

# 6.A. 2025 Water Cost-of-Service Study

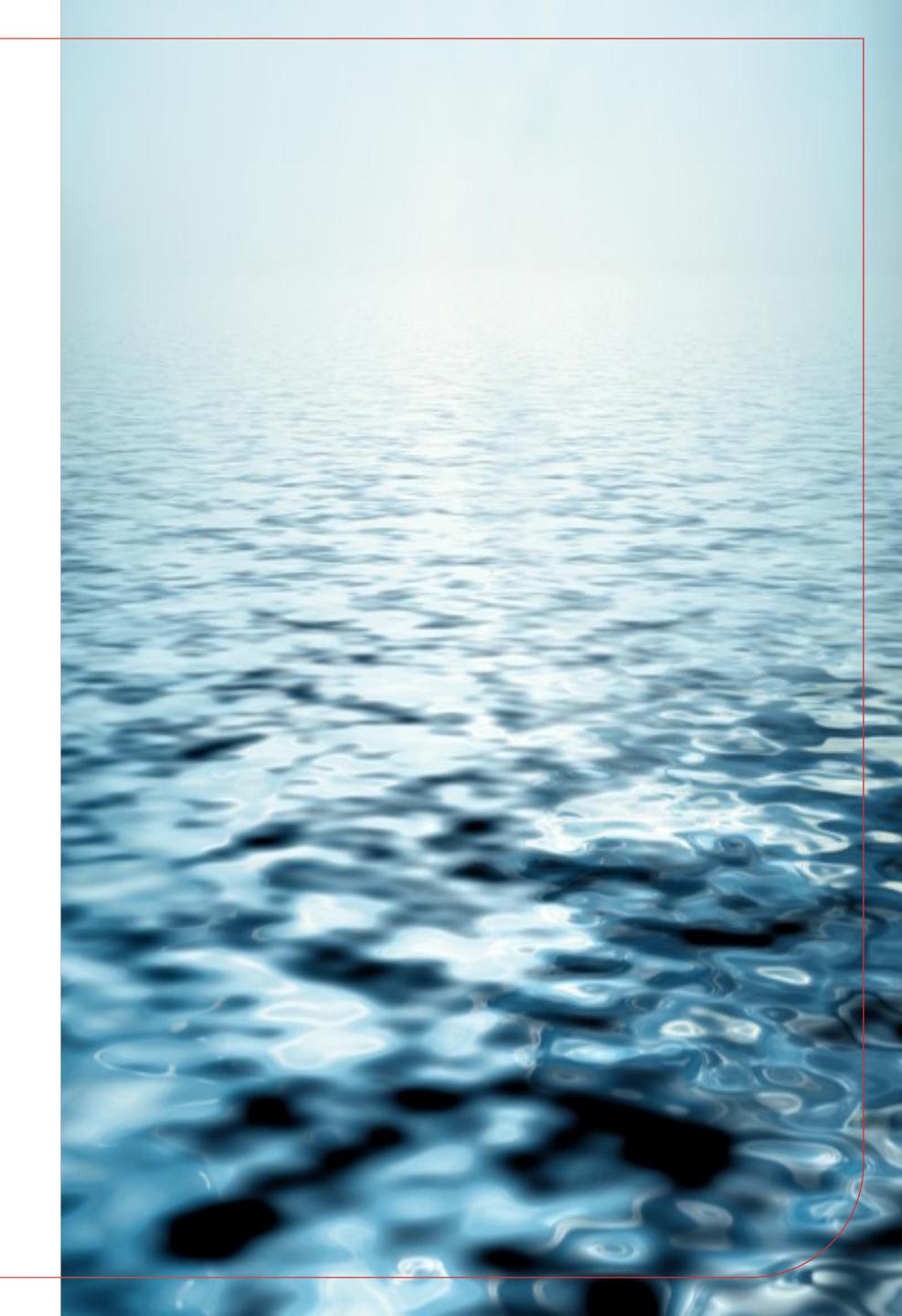


# Water Cost-of-Service & Rate Design Study

**Board Presentation** 

8/26/2025

1898<u>%</u>



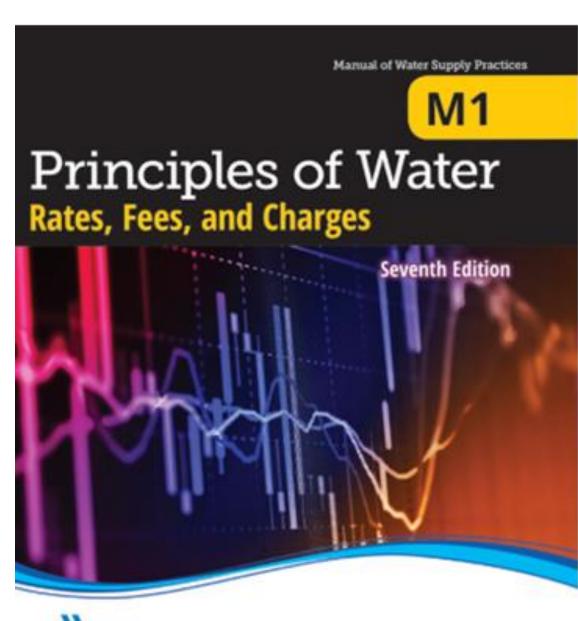
#### **OVERVIEW**

1. Background Information

2. Study Approach

3. Recommendations

4. Discussion & Questions





## Background Information

#### National Trends in Household Water Costs

| Survey or Publication     | Period      | Historical Increase<br>per Year |  |  |  |  |  |
|---------------------------|-------------|---------------------------------|--|--|--|--|--|
