| Deficit Carryforward FY20 | \$ | 500,000 | Fire Service Fees | \$ | 603,324 |
| Indirect Costs (2% increase annually) | \$ | 1,000,000 | Ashland Trunk Line Income | \$ | 984,462 |
| Total Expenses | \$ | 55,097,059 | Total Estimated Misc. Revenue | \$ | 2,758,824 |
| | | | Rate Revenue Required | \$ | 52,338,235 |

RATE FORECASTS

Eighty percent (80%) of anticipated spending in the FY22 forecast is 'fixed' (the city does not have the flexibility to make budget reductions in MWRA Assessments or Debt Service). However, the City does plan to refinance 2009, 2010, and 2011 existing debt to achieve cost

savings. Water and Wastewater Operating budgets were reduced by 8% in FY21: although we continue to look for efficiencies and cost-saving changes, we do not expect significant reductions in operating accounts.

As mentioned earlier, forecasted FY21 revenue is projected to be \$46.9M. The FY22 forecast (above) that begins the reinstatement of Indirect Costs: with \$1.0M included, requires \$52.3M in revenue: a 12% increase.

Indirect Costs is a line item in the budget the city can affect. We have shown below further rate increases needed for FY22 based on different Indirect Cost allocations:

| FY21 Forecasted Revenue | \$ 46,892,9 | | | | | |
|-------------------------|-------------|---------------------|----|--------------------------------|---------------------------|--|
| | | rect Cost cation | | ditional enue Needed Y22 | % Rate Growth Required | |
| | \$ | 3,422,238.00 | \$ | 7,867,540.87 | 17% | |
| | \$ | 2,500,000.00 | \$ | 6,945,302.87 | 15% | |
| | \$ | 1,000,000.00 | \$ | 5,445,302.87 | 12% | |

SUMMARY

EXPECTATIONS

- Gradual recovery of lost consumption
- Increased demand as development expands and occupancy of rental units increases

ACTIONS

- 12% rate increase effective 7/1/21 (1st rate increase since July 2019):
 - Estimated impact on the average quarterly water and wastewater bill: \$25
- Evaluate alternative billing models:
 - Implementation of a revised billing structure targeted for 7/1/22
- Multi-year adjustment to indirect expenses
- Consider revisions to the City's Water and Sewer Discount policy to expand the eligibility criteria

ALTERNATIVES

• \$84 impact to the average property tax bill if the deficit is added to the levy

ATTACHMENTS

- 1. Multi-year Summary of Water & Sewer Tier Consumption
- 2. Comparison of 2019 to 2020 Usage Large Accounts
- 3. Billing Structures of MWRA Communities
- 4. FY21 Revenue Forecast
- 5. Long-term Financial Forecast

Water Consumption Analysis by Tier

| Water Tier 1 | | | <u>Year</u> | | |
|--------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 80,822 | 81,475 | 82,336 | 81,098 | 80,795 |
| February | 70,442 | 70,441 | 70,559 | 70,240 | 70,045 |
| March | 73,373 | 72,680 | 72,368 | 73,910 | 72,663 |
| April | 79,009 | 79,141 | 79,895 | 83,688 | 79,765 |
| Мау | 69,913 | 68,903 | 69,217 | 69,043 | 70,022 |
| June | 74,742 | 74,575 | 88,292 | 87,690 | 81,532 |
| July | 84,097 | 82,781 | 83,958 | 82,036 | 85,431 |
| August | 73,108 | 72,010 | 72,832 | 72,060 | 73,381 |
| September | 75,308 | 74,811 | 73,985 | 75,165 | 76,654 |
| October | 83,270 | 82,889 | 82,805 | 82,847 | 84,803 |
| November | 71,473 | 71,603 | 71,485 | 71,113 | 73,171 |
| December | 74,207 | 86,325 | 87,455 | 87,572 | 80,854 |
| Grand Total | 909,764 | 917,634 | 935,187 | 936,462 | 929,116 |

