| *** * * * * * * * * * * * * * * * * * * | 1.57 | i | The state of the s |
|--|--|----------------|--|
| 1 | | * | CITY OF CELINA |
| | | ´ > , | WATER/WASTEWATER COST OF SERVICE MODEL 「 |
| Marketine School of the Sandan State | and the same of th | , | and the forest to appropriate the contract of |
| | | | Effective Effective Effective |
| esi da Maria de de la contra del contra de la contra del la contra de la contra del la contra del la contra de la contra del la contra | Salar Sa | AL STREET, TES | Gurrent Jan-19 |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| | 25 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 | F-892 | | | | |
|-------------------|--|-------|----------|----------|----------|--------|
| 3 7900000000 | | 25.2 | | | | |
| 5,000 | 3/4" Meter | | | | | |
| | Total | \$ | 57 49 \$ | 58 54 \$ | 60 29 \$ | 62.10 |
| | Dollar Inc | | 1 79 | 1 05 | 1 76 | 1 81 |
| | Percent Inc | | 3 2% | 1 8% | 3 0% | 3 0% |
| 10,000 | 3/4" Meter | | | | | |
| | Total | | 95 44 | 96 49 | 99 38 | 102 36 |
| | Dollar Inc | | 2 54 | 1 05 | 2 89 | 2 98 |
| | Percent Inc | | 2 7% | 1 1% | 3 0% | 3 0% |
| 20,000 | 3/4" Meter | | | | | |
| | Total | | 210 34 | 211 39 | 217 73 | 224 26 |
| | Dollar Inc | | 5 84 | 1 05 | 6 34 | 6 53 |
| | Percent Inc | | 2 9% | 0 5% | 3 0% | 3 0% |
| 4 Vanasses | | | | | | |
| 30,000 Ga | illons 1 1/2" Meter | | | | | |
| | Total | | 304 62 | 313 76 | 323 17 | 332 87 |
| | Dollar Inc | | 6 40 | 9 14 | 9 41 | 9 70 |
| | Percent Inc | | 2 1% | 3 0% | 3 0% | 3.0% |
| 60,000 Ga | illons 1 1/2" Meter | | | | | |
| | Total | | 695 22 | 716 08 | 737 56 | 759 69 |
| | Dollar Inc | | 25 00 | 20 86 | 21 48 | 22 13 |
| | Percent Inc | | 3 7% | 3 0% | 3 0% | 3 0% |

| , | | WATE | R/WASTEV | TY OF CELINA TER COST OF SEF | RVICE MODEL | | , |
|----------|--|----------|--------------|---------------------------------|---------------------|---------------|--------|
| <i>'</i> | and the second section of the s | Cu | <u>riónt</u> | Effective | Effective Jan-20 | Effective | A COST |
| | City Rate Plan Three Year Summary Scen: 2018 11 14 Scenario 2 WW Inverted B | Block | | | | | |
| 5 | | J | | | | | |
| | 5,000 Gallons 3/4" Meter | | | | | | |
| | Total | \$ | 39 02 | \$ 40 96 \$ | 44 64 | \$ 48 66 | |
| | Dollar Inc | | 1 23 | 1 94 | 3 69 | 4 02 | |
| | Percent Inc | | 3 3% | 5 0% | 9.0% | 9 0% | |
| | 10,000 Gallons 3/4" Meter | | | | | | |
| | Total | | 68 22 | 77 11 | 84 04 | 91 61 | |
| | Dollar Inc | | 1 78 | 8 89 | 6 94 | 7 56 | |
| | Percent Inc | | 2 7% | 13 0% | 9 0% | 9 0% | |
| | 15,000 Gallons 3/4" Meter | | | | | | |
| | Total | | 91 58 | 106 03 | 115 57 | 125 97 | |
| | Dollar Inc | | 2 22 | 14 45 | 9 54 | 10 40 | |
| | Percent Inc | | 2 5% | 15 8% | 9 0% | 9 0% | |
| | 20,000 Gallons 3/4" Meter | | | | | | |
| | Total | | 91 58 | 106 03 | 115 57 | 125 97 | |
| | Dollar Inc Percent Inc | | 2 22 2 5% | 14 45 15 8% | 9 54 9 0% | 10 40 9 0% | |
| 6 | distingen school of the second | | | | 0 0% | | |
| | 30,000 Gallons 1 1/2" Meter | | | | | | |
| | Total 1 1/2" | \$ | 253 65 | \$ 276 48 \$ | 301 36 | | |
| | Dollar Inc | | 3 08 | 22 83 | 24 88 | 27 12 | |
| | Percent Inc | | 1 2% | 9 0% | 9 0% | 9 0% | |
| | 60,000 Gallons 1 1/2" Meter | | | | | | |
| | Total 1 1/2" | | 640 65 | 698 31 | 761 16 | 829 66 | |
| | | | | | | | |

132 08

26 0%

57 66

9 0%

62 85

9 0%

68 50

9 0%

Dollar Inc

Percent Inc

CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL ENGLY

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| 5 | | | | | | |
|---------|--|-------------------------------------|-----------|-----------|-----------|----------|
| E 000 C | allons Water, 5,000 Gallons WW 3/ | 4" Meter | | | | |
| 5,000 G | Total | * Meter \$ | 77 35 \$ | 80 43 \$ | 85 31 \$ | 90 54 |
| | Dollar Inc | • | 2 43 | 3 08 | 4 87 | 5 24 |
| | Percent Inc | | 3 2% | 4 0% | 6 1% | 6 1% |
| | i ercent no | | 0270 | 7 0 70 | 0 1,0 | • .,. |
| 10,000 | Gallons Water, 10,000 Gallons WW : | 3/4" Meter | | | | |
| | Total | | 131 85 | 142 64 | 151 55 | 161 14 |
| | Dollar Inc | | 3 48 | 10 79 | 8 91 | 9 59 |
| | Percent Inc | | 2 7% | 8 2% | 6 2% | 6 3% |
| 20,000 | Gallons Water, 14,000 Gallons WW : | 3/4" Meter | | | | |
| , | Total | | 231 81 | 250 46 | 264 34 | 279 20 |
| | Dollar Inc | | 6 12 | 18 65 | 13 88 | 14.86 |
| | Percent Inc | | 2 7% | 8 0% | 5 5% | 5 6% |
| 30,000 | Gallons Water, 14,000 Gallons WW : | 3/4" Meter | | | | |
| • | Total | | 322 01 | 343 37 | 360 03 | 377 77 |
| | Dollar Inc | | 9 52 | 21.36 | 16 66 | 17 73 |
| | Percent Inc | | 3 0% | 6 6% | 4 9% | 4 9% |
| 6 | dagan di seculon de Bojskou (monde) konskipusat seku | The action beautiful and the second | | | | |
| 30,000 | Gallons Water, 30,000 Gallons WW | 1 1/2" Meter | | | | |
| ., | Total | - \$ | 558 27 \$ | 590 24 \$ | 624 53 \$ | 661 35 |
| | Dollar Inc | • | 9.48 | 31 97 | 34 30 | 36 82 |
| | Percent Inc | | 1 7% | 5 7% | 5 8% | 5 9% |
| 60,000 | Sallons Water, 60,000 Gallons WW | 1 1/2" Meter | | | | |
| , | Total | • | 1,335 87 | 1,414 39 | 1,498 72 | 1,589 35 |
| | Dollar Inc | | 157 08 | 78 52 | 84 33 | 90 63 |
| | Percent Inc | | 13 3% | 5 9% | 6 0% | 6 0% |
| | | | | | | |

| | | , | • | | | WAT | CIT ER/WASTEWAT | Y OF CELINA ER COST OF | | EL | | | |
|--|---------------------|-------------------------|---------------|-----------------|---------------------|---------------------|---------------------|---------------------------|---------------------|---------------------|--------------------|-----------------|-----------------|
| time to be the time who there is no collections when we have | | Current | Effective | | Effective Jan-19 | Effective Jan-20 | Effective Jen-21 | Effective Jan-22 | Effective Jan-23 | Effective Jan-24 | Effective | Effective | Effective |
| City Rate Plan 1 | | | | | | | | | | | | | |
| Scen: 2018 11 14 | Scenario 2 | 2 WW Inve | rted Blo | ck | | | | | | | | | |
| Various sent sees process and the proposition of the sees | المستور فيستان وقسر | ARIPANIAN TARA | <i>**11</i> , | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 7 40000000000 00000000000000000000000000 | | | | | | | | | | | | | |
| Monthly Minimum Cha | r ge 3/4" | \$ 22.2 | 25 \$ | 23 15 | 5 23 84 | DA 50 | \$ 25 30 \$ | 00.00 | 00.04 | 07.07 | ¢ 07.00 ¢ | 28 48 | \$ 29 05 |
| | 1" | 38 9 | 93 | 38 93 | 40 10 | \$ 24 56 5 41 30 | 42 54 | 26 06 5 43 82 | 45 13 | 46 03 | 46 95 | 47 89 | 48 85 |
| | 1 1/2" 2" | 77 8 124 5 | | 77 87 124 59 | 80 21 128 33 | 82 61 132 18 | 85 09 136 14 | 87 64 140 23 | 90 27 144 43 | 92 08 147 32 | 93 92 150 27 | 95 80 153 27 | 97 71 156 34 |
| | 3" | - | 15 | - | 120 33 | - | - | 140 23 | - | 147 32 | - | - | - |
| | 4" | - | | - | - | - | - | - | - | - | = | - | - |
| | 6" 8" | - | | - | - | - | | | - | - | - | - | - |
| Volume Rate/1,000 Gal | | | | | | | | | | | | | |
| 2,001 10,001 | 10,000 20,000 | 4 9 | | 5 06 7 66 | 5 21 7 89 | 5 37 8 13 | 5 53 8 37 | 5 70 8 62 | 5 87 8 88 | 5 98 9 06 | 6 10 9 24 | 6 22 9 42 | 6 35 9 61 |
| 20,001 | 30,000 | 8 6 | | 9 02 | 9 29 | 9 57 | 986 | 10 15 | 10 46 | 10 67 | 10 88 | 11 10 | 11 32 |
| 30,001 | Above | 12 4 | | 13 02 | 13 41 | 13 81 | 14 23 | 14 65 | 15 09 | 15 40 | 15 70 | 16 02 | 16 34 |
| | test William' | | | | | | | | | | | | |
| | ONALIJA * | | | | | | | | | | | | |
| Monthly Minimum Cha | r <u>ge</u> 3/4" | \$ 333 | 88 \$ | 34 72 | 35 77 | \$ 36.84 | 37 94 \$ | 39 08 | 40 26 | 41 06 | \$ 41.88 \$ | 42 72 | \$ 43 57 |
| | 1" | 58 4 | | 58 40 | 58 40 | 60 15 | 61 95 | 63 81 | 65 72 | 67 70 | 69 05 | 70 43 | 71 84 |
| | 1 1/2" | 116 8 | | 116 81 | 116 81 | 120 31 | 123 92 | 127 64 | 131 47 | 135 41 | 138 12 | 140 88 | 143 70 |
| | 2" 3" | 186 8 | 39 | 186 89 | 186 89 | 192 49 | 198 27 - | 204 21 | 210 34 | 216 65 | 220 98 | 225 40 | 229 91 |
| | 4" | - | | - | - | - | - | - | - | - | - | - | - |
| | 6" | - | | - | - | - | - | • | | - | - | ~ | - |
| | 8" | - | | - | - | - | - | - | - | - | - | - | - |
| Volume Rate/1,000 Gal | | | | | | | | | | | | | |
| 2,001 | 10,000 | 7 4 | | 7 59 | 7 59 | 7 82 | 8 05 | 8 29 | 8 54 | 8 80 | 8 97 | 9 15 | 9 34 |
| 10,001 | 20,000 | 11 ⁻ 13 (| | 11 49 13 53 | 11 49 | 11 83 13 94 | 12 19 14 35 | 12 56 14 78 | 12 93 15 33 | 13 32 | 13 59 16 00 | 13 86 16 32 | 14 14 |
| 20,001 30,001 | 30,000 Above | 18 (| | 19 53 | 13 53 19 53 | 20 12 | 14 35 20 72 | 14 78 21 34 | 15 23 21 98 | 15 68 22 64 | 23 09 | 23 56 | 16 65 24 03 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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| | | | | | | WAT | C | ITY OF CELINA TER COST OF | | | | | |
|---|------------------------|------|-------------------|---------------------|--------------------|------------------|---------------------|------------------------------|------------------|------------------|------------------|------------------|------------------|
| navonamakan da katalah | and and a state of the | Curi | n. | Effective Jan 18 | Effective April | Effective | Effective Jan-21 | Effective Joh-11 | Effective | Enective | Els ste | Emptho | |
| City Rate Plan 1 Scen: 2018 11 14 | | | verted | l Block | | | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | **** | | | | | | | | | | | | |
| Monthly Minimum Cha | | | | | | | | | | | | | |
| | 3/4" | | 781 \$ | | | | | | | | | | 34 90 |
| | 1" | | 3 67 | 48 67 | 50 13 | 51 63 | 53 18 | 54 78 | 56 42 | 57 55 | 58 70 | 59 88 | 61 07 |
| | 1 1/2" | | 7 34 | 97 34 455 74 | 100 26 | 103 27 | 106 37 | 109 56 | 112 84 | 115 10 | 117 40 187 84 | 119 75 191 60 | 122 15 195 43 |
| | 2" 3" | | 5 74 3 60 | 155 74 233 60 | 160 41 240 61 | 165 22 247 83 | 170 18 255 26 | 175 29 262 92 | 180 55 270 81 | 184 16 276 22 | 281 75 | 287 38 | 293 13 |
| | 3 4" | | 34 | 389 34 | 401 02 | 413 05 | 425 44 | 438 21 | 451 35 | 460 38 | 469 59 | 478 98 | 488 56 |
| | 4 6" | 30 | - | 309 34 | 40102 | 41303 | - | -30 21 | | | - | - | - |
| | 8" | | - | - | - | - | - | - | - | - | - | - | - |
| Volume Rate/1,000 Gai | | | | | | | | | | | | | |
| 2,001 | 10,000 | | 1 96 | 5 06 | 5 21 | 5 37 | 5 53 | 5 70 | 5 87 | 5 98 | 6 10 | 6 22 | 6 35 |
| 10,001 | 20,000 | | 7 44 | 7 66 | 7 89 | 8 13 | 8 37 | 8 62 | 8 88 | 9 06 | 9 24 | 9 42 | 9 61 |
| 20,001 | 30,000 | | 3 68 | 9 02 | 9 29 | 9 57 | 9 86 | 10 15 | 10 46 | 10 67 | 10 88 | 11 10 | 11 32 |
| 30,001 | Above - | 1 | 2 4 0 - | 13 02 - | 13 41 - | 13 81 - | 14 23 | 14 65 - | 15 09 - | 15 40 - | 15 70 - | 16 02 - | 16 34 - |
| and a server of the server of | | | | | | | | | | | | | |
| Monthly Minimum Cha | | | | | | | | | | | | | |
| | 3/4" | | 172 \$ | | | | | | | | | | 52 35 |
| | 1" | | 3 01 | 73 01 | 75 20 | 77 45 | 79 77 | 82 17 | 84 63 | 86 33 | 88 05 176 10 | 89 81 | 91 61 183 22 |
| | 1 1/2" | | 3 01 | 146 01 | 150 39 | 154 90 | 159 55 | 164 34 262 93 | 169 27 270 82 | 172 65 276 23 | 176 10 281 76 | 179 63 287 39 | 293 14 |
| | 2" 3" | | 3 61 3 40 | 233 61 350 40 | 240 62 360 91 | 247 84 371 74 | 255 27 382 89 | 262 93 394 38 | 406 21 | 414 33 | 422 62 | 431 07 | 439 69 |
| | 3" 4" | | 4 01 | 584 01 | 601 53 | 619 58 | 638 16 | 657 31 | 677 03 | 690 57 | 704 38 | 718 47 | 732 84 |
| | 6" | Jo | - | 504 01 | 00133 | 019 30 | - | - | - | 090 31 | 70430 | - | 752 04 |
| | 8" | | - | - | | - | - | - | - | • | - | - | - |
| Volume Rate/1,000 Gai | l | | | | | | | | | | | | |
| 2,001 | 10,000 | | 7 44 | 7 59 | 7 82 | 8 05 | 8 29 | 8 54 | 8 80 | 8 97 | 9 15 | 9 34 | 9 52 |
| 10,001 | 20,000 | 1 | 1 16 | 11 49 | 11 83 | 12 19 | 12 56 | 12 93 | 13 32 | 13 59 | 13 86 | 14 14 | 14 42 |
| 20,001 | 30,000 | 1 | 3 02 | 13 53 | 13 94 | 14 35 | 14 78 | 15 23 | 15 68 | 16 00 | 16 32 | 16 65 | 16 98 |
| 30,001 | Above | 1 | 3 60 | 19 53 | 20 12 | 20 72 | 21 34 | 21 98 | 22 64 | 23 09 | 23 56 | 24 03 | 24 51 |

304

| | the state of the s | |
|---------------------------------------|--|--|
| | CITY OF CELINA | |
| | WATER/WASTEWATER COST OF SERVICE MODEL | |
| · · · · · · · · · · · · · · · · · · · | | |
| Effective Effective | Effective Effective Effective Effective | Effective Effective |
| Current Jan-18 Jan-19 | Jan-20 Jan-21 Jan-22 Jan-23 Jan-24 | The second of th |

City Rate Plan -- 10 Year Summary Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| Comment of the second second second second second | | | | | | | | | | | | | |
|---|--------|----|----------|--------|----------|----------|----------|----------|----------|----------|----------|----------|--------|
| Monthly Minimum C | harge | | | | | | | | | | | | |
| | 3/4" | \$ | 20 60 \$ | 21 50 | 23 44 \$ | 25 54 \$ | 27 84 \$ | 30 35 \$ | 33 08 \$ | 34 07 \$ | 35 10 \$ | 36 15 \$ | 37 23 |
| | 1" | | 38 63 | 38 63 | 42 11 | 45 90 | 50 03 | 54 53 | 59 44 | 61 22 | 63 06 | 64 95 | 66 90 |
| | 1 1/2" | | 72 10 | 72 10 | 78 59 | 85 66 | 93 37 | 101 78 | 110 93 | 114 26 | 117 69 | 121 22 | 124 86 |
| | 2" | 1 | 23 60 | 123 60 | 134 72 | 146 85 | 160 07 | 174 47 | 190 17 | 195 88 | 201 76 | 207 81 | 214 04 |
| | 3" | | - | - | - | - | - | - | - | - | - | - | - |
| | 4" | | - | - | - | - | - | - | - | - | - | - | - |
| | 6" | | - | - | - | - | - | - | - | - | - | - | - |
| | 8" | | - | - | - | - | - | - | - | - | - | - | - |
| Volume Rate/1,000 G | ial | | | | | | | | | | | | |
| 2,001 | 5,000 | | 5 73 | 5 84 | 5 84 | 6 37 | 6 94 | 7 56 | 8 24 | 8 49 | 8 75 | 9 01 | 9 28 |
| 5,001 | 14,000 | | 5 73 | 5 84 | 7 23 | 7 88 | 8 59 | 9 36 | 10 21 | 10 51 | 10 83 | 11 15 | 11 49 |
| Monthly Minimum C | harge | | | | | | | | | | | | |
| | 3/4" | | 30 90 | 32 25 | 35 15 | 38 32 | 41 76 | 45 52 | 49 62 | 51 11 | 52 64 | 54 22 | 55 85 |
| | 1" | | 57 95 | 57 95 | 63 16 | 68 84 | 75 04 | 81 79 | 89 16 | 91 83 | 94 59 | 97 42 | 100 35 |
| | 1 1/2" | | 08 15 | 108 15 | 117 88 | 128 49 | 140 06 | 152 66 | 166 40 | 171 39 | 176 54 | 181 83 | 187 29 |
| | 2" | 1 | 35 40 | 185 40 | 202 09 | 220 27 | 240 10 | 261 71 | 285 26 | 293 82 | 302 63 | 311 71 | 321 06 |
| | 3" | | - | _ | • | _ | - | - | | - | - | - | - |
| | 4" | | - | - | • | - | - | - | - | - | - | - | - |
| | 6" | | - | - | • | - | - | - | - | - | - | - | _ |
| | 8" | | - | - | - | - | - | - | - | - | - | - | - |
| Volume Rate/1,000 G | ial | | | | | | | | | | | | |
| 2,001 | 5,000 | | 8 60 | 12 90 | 12 90 | 14 06 | 15 33 | 16 71 | 18 21 | 18 76 | 19 32 | 19 90 | 20 49 |
| 5,001 | 14,000 | | 8 60 | 12 90 | 15 97 | 17 41 | 18 97 | 20 68 | 22 54 | 23 22 | 23 92 | 24 63 | 25 37 |

| | | | | | WAT | C | ITY OF CELINA | 1 | | | | |
|--|--|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Trans anguaran uma muhamma dan sagarang bah | Andrean Andreas (Andreas (Andr | apagapantunganantalagum | Effective | Effective | Effective ** | Éfféctive | Effective | Effective | Éffective | | Effective | |
| | sate dilivery being | Current | | 1616 | | Jah-81 | Jan-22 | | | | teritoria. | |
| City Rate Plan 10 | Year Sum | mary | | | | | | | | | | |
| Scen: 2018 11 14 5 | Scenario 2 | WW Inverted | i Block | | | | | | | | | |
| Aller Anna Carlo Marcardo Angeles and Anna Angeles Anna Angeles Anna Angeles Anna Angeles Anna Angeles Anna An | ALL LOND MICH. | | | | | | | | | | | |
| Monthly Minimum Char | | | | | | | | | | 40.00 | 40.00 | 44.50 |
| | 3/4" 1" | 25 75 48 29 | 25 75 48 29 | 28 07 52 64 | 30 59 57 37 | 33 35 62 54 | 36 35 68 17 | 39 62 74 30 | 40 81 76 53 | 42 03 78 83 | 43 29 81 19 | 44 59 83 63 |
| | 1 1/2" | 90 13 | 46 29 90 13 | 98 24 | 107 08 | 116 72 | 127 23 | 138 68 | 142 84 | 147 12 | 151 54 | 156 08 |
| | 2" | 154 50 | 154 50 | 168 41 | 183 56 | 200 08 | 218 09 | 237 72 | 244 85 | 252 19 | 259 76 | 267 55 |
| | 3" | - | - | - | - | - | | | - | - | - | - |
| | 4" | 386 25 | 386 25 | 421 01 | 458 90 | 500 20 | 545 22 | 594 29 | 612 12 | 630 49 | 649 40 | 668 88 |
| | 6" | - | - | - | - | - | - | - | - | - | • | - |
| | 8" | - | - | - | - | - | - | • | - | - | - | - |
| Volume Rate/1,000 Gal | | | | | | | | | | | | |
| 2,001 | Above | 5 73 | 5 84 | 6 37 | 6 94 | 7 56 | 8 24 | 8 99 | 9 26 | 9 53 | 9 82 | 10 11 |
| • | • | - | - | _ | - | _ | - | - | _ | - | | |
| and the state of t | a protone a primaria | | | | | | | | | | | |
| Monthly Minimum Char | ge | | | | | | | | | | | |
| | 3/4" | 38 63 | 38 63 | 42 10 | 45 89 | 50 02 | 54 52 | 59 43 | 61 21 | 63 05 | 64 94 | 66 89 |
| | 1" | 72 44 | 72 44 | 78 95 | 86 06 | 93 81 | 102 25 | 111 45 | 114 79 | 118 24 | 121 78 | 125 44 |
| | 1 1/2" | 135 20 | 135 20 | 147 36 | 160 63 | 175 08 | 190 84 | 208 01 | 214 25 | 220 68 | 227 30 | 234 12 |
| | 2" | 231 75 | 231 75 | 252 61 | 275 34 | 300 12 | 327 13 | 356 58 | 367 27 | 378 29 | 389 64 | 401 33 |
| | 3" | - | - | - | - | - 750.04 | - 817 84 | - 891 44 | - 918 18 | - 945 73 | - 974 10 | - 1,003 32 |
| | 4" 6" | 579 38 | 579 38 | 631 52 | 688 36 | 750 31 - | 817 84 | 891 44 | 918 18 | 945 /3 | 9/4 10 | 1,003 32 |
| | 8" | - | - | - | - | - | - | - | - | - | - | - |
| Volume Rate/1,000 Gal | | | | | | | | | | | | |
| 2,001 | Above | 8 60 | 12 90 | 14 06 | 15 33 | 16 71 | 18 21 | 19 85 | 20 44 | 21 06 | 21 69 | 22 34 |

CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL Effective Éffective Effective Effective Effective Effective Effective Current Jan-18 Jan-19 Janeo Jan-21 Jan-22 Jan 23

City Rate Plan -- 10 Year Summary

Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| 5,000 Gallons 3/4" Meter Total \$ 37 13 \$ 38 33 \$ 39 48 \$ 40 66 \$ 41 88 \$ 43 14 \$ 44 43 \$ 45 32 \$ 46 23 \$ 47 15 \$ Dollar inc 1 20 1 15 1 18 1 22 1 26 1 29 0 89 0 91 0 92 Percent Inc 3 2% 3 0% 3 0% 3 0% 3 0% 3 0% 2 0% 2 0% | | | | | | | | | | | | | | |
|---|-------|----|--------|--------|--------|--------|--------|--------|--------|----------|----------|------------|-----------|----------------------------|
| Total \$ 37 13 \$ 38 33 \$ 39 48 \$ 40 66 \$ 41 88 \$ 43 14 \$ 44 43 \$ 45 32 \$ 46 23 \$ 47 15 \$ Dollar Inc | | | | | | | | | | | | 300 101100 | NATURE 19 | 3 |
| Dollar Inc 1 20 1 15 1 18 1 22 1 26 1 29 0 89 0 91 0 92 Percent Inc 3 2% 3 0% 3 0% 3 0% 3 0% 2 0% 2 0% 2 0% 10,000 Gallons 3/4"" Meter | | | | | | | | | | | | | | 5,000 Gallons 3/4" Meter |
| Percent Inc 3 2% 3 0% 3 0% 3 0% 3 0% 2 0% 2 0% 2 0% | 48 10 | | | | | | | | | 39 48 \$ | 38 33 \$ | 37 13 \$ | \$ | Total |
| 10,000 Gallons 3/4"" Meter | 0 94 | | | | | | | | | | | | | |
| | 2 0% | | 2 0% | 2 0% | 2 0% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 3 2% | | | Percent Inc |
| Total 61 93 63 63 65 54 67 51 69 53 71 62 73 76 75 24 76 74 78 28 | | | | | | | | | | | | | | 10,000 Gallons 3/4"" Meter |
| | 79 85 | - | 78 28 | 76 74 | 75 24 | 73 76 | 71 62 | 69 53 | 67 51 | 65 54 | 63 63 | 61 93 | | Total |
| Dollar Inc 170 191 197 203 209 215 148 150 153 | 1 57 | | 1 53 | 1 50 | 1 48 | 2 15 | 2 09 | 2 03 | 1 97 | 1 91 | 1 70 | | | Dollar Inc |
| Percent Inc 2 7% 3 0% 3 0% 3 0% 3 0% 2 0% 2 0% 2 0% | 2 0% | | 2 0% | 2 0% | 2 0% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 7% | | | Percent Inc |
| 20,000 Gallons 3/4" Meter | | | | | | | | | | | | | | 20,000 Gallons 3/4" Meter |
| Total 136 33 140 23 144 44 148 77 153 23 157 83 162 57 165 82 169 13 172 52 | 75 97 | 1- | 172 52 | 169 13 | 165 82 | 162 57 | 157 83 | 153 23 | 148 77 | 144 44 | 140 23 | 136 33 | | Total |
| Dollar Inc 3 90 4 21 4 33 4 46 4 60 4 73 3 25 3 32 3 38 | 3 45 | | 3 38 | 3 32 | 3 25 | 4 73 | 4 60 | 4 46 | 4 33 | 4 21 | 3 90 | | | Dollar Inc |
| Percent Inc 2 9% 3 0% 3 0% 3 0% 3 0% 2 0% 2 0% 2 0% | 2 0% | | 2 0% | 2 0% | 2 0% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 9% | | | Percent Inc |
| 30,000 Galions 3/4" Meter | | | | | | | | | | | | | | 30,000 Gallons 3/4" Meter |
| | 89 15 | 28 | 283 48 | 277 92 | 272 47 | 267 13 | 259 35 | 251 80 | 244 46 | 237 34 | 230 43 | 223 13 | | · · |
| Dollar Inc 7 30 6 91 7 12 7 33 7 55 7 78 5 34 5 45 5 56 | 5 67 | | 5 56 | 5 45 | 5 34 | 7 78 | 7 55 | 7 33 | 7 12 | 6 91 | 7 30 | | | Dollar Inc |
| Percent Inc 3 3% 3 0% 3 0% 3 0% 3 0% 2 0% 2 0% 2 0% | 2 0% | | 2 0% | 2 0% | 2 0% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 3 3% | | | Percent Inc |

