

# 12/26/17 Sewer Rate Proposal

## Information on Proposed Sewer Rate Increase

Dec 11, 2017

### Expense Summary

|                             | FY18          | FY17          | FY16          | FY15          | FY14          | FY13          | FY12          | FY11          | FY10          |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category                    | Budgeted      | Actual        | Actual        | Actual        | Actual        | Actual        | Actual        | Actual        | Actual        |
| Alarm Services              | 280           | 270           | 264           | 264           | 258           | 252           | 252           | 246           | 240           |
| Bill Printing               | 565           | 417           | 556           | 553           | 552           | 552           | 553           | 551           | 543           |
| Dues                        | 112           | 112           | 112           | 112           | 112           | -             | -             | -             | -             |
| Electric                    | 1,500         | 1,184         | 1,314         | 1,413         | 1,192         | 1,109         | 1,239         | 1,317         | 1,407         |
| Inspections/Calibrations    | 685           | 50            | -             | 100           | 685           | 100           | 569           | 569           | 70            |
| I&I Work & Smoke Test       | 2,500         | -             | -             | -             | 2,485         | -             | -             | -             | -             |
| Maintenance                 | 5,000         | 371           | 4,231         | 6,704         | 3,045         | 3,674         | 1,224         | 130           | -             |
| Mileage                     | 1,200         | 969           | 1,027         | 1,076         | 1,038         | 1,127         | 1,249         | 1,046         | 1,080         |
| Mowing                      | 450           | 275           | 330           | 320           | 350           | 335           | 440           | 275           | 290           |
| Other/Supplies              | 200           | 155           | 923           | -             | -             | 803           | -             | 26            | 480           |
| Payroll                     | 11,983        | 10,547        | 10,688        | 11,456        | 11,110        | 9,303         | 9,998         | 9,162         | 10,774        |
| Postage                     | 350           | -             | 59            | -             | 32            | -             | -             | -             | 110           |
| Sewage Disposal             | 71,000        | 71,257        | 59,422        | 50,625        | 61,643        | 59,053        | 63,897        | 52,029        | 47,070        |
| Telephone                   | 240           | 227           | 227           | 225           | 222           | 225           | 213           | 222           | 176           |
| <b>Expenses grand total</b> | <b>96,065</b> | <b>85,834</b> | <b>79,152</b> | <b>72,848</b> | <b>82,724</b> | <b>76,534</b> | <b>79,633</b> | <b>65,573</b> | <b>62,240</b> |

|                       |        |        |        |        |        |        |        |        |        |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Omnibus Budget Voted  | 96,065 | 92,585 | 87,865 | 87,865 | 79,230 | 79,042 | 67,740 | 66,166 | 66,047 |
| Extra Voted to Budget | -      | -      | -      | -      | 3,500  | -      | 12,000 | -      | -      |
| Budget minus Expenses | -      | 6,751  | 8,713  | 15,017 | 6      | 2,508  | 107    | 593    | 3,806  |

|                                  | Average |        |        |        |        |        |        |        |        |
|----------------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| % expenses - Sewage Disposal     | 76%     | 83%    | 75%    | 69%    | 75%    | 77%    | 80%    | 79%    | 76%    |
| % all other expenses             | 24%     | 17%    | 25%    | 31%    | 25%    | 23%    | 20%    | 21%    | 24%    |
| total all other expenses         |         | 14,578 | 19,730 | 22,222 | 21,081 | 17,480 | 15,736 | 13,544 | 15,170 |
| incr all other expenses/prior yr | -1.4%   | -26.1% | -11.2% | 5.4%   | 20.6%  | 11.1%  | 16.2%  | -10.7% | -16.1% |

|  |            |   |            |
|--|------------|---|------------|
| 36-month total gallons sent to Montague        | 28,485,200 | average yearly non-disposal expenses (last 3 years) | 18,843     |
| average gallons for 12 months                  | 9,495,067  | average increase to non-disposal expenses (last 3)  | -11%       |
| estimated disposal cost - old rate \$7.41/1000 | \$ 70,358  | (A) average yearly non-disposal expenses plus 5%    | 19,785     |
| (B) estimated disposal cost - NEW rate \$7.66  | \$ 72,732  | budgeted for non-disposal expenses                  | 25,065     |
| budgeted for disposal                          | \$ 71,000  |   |            |
| expected shortfall                             | \$ 1,732   | non-disposal costs (average) (A)                    | \$ 19,785  |
|  |            | estimated disposal costs (new rate) (B)             | \$ 72,732  |
| Montague rate increase                         | 3.37%      | contingency for nonpayments & build reserves        | \$ 10,000  |
|  |            | total to bill                                       | \$ 102,518 |

