Agenda – Standing Policy Committee on Water, Waste and Environment – January 8, 2024

REPORTS

Item No. 5 2024 to 2027 Water and Sewer Rates

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

1. That Council approve a four-year increase to the Water volume rate, based on the amount of water used in cubic metres (m³) effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Water	Approved	Recommended	Recommended	Recommended	Recommended
	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
Rate (per m ³)	\$2.00	\$2.04	\$2.09	\$2.15	\$2.23

2. That Council approve a four-year increase to the Sewer volume rate, based on the amount of water used in cubic metres (m³), which includes an amount allocated to the Environmental Projects Reserve (EPR) effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Sewer	Approved	Recommended	Recommended	Recommended	Recommended
	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
Rate (per m3)	\$2.96	\$3.21	\$3.47	\$3.74	\$4.00
Allocated to EPR (per m3)	\$0.35	\$0.40	\$0.45	\$0.50	\$0.55

3. That Council approve a four-year increase to the Daily Basic Charge rate for all meter sizes effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Meter Size (inches)	Approved rate/day 2023	Recommended rate/day April 1, 2024	Recommended rate/day January 1, 2025	Recommended rate/day January 1, 2026	Recommended rate/day January 1, 2027
5/8	\$0.73	\$0.75	\$0.77	\$0.78	\$0.80
3/4	\$0.77	\$0.79	\$0.81	\$0.82	\$0.84
1	\$0.88	\$0.90	\$0.92	\$0.94	\$0.97
1.5	\$1.02	\$1.05	\$1.07	\$1.10	\$1.13
2	\$1.41	\$1.45	\$1.49	\$1.54	\$1.58
3	\$4.30	\$4.45	\$4.59	\$4.74	\$4.89
4	\$5.37	\$5.56	\$5.74	\$5.93	\$6.11
6	\$7.87	\$8.14	\$8.42	\$8.69	\$8.97
8	\$10.72	\$11.10	\$11.48	\$11.86	\$12.24
10	\$13.58	\$14.06	\$14.54	\$15.02	\$15.51
Private meter	\$0.68	\$0.70	\$0.71	\$0.73	\$0.75

Agenda – Standing Policy Committee on Water, Waste and Environment – January 8, 2024

WINNIPEG PUBLIC SERVICE RECOMMENDATION (continued):

4. That Council approve a four-year increase per property of the sewer service buy-in charge for service sharing agreements, based on water meter size in inches or equivalent maximum water demand (MWD) in litres per second (l/s), effective February 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Sewer Services		Approved	Recommended	Recommended	Recommended	Recommended
Buy-In Ch	arge	rate/property	rate/property	rate/property	rate/property	rate/property
Water Meter Size	MWD					
(inches)	(litres/sec)	2023	February 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
5/8"	0.0-0.9	\$3,100	\$3,200	\$3,400	\$3,500	\$3,700
3/4"	0.91-1.3	\$4,600	\$4,800	\$5,000	\$5,200	\$5,400
1"	1.31-2.4	\$7,700	\$8,000	\$8,400	\$8,700	\$9,100
1 1/2"	2.41-3.8	\$15,600	\$16,300	\$17,000	\$17,700	\$18,500
2"	3.81-7.6	\$25,000	\$26,000	\$27,200	\$28,400	\$29,600
3"	>7.6	\$47,000	\$49,000	\$51,100	\$53,300	\$55,600
4"	>7.6	\$72,500	\$75,600	\$78,900	\$82,300	\$85,800

5. That Council approve a four-year increase per cubic metre (m³) for Water from Standpipe rate effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Standning Water	Approved	Recommended	Recommended	Recommended	Recommended
Stanupipe water	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
Rate (per m3)	\$4.25	\$5.25	\$5.56	\$5.89	\$6.23

6. That an increase per assessable foot to the Local Improvement Rates for Water Main, Sewer Main, Land Drainage Sewer Lateral and Land Drainage Sewer Trunk effective April 1, 2024, be approved as follows:

Local Improvement Rates	Approved	Recommended
	2023	April 1, 2024
Watermain Local (per frontage foot)	\$122.00	\$165.00
Wastewater Sewer (per frontage foot)	\$122.00	\$181.00
Land Drainage Sewer Laterals (per	\$40.00	\$144.00
Land Drainage Sewer Trunks (per	\$55.00	\$76.00

7. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

ADMINISTRATIVE REPORT

Title: 2024 to 2027 Water and Sewer Rates

Critical Path: Standing Policy Committee on Water, Waste and Environment – Executive Policy Committee – Council

AUTHORIZATION

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EXECUTIVE SUMMARY

This report recommends approval of the 2024 to 2027 proposed water and sewer rates. The list of rates is in Appendix A. The water volume rate is increasing on average by 2.8 percent. The sewer volume rate is increasing on average by 7.8 percent.