| Water Tier 2 | | | <u>Year</u> | | |
|--------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 32,339 | 31,559 | 32,232 | 29,291 | 29,122 |
| February | 29,987 | 29,914 | 29,097 | 28,157 | 27,885 |
| March | 36,985 | 36,670 | 34,707 | 33,119 | 34,118 |
| April- | 29,002 | 29,043 | 28,365 | 25,005 | 28,596 |
| May | 27,717 | 26,322 | 25,883 | 25,833 | 29,383 |
| June | 41,149 | 39,152 | 38,371 | 37,950 | 41,367 |
| July | 44,087 | 36,043 | 38,619 | 33,106 | 47,966 |
| August | 39,827 | 34,914 | 37,404 | 34,412 | 44,292 |
| September | 45,554 | 41,830 | 41,890 | 41,045 | 46,478 |
| October | 43,308 | 38,363 | 37,220 | 37,503 | 46,118 |
| November | 34,723 | 33,420 | 31,667 | 31,971 | 37,588 |
| December | 39,683 | 38,137 | 38,592 | 37,416 | 38,976 |
| Grand Total | 444,361 | 415,367 | 414,047 | 394,808 | 451,889 |

City of Framingham

Water Consumption Analysis by Tier

| Water Tier 3 | | | <u>Year</u> | | |
|--------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 6,751 | 6,344 | 6,537 | 5,591 | 5,605 |
| February | 9,345 | 9,622 | 9,440 | 8,773 | 8,976 |
| March | 13,510 | 13,710 | 13,401 | 11,550 | 12,203 |
| April | 5,740 | 5,448 | 5,432 | 4,546 | 5,186 |
| Мау | 9,164 | 8,459 | 8,589 | 8,134 | 8,930 |
| June | 14,447 | 13,964 | 14,118 | 12,924 | 13,321 |
| July | 12,790 | 7,993 | 9,359 | 6,834 | 14,499 |
| August | 17,149 | 13,265 | 15,001 | 12,463 | 17,912 |
| September | 18,894 | 16,556 | 16,713 | 15,551 | 18,336 |
| October | 15,529 | 11,077 | 10,697 | 11,271 | 15,918 |
| November | 13,445 | 12,572 | 11,442 | 11,895 | 14,431 |
| December | 15,073 | 15,061 | 14,022 | 13,667 | 13,654 |
| Grand Total | 151,837 | 134,071 | 134,751 | 123,199 | 148,971 |

| Water Tier 4 | | | <u>Year</u> | | |
|--------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 22,640 | 23,269 | 23,595 | 22,391 | 22,316 |
| February | 37,024 | 36,752 | 36,233 | 34,542 | 35,649 |
| March | 50,451 | 51,686 | 51,207 | 50,103 | 51,681 |
| April | 22,121 | 23,381 | 23,638 | 21,017 | 21,370 |
| May | 37,829 | 35,328 | 37,002 | 33,343 | 31,432 |
| June | 56,282 | 54,761 | 56,625 | 54,887 | 43,674 |
| July | 28,222 | 25,013 | 25,344 | 23,785 | 26,110 |
| August | 47,373 | 43,965 | 44,832 | 41,679 | 39,687 |
| September | 62,056 | 57,021 | 58,578 | 58,578 | 51,579 |
| October | 32,845 | 27,390 | 27,267 | 27,275 | 29,674 |
| November | 44,519 | 43,215 | 40,878 | 40,559 | 39,462 |
| December | 57,437 | 55,028 | 57,287 | 56,543 | 47,325 |
| Grand Total | 498,799 | 476,809 | 482,486 | 464,702 | 439,959 |

