# Reverse Osmosis Water Treatment Plant Preliminary Engineering Report & Rate Study

### **Community Meeting**

## Town of Belleair November 10, 2020

RAFTELIS





## **RATE STUDY ASSUMPTIONS**

- Minimal customer growth for the system
  - Units associated with Belleview Place
- Operating expense growth rate of approximately 6.0% per year from Fiscal Years 2020 Through 2035
  - Includes cost escalation for inflation, merit and cost of living adjustments, additional personnel, etc.
  - Includes increased net operating expenses associated with operation of the RO treatment plant
- Assumes issuance of two low-interest State Revolving Fund (SRF) loans to fund capital plan
  - 20-year loans at 2.0% interest rate
  - Debt service payments not made until after completion of the project
  - Requires minimum debt service coverage ratio of 115%

### RATE STUDY PRELIMINARY RESULTS – IDENTIFIED RATE ADJUSTMENTS

|             | 2021  | 2022-2024 | 2025-2035 |
|-------------|-------|-----------|-----------|
| Two Phases  | 0.00% | 13.25%    | 3.75%     |
| All-At-Once | 0.00% | 16.00%    | 3.00%     |

- Rate Adjustments Identified to:
  - Fund increased cost of operations
  - Pay annual debt service payments associated with funding projects identified in the PER
  - Maintain debt service coverage ratios required for compliance with proposed SRF loans
  - Maintain adequate operating and capital reserves

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## CURRENT RATE COMPARISONS WITH OTHER UTILITIES



Comparison of Monthly Charges for Residential Water Service for Customers Using 10,000 Gallons per Month

#### Table 6

#### Town of Belleair, Florida Water Revenue Sufficiency Study

#### Comparison of Typical Monthly Residential Bills for Water Service[\*]

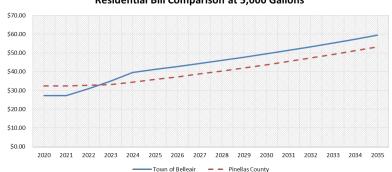
|      |                                     |         | Residential Service for a 5/8" or 3/4" Meter |         |         |         |         |          |          |          |          |            |
|------|-------------------------------------|---------|--|---------|---------|---------|---------|----------|----------|----------|----------|------------|
| Line |                                     | 0       | 2,000  | 4,000   | 5,000   | 7,000   | 10,000  | 15,000   | 20,000   | 50,000   | 75,000   | 100,000    |
| No.  | Description                         | Gallons | Gallons                                      | Gallons | Gallons | Gallons | Gallons | Gallons  | Gallons  | Gallons  | Gallons  | Gallons    |
|      | Town of Belleair                    |         |  |         |         |         |         |          |          |          |          |            |
| 1    | Existing Rates                      | \$12.99 | \$16.89                                      | \$20.79 | \$27.31 | \$40.35 | \$59.91 | \$92.51  | \$125.11 | \$353.21 | \$548.71 | \$744.21   |
|      | Surveyed Florida Utilities:         |         |  |         |         |         |         |          |          |          |          |            |
| 2    | City of Clearwater                  | \$24.09 | \$24.09                                      | \$33.85 | \$43.61 | \$63.13 | \$94.96 | \$156.51 | \$218.06 | \$587.36 | \$895.11 | \$1,202.86 |
| 3    | City of Dunedin                     | 7.47    | 16.29  | 25.11   | 29.52   | 42.76   | 62.62   | 95.72    | 128.82   | 427.32   | 676.07   | 924.82     |
| 4    | City of Gulfport                    | 16.93   | 16.93  | 34.98   | 44.56   | 66.00   | 98.16   | 157.36   | 222.21   | 611.31   | 935.56   | 1,259.81   |
| 5    | City of Largo                       | 6.80    | 17.06  | 27.32   | 32.45   | 42.71   | 58.10   | 83.75    | 109.40   | 263.30   | 391.55   | 519.80     |
| 6    | City of Oldsmar                     | 13.79   | 19.94  | 32.24   | 38.39   | 50.69   | 69.14   | 110.39   | 163.89   | 484.89   | 752.39   | 1,019.89   |
| 7    | Pinellas County                     | 6.80    | 17.06  | 27.32   | 32.45   | 42.71   | 58.10   | 83.75    | 109.40   | 263.30   | 391.55   | 519.80     |
| 8    | City of Pinellas Park               | 22.08   | 22.08  | 29.44   | 36.80   | 51.52   | 74.46   | 115.46   | 159.85   | 431.35   | 657.60   | 883.85     |
| 9    | City of Safety Harbor               | 22.81   | 30.11  | 37.41   | 41.06   | 59.30   | 92.37   | 195.02   | 297.67   | 1,187.17 | 1,928.42 | 2,669.67   |
| 10   | City of St. Petersburg              | 13.18   | 22.70  | 32.22   | 36.98   | 48.19   | 70.42   | 111.07   | 164.77   | 809.17   | 1,346.17 | 1,883.17   |
| 11   | City of Tarpon Springs              | 23.24   | 32.00  | 40.75   | 45.13   | 62.64   | 88.90   | 143.72   | 212.35   | 828.34   | 1,362.13 | 1,895.91   |
| 12   | City of Treasure Island             | 6.80    | 17.06  | 27.32   | 32.45   | 42.71   | 58.10   | 83.75    | 109.40   | 263.30   | 391.55   | 519.80     |
| 13   | Surveyed Florida Utilities' Average | \$14.91 | \$21.39                                      | \$31.63 | \$37.58 | \$52.03 | \$75.03 | \$121.50 | \$172.35 | \$559.71 | \$884.37 | \$1,209.03 |
| 14   | Minimum                             | 6.80    | 16.29  | 25.11   | 29.52   | 42.71   | 58.10   | 83.75    | 109.40   | 263.30   | 391.55   | 519.80     |
| 15   | Maximum                             | 24.09   | 32.00  | 40.75   | 45.13   | 66.00   | 98.16   | 195.02   | 297.67   | 1,187.17 | 1,928.42 | 2,669.67   |