20,000 Gallons -- 3/4" Meter

Dollar Inc

Percent Inc

Total

| | | | | | WATI | | ITY OF CELINA | SERVICE MOD | 1 | | | |
|--|---------|----------|-------------------|---------------------|---------------|----------------|---------------------|----------------|---------------------|------------------|-----------------|----------------|
| | ¢um | | Tective Jan 18 | Effective Jan-19 | Effective | Effective | Effective Jan-22 | Effective. | Effective Dis-22 | 1400 | Ellective . | |
| City Rate Plan 10 Year S Scen: 2018 11 14 Scenario | | | Block | | | | | | | | | |
| 5,000 Galions 3/4" Meter Total Dollar Inc | . , , , | 55 70 \$ | 57 49 S 1 79 | 1 05 | 1 76 | 1 81 | 1 86 | 1 92 | 1 57 | 68 81 \$ 1 35 | 70 18 \$ | 71 59 1 40 |
| Percent Inc 10,000 Gallons 3/4"" Meter Total | | 92 90 | 3 2% 95 44 | 1 8% 96 49 | 3 0% 99 38 | 3 0% 102 36 | 3 0% 105 43 | 3 0% 108 60 | 2 4% 111 45 | 2 0% 113 68 | 2 0% 115 95 | 2 0% 118 27 |
| Dollar Inc Percent Inc | | | 2 54 2 7% | 1 05 1 1% | 2 89 3 0% | 2 98 3 0% | 3 07 3 0% | 3 16 3 0% | 2 86 2 6% | 2 23 2 0% | 2 27 2 0% | 2 32 2 0% |

| 30,000 Gallons 1 1/2" Meter | | | | | | | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total | 298 22 | 304 62 | 313 76 | 323 17 | 332 87 | 342 85 | 353 14 | 360 20 | 367 40 | 374 75 | 382 25 |
| Dollar Inc | | 6 40 | 9 14 | 9 4 1 | 9 70 | 9 99 | 10 29 | 7 06 | 7 20 | 7 35 | 7 50 |
| Percent Inc | | 2 1% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 0% | 2 0% | 2 0% | 2 0% |
| 60,000 Gallons 1 1/2" Meter | | | | | | | | | | | |
| Total | 670 22 | 695 22 | 716 08 | 737 56 | 759 69 | 782 48 | 805 95 | 822 07 | 838 51 | 855 28 | 872 39 |
| Dollar Inc | | 25 00 | 20 86 | 21 48 | 22 13 | 22 79 | 23 47 | 16 12 | 16 44 | 16 77 | 17 11 |
| Percent Inc | | 3 7% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 0% | 2 0% | 2 0% | 2 0% |

224 26

6 53

3 0%

230 99

6 73

3 0%

237 92

6 93

3 0%

244 65

6 73

2 8%

249 55

4 89

20%

254 54

4 99

2 0%

259 63

5 09

2 0%

308

217 73

6 34

3 0%

211 39

1 05

0 5%

204 50

210 34

5 84

2 9%

| | | | | | | WAT | | TY OF CELINA TER COST OF | SERVICE MOD | EL | e e e e e e e e e e e e e e e e e e e | | |
|-----------------------------|---|---|----------|---------------------|---------------------|---------------------|-----------------------|-----------------------------|--------------------|-----------------|---------------------------------------|--------------------|--|
| te the will desire in | territaria de la companya de la comp | | illrent. | Effective Ján-18 | Effective Jan-19 | Effective Jan-20 | Effective Jen-21 | Effective Jan 22 | Effective | Effective | Effective Jan 23 | Effective | A STATE OF THE STA |
| | <i>Plan 10 Year</i> S 8 11 14 Scenario | | | ed Block | | | | | | | | | |
| 5 | in a sure wellow do not be to the sound about the | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | | I | | | | | | | | | |
| 5,000 Gallon Tota | s 3/4" Meter | \$ | 37 79 | \$ 39 02 | \$ 40 96 | \$ 44 64 | \$ 4866 \$ | 53 04 | \$ 5781 \$ | 59 55 | | 63 17 \$ | |
| | ar Inc ent Inc | | | 1 23 3 3% | 1 94 5 0% | 3 69 9 0% | 4 02 9 0% | 4 38 9 0% | 4 77 9 0% | 1 73 3 0% | 1 79 3 0% | 1 84 3 0% | 1 90 3 0% |
| , | ns 3/4" Meter | | | | | | | | | | | | |
| Tota Dolla | il ar Inc | | 66 44 | 68 22 1 78 | 77 11 8 89 | 84 04 6 94 | 91 61 7 56 | 99 85 8 24 | 108 84 8 99 | 112 11 3 27 | 115 47 3 36 | 118 93 3 46 | 122 50 3 57 |
| | cent Inc | | | 2 7% | 13 0% | 9 0% | 90% | 9 0% | 9 0% | 3 0% | 3 0% | 3 0% | 3 0% |
| | ns 3/4" Meter | | 00.00 | 04.50 | 400.00 | 445.57 | 405.07 | 407.04 | 440.00 | 454.45 | 450.70 | 400.54 | 168 45 |
| Tota Dolla | ıı ar İnc | | 89 36 | 91 58 2 22 | 106 03 14 45 | 115 57 9 54 | 125 97 10 40 | 137 31 11 34 | 149 66 12 36 | 154 15 4 49 | 158 78 4 62 | 163 54 4 76 | 4 91 |
| Pero | cent Inc | | | 2 5% | 15 8% | 9 0% | 9 0% | 9 0% | 9 0% | 3 0% | 3 0% | 3 0% | 3 0% |
| 30,000 Galio | ns 3/4" Meter | | 89 36 | 91 58 | 106 03 | 115 57 | 125 97 | 137 31 | 149 66 | 154 15 | 158 78 | 163 54 | 168 45 |
| | ar Inc | | 09 30 | 2 22 | 14 45 | 9 54 | 10 40 | 11 34 | 12 36 | 4 49 | 4 62 | 4 76 | 4 91 |
| Perd | ent Inc | | | 2 5% | 15 8% | 9 0% | 9 0% | 9 0% | 9 0% | 3 0% | 3 0% | 3 0% | 3 0% |
| 6 June Manie | and the filtration of the profession between principal party. | | | ı | | | | | | | | | |
| 30,000 Gallo | ns 1 1/2" Meter | | | | | | | | | | | | |
| Tota | | \$ | 250 57 | \$ 253 65 3 08 | \$ 276 48 22 83 | \$ 301 36 24 88 | \$ 328 48 \$ 27 12 | 358 05 29 56 | \$ 390 27 \$ 32 22 | 401 98 11 71 | \$ 414 04 \$ 12 06 | 426 46 \$ 12 42 | 439 25 12 79 |
| | ar Inc cent Inc | | | 1 2% | 9 0% | 9 0% | 90% | 9 0% | 9 0% | 30% | 3 0% | 3 0% | 3 0% |
| , | ns 1 1/2" Meter | | 400 | 100.5- | | 500 55 | | 205.25 | 252.24 | 272.20 | 700.00 | 70.00 | 740.05 |
| Tota Doll | al 1/2" ar Inc | | 422 47 | 428 85 6 38 | 467 45 38 60 | 509 52 42 07 | 555 37 45 86 | 605 36 49 98 | 659 84 54 48 | 679 63 19 80 | 700 02 20 39 | 721 02 21 00 | 742 65 21 63 |
| | cent Inc | | | 1 5% | 9 0% | 9 0% | 9 0% | 9 0% | 9 0% | 3 0% | 3 0% | 3 0% | 3 0% |

| The second | | Control of the state of the sta | 4 |
|---|--|--|--|
| | | CITY OF CELINA | |
| | WATER/WAST | TEWATER COST OF SERVICE MODEL | 4 |
| tarahamman oper mengapatikan per mengapatikan per | anay na anangitang pagagan ditag sa gang nagagan gang sa anang nagan ang manag panang panang panang gang nagan | and the state of t | |
| | Effective 1 | Effective | |
| 19 19 19 19 19 19 19 19 19 19 19 19 19 1 | A Company of the Comp | | municipal de la companya della compa |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| Monthly Minimum Charge | | | | |
|---|----------------------------|---|---|--|
| | 3/4" | \$ 23 84 | \$ 24 56 | \$ 25 3 |
| | 1" | 40 10 | 41 30 | 42 5 |
| | 1 1/2" | 80 21 | 82 61 | 85 0 |
| | 2" | 128.33 | 132 18 | 136.1 |
| Volume Rate/1,000 Gal | | | | |
| 2,001 | 10,000 | \$ 5 21 | \$ 5 37 | \$ 5 5 |
| 10,001 | 20,000 | 7 89 | 8 13 | 8 3 |
| 20,001 | 30,000 | 9 29 | 9 57 | 98 |
| 30,001 | Above | 13 41 | 13 81 | 14 2 |
| | | 1341 | 1501 | 142 |
| | | 1341 | 1307 | 142 |
| Monthly Minimum Charge | | | | |
| ,,,,, | 3/4" | \$ 35 77 | \$ 36 84 | \$ 37 9 |
| ,,,,, | 3/4" 1" | \$ 35 77 58 40 | \$ 36 84 60 15 | \$ 37 9 61 9 |
| ,,,,, | 3/4" 1" 1 1/2" | \$ 35 77 58 40 116 81 | \$ 36 84 60 15 120 31 | \$ 37 9 61 9 123 9 |
| ,,,,, | 3/4" 1" | \$ 35 77 58 40 | \$ 36 84 60 15 | \$ 37 9/ 61 9/ 123 9/ |
| ,,,,, | 3/4" 1" 1 1/2" | \$ 35 77 58 40 116 81 | \$ 36 84 60 15 120 31 | \$ 37 9 61 9 123 9 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" | \$ 35 77 58 40 116 81 186 89 | 36 84 60 15 120 31 192 49 8 05 | 37 9 61 9 123 9 198 2 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" | 35 77 58 40 116 81 186 89 7 82 11 83 | 36 84 60 15 120 31 192 49 8 05 12 19 | 37 9 61 9: 123 9: 198 2: 8 2: 12 5: |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 | 3/4" 1" 1 1/2" 2" | 35 77 58 40 116 81 186 89 | 36 84 60 15 120 31 192 49 8 05 | 37 9 61 9: 123 9: 198 2: 12 5: 14 7: 21 3: |

| | CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL | , |
|--|---|---|
| the said of the sa | Effective Effective Effective Jan-19 Jan-20 Jan-21 | |

City Rate Plan -- Three Year Summary

Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| Monthly Minimum_Charge | | | | |
|--|----------------------------------|---|---|--------------------------------|
| | 3/4" | \$ 28 64 | \$ 29 50 | \$ 3 |
| | 1" | 50 13 | 51 63 | 5 |
| | 1 1/2" | 100 26 | 103 27 | 10 |
| | 2" | 160 41 | 165 22 | 17 |
| | 3" | 240 61 | 247 83 | 25 |
| | 4" | 401 02 | 413 05 | 42 |
| Volume Rate/1,000 Gal | | | | |
| 2,001 | 10,000 | \$ 5 21 | \$ 5 37 | \$ |
| 10,001 | 20,000 | 7 89 | 8 13 | |
| 20,001 | 30,000 | 9 29 | 9 57 | |
| 30,001 | Above | 13 41 | 13 81 | 1 |
| | | | | |
| | | | | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 88 | | | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4° | \$ 42 97 | \$ 44 26 | \$ 4 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | \$ 42 97 75 20 | \$ 44 26 77 45 | \$ |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4" | \$ | \$ | \$ 7 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" 2" | \$ 75 20 150 39 240 62 | \$ 77 45 154 90 247 84 | \$ 7 15 25 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4" 1" 1 1/2" 2" 3" | \$ 75 20 150 39 240 62 360 91 | \$ 77 45 154 90 247 84 371 74 | \$ 7 15 25 38 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4" 1" 1 1/2" 2" | \$ 75 20 150 39 240 62 | \$ 77 45 154 90 247 84 | \$ 7 15 25 38 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" 2" 3" | \$ 75 20 150 39 240 62 360 91 | \$ 77 45 154 90 247 84 371 74 | \$ 7 15 25 38 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" 2" 3" | \$ 75 20 150 39 240 62 360 91 | 77 45 154 90 247 84 371 74 | 7 15 25 38 63 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 10,001 | 3/4" 1" 1 1/2" 2" 3" 4" | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 4 7 15 25 38 63 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 | 3/4" 1" 1 1/2" 2" 3" 4" | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 7 15 25 38 63 |

| | | CITY OF CELINA | |
|--|--|--|--|
| and the second s | and the same of th | WATER/WASTEWATER COST OF SERVICE MODEL | |
| and the second s | | Effective Effective Effective | |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| Monthly Minimum Charge | | | | |
|--|--|---------------------------|---------------------------|------------------------------|
| | 3/4" | \$ 23 44 | \$ 25 54 | \$ 27 |
| | 1" | 42 11 | 45 90 | 50 |
| | 1 1/2" | 78 59 | 85 66 | 93 |
| | 2" | 134 72 | 146 85 | 160 |
| Volume Rate/1,000 Gal | | | | |
| 2,001 | 5,000 | 5 84 | 6 37 | E |
| 5,001 | Maximum | 7 23 | 7 88 | 8 |
| | Maximum Gallons | 13 000 | 12,000 | 11, |
| | | | | |
| entrillige flows hoters and had a substantial the new commonwhite the large, we said | monder to the second section in the second section is | | | |
| Monthly Minimum Charge | and the same of th | | | |
| Monthly Minimum Charge | 3/4" | 35 15 | 38 32 | 41 |
| Monthly Minimum Charge | rancial field to the season of the season of the | 35 15 63 16 | 38 32 68 84 | |
| Monthly Minimum Charge | 3/4" | | | 75 |
| Monthly Minimum Charge | 3/4" 1" | 63 16 | 68 84 | 7: 14: |
| | 3/4" 1" 1 1/2" | 63 16 117 88 | 68 84 128 49 | 75 140 |
| Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" | 63 16 117 88 | 68 84 128 49 220 27 | 75 140 240 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 5,001 | 3/4" 1" 1 1/2" | 63 16 117 88 202 09 | 68 84 128 49 | 41 75 140 240 15 |

| | | · veneral | WATER/WASTE | CITY OF CELINA WATER COST OF SERV | ICE MODEL | |
|--|--|------------|---------------------|--------------------------------------|---------------------|--|
| many with a till the man and a sink with mile him and a sink | the second s | | Effective Jan-19 | Effective | Effective Jan-21 | |
| City Rate Plan Thr Scen: 2018 11 14 | ee <i>Year Summary</i> Scenario 2 WW Inver | rted Block | | | | |
| ann algumi mineratura Altariga ballar | | | | | | |
| Monthly Minimum Charge | 3/4" | | 28 07 | 30 59 | 33 35 | |
| | 1" | | 52 64 | 57 37 | 62 54 | |
| | 1 1/2" | | 98 24 | 107 08 | 116 72 | |
| | 2" 4" | | 168 41 421 01 | 183.56 458 90 | 200 08 500 20 | |
| Volume Rate/1,000 Gal | | | | | | |
| 2, | ,001 Above | | 6 37 | 6 94 | 7 56 | |
| | | | | | | |
| negoverne po kara kara kara kara kara kara kara kar | anine is a shirth a letter the | | | | | |
| Monthly Minimum Charge | | | | | | |
| Monthly Minimum Charge | 3/4" | | 42 10 | 45 89 | 50 02 | |
| Monthly Minimum Charge | ! 3/4" 1" | | 78 95 | 86 06 | 93 81 | |
| Monthly Minimum Charge | 3/4" | | | | | |

14 06

15 33

16 71

2,001

Above

| | | All the state of the | 1717 1350 | 18 |
|-----------|--|--|---|--------|
| · · · · · | CITY OF CELINA | | | , Y. |
| | WATER/WASTEWATER COST OF SERVICE MODEL | | | |
| | was the state of t | and the second s | drawn anny are makeny provinced agreement | L |
| . 1 | Effective Effective Briedive | | | 14.7°, |
| | Landa La | an Bullion and the Markey | and a secretary with the second | 242 |
| · | WATER/WASTEWATER COST OF SERVICE MODEL Effective Effective Effective | | aramanaya aramanaya aramanay | |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 1 -- Status Quo

1 THE RESIDENCE AND RESIDENCE

2,001

10,001

20,001

30,001

10,000

20.000

30,000

Above

| Manadali, Minimum Obania | | | | | | | | | |
|--------------------------|--|----|--------|----|--------|----|--------|----|-----|
| Monthly Minimum Charge | 3/4" | \$ | 23 15 | ¢ | 23 84 | œ | 24 56 | ¢ | 25 |
| | 1" | Φ | 38 93 | Þ | 40 10 | Ð | 41 30 | Ф | 42 |
| | 1 1/2" | | 77 87 | | 80 21 | | 82.61 | | 85 |
| | 2" | | 124 59 | | 128 33 | | 132 18 | | 130 |
| Volume Rate/1,000 Gal | | | | | | | | | |
| 2,001 | 10,000 | \$ | 5 06 | \$ | 5 21 | \$ | 5 37 | \$ | |
| 10,001 | 20,000 | • | 7 66 | • | 7 89 | • | 8 13 | • | |
| 20,001 | 30,000 | | 9 02 | | 9 29 | | 9 57 | | |
| 30,001 | Above | | 13 02 | | 13 41 | | 13 81 | | 1 |
| on the second | 1223 200 | | | | | | | | |
| Monthly Minimum Charge | And the second section of the section of t | | | | | | | | |
| monany miniman Onusqu | 3/4" | \$ | 34 72 | \$ | 35 77 | • | 36 84 | • | 3 |
| | 1" | Ψ | 58 40 | Ψ | 58 40 | Ψ | 60 15 | Ψ | 6 |
| | 1 1/2" | | 116 81 | | 116 81 | | 120.31 | | 12 |
| | | | 11001 | | 11001 | | 120.31 | | 12 |

7 59 \$

11 49

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19 53

782 \$

11 83

13 94

20 12

8 05 \$

12 19

14 35

20 72

8 29

12 56

14 78

CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL Effective Effective Current Jan-19 Jen-20 Jen-21

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 1 -- Status Quo

| Monthly Minimum Charge | | | | | |
|---|--|---|---|---|---|
| | 3/4" | \$ 27 81 | \$ 28 64 | \$ 29 50 | \$ 30 3 |
| | 1" | 48 67 | 50 13 | 51 63 | 53 1 |
| | 1 1/2" | 97 34 | 100 26 | 103 27 | 106 |
| | 2" | 155 74 | 160 41 | 165 22 | 170 |
| | 3" | 233 60 | 240 61 | 247 83 | 255 |
| | 4" | 389 34 | 401 02 | 413 05 | 425 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | 10,000 | \$ 5 06 | \$ 5 21 | \$ 5 37 | \$ 5 |
| 10,001 | 20,000 | 7 66 | 7 89 | 8 13 | 8 |
| 20,001 | 30,000 | 9 02 | 9 29 | 9 57 | 9 |
| 30,001 | Above | 13 02 | 13 41 | 13 81 | 14 |
| | | | | | |
| | | | | | |
| , . , | , | | | | |
| , . , | 34°° 28' 28' 28' 28' 28' 28' 28' 28' 28' 28' | \$ 41 72 | \$ 42 97 | \$ 44 26 | \$ 45 |
| , . , | , | \$ 41 72 73 01 | \$ 42 97 75 20 | \$ 44 26 77 45 | \$ |
| , . , | 3/4" | \$ | \$ | \$ | \$ 79 |
| , . , | 3/4" 1" | \$ 73 01 | \$ 75 20 | \$ 77 45 | \$ 79 159 |
| , . , | 3/4" 1" 1 1/2" | \$ 73 01 146 01 | \$ 75 20 150 39 | \$ 77 45 154 90 | \$ 79 159 255 |
| , . , | 3/4" 1" 1 1/2" 2" | \$ 73 01 146 01 233 61 | \$ 75 20 150 39 240 62 | \$ 77 45 154 90 247 84 | \$ 79 159 255 382 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" 3" | \$ 73 01 146 01 233 61 350 40 | \$ 75 20 150 39 240 62 360 91 | \$ 77 45 154 90 247 84 371 74 | \$ 79 159 255 382 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" 2" 3" | \$ 73 01 146 01 233 61 350 40 | 75 20 150 39 240 62 360 91 | 77 45 154 90 247 84 371 74 | 79 159 255 382 638 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" 3" 4" | 73 01 146 01 233 61 350 40 584 01 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 79 159 255 382 638 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 | 3/4" 1" 1 1/2" 2" 3" 4" | 73 01 146 01 233 61 350 40 584 01 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 45 5 79 159 9 255 2 382 8 638 8 12 9 |

| CITY OF CELINA | |
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| WATER/WASTEWATER COST OF SERVICE MODEL | |
| Effective Effective | Effective |

City Rate Plan -- Three Year Summary Scen: 2018 11 14 Scenario 1 -- Status Quo

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| artenant similar anno anno anno anno anno anno anno an | more proportion with the state | | | | |
|--|---|----------------|----------|----------|--------|
| Monthly Minimum Charge | | | | | |
| | 3/4" | \$ 21 50 \$ | 23 44 \$ | 25 54 \$ | 27 84 |
| | 1" | 38 63 | 42 11 | 45 90 | 50 03 |
| | 1 1/2" | 72 10 | 78 59 | 85 66 | 93 37 |
| | 2" | 123 60 | 134 72 | 146 85 | 160 07 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | Maximum | 5 84 | 6 37 | 6 94 | 7 56 |
| | Maximum Gallons | 14,000 | 13,000 | 12,000 | 11,000 |
| the in high the historical disease was not been as well as well the second | th.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | |
| Monthly Minimum Charge | | | | | |
| | 3/4" | 32 25 | 35 15 | 38 32 | 41 76 |
| | 1" | 57 95 | 63 16 | 68 84 | 75 04 |
| | 1 1/2" | 108 15 | 117 88 | 128 49 | 140 06 |
| | 2" | 185 40 | 202 09 | 220 27 | 240 10 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | Maximum | 12 90 | 14 06 | 15 33 | 16 71 |
| | Maximum Gallons | 14,000 | 13 000 | 12,000 | 11,000 |

| | , ,, | | |
|-----|--|--|---|
| н | *, | The state of the s | |
| 11 | | CITY OF CELINA | |
| н | , | OIT OF GELINA | 1. |
| I | | WATER/WASTEWATER COST OF SERVICE MOD | NE! 1 |
| II. | | WATERWASTEWATER COST OF SERVICE MODE | <u>/</u> |
| ш | | | · · · · · · · · · · · · · · · · · · · |
| ш | / | | |
| II. | . 1 | Effective Effective | Effective |
| ш | | Eligenae Enachae | : CHOCHAR |
| II. | | Current | Jan.34 |
| H2 | be a strategic or or a side of the strategic bearing | Charles State Stat | and the region of the first things in the second of the control and |
| | - mn, | | |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 1 -- Status Quo

| Monthly Minimum Charge | | | | | |
|------------------------|--------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | 3/4" | 25 75 | 28 07 | 30 59 | 33 35 |
| | 1" | 48 29 | 52 64 | 57 37 | 62 54 |
| | 1 1/2" | 90 13 | 98 24 | 107 08 | 116 72 |
| | 2" | 154 50 | 168 41 | 183 56 | 200 08 |
| | 4" | 386 25 | 421 01 | 458 90 | 500 20 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | Above | 5 84 | 6 37 | 6 94 | 7 56 |
| | | | | | |
| | | | | | |
| Monthly Minimum Charge | and the district | | | | |
| Monthly Minimum Charge | 3/4" | 38 63 | 42 10 | 45 89 | 50 02 |
| | 3/4" 1" | 38 63 72 44 | 42 10 78 95 | 45 89 86 06 | 50 02 93 81 |
| | | | | | |
| | 1" | 72 44 | 78 95 | 86 06 | 93 81 |
| | 1" 1 1/2" | 72 44 135 20 | 78 95 147 36 | 86 06 160 63 | 93 8 1 175 08 |
| | 1" 1 1/2" 2" | 72 44 135 20 231 75 | 78 95 147 36 252 61 | 86 06 160 63 275 34 | 93 81 175 08 300 12 |

| | CITY OF CELINA |
|--|--|
| | WATER/WASTEWATER COST OF SERVICE MODEL |
| A STATE OF THE STA | A CONTRACT OF THE PROPERTY OF |
| | Effective Effective Effective |
| | Jan-19 Jan-20 Jan-19 |
| | and the control of th |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| Monthly Minimum Charge | | | | | | |
|---|--------------------------------------|----------|--|--|--|--------------------|
| | 3/4" | \$ | 23 15 | \$ 23 84 | \$ 24 56 | \$ 25 |
| | 1" | | 38 93 | 40 10 | 41 30 | 42 |
| | 1 1/2" | | 77.87 | 80 21 | 82 61 | 85 |
| | 2" | | 124 59 | 128 33 | 132 18 | 136 |
| Volume Rate/1,000 Gal | | | | | | |
| 2,001 | 10,000 | \$ | 5.06 | \$ 5 21 | \$ 5 37 | \$ |
| 10,001 | 20,000 | | 7 66 | 7 89 | 8 13 | 1 |
| 20,001 | 30,000 | | 9 02 | 9 29 | 9 57 | į |
| 30,001 | Above | | 13 02 | 42.44 | 13 81 | 14 |
| | 7.0070 | | 13 02 | 13 41 | 1301 | , |
| Monthly Minimum Charge | | | 13 02 | 13 41 | 13 61 | ' |
| Monthly Minimum Charge | | ¢ | | \$ | \$ | \$ |
| on proof and have been really a subject to the common constitution of the constitution of the 2012 of the const | 3/4" | \$ | 34 72 | \$ 35 77 | \$ 36.84 | \$ 33 |
| on proof and have been really a subject to the common constitution of the constitution of the 2012 of the const | 3/4" 1" | \$ | 34 72 58 40 | \$ 35 77 58.40 | \$ 36.84 60 15 | \$ 3 6 |
| on proof and have been really a subject to the common constitution of the constitution of the 2012 of the const | 3/4" | \$ | 34 72 | \$ 35 77 | \$ 36.84 | \$ 3 6 12 |
| on proof and have been really a subject to the common constitution of the constitution of the 2012 of the const | 3/4" 1" 1 1/2" | \$ | 34 72 58 40 116 81 | \$ 35 77 58.40 116 81 | \$ 36.84 60 15 120 31 | \$ 3 6 12 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" | \$ | 34 72 58 40 116 81 | 35 77 58.40 116 81 | 36.84 60 15 120 31 | 3 6 12 19 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" | | 34 72 58 40 116 81 186 89 | 35 77 58.40 116 81 186 89 | 36.84 60 15 120 31 192 49 | 3 6 12 19 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 | 3/4" 1" 1 1/2" 2" 10,000 | | 34 72 58 40 116 81 186 89 7 59 | 35 77 58.40 116 81 186 89 7 59 | 36.84 60 15 120 31 192 49 7 82 | |

CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL Effective Effective Current Jan 19

City Rate Plan -- Three Year Summary

Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| Monthly Minimum Charge | | | | | |
|--|--|--|--|--|--------------------------------------|
| | 3/4" | \$ 27 81 | \$ 28 64 | \$ 29 50 | \$ 30 |
| | 1" | 48 67 | 50 13 | 51 63 | 53 |
| | 1 1/2" | 97 34 | 100 26 | 103 27 | 106 |
| | 2" | 155 74 | 160 41 | 165 22 | 170 |
| | 3" | 233 60 | 240 61 | 247 83 | 255 |
| | 4* | 389 34 | 401 02 | 413 05 | 425 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | 10,000 | \$ 5 06 | \$ 5 21 | \$ 5 37 | \$ 5 |
| 10,001 | 20,000 | 7 66 | 7 89 | 8 13 | 8 |
| 20,001 | 30,000 | 9 02 | 9 29 | 9 57 | g |
| 30,001 | Above | 13 02 | 13 41 | 13 81 | 14 |
| | | | | | |
| | | | | | |
| - + · · · · · · · · · · · · · · · · · · | ,, , | | | | |
| - + · · · · · · · · · · · · · · · · · · | 3/4" | \$ 41 72 | \$ 42 97 | \$ 44 26 | \$ |
| - + · · · · · · · · · · · · · · · · · · | 3/4 " 1" | \$ 73 01 | \$ 75 20 | \$ 77 45 | \$ 79 |
| - + · · · · · · · · · · · · · · · · · · | 3/4" 1" 1 1/2" | \$ 73 01 146 01 | \$ 75 20 150 39 | \$ 77 45 154 90 | \$ 79 159 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" 2" | \$ 73 01 146 01 233 61 | \$ 75 20 150 39 240 62 | \$ 77 45 154 90 247 84 | \$ 79 159 255 |
| - + · · · · · · · · · · · · · · · · · · | 3/4" 1" 1 1/2" 2" 3" | \$ 73 01 146 01 233 61 350 40 | \$ 75 20 150 39 240 62 360 91 | \$ 77 45 154 90 247 84 371 74 | \$ 79 159 255 382 |
| - + · · · · · · · · · · · · · · · · · · | 3/4" 1" 1 1/2" 2" | \$ 73 01 146 01 233 61 | \$ 75 20 150 39 240 62 | \$ 77 45 154 90 247 84 | \$ 79 159 255 382 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" 3" 4" | 73 01 146 01 233 61 350 40 584 01 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 79 159 255 382 638 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 | 3/4" 1" 1 1/2" 2" 3" 4" | \$ 73 01 146 01 233 61 350 40 584 01 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 79 159 255 382 638 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 10,001 | 3/4" 1" 1 1/2" 2" 3" 4" | 73 01 146 01 233 61 350 40 584 01 7 59 11 49 | 75 20 150 39 240 62 360 91 601 53 7 82 11 83 | 77 45 154 90 247 84 371 74 619 58 8 05 12 19 | 45 79 159 255 382 638 |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 | 3/4" 1" 1 1/2" 2" 3" 4" | 73 01 146 01 233 61 350 40 584 01 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 79 159 255 382 638 |

| | CITY OF CELINA |
|--|--|
| | WATER/WASTEWATER COST OF SERVICE MODEL |
| the state of the s | |
| The second of th | The day of the second s |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| resurres pronounced announce to the rain field of the session and | | | | | |
|---|--|---------------------------|---------------------------|---------------------------|--|
| Monthly Minimum Charge | | | | | |
| | 3/4" | \$ 21 50 \$ | 23 44 \$ | 25 54 | \$ 27 84 |
| | 1" | 38 63 | 42 11 | 45 90 | 50 03 |
| | 1 1/2" | 72 10 | 78 59 | 85 66 | 93 37 |
| | 2" | 123 60 | 134 72 | 146 85 | 160 07 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | 5,000 | 5 84 | 5 84 | 6 37 | 6 94 |
| 5,001 | Maximum | 5 84 | 7 23 | 7 88 | 8 59 |
| | Maximum Gallons | 14,000 | 13,000 | 12 000 | 11,000 |
| | | | | | |
| distributes and a second | | | | | |
| Monthly Minimum Charge | ************************************** | | | | |
| | 3/4" | 32 25 | 35 15 | 38 32 | 41 76 |
| | 3/4" 1" | 32 25 57 95 | 35 15 63 16 | 38 32 68 84 | |
| | | | | | 75 04 |
| | 1" | 57 95 | 63 16 | 68 84 | 75 04 140 06 |
| | 1" 1 1/2" | 57 95 108 15 | 63 16 117 88 | 68 84 128.49 | 75 04 140 06 |
| Monthly Minimum Charge | 1" 1 1/2" | 57 95 108 15 | 63 16 117 88 | 68 84 128.49 | 75 04 140 06 240 10 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 1" 1 1/2" 2" | 57 95 108 15 185 40 | 63 16 117 88 202 09 | 68 84 128.49 220 27 | 41 76 75 04 140 06 240 10 15 33 18.97 |

| | | . , | | | | and the state of the | | |
|--------|-------------|---------------|----------------------|-----|------------|----------------------|----------------------|-----------|
| () | , | | | | | CITY OF CELINA | | , |
| | 4 | | | | WATER/WAST | EWATER COST OF SE | RVICE MODEL | , · · |
| | , , | | ÷ | | | MARKET CO. A. S. C. | Marie and the second | **** |
| | i j | , | | : ' | Current | Effective | Effective | Effective |
| CHÁCKA | Common Mark | Holming de 16 | na sina ilaa haa haa | | Current | Jan-19 | Jan-20 | Jan-21: |

