

LETTER OF COMMUNICATION

TITLE: Utility Rate Review

TO: Budget Committee

FROM: Department of Financial Services

DATE: December 4, 2018

PUBLIC: This is a public document

IN-CAMERA:

RECOMMENDATION

THAT the Waterworks and Sanitary Sewer Utility Rate Schedule be amended to reflect a 6% rate increase effective April 1, 2019; and

THAT effective April 1, 2019, a Waterworks Infrastructure Levy be established based upon a variable monthly levy based upon meter size. That infrastructure Levy will be:

| | Monthly |
|--------------------|------------|
| Meter Size | Levy |
| 15 - 20 mm | \$8.33 |
| 21 - 30 mm | \$16.67 |
| 31 - 40 mm | \$33.33 |
| 41 - 50 mm | \$66.67 |
| 51 - 75 mm | \$133.00 |
| 76 - 100 mm | \$267.00 |
| 101 - 150 mm | \$533.00 |
| 151 - 200 mm | \$1,067.00 |
| greater than 200mm | \$2,133.00 |

and further;

THAT City Administration be directed to amend Bylaw No. 5152 <u>The Sewer and Water</u> Utility Bylaw.

TOPIC AND PURPOSE

The purpose of this report is to provide Budget Committee with the results of an analysis of Water and Sewer Utility rates.

BACKGROUND

The City of Moose Jaw provides water and sanitary sewer services to the citizens and businesses of the community via two separate utilities. The Waterworks Utility is set up to be a self-funded utility that provides potable water to the citizens and businesses of the City of Moose Jaw. Likewise, the Sanitary Sewer Utility is also self-funded and provides sanitary sewer disposal services to the citizens and businesses of Moose Jaw.

On April 24, 2017, City Council passed the following motion in respect to Watermain Funding and more specifically transitioning the Hospital Levy into an Infrastructure Levy.

"THAT the 2016 Cast Iron Watermain Budget not be carried over to 2017; and

THAT the 2.25% allocation of Municipal Taxation in 2017 be reduced to 1.65% and be directed on an ongoing basis to the Cast Iron Watermain Replacement Program; and further

THAT the source of funding for the remainder of the annual \$5,850,000 (to be inflation adjusted annually) come from the transition of the Hospital Levy into an Infrastructure Levy to be levied on water utility customers based upon meter size starting in 2019."

Waterworks Utility

The Waterworks Utility's Operating Expenditures are funded from the revenue generated from utility rate charges to its customers. The excess of utility rate revenues, once operating expenditures have been satisfied, is contributed as a reserve charge to be utilized to fund its capital needs. It is estimated that the Waterworks Utility will generate approximately \$2,492,475 in 2019 towards these capital needs.

City of Moose Jaw Budget Summary of Revenues & Expenditures

For Waterworks

| | | FOI Wat | GI MOI V2 | | | |
|----|--------------------------|--------------------|----------------|----------------|--------------------------|----------|
| | Description | 2018 Projection | 2018 Budget | 2019 Budget | 2019 - 2018 INC (DCR) | % Change |
| G | ENERAL SERVICE | 10,600,000 | 10,015,565 | 10,600,000 | 584,435 | 5.8% |
| U | FILITY BILLING PENALTIES | 58,277 | 42,438 | 60,387 | 17,949 | 42.3% |
| C | ONNECTION FEES | 62,235 | 65,025 | 62,940 | (2,085) | (3.2)% |
| W | ATER DEPOTS | 35,075 | 27,361 | 28,390 | 1,029 | 3.8% |
| H | OUSE CONNECTIONS | 300,000 | 250,000 | 300,000 | 50,000 | 20.0% |
| M | ISCELLANEOUS REVENUE | 1,092 | 5,700 | 1,000 | (4,700) | (82.5)% |
| W | ATER METER REVENUE | 17,000 | 29,000 | 20,000 | (9,000) | (31.0)% |
| R | EVENUES | 11,073,679 | 10,435,089 | 11,072,717 | 637,628 | 6.1% |
| Ы | RODUCTION | 2,971,446 | 3,118,271 | 3,047,945 | (70,326) | (2.3)% |
| DI | STRIBUTION | 4,018,372 | 3,933,184 | 4,032,213 | 99,029 | 2.5% |
| ΑI | DMINISTRATION | 1,361,636 | 1,337,706 | 1,500,084 | 162,378 | 12.1% |
| RI | ESERVE CHARGE | 2,722,225 | 2,045,928 | 2,492,475 | 446,547 | 21.8% |
| Ε | XPENDITURES | 11,073,679 | 10,435,089 | 11,072,717 | 637,628 | 6.1% |
| | | | | | | |

The Waterworks Utility is also the recipient of the City's Gas Tax funding which will total an estimated \$2,082,952 in 2019. In addition to this funding, the City currently redirects municipal taxation to the utility to partially fund the cast iron watermain replacement program. This appropriation of tax revenues totals \$2,836,492. In summary, for 2019 the following are the anticipated funding sources for the utilities capital needs:

| Utility Rate Charges | \$2,492,475 |
|-------------------------------|-------------|
| Gas Tax Funding | \$2,082,952 |
| Municipal Taxation | \$2,836,492 |
| Total Funds for Capital Needs | \$7,411,919 |

The capital needs of the Waterworks Utility are estimated to be \$119,654,432 over the next five years.

