# Town of Saugus <br> FY2020 Water Rates Update 

The Abrahams Group
May 2019

## Background

- 9,400 water connections
- The Town has increased rates in recent years. The use of retained earnings has mitigated larger rate increases over past several years and may continue to do so in the near future.
- The Town has begun addressing additional capital infrastructure or equipment, but more needs will be addressed in the near future. These needs are included in the rates analysis.


## Objectives

The Town would like to develop a five-year rate plan that would:

- Eliminate shortfalls.
- Eliminate using retained earnings to supplement the operating budget.
- Fund new capital infrastructure and equipment over the next five years.
- Project resulting retained earnings balance to be a generally accepted benchmark (10-25\% of the operating budget).


## Methodology

- Present baseline or the "Do Nothing" scenario that contains projections with no rate increases.
- Present multiple rate scenarios with targeted projected retained earnings balance by the fifth year of the analysis:
- 10\%
- 15\%
- Focus on an FY2O water rate increase based upon a five-year analysis.


## Analysis Last Three Years

- While targeting similar retained earning balances like in this year's study, water rates were increased by $9.5 \%$ in FY2017, 2.5\% in FY2018, and 3.0\% in FY2019.
- Each increase was part of a multi-year plan to achieve the Town's rates-setting objectives. The following table shows the rate increases that were recommended the past three years along with the voted increases.

|  | Water Rate Increases |  |
| :--- | ---: | ---: |
|  | Recommended | Voted |
| FY 2017 | $9.5 \%$ | $9.5 \%$ |
| FY 2018 | $2.5 \%$ | $2.5 \%$ |
| FY 2019 | $3.0 \%$ | $3.0 \%$ |

## Focus of This Year's Study

- Last year's study targeted Retained Earnings as $10 \%$ of budget at the end of FY2023. This year's study shows that target is still on track.
- Focus on a new five-year rates-setting plan to target $10 \%$ at the end of the fifth year in the study (FY2024).
- Water projections are similar to last year's, but show that projected new debt due to an updated capital plan suggests rate increases slightly lower than the adopted plan last year, in order to target 10\% in FY2024.


## Water Capital Plan

The Town plans to borrow for the following projects and items in the latest water capital plan.

- \$3.2m for Water Main Replacements in FY2020
- \$1,548,713 financed through 0\% interest MWRA loan
- \$40k for new mini-excavator in FY2021
- Conventionally borrowed at 4.5\% interest
- \$75k for new truck in FY2021
- Conventionally borrowed at 4.5\% interest
- $\$ 2.0 \mathrm{~m}$ for water meter replacement program and meter-reading vehicle in FY2022
- Conventionally borrowed at 4.5\% interest, with MWRA funding a possibility


## Rates-Setting Drivers

- Projected water expenses \% increases/decreases are shown here:

|  | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Salaries | $0.51 \%$ | $2.50 \%$ | $2.50 \%$ | $2.50 \%$ | $2.50 \%$ |
| Debt | $-18.33 \%$ | $27.87 \%$ | $0.38 \%$ | $19.17 \%$ | $-9.62 \%$ |
| Other Expenses | $4.28 \%$ | $3.52 \%$ | $3.53 \%$ | $3.54 \%$ | $3.55 \%$ |
| Total | $\mathbf{0 . 7 8 \%}$ | $\mathbf{6 . 3 5 \%}$ | $\mathbf{3 . 0 3 \%}$ | $\mathbf{5 . 6 6 \%}$ | $\mathbf{1 . 4 4 \%}$ |

## Water FY2019 Review

| FISCAL YEAR 2019 | May 2018 | May 2018 | May 2019 |
| :---: | :---: | :---: | :---: |
| WATER ENTERPRISE | Recommended 3.0\% | Voted 3.0\% | Projected 3.0\% |
| FUND REVIEW | FY 2019 | FY 2019 | FY 2019 to date |
| Revenues | \$ 6,749,906 | \$ 6,749,906 | \$ 6,827,290 |
| Prior Year Carrover | \$ - | \$ - | \$ 63,720 |
| Retained Earnings Planned | \$ | \$ | \$ |
| Total Revenues and Available Funds | \$ 6,749,906 | \$ 6,749,906 | \$ 6,891,011 |
| Expenditures | \$ 6,621,418 | \$ 6,621,418 | \$ 6,672,980 |
| Surplus/(Deficit) | \$ 128,488 | \$ 128,488 | \$ 218,031 |
| Retained Earnings Projections |  |  |  |
| Retained Earnings at Start of FY 2019 | \$ 1,678,803 | \$ 1,678,803 | \$ 1,626,051 |
| Surplus/(Deficit) Current FY 2019 | \$ 128,488 | \$ 128,488 | \$ 218,031 |
| Projected Retained Earnings at End of FY | \$ 1,807,291 | \$ 1,807,291 | \$ 1,844,082 |
| Retained Earnings as \% of Oper. Budget | 27.3\% | 27.3\% | 27.6\% |
|  |  |  |  |
| Retained Earnings at the start of FY 2019 projected in May 2018 columns and certified in May 2019 column. |  |  |  |