City Rate Plan -- Three Year Summary
Scen: 2018 11 14 Scenario 2 -- WW Inverted Block

| Monthly Minimum Charge | | | | | |
|--|--------|--------|--------|--------|--------|
| | 3/4" | 25 75 | 28 07 | 30 59 | 33 35 |
| | 1" | 48 29 | 52 64 | 57 37 | 62 54 |
| | 1 1/2" | 90 13 | 98 24 | 107 08 | 116 72 |
| | 2" | 154 50 | 168 41 | 183 56 | 200 08 |
| | 4" | 386 25 | 421 01 | 458 90 | 500 20 |
| /olume Rate/1,000 Gal | | | | | |
| 2,001 | Above | 5 84 | 6 37 | 6 94 | 7 56 |
| oleon to a super terms of the desired the superior | | | | | |
| onthly Minimum Charge | | | | | |
| | 3/4" | 38 63 | 42 10 | 45 89 | 50 02 |
| | 1" | 72 44 | 78 95 | 86 06 | 93 81 |
| | 1 1/2" | 135 20 | 147 36 | 160 63 | 175 08 |
| | 2" | 231 75 | 252 61 | 275 34 | 300 12 |
| | 4" | 579 38 | 631 52 | 688 36 | 750 31 |

CITY OF CELINA | TEXAS



Water and Wastewater Rate Analysis and Long Term Financial Plan



CITY OF CELINA WATER AND WASTEWATER RATE STUDY TABLE OF CONTENTS

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Appendix A – Water and Wastewater Rate Model Summary – Alternative 1

Appendix B - Water and Wastewater Rate Model Summary - Alternative 2



Acknowledgements

During the course of this rate study, several City of Celina employees expended considerable time and effort in assisting the project team. These employees included the Mayor and Council, Mr. Jason Laumer, Mr. Paul DeBuff, Ms. Amy Kuehn, Mr. Jay Toutounchain, Ms. Kimberly Brawner, and Mr. Alan Fourmentin. The project team owes a debt of gratitude to the hard work, dedication and professionalism of these individuals, without whom this project would not have been successfully completed.

The project team has relied upon the extensive data supplied by the City of Celina. Thus, the integrity of the study is largely dependent upon the accuracy of this financial and customer data. Every effort has been made by the project team to validate and confirm the information contained herein prior to the preparation of the final study documents; however we cannot guarantee the reliability of data supplied to us by the City. This report presents no assurance or guarantee that the forecast contained herein will be consistent with actual results or performances. These represent forecasts based on a series of assumptions about future behavior and are not guarantees. Any changes in assumptions or actual events may result in significant revisions to the forecast and its conclusions. The cash flow projections and debt service coverage calculations are not intended to present overall financial positions, results of operations, and/or cash flows for the periods indicated, which is in conformity with guidelines for presentation of a forecast established by the American Institute of Certified Public Accountants.





Executive Summary

Executive Summary

Background



In April 2018, the City of Celina, Texas (the "City") engaged **Willdan Financial Services** to conduct a water and wastewater rate study and long-term financial plan. The City was interested in developing a comprehensive rate plan for FY 2018 and beyond. The objective of this study is to develop a long-term rate plan that will enable the City to recover sufficient funds to meet operating expenses, capital outlays, debt service and coverage requirements, while at the same time to the best extent possible minimizing the impact of any adjustments on ratepayers.

The City identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems' current cost of service and revenue requirements.
- A forecast of operating expenses over the next decade, taking into consideration salient factors such as cost
 of water and wastewater treatment, inflation, and system growth.
- A review and analysis of the impact of forecast cost increases from Upper Trinity Regional Water District ("UTRWD"), the City's primary water and wastewater wholesale service provider, on the City's retail rates.
- A thorough review of the water and wastewater systems' known capital improvement needs, as well as a
 determination of the need for funding capital requirements through the issuance of long-term debt.
- An estimate of current and forecast accounts, volumes and billing units for the ten-year forecast period.
- An analysis of alternative rate structures for water and wastewater rates that will recover sufficient revenues and will distribute costs equitably.
- A detailed analysis and comparison of the City's current and proposed rates to rates in other surrounding communities.

Water and Wastewater Rate Comparison

Table ES-1 compares the City's monthly water and wastewater charges to nearby cities in Texas. Volumes of 5,000 gallons for water and 5,000 gallons for wastewater were used for the residential comparison as it represents typical usage levels for an average household. The rate data is based on published rates and ordinances posted by each



municipality on their website. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. The following points are notable:

- Celina's residential monthly charges are average when compared to the surveyed communities.
- Celina's residential charges are approximately the same as the state average.
- It should be noted that according to US governmental statistics, as many as 30% of water and wastewater
 utilities charge rates that do not cover their costs. So if a utility has low rates, this does not necessarily
 translate into low costs.

TABLE ES-1

| | ٧ | /ater | Was | tewater | Total | | |
|---------------------|----|----------------|-----|----------------|-------|----------------|--|
| Celina | \$ | 37.13 | \$ | 37.79 | \$ | 74.92 | |
| A llen | | 31.97 | | 32.74 | | 64.71 | |
| Frisco | | 29.21 | | 41.52 | | 70.73 | |
| Mustang SUD | | 44.05 | | 51.60 | | 95.65 | |
| Prosper | | 31.90 | | 46.12 | | 78.02 | |
| Colleyville | | 33.06 | | 25.27 | | 58.33 | |
| Coppell | | 33 60 | | 31.36 | | 64 96 | |
| University Park | | 29.13 | | 33.60 | | 62.73 | |
| Rockw all | | 35.72 | | 34.90 | | 70.62 | |
| Fairview Keller | | 35.42 40.84 | | 37.08 35.35 | | 72.50 76 19 | |
| Murphy | | 46.38 | | 38.87 | | 85.25 | |
| Mc Kinney | | 37.45 | | 39.85 | | 77.30 | |
| Southlake | | 54.17 | | 43.21 | | 97.38 | |
| Little Elm | | 40.76 | | 42.29 | | 83 05 | |
| Marillee SUD | | 47.40 | | 37.79 | | 85 19 | |
| Sample Average | | 38.01 | | 38.08 | | 76.10 | |
| 2018 State Average* | | 38.21 | | 35.99 | | 74.21 | |

Water and Wastewater Customers and Usage - Test Year & Forecast

Table ES-2 and **Table ES-3** present total historical and forecast water accounts for the City. For each of the historical years, the average number of accounts for the year is shown and the growth reflects the difference from one fiscal year to the next. The charts reveal that in 2016 and 2017 the City experienced growth in excess of 810 water accounts. The project team is forecasting that account growth will continue in future years, tapering down from 23% in FY 2019 to 6% in 2027. The forecast projects that the test year 2018 total of **5,090** will increase to **12,795** by 2027.



The charts further reveal that residential accounts represent the largest water customer class, at 3,611 accounts in the test year 2018.

TABLE ES-2

| | See all the | | at the country of the | | | | | | | | | |
|---|-------------|---------------------|-----------------------|------------------------------|--------|--|--|--|--|--|--|--|
| Fiscal Year | Residential | Residential Outside | Commercial | Commercial al Outside Tot | | | | | | | | |
| A second | | | | | | | | | | | | |
| FY 2015 | 2 477 | 593 | 219 | 24 | 3,313 | | | | | | | |
| FY 2016 | 2.760 | 892 | 223 | 24 | 3,899 | | | | | | | |
| FY 2017 | 3,320 | 1 131 | 239 | 27 | 4,717 | | | | | | | |
| 12 Mo Apr '18 | 3,611 | 1,211 | 241 | 28 | 5,090 | | | | | | | |
| FY 2019 | 4,418 | 1,481 | 295 | 34 | 6,228 | | | | | | | |
| FY 2020 | 5,308 | 1,779 | 354 | 40 | 7,482 | | | | | | | |
| FY 2021 | 5,901 | 1,978 | 394 | 45 | 8,318 | | | | | | | |
| FY 2022 | 6,495 | 2,177 | 433 | 49 | 9,158 | | | | | | | |
| FY 2023 | 7,076 | 2,372 | 472 | 54 | 9,974 | | | | | | | |
| FY 2024 | 7,629 | 2,558 | 509 | 58 | 10,754 | | | | | | | |
| FY 2025 | 8,141 | 2,729 | 543 | 62 | 11,470 | | | | | | | |
| FY 2026 | 8,596 | 2,882 | 574 | 65 | 12,117 | | | | | | | |
| FY 2027 | 9,077 | 3,043 | 606 | 69 | 12,795 | | | | | | | |

TABLE ES-3

| | r | ORECAST TOTAL | CUSTOMERS | | | | | | |
|-----------------------------|-------------|---------------------|------------|-----------------------|-------|--|--|--|--|
| WASTEWATER Customer Classes | | | | | | | | | |
| | Residential | Residential Outside | Commercial | Commercial Outside | Total | | | | |
| | MAĞTEYYAYER | Togal Customore | ** | | | | | | |
| FY 2015 | 2 540 | 1 | 131 | 1 | 2,67 | | | | |
| FY2016 | 3 118 | 1 | 129 | 1 | 3,24 | | | | |
| FY2017 | 3,930 | 1 | 130 | 1 | 4,06 | | | | |
| 12 Mo Apr '18 | 4,208 | 1 | 146 | 1 | 4,35 | | | | |
| FY2019 | 5,148 | 1 | 179 | 1 | 5,32 | | | | |
| FY 2020 | 6,184 | 1 | 215 | 1 | 6,40 | | | | |
| FY 2021 | 6,876 | 1 | 239 | 1 | 7,11 | | | | |
| FY 2022 | 7,568 | 1 | 263 | 1 | 7,83 | | | | |
| FY 2023 | 8,244 | 1 | 286 | 1 | 8,53 | | | | |
| FY 2024 | 8,890 | 1 | 308 | 1 | 9,20 | | | | |
| FY 2025 | 9,486 | 1 | 329 | 1 | 9,81 | | | | |
| FY 2026 | 10,016 | 1 | 348 | 1 | 10,36 | | | | |
| FY 2027 | 10,576 | 1 | 367 | 1 | 10,94 | | | | |

Table ES-4 presents consumption by rate classification for the City for the past three fiscal years and the forecast growth over the next ten years.

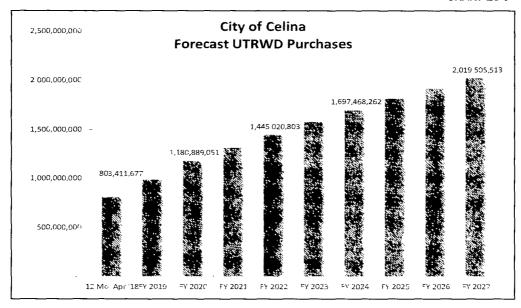


TABLE ES-4

| | FC | RECAST BILLI | ED CONSUMPT | TION | |
|-----------------|---|--------------|-----------------|-------------------|---------------|
| | CALLED VICTORY | | 400 | | |
| | | Residential | | Commercial | |
| | Residential | Outside | Commercial | Outside | Total |
| | an arang mengapan kanagan ang mengapan sa | | Carrie Williams | Maria Maria Maria | |
| FY 201 5 | 206,962 840 | 41 836,504 | 73,571,984 | 10 199,400 | 332,570,72 |
| FY 20 16 | 226 356,251 | 69,370 331 | 86 881 720 | 10 076 400 | 392,684,70 |
| FY 2 017 | 258 818 532 | 85 140 618 | 101 681 500 | 26 425 200 | 472,065,85 |
| ì | nda násny mistranic | | | | |
| 12 Mo Apr '18 | 308,850,184 | 100,247,428 | 104,120,104 | 22,390,069 | 535,607,78 |
| FY 2019 | 377,909,858 | 122,663,003 | 127,401,620 | 27,396,544 | 655,371,02 |
| FY 2020 | 453,961,289 | 147,347,983 | 153,040,209 | 32,909,886 | 787,259,36 |
| FY 20 21 | 504,714,730 | 163,821,671 | 170,150,296 | 36,589,253 | 875,275,95 |
| FY 2022 | 555,499,694 | 180,305,592 | 187,271,011 | 40,270,905 | 963,347,20 |
| FY 20 23 | 605,184,143 | 196,432,305 | 204,020,718 | 43,872,775 | 1,049,509,94 |
| FY 2024 | 652,546,384 | 211,805,269 | 219,987,558 | 47,306,296 | 1,131,645,50 |
| FY 2025 | 696,319,686 | 226,013,326 | 234,744,488 | 50,479,638 | 1,207,557,13 |
| FY 20 26 | 735,244,392 | 238,647,612 | 247,866,852 | 53,301,482 | 1,275,060,33 |
| FY 2027 | 776.345.014 | 251,988,163 | 261,722,764 | 56,281,068 | 1,346,337,009 |

Chart ES-5 presents forecast increase in water purchases (gallons) from UTRWD for the period FY 2019 through FY 2027. The chart reveals that under current circumstances, and assuming no changes to the current UTRWD contractual methodology, the City water purchases are forecast to increase significantly over the next decade.

CHART ES-5





Net Revenue Requirement

Table ES-6 presents the City's forecast Net Revenue Requirement for the ten-year period FY 2018 through FY 2027. Details behind these calculations can be found in the rate model contained in **Appendix A**. This forecast is based on the following set of assumptions:

- Most operating costs are expected to increase at an annual rate of 3%, which is approximately equivalent to the rate of inflation.
- Certain expenses will increase at above-inflation rates, to reflect the rapid rate of increase of these costs. These expenses include chemicals, workers' compensation, Medicare and insurance.
- The City of Celina staff provided guidance on inflation factors used in their budgetary forecasts and these same factors were then applied within the rate model.
- An additional eight employees are anticipated by the City at this time. Two utility billing personnel; two water department personnel; and four wastewater department personnel.
- Utility Billing Costs are distributed to water, solid waste and wastewater based on FY 2018 revenue budgeted for each department.
- The forecast includes an annual transfer to General Fund for General and Administrative services. These transfers are forecast to increase either at the inflation rate.
- As shown in these charts, UTRWD charges are by far the largest annual operating expense paid by Celina's
 water and wastewater utilities. The project team utilized UTRWD's most recent budgeted rate forecast as
 the basis for the UTRWD cost estimates. Any changes in UTRWD forecast rate estimates used in
 determining the City's water and wastewater revenue requirement for this rate study could require
 significant changes to the rate plan presented in this report.
- The City has developed a comprehensive capital improvement plan ("CIP") for its water and wastewater system. The plan includes estimates for infrastructure capital improvements for the ten-year (2018 2027) rate study financial planning period. This plan includes an aggressive list of projects required to meet utility service needs for communities like Celina with high growth forecasts in number of accounts and water/wastewater demands. The water CIP includes storage, pumps and distribution lines expansion, repairs and upgrades. The wastewater CIP includes wastewater treatment and collection system expansion and upgrades to infrastructure. In developing a ten-year financial forecast, the project team used the totals provided by the City to determine an overall estimate for capital spending needs for the decade. This total CIP for the next ten years is \$164,283,000.
- To fund the long-term capital improvement plan, the City is forecast to issue \$161,000,000 in water and wastewater long-term debt over the next decade. This includes \$112,000,000 of debt between FY 2019 and FY 2023, and \$49,000,000 in debt between FY 2024 and FY 2028. The debt service and coverage requirements are major factors in the City's long-term debt plan.
- Non-rate revenues, particularly revenues from connection and impact fees, are forecast to partially offset the need for rate adjustments in the next decade.



Table ES-6 reveals that the total revenue requirement is expected to increase from \$7,472,142 in FY 2018 to \$27,273,073 in FY 2027. The City's utility fund is forecast to be able to meet projected capital and operating expenses in the test year under the recommended rate plan without assistance from the City's General Fund. However, this forecast is highly dependent on the assumptions contained in this study, and any material changes to any of these assumptions may result in significant changes to the revenue requirement.

TABLE ES-6

| | | CURRENT | AND FOREC | AST NET REVE | RE REQUIRE | MENT | | |
|-------------|---|--|---|---|--------------|--------------|--------------|--|
| CENARIO: | - | • | | | | | | |
| 018 11 14 S | cenario 1 Status Q | luo | | | | | | |
| | . | | 5.4 | | Total | Less | Net_ | |
| | Operating | Capital | Debt | Transfers & | Cost of | Non-Rate | Revenue | |
| | Expenses | Outlays | Service | Contingencies | Service | Revenues | Requirement | |
| | all bearing the Minister | erek erreten en en eliste. | N. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. | **** ******************************** | | | | |
| 2018 | \$ 4,139,331 | The state of the s | 1,313,274 | S. M. M. S. M. S. | \$ 5,993,844 | \$ 1,675,083 | \$ 4,318,761 | |
| 2019 | 4,943,924 | 181,823 | 2,507,185 | 370,198 | 8.003,129 | 1,675,083 | 6,328,046 | |
| 2020 | 5,513,776 | 181,823 | 2,509,427 | 381,304 | 8,586,330 | 1,793,131 | 6,793,199 | |
| 2021 | 5,959,027 | 181,823 | 4,486,450 | 392,743 | 11,020,043 | 1,366,001 | 9,654,041 | |
| 2022 | 6,903,399 | 181,823 | 4,487,564 | 404,525 | 11,977,310 | 1,366,534 | 10,610,777 | |
| 2023 | 7,343,750 | 181,823 | 5,343,325 | 416,661 | 13,285,559 | 1,347,952 | 11,937,606 | |
| 2024 | 7,794,602 | 181,823 | 5,348,069 | 429,160 | 13,753,654 | 1,308,744 | 12,444,910 | |
| 2025 | 8,810,788 | 181,823 | 5,555,847 | 442,035 | 14,990,493 | 1,248,149 | 13,742,344 | |
| 2026 | 9,303,199 | 181,823 | 5,558,157 | 455,296 | 15,498,475 | 1,166,286 | 14,332,189 | |
| 2027 | 9,826,129 | 181,823 | 5,685,162 | 468,955 | 16,162,070 | 1,203,024 | 14,959,046 | |
| | This de la fraisse and the land on the land | | | | | | | |
| 2018 | 3,16 4, 382 | 117,911 | 907,720 | 167,585 | 4,357,598 | 1,204,217 | 3,153,381 | |
| 2019 | 3,442,607 | 117,911 | 1,835,781 | 172,612 | 5,568,911 | 1,204,217 | 4,364,694 | |
| 2019 | 3,770,518 | 117,911 | 1,837,331 | 177,791 | 5,903,551 | 1,294,424 | 4,609,127 | |
| 2020 | 4,073,256 | 117,911 | 2,825,364 | 183.124 | 7,199,656 | 968.032 | 6,231,624 | |
| 2021 | 4,415,011 | 117,911 | 2,826,134 | 188,618 | 7,193,030 | 968,439 | 6,579,235 | |
| 2022 | 4,807,977 | 117,911 | 4,276,380 | 194,277 | 9,396,546 | 954,240 | 8,442,305 | |
| 2023 | 5.092,088 | 117,911 | 4,279,659 | 200,105 | 9,689,764 | 924,279 | 8,765,484 | |
| 2024 | 5,382,040 | 117,911 | 5,865,215 | 206,108 | 11,571,275 | 877,975 | 10,693,300 | |
| 2026 | 5,664,143 | 117,911 | 5,866,812 | 212,291 | 11,861,158 | 815,419 | 11,045,739 | |
| 2027 | 5,967,805 | 117,911 | 6,853,144 | 218,660 | 13,157,520 | 843,493 | 12,314,027 | |
| | | | | | | | | |
| | TOTAL Reference | Requirement | | | | | | |
| 2018 | 7,303,713 | 299,734 | 2,220,995 | 527,000 | 10,351,442 | 2,879,300 | 7,472,142 | |
| 2019 | 8,386,530 | 299,734 | 4,342,966 | 542,810 | 13,572,040 | 2,879,300 | 10,692,740 | |
| 2020 | 9,284,294 | 299,734 | 4,346,759 | 559,094 | 14,489,881 | 3,087,555 | 11,402,325 | |
| 2021 | 10,032,283 | 299,734 | 7,311,814 | 575,867 | 18,219,698 | 2,334,034 | 15,885,665 | |
| 2022 | 11,318,410 | 299,734 | 7,313,698 | 593,143 | 19,524,985 | 2,334,973 | 17,190,012 | |
| 2023 | 12,151,728 | 299,734 | 9,619,706 | 610,937 | 22,682,105 | 2,302,193 | 20,379,912 | |
| 2024 | 12,886,690 | 299,734 | 9,627,729 | 629,266 | 23,443,418 | 2,233,024 | 21,210,394 | |
| 2025 | 14,192,829 | 299,734 | 11,421,062 | 648,144 | 26,561,769 | 2,126,124 | 24,435,644 | |
| 2026 | 14,967,342 | 299,734 | 11,424,969 | 667,588 | 27,359,633 | 1,981,705 | 25,377,928 | |



Water and Wastewater Rate Recommendations

During the course of this study, the project team evaluated several alternative rate plans for the City. After several meetings with staff and Council, it was determined that there would be two alternative rate plans to be presented for consideration. Both rate plans are considered to be revenue neutral, in that each is forecast to recover an equivalent amount of revenue per year. Further, each of the alternative rate plans developed by the project team includes the following objectives:

- Each plan will ensure that water rates will cover the water cost of service and wastewater rates will cover the wastewater cost of service
- Each plan is intended to allow the City to increase its operating reserves from 40 days to 60 days in three
 vears
- Each rate plan presents a forecast of rates for three years. City staff and the project team discussed the adoption of rate plan, with rates to be automatically implemented on January 1st of each year beginning with January 2019 and ending in January 2021
- Given the continued residential and Commercial growth in the City and potential for unexpected events, the
 project team recommends that the City not commit itself to a rate plan beyond three years. Further, the
 project team recommends that the City review these rates annually, to incorporate any unanticipated
 changes to costs, volumes or growth assumptions that may occur during that time.
- The most significant impact on rates will be the cost of UTRWD treated water and wastewater treatment and debt issued to fund the CIP. Should UTRWD make material changes to its rate forecasts and/or the City changes its forecast of future debt, the City should undertake an immediate review of its rate plan.

Rate Plan Alternative 1 - Status Quo

Table ES-7 presents a summary of the first alternative water and wastewater rate plan proposed for Residential and Commercial customers. **Table ES-8** presents the impact on monthly charges of both the water and wastewater rate adjustments for representative Residential and Commercial accounts.

As previously mentioned, this alternative retains the basic rate structure for water and wastewater currently in place for the City. It requires a series of annual percentage rate adjustments in January of each year.

In lieu of changing to a winter averaging method for billing residential sewer accounts (Alternative #1), the staff chose to "ratchet" down the 14,000 gallons monthly cap by 1,000 gallons each of the three-year rate plan. The ultimate goal is to reach 9,000 gallons, but that will require a timeframe that extends beyond the three years of this rate plan. Since the average monthly use by residential customers never exceeded 10,000 gallons over the twelve-month test year used in the rate study, 9,000 gallons is considered an appropriate cap for the City residential customers.

In addition, the staff decided that instead of changing 3/4" meter monthly charge to equal 1" meter monthly charge they will grandfather the 3/4" meter monthly charge. The City is no longer installing 3/4" meters for residential customers. 1" is the smallest meter the City will install.

A full exhibit of the 3-year rate plan is presented in **Appendix A** of this report. Appendix A further forecasts rates for a 10-year period. However, beyond FY 2021 the recommended rates should be considered as trends and general



guidelines. Because of the significant volume of and volatility of future growth forecasts, the project team strongly recommends that the rate plan be reviewed every year to ensure that revenues are consistent with forecasts and are adequate to fund all the costs of providing service

TABLE ES-7

| | | | Scenario: | 2010 | 11 14 3001 | ai io | l Status Qı | JU | |
|--|------------------------------|----|---------------------|------|------------|-------|-------------|----|---------|
| | | | Effective Jan-18 | | Jan-19 | 433. | Jan-20 | | Jan-21 |
| | | _ | Jai1-10 | | Jai1-15 | | Jai1-20 | | Jail-21 |
| Control of the Control | | | | | | | | | |
| Minimum Charge | | • | 00.45 | | 00.04 | | 04.50 | | 05.00 |
| | 3/4" | \$ | 23.15 | | 23.84 | \$ | 24.56 | Þ | 25.30 |
| | 1" | | 38.93 | | 40.10 | | 41.30 | | 42.54 |
| | 1 1/2 " 2" | | 77.87 124.59 | | 80.21 | | 82.61 | | 85.09 |
| | 2 | | 124.59 | | 128.33 | | 132.18 | | 136.14 |
| Volume Rate Per_1 | ,000 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5.06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7.66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.86 |
| 30,001 | Above | | 13 02 | | 13.41 | | 13.81 | | 14.23 |
| de la companya de la | | | | | | | | | |
| Minimum Charge | 1st 2,000 Gal | | | | | | | | |
| | 3/4" | \$ | 27.81 | \$ | 28.64 | \$ | 29.50 | \$ | 30.39 |
| | 1" | | 48.67 | | 50.13 | | 51.63 | | 53.18 |
| | 1 1/2" | | 97.34 | | 100.26 | | 103.27 | | 106.37 |
| | 2" | | 155 74 | | 160.41 | | 165.22 | | 170.18 |
| | 3" | | 233.60 | | 240.61 | | 247.83 | | 255.26 |
| | 4" | | 389.34 | | 401.02 | | 413.05 | | 425.44 |
| Volume Rate Per 1 | ,000 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5 06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7.66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.86 |
| 30,001 | Above | | 13.02 | | 13.41 | | 13.81 | | 14.23 |
| | Will Williams of the Control | | | | | | | | |
| Minimum Charge | 1st 2,000 Gal | | | | | | | | |
| | 3/4" | \$ | 21.50 | | 23.44 | \$ | 25.54 | \$ | 27.84 |
| | 1" | | 38.63 | | 42.11 | | 45.90 | | 50.03 |
| | 1 1/2" | | 72.10 | | 78.59 | | 85.66 | | 93.37 |
| | 2" | | 123.60 | | 134.72 | | 146.85 | | 160.07 |
| Volume Rate/1,00 | 0 Gal (2,001 to 14,000) | | 5.84 | | 6.37 | | 6.94 | | 7.56 |
| Residential Usage | e Cap (gallons) | | 14,000 | | 13,000 | | 12,000 | | 11,000 |
| Minimum Charac | 1et 2 000 Gal | | | | | | | | |
| Minimum Charge | 3/4" | \$ | 25.75 | \$ | 28.07 | \$ | 30.59 | \$ | 33.35 |
| | 1" | Ψ | 48.29 | * | 52.64 | 7 | 57.37 | • | 62.54 |
| | 1 1/2" | | 90 13 | | 98.24 | | 107.08 | | 116.72 |
| | 2" | | 154.50 | | 168.41 | | 183.56 | | 200.08 |
| | 3" | | - | | | | - | | - |
| | 4" | | 386.25 | | 421.01 | | 458.90 | | 500.20 |



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TABLE ES-8

| | | | Scenario: | | 18 11 14 Scena | 1 Status Quo | The second secon | |
|---------------|------------------------|----|-----------|----|----------------|--------------|--|----------|
| | | | Jan-18 | | Jan-19 | 3 | Jan-20 | Jan-21 |
| Residential M | Ionthly Charges 3/4" | | | | | | | |
| 5,000 Water | 5,000 WW | \$ | 77.35 | \$ | 82.01 | \$ | 87.02 \$ | 92.42 |
| ŕ | Increase \$ | | | | 4.66 | | 5.01 | 5.39 |
| | Increase % | | | | 6.0% | | 6.1% | 6.2% |
| 10,000 Water | 10,000 WW | | 131.85 | | 139.90 | | 148.56 | 157.88 |
| | Increase \$ | | | | 8.05 | | 8.66 | 9.32 |
| | Increase % | | | | 6.1% | | 6.2% | 6.3% |
| 20,000 Water | 14,000 WW | | 231.81 | | 244.26 | | 257.58 | 271.83 |
| | Increase \$ | | | | 12.45 | | 13.32 | 14.26 |
| | Increase % | | | | 5.4% | | 5.5% | 5.5% |
| Commercial | Monthly Charges 1 1/2" | | | | | | | |
| 30.000 Water | 30,000 WW | \$ | 558.27 | \$ | 590.24 | \$ | 624.53 \$ | 661.35 |
| | Increase \$ | • | | • | 31.97 | • | 34.30 | 36.82 |
| | | | | | 5.7% | | 5.8% | 5.9% |
| | | | | | | | | |
| 60,000 Water | 60,000 WW | | 1,124.07 | | 1,183.52 | | 1,247.08 | 1,315.06 |
| | Increase \$ | | | | 59.45 | | 63.55 | 67.98 |
| | Increase % | | | | 5.3% | | 5.4% | 5.5% |

Rate Plan Alternative 2 – Wastewater Inverted Block

Table ES-9 presents a summary of the second alternative water and wastewater rate plan proposed for Residential and Commercial customers. **Table ES-10** presents the impact on monthly charges of both the water and wastewater rate adjustments for representative Residential and Commercial accounts.