| Water & Sewer Index, BLS  | 2000 - 2024 | 4.8%                            |  |  |  |  |  |
| AWWA Rate Survey - Water  | 1996 - 2018 | 5.1%                            |  |  |  |  |  |
| RPU Historic Increases    | 2013 - 2025 | 3.6%                            |  |  |  |  |  |
| CPI-U (General Inflation) | 2000 - 2024 | 2.5%                            |  |  |  |  |  |

In recent history, household water costs have increased nearly 2x household inflation

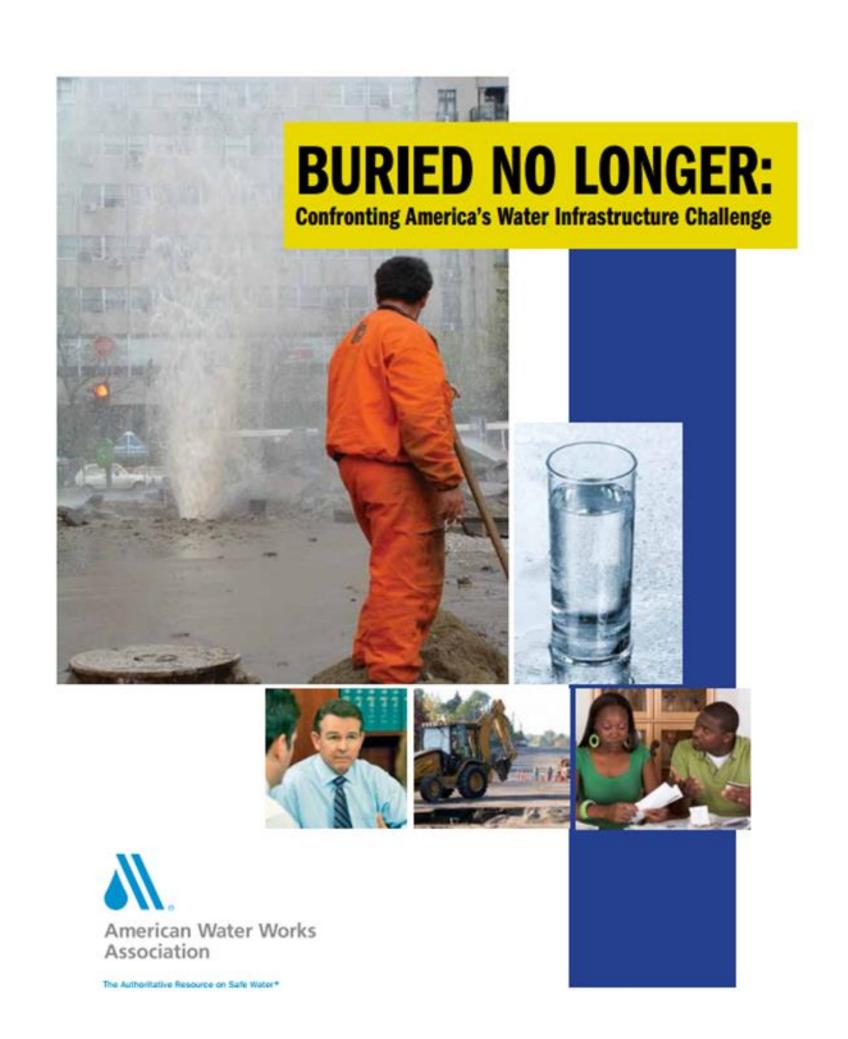
## Common Factors Contributing to Utility Rate Increases