The quarterly residential customer bill for a family of four and 50 cubic meters of water use would increase by:

Residential Customer Quarterly Bill (50 m3 per quarter/ family of four)	2023	2024	2025	2026	2027
Water	\$100	\$102	\$105	\$108	\$112
Sewer	\$148	\$157	\$173	\$187	\$200
DBC	\$67	\$68	\$70	\$71	\$73
Total Quarterly Bill	\$315	\$327	\$348	\$366	\$385
Quarterly increase		\$12	\$21	\$18	\$19
Total Annual Bill	\$1260	\$1308	\$1392	\$1464	\$1540
Annual increase - \$		\$48	\$84	\$72	\$76
Annual increase - %		3.8%	6.4%	5.2%	5.2%

Rate changes are primarily due to major capital and operating cost increases. The major assumptions used for the recommended rates are:

- Increased cost sharing from Provincial and Federal governments to a full one-third of the current cost of the North End Sewage Treatment Plant (NEWPCC) Upgrade: Biosolids Facilities project.
- Increased funding for CentrePort South Servicing and the Southwest Interceptor project.
- Inclusion of the impact of the Water Meter Renewals (WMtrR) project.
- No new funding for the NEWPCC Upgrade: Nutrient Removal project.
- No changes to the current funding for Combined Sewer Overflow (CSO) Program.

The water and sewer rates are reviewed each year. Changes in funding from other levels of government or internal finances will impact the rate model. The Public Service will report back to Council with any recommended adjustment to the rates if the changes are not manageable in the approved four-year rate schedule.

RECOMMENDATIONS

1. That Council approve a four-year increase to the Water volume rate, based on the amount of water used in cubic metres (m³) effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Water	Approved	Recommended	Recommended	Recommended	Recommended
Water	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
Rate (per m ³)	\$2.00	\$2.04	\$2.09	\$2.15	\$2.23

2. That Council approve a four-year increase to the Sewer volume rate, based on the amount of water used in cubic metres (m³), which includes an amount allocated to the Environmental Projects Reserve (EPR) effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Sower	Approved	Recommended	Recommended	Recommended	Recommended
Sewer	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
Rate (per m3)	\$2.96	\$3.21	\$3.47	\$3.74	\$4.00
Allocated to EPR (per m3)	\$0.35	\$0.40	\$0.45	\$0.50	\$0.55

3. That Council approve a four-year increase to the Daily Basic Charge rate for all meter sizes effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Meter Size (inches)	Approved rate/day 2023	Recommended rate/day April 1, 2024	Recommended rate/day January 1, 2025	Recommended rate/day January 1, 2026	Recommended rate/day January 1, 2027
5/8	\$0.73	\$0.75	\$0.77	\$0.78	\$0.80
3/4	\$0.77	\$0.79	\$0.81	\$0.82	\$0.84
1	\$0.88	\$0.90	\$0.92	\$0.94	\$0.97
1.5	\$1.02	\$1.05	\$1.07	\$1.10	\$1.13
2	\$1.41	\$1.45	\$1.49	\$1.54	\$1.58
3	\$4.30	\$4.45	\$4.59	\$4.74	\$4.89
4	\$5.37	\$5.56	\$5.74	\$5.93	\$6.11
6	\$7.87	\$8.14	\$8.42	\$8.69	\$8.97
8	\$10.72	\$11.10	\$11.48	\$11.86	\$12.24
10	\$13.58	\$14.06	\$14.54	\$15.02	\$15.51
Private meter	\$0.68	\$0.70	\$0.71	\$0.73	\$0.75

4. That Council approve a four-year increase per property of the sewer service buy-in charge for service sharing agreements, based on water meter size in inches or equivalent maximum water demand (MWD) in litres per second (I/s), effective February 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Sewer Ser	vices	Approved	Recommended	Recommended	Recommended	Recommended
Buy-In Ch	arge	rate/property	rate/property	rate/property	rate/property	rate/property
Water Meter Size	MWD					
(inches)	(litres/sec)	2023	February 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
5/8"	0.0-0.9	\$3,100	\$3,200	\$3,400	\$3,500	\$3,700
3/4"	0.91-1.3	\$4,600	\$4,800	\$5,000	\$5,200	\$5,400
1"	1.31-2.4	\$7,700	\$8,000	\$8,400	\$8,700	\$9,100
1 1/2"	2.41-3.8	\$15,600	\$16,300	\$17,000	\$17,700	\$18,500
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4"	>7.6	\$72,500	\$75,600	\$78,900	\$82,300	\$85,800

5. That Council approve a four-year increase per cubic metre (m³) for Water from Standpipe rate effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027, as follows:

Standning Water	Approved	Recommended	Recommended	Recommended	Recommended
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Rate (per m3)	\$4.25	\$5.25	\$5.56	\$5.89	\$6.23

 That an increase per assessable foot to the Local Improvement Rates for Water Main, Sewer Main, Land Drainage Sewer Lateral and Land Drainage Sewer Trunk effective April 1, 2024, be approved as follows:

Local Improvement Rates	Approved	Recommended
	2023	April 1, 2024
Watermain Local (per frontage foot)	\$122.00	\$165.00
Wastewater Sewer (per frontage foot)	\$122.00	\$181.00
Land Drainage Sewer Laterals (per	\$40.00	\$144.00
Land Drainage Sewer Trunks (per	\$55.00	\$76.00

7. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

Increases in water and sewer rates above inflation require Council approval.