City of Framingham

Water Consumption Analysis by Tier

| Water Tier 5 | | | <u>Year</u> | | |
|--------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 20,645 | 22,769 | 21,129 | 16,769 | 19,666 |
| February | 25,712 | 21,612 | 22,057 | 17,960 | 17,928 |
| March | 23,853 | 24,355 | 22,706 | 18,313 | 21,459 |
| April | 16,881 | 27,249 | 23,237 | 18,881 | 16,530 |
| Мау | 23,840 | 21,473 | 22,116 | 19,988 | 14,622 |
| June | 31,708 | 31,244 | 34,212 | 27,960 | 19,742 |
| July | 32,563 | 29,676 | 28,877 | 24,310 | 23,727 |
| August | 33,731 | 30,842 | 29,729 | 28,663 | 25,803 |
| September | 35,178 | 35,149 | 32,851 | 30,492 | 22,497 |
| October | 25,467 | 26,936 | 24,091 | 22,571 | 18,913 |
| November | 25,531 | 25,840 | 23,108 | 20,292 | 15,858 |
| December | 27,820 | 23,902 | 26,718 | 23,601 | 15,987 |
| Grand Total | 322,929 | 321,047 | 310,831 | 269,800 | 232,732 |

| Irrigation Usage | | | <u>Year</u> | | |
|------------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 4,354 | 6,093 | 8,595 | 3,800 | 5,378 |
| February | 1,480 | 1,233 | 3,530 | 714 | 1,184 |
| March | 218 | 234 | 119 | 191 | 610 |
| April | 269 | 1,117 | 149 | 194 | 239 |
| Мау | 2,917 | 2,267 | 2,137 | 1,527 | 1,180 |
| June | 4,456 | 4,120 | 9,597 | 4,593 | 6,438 |
| July | 32,819 | 19,272 | 28,195 | 13,835 | 31,703 |
| August | 50,848 | 32,620 | 44,286 | 32,969 | 48,972 |
| September | 23,664 | 15,926 | 19,187 | 18,590 | 15,398 |
| October | 62,109 | 51,835 | 53,170 | 52,839 | 67,311 |
| November | 42,159 | 36,705 | 30,624 | 34,559 | 48,789 |
| December | 8,526 | 17,741 | 23,555 | 17,755 | 32,946 |
| Grand Total | 233,819 | 189,163 | 223,144 | 181,566 | 260,148 |

Wastewater Consumption Analysis by Tier

| Wastewater Tier 1 | | | Year | | |
|-------------------|---------|---------|---------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 77,690 | 78,361 | 79,146 | 77,916 | 77,629 |
| February | 69,852 | 69,708 | 70,009 | 69,841 | 69,623 |
| March | 72,965 | 72,249 | 71,929 | 73,507 | 72,299 |
| April | 76,072 | 76,230 | 78,677 | 80,793 | 76,672 |
| May | 69,294 | 68,012 | 68,704 | 68,657 | 69,551 |
| June | 74,259 | 74,016 | 86,489 | 85,737 | 80,453 |
| July | 80,814 | 79,493 | 80,711 | 78,834 | 82,119 |
| August | 72,437 | 71,417 | 72,229 | 71,604 | 72,867 |
| September | 74,896 | 74,158 | 73,580 | 74,701 | 75,637 |
| October | 79,948 | 79,596 | 79,535 | 79,580 | 81,432 |
| November | 70,831 | 70,801 | 71,000 | 70,665 | 72,705 |
| December | 73,814 | 83,983 | 85,978 | 85,367 | 79,324 |
| Grand Total | 892,872 | 898,024 | 917,987 | 917,202 | 910,311 |

| Wastewater Tier 2 | | | <u>Year</u> | | |
|-------------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 30,970 | 30,274 | 30,755 | 27,989 | 27,831 |
| February | 29,769 | 29,748 | 28,920 | 28,070 | 27,791 |
| March | 36,876 | 36,524 | 34,661 | 33,114 | 34,063 |
| April | 27,946 | 27,982 | 27,220 | 24,018 | 27,530 |
| Мау | 27,412 | 26,067 | 25,721 | 25,759 | 29,214 |
| June | 40,992 | 38,914 | 38,266 | 37,888 | 41,266 |
| July | 41,904 | 34,246 | 36,654 | 31,393 | 45,417 |
| August | 39,256 | 34,410 | 36,922 | 33,950 | 43,760 |
| September | 45,226 | 41,545 | 41,703 | 40,860 | 46,747 |
| October | 40,900 | 36,300 | 35,233 | 35,454 | 43,658 |
| November | 34,219 | 32,713 | 31,351 | 31,673 | 37,289 |
| December | 39,571 | 37,914 | 38,516 | 37,306 | 38,761 |
| Grand Total | 435,041 | 406,637 | 405,922 | 387,474 | 443,327 |