Sanitary Sewer Utility

The Sanitary Sewer Utility is estimated to generate \$3,833,354 in 2019 as a reserve charge which will be utilized to fund current borrowings and future capital needs. The Sanitary Sewer Utility is a self-funded utility which means it relies on the revenue generated from utility rate charges and grant funding to fully fund its operations and capital needs.

City of Moose Jaw Budget Summary of Revenues & Expenditures

For Sanitary Sewer

| Description | 2018 Projection | 2018 Budget | 2019 Budget | 2019 - 2018 INC (DCR) | % Change |
|---------------------------|--------------------|----------------|----------------|--------------------------|----------|
| GENERAL SERVICE | 7,670,000 | 7,636,647 | 7,670,000 | 33,353 | 0.4% |
| SEWER BLOCKS | 450 | 4,663 | 806 | (3,857) | (82.7)% |
| UTILITY BILLING PENALTIES | 44,998 | 40,127 | 46,217 | 6,090 | 15.2% |
| SEPTAGE FEES | 34,793 | 21,171 | 26,811 | 5,640 | 26.6% |
| HOUSE CONNECTIONS | 400,000 | 275,000 | 400,000 | 125,000 | 45.5% |
| REVENUES | 8,150,241 | 7,977,608 | 8,143,834 | 166,226 | 2.1% |
| ADMINISTRATION | 1,000,542 | 994,790 | 1,038,449 | 43,659 | 4.4% |
| RESERVE CHARGE | 3,876,344 | 3,694,414 | 3,833,354 | 138,940 | 3.8% |
| SEWAGE TREATMENT | 2,043,742 | 2,119,753 | 2,083,785 | (35,968) | (1.7)% |
| SANITARY SEWERS | 1,229,613 | 1,168,651 | 1,188,246 | 19,595 | 1.7% |
| EXPENDITURES | 8,150,241 | 7,977,608 | 8,143,834 | 166,226 | 2.1% |

The Sanitary Sewer Utility has planned capital expenditures over the next five years of \$32,314,133.

The table below shows the City of Moose Jaw's Water and Sewer rate increases since 2005:

Historical Review of Utility Rate Increases

| <u>Water</u> | <u>Sewer</u> | |
|--------------|--------------|---------|
| 2005 | 2.00% | 2.00% * |
| 2006 | 2.00% | 2.00% * |
| 2007 | 5.00% | 10.00% |
| 2008 | 10.00% | 15.00% |
| 2009 | 10.00% | 15.00% |
| 2010 | 5.00% | 13.00% |
| 2011 | 15.00% | 15.00% |
| 2012 | 9.00% | 9.00% |
| 2013 | 9.00% | 9.00% |
| 2014 | 9.00% | 9.00% |
| 2015 | 9.00% | 9.00% |
| 2016 | 9.00% | 9.00% |
| 2017 | 15.00% | 6.00% |
| 2018 | 9.00% | 6.00% |

^{*} Note: Rate increases during the 2002 to 2006 period were not a flat across-the-board increase, but rather were made up of varying rate increases per type of meter and level of consumption. The increase shown is the average projected increase per Communication #178 dated July 11, 2001.

DISCUSSION

The Water and Sewer Utilities are both facing expenditure pressures on the operating and capital areas. The discussion below attempts to address the challenges and potential ways to deal with those challenges for each utility.

Waterworks Utility

The Water Utility operational costs appear to be stabilizing with distribution costs more within a normal inflationary increase. In terms of production costs, there is a small decrease for 2019, but significant increases in water rates charged by the Buffalo Pound Water Treatment Corporation (BPWTC) for capital improvements will impact production costs going forward.

These increased production costs are the result of the BPWTC now being responsible for all capital costs related to the facility. In order to fund an estimated \$127 million to \$224 million dollar renewal project, the rates charged for water will climb in the future. The table below summarizes those projected increases:

| | <u>Rate per megaliter</u> |
|------|---------------------------|
| 2018 | 533.00 |
| 2019 | 543.00 |
| 2020 | 585.00 |
| 2021 | 672.00 |
| 2022 | 725.00 |
| 2023 | 765.00 |

In terms of the infrastructure needs of the utility, they total \$119,935,619 and are detailed in Attachment #1 - 2019 to 2023 Waterworks Planned Capital Expenditures. This is an extreme amount of capital works for a utility of this size (annual revenue approx. \$11 million).