IMPLICATIONS OF THE RECOMMENDATIONS

The Public Service is requesting an increase to the water and sewer rates effective April 1, 2024, January 1, 2025, January 1, 2026, and January 1, 2027.

The water and sewer financial plan assume a Class 3 cost estimate for NEWPCC Upgrade: Biosolids Facilities - for a total estimate of \$1.035 billion (\$929 million plus \$106 million in debt financing). The rate model includes the existing funding agreement for \$368 million, and also assumes a future additional \$279 million from other levels of government to meet the one-third cost sharing approach. NEWPCC Upgrade: Nutrient Removal Facilities has not been incorporated into the financial plan pending an update to the preliminary design and cost estimate, and a review of the procurement method.

The financial plan does not include any new City-only funding of the CSO program needed for a 2045 completion date based on total estimated program cost. The rate model will be updated when viability of other sources of funding have been determined.

Failure to access funding from other levels of government will result in higher rate increases than projected in this report or increased debt levels, which will require the Public Service to report back to Council.

HISTORY/DISCUSSION

The Water and Waste Department (WWD) employs industry best practices to establish water and sewer rates. The rates are designed to fund all costs of operations and capital projects related to water and sewer quality, city growth and regulatory requirements.

A. WHAT DRIVES RATES

1. Capital Spending and Federal/Provincial Funding

The water and sewer financial plan is based on cash flows associated with WWD's asset management strategy and capital budget (Appendix C). Capital improvement programs are funded through a combination of debt, reserves, equity and other levels of government. The use of multiple funding sources supports intergenerational equity and helps to mitigate rate increases in any given year.

The table below summarizes the key increases to capital which are impacting rates, comparing cash flow assumptions made in the 2020-2023 financial analysis to the current 2024-2027. Project totals include debt servicing costs where applicable.

Rate Model Major Capital Changes ('000)			
	<u>2020-23</u>	<u>2024-27</u>	
	Rate Model	Rate Model	Increase
Environmental Projects Reserve			
NEWPCC - Headworks Facilities	408,380	473,380	65,000
NEWPCC Biosolids Facilities	552,712	1,035,000	482,288
NEWPCC - Nutrient Removal	-	18,000	18,000
Combined Sewer Overflow (10-year)	308,672	367,540	58,868
SEWPCC Upgrade	345,600	375,600	30,000
NEWPCC Interim Phosphorous	-	19,300	19,300
	1,615,364	2,288,820	673,456
Other Major Capital Projects			
CentrePort South	2,150	74,850	72,700
Southwest Interceptor	41,350	96,350	55,000
Advanced Metering System	113,000	135,000	22,000
	156,500	306,200	149,700
Combined Totals	\$ 1,771,864	\$ 2,595,020	\$ 823,156

North End Sewage Treatment Plant (NEWPCC) Upgrade

The NEWPCC is the City's largest sewage treatment plant and treats approximately 60 percent of the City's wastewater. The NEWPCC is licensed under the Environment Act License 2684 RRR, issued June 19, 2009. NEWPCC requires upgrading to meet the new effluent quality limits specified in its Environment Act License and in The Water Protection Act. Effluent limits are intended to mitigate impacts on water quality in the Red River and further downstream in Lake Winnipeg and beyond. The proposed financial analysis includes the following:

- NEWPCC Upgrade: Headworks Facilities, total cost at \$473 million
- NEWPCC Upgrade: Biosolids Facilities, \$1.035 billion
- Federal and Provincial Funding of \$581 million towards these projects
- NEWPCC Upgrade: Nutrient Removal Facilities is currently unfunded and not included in the proposed rates

NEWPCC Upgrade: Biosolids Facilities

On July 21, 2022, Council was informed of an updated Class 3 cost estimate for the Biosolids Facilities of \$912 million, an increase of \$359 million from the current approved Capital Budget (\$553 million). This increase was driven by growth, project delay, project financing, market adjustment, and regulatory/scope increase. A budget increase was referred to the 2024-2027 multi-year budget process.

Due to rapidly-changing market conditions, an updated Class 3 cost estimate was obtained in 2023 with an estimated total cost at \$1.035 billion (\$929 million plus \$106 million in debt financing). The increase above the 2022 estimate is primarily influenced by increased construction costs, and debt and financing expenses.

On September 29, 2023 Council approved a budget increase of \$482 million funded by \$351 million debt, \$76 million retained earnings and \$55 million Environmental Projects Reserve. The rate model includes the existing funding agreement for \$368 million, and also assumes a future additional \$279 million from other levels of government to meet the one-third cost sharing approach. If the City is unable to secure an increase in funding, the Public Service will report back to Council with required rate model adjustments.