### Revenue Summary

There are currently 112 sewer accounts (as of 9/28/17), but this will soon go to 114 (Gill Mobil & 2 Oak St)

|                   |   |
|-------------------|---|
| Current Rate      | 0.193 \$/cubic foot (adopted for bills in Dec 2016) |
| less 10% discount | 0.0193 (all customers receive the discount)         |
| Effective Rate    | 0.1737  |

#### Sewer Commitments - aka Invoices to Users

| Period | FY18 | FY17      | FY16      | FY15      | FY14      | FY13      | FY12      | FY11      | FY10      |
|--------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|        |      | 86,976.16 | 93,303.22 | 86,514.47 | 85,216.25 | 73,688.53 | \$ 49,266 | \$ 51,262 | \$ 52,310 |

(only 10 months of billing fell in FY17 due to shift in quarterly cycle)

#### Current Projected Revenue

|                                 |                    |                              |
|---------------------------------|--------------------|------------------------------|
| RWD Water Use (current average) | 12,496 gal/day     | (average of last 8 quarters) |
| equals                          | 4,561,040 gal/year |                              |
| equals                          | 609,765 cu ft/year |                              |
| x current Effective Rate        | 0.1737 \$/cu ft    |                              |
| Total Invoiced to Sewer Users   | \$ 105,916         |                              |

# 12/26/17 Sewer Rate Proposal

## Proposed Projected Revenue - FULL YEAR

| Scenario A                |            |          | Scenario B                   |            |          |
|---------------------------|------------|----------|------------------------------|------------|----------|
| No Rate Change            | 0.193      | \$/cu ft | Possible New Rate (+ 1 %)    | 0.195      | \$/cu ft |
| Effective Rate            | 0.1737     | \$/cu ft | Possible Effective Rate      | 0.1755     | \$/cu ft |
| Estim. Total Full Year    | \$ 105,916 |          | Estim. Total Full Year       | \$ 107,014 |          |
| Scenario C                |            |          | Scenario D                   |            |          |
| Possible New Rate (+ 2 %) | 0.1970     | \$/cu ft | Possible New Rate (+ 3.37 %) | 0.1995     | \$/cu ft |
| Possible Effective Rate   | 0.1773     | \$/cu ft | Possible Effective Rate      | 0.1796     | \$/cu ft |
| Estim. Total Full Year    | \$ 108,111 |          | Estim. Total Full Year       | \$ 109,483 |          |

### FY18 Proposed Projected Revenue - July/Oct bills @ Old Rate, Jan/Apr bills @ New Rate

|   | Scenario A |            |               | Scenario B |            |               |
|---|------------|------------|---------------|------------|------------|---------------|
|   | Avg Cu. Ft | Disc. Rate | Bill Total \$ | Avg Cu. Ft | Disc. Rate | Bill Total \$ |
| Bill Date                               |            |            |               |            |            |               |
| July '17 - Actual                       |            |            | \$ 25,423     |            |            | \$ 25,423     |
| October '17 - Actual                    |            |            | \$ 26,664     |            |            | \$ 26,664     |
| January '18 (avg last 2 seasonal bills) | 156,402    | 0.1737     | \$ 27,167     | 156,402    | 0.1755     | \$ 27,449     |
| March '18 (avg last 2 seasonal bills)   | 138,996    | 0.1737     | \$ 24,144     | 138,996    | 0.1755     | \$ 24,394     |
|   |            |            | \$ 103,398    |            |            | \$ 103,929    |
|   | Scenario C |            |               | Scenario D |            |               |
| Bill Date                               | Avg Cu. Ft | Disc. Rate | Bill Total \$ | Avg Cu. Ft | Disc. Rate | Bill Total \$ |
| July '17 - Actual                       |            |            | \$ 25,423     |            |            | \$ 25,423     |
| October '17 - Actual                    |            |            | \$ 26,664     |            |            | \$ 26,664     |
| January '18 (avg last 2 seasonal bills) | 156,402    | 0.1773     | \$ 27,730     | 156,402    | 0.1796     | \$ 28,090     |
| March '18 (avg last 2 seasonal bills)   | 138,996    | 0.1773     | \$ 24,644     | 138,996    | 0.1796     | \$ 24,964     |
|   |            |            | \$ 104,461    |            |            | \$ 105,140    |

