



# Utility Rate & Fee Study

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## St. Mary's Metropolitan Commission

Water & Sewer Rate Presentation  
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**BURTON & ASSOCIATES**



# **Summary of Recent Rate Study**

# Objectives & Scope

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- ▶ Perform a comprehensive analysis of the rates/fees for:
  - ▶ Water and Sewer Operations (General Fund)
    - ▶ *Excludes System Improvement & Capital Contribution Charges*
- ▶ Develop multi-year projection model for use by staff
  - ▶ To be updated annually as part of the budget process
- ▶ Core components of the study:
  - ▶ Revenue Sufficiency Analysis
    - ▶ Established two-part reserve target (operating and capital liquidity)
    - ▶ Identified plans of annual rate increases based upon projected costs
  - ▶ Rate Structure Modifications
    - ▶ Better conform to industry practice, enhance affordability for low volume/typical users, and promote conservation from high volume users

# Revenue Sufficiency Analysis

- ▶ Identified Plans of Rate Revenue Increases That:
  - ▶ Fund annual operating requirements of each system
  - ▶ Achieve/maintain recommended reserve levels
  - ▶ Were very comparable to national industry trends (Water & Sewer CPI)

| Service        | FY 15  | FY 16* | FY 17  | FY 18  | FY 19  |
|----------------|--------|--------|--------|--------|--------|
| Effective Date | 7/1/14 | 7/1/15 | 7/1/16 | 7/1/17 | 7/1/18 |
| Water          | 0.00%  | 3.00%* | 3.00%  | 3.00%  | 3.00%  |
| Sewer          | 3.67%  | 3.75%* | 3.75%  | 3.75%  | 3.75%  |
| Combined       | 2.40%  | 3.50%* | 3.50%  | 3.50%  | 3.50%  |

- ▶ \*Recommended rate structure modifications to recover the amount of additional revenue that resulted in changes to rates that affected customers differently depending upon their meter size and water use

# Rate Structure Modifications

- ▶ **Establish monthly readiness-to-serve charge**
  - ▶ Recover portion of fixed costs of system from users based upon potential demand
  - ▶ Scale fee based upon size of meter using AWWA maximum flow rates
  - ▶ Very common industry practice; provides fiscal stability
- ▶ **Remove minimum monthly billed usage amount**
  - ▶ Bill actual consumption based upon recommended usage rates
  - ▶ Avoids low volume users paying for something they don't use
- ▶ **Establish an inclining block water usage rate structure**
  - ▶ Provides affordability for low/average users and promotes water conservation
  - ▶ First tier: Essential domestic requirements for typical residence (lowest rate)
  - ▶ Second tier: Reasonable amount of irrigation for typical residence (higher rate)
  - ▶ Third tier: All remaining usage (highest rate)
  - ▶ Amount of usage in each tier scaled by meter size
- ▶ **Updated non-metered service rates**
  - ▶ Equal to readiness-to-serve charge plus usage charges for typical user (5,000 gal.)
  - ▶ Bill residential sewer accounts metered rates (currently billed non-metered rates)

# Single-Family Residential Customer Impact Analysis

| Single Family 5/8" Meter Monthly Water & Sewer Bill Calculations |                      |                           |                 |                 |                  |
|--|----------------------|---------------------------|-----------------|-----------------|------------------|
| Monthly Use (Gal)  | % of Bills (FY 2013) | Agg. % of Bills (FY 2013) | FY 14/15        | FY 15/16        | \$ Chg           |
| 0  | 1.4%                 | 1.4%                      | \$ 54.25        | \$ 23.90        | \$ (30.35)       |
| 1,000  | 5.2%                 | 6.6%                      | \$ 54.25        | \$ 29.61        | \$ (24.64)       |
| 2,000  | 10.5%                | 17.0%                     | \$ 54.25        | \$ 35.32        | \$ (18.93)       |
| 3,000  | 13.9%                | 30.9%                     | \$ 54.25        | \$ 41.03        | \$ (13.22)       |
| 4,000  | 15.6%                | 46.5%                     | \$ 54.25        | \$ 46.74        | \$ (7.51)        |
| <b>5,000</b>   | <b>13.8%</b>         | <b>60.3%</b>              | <b>\$ 54.25</b> | <b>\$ 52.45</b> | <b>\$ (1.80)</b> |
| 6,000  | 12.4%                | 72.7%                     | \$ 54.25        | \$ 59.69        | \$ 5.44          |
| 7,000  | 7.7%                 | 80.3%                     | \$ 57.32        | \$ 66.93        | \$ 9.61          |
| 8,000  | 5.3%                 | 85.6%                     | \$ 60.39        | \$ 74.17        | \$ 13.78         |
| 9,000  | 3.5%                 | 89.2%                     | \$ 63.46        | \$ 81.41        | \$ 17.95         |
| 10,000   | 2.5%                 | 91.7%                     | \$ 66.53        | \$ 88.65        | \$ 22.12         |
| 15,000   | 0.6%                 | 97.0%                     | \$ 81.88        | \$124.85        | \$ 42.97         |
| 20,000   | 0.3%                 | 98.7%                     | \$ 97.23        | \$161.05        | \$ 63.82         |
| 25,000   | 0.1%                 | 99.4%                     | \$112.58        | \$212.55        | \$ 99.97         |
| 30,000   | 0.1%                 | 99.8%                     | \$127.93        | \$264.05        | \$136.12         |