#### Footnotes:

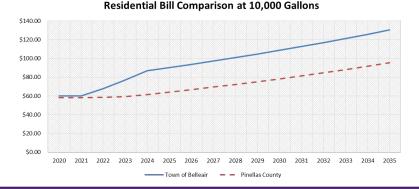
[\*] Unless otherwise noted, amounts shown reflect residential rates in effect October 2020 and are exclusive of taxes, franchise fees or water restriction surcharges, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

## **RATE COMPARISONS WITH PINELLAS COUNTY**

- Assumes Identified Rate Increases from Preliminary Results for Town
- Pinellas County Assumed Rate Adjustments:
  - County did not implement retail water rate adjustments for fiscal year 2021
  - 1.0% per year for fiscal years 2022 2023
  - 4.0% per year thereafter
- Assumes Town Would be Retail Customer of the County
- Does Not Consider Potential for:
  - Sale of Town water distribution line assets
  - Payment of impact fees to the County
  - Costs that may still be incurred by Town







#### Comparison of Typical Monthly Residential Bills for Water Service to Pinellas County - All at Once Scenario

|      | Residential Service for a 5/8" or 3/4" Meter |         |         |         |         |         |         |         |          |          |          |          |
|------|--|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|
| Line |  | 0       | 2,000   | 4,000   | 5,000   | 7,000   | 10,000  | 15,000  | 20,000   | 50,000   | 75,000   | 100,000  |
| No.  | Description                                  | Gallons  | Gallons  | Gallons  | Gallons  |
|      | Town of Belleair                             |         |         |         |         |         |         |         |          |          |          |          |
| 1    | 2020   | \$12.99 | \$16.89 | \$20.79 | \$27.31 | \$40.35 | \$59.91 | \$92.51 | \$125.11 | \$353.21 | \$548.71 | \$744.21 |
| 2    | 2021   | 12.99   | 16.89   | 20.79   | 27.31   | 40.35   | 59.91   | 92.51   | 125.11   | 353.21   | 548.71   | 744.21   |
| 3    | 2022   | 15.07   | 19.59   | 24.11   | 31.67   | 46.79   | 69.47   | 107.27  | 145.07   | 409.62   | 636.37   | 863.12   |
| 4    | 2023   | 17.48   | 22.72   | 27.96   | 36.73   | 54.27   | 80.58   | 124.43  | 168.28   | 475.13   | 738.13   | 1,001.13 |
| 5    | 2024   | 20.28   | 26.36   | 32.44   | 42.61   | 62.95   | 93.46   | 144.31  | 195.16   | 551.01   | 856.01   | 1,161.01 |
| 6    | 2025   | 20.89   | 27.15   | 33.41   | 43.89   | 64.85   | 96.29   | 148.69  | 201.09   | 567.74   | 881.99   | 1,196.24 |
| 7    | 2026   | 21.52   | 27.96   | 34.40   | 45.19   | 66.77   | 99.14   | 153.09  | 207.04   | 584.74   | 908.49   | 1,232.24 |
| 8    | 2027   | 22.17   | 28.81   | 35.45   | 46.56   | 68.78   | 102.11  | 157.66  | 213.21   | 602.26   | 935.76   | 1,269.26 |
| 9    | 2028   | 22.84   | 29.68   | 36.52   | 47.96   | 70.84   | 105.16  | 162.36  | 219.56   | 620.26   | 963.76   | 1,307.26 |
| 10   | 2029   | 23.53   | 30.57   | 37.61   | 49.39   | 72.95   | 108.29  | 167.19  | 226.09   | 638.74   | 992.49   | 1,346.24 |
| 11   | 2030   | 24.24   | 31.50   | 38.76   | 50.89   | 75.15   | 111.54  | 172.19  | 232.84   | 657.74   | 1,021.99 | 1,386.24 |
| 12   | 2031   | 24.97   | 32.45   | 39.93   | 52.42   | 77.40   | 114.87  | 177.32  | 239.77   | 677.47   | 1,052.72 | 1,427.97 |
| 13   | 2032   | 25.72   | 33.42   | 41.12   | 53.98   | 79.70   | 118.28  | 182.58  | 246.88   | 697.68   | 1,084.18 | 1,470.68 |
| 14   | 2033   | 26.49   | 34.43   | 42.37   | 55.62   | 82.12   | 121.87  | 188.12  | 254.37   | 718.62   | 1,116.62 | 1,514.62 |