• General trend in lower use per account can pressure variable revenue streams

Inflation on operating and capital/construction costs

More stringent water quality regulations

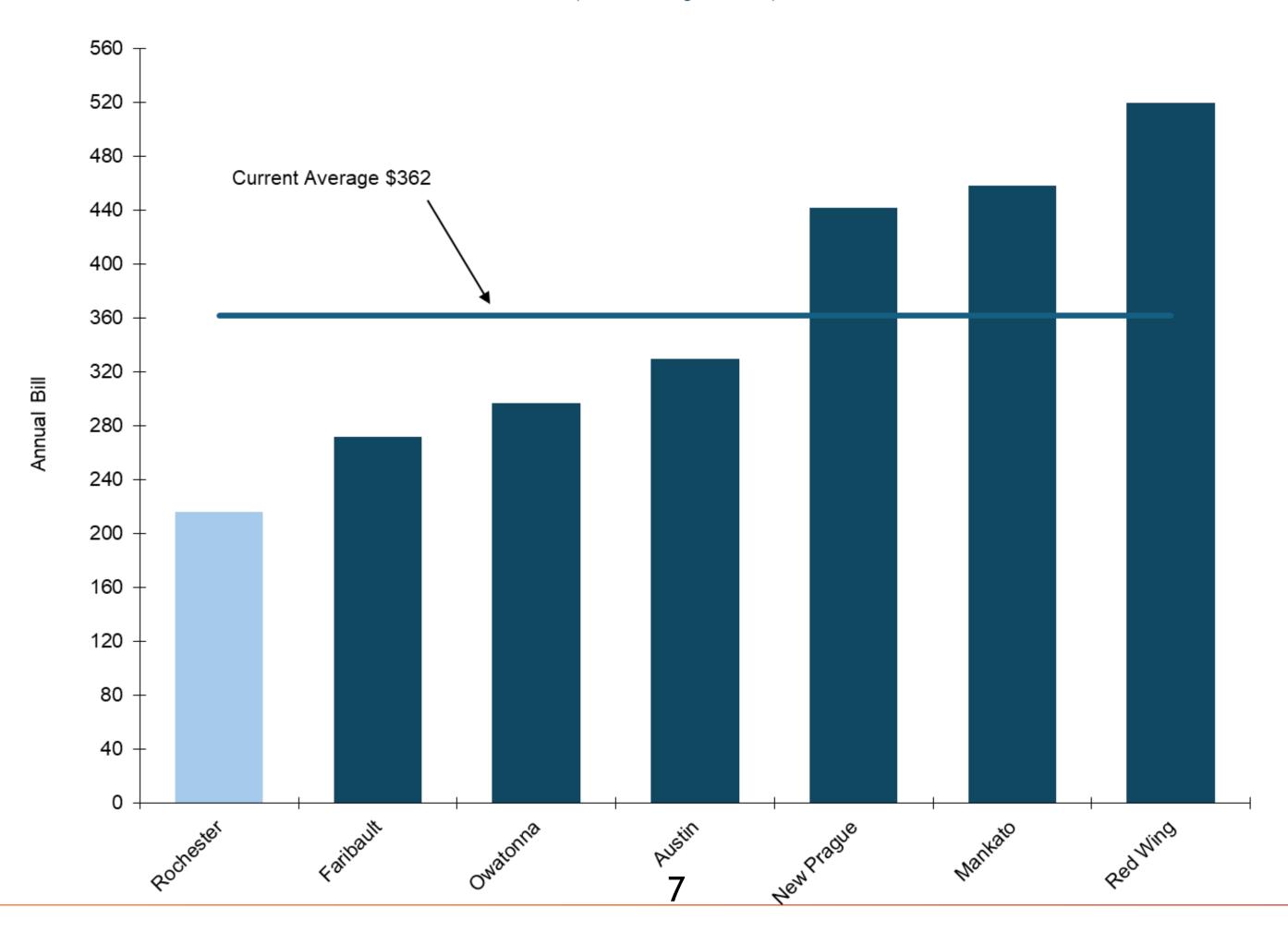
Aging infrastructure requires renewal and replacement



## Regional Residential Water Bill Comparison



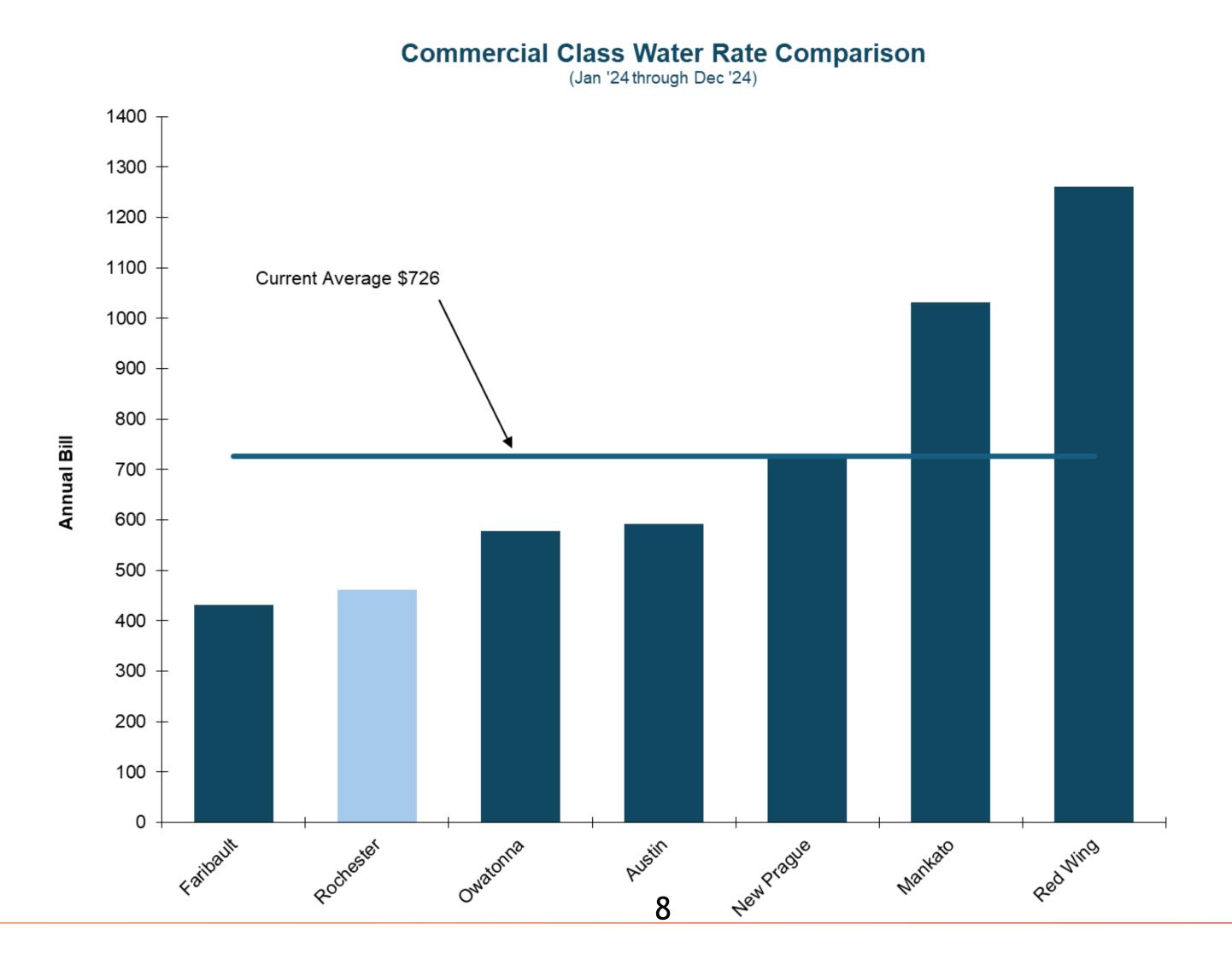
(Jan '24 through Dec '24)