The Financial Services Department has created a Financial Model for the Waterworks Utility that puts into perspective the extreme financial pressures being faced by the utility. This model can be found in Attachment #2 - 2019 to 2023 Waterworks Financial Model.

As can be seen, the financial model calls for an additional \$45 million in borrowing, which is in addition to the \$30 million borrowed in 2018. As well, the model has been produced with annual 6% rate increases which is the direction of City Council. Lastly, the transition of the Hospital Levy to a Waterworks Levy beginning in 2019 has been accounted for in the model.

The one thing this financial model does not take into account is the potential for any Federal/Provincial Grant funding. If the City were successful in getting Federal/Provincial funding, this would reduce some of the borrowing needs.

The financial model presented will meet the needs of the utility over the next five years, but does not provide long term financial stability for the utility. Going forward into the future, there will be a need for utility rate increases greater than 6% annually and/or significant amounts of Federal and Provincial grant funding.

The current financial model also will not provide much if any room for future debt limit requirements related to the BPWTC renewal. The funding for the renewal project will come from the rates charged for water by BPWTC. However, since the corporation is jointly owned by the City of Regina (74%) and City of Moose Jaw (26%) any borrowing done by the corporation will count against the borrowing limits of the two cities.

In Moose Jaw's case, 26% of any borrowing will need to be absorbed in the City's debt limit. The City's debt limit currently sits at \$95 million dollars and approximately \$64 million dollars of that limit has been used to date. The waterworks financial model anticipates that an additional \$45 million in borrowing for the Waterworks Utility will be required over the next three years. Given that a portion of the debt will be paid off over the next three years, it is estimated that the additional \$45 million in borrowing will put the City at its debt limit of \$95 million dollars.

Where issues may potentially arise is the amount of additional debt limit that will be required for the City of Moose Jaw's 26% share of the BPWTC renewal project. That could range from \$33 million to \$58 million if no grant funding is available. If 50% grant funding were available for the plant renewal, then the City's share of debt would range from \$16.5 to \$29.0 million dollars. The lower range of this debt requirement is likely manageable; however, if significant Federal and Provincial funding is not available, then it may be difficult for the City to get that high a debt level approved by the Saskatchewan Municipal Board given our current planned debt levels.

The financial model presented with 6% annual rate increases, transition of the Hospital Levy to a Waterworks Infrastructure Levy and \$45 million in borrowing is manageable over the five year Capital Plan period. Future periods beyond 2023 being manageable are predicated on a significantly reduced capital need and Federal and Provincial grant funding.

Sanitary Sewer Utility

The Sanitary Sewer Utility is experiencing more moderate cost pressures on its operations and capital needs. The debt that the corporation currently holds will be paid off at the end of 2023 and the financial model appears to be sustainable with moderate rate increases of 6% each year over the five year period.

In the longer term, it may make sense to look at the potential of combining the Waterworks and Sanitary Sewer Utilities into one entity. This would have the benefit of creating a larger utility which could redirect resources from one area such as Sanitary Sewers to areas of financial need such as Waterworks. This type of amalgamation is several years off as the Sanitary Sewer Utility is just now getting on solid financial footings where at a point five or so years down the road, it may be able to contribute to Waterworks capital needs.

In terms of the infrastructure needs of the utility, they total \$32,314,133 and are detailed in Attachment #3 - 2019 to 2023 Sanitary Sewer Planned Capital Expenditures. This is a much more moderate capital request than the Waterworks Utility and in addition, long-term borrowing for the utility will be fully repaid by 2023. Annual contributions from operations to capital are also strong at an estimated \$3,833,354 in 2019 before the proposed 6% rate increase.

The Financial Services Department has created a Financial Model for the Sanitary Sewer Utility that puts into perspective the financial pressures being faced by the utility. This model can be found in Attachment #4 - 2019 to 2023 Wastewater Financial Model. City Administration would recommend funding the Sanitary Sewer Utility with 6% rate increases over the next five years.

Conclusion

As can be seen from the discussion above, both utilities are facing financial pressures. The analysis above has proposed rate increases for each of the next five years for each utility.

The uncertainty surrounding these financial models relates to:

- Scope of work that must be performed over the next five years.
- Federal/Provincial Infrastructure Funding.

Given these uncertainties and the obvious need for a utility increase for 2019, City Administration would recommend to Council to proceed with a 2019 increase only at this point in time.

The rate adjustments recommended in this report are necessary for the utilities to be able to meet their financial obligations and continue to provide water and sanitary sewer services.

A comparison of other cities' 2017 rates for both residential and commercial usage is provided in Attachment #5 - 2017 Utility Rate Comparison (2018 comparison was not available). As can be seen, the City of Moose Jaw has the fifth lowest residential rates and the fourth lowest commercial rates amongst the cities surveyed.

Also of specific interest is the water and sewer rates of Moose Jaw's closest comparator, that being the City of Regina. (See attachment #6.) The City of Regina's 2018 water and sewer rates are compared to the City of Moose Jaw's in the attached table. The table indicates that the City of Regina's residential water and sewer charges are 22% more than Moose Jaw's.