Wastewater Consumption Analysis by Tier

| Wastewater Tier 3 | | | <u>Year</u> | | |
|---------------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 6,397 | 6,093 | 6,183 | 5,392 | 5,459 |
| February | 9,229 | 9,657 | 9,415 | 8,766 | 9,009 |
| March | 13,492 | 13,573 | 13,379 | 11,578 | 12,197 |
| Apri <mark>l</mark> | 5,616 | 5,345 | 5,159 | 4,428 | 5,126 |
| May | 9,027 | 8,472 | 8,563 | 8,173 | 8,945 |
| June | 14,389 | 13,847 | 13,989 | 12,897 | 13,306 |
| July | 11,640 | 7,361 | 8,411 | 6,399 | 13,071 |
| August | 16,493 | 12,886 | 14,480 | 12,074 | 17,300 |
| September | 18,616 | 16,275 | 16,500 | 15,378 | 18,103 |
| October | 13,825 | 9,867 | 9,353 | 10,038 | 14,196 |
| November | 12,869 | 12,082 | 11,159 | 11,635 | 14,025 |
| December | 15,011 | 14,912 | 13,988 | 13,622 | 13,504 |
| Grand Total | 146,604 | 130,370 | 130,579 | 120,380 | 144,241 |

| Wastewater Tier 4 | | | <u>Year</u> | | |
|-------------------|---------|-----------------------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 22,631 | 23,322 | 23,634 | 22,560 | 22,297 |
| February | 36,565 | 36,664 | 36,425 | 34,291 | 35,613 |
| March | 50,825 | 5 <mark>1,81</mark> 2 | 51,482 | 50,108 | 51,084 |
| April | 22,317 | 23,401 | 23,712 | 21,032 | 21,296 |
| May | 37,135 | 35,567 | 36,310 | 33,090 | 30,895 |
| June | 56,707 | 54,134 | 56,802 | 54,885 | 43,373 |
| July | 27,554 | 24,604 | 24,857 | 23,655 | 24,525 |
| August | 45,744 | 43,016 | 43,432 | 40,368 | 37,949 |
| September | 61,400 | 56,935 | 57,812 | 58,454 | 51,191 |
| October | 29,563 | 26,042 | 26,074 | 25,967 | 26,603 |
| November | 42,982 | 42,072 | 39,820 | 39,832 | 38,158 |
| December | 56,914 | 54,910 | 58,392 | 57,076 | 47,269 |
| Grand Total | 490,337 | 472,479 | 478,752 | 461,318 | 430,253 |

Wastewater Consumption Analysis by Tier

| WastewaterTier 5 | | | <u>Year</u> | | |
|------------------|---------|---------|-------------|---------|---------|
| Month | 2016 | 2017 | 2018 | 2019 | 2020 |
| January | 21,175 | 22,901 | 21,196 | 16,986 | 19,370 |
| February | 26,490 | 21,472 | 22,467 | 16,706 | 17,495 |
| March | 24,497 | 24,466 | 23,195 | 17,451 | 21,076 |
| April | 17,713 | 27,079 | 23,923 | 18,214 | 16,335 |
| Мау | 23,828 | 21,578 | 21,971 | 19,723 | 14,591 |
| June | 30,236 | 29,390 | 32,676 | 26,244 | 18,796 |
| July | 29,972 | 26,141 | 25,365 | 20,913 | 18,767 |
| August | 30,172 | 27,554 | 25,280 | 24,764 | 21,070 |
| September | 32,215 | 32,777 | 29,002 | 28,485 | 19,513 |
| October | 24,895 | 25,456 | 23,443 | 21,919 | 17,110 |
| November | 26,009 | 25,653 | 23,589 | 19,469 | 14,508 |
| December | 28,721 | 24,476 | 28,787 | 23,344 | 15,866 |
| Grand Total | 315,923 | 308,943 | 300,894 | 254,218 | 214,497 |