As previously mentioned, this alternative retains the basic rate structure for water and wastewater currently in place for the City. It requires a series of annual percentage rate adjustments in January of each year. However, while water rates are unchanged from Alternative #1, wastewater rates are converted into an inverted block for residential wastewater customers.

This alternative also includes the ratcheting down of the wastewater usage cap, as well as the grandfathering of 3/4" water meters.

A full exhibit of the 3-year rate plan is presented in **Appendix B** of this report. Appendix B further forecasts rates for a 10-year period. However, beyond FY 2021 the recommended rates should be considered as trends and general guidelines. Because of the significant volume of and volatility of future growth forecasts, **the project team strongly recommends that the rate plan be reviewed every year to ensure that revenues are consistent with forecasts and are adequate to fund all the costs of providing service.**



TABLE ES-9

| | | | ASTEWATER F Scenario: | | 11 14 Scena | ario 2 | WW Inve | rted | Block |
|-------------------|--------------------------------|----|--------------------------|-----|-------------|--------|-------------|------|--------|
| | | | Effective Jan-18 | 11. | | | Jan-20 | | Jan-21 |
| | | | | | | | | | |
| Minimum Charge - | - 1st 2,000 Gal | | | | | | | | |
| | 3/4" | \$ | 23.15 | \$ | 23.84 | \$ | 24.56 | \$ | 25.30 |
| | 1" | | 38.93 | | 40.10 | | 41.30 | | 42.54 |
| | 1 1/2" | | 77.87 | | 80.21 | | 82.61 | | 85.09 |
| | 2" | | 124.59 | | 128.33 | | 132.18 | | 136.14 |
| Volume Rate Per 1 | I. 0 00 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5.06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7.66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.80 |
| 30,001 | Above | | 13.02 | | 13.41 | | 13.81 | | 14.23 |
| | | | | | | | | | |
| Minimum Charge | - <u>1st 2,000 Gal</u> 3/4" | \$ | 27.81 | s | 28.64 | \$ | 29.50 | \$ | 30.39 |
| | 1" | • | 48.67 | • | 50.13 | • | 51.63 | • | 53.18 |
| | 1 1/2" | | 97.34 | | 100.26 | | 103.27 | | 106.37 |
| | 2" | | 155.74 | | 160.41 | | 165.22 | | 170.18 |
| | 3" | | 233.60 | | 240.61 | | 247.83 | | 255.26 |
| | 4" | | 389.34 | | 401.02 | | 413.05 | | 425.44 |
| Volume Rate Per 1 | I 0 00 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5.06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7.66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.80 |
| 30,001 | Above | | 13.02 | | 13.41 | | 13.81 | | 14.23 |
| | Wing. | | | | | | | | |
| Minimum Charge - | <u>- 1st 2,000 Gal</u> 3/4" | \$ | 21.50 | \$ | 23.44 | • | 25.54 | ė | 27.84 |
| | 3/ 4 1" | φ | 38.63 | Ψ | 42.11 | J | 45.90 | Ψ | 50.03 |
| | 1 1/2" | | 72.10 | | 78.59 | | 85.66 | | 93.37 |
| | 2" | | 123.60 | | 134.72 | | 146.85 | | 160.07 |
| Volume Rate/1.00 | 00 Gal (2,001 to 5,000) | | 5.84 | | 5.84 | | 6.37 | | 6.94 |
| | 00 Gal (5,001 to 14,000) | | 5 84 | | 7.23 | | 7.88 | | 8.59 |
| Residential Usage | e Cap (gallons) | | 14,000 | | 13,000 | | 12,000 | | 11,000 |
| | | | | | | | | | |
| Minimum Charge - | <u>- 1st 2,000 Gal</u> 3/4" | \$ | 25.75 | \$ | 28.07 | \$ | 30.59 | s | 33.35 |
| | 1" | 4 | 48 29 | • | 52.64 | • | 57.37 | ~ | 62.54 |
| | 1 1/2" | | 90.13 | | 98.24 | | 107.08 | | 116.72 |
| | 2" | | 154.50 | | 168.41 | | 183.56 | | 200.08 |
| | 3" 4" | | 386.25 | | - 421.01 | | - 458.90 | | 500.20 |
| | 00 Gal | | | | | | | | |



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TABLE ES-10

| | | Scenario: | 2018 11 14 Scenario 2 WW Inverted Block | | | | | | | | |
|---------------|------------------------|--------------|---|----------|----|----------|--------------|--|--|--|--|
| | | Jan-18 | i. | Jan-19 | | Jan-20 | Jan-21 | | | | |
| Residential M | Ionthly Charges 3/4" | | | | | | | | | | |
| 5,000 Water | 5,000 WW | \$ 77.35 | \$ | 80.43 | \$ | 85.31 | 90.54 | | | | |
| | Increase \$ | | | 3.08 | | 4.87 | 5.24 | | | | |
| | Increase % | | | 4.0% | | 6.1% | 6.1% | | | | |
| 10,000 Water | 10,000 WW | 131.85 | | 142.64 | | 151.55 | 161.14 | | | | |
| | Increase \$ | | | 10.79 | | 8.91 | 9.59 | | | | |
| | Increase % | | | 8.2% | | 6.2% | 6.3% | | | | |
| 20,000 Water | 14,000 WW | 231.81 | | 250.46 | | 264.34 | 279.20 | | | | |
| | Increase \$ | | | 18.65 | | 13.88 | 14.86 | | | | |
| | Increase % | | | 8.0% | | 5.5% | 5.6% | | | | |
| Commercial | Monthly Charges 1 1/2" | , | | | | | . | | | | |
| 30,000 Water | 30,000 WW | \$ 558.27 | \$ | 590.24 | \$ | 624.53 | | | | | |
| | Increase \$ | | | 31.97 | | 34.30 | 36.82 | | | | |
| | | | | 5.7% | | 5.8% | 5.9% | | | | |
| 60,000 Water | 60,000 WW | 1,124.07 | | 1,183.52 | | 1,247.08 | 1,315.06 | | | | |
| | Increase \$ | | | 59.45 | | 63.55 | 67.98 | | | | |
| | Increase % | | | 5.3% | | 5.4% | 5.5% | | | | |

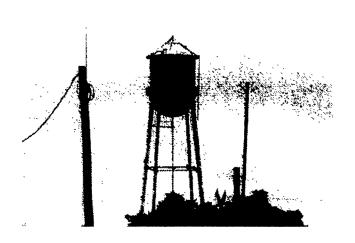


Section I

SECTION

Introduction and Demographic Profile

Background



In April 2018, the City of Celina, Texas (the "City") engaged **Willdan Financial Services** to conduct a water and wastewater rate study and long-term financial plan. The City was interested in developing a comprehensive rate plan for FY 2018 and beyond. The objective of this study is to develop a long-term rate plan that will enable the City to recover sufficient funds to meet operating expenses, capital outlays, debt service and coverage requirements, while at the same time to the best extent possible minimizing the impact of any adjustments on ratepayers.

The City identified numerous objectives for this study, including but not limited to the following:

 A comprehensive analysis and evaluation of the water and wastewater systems' current cost of service and revenue

requirements.

- A forecast of operating expenses over the next ten years, taking into consideration such factors as inflation, system growth, and increases in staffing levels.
- A review and analysis of the impact of forecast cost increases from Upper Trinity Regional Water District ("UTRWD"), the City's primary water and wastewater wholesale service provider, on the City's retail rates.
- A thorough review of the water and wastewater systems' known capital improvement needs, as well as a
 determination of the need for funding capital requirements through the issuance of long-term debt for the
 existing identified capital improvements.
- An estimate of current and forecast accounts, volumes and billing units for the forecast period.
- An analysis of alternative multi-year water and wastewater rate plans that will achieve the City's objectives
 while ensuring that the cost of service is fully recovered.
- A detailed analysis and comparison of the City's current and proposed rates to rates in other surrounding communities.



Report Organization

This report is organized into the following sections:

Section I – Introduction and Demographic Profile - outlines the background, objectives and scope of this rate study and long-term financial plan. It also presents the City's current rate structure and a community profile of the City of Celina. This includes a comparison of the City's water and wastewater charges with other Texas cities.

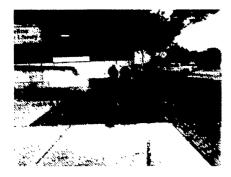
Section II – Water and Wastewater Test Year and Forecast Volumes – analyzes the City's customer base, total accounts and current volumes of treated water and wastewater. This section presents totals for the current year and a forecast ten years into the future.

Section III – Water and Wastewater Test Year and Forecast Revenue Requirement – outlines the process of analyzing the City's current water and wastewater utility cost structure. The total current or "test year" revenue requirements are developed, and costs are functionalized between treatment, distribution/collection, administration and customer billing. Using the test year as a basis, costs are forecast for a ten-year period.

Section IV – Water and Wastewater Rate Design – presents the Council-preferred rate recommendations for the City of Celina. Each plan is intended to be revenue neutral and will allow for the City to recover its full cost of service. This section also presents an analysis of the impact of each rate plan on residential and Commercial customers.

Appendix A – presents a hard copy printout of the interactive Microsoft Excel spreadsheet model summary developed for the City of Celina to calculate water and wastewater current and future revenue requirements. The model automatically generates all calculations based on a set of defined user inputs and has an executive dashboard for users to develop real-time "what-if" scenarios.

City Overview



The City of Celina, Texas is located approximately 30 miles north of Dallas. The City has seen tremendous growth over the past 15 years, but the growth rate is expected to begin tapering off toward the end of this study's financial planning period. The City encompasses approximately 14 square miles and has a 2017 population of 9,836. The City is situated primarily in Collin County with a limited amount of territory in neighboring Denton County.

The City of Celina has a Council-Manager form of government in which the elected Mayor and City Council Members establish policy. Those policies are then implemented by the City Manager who is appointed by, and reports to, the City Council.

The Celina City Council consists of six Council Members and the Mayor. All Council members and the Mayor are elected at large. The City Manager operates in much the same manner as a Chief Executive Officer of a corporation. The City Manager's Office is responsible for the day-to-day administration of Celina's City government, including managing the City's budget, the City's departments and operations, and communicating with residents and employees.



Water and Wastewater Current Rates

Table I-1 summarizes the City of Celina's current water and wastewater rate structure. The City last adjusted its rates in January 2018.

TABLE I-1

| OF CELINA | | Section of the control or some as we will as the color of | 1,380,3 |
|--|------------|--|------------------|
| | SVIII N | Wastewater Rates | |
| | ***** | Residential Rates | |
| Minimum Charge by Meter Size 3/4" | \$ 23 15 | Vidual Colored | |
| (Includes 2,000 Gallons in Base 1" | 38.93 | Minimum Charge 3/4" | \$ 21 50 |
| 1 1/2" | 77.87 | (Includes 2,000 Gallons in Base 1" | 38 63 |
| 2" | 124.59 | 1 1/2" | |
| Volume Rate (per 1,000 Gallons) | | 2" | 123.60 |
| 2,001 10,000 | \$ 5.06 | Volume Rate (per 1,000 Gallons) | \$ 584 |
| 10,001 20,000 | 7 66 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | • |
| 20,001 30,000 | 9 02 | * Volumes are capped at 14,000 monthl | y water use |
| 30,001 Above | 13 02 | , , | - |
| | | Commercial Rates | |
| Vinimum Charge by Meter Size 3/4" | \$ 27.81 | Minimum Charge by Meter Size 3/4" | \$ 25 75 |
| Includes 2,000 Gallons in Base 1" | 48.67 | (Includes 2,000 Gallons in Base 1" | 48.29 |
| 1 1/2" | 97.34 | 1 1/2" | |
| 2" | 155 74 | 2" | 154 50 |
| 3" | 233.60 | 4" | 386 25 |
| 4" | 389 34 | · · | |
| | | Volume Rate (per 1,000 Gallons) | \$ 584 |
| Volume Rate (per 1,000 Gallons) | | | |
| 2,001 10,000 | \$ 5.06 | Outside Residential fister | 3 |
| 10,001 20,000 | 7 66 | 15 Oh | * no or |
| 20,001 30,000 | 9.02 | Minimum Charge 3/4" | \$ 32.25 |
| 30,001 Above | 13.02 | (Includes 2,000 Gallons in Base 1" | 57 95 |
| ti kili salah karamatan sama salah menjadi salah s | X-1/2-1444 | 1 1/2" 2" | 108.15 185.40 |
| Minimum Charge by Meter Size 3/4" | \$ 34 72 | 4 | 100 40 |
| Includes 2,000 Gallons in Base 1" | 58 40 | Volume Rate (per 1,000 Gallons) | \$ 12 90 |
| 1 1/2" | 116 81 | , | |
| 2" | 186 89 | * Volumes are capped at 14,000 monthl | y water use |
| (at any Date (any 4 000 Oallane) | | | |
| Volume Rate (per 1,000 Gallons) 2,001 10,000 | \$ 759 | . Cutside Commercial Rate | |
| 10,001 20,000 | 11 49 | Minimum Charge by Meter Size 3/4" | \$ 38.63 |
| 20,001 30,000 | 13.53 | (Includes 2,000 Gallons in Base 1" | 72.44 |
| 30,001 Above | 19 53 | 1 1/2" | |
| 25,25 | | 2" | 231.75 |
| | 25 | _ 4" | 579.38 |
| Vinimum Charge by Meter Size 3/4" | \$ 4172 | | |
| Includes 2,000 Gallons in Base 1" | 73 01 | Volume Rate (per 1,000 Gallons) | \$ 12.90 |
| 1 1/2" | 146 01 | | |
| 2" | 233 61 | | |
| 3" | 350 40 | | |
| 4" | 584 01 | | |
| Volume Rate (per 1,000 Gallons) | | | |
| 2,001 10,000 2,001 | \$ 7.59 | | |
| 10,001 20,000 | 11 49 | | |
| 20,001 30,000 | 13 53 | | |
| 30,001 Above | 19.53 | | |



Water accounts served by Celina are classified as Residential, Commercial and Outside City Residential/Commercial. The water rate structure assesses a base charge by meter size. All customer classes include a 2,000-gallon allowance in the base charge. Consumption volume is billed based on tiered rates per 1,000 gallons. The tiered rates differ nominally for each customer class.

Residential and Commercial wastewater rates are assessed a base charge by meter size. All customer classes include a 2,000-gallon allowance in the base charge. A volume charge is based on metered water consumption. Residential customers' bills are capped at 14,000 gallons per month. Both Residential and Commercial wastewater accounts are assessed a uniform volume charge per 1,000 gallons for all recorded water consumption.

Water and Wastewater Rate Comparison

Chart I-2 and Table I-3 compare the City's monthly water and wastewater charges to nearby cities and water systems in Texas. Volumes of 5,000 gallons for water and 5,000 gallons for wastewater were used for the residential comparison as it represents typical usage levels for an average household.

The rate data is based on published rates and ordinances posted by each municipality on their website. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges.

The following points are notable:

- Among residential accounts Celina's charges for monthly water and wastewater service is in the mid-range of water system charges in the Dallas-Fort Worth metroplex.
- For 5,000 gallons of water and wastewater usage, Celina's residential charges are approximately \$1 below the state average.
- It should be noted that according to US governmental statistics, as many as 30% of water and wastewater
 utilities charge rates that do not cover their costs. So if a utility has low rates, this does not necessarily
 translate into low costs.

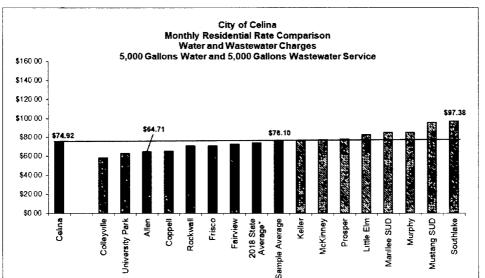
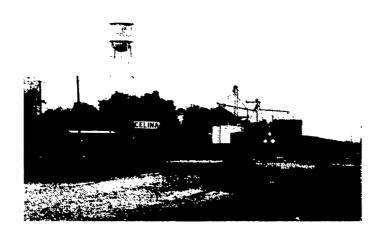


CHART I-2

TABLE I-3

| | V | Vate r | Was | tewater | Total | | | |
|---------------------|----|----------------|-----|----------------|-------|----------------|--|--|
| Celina | \$ | 37.13 | \$ | 37.79 | \$ | 74.92 | | |
| Allen | | 31.97 | | 32.74 | | 64.71 | | |
| Frisco | | 29.21 | | 41.52 | | 70.73 | | |
| Mustang SUD | | 44.05 | | 51.60 | | 95.65 | | |
| Prosper | | 31.90 | | 46.12 | | 78.02 | | |
| Colleyville | | 33.06 | | 25.27 | | 58.33 | | |
| Coppell | | 33.60 | | 31.36 | | 64.96 | | |
| University Park | | 29.13 | | 33.60 | | 62.73 | | |
| Rockw all | | 35.72 | | 34.90 | | 70.62 | | |
| Fairview Keller | | 35.42 40.84 | | 37.08 35.35 | | 72.50 76.19 | | |
| Murphy | | 46.38 | | 38.87 | | 85.25 | | |
| McKinney | | 37.45 | | 39.85 | | 77.30 | | |
| Southlake | | 54.17 | | 43.21 | | 97.38 | | |
| Little 🖯 m | | 40.76 | | 42.29 | | 83.05 | | |
| Marillee SUD | | 47.40 | | 37.79 | | 85.19 | | |
| Sample Average | | 38.01 | | 38.08 | | 76.10 | | |
| 2018 State Average* | | 38.21 | | 35.99 | | 74.21 | | |





Section II

SECTION II

Water & Wastewater Test Year and Forecast Volumes



In order to accurately forecast future revenues and expenses, it is necessary to examine current water and wastewater utility conditions. The first step in developing cost of service rates is to analyze patterns of usage, both for the system as a whole, and for specified customer classes.

For the City of Celina, monthly water and wastewater records were reviewed for the period of October 2014 through April 2018. These records provided summary information on the monthly water volumes distributed system-wide as well as the number of accounts for each period by defined customer class and the associated revenues. Additionally, these records

provided the number of accounts and revenues monthly for all classifications of wastewater customers.

According to standard utility ratemaking methodology, in order to allocate revenue requirements equitably among system users, customers must be classified into relatively homogeneous groups with similar usage characteristics or service demands. Costs are then allocated to the customer classes in proportion to the usage characteristics of each class. For the water system, costs are typically allocated to customers based on their average and peak water demands. For the wastewater system, costs are allocated to customers based on their estimated wastewater flows, and in some cases, based on wastewater strengths.

After thoroughly examining volume and customer data, the project team made no revisions to the City's existing customer classifications. The project team finds these customer class distinctions to be reasonable and appropriate, meeting the criteria of homogenous groups with similar usage patterns.

In this section, the City's functional customer classes and test year usage patterns will be thoroughly analyzed. A five-year projection of customers and usage will also be presented. These forecasts, along with the revenue requirements, will form the basis of the proposed rate designs.

Population - Current and Projected

Like many other North Texas communities, the City of Celina has experienced a high rate of growth for the past 15 20 years. The City is not expected to reach build-out in the next decade. Chart II-1 presents actual and forecast population for the period 2010 through 2030. The chart reveals that as of 2010 the City's population was approximately 6,028. According to the US Census, as of 2015 the population had reached 7,690. According to the City's staff, the population is estimated to exceed 25,000 in 2020. By 2030 the City's Comprehensive plan projects that the City's population will reach 48,000.



| | Historian intel | preciset Popular | Mon |
|---------------------|-----------------|------------------|-----------------------|
| | Population | Increase | Ave Annual Percent |
| 2010 [1] | 6,028 | | |
| 2015 ^[1] | 7,690 | 1,662 | 5.0% |
| 2020 ^[2] | 25,868 | 18,178 | 27.5% |
| 2030 ^[3] | 48,000 | 22,132 | 6.4% |

It is important to note that these projections are always subject to shifts due to multiple factors beyond the City's control.

Water and Wastewater Customers and Meters – Test Year & Ten-Year Forecast

Table II-2 and **Chart II-3** present total historical and forecast water accounts for the City. For each of the historical years, the average number of accounts for the year is shown and the growth reflects the difference from one fiscal year end to the next. The charts reveal that in 2016 and 2017 the City experienced growth of approximately 590 and 820 accounts, respectively. The project team is forecasting that account growth will continue in future years but at a lesser rate. The forecast projects that the test year 2018 total of **5,090** total water accounts will increase to **12,795** total water accounts by 2027.

The charts further reveal that residential accounts represent the largest water customer class, at 3,611 accounts in the test year 2018.



TABLE II-2

| | FOI | RECAST TOTAL C | USTOMERS | | | | | |
|---|---------------------------------------|---------------------|-------------|-----------------------|--------|--|--|--|
| | a said dull | | | | | | | |
| Fiscal Year | Residential | Residential Outside | Commercial | Commercial Outside | Total | | | |
| | · · · · · · · · · · · · · · · · · · · | | | | | | | |
| Y2015 | 2 477 | 593 | 219 | 24 | 3,313 | | | |
| Y 2016 | 2,760 | 892 | 223 | 24 | 3,899 | | | |
| Y2017 | 3,320 | 1,131 | 239 | 27 | 4,717 | | | |
| 2 Mo. Apr '18 | 3,611 | 1,211 | 241 | 28 | 5,090 | | | |
| Y 2019 | 4,418 | 1,481 | 295 | 34 | 6,228 | | | |
| Y 2020 | 5,308 | 1,779 | 354 | 40 | 7,482 | | | |
| Y 2021 | 5,901 | 1,978 | 394 | 45 | 8,318 | | | |
| Y 2022 | 6,495 | 2,177 | 433 | 49 | 9,155 | | | |
| Y 2023 | 7,076 | 2,372 | 472 | 54 | 9,974 | | | |
| Y 2024 | 7,629 | 2,558 | 509 | 58 | 10,754 | | | |
| Y 2025 | 8,141 | 2,729 | 54 3 | 62 | 11,476 | | | |
| Y 2026 | 8,596 | 2,882 | 574 | 65 | 12,117 | | | |
| Y 2027 | 9,077 | 3,043 | 606 | 69 | 12,795 | | | |
| | | | | | • | | | |
| - - - - - - - - - - - - - - - - - - - | 283 | 299 | 4 | _ | 586 | | | |
| Y2017 | 560 | 239 | 16 | 3 | 818 | | | |
| 12 Mo. Apr '18 | 291 | 80 | 2 | 1 | 373 | | | |
| Y 2019 | 807 | 271 | 54 | 6 | 1,138 | | | |
| Y 2020 | 889 | 298 | 59 | 7 | 1,253 | | | |
| Y 2021 | 593 | 199 | 40 | 5 | 836 | | | |
| Y 2022 | 594 | 199 | 40 | 5 | 837 | | | |
| Y 2023 | 581 | 195 | 39 | 4 | 819 | | | |
| Y 2024 | 554 | 186 | 37 | 4 | 781 | | | |
| Y 2025 | 512 | 172 | 34 | 4 | 721 | | | |
| FY 2026 | 455 | 153 | 30 | 3 | 641 | | | |



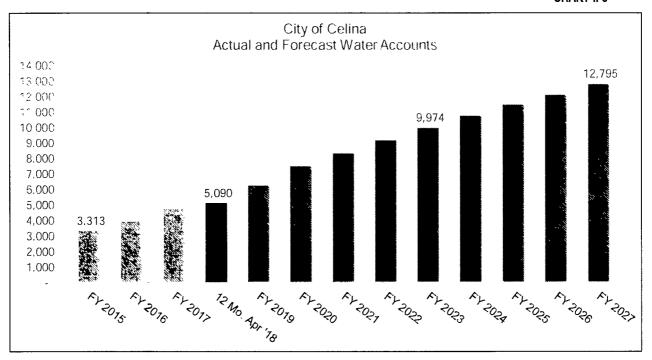


Table II-4 and **Chart II-5** present wastewater accounts and classifications for the City for the past three fiscal years and the forecast growth over the next ten years. The tables reveal that the City's total wastewater accounts of **4,356** in FY 2018 are forecast to increase to **10,945** by FY 2027.

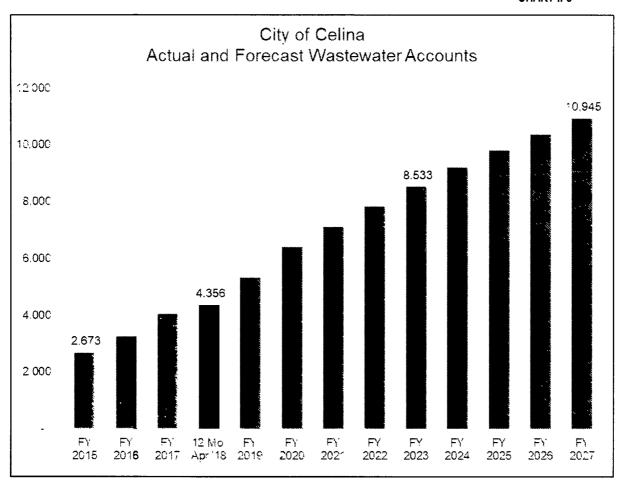




TABLE II-4

| | | ORECAST TOTAL | | The state of the s | |
|----------------|--------------|------------------------------------|------------|--|-------|
| | Residential | VASTEWATER Cus Residential Outside | Commercial | Commercial Outside | Total |
| | | | | | |
| 2 | WASTEWATER | Fotal Customers | | | |
| FY 2015 | 2,540 | 1 | 131 | 1 | 2,6 |
| FY 2016 | 3,118 | 1 | 129 | 1 | 3,24 |
| FY 2017 | 3.930 | 1 | 130 | 1 | 4,00 |
| 12 Mo. Apr '18 | 4,208 | 1 | 146 | 1 | 4,3 |
| FY2019 | 5,148 | 1 | 179 | 1 | 5,3 |
| FY 2020 | 6,184 | 1 | 215 | 1 | 6,4 |
| FY 2021 | 6,876 | 1 | 239 | 1 | 7,1 |
| FY 2022 | 7,568 | 1 | 263 | 1 | 7,8 |
| FY 2023 | 8,244 | 1 | 286 | 1 | 8,5 |
| FY 2024 | 8,890 | 1 | 308 | 1 | 9,2 |
| FY 2025 | 9,486 | 1 | 329 | 1 | 9,8 |
| FY 2026 | 10,016 | 1 | 348 | 1 | 10,3 |
| FY2027 | 10,576 | 1 | 367 | 1 | 10,9 |
| 5 | NASTEWATER / | Annual New Customer | | | , |
| FY2016 | 578 | - | (2) | - | 5 |
| FY 2017 | 812 | - | 1 | - | 8 |
| 12 Mo. Apr '18 | 278 | - | 16 | - | 2 |
| FY2019 | 941 | - | 33 | - | 9 |
| FY 2020 | 1,036 | - | 36 | - | 1,0 |
| FY 2021 | 691 | - | 24 | • | 7 |
| FY 2022 | 692 | - | 24 | - | 7 |
| FY 2023 | 677 | - | 23 | - | 7 |
| FY 2024 | 645 | - | 22 | - | 6 |
| FY 2025 | 596 | • | 21 | • | 6 |
| FY 2026 | 530 | - | 18 | - | 5 |
| FY 2027 | 560 | - | 19 | - | 5 |





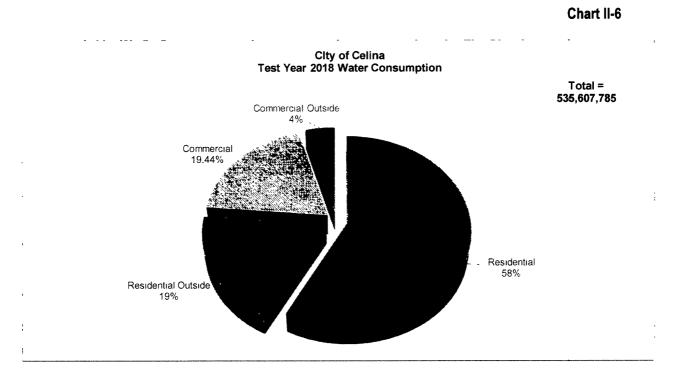
Historical and Forecast Water Consumption

Total water system consumption data was analyzed over the same period as customer data. The project team prepared a ten-year forecast of water usage based on the same principles on which customer accounts were projected.