## Notes:

- Bills do not include system improvement charges
- Residential accounts (single & multi-family) represent 94% of MetCom's customer base



# **Summary of Rate Study Update**

# Objectives & Scope

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- ▶ Perform a limited analysis of the rates/fees for:
  - ▶ Water and Sewer Operations (General Fund)
    - ▶ *Excludes System Improvement & Capital Contribution Charges*
- ▶ Assist in updating multi-year financial forecasting model
  - ▶ Identify level of rate increases for FY 2017
  - ▶ Update future rate increase projections
- ▶ Identify and evaluate solutions to customer concerns relative to impacts of new rate structure
  - ▶ Incorporate financial impacts into multi-year forecasting model



# Revenue Sufficiency Analysis

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- ▶ Identified updated plans of rate revenue increases that:
  - ▶ Fund annual operating requirements of each system and maintain reserves
  - ▶ Mitigates risk/impact of potential changes in demand due to new rate structure
  - ▶ Account for all changes and most current information since prior study
    - ▶ **Positive performance vs projections – lower near-term rate increase requirements**
- ▶ Two scenarios: with and without rate structure modifications intended to address recent customer concerns on new rate structure
  - Option A: No rate structure changes***
  - Option B: With rate structure modifications***
- ▶ Prior Study: Water at 3% per year; Sewer at 3.75% per year; 3.5% combined

# Revenue Sufficiency Analysis

| Option A       | FY 17  | FY 18  | FY 19  | FY 20  | FY 21  |
|----------------|--------|--------|--------|--------|--------|
| Effective Date | 7/1/16 | 7/1/17 | 7/1/18 | 7/1/19 | 7/1/20 |
| Water          | 1.75%  | 1.75%  | 3.50%  | 3.50%  | 3.50%  |
| Sewer          | 0.00%  | 0.00%  | 3.50%  | 3.50%  | 3.50%  |
| Combined       | 0.60%  | 0.60%  | 3.50%  | 3.50%  | 3.50%  |

  

| Option B       | FY 17   | FY 18  | FY 19  | FY 20  | FY 21  |
|----------------|---------|--------|--------|--------|--------|
| Effective Date | 7/1/16* | 7/1/17 | 7/1/18 | 7/1/19 | 7/1/20 |
| Water          | 1.75%*  | 1.75%  | 3.50%  | 3.50%  | 3.50%  |
| Sewer          | 3.75%*  | 3.75%  | 3.50%  | 3.50%  | 3.50%  |
| Combined       | 3.00%*  | 3.00%  | 3.50%  | 3.50%  | 3.50%  |

- ▶ \*Includes impact of recommended rate structure modifications to address certain customer concerns on current rate structure
- ▶ Prior Study: Water at 3% per year; Sewer at 3.75% per year; 3.5% combined

# Option B Rate Structure Modifications

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- ▶ **Establish a residential sewer “cap” or maximum gallons**
  - ▶ Is a fairly common industry-accepted practice (areas without irrigation meters)
  - ▶ Industry range is generally between 6,000 – 15,000 gallons per month
  - ▶ Recommendation for Metcom is 10,000 gallons per month
    - ▶ Based upon EPA indoor water use requirements of 65-70 gpd / person for 5 people
  - ▶ Expected to result in \$500-600k of revenue loss (factored into financial plan)
  - ▶ Should help address concerns of many residential customers that irrigate
- ▶ **No readiness-to-serve charge on irrigation-only meter**
  - ▶ Continue to allow second meter for irrigation purposes
  - ▶ However, since existing meter could meet all capacity needs, 2<sup>nd</sup> meter is not increases demands on system; therefore no readiness-to-serve charge
  - ▶ Same reason for not applying capital contribution charges
  - ▶ Do charge meter installation/connection fees
  - ▶ Provides additional fairness and equity to those with irrigation demands