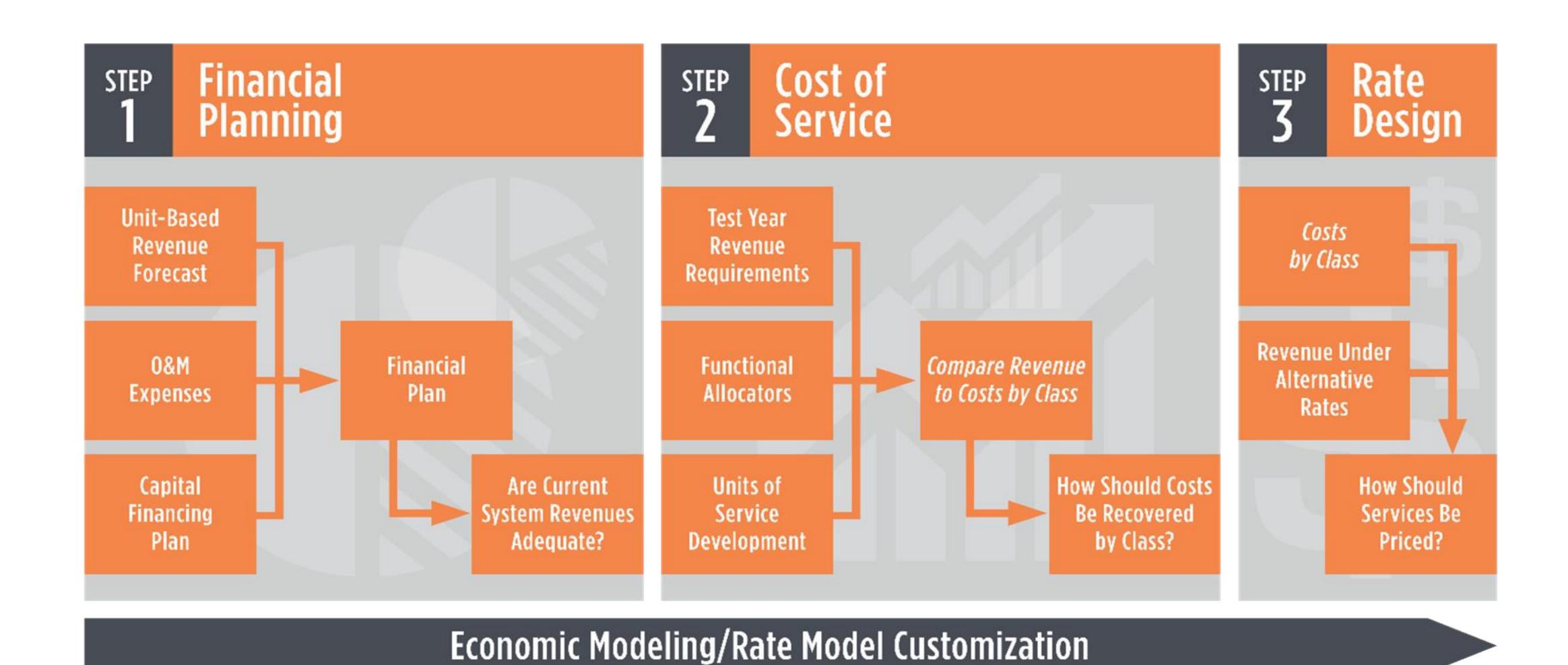
## Regional Commercial Water Bill Comparison