Chart II-6 presents test year water consumption by defined customer class. Residential presents the highest percentage of usage (approximately 58%), but the City's outside residential and commercial class accounts make up approximately 40% (19% each) of the total gallons sold.

Chart II-7 presents the average monthly consumption by customer class in the Test Year. Residential customers' water usage averages approximately 6,700 gallons per month.





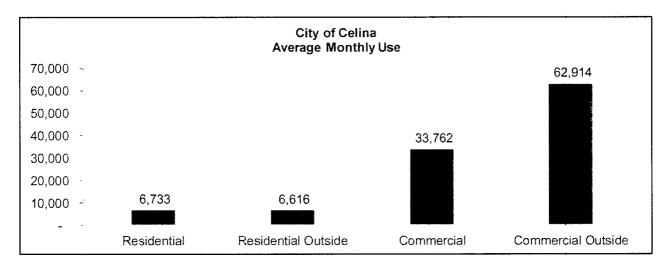
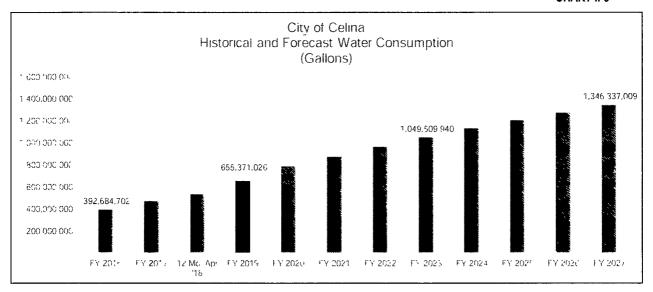


Table II-8 and **Chart II-9** which present consumption by rate classification for the City for the past three fiscal years and the forecast growth over the next ten years.



TABLE II-8

| | FC | RECAST BILLI | ED CONSUMPT | TION | |
|-----------------|---|--|-----------------|--|---------------|
| 33 | and the second section | | i kili | A CONTRACTOR OF THE PARTY OF TH | |
| | * | Residential | | Commercial | |
| | Residential | Outside | Commercial | Outside | Total |
| Ů | io de la company de la comp La company de la company d | the state of the s | of the property | Stille Hillering | |
| FY 2 015 | 206 962 840 | 41 83£ 564 | 73 571 984 | 10 199 400 | 332,570,728 |
| FY 2016 | 226,359 251 | 69 376 331 | 86 661 720 | 10 076 400 | 392,684,70 |
| FY 2017 | 258 318 532 | 85,140,618 | 101,681,500 | 26 425 200 | 472,065,85 |
| | | | | | |
| 12 Mo Apr'18 | 308,850,184 | 100,247,428 | 104,120,104 | 22,390,069 | 535,607,788 |
| FY 2019 | 377,909,858 | 122,663,003 | 127,401,620 | 27,396,544 | 655,371,020 |
| FY 2020 | 453,961,289 | 147,347,983 | 153,040,209 | 32,909,886 | 787,259,368 |
| FY 2021 | 504,714,730 | 163,821,671 | 170,150,296 | 36,589,253 | 875,275,950 |
| FY 2022 | 555,499,694 | 180,305,592 | 187,271,011 | 40,270,905 | 963,347,202 |
| FY 2023 | 605,184,143 | 196,432,305 | 204,020,718 | 43,872,775 | 1,049,509,94 |
| FY 2024 | 652,546,384 | 211,805,269 | 219,987,558 | 47,306,296 | 1,131,645,50 |
| FY 2025 | 696,319,686 | 226,013,326 | 234,744,488 | 50,479,638 | 1,207,557,13 |
| | | 000 047 040 | 247,866,852 | 53,301,482 | 1,275,060,338 |
| FY 2026 | 735,244,392 | 238,647,612 | 247,000,002 | 33,301,402 | 1,270,000,330 |



Peaking Factors

The cost of providing water to customers depends not only on the amount of water each class uses, but also on how that usage occurs over time. The maximum-day and maximum-hour peaking requirements of a water utility's customers are an important influence on the utility's costs. Because water utilities attempt to meet all the demands of their customers, water systems are sized to meet customers' peak requirements. Therefore, during off-peak periods, there are usually significant costs associated with the unused capacity of the system. These costs must be



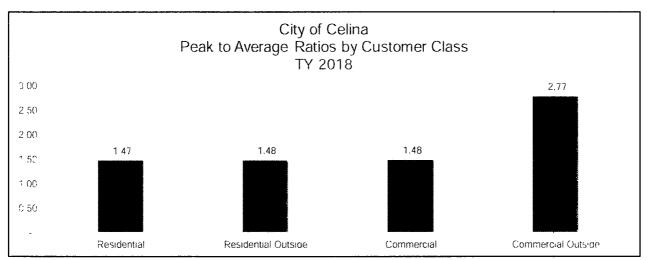
allocated to customers in proportion to the contribution of each customer class to the system peak, to develop equitable cost-based rates. Thus, it is necessary to determine the peak rate of use relative to the average rate of use for each class. This ratio is called a **Peaking Factor**.

The consumption data by class provided by the City was utilized in the rate model to calculate the peak day factor and peaking factors for individual rate classes.

The calculation of peaking factors for individual classes relies on available pumping and consumption information as well as professional judgment. If customer meters could record daily flow rates for each customer, more refined information could be obtained on peaking factors. This is not feasible because of the enormous cost that would be imposed on the utility. Therefore, it is accepted practice in the water industry to develop peaking factor estimates based on standard formulas using system peak day information and monthly customer class usage records. This is a conservative methodology, since customer class peaking factors based on peak months will inevitably be lower than the system-wide peaking factor, which is based on the peak day.

Based on AWWA guidelines, the customer class peaking factors calculated in this study are for non-coincidental peaks. The peaking factors developed for this analysis are based on the annualized water consumption by customer class for the months of May 2017 through April 2018. The calculations of the peaking factors by class are presented graphically in **Chart II-10**.





A general ratemaking rule is that **the higher the peak to average ratio, the higher the unit cost of service for a given customer class.** While this is not an absolute rule, it is a good general indicator as to which customer classes are incurring the greatest costs to provide service. This principle will be examined more thoroughly in Section III.

The chart reveals that the highest peak to average ratio is for the **Commercial Outside** customer class. Also, it is notable that at this time the residential and commercial peak to average ratios are equivalent. This may change as more commercial development enters the City in the coming decade.



Historical and Forecast Wastewater Flows

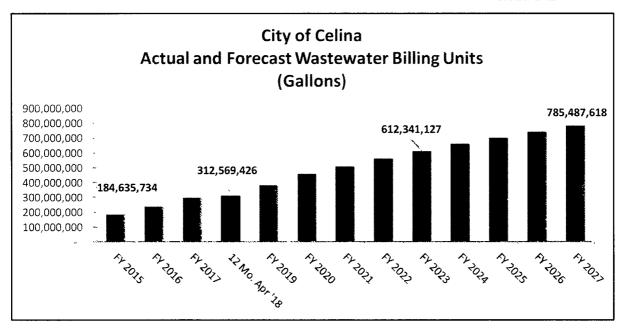
The City currently calculates wastewater charges for all customers based on their total volume of water consumption. The wastewater charges for Single-Family Residential customer class is capped at 14,000 gallons water consumption per month.

As with water billed consumption, the project team prepared a ten-year forecast of wastewater billing units. Since individual customer wastewater flow is not metered, it is derived from the water consumption figures for each customer class. The billing unit forecast is derived using anticipated growth in accounts as depicted in Table II-4. The results of the forecast are presented in **Table II-11** and **Chart II-12**.

TABLE II-11

| | | | ATER BILLING ustomer Classe | | |
|------------------|---------------------|------------------------|-----------------------------|-----------------------|-------------|
| | Residential | Residential Outside | Commercial | Commercial Outside | Total |
| | MAGVEWATER HE | torical Billing Units | | | |
| FY 2015 | 168,638,444 | 156,100 | 15.748.990 | 92,200 | 184,635,734 |
| FY2016 | 217.345,047 | 86,100 | 20,605,360 | 92.600 | 238,129,107 |
| FY2017 | 276,165,029 | 72,600 | 21,126,552 | 74,400 | 297,438,58 |
| 1 | WASTEWATER FO | erak Bullie Ordes | | | |
| 12 Mo. Apr '18 ¯ | 288,193,448 | 76,000 | 24,239,678 | 60,300 | 312,569,420 |
| FY 2019 | 352,634,224 | 76,000 | 29,659,731 | 60,300 | 382,430,254 |
| FY 2020 | 42 3,599,130 | 76,000 | 35,628,521 | 60,300 | 459,363,95° |
| FY 2021 | 470,958,042 | 76,000 | 39,611,835 | 60,300 | 510,706,177 |
| FY 2022 | 518,346,371 | 76,000 | 43,597,622 | 60,300 | 562,080,293 |
| FY 2023 | 564,707,790 | 76,000 | 47,497,037 | 60,300 | 612,341,127 |
| FY 2024 | 608,902,316 | 76,000 | 51,214,197 | 60,300 | 660,252,813 |
| FY 2025 | 649,747,940 | 76,000 | 54,649,684 | 60,300 | 704,533,924 |
| FY 2026 | 686,069,257 | 76,000 | 57,704,635 | 60,300 | 743,910,192 |





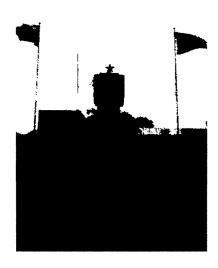




Section III

SECTION III

Water & Wastewater Forecast Revenue Requirement



In this section of the water and wastewater rate study and long-term financial plan, the City of Celina's test year and forecast water and wastewater utility revenue requirements are developed. The test year consists of the City's current fiscal year, October 1, 2017 through September 30, 2018. The estimates presented in this section are based on the City's approved budget for FY 2018.

The calculation of a revenue requirement differs from a utility's budget in that it represents only that amount that must be raised through the City's user rates. This means that non-rate revenue (such as reconnection fees, late payment charges and interest) must be subtracted from the budgeted operating and capital expenditures to determine the net revenue requirement to be raised from rates.

As is typical for publicly owned utilities, the City of Celina's system revenue requirements were developed using the cash basis of ratemaking. Under the cash basis, as defined by the AWWA Manual

M-1, system revenue requirements consist of cash expenditures and other financial commitments (such as debt service coverage or reserves) that must be met through system operating revenues and other revenue sources.

All data used in the development of the revenue requirements was obtained from the financial statements, budgets and other information provided by the City. Calculation summaries are presented in the rate model summaries contained in **Appendix A** of this report. For rate design purposes, revenue requirements are developed separately for the water and wastewater systems.

The assumptions utilized in this expense forecast will be thoroughly detailed in this section of the report. These assumptions are critical to the development of both the revenue requirement and the ultimate rate recommendation. The project team reviewed these assumptions with the City staff and considers all to be consistent with staff recommendations.

In this section, current and forecast Operating Costs, Capital Outlays, Transfers, and Debt Service will be examined first. Non-rate revenues will be subtracted from the total to yield the Net Revenue Requirement.

Operating Expenses and Capital Outlays – Test Year

Table III-1 summarizes the test year FY 2018 water system operating expenses and capital outlays in detail by department. **Table III-2** presents the test year FY 2018 operating expenses and capital outlays in detail by department for the wastewater system.



The City's Water and Sewer Enterprise Fund accounts for all water, sewer and utility billing functions, including administration, operation and maintenance of the water and sewer system and billing and collection activities. There are three (3) Cost Centers within the City's Utility Fund, each with their own budget. Each of the Cost Centers typically includes some or all of the expense categories of Personnel Services, Materials and Supplies, Contractual & Professional, Sundry, Reimbursements, and Capital Outlays. Other Non-Departmental expenses and Transfers are shown outside of these Cost Centers but in the Fund budget.

The City's budget has the following expense categories in each Cost Center:

- Personnel Services includes personnel salaries and benefits
- Contractual Services includes water and wastewater consultant and contractor financial and engineering services
- Materials and Supplies Office supplies, IT software/hardware, tools and chemicals
- Maintenance refers to costs related to maintenance and fuel for vehicles and facilities and sludge removal
- Utilities includes costs for electric and gas services and phone service
- Operation and Capital Outlays includes Upper Trinity Regional Water District Fees for purchased water and fees charged for conveyance and treatment of wastewater and capital outlays. Note: the rate model separates UTRWD costs into a distinct line item
- Non Departmental primarily transfers the Water and Sewer Funds allocated share of expenses to other internal funds, including the General Fund.

Tables III-1 and **III-2** also allocate total budget expenses between the water and wastewater functions based on general ratemaking principles. As the tables show, total operating expenses, and capital outlays in the test year are **\$4,680,570** for the water utility and **\$3,449,877** for the wastewater utility.

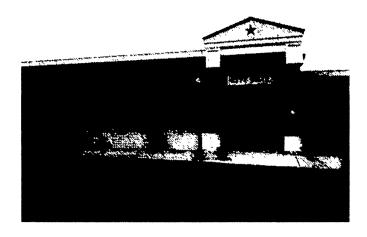




TABLE III-1

| | and the state of t | | · · · · · · · · · · · · · · · · · · · | | | | | | | | |
|---------------|--|----|---------------------------------------|----|-----------|-----|------------|----|---------|----|--------------------|
| ARIO: | 2018 11 14 Scenario 1 Status Quo | Ne | et Budget | Tı | reatment | Dis | stribution | | Admin | С | ustomer Billing |
| Department Co | de | | | | | | | · | | | |
| | Operating & Maintenance | | | | | | | | | | |
| 1 | Personnel Svcs | \$ | 860,891 | \$ | - | \$ | 742,609 | \$ | - | \$ | 118,282 |
| 2 | Contractual | | 26,149 | | - | | 20,000 | | - | | 6,149 |
| 3 | Materials & Supplies | | 658,400 | | - | | 658,400 | | - | | - |
| 4 | Operations | | 164,509 | | 16,000 | | 139,000 | | - | | 9,509 |
| 5 | Utilities | | 237,864 | | - | | 227,499 | | - | | 10,365 |
| UTRWD-W | Upper Trinity Regional Water District- Water | | 2,111,200 | | 2,111,200 | _ | | | | | |
| | Total Operating & Maintenance | | 4,139,331 | | 2,127,200 | | 1,826,858 | | • | | 185,273 |
| | Transfers | | 359,415 | | - | | - | | 359,415 | | - |
| | Capital Outlays | | 181,823 | | | | 181,823 | | • | | - |
| | Total WATER Operating Expenses, | | | | | | | | | | |
| | Transfers and Capital Outlays | \$ | 4,680,570 | \$ | 2,127,200 | \$ | 2,008,681 | \$ | 359,415 | \$ | 185,273 |

TABLE III-2

| ENARIO: | 2018 11 14 Scenario 1 Status Quo | B.I. | - A Bodon | т. | reatment | C. | ollection | Admin | ustomer Billing |
|----------------|---|------|-----------|----|-----------|----|------------|-----------|------------------------|
| Department Coo | de | Ne | et Budget | | reatment | | Diffection | Admin | Billing |
| | Operating & Maintenance | | | | | | | | |
| 1 | Personnel Svcs | \$ | 491,035 | \$ | - | \$ | 422,734 | \$ - | \$ 68.301 |
| 2 | Contractual | | 200,051 | | - | | 196,500 | - | 3,551 |
| 3 | Materials & Supplies | | 71,000 | | - | | 71,000 | - | - |
| 4 | Operations | | 215,991 | | - | | 210,500 | - | 5,491 |
| 5 | Utilities | | 81,985 | | - | | 76,000 | - | 5,985 |
| UTRWD-W | Upper Trinity Regional Water District- Sew er | | 2,054,363 | | 2,009,037 | | 45,326 | - | |
| | Total Operating & Maintenance | | 3,164,382 | | 2,009,037 | | 1,048,360 | - | 106,985 |
| | Transfers | | 167,585 | | | | | 167,585 | |
| | Capital Outlays | | 117,911 | | | | 117,911 | - | |
| | Total WATER Operating Expenses, Transfers and Capital Outlays | | 3,449,877 | | 2,009,037 | | 1,166,271 | 167,585 | 106,985 |



Operating Expenses and Capital Outlays – Ten Year Forecast

Table III-3 and **Chart III-4** present the water and wastewater utility operating expense and capital outlay forecast for the five-year period FY 2018 – FY 2022. Details behind these calculations can be found in the rate model summarized in **Appendix A**. This forecast is based on the following set of assumptions:

- Most operating costs are expected to increase at an annual rate of 3%, which is approximately equivalent to the rate of inflation.
- Certain expenses will increase at above-inflation rates, to reflect the rapid rate of increase of these costs. These expenses include chemicals, workers' compensation, Medicare and insurance.
- The City of Celina staff provided guidance on inflation factors used in their budgetary forecasts and these same factors were applied within the rate model.
- The City anticipates adding approximately eight employees during the forecast period. Two are utility billing personnel; two are water department personnel; and four are wastewater department personnel.
- Utility Billing Costs are distributed to water, solid waste and wastewater based on FY 2018 revenue budgeted for each department.
- As shown in these charts, UTRWD charges are by far the largest annual expense paid by Celina's water
 and wastewater utilities. The project team utilized UTRWD's most recent budgeted rate forecast as the
 basis for the UTRWD cost estimates. Any changes in UTRWD forecast rate estimates used in
 determining the City's water and wastewater revenue requirement for this rate study could require
 significant changes to the rate plan presented in this report.
- Transfer to General Fund for General and Administrative This amount is budgeted to be \$352,000 in the test year FY 2018 and is forecast to increase by approximately 3.0% per year.
- Additional Water/Sewer Revenue Transfer for 175,000 in the test year. This too is escalated by 3% per year.

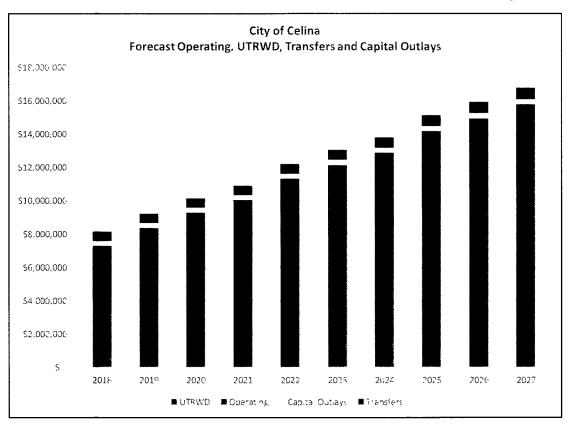


TABLE III-3

| NARIO: | | " . E | : E., | | d.Ba | | | | | • |
|--------------|---------|------------------------|---------------|------------|------|-------------------------------------|-----|--------------------|---|--------------------------|
| | cenario | 1 Status Quo | | | | | | | | |
| | | | | | | | | | | Total |
| | C | perating | UTF | W D | | Capital | Tr | ansfers & | | Operating/ |
| | E | xpenses | Paym | ents | | Outlays | Coi | ntingencies | Ca | pital Outlays |
| | | | | | | | | | | |
| | · ^ ``, | | e and surviva | | | | | | | |
| 2018 | \$ | 2,028,131 | \$ | 2,111,200 | \$ | 181,823 | \$ | 359,415 | \$ | 4,680,570 |
| 2019 | • | 2,102,146 | | 2,841,778 | • | 181,823 | • | 370,198 | • | 5,495,944 |
| 2020 | | 2,267,259 | | 3,246,517 | | 181,823 | | 381,304 | | 6,076,903 |
| 2021 | | 2,410,800 | | 3,548,227 | | 181,823 | | 392,743 | | 6,533,593 |
| 2022 | | 2,532,400 | | 4,370,998 | | 181,823 | | 404,525 | | 7,489,747 |
| 2023 | | 2,626,984 | | 4,716,766 | | 181,823 | | 416,661 | | 7,942,234 |
| 2023 | | 2,725,720 | | 5,068,882 | | 181,823 | | 429,160 | | 8,405,585 |
| 2025 | | 2,828,826 | | 5,981,962 | | 181,823 | | 442,035 | | 9,434,647 |
| 2026 | | 2,936,540 | | 6,366,659 | | 181,823 | | 455,296 | | 9,940,318 |
| 2027 | | 3,049,110 | | 6,777,020 | | 181,823 | | 468,955 | | 10,476,908 |
| | | 0,0,0,7,0 | | 0,,0_0 | | .0.,0_0 | | ,,,,,,,,, | | ,, |
| | WAS | TEWATER Foove | nue Req | uirement | | and the second second second second | | | | |
| 2018 | \$ | 1,110,019 | \$ | 2,054,363 | \$ | 117,911 | \$ | 167,585 | \$ | 3,449,877 |
| 2019 | | 1,155,702 | | 2,286,905 | | 117,911 | | 172,612 | | 3,733,130 |
| 2020 | | 1,217,802 | | 2,552,716 | | 117,911 | | 177,791 | | 4,066,219 |
| 2021 | | 1,319,844 | | 2,753,412 | | 117,911 | | 183,124 | | 4,374,292 |
| 2022 | | 1,450,513 | | 2,964,499 | | 117,911 | | 188,618 | | 4,721,541 |
| 2023 | | 1,625,247 | | 3,182,731 | | 117,911 | | 194,277 | | 5,120,165 |
| 2024 | | 1,687,926 | | 3,404,162 | | 117,911 | | 200,105 | | 5,410,104 |
| 2025 | | 1,757,817 | | 3,624,223 | | 117,911 | | 206,108 | | 5,706,060 |
| 2026 | | 1,826,298 | | 3,837,846 | | 117,911 | | 212,291 | | 5,994,346 |
| 2027 | | 1,897,987 | | 4,069,818 | | 117,911 | | 218,660 | | 6,304,376 |
| | TOTA | Litteranie für | e azerluş | riks (Sin) | | | | | * | |
| 2018 | \$ | 3,138,150 | \$ | 4,165,563 | \$ | 299,734 | \$ | 527,000 | \$ | 8,130,447 |
| 2019 | Ψ | 3,257,848 | | 5,128,683 | Ψ | 299,734 | Ψ | 542,810 | * | 9,229,074 |
| 2020 | | 3,485,061 | | 5,799,233 | | 299,734 | | 559,094 | | 10,143,122 |
| 2021 | | 3,730,644 | | 6,301,639 | | 299,734 | | 575,867 | | 10,907,884 |
| 2021 | | 3,982,913 | | 7,335,497 | | 299,734 | | 593,143 | | 12,211,287 |
| 2022 | | 4,252,231 | | 7,899,497 | | 299,734 | | 610,937 | | 13,062,399 |
| 2023 | | | | 8,473,044 | | 299,734 | | 629,266 | | 13,815,689 |
| 2024 | | 4,413,645 | | | | 299,734 | | 648,144 | | |
| | | 4,586,644 | | 9,606,185 | | | | | | 15,140,706 |
| 2026 2027 | | 4,762,838 4,947,097 | 1 | 0,204,505 | | 299,734 | | 667,588 687,615 | | 15,934,664 16,781,284 |







Upper Trinity Regional Water District (UTRWD)

As stated above, a primary component of the City's operating budget is its contractual agreement for treated water service from UTRWD. The project team obtained recent correspondence from UTRWD regarding their preliminary forecasts of the future cost of service. Each year UTRWD updates its forecast of operating and capital expenses, with new rates adopted by the UTRWD Board of Directors in September. UTRWD's preliminary forecast reveals an expected graduated series of rate increases over the next several years as it builds additional infrastructure, develops additional water sources, and expands its operations. These actions will require that the District incur sizable capital outlays and new bond issues which will be factored into the rates charged to customers.

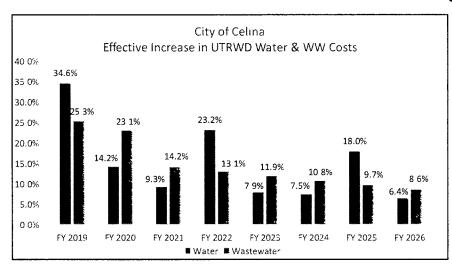
The City also sends a portion of its wastewater flows to UTRWD for treatment. UTRWD maintains wastewater treatment plants and a transmission system utilized in conveying and treating Celina wastewater flows. The respective flows and varying cost projections for each of these wastewater system components were factored into the cost projections for wastewater treatment and transmission in the rate model.

The volume charge for water from the UTRWD in FY 2018 is \$1.23 per thousand gallons. The UTRWD annual demand charge is \$428,200 per MGD. Both charges are forecast to increase by 5% annually in 2019 and 2020, and 3.5% in 2021 – 2027. The project team estimated that wastewater rates will increase annually by 3% for inflation. **Chart III-5** presents the forecast percent increases in UTRWD's water and wastewater charges paid by Celina for



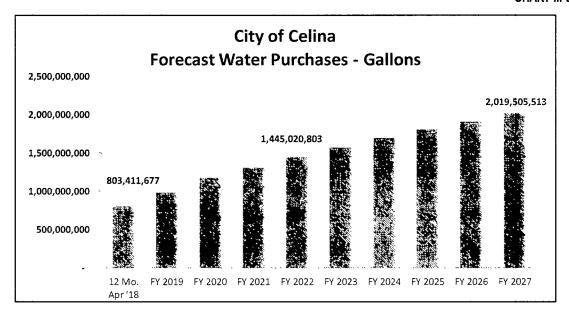
the next decade. Importantly, these increases do not just reflect cost increases by NTMWD; they also incorporate Celina's forecast growth in demand. It should also be noted that Celina's contract water demand is assumed to increase by 1.0 MGD in 2019, 2022, and 2025.

CHART III-5



The forecast water purchases from UTRWD are presented in **Chart III-6**. Based on current account growth estimates, water purchases from UTRWD are expected to increase from approximately 800 million gallons in the year ending April 2018 to over 2 billion in fiscal year ending 2027.

CHART III-6

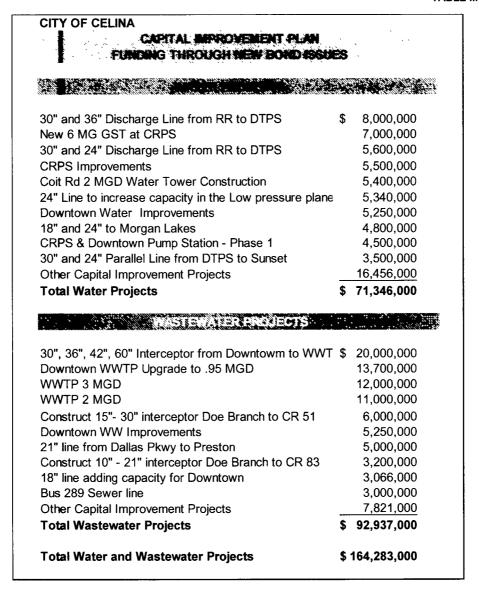




Capital Improvement Plan

The City has developed a comprehensive capital improvement plan ("CIP") for its water and wastewater system. The plan includes estimates for infrastructure capital improvements for the ten-year (2018 – 2027) rate study financial planning period. This plan includes an aggressive list of projects required to meet utility service needs for communities like Celina with high growth forecasts in number of accounts and water/wastewater demands. The water CIP includes storage, pumps and distribution lines expansion, repairs and upgrades. The wastewater CIP includes wastewater treatment and collection system expansion and upgrades to infrastructure. In developing a ten-year financial forecast, the project team used the totals provided by the City to determine an overall estimate for capital spending needs for the decade. This total CIP for the next ten years is \$164 million, presented in **Table III-7**.

TABLE III-7





Existing and Forecast Debt Service

Table III-8 presents current and forecast debt service for the water and wastewater utility. At present the water and wastewater utility has ten bond issues outstanding with principal totaling over \$28 million. The outstanding bond principal is for debt that was issued between 2004 and 2017. This debt is a combination of Certificates of Obligation (CO) and General Obligation (GO) bonds.

In 2018 the City intends to issue an additional \$32 million of debt to pay for CIP projects. The City expects to issue another \$129 million in debt over the next decade to finance the balance of the water and wastewater CIP. These assumptions are consistent with City staff's desires and with the City's intention to fund all capital improvements through debt.