## Water Baseline

|  | Budgeted | Projected | Projected | Projected | Projected |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Total Revenues and OFS | \$ 6,827,290 | \$ 6,827,290 | \$ 6,827,290 | \$ 6,827,290 | \$ 6,827,290 |
| Total Expenditures and OFU | \$ 6,725,227 | \$ 7,152,551 | \$ 7,369,459 | \$ 7,786,372 | \$ 7,898,340 |
| Excess (Deficiency) | \$ 102,063 | \$ (325,261) | \$ (542,169) | \$ (959,082) | \$ (1,071,050) |
| Retained Earnings Summary FY20-FY24 |  |  |  |  |  |
| RE at start of FY | \$ 1,844,082 | \$ 1,946,145 | \$ 1,620,884 | \$ 1,078,715 | \$ 119,633 |
| Current Year Surplus (Deficit) | \$ 102,063 | \$ (325,261) | \$ $(542,169)$ | \$ $(959,082)$ | \$ (1,071,050) |
| Projected Retained Earnings Balance | \$ 1,946,145 | \$ 1,620,884 | \$ 1,078,715 | \$ 119,633 | \$ $(951,417)$ |
| Retained Earnings \% of Expenditures | 28.9\% | 22.7\% | 14.6\% | 1.5\% | -12.0\% |
| Retained Earnings FY18/FY19 |  |  |  |  |  |
| Certified Retained Earnings June 30, 2018 | \$ 1,626,051 |  |  |  |  |
| Projected FY19 Surplus/(Deficit) | \$ 218,031 |  |  |  |  |
| Projected Retained Earnings June 30, 2019 | \$ 1,844,082 |  |  |  |  |

- Water planned expenditures exceed planned revenues, resulting in a shortfall in each of the five fiscal years, except for FY2020.
- Projections show that retained earnings can cover shortfalls through FY2023, but not beyond.
- A water rate increase is needed to eliminate the shortfalls and/or provide a reasonable retained earnings balance.


## Water Option 1 - Level Rate Increases Target 25\% Retained Earnings

Option 1 would increase rates annually as shown on the right. It would result in a positive retained earnings balance in each of the five years, $25 \%$ retained earnings when compared to the budget in FY24, and would impact users as shown below.

| Updated Rates |  |
| :---: | ---: |
| Year | Rate Incr \% |
| FY2020 | $3.0 \%$ |
| FY2021 | $3.0 \%$ |
| FY2022 | $3.0 \%$ |
| FY2023 | $3.0 \%$ |
| FY2024 | $3.0 \%$ |


| User Impact | Usage / Bill | $\begin{gathered} \hline \text { FY19 } \\ \text { Bill } \\ \hline \end{gathered}$ | FY20 |  | FY21 |  | FY22 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| User Example |  |  | Bill | Diff \$ | Bill | Diff \$ | Bill | Diff \$ |
| Tier 1 User | 2,000 | \$ 91 | \$ 94 | \$ 3 | \$ 97 | \$ 3 | \$ 100 | \$ 3 |
| Tier 2 User | 3,000 | \$ 140 | \$ 144 | \$ 4 | \$ 149 | \$ 4 | \$ 153 | \$ 4 |
| Avg. Residential User | 4,362 | \$ 229 | \$ 236 | \$ 7 | \$ 243 | \$ 7 | \$ 250 | \$ 7 |
| Avg. Commercial User | 24,527 | \$2,029 | \$ 2,090 | \$ 61 | \$ 2,152 | \$ 63 | \$ 2,217 | \$ 65 |
| User Impact | Usage / | FY19 |  |  | FY2 |  | FY24 | Y19 |
| User Example | Bill | Bill | Bill | Diff \$ | Bill | Diff \$ | Bill | Diff \$ |
| Tier 1 User | 2,000 | \$ 91 | \$ 103 | \$ 3 | \$ 106 | \$ 3 | \$ 106 | \$ 15 |
| Tier 2 User | 3,000 | \$ 140 | \$ 158 | \$ 5 | \$ 162 | \$ 5 | \$ 162 | \$ 22 |
| Avg. Residential User | 4,362 | \$ 229 | \$ 257 | \$ 7 | \$ 265 | \$ 8 | \$ 265 | \$ 36 |
| Avg. Commercial User | 24,527 | \$2,029 | \$ 2,283 | \$ 67 | \$ 2,352 | \$ 69 | \$ 2,352 | \$ 323 |