The City of Moose Jaw's water and sewer charge for a residential customer with a 20 mm meter and 25 M3 of usage a month is \$109.69. The proposed rate increases will result in this same residential customer paying \$116.27 for water and sewer services in 2019 plus the water infrastructure levy of \$8.33 bringing the total monthly charge to \$124.60. Although this is a significant increase in cost, it should be noted that the cost of water and sewer services is still reasonable when compared to the monthly charges that one pays for electricity, natural gas, cable and telephone.

City Administration is recommending only a one-year utility rate increase be implemented at this time. The rationale for this recommendation is twofold. First of all the capital plans for both utilities are subject to fluctuation into the future and secondly the City is hopeful it will receive some Federal/Provincial funding over the next five years. For these reasons, a rate increase of 6% for the Waterworks Utility and 6% for the Sanitary Sewer Utility effective April 1, 2019 is being recommended.

OPTIONS TO RECOMMENDATION

1) Implement a longer term rate increase such as three years of 6% utility rate increases and implementation of the Infrastructure Levy.

PUBLIC AND/OR STAKEHOLDER INVOLVEMENT

As part of the City's public input process, individuals or groups can present a submission to Budget Committee in respect to proposed utility rate increases. At this point, no groups or individuals have come forward but if any do, they will be allowed to present at this meeting.

COMMUNICATION PLAN

Once a decision on 2019 utility rate increases have been ratified, City Administration will inform the public of the upcoming increases through advertising as well as an insert in utility bills.

In addition, as part of the communications plan for this rate increase, the City will make every effort to inform our customers about the Water Instalment Payment Plan (WIPPS) that the City offers. This plan allows customers to move from the regular three month

billing and payment cycle to a monthly payment cycle but which requires the customer to sign up for direct debit as a method of payment. The move from quarterly to monthly billings under the WIPPS plan allows customers to be charged a more manageable monthly bill rather than facing a larger bill every three months, penalty free due to the direct withdrawal requirement. Currently about 14.3 % of the City's Water & Sewer customers take advantage of the monthly payment plan.

STRATEGIC PLAN

Developing an appropriate utility rate structure forms the basis for the carrying out of the City's strategic and administrative plans as they relate to both the Waterworks and Sanitary Sewer Utilities. This funding mechanism also provides for the funding necessary to move forward with infrastructure renewal and supports the administrative strategic theme of enhancing infrastructure planning and management.

BYLAW OR POLICY IMPLICATIONS

The approval of the recommendation in this report will result in the need to amend the rate schedule in Bylaw No. 5152 The Sewer and Water Utility Bylaw.

FINANCIAL IMPLICATIONS

The proposed rate increases and levy introduction for the Waterworks Utility and the rate increase for the Sanitary Sewer Utility will generate annually approximately \$2,192,000 and \$414,000 respectively. It is important to note that taxpayers will see a corresponding drop in the monies levied for the hospital of \$1,620,000 annually.

PUBLIC NOTICE

Public Notice pursuant to the Public Notice Policy as incorporated into the City Administration Bylaw No. 5175 of 2016 is not required.

PRESENTATION

VERBAL: X AUDIO/VISUAL: NONE:

ATTACHMENTS

- 1) 2019 to 2023 Waterworks Planned Capital Expenditures.
- 2) 2019 to 2023 Waterworks Financial Model.
- 3) 2019 to 2023 Sanitary Sewer Planned Capital Expenditures.
- 4) 2019 to 2023 Wastewater Financial Model.
- 5) 2017 Utility Rate Comparison.
- 6) Comparison to City of Regina Utility Rates.
- 7) Potential Waterworks Infrastructure Levy examples.

| Brian Acker | | |
|--|---------------|-------------------|
| Brian Acker, B.Comm., CPA, CMA Director of Financial Services | | |
| BA/sp | | |
| Attachs. | | |
| APPROVAL OF REPORT RECEIVED | | COMMENTS RECEIVED |
| <u>Jim Puffalt</u> Jim Puffalt, City Manager | _ | |
| <u>Fraser Tolmie</u> Fraser Tolmie, Mayor | _ | |
| To be completed by the Clerk's Department o | | |
| Presented to Regular Council or Executive Co | ommittee on | |
| No | Resolution No | |