CITY OF CELINA PAR AND PODECUST SERVES SCENARIO: 2018 09 06 Scenario 1 -- Status Quo Wastewater Current **Forecast** Current Year Fore cast Total TY 2018 \$ 1,313,274 \$ 907,720 \$ \$ 2,220,995 FY 2019 1,319,470 1,187,714 912,003 923,778 4,342,966 FY 2020 1,321,713 913,553 1,187,714 923,778 4,346,759 FY 2021 1,319,211 3,167,239 911,824 1,913,540 7,311,814 FY 2022 1,320,325 3,167,239 912,594 1,913,540 7,313,698 FY 2023 1,318,293 4.025.032 911.189 3,365,191 9,619,706 FY 2024 1,323,037 4,025,032 914,468 3,365,191 9,627,729 11,421,062 FY 2025 1,134,909 4,420,937 784,437 5,080,779 FY 2026 1,137,219 4,420,937 786,033 5,080,779 11,424,969 FY 2027 1,132,256 4,552,906 782,603 6,070,541 12,538,306

TABLE III-8

Non-Rate Revenues

Although rate revenues constitute the majority of the revenue received by the City of Celina for water and wastewater service, a certain amount of revenue is accrued from non-rate sources. These revenues include connection fees, miscellaneous charges, permit fees, testing fees, construction water and other fees. These non-rate revenues are subtracted from the overall budget to determine the revenue requirement to be raised from rates. **Note:** a substantial portion of non-rate revenues come from water and wastewater connection fees. These fees are expected to increase as the City's population grows. However, as the annual growth in number of accounts begin to slow there is expected to be a corresponding reduction in annual revenue from connection fees.

Non-Rate Revenues not specifically and solely tied to either water or wastewater were allocated between the two utilities based on a 50/50 water wastewater allocation. Except for connection fees, non-rate revenues are projected to remain stable over the forecast period. Annual non-rate revenue totals are presented in **Table III-9**.



TABLE III-9

| CENARI | | r | ORECAST 4 | 90030 | KTE NOW | | | |
|----------|-------------------------|------------|-------------|-------|----------|------------|--------------|-----------------|
| 018 09 0 | 6 Scenario 1 Connection | Status Quo | | 24047 | nnection | | | Total |
| | Fees | Other | Total | | Fees | Other | Total | Total |
| 2018 | \$1,166,000 | \$ 509,083 | \$1,675,083 | \$ | 891,000 | \$ 313,217 | \$ 1,204,217 | \$ 2,879,300 |
| 2019 | 1,166,000 | 509,083 | 1,675,083 | | 891,000 | 313,217 | 1,204,217 | 2,879,300 |
| 2020 | 1,284,048 | 509,083 | 1,793,131 | | 981,207 | 313,217 | 1,294,424 | 3,087,555 |
| 2021 | 856,918 | 509,083 | 1,366,001 | | 654,815 | 313,217 | 968,032 | 2,334,034 |
| 2022 | 857,451 | 509,083 | 1,366,534 | | 655,222 | 313,217 | 968,439 | 2,334,973 |
| 2023 | 838,870 | 509,083 | 1,347,952 | | 641,023 | 313,217 | 954,240 | 2,302,193 |
| 2024 | 799,662 | 509,083 | 1,308,744 | | 611,062 | 313,217 | 924,279 | 2,233,024 |
| 2025 | 739,066 | 509,083 | 1,248,149 | | 564,758 | 313,217 | 877,975 | 2,126,124 |
| 2026 | 657,203 | 509,083 | 1,166,286 | | 502,202 | 313,217 | 815,419 | 1,981,705 |
| 2027 | 693,941 | 509,083 | 1,203,024 | | 530,276 | 313,217 | 843,493 | 2,046,516 |





Net Revenue Requirement

Table III-10 presents the test year and ten-year forecast for the City's net revenue requirement to be raised from rates for the water and wastewater utility for the test year 2017 and forecast period. The water and wastewater net revenue requirement is expected to increase from **\$7,472,142** in FY 2018 to **\$27,273,073** in FY 2027.

TABLE III-10

| SCENARIO: 2018 11 14 Scenario 1 Status Quo Total Less Net | | | | | | | | | |
|---|---------------|----------------|------------|------------------|--------------|--------------|--------------------------|--|--|
| | Operating | Capital | Debt | Debt Transfers & | | Non-Rate | Revenue | | |
| | Expenses | Outlays | Service | Contingencies | Service | Revenues | Requirement | | |
| | | | | 3 (14.8% LANE) | | | | | |
| 2018 | \$ 4,139,331 | 181,823 | | | \$ 5,993,844 | \$ 1,675,083 | \$ 4,318,76 ² | | |
| 2019 | 4,943,924 | 181,823 | 2,507,185 | 370,198 | 8,003,129 | 1,675,083 | 6,328,046 | | |
| 2020 | 5,513,776 | 181,823 | 2,509,427 | 381,304 | 8,586,330 | 1,793,131 | 6,793,199 | | |
| 2021 | 5,959,027 | 181,823 | 4,486,450 | 392,743 | 11,020,043 | 1,366,001 | 9,654,04 | | |
| 2022 | 6,903,399 | 181,823 | 4,487,564 | 404,525 | 11,977,310 | 1,366,534 | 10,610,777 | | |
| 2023 | 7,343,750 | 181,823 | 5,343,325 | 416,661 | 13,285,559 | 1,347,952 | 11,937,600 | | |
| 2024 | 7,794,602 | 181,823 | 5,348,069 | 429,160 | 13,753,654 | 1,308,744 | 12,444,910 | | |
| 2025 | 8,810,788 | 181,823 | 5,555,847 | 442,035 | 14,990,493 | 1,248,149 | 13,742,344 | | |
| 2026 | 9,303,199 | 181,823 | 5,558,157 | 455,296 | 15,498,475 | 1,166,286 | 14,332,189 | | |
| 2027 | 9,826,129 | 181,823 | 5,685,162 | 468,955 | 16,162,070 | 1,203,024 | 14,959,046 | | |
| | WASTENATER RE | venue Reguiren | (OIK) | | | | | | |
| 2018 | 3,164,382 | 117,911 | 907,720 | 167,585 | 4,357,598 | 1,204,217 | 3,153,38 | | |
| 2019 | 3,442,607 | 117,911 | 1,835,781 | 172,612 | 5,568,911 | 1,204,217 | 4,364,694 | | |
| 2020 | 3,770,518 | 117,911 | 1,837,331 | 177,791 | 5,903,551 | 1,294,424 | 4,609,127 | | |
| 2021 | 4,073,256 | 117,911 | 2,825,364 | 183,124 | 7,199,656 | 968,032 | 6,231,624 | | |
| 2022 | 4,415,011 | 117,911 | 2,826,134 | 188,618 | 7,547,675 | 968,439 | 6,579,23 | | |
| 2023 | 4,807,977 | 117,911 | 4,276,380 | 194,277 | 9,396,546 | 954,240 | 8,442,30 | | |
| 2024 | 5,092,088 | 117,911 | 4,279,659 | 200,105 | 9,689,764 | 924,279 | 8,765,484 | | |
| 2025 | 5,382,040 | 117,911 | 5.865,215 | 206,108 | 11,571,275 | 877,975 | 10,693,300 | | |
| 2026 | 5,664,143 | 117,911 | 5,866,812 | 212,291 | 11,861,158 | 815,419 | 11,045,739 | | |
| 2027 | 5,967,805 | 117,911 | 6,853,144 | 218,660 | 13,157,520 | 843,493 | 12,314,027 | | |
| | TOTAL Movemen | Parision and | | | | | | | |
| 2018 | 7,303,713 | 299.734 | 2,220,995 | 527,000 | 10,351,442 | 2,879,300 | 7,472,142 | | |
| 2019 | 8,386,530 | 299,734 | 4,342,966 | 542,810 | 13,572,040 | 2,879,300 | 10,692,740 | | |
| 2020 | 9,284,294 | 299,734 | 4,346,759 | 559,094 | 14,489,881 | 3,087,555 | 11,402,32 | | |
| 2021 | 10,032,283 | 299,734 | 7,311,814 | 575,867 | 18,219,698 | 2,334,034 | 15,885,668 | | |
| 2022 | 11,318,410 | 299,734 | 7,313,698 | 593,143 | 19,524,985 | 2,334,973 | 17,190,012 | | |
| 2023 | 12,151,728 | 299,734 | 9,619,706 | 610,937 | 22,682,105 | 2,302,193 | 20,379,912 | | |
| 2024 | 12,886,690 | 299,734 | 9,627,729 | 629,266 | 23,443,418 | 2,233,024 | 21,210,394 | | |
| 2025 | 14,192,829 | 299,734 | 11,421,062 | 648,144 | 26,561,769 | 2,126,124 | 24,435,644 | | |
| 2026 | 14,967,342 | 299,734 | 11,424,969 | 667,588 | 27,359,633 | 1,981,705 | 25,377,928 | | |
| 2027 | 15,793,934 | 299,734 | 12,538,306 | 687,615 | 29,319,589 | 2,046,516 | 27,273,07 | | |



Water Utility Cost Functionalization

Once the total water and wastewater system costs have been identified, the next step in the rate development process is to isolate the costs associated with each system function. Some of these expenditures are a function of base water demand; others are based on the peak demands placed on the system. Certain costs are associated with serving customers regardless of the volume of water use or wastewater discharge. The basic steps used to allocate the City's water revenue requirements include the following:

- 1. Each system's costs (revenue requirements) are categorized by utility function (i.e. treatment, distribution, administrative, customer). This process is known as *functionalization*.
- 2. Functionalized costs are classified based on the service characteristics or the types of demand served by the utility (base and maximum day). This process is known as *classification*.
- 3. Costs by service characteristic are allocated to customer classes in proportion to the service demands demonstrated by each class.

This three-step process allows for the allocation of system costs in the same terms as customer classes. The approaches described in this section follow standard industry practices. Water system costs are allocated to the following functions:

Treatment – the process by which raw water is converted to potable water

Distribution - the lines that carry water to individual customers' properties

Administration - miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and providing other services to customers

The project team allocated operating budget line item expenses individually to system functions based on general guidelines, specific research and input from the City of Celina staff. The results of the allocation process for the test year are summarized in **Table III-11**.

CITY OF CELINA NEST OFFICE VOLUME COST PROPERTY SCENARIO: 2018 11 14 Scenario 1 -- Status Quo 2018 Revenue Function Requirement Percent 1,532,717 35 5% Treatment Distribution 2.365.190 54 8% 258,970 60% Customer 161,883 37% 4,318,761 100 0%

TABLE III-11



Water Utility Cost Classification

The allocation of functionalized water system costs to service characteristics follows the base-extra capacity cost allocation method recommended by AWWA. Using this method, costs are segregated into the following categories:

Base costs – capital costs and O&M expenses associated with service to customers under average demand conditions. This category does not include any costs attributable to variations in water use resulting from peaks in demand. Base costs tend to vary directly with the total quantity of water used.

Maximum Day/Extra Capacity costs – costs attributable to facilities that are designed to meet peaking requirements. These costs include capital and operating charges for additional plant and system capacity beyond that required for average usage.

Customer Billing costs – costs associated with any aspect of customer service, including billing, accounting, and meter services. These costs are independent of the amount of water used and the size of the customer's meter and are not subject to peaking factors.

According to AWWA Manual M-1, in the base-extra capacity method, care must be taken in separating costs between those devoted to base capacity and those devoted to extra capacity. The peak to average factor is calculated by dividing the volume on the peak day of the year by the average daily volume. Facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 67% (2/3) to base, and 33% to extra capacity (Max Day). This means that facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 67% to base, and 33% to extra capacity.

All customer service-related costs are allocated 100% to customer billing. Administration costs are generally not directly-assignable to individual classifications. Therefore, it is standard rate-making practice to allocate these costs on an indirect basis to service characteristics.

The system-wide costs by service characteristic are shown in **Table III-12**. As with cost functionalization, these percentages are not expected to change significantly in the forecast period.

CITY OF CELINA SCENARIO: 2018 11 14 Scenario 1 -- Status Quo 2018 Revenue **Function** Requirement Percent \$ 2,782,775 Base 64.43% Maximum Day 1,391,387 32.22% Customer 144,599 3.35% 4,318,761 100.0% Total

TABLE III-12



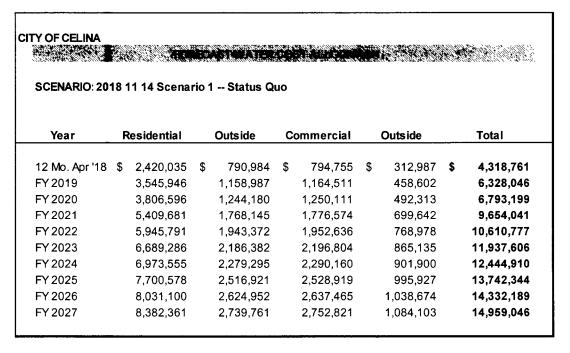
Water Utility Cost Allocation

Allocation of costs by service characteristic to customer classes is based on the proportionate use levels of each characteristic by each class. The total water utility costs by customer class for the test year are summarized in **Table III-13** and for the ten-year forecast period in **Table III-14**.

CITY OF CELINA SCENARIO: 2018 11 14 Scenario 1 -- Status Quo 2018 Revenue **Function** Requirement Percent \$ 2,420,035 56.0% Residential Residential Outside 790,984 18.3% Commercial 794,755 18.4% Commercial Outside 312,987 7.2% 4,318,761 100.0% Total

TABLE III-13

TABLE III-14





Wastewater Utility Cost Functionalization and Classification

Wastewater system costs are allocated to the following functions:

Treatment -- Volume -- the costs associated with treating wastewater volume discharges

Collection – the lines that transport wastewater from customers' properties to the wastewater treatment plant

Administration – miscellaneous overhead and other non-operating costs

Customer Billing – the processes involved in billing and other services to customers

As was the case for the water system, wastewater utility operating budget line item expenses are allocated individually to functions. The results of the allocation process are presented on **Table III-15**. As with the water utility, these percentages are not forecast to change significantly during the next ten years.

CITY OF CELINA TEST YEAR WASTEWATER COST FUNCTIONALIZATION SCENARIO: 2018 11 14 Scenario 1 -- Status Quo 2018 Revenue **Function** Requirement Percent \$ Treatment 1,453,842 46.1% Collection 1,481,140 47.0% Administration 121,273 3.8% Customer 97,126 3.1% Total 3,153,381 100.0%

TABLE III-15

Wastewater Utility Cost Allocation

Allocation of wastewater utility costs by service characteristic to customer classes is performed in the same manner as described for the water utility. The total wastewater utility costs by customer class for the test year are summarized in **Table III-16** and for the ten-year forecast period in **Table III-17**.



TABLE III-16

| ITY OF CELINA | | COST ALLO | | | | | | | | |
|--|--------------------------|-----------|--------|--|--|--|--|--|--|--|
| and the state of t | Amadhilia dhe karin sa k | | | | | | | | | |
| SCENARIO: | | | | | | | | | | |
| 2018 11 14 Scenario 1 S | atus Quo | | | | | | | | | |
| | 2018 | | | | | | | | | |
| | F | Revenue | | | | | | | | |
| Function | Re | Percent | | | | | | | | |
| Residential | \$ | 2,911,907 | 92.3% | | | | | | | |
| Residential Outside | | 765 | 0.0% | | | | | | | |
| Commercial | | 240,096 | 7.6% | | | | | | | |
| Commercial Outside | | 612 | 0.0% | | | | | | | |
| Total | | 3,153,381 | 100.0% | | | | | | | |

TABLE III-17

CITY OF CELINA

FORECAST WASTEWATER COST ALLOCATION

SCENARIO:

2018 11 14 Scenario 1 -- Status Quo

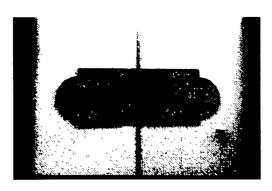
| Year | Residential | | | | | | Commercial | | | |
|------|-------------|------------|---------|-------|------------|---------|------------|-----|-------|------------|
| | Residential | | Outside | | Commercial | | Outside | | Total | |
| 2018 | \$ | 2,911,907 | \$ | 765 | \$ | 240,096 | \$ | 612 | \$ | 3,153,381 |
| 2019 | | 4,029,748 | | 866 | | 333,388 | | 692 | | 4,364,694 |
| 2020 | | 4,255,761 | | 761 | | 351,996 | | 608 | | 4,609,127 |
| 2021 | | 5,753,072 | | 926 | | 476,887 | | 739 | | 6,231,624 |
| 2022 | | 6,074,276 | | 888 | | 503,362 | | 709 | | 6,579,235 |
| 2023 | | 7,793,257 | | 1,047 | | 647,167 | | 835 | | 8,442,305 |
| 2024 | | 8,091,874 | | 1,008 | | 671,798 | | 804 | | 8,765,484 |
| 2025 | | 9,870,280 | | 1,152 | | 820,949 | | 918 | | 10,693,300 |
| 2026 | | 10,195,884 | | 1,127 | | 847,829 | | 898 | | 11,045,739 |
| 2027 | | 11,366,129 | | 1,190 | | 945,760 | | 948 | | 12,314,027 |



Section IV

SECTION IV

Water and Wastewater Rate Design



Rate design involves determining charges for each class of customers that will generate a desired level of revenue in accordance with AWWA and other industry cost of service rate-making principles. The water and wastewater rates developed in this section are designed to recover the test year and forecast revenue requirements while providing funding for the identified capital improvements and existing debt service. In this section the project team is presenting its recommended alternative rate plans for the City.

During the course of this study, the project team evaluated several alternative rate plans for the City. These rate plans included the following:

<u>Rate Design 1</u> - Convert residential sewer rates to winter averaging. Currently the residential customer is charged 100% of monthly metered water up to a 14,000 gallon cap.

Rate Design 2 - Changing commercial customer's multi-tier inclining block volume rates to a uniform rate per 1,000 gallons.

Rate Design 3 - Change the rate charged to Light Farms area from residential outside to residential inside rate.

Rate Design 4 – Implementing the same the residential monthly charge for 3/4" and 1" customers

After several meetings with staff and Council, it was determined that there would be two alternative rate plans to be presented for consideration. These plans are as follows:

Rate Plan Alternative 1 – Status Quo – implementing a series of phased in rate adjustments over the next three fiscal years. Also includes reducing the wastewater winter average by 1,000 gallons each year for the three-year period.

Rate Plan Alternative 2 – WW Inverted Blocks – same as Rate Plan 1 except for implementing an inverted book rate structure for the residential wastewater customer class.

Both rate plans are considered to be revenue neutral, in that each is forecast to recover an equivalent amount of revenue per year. Further, each of the alternative rate plans developed by the project team includes the following objectives:



- Each plan will ensure that water rates will cover the water cost of service and wastewater rates will cover the wastewater cost of service
- Each plan is intended to allow the City to increase its operating reserves from 40 days to 60 days in three
 vears
- Each rate plan presents a forecast of rates for three years. City staff and the project team discussed the adoption of rate plan, with rates to be automatically implemented on January 1st of each year beginning with January 2019 and ending in January 2021
- Given the continued residential and Commercial growth in the City and potential for unexpected events, the
 project team recommends that the City not commit itself to a rate plan beyond three years. Further, the
 project team recommends that the City review these rates annually, to incorporate any unanticipated
 changes to costs, volumes or growth assumptions that may occur during that time.
- The most significant impact on rates will be the cost of UTRWD treated water and wastewater treatment and debt issued to fund the CIP. Should UTRWD make material changes to its rate forecasts and/or the City changes its forecast of future debt, the City should undertake an immediate review of its rate plan.

Rate Plan Alternative 1 - Status Quo

Table IV-1 presents a summary of the first alternative water and wastewater rate plan proposed for Residential and Commercial customers. **Table IV-2** presents the impact on monthly charges of both the water and wastewater rate adjustments for representative Residential and Commercial accounts.

As previously mentioned, this alternative retains the basic rate structure for water and wastewater currently in place for the City. It requires a series of annual percentage rate adjustments in January of each year.

In lieu of changing to a winter averaging method for billing residential sewer accounts (Alternative #1), the staff chose to "ratchet" down the 14,000 gallons monthly cap by 1,000 gallons each of the three-year rate plan. The ultimate goal is to reach 9,000 gallons, but that will require a timeframe that extends beyond the three years of this rate plan. Since the average monthly use by residential customers never exceeded 10,000 gallons over the twelve-month test year used in the rate study, 9,000 gallons is considered an appropriate cap for the City residential customers.

In addition, the staff decided that instead of changing 3/4" meter monthly charge to equal 1" meter monthly charge they will grandfather the 3/4" meter monthly charge. The City is no longer installing 3/4" meters for residential customers. 1" is the smallest meter the City will install.

A full exhibit of the 3-year rate plan is presented in **Appendix A** of this report. Appendix A further forecasts rates for a 10-year period. However, beyond FY 2021 the recommended rates should be considered as trends and general guidelines. Because of the significant volume of and volatility of future growth forecasts, **the project team strongly recommends that the rate plan be reviewed every year to ensure that revenues are consistent with forecasts and are adequate to fund all the costs of providing service.**



TABLE IV-1

| | PROPOSED WATER | | Scenario: | | | ario 1 | - Status Q | 10 | ranos mest. |
|------------------------------|--------------------------|----------|------------------|---------|------------------|--------|-------------|---------------|-------------|
| | | _ | Jan-18 | .111111 | Jan-19 | 100 | Jan-20 | CHE TO A TOWN | Jan-21 |
| posintatura vido il talleno. | | | | | | | | | |
| Minimum Charge - | - 1st 2 000 Gal | AH. | | | | | | | |
| go | 3/4" | \$ | 23.15 | \$ | 23.84 | \$ | 24.56 | \$ | 25.30 |
| | 1" | • | 38.93 | • | 40.10 | • | 41.30 | • | 42.54 |
| | 1 1/2" | | 77.87 | | 80.21 | | 82.61 | | 85.09 |
| | 2" | | 124.59 | | 128.33 | | 132.18 | | 136.14 |
| Volume Rate Per | 1 000 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5 06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7 66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.86 |
| 30,001 | Above | | 13.02 | | 13.41 | | 13.81 | | 14.23 |
| | | W. | | | | | | | |
| Minimum Charge | - 1st 2.000 Gal | 1141.41. | | | | | | | |
| | 3/4" | \$ | 27.81 | \$ | 28.64 | \$ | 29.50 | \$ | 30.39 |
| | 1" | Ψ | 48.67 | • | 50.13 | • | 51.63 | • | 53.18 |
| | 1 1/2" | | 97.34 | | 100.26 | | 103.27 | | 106.37 |
| | 2" | | 155.74 | | 160.41 | | 165.22 | | 170.18 |
| | 2 3" | | | | | | 247.83 | | 255.26 |
| | 3 4" | | 233 60 389.34 | | 240.61 401.02 | | 413.05 | | 425.44 |
| Volume Rate Per | 1.000 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5.06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7.66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.86 |
| 30,001 | Above | | 13.02 | | 13.41 | | 13.81 | | 14.23 |
| | | | | | | | | | |
| Minimum Charge | | | | | | | | | |
| | 3/4" | \$ | 21 50 | \$ | 23.44 | \$ | 25.54 | \$ | 27.84 |
| | 1" | | 38 63 | | 42.11 | | 45.90 | | 50.03 |
| | 1 1/2" | | 72.10 | | 78.59 | | 85.66 | | 93.37 |
| | 2" | | 123.60 | | 134.72 | | 146.85 | | 160.07 |
| Volume Rate/1,0 | 00 Gal (2,001 to 14,000) | | 5.84 | | 6.37 | | 6.94 | | 7.56 |
| Residential Usag | e Cap (gallons) | | 14,000 | | 13,000 | | 12,000 | | 11.000 |
| | | | | | | | | | |
| Minimum Charge | | _ | | | | • | | | |
| | 3/4" | \$ | 25.75 | \$ | 28.07 | \$ | 30.59 | 2 | 33.35 |
| | 1" | | 48.29 | | 52.64 | | 57.37 | | 62.54 |
| | 1 1/2" | | 90.13 | | 98.24 | | 107.08 | | 116.72 |
| | 2" 3" | | 154.50 - | | 168.41 - | | 183.56 - | | 200.08 |
| | 4" | | 386 25 | | 421.01 | | 458.90 | | 500.20 |
| Volume Rate/1,0 | 00.0-1 | | 5.84 | | 6.37 | | 6.94 | | 7.56 |



TABLE IV-2

| | | | Scenario: | 2018 | 11 14 Scena | ******* | Status Qu | 10 | *** |
|---------------|------------------------|----|-----------|------|-------------|---------|-----------|----|----------|
| | | | Jan-18 | (| Jan-19 | | Jan-20 | | Jan-21 |
| | ionthly Charges 3/4" | | | | | | | | |
| 5,000 Water | 5,000 WW | \$ | 77.35 | \$ | 82.01 | \$ | 87.02 | \$ | 92.42 |
| | Increase \$ | | | | 4.66 | | 5.01 | | 5.39 |
| | Increase % | | | | 6.0% | | 6.1% | | 6.2% |
| 10,000 Water | 10,000 WW | | 131.85 | | 139.90 | | 148.56 | | 157.88 |
| | Increase \$ | | | | 8.05 | | 8.66 | | 9.32 |
| | Increase % | | | | 6.1% | | 6.2% | | 6.3% |
| 20,000 Water | 14,000 WW | | 231.81 | | 244.26 | | 257.58 | | 271.83 |
| | Increase \$ | | | | 12.45 | | 13.32 | | 14.26 |
| | Increase % | | | | 5.4% | | 5.5% | | 5.5% |
| Commercial | Monthly Charges 1 1/2" | | | | | | | | |
| 30,000 Water | 30,000 WW | \$ | 558.27 | \$ | 590.24 | \$ | 624.53 | \$ | 661.35 |
| 00,000 110101 | Increase \$ | • | 000.27 | * | 31.97 | Ψ | 34.30 | Ψ | 36.82 |
| | moreage \$\psi\$ | | | | 5.7% | | 5.8% | | 5.9% |
| | | | | | 5.1 70 | | 0.076 | | 5.576 |
| 60,000 Water | 60,000 WW | | 1,124.07 | | 1,183.52 | | 1,247.08 | | 1,315.06 |
| | Increase \$ | | | | 59.45 | | 63.55 | | 67.98 |
| | Increase % | | | | 5.3% | | 5.4% | | 5.5% |

The projected rate revenues developed in this section, are forecast to be sufficient to fund all operating and current scheduled capital obligations through FY 2021 **if all annual adjustments are implemented beginning with January 2019**. Rate revenues should be sufficient to fund the water and wastewater full cost of service including all existing and future debt service over the forecast period. **Chart IV-3** presents the rate model's dashboard charts projecting revenues, net revenues, debt service and debt service coverage¹ under the proposed rate plan. This highlights the importance of the implementation of each annual rate adjustment and future review of growth, operating and capital assumptions and actual financial results.

Table IV-4 presents forecast revenues for the test year and each of the next three years if the three-year rate plan is adopted, as well as a forecast of future revenues for a ten-year period.

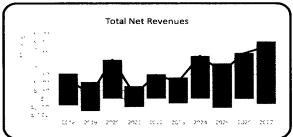
¹ Note. The water and wastewater outstanding debt are all CO and GO bonds and, therefore, have no debt service coverage requirements. This chart is presented as one of a several indicators used to demonstrate the utility fund's financial health with implementation of the recommended rate plan

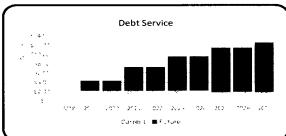


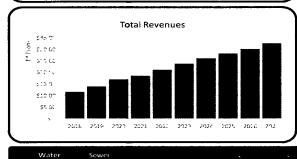
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CHART IV-3







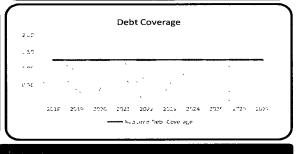


TABLE IV-4

| Y OF CELINA | Forecast Wate | r and Wastewater I | Revenues | |
|----------------|-----------------|------------------------|----------------------|-------------------|
| Scenario: | 2018 11 14 Scen | ario 1 Status Quo | | |
| Fiscal Year | | Wastewater Revenues | Non-Rate Revenues | Total Revenues |
| 2018 | \$ 5,872,806 | \$ 2,769,309 | \$ 2,879,300 | \$ 11,521,415 |
| 2019 | 7,381,866 | 3,612,639 | 2,879,300 | 13,873,805 |
| 2020 | 9,125,209 | 4,729,761 | 3,087,555 | 16,942,525 |
| 2021 | 10,449,782 | 5,731,544 | 2,334,034 | 18,515,359 |
| 2022 | 11,846,288 | 6,875,726 | 2,334,973 | 21,056,987 |
| 2023 | 13,293,007 | 8,164,595 | 2,302,193 | 23,759,794 |
| 2024 | 14,675,719 | 9,233,531 | 2,233,024 | 26,142,273 |
| 2025 | 15,978,119 | 10,148,295 | 2,126,124 | 28,252,538 |
| 2026 | 17,208,732 | 11,036,873 | 1,981,705 | 30,227,310 |
| 2027 | 18,534,125 | 12,003,266 | 2,046,516 | 32,583,908 |



Rate Plan Alternative 2 - Wastewater Inverted Block

Table IV-5 presents a summary of the second alternative water and wastewater rate plan proposed for Residential and Commercial customers. **Table IV-6** presents the impact on monthly charges of both the water and wastewater rate adjustments for representative Residential and Commercial accounts.

As previously mentioned, this alternative retains the basic rate structure for water and wastewater currently in place for the City. It requires a series of annual percentage rate adjustments in January of each year. However, while water rates are unchanged from Alternative #1, wastewater rates are converted into an inverted block for residential wastewater customers.