### Impact on Average Sewer User

|   | Cubic Feet | Discounted Rate | Billed Amount | Amount Over Current | % Over Current | Scenario |
|---|------------|-----------------|---------------|---------------------|----------------|----------|
| Current Avg. Quarterly Amount (last 8 quarters) | 1390       | 0.1737          | \$ 241        |                     |                |          |
| Current Avg. Annual Amount (last 8 quarters)    | 5561       | 0.1737          | \$ 966        |                     |                |          |
| Possible Avg. Quarterly Amount                  | 1390       | 0.1737          | \$ 241        | \$ -                |                | <b>A</b> |
| Possible Avg. Annual Amount                     | 5561       | 0.1737          | \$ 966        | \$ -                | 0.0%           |          |
| Possible Avg. Quarterly Amount                  | 1390       | 0.1755          | \$ 244        | \$ 2.50             | 1.0%           | <b>B</b> |
| Possible Avg. Annual Amount                     | 5561       | 0.1755          | \$ 976        | \$ 10.01            |                |          |
| Possible Avg. Quarterly Amount                  | 1390       | 0.1773          | \$ 246        | \$ 5.00             | 2.1%           | <b>C</b> |
| Possible Avg. Annual Amount                     | 5561       | 0.1773          | \$ 986        | \$ 20.02            |                |          |
| Possible Avg. Quarterly Amount                  | 1390       | 0.1796          | \$ 250        | \$ 8.20             | 3.4%           | <b>D</b> |
| Possible Avg. Annual Amount                     | 5561       | 0.1796          | \$ 999        | \$ 32.81            |                |          |

### Sewer Fund Balances

|                                | FY18      | FY17      | FY16      | FY15      | FY14      | FY13      | FY12      | FY11      | FY10       |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Starting Balance               | 92,203.31 | 78,330.04 | 51,007.40 | 47,215.67 | 75,623.82 | 57,467.72 | 89,251.00 | 99,559.18 | 100,773.71 |
| minus Transfer to Omnibus      | 57,200.00 | 53,720.00 | 49,000.00 | 49,000.00 | 45,000.00 | 45,000.00 | 67,600.09 | 66,165.55 | 66,046.70  |
| minus Extra to Omnibus         |           | -         | -         | -         | -         | -         | 12,000.00 | -         | -          |
| plus Actual/Estimated Receipts | TBD       | 99,707.72 | 91,457.41 | 91,656.73 | 84,675.85 | 63,156.10 | 47,816.81 | 55,857.37 | 64,832.17  |
| plus Transfer from Free Cash   |           |           | 15,017.20 |           |           |           |           |           |            |
| plus Unspent from Omnibus      | TBD       | 6,750.55  | 8,713.03  |           |           |           |           |           |            |
| minus Reserved from Receipts   | 38,865.00 | 38,865.00 | 38,865.00 | 38,865.00 | 68,084.00 | -         | -         | -         | -          |
| Ending Balance                 |           | 92,203.31 | 78,330.04 | 51,007.40 | 47,215.67 | 75,623.82 | 57,467.72 | 89,251.00 | 99,559.18  |

#### Notes

  = Higher than it should have been. \$34,042 of Reserved from Receipts wasn't transferred to General Fund until following fiscal year.

  = Lower than it should be. Special Town Meeting vote is needed to transfer \$15,017 (unspent from FY15 sewer budget) from Free Cash back into Sewer Fund.

|  | FY18 | FY17      | FY16      | FY15      | FY14      | FY13      | FY12      | FY11      | FY10      |
|--|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Ending Balance after adjusting for two "Notes" boxes |      | 92,203.31 | 78,330.04 | 66,024.40 | 47,215.67 | 41,581.82 | 57,467.72 | 89,251.00 | 99,559.18 |