Respectfully Submitted By,

ATTACHMENT #1 – 2019 TO 2023 Waterworks Planned Capital Expenditures

| Object Account | Total 2018 | Carry Forward 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
|---------------------------------------|------------|-----------------------|------------|------------|------------|------------|------------|------------|
| 9618 - WW1 WATER DISTRIBUTION | 679,000 | 400,000 | 310,000 | 653,000 | 666,000 | 675,000 | 675,000 | 2,979,000 |
| 9604 - WW4 WATER RESERVOIRS | 13,358,724 | 12,500,000 | 7,100,000 | 2,000,000 | 2,300,000 | 2,300,000 | 2,200,000 | 15,900,000 |
| 9612 - WW5 BPWTP | 5,634,163 | 5,629,381 | - | - | - | - | - | - |
| 9616 - WW16 BPWTP TRANSMISSION LINE | 21,103,139 | 4,110,000 | 3,500,000 | 100,000 | - | - | - | 3,600,000 |
| 9625 - WW25 WATERWORKS LOAN REPAYMENT | 2,679,000 | | 4,423,349 | 5,857,000 | 6,751,287 | 6,751,287 | 6,751,287 | 30,534,210 |
| 9650 - WS1 RAW WATER ASSETS | 200,000 | 200,000 | - | - | - | - | - | - |
| 9609 - WW9 FEEDER MAINS | 2,885,000 | 2,772,494 | 2,000,000 | 2,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 7,000,000 |
| 9617 - WW17 CAST IRON WATERMAIN REP | 8,267,464 | 1,810,534 | 6,500,000 | 6,500,000 | 6,500,000 | 6,500,000 | 6,500,000 | 32,500,000 |
| Water Utility Reserve Summary | 54,806,490 | 27,422,409 | 23,833,349 | 17,110,000 | 17,217,287 | 17,226,287 | 17,126,287 | 92,513,210 |



City of Moose Jaw Waterworks Utility 2019 to 2023 Financial Model



| Waterworks Utility - Forecast | | | | | | COME I | | | | | |
|---|---------------|--------------|---|----------|--------------|--------|------------------------|----------|--------------|----------|-------------|
| Revised November 22nd, 2018 | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | 2023 |
| | | 16-7 | | | | | | | | | 100000 |
| Operating Budget Model | | | | | | | | | | | |
| Revenues: | | | | | | | | | | | |
| General Service | \$ 10,600,000 | T\$ | 11,029,300 | I s | 11,775,710 | 1 \$ | 12,411,598 | \$ | 13,081,824 | 1 \$ | 13,788,243 |
| Utility Billing Penalties | 58,277 | Ť | 60,387 | Ψ. | 63,648 | Ψ | 67.085 | Ψ | 70.707 | T W | 74,520 |
| Connection Fees | 62,235 | | 62,940 | - | 63,000 | | 65,000 | | 67,000 | | 70,000 |
| Water Depots | 35,075 | \vdash | 28,390 | \vdash | 29,923 | | 31,539 | | 33,242 | | 35,037 |
| House Connections | 300,000 | \vdash | 300,000 | \vdash | 315,000 | | 330,750 | | 347,288 | | 364,652 |
| Miscellaneous Revenue | 1,092 | 1 | 1,000 | \vdash | 1,000 | - | 1,000 | \vdash | 1,000 | | 1,000 |
| Water Meter Revenue | 17,000 | \vdash | 20,000 | \vdash | 21.000 | - | 22,000 | \vdash | 23.000 | - | 24.000 |
| Total Revenues | \$ 11,073,679 | \$ | 11,502,017 | \$ | 12,269,281 | \$ | 12,928,972 | \$ | 13,624,061 | \$ | 14,357,457 |
| | | | , | 1 7 | | 1 4 | ,0_0,0 | Ι Ψ | 10,021,001 | 1 4 | 1 1,007,101 |
| Expenditures: | | | | | | | | | | | |
| Production | \$ 2,971,446 | \$ | 3,047,945 | \$ | -1 | \$ | 3,752,742 | \$ | .,, | \$ | 4,266,440 |
| Distribution | 4,018,372 | | 4,032,213 | | 4,128,986 | | 4,228,082 | | 4,329,556 | | 4,433,465 |
| Administration | 1,361,636 | | 1,500,084 | | 1,549,711 | | 1,613,249 | | 1,669,331 | | 1,727,712 |
| Total Expenditures | \$ 8,351,454 | \$ | 8,580,242 | \$ | 8,958,487 | \$ | 9,594,073 | \$ | 10,043,056 | \$ | 10,427,617 |
| Reserve Contribution | \$ 2.722.225 | 1 \$ | 2,921,775 | 2 | 3,310,794 | \$ | 3,334,899 | \$ | 3,581,006 | \$ | 3,929,840 |
| Reserve Cashflow Model | 2018 | IΨ | 2019 | Ψ | | 1 4 | | Ψ | | 10 | |
| Opening Balance of Reserve | \$ 8,326,765 | \$ | 18,138,802 | \$ | (3,743,594) | \$ | 2021 | \$ | 7,075,030 | \$ | 2023 |
| Reserve Contribution | 2.722.225 | φ | 2,921,775 | Ф | 3,310,794 | Ф | 4,086,191 3,334,899 | \$ | | Þ | 445,974 |
| nterest Revenue | 238,190 | \vdash | 169,143 | - | 4,452 | ├ | 159,042 | <u> </u> | 3,581,006 | <u> </u> | 3,929,840 |
| Borrowing Proceeds | 30,000,000 | ┢ | 20,000,000 | - | 15.000.000 | - | | _ | 116,562 | - | (88,760 |
| Gas Tax Funding | 2,033,041 | ┝ | 2,082,952 | H | | _ | 10,000,000 | _ | 71 | - | |
| Borrowing Repayment | (504,212) | - | (4,423,349) | | 2,082,952 | _ | 2,082,952 | _ | 2,082,952 | - | 2,082,952 |
| Tax Funding | | - | 1 1 1 - 1 | - | (5,857,000) | _ | (6,751,287) | _ | (6,751,287) | _ | (6,751,287 |
| Infrastructure Levy | 2,706,874 | - | 2,836,492 | - | 2,921,587 | _ | 3,009,234 | _ | 3,099,511 | _ | 3,192,497 |
| Carry Forwards | - | ┝ | 1,363,000 | <u> </u> | 1,620,000 | _ | 1,620,000 | <u> </u> | 1,717,200 | _ | 1,820,232 |
| | (07.004.004) | - | (27,422,409) | <u> </u> | - | _ | | _ | - | _ | - |
| Capital Expenditures Closing Balance of Reserve | (27,384,081) | - | (19,410,000) | - | (11,253,000) | | (10,466,000) | _ | (10,475,000) | | (10,375,000 |
| Forecast Rates: | \$ 18,138,802 | \$ | (3,743,594) | \$ | 4,086,191 | \$ | 7,075,030 | \$ | 445,974 | \$ | (5,743,552 |
| | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | 2023 |
| Projected Key Rates | | | | | | 168 | | | | | |
| Anticipated Cost Increases | 2.4% | | 2.4% | | 2.4% | | 2.4% | | 2.4% | | 2.49 |
| Production Cost Increases | 5.0% | L | 5.0% | | 5.0% | | 5.0% | | 5.0% | | 5.0% |
| Approved Rate Structure | 9.0% | | 0.0% | | 0.0% | | 0.0% | | 0.0% | | 0.0% |
| Proposed Rate Structure | 0.0% | | 6.0% | | 6.0% | | 6.0% | | 6.0% | | 6.0% |
| Conservation Rate | 10.0% | and the same | 10.0% | | 10.0% | | 10.0% | | 10.0% | | 10.0% |
| Average Cost Example | 2018 | | 2019 | | 2020 | | 2024 | | 2000 | No. | 0000 |
| 75M3 per Qtr 15 - 20mm Meter | | 0 | | 0 | | • | 2021 | • | 2022 | • | 2023 |
| 25M3 per Mnth 15 - 20mm Meter | | \$ | 192.81 | \$ | 204.38 | \$ | 216.64 | \$ | 229.64 | \$ | 243.41 |
| Infrastructure Levy-15-20mm/Mnth | \$ 60.63 | \$ | 64.27 | \$ | 68.13 | \$ | 72.21 | \$ | 76.55 | \$ | 81.14 |
| mirastructure Levy-15-20mm/Ninth | - ¢ | \$ | 8.33 | \$ | 8.33 | \$ | 8.33 | \$ | 8.83 | \$ | 9.36 |