NEWPCC Upgrade: Nutrient Removal Facilities

The impact of the Nutrient Removal Facilities on future rates will depend on the results of an updated cost estimate and negotiations with other levels of government about funding. For example, if funding for the Nutrient Removal project (current Class 5 estimate of \$828 million) is shared equally between federal and/or provincial funding, debt and rates, the annual bill for a residential customer (family of four, 200m³ annual consumption) will be 17 percent or \$3,040 less over the 10-year period than if the project is funded fully by sewer rates alone.

When a Class 3 estimate for the Nutrient Removal project is available, the public service will update the rate financial model and will report back to Council if there are any significant changes.

Combined Sewer Overflow (CSO) Mitigation

On April 29, 2021 Council approved an increase of 50 percent to the CSO budget between 2023-2026 (\$15 million each year for a total of \$60 million additional capital spending) to expedite the Armstrong Combined Sewer District separation work. Total spending for 2024-2033 is estimated at \$368 million and assumes no federal or provincial funding.

The CSO Master Plan schedule set in 2019 will require funding support from both Provincial and Federal governments to meet the 2045 deadline. The current level of funding will not meet the completion date of December 31, 2045 for CSO mitigation that was specified by the Province on November 13, 2019, and Council on June 23, 2022.

The Winnipeg Public Service was directed to prepare costing for the completion of the \$1.15 billion (class 5 estimate) Combined Sewer Overflow project by 2045. Two funding scenarios were prepared:

1. City only funding of the CSO Master Plan estimated capital cost of \$1.15 billion plus 3 percent inflation.



2. City only funding of the CSO Master Plan estimated capital cost with the maximum +100 percent of the Class 5 estimate range, \$2.3 billion plus 3 percent inflation.

If CSO spending is increased to meet the 2045 deadline with no federal or provincial funding, an average residential customer could pay an additional \$624 over the four-year approval period based on the \$1.15 billion estimate, and by \$1,655 based on the \$2.3 billion estimate.

	2024	2025	2026	2027
Annual change in bill: \$1.15B estimate	\$134	\$180	\$163	\$147
Annual Change in bill: \$2.3B estimate	\$384	\$475	\$422	\$374

The rate model will be updated when viability of other sources of funding for the CSO program completion date of 2045 has been determined.

South End Sewage Treatment Plant (SEWPCC) Nutrient Removal Upgrade/Expansion On May 27, 2021 and on July 21, 2022 Council approved a budget increase of \$16.5 million and 23.5 million respectively in order for the Department to manage the upgrades/expansion to the SEWPCC facility and meet provincial licensing requirements. Total updated cost of the project is estimated at \$375.6 million, including \$59.4 million in government funding.

NEWPCC Interim Phosphorous Removal

On February 25, 2021 Council approved the NEWPCC Interim Phosphorus Removal capital project with an AACE Class 4 capital cost estimate of \$10.5 million, and the financial operating and Environmental Projects Reserve (EPR) implications be referred to the 2022 budget process. A budget increase of \$6.5 million was approved by Council on July 21, 2022. Total updated cost of the project is estimated at \$19.3 million and the financial model assumes 100 percent funding by the EPR.

CentrePort South

The project includes detailed design and construction of a water feeder main extension, a new sewer lift station and force main, and interceptor extension, as well as land acquisition and administrative costs. Work will be separated into phases to provide servicing for the area as development occurs. Estimated cost included in the financial plan is \$74.85 million including \$40 million in government funding with the remaining to be funded equally by debt and retained earnings.

Southwest Interceptor

The Southwest Interceptor will provide an additional sewer crossing of the Red River. The major benefits include enabling growth in southwest Winnipeg and maintaining essential levels of service. The project will be completed in two phases; the estimated cost of the total project included in the financial plan is \$96.35 million, with \$7.6 million in government funding and the remaining to be funded equally by debt and retained earnings.

Advanced Metering System

Planned is the implementation of an advanced metering system (AMS) which includes an integrated system of smart meters, data management systems and networks that enables two-way communication between the utility and the customer. In 2023, a Class 3 capital estimate of \$135 million was obtained. The AMS will be fully funded by the Water Meter Renewal Reserve.

AMS will improve accuracy in billing and increase annual revenue by up to \$16.1 million post implementation. The revenue improvements and the associated increase in the water and sewer dividend have been incorporated into the water and sewer financial plan.

2. Revenue Requirements



For 2024, total water and sewer revenue requirements are estimated at \$396 million and will fund capital spending, transfers to reserves, transfer to support land drainage operating and capital, operating costs, debt servicing and the dividend.

The rate financial plan also incorporates the water and sewer utilities' 2024 Budget Risk List items which includes increased costs of, for example, chemicals, hauling, rental equipment and cut restoration services. Total costs are \$35.1 million for 2024-2027.



3. Consumption

For rate purposes, billed water consumption is estimated to marginally decline, approximately 0.02 percent per year over the 10-year financial forecast. Forecasts take into consideration historical trends, water planning and research, technology, population growth and anticipated changes in industry.