1898 Eco.



Study Approach

#### STUDY APPROACH





#### FINANCIAL FORECAST

- Developed and reviewed financial plan with RPU management using the following key inputs
  - Unit based revenue forecast (accounts, volume, existing rates)
  - Budgeted operating and capital expenses
  - Achieved targeted operating margins and cash balances

| Year | Proposed<br>Rate Change |
|------|-------------------------|
| 2026 | 9%                      |
| 2027 | 9%                      |
| 2028 | 7%                      |
| 2029 | 7%                      |
| 2030 | 5%                      |

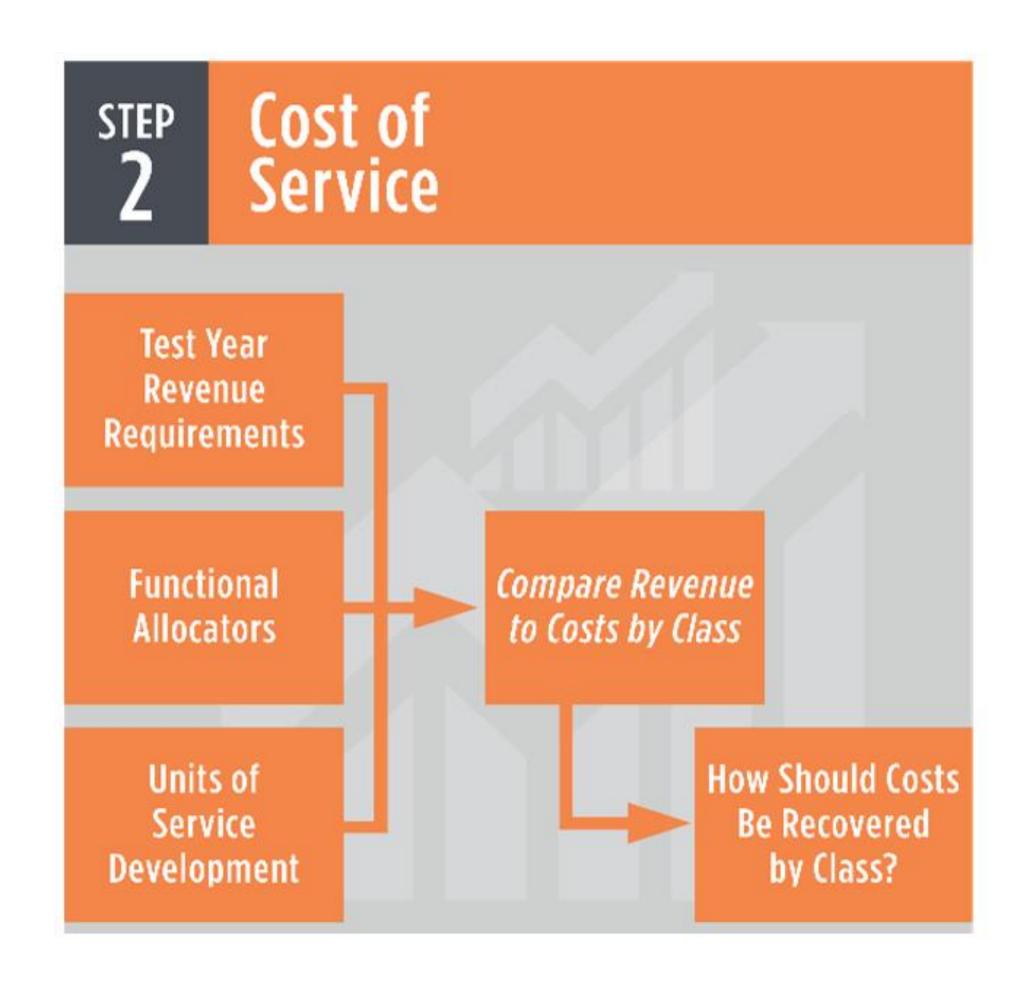
#### COST OF SERVICE ANALYSIS

 Reflects financial planning from Step 1

Allocated operating and capital costs to functions

Develop units and unit cost of service

Allocate unit costs to classes



## COST OF SERVICE ANALYSIS (TEST YEAR 2026)

|      | -                      |                       |                |            |            |  |  |  |  |  |  |  |
|------|------------------------|-----------------------|----------------|------------|------------|--|--|--|--|--|--|--|
|      |                        | Test Year 2026        |                |            |            |  |  |  |  |  |  |  |
|      |                        | Total                 |                |            |            |  |  |  |  |  |  |  |
|      |                        | Revenue               | Indicated      |            |            |  |  |  |  |  |  |  |
| Line |                        | <b>Under Existing</b> | Cost of        | Increase / | Increase / |  |  |  |  |  |  |  |
| No.  | Description            | <u>Rates</u>          | <u>Service</u> | (Decrease) | (Decrease) |  |  |  |  |  |  |  |
|      |                        | \$                    | \$             | \$         | %          |  |  |  |  |  |  |  |
| 1    | Residential            | 8,475,100             | 8,850,800      | 375,700    | 4.4%       |  |  |  |  |  |  |  |
| 2    | Commercial             | 3,982,000             | 4,697,100      | 715,100    | 18.0%      |  |  |  |  |  |  |  |
| 3    | Industrial             | 668,200               | 797,600        | 129,400    | 19.4%      |  |  |  |  |  |  |  |
| 4    | Interdepartmental (RPU | 32,100                | 35,300         | 3,200      | 10.0%      |  |  |  |  |  |  |  |
| 5    | Public Fire Protection | 699,800               | 723,900        | 24,100     | 3.4%       |  |  |  |  |  |  |  |
| 6    | Total                  | 13,857,200            | 15,104,700     | 1,247,500  | 9.0%       |  |  |  |  |  |  |  |