| 15   | 2034   | 27.28   | 35.46   | 43.64   | 57.29   | 84.59   | 125.54  | 193.79  | 262.04   | 740.29   | 1,150.29 | 1,560.29 |
| 16   | 2035   | 28.10   | 36.52   | 44.94   | 59.00   | 87.12   | 129.30  | 199.60  | 269.90   | 762.45   | 1,184.70 | 1,606.95 |
|      | Pinellas County                              |         |         |         |         |         |         |         |          |          |          |          |
| 17   | 2020   | \$6.80  | \$17.06 | \$27.32 | \$32.45 | \$42.71 | \$58.10 | \$83.75 | \$109.40 | \$263.30 | \$391.55 | \$519.80 |
| 18   | 2021   | 6.80    | 17.06   | 27.32   | 32.45   | 42.71   | 58.10   | 83.75   | 109.40   | 263.30   | 391.55   | 519.80   |
| 19   | 2022   | 6.87    | 17.23   | 27.59   | 32.77   | 43.13   | 58.67   | 84.57   | 110.47   | 265.87   | 395.37   | 524.87   |
| 20   | 2023   | 6.94    | 17.40   | 27.86   | 33.09   | 43.55   | 59.24   | 85.39   | 111.54   | 268.44   | 399.19   | 529.94   |
| 21   | 2024   | 7.22    | 18.10   | 28.98   | 34.42   | 45.30   | 61.62   | 88.82   | 116.02   | 279.22   | 415.22   | 551.22   |
| 22   | 2025   | 7.51    | 18.83   | 30.15   | 35.81   | 47.13   | 64.11   | 92.41   | 120.71   | 290.51   | 432.01   | 573.51   |
| 23   | 2026   | 7.81    | 19.59   | 31.37   | 37.26   | 49.04   | 66.71   | 96.16   | 125.61   | 302.31   | 449.56   | 596.81   |
| 24   | 2027   | 8.12    | 20.38   | 32.64   | 38.77   | 51.03   | 69.42   | 100.07  | 130.72   | 314.62   | 467.87   | 621.12   |
| 25   | 2028   | 8.44    | 21.20   | 33.96   | 40.34   | 53.10   | 72.24   | 104.14  | 136.04   | 327.44   | 486.94   | 646.44   |
| 26   | 2029   | 8.78    | 22.06   | 35.34   | 41.98   | 55.26   | 75.18   | 108.38  | 141.58   | 340.78   | 506.78   | 672.78   |
| 27   | 2030   | 9.13    | 22.95   | 36.77   | 43.68   | 57.50   | 78.23   | 112.78  | 147.33   | 354.63   | 527.38   | 700.13   |
| 28   | 2031   | 9.50    | 23.88   | 38.26   | 45.45   | 59.83   | 81.40   | 117.35  | 153.30   | 369.00   | 548.75   | 728.50   |
| 29   | 2032   | 9.88    | 24.84   | 39.80   | 47.28   | 62.24   | 84.68   | 122.08  | 159.48   | 383.88   | 570.88   | 757.88   |
| 30   | 2033   | 10.28   | 25.84   | 41.40   | 49.18   | 64.74   | 88.08   | 126.98  | 165.88   | 399.28   | 593.78   | 788.28   |
| 31   | 2034   | 10.69   | 26.87   | 43.05   | 51.14   | 67.32   | 91.59   | 132.04  | 172.49   | 415.19   | 617.44   | 819.69   |
| 32   | 2035   | 11.12   | 27.94   | 44.76   | 53.17   | 69.99   | 95.22   | 137.27  | 179.32   | 431.62   | 641.87   | 852.12   |

### COMPARISON OF FUTURE BILLING - RO ALL AT ONCE VERSUS PC RETAIL

|          |         | <u>2020</u> | <u>2023</u> | <u>2027</u> | <u>2030</u> | <u>2035</u> |
|----------|---------|-------------|-------------|-------------|-------------|-------------|
| BELLEAIR | 5 TGAL  | \$27.31     | \$36.73     | \$46.56     | \$50.89     | \$59.00     |
|          | 10 TGAL | 59.91       | 80.58       | 102.11      | 111.54      | 129.30      |
|          | 20 TGAL | 125.11      | 168.28      | 213.21      | 232.84      | 269.90      |
|          |         |             |             |             |             |             |
| PINELLAS | 5 TGAL  | \$32.45     | \$33.09     | \$38.77     | \$43.68     | \$53.17     |
|          | 10 TGAL | 58.10       | 59.24       | 69.42       | 78.23       | 95.22       |
|          | 20 TGAL | 109.40      | 111.54      | 130.72      | 147.33      | 179.32      |