Declining consumption is a factor of technology, consumer preference and is consistent with cities surveyed (Appendix B) partially offset by population growth.

4. Debt Servicing

The Public Service utilizes some debt funding for legacy capital projects. Through the rate modeling and the capital budget process, a comprehensive funding plan is prepared which balances debt, equity and government funding. This manages the impact on short-term rate increases and supports intergenerational equity.

The Public Service adheres to the Council-approved Debt Strategy, which includes measures of affordability for the self-supporting utilities and the City of Winnipeg. Debt servicing as a percent of revenue for the City overall is not to exceed 11 percent. The utility's debt servicing as a percent of revenue is not to exceed 20 percent.

Debt Strategy

On October 28, 2015, Council adopted a Debt Strategy for Tax Supported, Utilities and total City borrowing.

\$15 million of Tax Supported and \$10 million of Utilities borrowing capacity will remain if Council approves the recommendations in this report. (based on 2024 borrowing estimates)

The impact of this debt financing falls within the debt limits established in the Council Policy as outlined in the table below:

Tax Supported net debt as a percentage of revenue not to exceed	80%
Forecasted peak rate including proposed debt from this report	56.1%
Utilities net debt as a percentage of revenue not to exceed	220%
Forecasted peak rate including proposed debt from this report	121.2%
Total City net debt as a percentage of revenue not to exceed	90%
Forecasted peak rate including proposed debt from this report	89.0%
Tax Supported debt servicing as a percent of revenue not to exceed	10%
Forecasted peak rate including proposed debt from this report	5.0%
Utilities debt servicing as a percent of revenue not to exceed	20%
Forecasted peak rate including proposed debt from this report	10.2%
Total City debt servicing as a percent of revenue not to exceed	11%
Forecasted peak rate including proposed debt from this report	7.8%
Tax Supported Debt per Capita not to exceed	1,500
Forecasted peak rate including proposed debt from this report	1,134

Utilities Debt per Capita not to exceed	1,500
Forecasted peak rate including proposed debt from this report	1,365
Total City Debt per Capita not to exceed	2,800
Forecasted peak rate including proposed debt from this report	2,456

5. Dividends

Based on the recommended rate increases, the Water and Waste projected dividends are as follows:

\$000s	Budget 2023	Recommended 2024	Recommended 2025	Recommended 2026	Recommended 2027
Water	\$15,875	\$16,155	\$16,727	\$17,348	\$18,172
Sewer	\$22,386	\$23,491	\$25,804	\$27,839	\$30,012
Total	\$38,261	\$39,647	\$42,531	\$45,187	\$48,184

The annual dividend represents the City's return on investment in the utility. On March 20, 2019 Council approved the utility dividend policy be adjusted from 12 percent to 11 percent of budgeted gross water and sewer sales. The 10-year financial plan assumes no change to the 11 percent rate.

Dividend policies exist in other cities surveyed. (Appendix D)

6. Reserves

a. Environmental Projects Reserve (EPR)

The EPR supports the sewage treatment improvement program, as directed by the Province and set forth in the Department's asset management strategy. Capital projects consist of biological nutrient removal and upgrades at the sewage treatment plants, biosolids management, and combined sewer overflow mitigation, including basement flood relief.

Timing of capital project implementation or changes to licensing requirements may impact reserve contributions.



The 10-year financial plan incorporates the following funding sources:

- Sewer volume rates funding is estimated at \$407 million which includes consumption allocations that are dedicated to funding EPR projects.
- Federal and provincial funding is estimated at \$737 million.
- Debt funding is estimated at \$330 million which assumes completion of the SEWPCC Upgrade, NEWPCC Upgrade projects 1 and 2, and current CSO mitigation strategy.
- Retained earnings funding is estimated at \$27 million.

Council approved practices state that the maximum reserve balance will be no more than the total of the projected share of EPR projects over the upcoming five-year forecast period. For future years, once sewage treatment plant upgrades are complete, rate contributions will match planned capital spending to meet anticipated ongoing CSO mitigation program requirements.

The Department will monitor reserve balances and adjust future contributions according to Council approved reserve practices, changes to licensing requirements or federal and provincial funding.

b. Sewer System Rehabilitation Reserve (SSRR)

The SSRR supports the sewer renewal program as set forth in the Department's asset management strategy. The 10-year financial plan incorporates funding from volume sewer rates and the timing of capital project implementation may impact reserve contributions. Annual contributions to the SSRR will be approximately equal to the subsequent year's program funding requirements.

Council approved practices state the maximum ending balance in the SSRR in any fiscal year can be approximately equal to the subsequent year's projected funding requirements. The

Department will monitor reserve balances and adjust contributions according to anticipated program requirements.

c. <u>Water Main Renewal Reserve (WMRR)</u>

The WMRR supports the renewal of water mains as set forth in the Department's asset management strategy. The 10-year financial plan incorporates funding from volume water rates and the timing of capital project implementation may impact reserve contributions. Annual contributions to the WMRR will be approximately equal to the subsequent year's water main renewal funding requirements.