## COST OF SERVICE ANALYSIS (FORECASTED AVERAGE)

|      | <del>-</del>           |                       |                |            |            |
|------|------------------------|-----------------------|----------------|------------|------------|
|      |                        |                       | 2026 - 2030    |            |            |
|      |                        |                       | Average        |            |            |
|      |                        | Revenue               | Allocated      | Indicated  | Annual     |
| Line |                        | <b>Under Existing</b> | Cost of        | Increase / | Increase / |
| No.  | Description            | Rates                 | <u>Service</u> | (Decrease) | (Decrease) |
|      |                        | \$                    | \$             | \$         | %          |
| 1    | Residential            | 8,749,500             | 11,895,900     | 3,146,400  | 6.3%       |
| 2    | Commercial             | 4,111,000             | 6,515,400      | 2,404,400  | 9.6%       |
| 3    | Industrial             | 668,200               | 1,078,600      | 410,400    | 10.1%      |
| 4    | Interdepartmental (RPU | 32,100                | 47,800         | 15,700     | 8.3%       |
| 5    | Public Fire Protection | 722,400               | 863,100        | 140,700    | 3.6%       |
| 6    | Total                  | 14,283,200            | 20,400,800     | 6,117,600  | 7.4%       |

## Recommendations

#### RPU RATE DESIGN BOARD POLICY

 Financial Stability - Alignment of fixed and variable cost with fixed and variable rates

No subsidization between Rate Classes

Reduce subsidization within Rate Classes

• Rates that promote conservation and reduce costs

#### RATE DESIGN: APPROACH

- 1. Increased the volume charges more than the customer charges (in line with COS results)
- 2. Increased the Commercial & Industrial volumetric rates more than Residential (to achieve better class cost of service alignment)
- 3. Achieving impacts to customer bills within 2% of system wide revenue increase each year
- 4. Maintaining fixed revenue generation commensurate with fixed cost structure

#### EXISTING & PROPOSED RATES

|      |                                              | Existing | Proposed     |              |              |              |              |  |  |  |
|------|----------------------------------------------|----------|--------------|--------------|--------------|--------------|--------------|--|--|--|
| Line |                                              | 2025     | 2026         | 2027         | 2028         | 2029         | 2030         |  |  |  |
| No.  |                                              | Rates    | <u>Rates</u> | <u>Rates</u> | <u>Rates</u> | <u>Rates</u> | <u>Rates</u> |  |  |  |
|      |                                              | \$       | \$           | \$           | \$           | \$           | \$           |  |  |  |
|      | Customer Charge by Meter size                |          |              |              |              |              |              |  |  |  |
| 1    | 5/8"                                         | 11.86    | 12.75        | 13.71        | 14.51        | 15.36        | 16.00        |  |  |  |
| 2    | 3/4"                                         | 15.49    | 16.65        | 17.90        | 18.94        | 20.04        | 20.88        |  |  |  |
| 3    | 1"                                           | 22.50    | 24.19        | 26.00        | 27.52        | 29.13        | 30.34        |  |  |  |
| 4    | 1.5"                                         | 40.41    | 43.44        | 46.70        | 49.42        | 52.30        | 54.48        |  |  |  |
| 5    | 2"                                           | 61.94    | 66.59        | 71.58        | 75.76        | 80.18        | 83.52        |  |  |  |
| 6    | 3"                                           | 112.45   | 120.88       | 129.95       | 137.53       | 145.55       | 151.61       |  |  |  |
| 7    | 4"                                           | 184.44   | 198.27       | 213.14       | 225.57       | 238.73       | 248.68       |  |  |  |
| 8    | 6"                                           | 364.84   | 392.20       | 421.62       | 446.21       | 472.24       | 491.92       |  |  |  |
| 9    | 8"                                           | 649.18   | 697.87       | 750.21       | 793.97       | 840.28       | 875.29       |  |  |  |
|      | Volume Charge per 100 Cubic Feet Residential |          |              |              |              |              |              |  |  |  |
| 10   | First 7 CCF                                  | 1.053    | 1.166        | 1.291        | 1.399        | 1.516        | 1.607        |  |  |  |
| 11   | Next 5 CCF                                   | 1.156    | 1.301        | 1.464        | 1.606        | 1.762        | 1.884        |  |  |  |
| 12   | Over 12 CCF                                  | 1.312    | 1.486        | 1.683        | 1.856        | 2.047        | 2.198        |  |  |  |
| 12   | OVET 12 CCT                                  | 1.512    | 1.400        | 1.005        | 1.030        | 2.047        | 2.130        |  |  |  |
| 13   | Commercial                                   | 1.053    | 1.172        | 1.304        | 1.419        | 1.544        | 1.641        |  |  |  |
| 14   | Industrial                                   | 1.053    | 1.172        | 1.304        | 1.419        | 1.544        | 1.641        |  |  |  |
| 15   | Inderdepartmental                            | 1.053    | 1.172        | 1.304        | 1.419        | 1.544        | 1.641        |  |  |  |
|      | Fire Charge                                  |          |              |              |              |              |              |  |  |  |
| 16   | Residential                                  | 1.11     | 1.15         | 1.19         | 1.22         | 1.25         | 1.27         |  |  |  |
| 17   | Commercial                                   | 4.60     | 4.77         | 4.93         | 5.06         | 5.18         | 5.26         |  |  |  |
| 18   | Industrial                                   | 4.60     | 4.77         | 4.93         | 5.06         | 5.18         | 5.26         |  |  |  |
| 19   | Interdepartmental (RPU)                      | 4.60     | 4.77         | 4.93         | 5.06         | 5.18         | 5.26         |  |  |  |
|      |                                              |          |              |              |              |              |              |  |  |  |