ATTACHMENT #3 – 2019 TO 2023 Sanitary Sewer Planned Capital Expenditures

| Object Account | Total 2018 | Carry Forward 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
|--------------------------------------|------------|-----------------------|-----------|-----------|------------|-----------|-----------|------------|
| 9731 - S1 SANITARY SEWERS | 1,611,000 | 1,175,000 | 1,569,000 | 2,906,000 | 1,150,000 | 1,000,000 | 1,000,000 | 7,625,000 |
| 9733 - S3 WASTEWATER TREATMENT PLANT | 1,428,252 | 933,000 | 770,000 | 543,000 | 1,432,000 | 500,000 | 500,000 | 3,745,000 |
| 9734 - S4 LIFT STATIONS | 300,000 | 300,000 | 370,000 | 390,000 | 6,250,000 | 4,500,000 | 200,000 | 11,710,000 |
| 9725 - S25 WASTEWATER LOAN REPAYMENT | 1,545,688 | | 1,544,494 | 1,545,278 | 1,546,461 | 1,545,068 | 644,832 | 6,826,133 |
| Sanitary Sewage Reserve Summary | 4,884,940 | 2,408,000 | 4,253,494 | 5,384,278 | 10,378,461 | 7,545,068 | 2,344,832 | 29,906,133 |