Review of Top Utility Billing Accounts

January Through December

| Account Name | Account Location | 2019 Total Usage | 2020 Total Usage | Percent Variance |
|-----------------------------|--------------------------|------------------|---------------------|---------------------|
| NESTLES WATERS | 105 PENNSYLVANIA AVE FR | 46,357 | 49,121 | 6% |
| GENZYME CORPORATION | 74 NEW YORK AVE FR | 31,388 | 22,231 | -29% |
| BISHOP GARDENS CONDOMINIUMS | 1 BISHOP DR FR | 20,581 | 19,767 | -4% |
| THE TJX COMPANIES INC | 750 COCHITUATE RD FR | 17,864 | 8,754 | -51% |
| GENZYME CORPORATION | 74 NEW YORK AVE FR | 14,205 | 13,042 | -8% |
| GENZYME CORPORATION | 55 NEW YORK AVE FR | 12,592 | 13,182 | 5% |
| GENZYME CORPORATION | 74 NEW YORK AVE FR | 11,083 | 11,411 | 3% |
| 306 APTS | 1610 WORCESTER RD FR | 11,012 | 11,893 | 8% |
| 306 APTS | 1610 WORCESTER RD FR | 9,740 | 10,759 | 10% |
| LIFETIME FITNESS | 490 OLD CONNECTICUT PATH | 9,616 | 5,390 | -44% |
| JACK ABBEY BREWERY | 100 CLINTON ST FR | 8,904 | 8,853 | -1% |

Comparison of Top Users

| Account Name | Account Location | 2019 Total Usage | 2020 Total Usage | Percent Variance |
|------------------------------|-----------------------|------------------|---------------------|---------------------|
| AP WCP FRAMINGHAM OWNER LLC | 1651 WORCESTER RD FR | 9,313 | 3,357 | -64% |
| BAYBERRY HILL ESTATES 042653 | 44-66 DINSMORE AVE FR | 8,504 | 8,684 | 2% |
| | Total All | 211,159 | 186,444 | -12% |

MWRA Community Information Water & Wastewater Billing Methods

| | | | | Base Rate + Some | | |
|-------------|--------------|-----------|------------|---------------------|------------|-----------|
| Community | MWRA Service | Base Rate | # of Tiers | Consumption | # of Tiers | Flat Rate |
| Arlington | W/S | Χ | 3 | | | |
| Ashland | S | Χ | 4 | | | |
| Bedford | Partial W/S | Χ | 2 | | | |
| Belmont | W/S | Χ | 2 | | | |
| Boston | W/S | | | Х | 6 | |
| Braintree | S | Χ | 4 | | | |
| Brookline | W/S | Χ | 2 | | | |
| Burlington | S | | | Х | 6 | |
| Cambridge | Partial W/S | | 5 | | | |
| Canton | Partial W/S | Χ | 2 | | | |
| Chelsea | W/S | | 3 | | | |
| Chicpoee | W | Χ | 2 | | | |
| Clinton | W/S | Χ | 5 | | | |
| Dedham | Partial W/S | | | Х | 4 | |
| Everett | W/S | | 6 | | | |
| Framingham | W/S | | 5 | | | |
| Hingham | S | Χ | 2 | | | |
| Holbrook | S | X | 1 | | | |
| Leominster | Partial W | | | Х | 2 | |
| Lexington | W/S | | 3 | | | |
| Lynn | Partial W | | 4 | | | |
| Malden | W/S | | | Х | 4 | |
| Marblehead | W | Χ | 2 | | | |
| Marlborough | Partial W | | | | | Х |
| Medford | W/S | | | | | X 2 |
| Melrose | W/S | Χ | 2 | | | |
| Milton | W/S | | | Х | 4 | |
| Nahant | W | | | | | Х |
| Natick | S | | 4 | | | |