<sup>[1]</sup> Outside City customer pay 2.0 times the inside city customer rate

### RESIDENTIAL RATES

|      |                      |             |             | Monthly Bill Under |       |          |       |          |              |          |       |              |       |       |       |
|------|----------------------|-------------|-------------|--------------------|-------|----------|-------|----------|--------------|----------|-------|--------------|-------|-------|-------|
|      |                      |             |             | Existing Proposed  |       |          |       |          |              |          |       |              |       |       |       |
| Line |                      | Billable    | Meter       |                    | 2025  |          | 2026  |          | 2027         |          | 2028  |              | 2029  |       | 2030  |
| No.  | Customer Class       | <u>Flow</u> | <u>Size</u> | <u> </u>           | Rates | <u> </u> | Rates | <u> </u> | <u>Rates</u> | <u>[</u> | Rates | <u>Rates</u> |       | Rates |       |
|      |                      | CCF         | Inches      |                    |       |          |       |          |              |          |       |              |       |       |       |
|      | Residential Customer |             |             |                    |       |          |       |          |              |          |       |              |       |       |       |
| 1    | Low User             | 3.0         | 5/8"        | \$                 | 15.02 | \$       | 16.25 | \$       | 17.58        | \$       | 18.71 | \$           | 19.91 | \$    | 20.82 |
| 2    | Average User         | 6.0         | 5/8"        | \$                 | 18.18 | \$       | 19.75 | \$       | 21.46        | \$       | 22.90 | \$           | 24.46 | \$    | 25.64 |
| 3    | High User            | 12.0        | 5/8"        | \$                 | 25.01 | \$       | 27.42 | \$       | 30.07        | \$       | 32.33 | \$           | 34.78 | \$    | 36.67 |
|      | Change in Bills (\$) |             |             |                    |       |          |       |          |              |          |       |              |       |       |       |
| 4    | Low User             | 3.0         | 5/8"        |                    |       | \$       | 1.23  | \$       | 1.34         | \$       | 1.12  | \$           | 1.20  | \$    | 0.91  |
| 5    | Average User         | 6.0         | 5/8"        |                    |       | \$       | 1.57  | \$       | 1.71         | \$       | 1.45  | \$           | 1.55  | \$    | 1.19  |
| 6    | High User            | 12.0        | 5/8"        |                    |       | \$       | 2.41  | \$       | 2.65         | \$       | 2.27  | \$           | 2.45  | \$    | 1.89  |
|      | Change in Bills (%)  |             |             |                    |       |          |       |          |              |          |       |              |       |       |       |
| 7    | Low User             | 3.0         | 5/8"        |                    |       |          | 8.2%  |          | 8.2%         |          | 6.4%  |              | 6.4%  |       | 4.6%  |
| 8    | Average User         | 6.0         | 5/8"        |                    |       |          | 8.6%  |          | 8.7%         |          | 6.7%  |              | 6.8%  |       | 4.8%  |
| 9    | High User            | 12.0        | 5/8"        |                    |       |          | 9.6%  |          | 9.7%         |          | 7.5%  |              | 7.6%  |       | 5.4%  |