Council approved practices state that the maximum ending balance in the WMRR in any fiscal year can be approximately equal to the subsequent year's projected funding requirements. The Department will monitor reserve balances and adjust contributions according to anticipated program requirements.

d. <u>Water Meter Renewal Reserve (WMtrRR)</u>

The Water Meter Renewal Reserve funds the replacement and renewal of aging water meters and an advanced metering system (AMS). The reserve is funded by the Daily Basic Charge.

In 2023, under a separate Council report, the Advanced Water Metering Solution Business Case recommends that the capital project Water Meter Renewals, with an AACE Class 3 capital cost estimate of \$135 million, be approved and advanced to 2024.

7. Financial Stability

Working capital is comprised of current assets (cash and accounts receivable) net of current liabilities (current accounts payable) – cash or near cash items that can respond quickly to unexpected fluctuations. The working capital target provides medium-term stability, adequate liquidity to sustain operations and the ability to absorb losses in any given year when consumption falls short of anticipated levels and/or unforeseen emergency funds are required.

Industry best practices recommend utilities maintain a minimum working capital target. The Water and Waste Department follows best practices, utilizing a combined water and sewer working capital target of approximately 8 percent or between 30 to 60 days cash and investments on hand.

Significant increases in capital and operating expenditures have resulted in lower projected working capital in 2026 and 2027. This is primarily during the most significant capital expenditures of the NEWPCC Upgrade: Biosolids Facilities project. The Department will continue to monitor working capital and adjust future expenditures and rates to ensure the stability of the utility and affordability for customers.

The water and sewer funds adhere to a set of operating principles. (Appendix E).

B. WHAT ARE THE RECOMMENDED RATES (Appendix A)

1. Water Rate

The Public Service is recommending an increase to the volume water rate, based on the amount of water used in cubic metres (m³) effective April 1, 2024 and January 1, 2025 to 2027. The water rate funds operating and maintenance costs (such as salary, services, materials, parts and supplies), debt payments on borrowing for the water treatment plant, transfers for

ongoing water main renewal programs, planned capital projects funded by retained earnings and the dividend.

10-year financial projections for Water can be found in Appendix F.

2. Sewer Rate

The Public Service is recommending an increase to the sewer rate, based on the amount of water used in cubic metres (m³) effective April 1,2024, and January 1, 2025 to 2027. The volume sewer rate includes a consumption allocation to fund the transfer to the Environmental Projects Reserve.

The financial plan reflects an increasing sewer rate over the next 10 years, primarily due to sewage treatment plant upgrades and ongoing CSO mitigation as required by provincial licenses.

The sewer rate funds operating and maintenance costs (such as salary, services, materials, parts and supplies), debt payments on new borrowing for provincially mandated capital projects, transfers for ongoing sewer main renewal programs, environmental projects reserve contributions, planned capital projects funded by retained earnings, transfer to support land drainage and flood control and the dividend.

10-year financial projections for Sewer can be found in Appendix F.

3. Daily Basic Charge

The Public Service is recommending an increase in the daily basic charge (DBC) for all meter sizes, effective April 1, 2024, and January 1, 2025 to 2027. Billed on a daily basis, this charge is based on meter size and covers the fixed cost of water meters (including meter maintenance and meter reading), billing and production costs, and Utility Billing Centre operations.

The DBC is also increasing as part of a multi-year strategy to fund a program for the replacement and renewal of aging water meters and an advanced metering system.

4. Capital Region Sewer Service Sharing Buy-In Charge

The Public Service is recommending an increase to the buy-in charge for service sharing agreements, effective February 1, 2024, and January 1 each year 2025 to 2027.

On December 12, 2012, Council approved the basic terms of service sharing agreements for the provision of sewer services to neighbouring municipalities. Service Sharing Agreements contain provisions relating to sewer charges, including a one-time buy-in charge for new properties as they connect to the sewer.

The buy-in charge is calculated based on water meter size in inches or on the equivalent maximum water demand (MWD) in litres per second (I/s).

5. Water from Standpipe

The Public Service is recommending an increase to the water from standpipe rate per cubic metre, effective April 1, 2024, and January 1, 2025 to 2027. The standpipe rate reflects water and sewer cost of service.

6. Local Improvement Rates

Local improvements are a way for the costs of new or upgraded City services, including underground installations (e.g., water mains, wastewater sewers, land drainage sewers) and surface work (e.g., lane pavement, lighting, sidewalks, boulevards), to be paid in full or in part, by the owners of property that is directly benefited by the new or upgraded City service. In newer developments, these costs are paid by the developer and are often included in the sale price of the house. When local improvements are authorized in more mature areas of the City, the City of Winnipeg pays the costs of these local improvements up front and then recovers the costs in full or in part from the owners of benefiting property.

The Water and Waste Department reviews local improvement costs on an annual basis. Costs per frontage foot will vary with each local improvement project based on the actual costs of construction, inflation cost increases and the complexity of the projects. Local improvement land drainage projects within mature neighbourhoods of the City have been infrequent over the last several years.