| | D .: 1344/6 | ., | | | | |
|--------------|-------------|----|---|---|---|---|
| Needham | Partial W/S | Х | 4 | | | |
| Newton | W/S | | 4 | | | |
| Northborough | Partial W | Х | 3 | | | |
| Norwood | W/S | Х | 2 | | | |
| Peabody | Partial W | | 4 | | | |
| Quincy | W/S | | | | | Х |
| Randolph | S | Х | 2 | | | |
| Reading | W/S | Х | | | | X |
| Revere | W/S | | | | | Х |
| Saugus | W | | | Χ | 8 | |
| Somerville | W/S | | 5 | | | |
| Stoneham | W/S | | | | | X |
| Stoughton | Partial W/S | Х | 3 | | | |
| Swampscott | W | | | | | X |
| Wakefield | Partial W/S | | | | | Х |
| Walpole | S | | 4 | | | |
| Waltham | W/S | Х | 4 | | | |
| Watertown | W/S | Х | 3 | | | |
| Wellesley | Partial W/S | Х | 5 | | | |
| Westwood | Partial W/S | | | Х | 4 | |
| Weymouth | S | Х | 2 | | | |
| Wilbraham | W | Х | 3 | | | |
| Wilmington | Partial W/S | | 4 | | | |
| Winchester | Partial W/S | Х | 3 | | | |
| Winthrop | W/S | Х | | | | Х |
| Woburn | Partial W/S | | | | | Х |
| Worcester | Partial W | X | | | | Х |

56 27 8 12

S=Sewer W=Water

W/S= Water and Sewer

CITY OF FRAMINGHAM

WATER RATE ANALYSIS

| | Forecasted | | | Forecasted |
|------------------------|------------|----|----------|------------------|
| TIERS | FY21 USAGE | FY | 21 RATES | FY21 CHARGES |
| TIER 1 | 915,328 | \$ | 6.30 | \$ 5,766,566 |
| TIER 2 | 509,664 | \$ | 7.01 | \$ 3,572,748 |
| TIER 3 | 181,181 | \$ | 8.15 | \$ 1,476,629 |
| TIER 4 | 449,989 | \$ | 9.60 | \$ 4,319,893 |
| TIER 5 | 248,785 | \$ | 11.63 | \$ 2,893,372 |
| TOTAL USAGE | 2,304,948 | | | \$ 18,029,207 |
| IRRIGATION | 250,000 | \$ | 11.79 | \$ 2,947,500 |
| TOTAL WATER USAGE | 2,554,948 | | | \$ 20,976,707 |
| CITY OWNED BUILDINGS | | | | \$ 83,595 |
| WATER DISCOUNT PROGRAM | | | | \$ (62,000) |
| TOTAL WATER CHARGES | | | | \$ 20,998,302 |

WASTEWATER RATE ANALYSIS

| WASILWAILK NAIL ANALISI | 0 | | | | |
|-------------------------------|------------|----|----------|----|--------------|
| | Forecasted | | | | Forecasted |
| TIERS | FY21 USAGE | FY | 21 RATES | | FY21 CHARGES |
| TIER 1 | 898,116 | \$ | 8.18 | \$ | 7,346,585 |
| TIER 2 | 499,588 | \$ | 8.43 | \$ | 4,211,525 |
| TIER 3 | 173,539 | \$ | 11.33 | \$ | 1,966,198 |
| TIER 4 | 434,637 | \$ | 16.21 | \$ | 7,045,461 |
| TIER 5 | 225,297 | \$ | 23.54 | \$ | 5,303,481 |
| TOTAL USAGE | 2,231,176 | | | \$ | 25,873,251 |
| CITY OWNED BUILDINGS | | | | \$ | 67,100 |
| SEWER DISCOUNT PROGRAM | | | | \$ | (77,700) |
| SEWER FLAT FEES | | | | \$ | 31,979 |
| TOTAL SEWER CHARGES | | | | \$ | 25,894,630 |
| TOTAL WATER & SEWER BILLINGS | | | | \$ | 46,892,932 |
| ESTIMATED REVENUE NEEDED FROM | I RATES | | | \$ | 49,175,615 |
| SHORTFALL | | | | \$ | (2,282,683) |
| | | | | | |