City of Moose Jaw Sanitary Sewer (Wasterwater) Utility 2019 to 2023 Financial Model



| Management of Heilites Frances | | | | | | | | | | | |
|--|--------------|-----|-------------|----|-------------|----|-------------|--------|-------------|------|------------|
| Wastewater Utility - Forecast November 22, 2018 | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | 2022 |
| 14040111501 22, 2010 | 2010 | | 2010 | | 2020 | | 2021 | | 2022 | | 2023 |
| Operating Budget Model | | | | | | | | Mes en | | | |
| Revenues: | | - 6 | | | | | | | | 1 14 | |
| General Service | \$ 7,670,000 | \$ | 7,980,635 | \$ | 8,520,726 | \$ | 8,980,845 | \$ | 9,465,811 | \$ | 9,976,964 |
| Sewer Blocks | 450 | | 806 | | 900 | | 1,000 | Ė | 1,100 | Ť | 1,200 |
| Utility Billing Penalties | 44,998 | | 46,217 | | 48,713 | | 51,343 | | 54,116 | | 57,038 |
| Septage Fees | 34,793 | | 26,811 | | 28,000 | | 29,000 | | 30,000 | | 31,000 |
| House Connections | 400,000 | | 400,000 | | 420,000 | | 441,000 | | 463,050 | | 486,203 |
| Total Revenues | \$ 8,150,241 | \$ | 8,454,469 | \$ | 9,018,338 | \$ | 9,503,188 | \$ | 10,014,076 | \$ | 10,552,405 |
| Expenditures: | | | | | = 1 , | | - 72-5 | | | | |
| Administration | \$ 1,000,542 | \$ | 1,038,449 | \$ | 1,069,700 | \$ | 1,112,800 | \$ | 1,152,288 | \$ | 1,193,415 |
| Sewage Treatment | 2,043,742 | | 2,164,488 | | 2,216,436 | | 2,269,630 | | 2,324,101 | | 2,379,880 |
| Sanitary Sewers | 1,229,613 | | 1,188,246 | | 1,216,764 | | 1,245,966 | | 1,275,869 | | 1,306,490 |
| Total Expenditures | \$ 4,273,897 | \$ | 4,391,183 | \$ | 4,502,899 | \$ | 4,628,396 | \$ | 4,752,259 | \$ | 4,879,785 |
| Reserve Contribution | \$ 3,876,344 | \$ | 4,063,286 | \$ | 4,515,439 | \$ | 4,874,792 | \$ | 5,261,817 | \$ | 5,672,620 |
| Reserve Cashflow Model | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | 2023 |
| Opening Balance of Reserve | \$ 4,068,572 | 1\$ | 3,994,859 | \$ | 1,460,754 | \$ | 618.952 | \$ | (4,946,385) | \$ | (7,421,338 |
| Reserve Contribution | 3,876,344 | | 4,063,286 | | 4,515,439 | | 4,874,792 | - | 5,261,817 | | 5,672,620 |
| nterest Revenue | 72,571 | | 64,103 | | 27,036 | | (61,667) | | (191,702) | | (196,166 |
| Borrowing Proceeds | - | | X= % | | _ | | - | | - (101,101) | | - (.00,.0 |
| Building Canada Funding | = | T | - | | - | | _ | | _ | | |
| nfrastructure Levy | - | | - | | _ | | _ | | - | | _ |
| Borrowing Repayment | (1,545,688) | | (1,544,494) | | (1,545,278) | | (1,546,461) | _ | (1,545,068) | | (644,832 |
| Carry Forwards | - | | (2,408,000) | | - | | - | | - | | (0 1 1,002 |
| Capital Expenditures | (2,476,940) | | (2,709,000) | | (3,839,000) | | (8,832,000) | | (6,000,000) | | (1,700,000 |
| Closing Balance of Reserve | \$ 3,994,859 | \$ | 1,460,754 | \$ | 618,952 | \$ | (4,946,385) | \$ | (7,421,338) | | (4,289,716 |
| Forecast Rates: | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | 2023 |
| Projected Key Rates | | | | | | | | | | 7-71 | |
| Anticipated Cost Increases | 2.4% | | 2.4% | | 2.4% | | 2.4% | | 2.4% | | 2.49 |
| Approved Rate Structure | 6.0% | | 0.0% | | 0.0% | | 0.0% | | 0.0% | | 0.09 |
| Proposed Rate Structure | 0.0% | | 6.0% | | 6.0% | | 6.0% | | 6.0% | | 6.09 |
| Conservation Rate | 10.0% | | 10.0% | | 10.0% | | 10.0% | | 10.0% | | 10.09 |
| Average Cost Example | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | 2023 |
| 75M3 per Qtr 15 - 20mm Meter | \$ 147.18 | \$ | 156.01 | \$ | 165.37 | \$ | 175.29 | \$ | 185.81 | \$ | 196.96 |
| 25M3 per Mnth 15 - 20mm Meter | \$ 49.06 | \$ | 52.00 | \$ | 55.12 | \$ | 58.43 | \$ | 61.94 | \$ | 65.65 |
| The second secon | 4 10.00 | ĮΨ | 32.00 | Ψ | 00.12 | Ψ | 30.43 | φ | 01.94 | Ф | 05.05 |