# Single-Family Residential Customer Impact Analysis – Both Options

| Single Family 5/8" Meter Monthly Water & Sewer Bill Calculations |                             |                                  |                 |                 |                |                 |                |
|--|-----------------------------|----------------------------------|-----------------|-----------------|----------------|-----------------|----------------|
| <u>Monthly Use (Gal)</u>   | <u>% of Bills (FY 2013)</u> | <u>Agg. % of Bills (FY 2013)</u> | <u>Current</u>  | <u>Option A</u> | <u>\$ Chg</u>  | <u>Option B</u> | <u>\$ Chg</u>  |
| 0  | 1.4%                        | 1.4%                             | \$ 23.90        | \$ 24.05        | \$ 0.15        | \$ 24.63        | \$ 0.73        |
| 1,000  | 5.2%                        | 6.6%                             | \$ 29.61        | \$ 29.79        | \$ 0.18        | \$ 30.52        | \$ 0.91        |
| 2,000  | 10.5%                       | 17.0%                            | \$ 35.32        | \$ 35.52        | \$ 0.20        | \$ 36.41        | \$ 1.09        |
| 3,000  | 13.9%                       | 30.9%                            | \$ 41.03        | \$ 41.26        | \$ 0.23        | \$ 42.31        | \$ 1.28        |
| 4,000  | 15.6%                       | 46.5%                            | \$ 46.74        | \$ 47.00        | \$ 0.26        | \$ 48.20        | \$ 1.46        |
| <b>5,000</b>   | <b>13.8%</b>                | <b>60.3%</b>                     | <b>\$ 52.45</b> | <b>\$ 52.73</b> | <b>\$ 0.28</b> | <b>\$ 54.09</b> | <b>\$ 1.64</b> |
| 6,000  | 12.4%                       | 72.7%                            | \$ 59.69        | \$ 60.03        | \$ 0.34        | \$ 61.54        | \$ 1.85        |
| 7,000  | 7.7%                        | 80.3%                            | \$ 66.93        | \$ 67.32        | \$ 0.39        | \$ 68.99        | \$ 2.06        |
| 8,000  | 5.3%                        | 85.6%                            | \$ 74.17        | \$ 74.61        | \$ 0.44        | \$ 76.44        | \$ 2.27        |
| 9,000  | 3.5%                        | 89.2%                            | \$ 81.41        | \$ 81.91        | \$ 0.50        | \$ 83.89        | \$ 2.48        |
| 10,000   | 2.5%                        | 91.7%                            | \$ 88.65        | \$ 89.20        | \$ 0.55        | \$ 91.35        | \$ 2.70        |
| 15,000   | 0.6%                        | 97.0%                            | \$124.85        | \$125.67        | \$ 0.82        | \$106.91        | \$ (17.94)     |
| 20,000   | 0.3%                        | 98.7%                            | \$161.05        | \$162.14        | \$ 1.09        | \$122.48        | \$ (38.57)     |
| 25,000   | 0.1%                        | 99.4%                            | \$212.55        | \$214.17        | \$ 1.62        | \$153.62        | \$ (58.93)     |
| 30,000   | 0.1%                        | 99.8%                            | \$264.05        | \$266.21        | \$ 2.16        | \$184.75        | \$ (79.30)     |

# Customer Impact Analysis – With System Improvement Charges

Single Family 5/8" Meter Monthly Water & Sewer Bill Calculations

| <u>Monthly Use (Gal)</u> | <u>Agg. % of Bills (FY 2013)</u> | <u>Agg. % of Bills (FY 2016)</u> | <u>Current</u>  | <u>Option A</u> | <u>\$ Chg</u>  | <u>Option B</u> | <u>\$ Chg</u>  |
|--------------------------|----------------------------------|----------------------------------|-----------------|-----------------|----------------|-----------------|----------------|
| 2,000                    | 17.0%                            | 25.1%                            | \$ 60.13        | \$ 61.18        | \$ 1.05        | \$ 62.07        | \$ 1.94        |
| <b>5,000</b>             | <b>60.3%</b>                     | <b>64.5%</b>                     | <b>\$ 77.26</b> | <b>\$ 78.39</b> | <b>\$ 1.13</b> | <b>\$ 79.75</b> | <b>\$ 2.49</b> |
| 6,000                    | 72.7%                            | 72.2%                            | \$ 84.50        | \$ 85.69        | \$ 1.19        | \$ 87.20        | \$ 2.70        |
| 7,000                    | 80.3%                            | 77.8%                            | \$ 91.74        | \$ 92.98        | \$ 1.24        | \$ 94.65        | \$ 2.91        |
| 10,000                   | 91.7%                            | 86.9%                            | \$113.46        | \$114.86        | \$ 1.40        | \$117.01        | \$ 3.55        |
| 15,000                   | 97.0%                            | 93.9%                            | \$149.66        | \$151.33        | \$ 1.67        | \$132.57        | \$ (17.09)     |
| 20,000                   | 98.7%                            | 97.3%                            | \$185.86        | \$187.80        | \$ 1.94        | \$148.14        | \$ (37.72)     |
| 30,000                   | 99.8%                            | 100.0%                           | \$288.86        | \$291.87        | \$ 3.01        | \$210.41        | \$ (78.45)     |

# Questions & Discussion



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