City of Framingham Combined Enterprise Funds

FY2021 - FY2032 Financial Forecast

| | FORECAST | | | | | | | | | | | |
|---|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------|
| Expenses: | FY21 | FY22 | FY23 | FY24 | FY25 | FY26 | FY27 | FY28 | FY29 | FY30 | FY31 | FY32 |
| MWRA | \$ 22,043,794 \$ | 23,008,479 \$ | 23,783,002 \$ | 24,584,047 \$ | 24,297,863 \$ | 24,969,561 \$ | 25,844,968 \$ | 26,098,511 \$ | 25,870,575 \$ | 26,456,936 \$ | 27,062,785 \$ | 27,688,854 |
| Debt Service | \$ 20,612,085 \$ | 20,834,815 \$ | 21,568,186 \$ | 21,060,113 \$ | 22,236,990 \$ | 23,855,065 \$ | 25,505,413 \$ | 26,166,278 \$ | 26,729,702 \$ | 27,350,951 \$ | 27,891,225 \$ | 26,818,303 |
| Operating Expenses (incl Small Capital) | \$ 9,510,168 \$ | 9,753,764 \$ | 9,955,006 \$ | 10,156,407 \$ | 10,366,608 \$ | 10,577,087 \$ | 10,796,660 \$ | 11,016,641 \$ | 11,246,024 \$ | 11,475,953 \$ | 11,715,603 \$ | 11,955,945 |
| Deficit Carryforward FY20 | \$ 500,000 \$ | 500,000 \$ | 500,000 | | | | | | | | | |
| Indirect Costs (2% increase annually) | \$ - \$ | 1,000,000 \$ | 3,595,403 \$ | 3,667,311 \$ | 3,740,657 \$ | 3,815,470 \$ | 3,891,780 \$ | 3,969,616 \$ | 4,049,008 \$ | 4,129,988 \$ | 4,212,588 \$ | 4,296,839 |
| Total Expenses | \$ 52,666,047 \$ | 55,097,059 \$ | 59,401,596 \$ | 59,467,879 \$ | 60,642,118 \$ | 63,217,183 \$ | 66,038,821 \$ | 67,251,046 \$ | 67,895,309 \$ | 69,413,828 \$ | 70,882,200 \$ | 70,759,940 |
| Less: Revenue Sources/Offsets | | | | | | | | | | | | |
| Additional Revenue-New Development | \$ 178,197 \$ | 122,182 \$ | 483,496 \$ | 544,705 \$ | 544,705 \$ | 544,705 \$ | 544,705 \$ | 544,705 \$ | 544,705 \$ | 544,705 \$ | 544,705 \$ | 544,705 |
| Miscellaneous Revenue Sources | \$ 742,552 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 \$ | 742,796 |
| Inflow & Infiltration Fees | \$ 943,993 \$ | 306,060 \$ | 382,640 \$ | 447,980 \$ | 50,000 \$ | 50,000 \$ | 50,000 \$ | 50,000 \$ | 50,000 \$ | 50,000 \$ | 50,000 \$ | 50,000 |
| Fire Service Fees | \$ 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 \$ | 603,324 |
| Ashland Trunk Line Income | \$ 1,022,366 \$ | 984,462 \$ | 1,005,092 \$ | 1,026,167 \$ | 1,047,697 \$ | 1,069,692 \$ | 1,092,163 \$ | 1,115,120 \$ | 1,138,573 \$ | 1,162,535 \$ | 1,187,016 \$ | 1,212,028 |
| Total Estimated Misc. Revenue | \$ 3,490,432 \$ | 2,758,824 \$ | 3,217,348 \$ | 3,364,972 \$ | 2,988,522 \$ | 3,010,517 \$ | 3,032,988 \$ | 3,055,945 \$ | 3,079,398 \$ | 3,103,360 \$ | 3,127,841 \$ | 3,152,853 |
| Rate Revenue Required | \$ 49,175,615 \$ | 52,338,235 \$ | 56,184,248 \$ | 56,102,906 \$ | 57,653,596 \$ | 60,206,665 \$ | 63,005,833 \$ | 64,195,101 \$ | 64,815,911 \$ | 66,310,468 \$ | 67,754,359 \$ | 67,607,088 |