## Water Option 2 - Level Rate Increases Target 10\% Retained Earnings

Option 2 would increase rates annually as shown on the right. It would result in a positive retained earnings balance in each of the five years, $10 \%$ retained earnings when compared to the budget in FY24, and would impact users as shown below.

| Updated Rates |  |
| :---: | ---: |
| Year | Rate Incr \% |
| FY2020 | $2.0 \%$ |
| FY2021 | $2.0 \%$ |
| FY2022 | $2.0 \%$ |
| FY2023 | $2.0 \%$ |
| FY2024 | $2.0 \%$ |


| User Impact | Usage / Bill | $\begin{gathered} \hline \text { FY19 } \\ \text { Bill } \\ \hline \end{gathered}$ | FY20 |  | FY21 |  | FY22 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| User Example |  |  | Bill | Diff \$ | Bill | Diff \$ | Bill | Diff \$ |
| Tier 1 User | 2,000 | \$ 91 | \$ 93 | \$ 2 | \$ 95 | \$ 2 | \$ 97 | \$ 2 |
| Tier 2 User | 3,000 | \$ 140 | \$ 143 | \$ 3 | \$ 146 | \$ 3 | \$ 149 | \$ 3 |
| Avg. Residential User | 4,362 | \$ 229 | \$ 233 | \$ 5 | \$ 238 | \$ 5 | \$ 243 | \$ 5 |
| Avg. Commercial User | 24,527 | \$2,029 | \$ 2,069 | \$ 41 | \$ 2,111 | \$ 41 | \$ 2,153 | \$ 42 |
| User Impact | Usage / | FY1 |  |  | FY |  | FY24 | Y19 |
| User Example | Bill | Bill | Bill | Diff \$ | Bill | Diff \$ | Bill | Diff \$ |
| Tier 1 User | 2,000 | \$ 91 | \$ 99 | \$ 2 | \$ 101 | \$ 2 | \$ 101 | \$ 10 |
| Tier 2 User | 3,000 | \$ 140 | \$ 152 | \$ 3 | \$ 155 | \$ 3 | \$ 155 | \$ 15 |
| Avg. Residential User | 4,362 | \$ 229 | \$ 248 | \$ 5 | \$ 253 | \$ 5 | \$ 253 | \$ 24 |
| Avg. Commercial User | 24,527 | \$2,029 | \$ 2,196 | \$ 43 | \$ 2,240 | \$ 44 | \$ 2,240 | \$ 211 |

## Water Option 3 - Lower Increase Year 1 Target 10\% Retained Earnings

Option 3 would increase rates annually as shown on the right. It would result in a positive retained earnings balance in each of the five years, $10 \%$ retained earnings when compared to the budget in FY24, and would impact users as shown below.

| Updated Rates |  |
| :---: | ---: |
| Year | Rate Incr \% |
| FY2020 | $1.5 \%$ |
| FY2O21 | $2.0 \%$ |
| FY2O22 | $2.0 \%$ |
| FY2023 | $2.0 \%$ |
| FY2024 | $2.0 \%$ |


| User Impact | Usage / Bill | $\begin{gathered} \hline \text { FY19 } \\ \text { Bill } \end{gathered}$ | FY20 |  | FY21 |  | FY22 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| User Example |  |  | Bill | Diff \$ | Bill | Diff \$ | Bill | Diff \$ |
| Tier 1 User | 2,000 | \$ 91 | \$ 93 | \$ | \$ 95 | \$ 2 | \$ 96 | \$ 2 |
| Tier 2 User | 3,000 | \$ 140 | \$ 142 | \$ | \$ 145 | \$ 3 | \$ 148 | \$ 3 |
| Avg. Residential User | 4,362 | \$ 229 | \$ 232 | \$ | \$ 237 | \$ 5 | \$ 242 | \$ 5 |
| Avg. Commercial User | 24,527 | \$2,029 | \$ 2,059 | \$ 30 | \$ 2,100 |  | \$ 2,142 | \$ 42 |
| User Impact | ge | FY19 |  |  | FY |  | FY24 | Y19 |
| User Example | Bill | Bill | Bill | Diff \$ | Bill | Diff \$ | Bill | Diff \$ |
| Tier 1 User | 2,000 | \$ 91 | \$ 98 | \$ 2 | \$ 100 | \$ 2 | \$ 100 | \$ |
| Tier 2 User | 3,000 | \$ 140 | \$ 151 | \$ 3 | \$ 154 | \$ 3 | \$ 154 | \$ 14 |
| Avg. Residential User | 4,362 | \$ 229 | \$ 246 | \$ 5 | \$ 251 | \$ 5 | \$ 251 | \$ 23 |
| Avg. Commercial User | 24,527 | \$2,029 | \$ 2,185 | \$ 43 | \$ 2,229 | \$ 44 | \$ 2,229 | \$ 200 |