This alternative also includes the ratcheting down of the wastewater usage cap, as well as the grandfathering of 3/4" water meters.

A full exhibit of the 3-year rate plan is presented in **Appendix B** of this report. Appendix B further forecasts rates for a 10-year period. However, beyond FY 2021 the recommended rates should be considered as trends and general guidelines. Because of the significant volume of and volatility of future growth forecasts, **the project team strongly recommends that the rate plan be reviewed every year to ensure that revenues are consistent with forecasts and are adequate to fund all the costs of providing service.**





TABLE IV-5

| | | | Scenario: | 2010 | 11 14 Scena | 1110 2 | | | HOCK |
|------------------------|-------------------------|----|---------------------|------|----------------|--------|-----------------|----|-----------------|
| | | | Effective Jan-18 | | lan-19 | | Jan-20 | | Jan-21 |
| | | — | | | | | | | |
| | | | | | | | | | |
| Minimum Charge | | | | | | | | | |
| | 3/4" | \$ | 23.15 | \$ | 23.84 | \$ | 24.56 | \$ | 25.30 |
| | 1" | | 38 93 | | 40.10 | | 41.30 | | 42.54 |
| | 1 1/2" | | 77 87 | | 80.21 | | 82.61 | | 85.09 |
| | 2" | | 124.59 | | 128.33 | | 132.18 | | 136.14 |
| Volume Rate Per 1, | .000 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5.06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7.66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.86 |
| 30,001 | Above | | 13.02 | | 13.41 | | 13.81 | | 14.23 |
| anthi sees on the fill | | | | | | | | | |
| Minimum Charge | 1st 2,000 Gal | | | | | | | | |
| | 3/4" | \$ | 27.81 | \$ | 28.64 | \$ | 29.50 | \$ | 30.39 |
| | 1" | | 48.67 | | 50.13 | | 51.63 | | 53.18 |
| | 1 1/2" | | 97.34 | | 100.26 | | 103.27 | | 106.37 |
| | 2" | | 155.74 | | 160.41 | | 165.22 | | 170.18 |
| | 3" | | 233.60 | | 240.61 | | 247.83 | | 255.26 |
| | 4" | | 389.34 | | 401.02 | | 413.05 | | 425.44 |
| Volume Rate Per 1. | .000 Gal | | | | | | | | |
| 2,001 | 10,000 | | 5.06 | | 5.21 | | 5.37 | | 5.53 |
| 10,001 | 20,000 | | 7.66 | | 7.89 | | 8.13 | | 8.37 |
| 20,001 | 30,000 | | 9.02 | | 9.29 | | 9.57 | | 9.86 |
| 30,001 | Above | | 13 02 | | 13.41 | | 13.81 | | 14.23 |
| | | | | | | | | | |
| Minimum Charge | | | | | | | | | |
| | 3/4" | \$ | 21.50 | \$ | | \$ | 25.54 | \$ | 27.84 |
| | 1" | | 38.63 | | 42.11 | | 45.90 | | 50.03 |
| | 1 1/2" | | 72 10 | | 78.59 | | 85.66 | | 93.37 |
| | 2" | | 123.60 | | 134.72 | | 146.85 | | 160.07 |
| Volume Rate/1,000 | 0 Gal (2,001 to 5,000) | | 5.84 | | 5.84 | | 6.37 | | 6.94 |
| Volume Rate/1,000 | 0 Gal (5,001 to 14,000) | | 5.84 | | 7.23 | | 7.88 | | 8.59 |
| Residential Usage | Cap (gallons) | | 14 000 | | 13,000 | | 12,000 | | 11,000 |
| | | | | | | | | | |
| Minimum Charge | | • | 0F 75 | | 00 A= | • | 20.50 | • | 22.22 |
| | 3/4" | \$ | 25.75 | \$ | 28.07 | Þ | 30.59 | \$ | 33.35 |
| | 1" 1 1/2" | | 48.29 90 13 | | 52.64 98.24 | | 57.37 107.08 | | 62.54 116.72 |
| | 2" | | 154.50 | | 168.41 | | 183.56 | | 200.08 |
| | 3" 4" | | - 386 25 | | - 421.01 | | - 458.90 | | - 500.20 |
| | 7 | | JUU 2J | | | | | | JUU.20 |



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TABLE IV-6

| | | Scenario: | 201 | 8 11 14 Scena | rio : | 2 WW Invert | ed E | Block |
|---------------|------------------------|---------------------|-----|---------------|--|--------------|---------|----------|
| | | Effective Jan-18 | | Jan-19 | :: . :::::::::::::::::::::::::::::::::: |)认 Jan-20 | A 44000 | Jan-21 |
| Residential M | ionthly Charges 3/4" | | | | | | | |
| 5,000 Water | 5,000 WW | \$ 77.35 | \$ | 80.43 | \$ | 85.31 | \$ | 90.54 |
| | Increase \$ | | | 3.08 | | 4.87 | | 5.24 |
| | Increase % | | | 4.0% | | 6.1% | | 6.1% |
| 10,000 Water | 10,000 WW | 131.85 | | 142.64 | | 151.55 | | 161.14 |
| | Increase \$ | | | 10.79 | | 8.91 | | 9.59 |
| | Increase % | | | 8.2% | | 6.2% | | 6.3% |
| 20,000 Water | 14,000 WW | 231.81 | | 250.46 | | 264.34 | | 279.20 |
| | Increase \$ | | | 18.65 | | 13.88 | | 14.86 |
| | Increase % | | | 8.0% | | 5.5% | | 5.6% |
| Commercial | Monthly Charges 1 1/2" | | | | | | | • |
| 30,000 Water | 30,000 WW | \$ 558.27 | \$ | 590.24 | \$ | 624.53 | \$ | 661.35 |
| | Increase \$ | | | 31.97 | | 34.30 | | 36.82 |
| | | | | 5.7% | | 5.8% | | 5.9% |
| 60,000 Water | 60,000 WW | 1,124.07 | | 1,183.52 | | 1,247.08 | | 1,315.06 |
| | Increase \$ | | | 59.45 | | 63.55 | | 67.98 |
| | Increase % | | | 5.3% | | 5.4% | | 5.5% |

The projected rate revenues developed in this section, are forecast to be sufficient to fund all operating and current scheduled capital obligations through FY 2021 **if all annual adjustments are implemented beginning with January 2019**. Rate revenues should be sufficient to fund the water and wastewater full cost of service including all existing and future debt service over the forecast period. **Chart IV-7** presents the rate model's dashboard charts projecting revenues, net revenues, debt service and debt service coverage² under the proposed rate plan. This highlights the importance of the implementation of each annual rate adjustment and future review of growth, operating and capital assumptions and actual financial results.

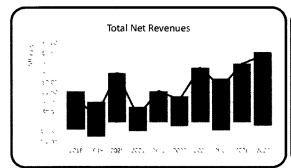
Table IV-8 presents forecast revenues for the test year and each of the next three years if the three-year rate plan is adopted, as well as a forecast of future revenues for a ten-year period.

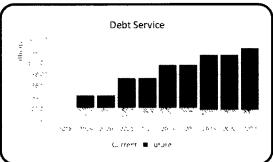
² Note: The water and wastewater outstanding debt are all CO and GO bonds and, therefore, have no debt service coverage requirements. This chart is presented as one of a several indicators used to demonstrate the utility fund's financial health with implementation of the recommended rate plan.

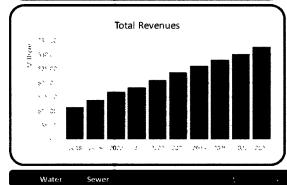


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CHART IV-7







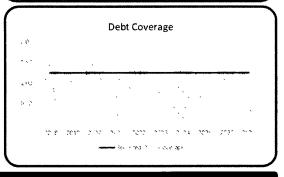


TABLE IV-8

| | Forecast Wate | r and Wastewater | Revenues | |
|----------------|-----------------|------------------------|----------------------|-------------------|
| Scenario: | 2018 11 14 Scen | ario 2 WW Inverted | d Block | |
| Fiscal Year | | Wastewater Revenues | Non-Rate Revenues | Total Revenues |
| 2018 | \$ 5,872,806 | \$ 2,769,309 | \$ 2,879,300 | \$ 11,521,415 |
| 2019 | 7,366,426 | 3,638,522 | 2,879,300 | 13,884,248 |
| 2020 | 9,096,832 | 4,779,193 | 3,087,555 | 16,963,580 |
| 2021 | 10,417,285 | 5,791,446 | 2,334,034 | 18,542,764 |
| 2022 | 11,809,448 | 6,947,587 | 2,334,973 | 21,092,008 |
| 2023 | 13,251,668 | 8,249,927 | 2,302,193 | 23,803,788 |
| 2024 | 14,640,110 | 9,330,035 | 2,233,024 | 26,203,169 |
| 2025 | 15,944,699 | 10,254,360 | 2,126,124 | 28,325,183 |
| 2026 | 17,172,738 | 11,152,226 | 1,981,705 | 30,306,668 |
| 2027 | 18,495,359 | 12,128,719 | 2,046,516 | 32,670,594 |



Notes on Rate Recommendations

The forecast and recommendations presented in this study represent a combination of the best information available from the City of Celina and the project team's expertise. However, this forecast relies in part on assumptions about future events and events beyond the control of the project team (such as account growth rates within the City). The forecast and recommendations contained in this study may be subject to revision if any of the following events occurs:

- Actual growth in accounts and consumed volumes is less than (or significantly greater than) forecast.
- Capital improvement plan funding costs increase significantly due to the rising cost of materials or other factors.
- An unforeseen event impacts the City, such as an extended recession, natural catastrophe or terrorist attack.
- Significant and long-lasting changes in weather patterns.
- Increases, decreases or changes in interest rates, coverage requirements, or reserve requirements for longterm debt.
- The City of Celina budget levels or priorities change significantly from those forecast in this study.

It should be noted that none of these events are foreseen by the project team or the City at this time.

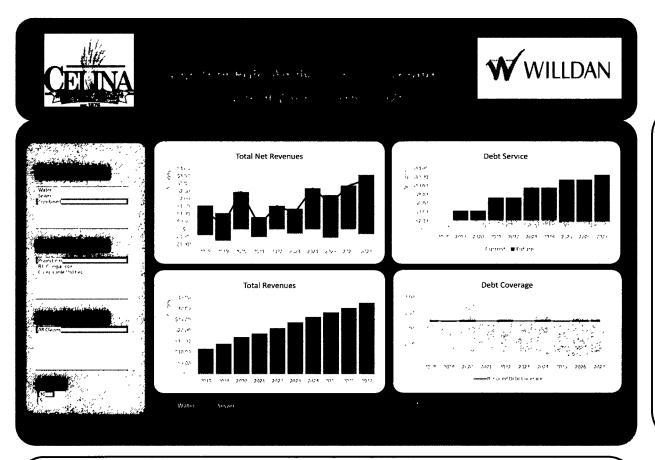
If any of these events occur, the City may be compelled to consider further adjustments to its water and wastewater rates.

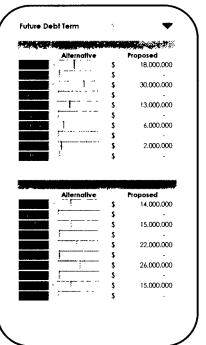


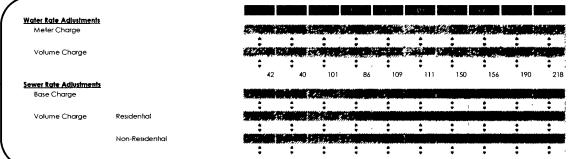


Appendix A

Date 10/26/2018







| | CITY OF CELINA | |
|--|--|------------------|
| | WATER/WASTEWATER COST OF SERVICE MODEL | |
| , | Effective Effective | Effective |
| the same and the same of the same of the same and the same and the same of the | Current Jan-19 Jan-20 | Jani 21 or . see |

City Rate Plan -- Three Year Summary

30,001

Above

Scen: 2018 11 14 Scenario 1 -- Status Quo

| 1 | VARIANT MONTHLY TANKS BOOK OF MICHIGAN |
|---|--|
| | |
| | |

| Monthly Minimum Charge | | | | | |
|---|----------------------------|---|-----------------------------------|-----------------------------------|-----------------------------------|
| | 3/4" | \$ 23 15 | \$ 23 84 | \$ 24 56 | \$ 25 |
| | 1" | 38 93 | 40 10 | 41 30 | 42 |
| | 1 1/2" | 77 87 | 80 21 | 82 61 | 85 |
| | 2" | 124 59 | 128 33 | 132 18 | 136 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | 10,000 | \$ 5 06 | \$ 5 21 | \$ 5 37 | \$ |
| 10,001 | 20,000 | 7 66 | 7 89 | 8 13 | 8 |
| 20,001 | 30,000 | 9 02 | 9 29 | 9 57 | (|
| 30,001 | Above | 13 02 | 13 41 | 13 81 | 14 |
| | | | | | |
| | | | | | |
| Monthly Minimum Charge | | | | | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4" | \$ 34 72 | \$ 35 77 | \$ 36 84 | \$ |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4" 1" | \$ 58 40 | \$ 58 40 | \$ 60 15 | \$ 6 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4" 1" 1 1/2" | \$ 58 40 116 81 | \$ 58 40 116 81 | \$ 60 15 120 31 | \$ 6 12 |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3/4" 1" | \$ 58 40 | \$ 58 40 | \$ 60 15 | \$ 6 12 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" | 58 40 116 81 186 89 | 58 40 116 81 186 89 | 60 15 120 31 192 49 | 6 12: 19: |
| Monthly Minimum Charge Volume Rate/1,000 Gal 2,001 | 3/4" 1" 1 1/2" 2" | \$ 58 40 116 81 186 89 7 59 | 58 40 116 81 186 89 7 82 | 60 15 120 31 192 49 8 05 | 6 ⁻ 123 198 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" | 58 40 116 81 186 89 | 58 40 116 81 186 89 | 60 15 120 31 192 49 | 37 61 123 198 8 12 |

19 53

20 12

20 72

CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL Effective Enterty

| Monthly Minimum Charge | | | | | |
|---|--|--|--|--|---|
| | 3/4" | \$ 27 81 | \$ 28 64 | \$ 29 50 | \$ 30 |
| | 1" | 48 67 | 50 13 | 51 63 | 53 |
| | 1 1/2" | 97 34 | 100 26 | 103 27 | 106 |
| | 2" | 155 74 | 160 41 | 165 22 | 170 |
| | 3" | 233 60 | 240 61 | 247 83 | 255 |
| | 4 " | 389 34 | 401 02 | 413 05 | 42 |
| Volume Rate/1,000 Gal | | | | | |
| 2,00 | | \$ 5 06 | \$ 5 21 | \$ 5 37 | \$ |
| 10,00 | 1 20,000 | 7 66 | 7 89 | 8 13 | |
| 20,00 | 1 30,000 | 9 02 | 9 29 | 9 57 | |
| 30,00 | 1 Above | 13 02 | 13 41 | 13 81 | 1. |
| | | | | | |
| | | | | | |
| Monthly Minimum Charge | | | | | |
| Monthly Minimum Charge | 3/4" | \$ 41 72 | \$ 42 97 | \$ 44 26 | \$ |
| Monthly Minimum Charge | 1" | \$ 73 01 | \$ 75 20 | \$ 77 45 | \$ 79 |
| Monthly Minimum Charge | 1" 1 1/2" | \$ 73 01 146 01 | \$ 75 20 150 39 | \$ 77 45 154 90 | \$ 79 159 |
| Monthly Minimum Charge | 1" 1 1/2" 2" | \$ 73 01 146 01 233 61 | \$ 75 20 150 39 240 62 | \$ 77 45 154 90 247 84 | \$ 79 159 259 |
| Monthly Minimum Charge | 1" 1 1/2" 2" 3" | \$ 73 01 146 01 233 61 350 40 | \$ 75 20 150 39 240 62 360 91 | \$ 77 45 154 90 247 84 371 74 | \$ 7 ¹ 15 ² 25 38 |
| Monthly Minimum Charge | 1" 1 1/2" 2" | \$ 73 01 146 01 233 61 | \$ 75 20 150 39 240 62 | \$ 77 45 154 90 247 84 | \$ 7 ¹ 15 ² 25 38 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 1" 1 1/2" 2" 3" | \$ 73 01 146 01 233 61 350 40 584 01 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 | \$ 7 ¹ 15 ² 25 38 |
| | 1" 1 1/2" 2" 3" 4" | \$ 73 01 146 01 233 61 350 40 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 | 7 ² 15 25 38 63 |
| <u>Volume Rate/1,000 Gat</u> 2,00 ⁻ 10,00 ⁻ | 1" 1 1/2" 2" 3" 4" 1 10,000 1 20,000 | 73 01 146 01 233 61 350 40 584 01 7 59 11 49 | 75 20 150 39 240 62 360 91 601 53 7 82 11 83 | 77 45 154 90 247 84 371 74 619 58 8.05 12 19 | 79 159 259 383 634 8 |
| <u>Volume Rate/1,000 Gat</u> 2.00 ⁻ | 1" 1 1/2" 2" 3" 4" 1 10,000 1 20,000 | 73 01 146 01 233 61 350 40 584 01 | 75 20 150 39 240 62 360 91 601 53 | 77 45 154 90 247 84 371 74 619 58 | 44 7: 156: 258: 388: 638: |

Jan-21.

CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL Effective Effective Effective

.Jan-20.

Jan-19

City Rate Plan -- Three Year Summary Scen: 2018 11 14 Scenario 1 -- Status Quo

| Edward of the Comment of the State of the St | ultin komunis astinik mes | | | | |
|--|---------------------------|--------------------------|--------------------------|--------------------------|------------------|
| Monthly Minimum Charge | | | | | |
| | 3/4" | \$ 21 50 \$ | 23 44 \$ | 25 54 \$ | 27 8 |
| | 1" | 38 63 | 42 11 | 45 90 | 50 0 |
| | 1 1/2" | 72 10 | 78 59 | 85 66 | 93 3 |
| | 2" | 123 60 | 134 72 | 146 85 | 160 (|
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | Maximum | 5 84 | 6 37 | 6 94 | 7 5 |
| | | | | | |
| | Maximum Gallons | 14 000 | 13,000 | 12,000 | |
| propriessors and the second | | 14 000 | 13,000 | 12,000 | |
| Monthly Minimum Charge | | 14 000 | 13,000 | 12,000 | 11 00 |
| | | 14 000 32 25 | 13,000 35.15 | 12,000 38 32 | 11 0 |
| | n Santolioù e la Star | | · | | |
| | 3/4" | 32 25 | 35.15 | 38 32 | 11 00 41 7 |
| | 3/4" 1" | 32 25 57 95 | 35.15 63 16 | 38 32 68 84 | 41 75 140 |
| | 3/4" 1" 1 1/2" | 32 25 57 95 108 15 | 35.15 63 16 117 88 | 38 32 68 84 128 49 | 11 0 41 75 |
| Monthly Minimum Charge | 3/4" 1" 1 1/2" | 32 25 57 95 108 15 | 35.15 63 16 117 88 | 38 32 68 84 128 49 | 41 75 140 |

Current

| CITY OF CELINA | " " " " " " " " " " " " " " " " " " " |
|--|--|
| | |
| WATER/WASTEWATER COST OF S | SERVICE MODEL |
| Andrew parameter and the second secon | |
| | ENGLIS OF THE CONTROL |

| Monthly Minimum Charge | | | | | |
|--|-------------------------------|---------------------------|---------------------------|---------------------------|--------------------------------|
| | 3/4" | 25 75 | 28 07 | 30 59 | 33 |
| | 1" | 48 29 | 52 64 | 57 37 | 62 |
| | 1 1/2" | 90 13 | 98 24 | 107 08 | 116 |
| | 2" | 154 50 | 168 41 | 183 56 | 200 |
| | 4" | 386 25 | 421 01 | 458 90 | 500 |
| Volume Rate/1,000 Gal | | | | | |
| 2,001 | Above | 5 84 | 6 37 | 6 94 | 7 |
| | | | | | |
| e per pour la constitución de la c | market the text to the second | | | | |
| | | | | | |
| | 3/4* | 38 63 | 42 10 | 45 89 | 50 |
| | 3/4" 1" | 72 44 | 78 95 | 86 06 | 93 |
| | 3/4" 1" 1 1/2" | 72 44 135 20 | 78 95 147 36 | 86 06 160 63 | 93 175 |
| | 3/4" 1" | 72 44 | 78 95 | 86 06 | 93 175 |
| | 3/4" 1" 1 1/2" | 72 44 135 20 | 78 95 147 36 | 86 06 160 63 | 93 175 300 |
| Monthly Minimum Charge Volume Rate/1,000 Gal | 3/4" 1" 1 1/2" 2" | 72 44 135 20 231 75 | 78 95 147 36 252 61 | 86 06 160 63 275 34 | 50 93 175. 300 750 |

| | WAT | | CITY OF CELINA ATER COST OF | | VICE MODEL | | |
|---|--------------|--------|--------------------------------|----------|------------|-----------|--|
| ta talahan samula ada da dalah da kanada da samula da | in the terms | urrent | Effective | | Effective | Effective | |
| City Rate Plan Three Year Summary Scen: 2018 11 14 Scenario 1 Status Quo | | | | | | | |
| | 报 4 | | | | | | |
| 5,000 Gallons 3/4" Meter | | | | | | | |
| Total | \$ | 38 33 | | | 40 66 | | |
| Dollar Inc | | 1 20 | 1 15 | | 1 18 | 1 22 | |
| Percent Inc | | 3 2% | 3 09 | % | 3 0% | 3 0% | |
| 10,000 Gallons 3/4" Meter | | | | | | | |
| Total | | 63 63 | 65 54 | ļ | 67 51 | 69 53 | |
| Dollar Inc | | 1 70 | 19 | l | 1 97 | 2 03 | |
| Percent Inc | | 2 7% | 3 09 | % | 3 0% | 3 0% | |
| 20,000 Gallons 3/4" Meter | | | | | | | |
| Total | | 140 23 | 144 44 | ļ | 148 77 | 153 23 | |
| Dollar Inc | | 3 90 | 4 2 | | 4 33 | 4 46 | |
| Percent Inc | | 2 9% | 3 09 | % | 3 0% | 3 0% | |
| 30,000 Gallons 3/4" Meter | | | | | | | |
| Total | | 230 43 | 237 34 | ı | 244 46 | 251.80 | |
| Dollar Inc | | 7 30 | 6 91 | | 7 12 | 7 33 | |
| Percent Inc | | 3 3% | 3 09 | 6 | 3 0% | 3 0% | |

| 7 | , | | 1. 1945 4 1. 1. 1. | | 38 (1. 1. 2) | a March St. Sant M. | Elly Belleville is | | |
|----|-----|------------------|--|-----------------------------------|--------------|--|--------------------|--|-------------|
| | , | | and it shared to | , , , | • | CITY OF CELINA | á | | ` . |
| | , , | . , ` | | . , , , | WATER/WAST | EWATER COST OF SER | VICE MODEL | | |
| 1 | | | | Marinatury new profitmic accident | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | |
| 1 | | | | | | Effective | Effective | Effective | |
| 44 | | atti i simi i da | Contract Co | a Branches (S) | Current | Japa 19 | | A STATE OF THE STA | فحف ومت نحط |

| | and software the second software some some some some some | | | | |
|-------------|--|----------------|----------|----------|--------|
| 5,000 | 3/4" Meter | | | | |
| • | Total | \$ 57 49 \$ | 59 22 \$ | 61 00 \$ | 62 83 |
| ı | Dollar Inc | 1 79 | 1 73 | 1 78 | 1 8 |
| 1 | Percent Inc | 3 2% | 3 0% | 3 0% | 3 0 |
| 10,000 | 3/4" Meter | | | | |
| - | Total | 95 44 | 98 31 | 101 26 | 104 30 |
| | Dollar Inc | 2 54 | 2 87 | 2 95 | 3 04 |
| ı | Percent Inc | 2 7% | 3 0% | 3 0% | 3 09 |
| 20,000 | 3/4" Meter | | | | |
| - | Total | 210 34 | 216 66 | 223 16 | 229 85 |
| I | Dollar Inc | 5 84 | 6 32 | 6 50 | 6 69 |
| F | Percent Inc | 2 9% | 3 0% | 3 0% | 3 09 |
| | and the second s | | | | |
| 0,000 Gallo | ons 1 1/2" Meter | | | | |
| 7 | Total | 304 62 | 313 76 | 323 17 | 332 87 |
| [| Dollar Inc | 6 40 | 9 14 | 9 41 | 9 70 |
| f | Percent Inc | 2 1% | 3 0% | 3 0% | 3 09 |
| 0,000 Gallo | ons 1 1/2" Meter | | | | |
| 7 | Total | 695 22 | 716 08 | 737 56 | 759 69 |
| | | | | | |
| (| Dollar Inc | 25 00 | 20 86 | 21 48 | 22 13 |

| | WAT | | Y OF CELINA ER COST OF SER | VICE MODEL | |
|--|------------------------------------|-----------|-------------------------------|------------|-----------|
| and the state of t | an and the Section of the later of | Surcont | Effective Jan-19 | Effective | Effective |
| City Rate Plan Three Year Su | mmary | | | | |
| Scen: 2018 11 14 Scenario 1 | | | | | |
| keen keen grade die sy bobe en namen and bekende blandery ke ee balanne net me ween | out remain parts and the | | | | |
| 5,000 Gallons 3/4" Meter | | | | | |
| Total | \$ | 39 02 \$ | 42 53 \$ | 46 36 \$ | 50 53 |
| Dollar Inc | | 1 23 | 3 51 | 3 83 | 4 17 |
| Percent Inc | | 3 3% | 9 0% | 9 0% | 9 0% |
| 10,000 Gallons 3/4" Meter | | | | | |
| Total | | 68 22 | 74 36 | 81 05 | 88 35 |
| Dollar Inc | | 1 78 | 6 14 | 6 69 | 7 29 |
| Percent Inc | | 2 7% | 9 0% | 9 0% | 9 0% |
| 15,000 Gallons 3/4" Meter | | | | | |
| Total | | 91 58 | 99 82 | 108 81 | 118 60 |
| Dollar Inc | | 2 22 | 8 24 | 8 98 | 9 79 |
| Percent Inc | | 2 5% | 9 0% | 9 0% | 9 0% |
| 20,000 Gallons 3/4" Meter | | | | | |
| Total | | 91 58 | 99 82 | 108 81 | 118 60 |
| Dollar Inc | | 2 22 | 8 24 | 8 98 | 9 79 |
| Percent Inc | | 2 5% | 9 0% | 9 0% | 9 0% |
| iki pini natiwa na pinaka na pinaka la | est in moneral america de antici | | | | |
| 30,000 Gallons 1 1/2" Meter | | | | | |
| Total 1 1/2" | \$ | 253 65 \$ | 276 48 \$ | 301 36 \$ | 328 48 |
| Dollar Inc | | 3 08 | 22 83 | 24 88 | 27 12 |
| Percent inc | | 1 2% | 9 0% | 9 0% | 9 0% |
| 60,000 Gallons 1 1/2" Meter | | | | | |
| Total 1 1/2" | | 640 65 | 698 31 | 761 16 | 829 66 |
| Dollar Inc | | 132 08 | 57 66 | 62 85 | 68 50 |
| Percent Inc | | 26 0% | 9 0% | 9 0% | 9 0% |

| Г | 31.55 | 30.00 | // | 11.3 (3) | ′ . | | 18 19 19 19 19 19 19 19 19 19 19 19 19 19 | | Continue Value (| | . " . " |
|---|--|-----------|--|--------------|-----------------|--------------|---|--|------------------|-----------|--------------------|
| | , | 100 | | | | 1 11 | | CITY OF CELINA | | | |
| | • | 11. | | | j di | | WATER/WA | STEWATER COST OF S | ERVICE MODEL | | *'1 |
| | ······································ | | · | | | - | | lada server vera seria na svorga nga pyyantia hhilib ilati pajriga tah | | | |
| | : | | 5.1 | | | | 140 | Efféctive | Effective | Effective | . 1 |
| | ر غ طوت کې | 41. 3.674 | 25:22:23 | river to the | A State Section | الأرسين أسام | Aurent . | Jan-19. | A CONTRACTOR | | المناعبة والمناوية |

| 92 42 5 39 6.2% 157 88 9 32 6 3% |
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| 5 39 6.2% 157 88 9 32 |
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| 9 32 |
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| 6.3% |
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| 271 83 |
| 14.26 |
| 5 5% |
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| 370 40 |
| 17 13 |
| 4 8% |
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| |
| 661 35 |
| 36 82 |
| 5 9% |
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| ,589 35, |
| 90 63 |
| 6 0% |
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| | , | , | , | | WAT | | TY OF CELINA TER COST OF | SERVICE MODI | EL | | · · · | |
|--|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------|------------------------------------|---|--|------------------------------------|
| er modernete klassifelde i hande skasse klass | Alahardara menerala | Current | Effective Jan-18 | Effective Jan-19 | Effective Jan 20 | Effective Jan-21 | Effective Jan-22 | Effective Jan 23 | Effective Jan-24 | Billedive | Efficiello La companya di | ESPECIO |
| City Rate Plan 10 Scen: 2018 11 14 S | | | 5 | | | | | | | | | |
| Carry Lagrange and State of Francis and Specifical | Same and the | inistruitus et izones in | ! | | | | | | | | | |
| A de la companya de l | - 1 | | | | | | | | | | | |
| | HA GAMBAN | | | | | | | | | | | |
| Monthly Minimum Char | g <u>e</u> 3/4" 1" 1 1/2" 2" | \$ 22 25 38 93 77 87 124 59 | \$ 23 15 38 93 77 87 124 59 | \$ 23 84 40 10 80 21 128 33 | \$ 24 56 41 30 82 61 132 18 | \$ 25 30 42 54 85 09 136 14 | \$ 26 06 43 82 87 64 140 23 | \$ 26 84 \$ 45 13 90 27 144 43 | 27 37 46 03 92 08 147 32 | \$ 27 92 \$ 46 95 93 92 150 27 | 28 48 \$ 47 89 95 80 153 27 | 29 05 48 85 97 71 156 34 |
| | 3" 4" 6" 8" | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - |
| 2,001 10,001 20,001 20,001 30,001 | 10,000 20,000 30,000 Above | 4 96 7 44 8 68 12 40 | 5 06 7 66 9 02 13 02 | 5 21 7 89 9 29 13 41 | 5 37 8 13 9 57 13 81 | 5 53 8 37 9 86 14 23 | 5 70 8 62 10 15 14 65 | 5 87 8 88 10 46 15 09 | 5 98 9 06 10 67 15 40 | 6 10 9 24 10 88 15 70 | 6 22 9 42 11 10 16 02 | 6 35 9 61 11 32 16 34 |
| | Maria de la como | | | | | | | | | | | |
| Monthly Minimum Char | | | | | | | | | | | | |
| | 3/4" 1" 1 1/2" 2" 3" | \$ 33 38 58 40 116 81 186 89 | \$ 34 72 58 40 116 81 186 89 | \$ 35 77 58 40 116 81 186 89 | \$ 36 84 60 15 120 31 192 49 | \$ 37 94 61 95 123 92 198 27 | \$ 39 08 63 81 127 64 204 21 | \$ 40 26 \$ 65 72 131 47 210 34 | 41 06 67 70 135 41 216 65 | \$ 41.88 \$ 69.05 138.12 220.98 | 42 72 \$ 70 43 140 88 225 40 | 43 57 71 84 143 70 229 91 |
| | 4" 6" 8" | - - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - - - | - |
| Volume Rate/1,000 Gal 2,001 10,001 20,001 30,001 | 10,000 20,000 30,000 Above | 7 44 11 16 13 02 18 60 | 7 59 11 49 13 53 19 53 | 7 82 11 83 13 94 20 12 | 8 05 12 19 14 35 20 72 | 8 29 12 56 14 78 21 34 | 8 54 12 93 15 23 21 98 | 8 80 13 32 15 68 22 64 | 8 97 13 59 16 00 23 09 | 9 15 13 86 16 32 23 56 | 9 34 14 14 16 65 24 03 | 9 52 14 42 16 98 24 51 |