Residential Water & Sewer

| 25M3 per Month - 3/4" service | 2017 Rank | |
|-------------------------------|-----------|----|
| Weyburn | 76.93 | 1 |
| Yorkton | 82.49 | 2 |
| Meadow Lake | 89.17 | 3 |
| Swift Current | 99.89 | 4 |
| Moose Jaw | 101.91 | 5 |
| Prince Albert | 103.27 | 6 |
| Saskatoon | 104.03 | 7 |
| Melfort | 104.82 | 8 |
| Estevan | 107.16 | 9 |
| North Battleford | 119.12 | 10 |
| Regina | 131.00 | 11 |
| Martensville | 136.00 | 12 |
| Warman | 139.66 | 13 |
| Melville | 150.03 | 14 |
| Humboldt | 165.29 | 15 |

Commercial Water & Sewer

| 500M3 per Month - 2" service | 2017 Rank | Z . |
|------------------------------|-----------|-----|
| Weyburn | 916.35 | 1 |
| Meadow Lake | 1,086.67 | 2 |
| Prince Albert | 1,262.84 | 3 |
| Moose Jaw | 1,400.08 | 4 |
| Melfort | 1,426.55 | 5 |
| Yorkton | 1,483.70 | 6 |
| Swift Current | 1,561.45 | 7 |
| Melville | 1,613.13 | 8 |
| North Battleford | 1,734.25 | 9 |
| Estevan | 1,781.65 | 10 |
| Saskatoon | 1,880.41 | 11 |
| Regina | 1,901.80 | 12 |
| Martensville | 1,969.50 | 13 |
| Humboldt | 2,715.03 | 14 |
| Warman | 3,025.47 | 15 |

ATTACHMENT #6 – Comparison to City of Regina Utility Rates

Moose Jaw

| 25 m3 | | 3/4" Service | | |
|----------|---------|--------------|--|--|
| variable | | | | |
| water | 1.2419 | 31.05 | | |
| sewer | 1.3092 | 32.73 | | |
| | | 63.78 | | |
| Fixed | Month | | | |
| water | 29.58 | | | |
| sewer | 16.33 | | | |
| | | 45.91 | | |
| | Monthly | 109.69 | | |

Regina

| 3, | /4" Service |
|-------|-----------------------------------|
| | |
| 1.92 | 48.00 |
| 1.71 | 42.75 |
| | 90.75 |
| / | |
| 0.81 | 24.30 |
| 0.62 | 18.60 |
| | 42.90 |
| | |
| nthly | 133.65 |
| | 1.92 1.71 / 0.81 0.62 |

ATTACHMENT #7 – Potential Waterworks Infrastructure Levy Examples

Potential Water Works Infrastructure Levy

Below are examples of how an infrastructure levy might be structured to replace the Hospital Levy collecting the same amount of funds \$1,620,000 annually.

EXAMPLE #1

| Meter Size | # of Meters | Anı | nual Amount of Levy | Fu | unds Generated |
|--------------------|-------------|-----|------------------------|----|----------------|
| 15 - 20 mm | 11,804 | \$ | 131.00 | \$ | 1,546,324 |
| 21 - 30 mm | 257 | \$ | 131.00 | \$ | 33,667 |
| 31 - 40 mm | 47 | \$ | 131.00 | \$ | 6,157 |
| 41 - 50 mm | 230 | \$ | 131.00 | \$ | 30,130 |
| 51 - 75 mm | 22 | \$ | 131.00 | \$ | 2,882 |
| 76 - 100 mm | 11 | \$ | 131.00 | \$ | 1,441 |
| 101 - 150 mm | 3 | \$ | 131.00 | \$ | 393 |
| 151 - 200 mm | - | \$ | 131.00 | \$ | - |
| greater than 200mm | 4 | \$ | 131.00 | \$ | 524 |
| | 12,378 | | • | \$ | 1,621,518 |

Includes Rural Accounts

levy 100

EXAMPLE #2

| | | 11.0 | | | |
|--------------------|-------------|------|----------------|----|----------------|
| | | Anı | nual Amount of | | |
| Meter Size | # of Meters | | Levy | Fι | ınds Generated |
| 15 - 20 mm | 11,804 | \$ | 100.00 | \$ | 1,180,400 |
| 21 - 30 mm | 257 | \$ | 200.00 | \$ | 51,400 |
| 31 - 40 mm | 47 | \$ | 400.00 | \$ | 18,800 |
| 41 - 50 mm | 230 | \$ | 800.00 | \$ | 184,000 |
| 51 - 75 mm | 22 | \$ | 1,600.00 | \$ | 35,200 |
| 76 - 100 mm | 11 | \$ | 3,200.00 | \$ | 35,200 |
| 101 - 150 mm | 3 | \$ | 6,400.00 | \$ | 19,200 |
| 151 - 200 mm | - | \$ | 12,800.00 | \$ | - |
| greater than 200mm | 4 | \$ | 25,600.00 | \$ | 102,400 |
| | 12,378 | , | • | \$ | 1,626,600 |

Includes Rural Accounts