### COMMERCIAL RATES

|      |                      |             |             | Monthly Bill Under |              |    |        |    |              |              |        |       |        |              |        |
|------|----------------------|-------------|-------------|--------------------|--------------|----|--------|----|--------------|--------------|--------|-------|--------|--------------|--------|
|      |                      |             |             | Е                  | xisting      |    |        |    |              | Pr           | oposed |       |        |              |        |
| Line |                      | Billable    | Meter       |                    | 2025         |    | 2026   |    | 2027         |              | 2028   |       | 2029   |              | 2030   |
| No.  | Customer Class       | <u>Flow</u> | <u>Size</u> |                    | <u>Rates</u> | ļ  | Rates  |    | <u>Rates</u> | <u>Rates</u> |        | Rates |        | <u>Rates</u> |        |
|      |                      | CCF         | Inches      |                    |              |    |        |    |              |              |        |       |        |              |        |
|      | Commercial Customer  |             |             |                    |              |    |        |    |              |              |        |       |        |              |        |
| 1    | Low User             | 24.0        | 1"          | \$                 | 47.77        | \$ | 52.32  | \$ | 57.30        | \$           | 61.58  | \$    | 66.19  | \$           | 69.72  |
| 2    | Average User         | 48.0        | 1"          | \$                 | 73.04        | \$ | 80.45  | \$ | 88.59        | \$           | 95.63  | \$    | 103.24 | \$           | 109.11 |
| 3    | High User            | 96.0        | 1"          | \$                 | 123.59       | \$ | 136.70 | \$ | 151.18       | \$           | 163.74 | \$    | 177.35 | \$           | 187.88 |
|      | Change in Bills (\$) |             |             |                    |              |    |        |    |              |              |        |       |        |              |        |
| 4    | Low User             | 24.0        | 1"          |                    |              | \$ | 4.55   | \$ | 4.98         | \$           | 4.28   | \$    | 4.61   | \$           | 3.54   |
| 5    | Average User         | 48.0        | 1"          |                    |              | \$ | 7.40   | \$ | 8.15         | \$           | 7.04   | \$    | 7.61   | \$           | 5.87   |
| 6    | High User            | 96.0        | 1"          |                    |              | \$ | 13.11  | \$ | 14.48        | \$           | 12.56  | \$    | 13.61  | \$           | 10.52  |
|      | Change in Bills (%)  |             |             |                    |              |    |        |    |              |              |        |       |        |              |        |
| 7    | Low User             | 24.0        | 1"          |                    |              |    | 9.5%   |    | 9.5%         |              | 7.5%   |       | 7.5%   |              | 5.3%   |
| 8    | Average User         | 48.0        | 1"          |                    |              |    | 10.1%  |    | 10.1%        |              | 7.9%   |       | 8.0%   |              | 5.7%   |
| 9    | High User            | 96.0        | 1"          |                    |              |    | 10.6%  |    | 10.6%        |              | 8.3%   |       | 8.3%   |              | 5.9%   |

## INDUSTRIAL RATES

|      |                      |             |             | Monthly Bill Under |              |            |              |              |              |  |  |  |
|------|----------------------|-------------|-------------|--------------------|--------------|------------|--------------|--------------|--------------|--|--|--|
|      |                      |             |             | Existing           |              | Proposed   |              |              |              |  |  |  |
| Line |                      | Billable    | Meter       | 2025               | 2026         | 2027       | 2028         | 2029         | 2030         |  |  |  |
| No.  | Customer Class       | <u>Flow</u> | <u>Size</u> | <u>Rates</u>       | <u>Rates</u> | Rates      | <u>Rates</u> | <u>Rates</u> | <u>Rates</u> |  |  |  |
|      |                      | CCF         | Inches      |                    |              |            |              |              |              |  |  |  |
|      |                      |             |             |                    |              |            |              |              |              |  |  |  |
|      | Industrial Customer  |             |             |                    |              |            |              |              |              |  |  |  |
| 1    | Low User             | 1,050.0     | 8"          | \$1,470.49         | \$1,622.80   | \$1,790.82 | \$1,936.16   | \$2,093.44   | \$2,214.97   |  |  |  |
| 2    | Average User         | 2,100.0     | 8"          | \$2,576.14         | \$2,853.40   | \$3,160.02 | \$3,426.11   | \$3,714.64   | \$3,938.02   |  |  |  |
| 3    | High User            | 4,200.0     | 8"          | \$4,787.44         | \$5,314.60   | \$5,898.42 | \$6,406.01   | \$6,957.04   | \$7,384.12   |  |  |  |
|      |                      |             |             |                    |              |            |              |              |              |  |  |  |
|      | Change in Bills (\$) |             |             |                    |              |            |              |              |              |  |  |  |
| 4    | Low User             | 1,050.0     | 8"          |                    | \$ 152.31    | \$ 168.02  | \$ 145.34    | \$ 157.28    | \$ 121.53    |  |  |  |
| 5    | Average User         | 2,100.0     | 8"          |                    | \$ 277.26    | \$ 306.62  | \$ 266.09    | \$ 288.53    | \$ 223.38    |  |  |  |
| 6    | High User            | 4,200.0     | 8"          |                    | \$ 527.16    | \$ 583.82  | \$ 507.59    | \$ 551.03    | \$ 427.08    |  |  |  |
|      |                      |             |             |                    |              |            |              |              |              |  |  |  |
|      | Change in Bills (%)  |             |             |                    |              |            |              |              |              |  |  |  |
| 7    | Low User             | 1,050.0     | 8"          |                    | 10.4%        | 10.4%      | 8.1%         | 8.1%         | 5.8%         |  |  |  |
| 8    | Average User         | 2,100.0     | 8"          |                    | 10.8%        | 10.7%      | 8.4%         | 8.4%         | 6.0%         |  |  |  |
| 9    | High User            | 4,200.0     | 8"          |                    | 11.0%        | 11.0%      | 8.6%         | 8.6%         | 6.1%         |  |  |  |
|      |                      |             |             |                    |              |            |              |              |              |  |  |  |





# Questions