Currently the rates for local improvement are:

- water main \$122 per frontage foot
- wastewater sewer \$122 per frontage foot
- land drainage sewer laterals \$40 per frontage foot
- land drainage sewer trunks \$55 per frontage foot

These rates were last changed in 2008. The Winnipeg Public Service completed a cost of service analysis and recommends the following rates effective April 1, 2024:

- water main \$165 per assessable foot
- wastewater sewer \$181 per assessable foot
- land drainage sewer laterals \$144 per assessable foot
- land drainage sewer trunks \$76 per assessable foot; \$0.57 per square foot

The rate is based on a localized set of actual costs for recently completed local improvement projects as well as a larger spread of regional infrastructure costs that were available during the study period. The Winnipeg Public Service recommends that future local improvement rates increase annually by the rate of inflation, as part of the annual operating budget process, with another full review to align with the next multi-year budget.

CUSTOMER IMPACT

Considering an April 1, 2024 effective date and January 1 for years 2025-2027, a residential customer, family of four, with an estimated consumption of 50 cubic meters per quarter, can expect an increase over the four-year period as follows:

Residential Customer Quarterly Bill (50 m3 per quarter/ family of four)	2023	2024	2025	2026	2027
Water	\$100	\$102	\$105	\$108	\$112
Sewer	\$148	\$157	\$173	\$187	\$200
DBC	\$67	\$68	\$70	\$71	\$73
Total Quarterly Bill	\$315	\$327	\$348	\$366	\$385
Quarterly increase		\$12	\$21	\$18	\$19
Total Annual Bill	\$1260	\$1308	\$1392	\$1464	\$1540
Annual increase - \$		\$48	\$84	\$72	\$76
Annual increase - %		3.8%	6.4%	5.2%	5.2%

A litre of water would continue to cost approximately one-half of a penny.

For customers that have difficulties paying their utility bill the following options are available to assist:

- Payment arrangements are considered if more time is needed to pay utility bills.
- The Water Leak Credit Policy provides financial help to single-family residential and nonprofit customers who receive a high utility bill for water and sewer services, as a result of a water leak within their house or building.
- The H2O Help to Others program provides support to low income individuals and families who have difficulty paying their City of Winnipeg utility bill.

C. WHAT MAY INFLUENCE FUTURE RATES

Financial Projection Risks

The detailed financial projections and rate plans are contained in Appendix F.

Primary risks associated with the 10-year financial projections in the 2024-2027 water and sewer rate report are licencing requirements and government funding:

a. NEWPCC Upgrade Projects:

i. Three-Project Approach: Project 1, Power Supply and Headworks Facilities is currently in construction and Project 2, Biosolids Facilities is included in the 2023 capital budget submission with an AACE Class 3 estimate of \$929 million (excludes debt servicing charges). The projects are being completed in order of process criticality taking into consideration any interdependencies. Full licence compliance will only be achieved at the completion of all three projects. Project 3, Nutrient Removal Facilities, remains on the unfunded capital list. Successful completion of Project 3, without a significant impact to rates, is dependent on government funding.

b. Combined Sewer Overflow (CSO) Mitigation:

i. Following approval of the 2019 CSO Master Plan, the provincial regulator directed the City to complete implementation of Control Option No. 1 (85 percent capture in a representative year) by 2045. The CSO Master Plan carries an AACE Class 5 (-50 percent +100 percent) planning level cost estimate of \$1.15 billion, or from \$575 million to 2.3 billion. Factoring in inflation escalation, the total cost could reach \$3.7 billion. Successful completion by the 2045 target, without a significant impact to rates, is dependent on government funding.

c. Debt:

i. Should additional government funding for the NEWPCC Upgrade capital project not materialize or be delayed, and the Department continue to adhere to provincial licencing requirements, the resulting estimated debt levels may not meet Council-approved Debt Strategy limits and increased costs would be borne by customers.

d. New Legislation:

i. Environmental and public health concerns are driving more stringent standards in the water and sewage industry. The Environment Act Licences for the three sewage treatment plants have required large increases in capital and operating costs. Further introduction of new legislation or more stringent licences could cause an increase in rates.

e. Inflation:

i. Cost escalation caused by inflation, supply chain issues and market volatility are resulting in high increases in expenditures in multiple areas (commodities, materials, chemicals, etc.). A significant portion of the operational budget are expenditures that are highly susceptible to these market fluctuations.