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| The state of the s | | |
|--|---|----------------------------------|
| | CITY OF CELINA | |
| | WATER/WASTEWATER COST OF SERVICE MODEL | |
| The state of the s | | |
| The company of the co | ictive Effective Effective Effective Effective Effective | tive Emerica Effective Committee |
| | nda Janes | |

City Rate Plan -- 10 Year Summary Scen: 2018 11 14 Scenario 1 -- Status Quo

| Nonthly Minimum Cha | | | | | | | | | | | | | |
|--|----------------------------------|----|---|---|---|---|---|---|---|---|---|---|--|
| NOTUTE WITHHUM CHA | 7 <u>4e</u> 3/4" | \$ | 27 81 \$ | 27 81 \$ | 28 64 \$ | 29 50 \$ | 30 39 \$ | 31 30 \$ | 32 24 \$ | 32 88 \$ | 33 54 \$ | 34 21 \$ | 34 9 |
| | 1" | • | 48 67 | 48 67 | 50 13 | 51 63 | 53 18 | 54 78 | 56 42 | 57 55 | 58 70 | 59 88 | 61 0 |
| | 1 1/2" | | 97 34 | 97.34 | 100 26 | 103 27 | 106 37 | 109 56 | 112 84 | 115 10 | 117 40 | 119 75 | 122 1 |
| | 2" | | 155 74 | 155 74 | 160 41 | 165 22 | 170 18 | 175 29 | 180 55 | 184 16 | 187 84 | 191 60 | 195 4 |
| | 3" | | 233 60 | 233 60 | 240 61 | 247 83 | 255 26 | 262 92 | 270 81 | 276 22 | 281 75 | 287 38 | 293 1 |
| | 4" | | 389 34 | 389 34 | 401 02 | 413 05 | 425 44 | 438 21 | 451 35 | 460 38 | 469 59 | 478 98 | 488 5 |
| | 6" | | - | - | - | - | - | - | - | - | - | - | - |
| | 8" | | - | - | - | - | - | - | - | - | - | - | - |
| /olume Rate/1,000 Gal | | | | | | | | | | | | | |
| 2,001 | 10,000 | | 4 96 | 5 06 | 5 21 | 5 37 | 5 53 | 5 70 | 5 87 | 5 98 | 6 10 | 6 22 | 6 3 |
| 10,001 | 20,000 | | 7 44 | 7 66 | 7 89 | 8 13 | 8 37 | 8 62 | 8 8 8 | 9 06 | 9 24 | 9 42 | 96 |
| 20,001 | 30,000 | | 8 68 | 9 02 | 9 29 | 9 57 | 9 86 | 10 15 | 10 46 | 10 67 | 10 88 | 11 10 | 11 3 |
| 30,001 | Above | | 12 40 | 13 02 | 13 41 | 13 81 | 14 23 | 14 65 | 15 09 | 15 40 | 15 70 | 16 02 | 16 3 |
| - | - | | - | - | - | - | - | - | - | - | - | - | - |
| - | AMARIKA | | | | | | | | | | | - | - |
| - | rge | | - | - | - | - | - | - | - | - | - | | |
| aris and a section for the section of the section o | rge 3/4" | \$ | 41 72 \$ | - 41 72 \$ | - 42 97 \$ | - 44 26 \$ | - 45 58 \$ | - 46 95 \$ | - 48 36 \$ | - 49 33 \$ | - 50 31 \$ | 51 32 \$ | 52 3 |
| aris and a section for the section of the section o | r <u>ge</u> 3/4" 1" | • | 41 72 \$ 73 01 | - 41 72 \$ 73 01 | 42 97 \$ 75 20 | - 44 26 \$ 77 45 | 45 58 \$ 79 77 | - 46 95 \$ 82 17 | - 48 36 \$ 84 63 | - 49 33 \$ 86 33 | 50 31 \$ 88 05 | 51 32 \$ 89 81 | 52 3 91 6 |
| aris and a section for the section of the section o | - rge 3/4" 1" 1 1/2" | · | - 41 72 \$ 73 01 146 01 | - 41 72 \$ 73 01 146 01 | 42 97 \$ 75 20 150 39 | 44 26 \$ 77 45 154 90 | 45 58 \$ 79 77 159 55 | - 46 95 \$ 82 17 164 34 | 48 36 \$ 84 63 169 27 | 49 33 \$ 86 33 172 65 | 50 31 \$ 88 05 176 10 | 51 32 \$ 89 81 179 63 | 52 3 91 6 183 2: |
| aris and a section for the section of the section o | - 3/4" 1" 1 1/2" 2" | · | 41 72 \$ 73 01 146 01 233 61 | 41 72 \$ 73 01 146 01 233 61 | 42 97 \$ 75 20 150 39 240 62 | 44 26 \$ 77 45 154 90 247 84 | 45 58 \$ 79 77 159 55 255 27 | 46 95 \$ 82 17 164 34 262 93 | 48 36 \$ 84 63 169 27 270 82 | 49 33 \$ 86 33 172 65 276 23 | 50 31 \$ 88 05 176 10 281 76 | 51 32 \$ 89 81 179 63 287 39 | 52 3 91 6 183 2 293 1 |
| aris and a section for the section of the section o | - 3/4" 1" 1 1/2" 2" 3" | · | 41 72 \$ 73 01 146 01 233 61 350 40 | 41 72 \$ 73 01 146 01 233 61 350 40 | 42 97 \$ 75 20 150 39 240 62 360 91 | -44 26 \$ 77 45 154 90 247 84 371 74 | 45 58 \$ 79 77 159 55 255 27 382 89 | 46 95 \$ 82 17 164 34 262 93 394 38 | 48 36 \$ 84 63 169 27 270 82 406 21 | 49 33 \$ 86 33 172 65 276 23 414 33 | 50 31 \$ 88 05 176 10 281 76 422 62 | 51 32 \$ 89 81 179 63 287 39 431 07 | 52 3 91 6 183 2 293 1 439 6 |
| aris and a section for the section of the section o | - 3/4" 1" 1 1/2" 2" 3" 4" | · | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 | 42 97 \$ 75 20 150 39 240 62 360 91 601 53 | 44 26 \$ 77 45 154 90 247 84 371 74 619 58 | 45 58 \$ 79 77 159 55 255 27 382 89 638 16 | 46 95 \$ 82 17 164 34 262 93 394 38 657 31 | 48 36 \$ 84 63 169 27 270 82 406 21 677 03 | 49 33 \$ 86 33 172 65 276 23 414 33 690 57 | 50 31 \$ 88 05 176 10 281 76 422 62 704 38 | 51 32 \$ 89 81 179 63 287 39 431 07 718 47 | 52 3 91 6 183 2 293 1 439 6 732 8 |
| aris and a section for the section of the section o | - 3/4" 1" 1 1/2" 2" 3" | · | 41 72 \$ 73 01 146 01 233 61 350 40 | 41 72 \$ 73 01 146 01 233 61 350 40 | 42 97 \$ 75 20 150 39 240 62 360 91 | -44 26 \$ 77 45 154 90 247 84 371 74 | 45 58 \$ 79 77 159 55 255 27 382 89 | 46 95 \$ 82 17 164 34 262 93 394 38 | 48 36 \$ 84 63 169 27 270 82 406 21 | 49 33 \$ 86 33 172 65 276 23 414 33 | 50 31 \$ 88 05 176 10 281 76 422 62 | 51 32 \$ 89 81 179 63 287 39 431 07 | 52 3 91 6 183 2 293 1 439 6 |
| Monthly Minimum Cha | - 3/4" 1" 1 1/2" 2" 3" 4" 6" | · | 41 72 \$ 73 01 146 01 233 61 235 040 584 01 | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 | 42 97 \$ 75 20 150 39 240 62 360 91 601 53 | 44 26 \$ 77 45 154 90 247 84 371 74 619 58 | 45 58 \$ 79 77 159 55 255 27 382 89 638 16 | 46 95 \$ 82 17 164 34 262 93 394 38 657 31 | 48 36 \$ 84 63 169 27 270 82 406 21 677 03 | 49 33 \$ 86 33 172 65 276 23 414 33 690 57 | 50 31 \$ 88 05 176 10 281 76 422 62 704 38 | 51 32 \$ 89 81 179 63 287 39 431 07 718 47 | 52 3 91 6 183 2 293 1 439 6 732 8 |
| Monthly Minimum Cha | 3/4" 1" 1 1/2" 2" 3" 4" 6" 8" | · | 41 72 \$ 73 01 146 01 233 61 250 40 584 01 | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 | 42 97 \$ 75 20 150 39 240 62 360 91 601 53 | 44 26 \$ 77 45 154 90 247 84 371 74 619 58 | 45 58 \$ 79 77 159 55 255 27 382 89 638 16 | 46 95 \$ 82 17 164 34 262 93 394 38 657 31 | 48 36 \$ 84 63 169 27 270 82 406 21 677 03 | 49 33 \$ 86 33 172 65 276 23 414 33 690 57 | 50 31 \$ 88 05 176 10 281 76 422 62 704 38 | 51 32 \$ 89 81 179 63 287 39 431 07 718 47 | 52 3 91 6 183 2 293 1 439 6 732 8 |
| Monthly Minimum Cha | - 3/4" 1" 1 1/2" 2" 3" 4" 6" | · | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 | 42 97 \$ 75 20 150 39 240 62 360 91 601 53 | 44 26 \$ 77 45 154 90 247 84 371 74 619 58 | 45 58 \$ 79 77 159 55 255 27 382 89 638 16 - | 46 95 \$ 82 17 164 34 262 93 394 38 657 31 | 48 36 \$ 84 63 169 27 270 82 406 21 677 03 | 49 33 \$ 86 33 172 65 276 23 414 33 690 57 | 50 31 \$ 88 05 176 10 281 76 422 62 704 38 | 51 32 \$ 89 81 179 63 287 39 431 07 718 47 | 52 3 91 6 183 2 293 1 439 6 732 8 |
| Monthly Minimum Cha | 3/4" 1" 1 1/2" 2" 3" 4" 6" 8" | · | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 7 44 | 41 72 \$ 73 01 146 01 233 61 350 40 584 01 7 59 | 42 97 \$ 75 20 150 39 240 62 360 91 601 53 - | 44 26 \$ 77 45 154 90 247 84 371 74 619 58 | 45 58 \$ 79 77 159 55 255 27 382 89 638 16 8 29 | 46 95 \$ 82 17 164 34 262 93 394 38 657 31 8 54 | 48 36 \$ 84 63 169 27 270 82 406 21 677 03 8 80 | 49 33 \$ 86 33 172 65 276 23 414 33 690 57 | 50 31 \$ 88 05 176 10 281 76 422 62 704 38 9 15 | 51 32 \$ 89 81 179 63 287 39 431 07 718 47 9 34 | 52 3 91 6 183 2: 293 1- 439 6' 732 8- |

| <i>;</i> | | | | , . | WA | | | IA F SERVICE MOI | DEL | , | | |
|---|--|----------------------------------|---------------------|--|---------------------|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|---------------------------------------|
| Salte de meest de termeter de het een de he | 3 | Current | Effective Jan 18 | | Effective Jan-20 | Efféctivé Jan-21 | Effective Jan-22 | Effective 447-23 | Effective Jen-24 | Effective | Effective Japan | Effective |
| City Rate Plan 16 Scen: 2018 11 14 5 | | | | | | | | | | | | |
| menjananananananana | reservation (p. fraintie) | ne estima este ilia | | | | | | | | | | |
| | 20.00 TO 18.00 | | | | | | | | | | | |
| Monthly Minimum Char | | | | | | | | | | | | |
| MONTHLY WITHINGTH CHAI | 3/4" 1" 1 1/2" 2" | \$ 20 6 38 6 72 1 123 6 | 3 38 0 72 | 50 \$ 23 44 63 42 11 10 78 59 60 134 72 | 45 90 85 66 | \$ 27 84 50 03 93 37 160 07 | \$ 30 35 54 53 101 78 174 47 | \$ 33 08 59 44 110 93 190 17 | \$ 34 07 61 22 114 26 195 88 | \$ 35 10 63 06 117 69 201 76 | 36 15 64 95 121 22 207 81 | \$ 37 23 66 90 124 86 214 04 |
| | 3" 4" | - | | | | - | - | | - | | | - - - |
| | 6" 8" | - | | | - | - | - | - | - | - | - | - |
| Volume Rate/1,000 Gal 2,001 | 14,000 | 5 7 | 3 5 | 84 6 37 | 6 94 | 7 56 | 8 24 | 8 99 | 9 26 | 9 53 | 9 82 | 10 11 |
| - | - | - | | - | - | • | - | - | - | - | - | - |
| rans respect to the second | antenite en de la constitución d | | | | | | | | | | | |
| Monthly Minimum Char | g <u>e</u> 3/4" | 30 9 | 0 32 | 25 35 15 | 38 32 | 41 76 | 45 52 | 49 62 | 51 11 | 52 64 | 54 22 | 55 85 |
| | 1" | 57 9 | | 95 63 16 | 68 84 | 75 04 | 81 79 | 89 16 | 91 83 | 94 59 | 97 42 | 100 35 |
| | 1 1/2" | 108 1 | | | 128 49 | 140 06 | 152 66 | 166 40 | 171 39 | 176 54 | 181 83 | 187 29 |
| | 2" | 185 4 | | | 220 27 | 240 10 | 261 71 | 285 26 | 293 82 | 302 63 | 311 71 | 321 06 |
| | 3" 4" | - | | - | - | • | - | - | - | • | - | - |
| | 4" 6" | - | | - | - | - | • | - | - | - | - | - |
| | 8" | - | | | - | • | | - | - | - | - | - |
| Volume Rate/1,000 Gal | | | | | | | | | | | | |
| 2,001 | 14,000 | 8 6 | 0 12 | 90 14 06 | 15 33 | 16 71 | 18 21 | 19 85 | 20 44 | 21 06 | 21 69 | 22 34 |
| _ | _ | _ | | | | | | | | | | |

Volume Rate/1,000 Gal

2,001

Above

| | | | | | WAT | | ITY OF CELINATER COST OF | A SERVICE MOI | DEL | | | |
|--|----------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| And the second s | | | Efficative JANNA | Effective #86-18 | Effective | Effective | Effective | Effective | Effective Jan 24 | | | |
| City Rate Plan 1 Scen: 2018 11 14 | | | | | | | | | | | | |
| Carren Carren Communication Control Co | | | | | | | | | | | | |
| Monthly Minimum Cha | 3/4" 1" 1 1/2" 2" | 25 75 48 29 90 13 154 50 | 25 75 48 29 90 13 154 50 | 28 07 52 64 98 24 168 41 | 30 59 57 37 107 08 183 56 | 33 35 62 54 116 72 200 08 | 36 35 68 17 127 23 218 09 | 39 62 74 30 138 68 237 72 | 40 81 76 53 142 84 244 85 | 42 03 78 83 147 12 252 19 | 43 29 81 19 151 54 259 76 | 44 59 83 63 156 08 267 55 |
| | 3" 4" 6" 8" | 386 25 - - | 386 25 - - | - 421 01 - - | - 458 90 - - | 500 20 - - | - 545 22 - - | - 59 4 29 - - | 612 12 | 630 49 - - | - 649 40 - - | - 668 88 - - |
| Volume Rate/1,000 Gal 2,001 | Above - | 5 73 - | 5 84 - | 6 37 - | 6 94 - | 7 56 - | 8 24 - | 8 99 - | 9 26 - | 9 53 - | 9 82 - | 10 11 - |
| a and a finderical flow of the control of the contr | perter de la later | | | | | | | | | | | |
| Monthly Minimum Cha | 3/4" 1" 1 1/2" 2" 3" | 38 63 72 44 135 20 231 75 | 38 63 72 44 135 20 231 75 | 42.10 78 95 147 36 252 61 | 45 89 86 06 160 63 275 34 | 50 02 93 81 175 08 300 12 | 54 52 102 25 190 84 327 13 | 59 43 111 45 208 01 356 58 | 61 21 114 79 214 25 367 27 | 63 05 118 24 220 68 378 29 | 64 94 121 78 227 30 389 64 | 66 89 125 44 234 12 401 33 |
| | 4" 6" 8" | 579 38 - - | 579 38 - - | 631 52 | 688 36 - - | 750 31 | 817 84 - - | 891 44 - | 918 18 | 945 73 | 974 10 | 1,003 32 |

8 60

12 90

14 06

15 33

16 71

18 21

19 85

20 44

21 06

21 69

20,000 Gallons -- 3/4" Meter

Dollar Inc

Percent Inc

30,000 Gallons -- 3/4" Meter

Dollar Inc

Percent Inc

Total

Total

| | | | | | CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL | | | | | | 14 | |
|---|---------------|-------|--------------|---------------------|--|--------------|---------------------|---------------------|--------------|--------------|-------------------------|--------------|
| 20 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 | Ç | ument | Effective | Effective Jan-19 | Effective Jen-20 | Effective | Effective Jen-22 | Effective Jan-23 | Effective | Entrative | Effective | |
| City Rate Plan 10 Year Scen: 2018 11 14 Scenar | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | WATER/A | | | | | | | | | | | |
| 5,000 Gallons 3/4" Meter | WATER/A | | | | | | | | | | | |
| | ****** | 37 13 | | | | | | | | | | |
| 5,000 Gallons 3/4" Meter Total Dollar Inc | | , | 1 20 | 1 15 | 1 18 | 1 22 | 1 26 | 1 29 | 0 89 | 0 91 | 0 92 | 0 94 |
| 5,000 Gallons 3/4" Meter Total | | , | | | | | | | | | 0 92 | |
| 5,000 Gallons 3/4" Meter Total Dollar Inc Percent Inc | | , | 1 20 | 1 15 | 1 18 | 1 22 | 1 26 | 1 29 | 0 89 | 0 91 | 0 92 | 0 94 |
| 5,000 Gallons 3/4" Meter Total Dollar Inc Percent Inc | | , | 1 20 | 1 15 | 1 18 | 1 22 | 1 26 | 1 29 | 0 89 | 0 91 | 0 92 6 2 0% | 0 94 |
| 5,000 Gallons 3/4" Meter Total Dollar Inc Percent Inc 10,000 Gallons 3/4"" Meter | | 37 13 | 1 20 3 2% | 1 15 3 0% | 1 18 3 0% | 1 22 3 0% | 1 26 3 0% | 1 29 3 0% | 0 89 2 0% | 0 91 2 0% | 0 92 6 2 0% 78 28 | 0 94 2 0% |

153 23

4 46

3 0%

251 80

7 33

3 0%

157 83

259 35

7 55

3 0%

4 60

3 0%

162 57

4 73

3 0%

267 13

7 78

3 0%

165 82

272 47

5 34

2 0%

3 25

2 0%

169 13

3 32

2 0%

277 92

5 4 5

2 0%

172 52

3 38

2 0%

283 48

5 56

2 0%

175 97

289 15

5 67

2 0%

3 45

2 0%

136 33

223 13

140 23

3 90

2 9%

230 43

7 30

3 3%

144 44

237 34

6 91

3 0%

4 21

3 0%

148 77

4 33

3 0%

244 46

7 12

3 0%

Date: 10/26/2018

| | | | | | CITY OF CELINA WATER/WASTEWATER COST OF SERVICE MODEL | | | | | | | | |
|----------|---|--|--------------|--------------|---|--------------|---------------------|--------------|---------------------|--------------|------------------------|---------------------|--|
| er teres | | reginar in an anninandaga pro-es sinaranga a | Effective | Effective | Privates Andreas | Effective | Effective Jan-22 | Bhantive | Effective Abov44 | | Effective Territory | | |
| | Rate Plan 10 Year S n: 2018 11 14 Scenari | | | | | | | | | | | | |
| 3 | organización de la company y producción de la company | | | | | | | | | | | | |
| 5,000 | Gallons 3/4" Meter | | | | | | | | | | | | |
| | Total | \$ 55 70 | | | | | | | | | | | |
| | Dollar Inc Percent Inc | | 1 79 3 2% | 1 73 3 0% | 1 78 3 0% | 1 83 3 0% | 1 88 3 0% | 1 94 3 0% | 1 33 2 0% | 1 36 2 0% | 1 39 2 0% | 1 41 2 0% | |
| | | | | | | | | | | | | | |
| 10,00 | O Gallons 3/4"" Meter Total | 92 90 | 95 44 | 98 31 | 101 26 | 104 30 | 107 42 | 110 65 | 112 86 | 115 12 | 117 42 | 119 77 | |
| | Dollar Inc | 92 90 | 2.54 | 287 | 2 95 | 3 04 | 3 13 | 3 22 | 2 21 | 2 26 | 2 30 | 2 35 | |
| | Percent Inc | | 2 7% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 0% | 2 0% | 2 0% | 2 0% | |
| 20.00 | 0 Gallons 3/4" Meter | | | | | | | | | | | | |
| , | Total | 204 50 | 210 34 | 216 66 | 223 16 | 229 85 | 236 75 | 243 85 | 248 72 | 253 70 | 258 77 | 263 95 | |
| | Dollar Inc | | 5 84 | 6 32 | 6 50 | 6 69 | 6 90 | 7 10 | 4 88 | 4 97 | 5 07 | 5 18 | |
| | Percent Inc | | 2 9% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 0% | 2 0% | 2 0% | 2 0% | |
| 4 3 | | | | | | | | | | | | | |
| 30,00 | 0 Gallons 1 1/2" Meter | | | | | | | | | | | | |
| , | Total | 298 22 | 304 62 | 313 76 | 323 17 | 332 87 | 342 85 | 353 14 | 360 20 | 367 40 | 374 75 | 382 25 | |
| | Dollar Inc | | 6 40 | 9 14 | 9 41 | 9 70 | 9 99 | 10 29 | 7 06 | 7 20 | 7 35 | 7 50 | |
| | Percent Inc | | 2 1% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 0% | 2 0% | 2 0% | 2 0% | |
| 60,00 | 0 Gallons 1 1/2" Meter | | | | | | | | | | | | |
| | Total | 670 22 | 695 22 | 716 08 | 737 56 | 759.69 | 782 48 | 805 95 | 822 07 | 838 51 | 855 28 | 872 39 | |
| | Dollar Inc | | 25 00 | 20 86 | 21 48 | 22 13 | 22 79 | 23 47 | 16 12 | 16 44 | 16 77 | 17 11 | |
| | Percent Inc | | 3 7% | 3 0% | 3 0% | 3 0% | 3 0% | 3 0% | 2 0% | 2 0% | 2 0% | 2 0% | |

| | | | | Ĺ | WAT | CÍT ER/WASTEWAT | TY OF CELINA ER COST OF | EL | · · · · · · · · · · · · · · · · · · · | | | |
|--|---|--------------------|------------------|-------------------|---------------------|---------------------|----------------------------|---------------------|---------------------------------------|-------------------|---------------------|-----------------------------|
| ing the state of t | Ć | rrient | | Mective Jan-19 | Effective Jan-20 | Effective Jan-21 | Effective Jan-12 | Efficiency | Effective Jan-24 | Erlocito | Effective | alegoria. Ngaranganjerah |
| City Rate Plan 10 Year S Scen: 2018 11 14 Scenario | | | | | | | | | | | | |
| 5 | Marianana | .,,,,,,,,,,,, | | | | | | | | | | |
| 5,000 Gallons 3/4" Meter | _ | | | | | | | | | | | |
| Total Dollar Inc | \$ | 37 79 \$ | 39 02 \$ 1 23 | 42 53 \$ 3 51 | 46 36 3 83 | \$ 50 53 \$ 4 17 | 55 08 5 4 55 | \$ 60 04 \$ 4 96 | 61 84 1 80 | \$ 6369 \$ 186 | 65 60 \$ 1 91 | 67 57 1 97 |
| Percent Inc | | | 3 3% | 9 0% | 9 0% | 9 0% | 9 0% | 9 0% | 3 0% | 3 0% | 3 0% | 3 0% |
| 10,000 Gallons 3/4" Meter | | | | | | | | | | | | |
| Total Dollar Inc | | 66 44 | 68 22 1 78 | 74 36 | 81 05 | 88 35 | 96 30 | 104 96 | 108 11 | 111 36 | 114 70 | 118 14 |
| Percent Inc | | | 2 7% | 6 14 9 0% | 6 69 9 0% | 7 29 9 0% | 7 95 9 0% | 8 67 9 0% | 3 15 3 0% | 3 24 3 0% | 3 34 3 0% | 3 44 3 0% |
| 20,000 Gallons 3/4" Meter | | | | | | | | | | | | |
| Total | | 89 36 | 91 58 | 99 82 | 108 81 | 118 60 | 129 27 | 140 91 | 145 13 | 149 49 | 153 97 | 158 59 |
| Dollar Inc Percent Inc | | | 2 22 2 5% | 8 24 9 0% | 8 98 9 0% | 9 79 9 0% | 10 67 9 0% | 11 63 9 0% | 4 23 3 0% | 4 35 3 0% | 4 48 3 0% | 4 62 3 0% |
| 30,000 Gallons 3/4" Meter | | | | | | | | | | | | |
| Total | | 89 36 | 91 58 | 99 82 | 108 81 | 118 60 | 129 27 | 140 91 | 145 13 | 149 49 | 153 97 | 158 59 |
| Dollar Inc Percent Inc | | | 2 22 2 5% | 8 24 9 0% | 8 98 9 0% | 9 79 9 0% | 10 67 9 0% | 11 63 9 0% | 4 23 3 0% | 4 35 3 0% | 4 48 3 0% | 4 62 3 0% |
| | | | | | | | | | | | | |
| 30,000 Gallons 1 1/2" Meter | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | (a) y (a), (b) (b) | | | | | | | | | | |
| Total 1 1/2" | \$ | 250 57 \$ | | 276 48 | | | | | | | | 439 25 |
| Dollar Inc Percent Inc | | | 3 08 1 2% | 22 83 9 0% | 24 88 9 0% | 27 12 9 0% | 29 56 9 0% | 32 22 9 0% | 11 71 3 0% | 12 06 3 0% | 12 42 3 0% | 12 79 3 0% |
| 60,000 Gallons 1 1/2" Meter | | | | | | | | | | | | |
| Total 1 1/2" | | 422 47 | 428 85 | 467 45 | 509 52 | 555 37 | 605 36 | 659 84 | 679 63 | 700 02 | 721 02 | 742 65 |
| Dollar Inc Percent Inc | | | 6 38 1 5% | 38 60 9 0% | 42 07 9 0% | 45 86 9 0% | 49 98 9 0% | 54.48 9.0% | 19 80 3 0% | 20 39 3 0% | 21 00 3 0% | 21 63 3 0% |
| r Groont IIIO | | | 1 3/0 | 3 0 70 | 3076 | 3070 | 3 0 76 | 5070 | 3 076 | 30% | 3070 | 3 0 70 |