Additional risk factors include:

- **Consumption**: Trends across North America, including Winnipeg, indicate a continued gradual decline of litres per capita per day (LCD) over the next 20 years, as consumers continue to embrace water conservation. Rate model projections incorporate the continued trend of declining consumption, combined with forecasted increase in population and growth in the non-residential sectors. If actual consumption is less than planned, this could cause a rate increase. Conversely, actual consumption greater than planned this could cause a rate decrease or mitigate future increases.
- **Economic Development**: The City's economic climate can impact the financial plan. The addition or deletion of a major customer could effect a change in rates due to the consumption and sales revenue associated with large volume users.
- **Capital Investment**: Capital investment is based on the Department's current estimate of improvements that are required. Many items can influence capital program expenditures including an escalation in market price, introduction of new technology, availability of consultant and contractor resources, detailed design, and mandated improvements.
- Foreign Currency Exposure: Fluctuating currency exchange rates is a risk that must be managed and addressed within the financial plan, as some commodities for the capital programs may need to be purchased outside of Canada.

• Land Drainage Rate Planning: For 2024 to 2027, the sewer rate is projected to fund a total of \$48.4 million for land drainage and flood control operating and capital costs, \$22.1 million for land drainage operating and \$26.3 million for capital. A separate land drainage fee is a common practice in other cities surveyed across Canada (Appendix D). The potential for the introduction of a land drainage fee will be the subject of a future report to be tabled at Council.

D. COMPETITIVENESS

Winnipeg's combined water and sewer rate remains competitive with other cities of similar size. In 2023, Winnipeg ranks second out of five cities for affordability for a residential and commercial customer. (Appendix G)

E. COMMUNICATION

Following Council approval, the Water and Waste Department will communicate the water and sewer rate changes to customers as follows:

Strategy	Timeline	
MyUtilityBill Website updated with new rates	April 2024	
Message on utility bill	April 2024 to June 2024	

The Water and Waste Department will communicate sewer and buy-in charge rates to impacted municipalities as follows:

Strategy	Timeline
Notice to municipalities impacted by rates	January 2024

Financial Impact StatementDate:October 30, 2023

Project Name: 2024 TO 2027 WATER AND SEWER RATES

COMMENTS:

The financial projections for water and sewer funds are contained in appendices to this report.

The proposed rate increases reflect cost of service recovery and assume that funding agreements with the federal and provincial governments will be achieved for impacted capital projects.

Lucy Szkwarek, CPA, CGA

Lucy Szkwarek, CPA, CGA Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

• Legal Services (as to legal issues)

OURWINNIPEG POLICY ALIGNMENT

This report aligns with OurWinnipeg 2045:

Goal: Leadership and Good Governance

Objective 1: Establish and implement priority actions through evidence-informed decisionmaking processes.

Policy 1.8 Accountable Revenue Generation

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

This report aligns with Winnipeg Climate Action Plan through Strategic Opportunity 7: Community Climate Resiliency

Key Directions:

7.1 Implement opportunities to improve Winnipeg's resilience and adaptability to the effects of a changing climate.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

The report aligns with the Winnipeg Poverty Reduction Strategy:

Goal 4: Community Well-Being Supports for those in Greatest Need are Increased

SUBMITTED BY

Department:Water and WasteDivision:Finance and AdministrationPrepared by:Ashleigh Campbell, CPA CADate:December 14, 2023File No.:A-014

ATTACHMENTS:

APPENDIX A	2024 to 2027 Recommended Rates
APPENDIX B	Consumption
APPENDIX C	Capital Spending
APPENDIX D	Benchmarking
APPENDIX E	Water and Sewer Utility Principles of Operations
APPENDIX F	Water Works and Sewage Disposal System Funds Financial Projections
APPENDIX G	Competitiveness to Other Canadian Cities

APPENDIX A 2024 TO 2027 RECOMMENDED RATES

	Approved	Recommended	Recommended	Recommended	Recommended
Category	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027
Water Rate (per m3)	\$2.00	\$2.04	\$2.09	\$2.15	\$2.23
Sewer Rate (per m3)	\$2.96	\$3.21	\$3.47	\$3.74	\$4.00
Allocated to EPR (per m3)	\$0.35	\$0.40	\$0.45	\$0.50	\$0.55

	Approved	Recommended	Recommended	Recommended	Recommended	
Category	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027	
Daily Basic Charge (per day per meter size)						
5/8" meter	\$0.73	\$0.75	\$0.77	\$0.78	\$0.80	
3/4" meter	\$0.77	\$0.79	\$0.81	\$0.82	\$0.84	
1" meter	\$0.88	\$0.90	\$0.92	\$0.94	\$0.97	
1.5" meter	\$1.02	\$1.05	\$1.07	\$1.10	\$1.13	
2" meter	\$1.41	\$1.45	\$1.49	\$1.54	\$1.58	
3" meter	\$4.30	\$4.45	\$4.59	\$4.74	\$4.89	
4" meter	\$5.37	\$5.56	\$5.74	\$5.93	\$6.11	
6" meter	\$7.87	\$8.14	\$8.42	\$8.69	\$8.97	
8" meter	\$10.72	\$11.10	\$11.48	\$11.86	\$12.24	
10" meter	\$13.58	\$14.06	\$14.54	\$15.02	\$15.51	
Private meter	\$0.68	\$0.70	\$0.71	\$0.73	\$0.75	

	Approved	Recommended	Recommended	Recommended	Recommended			
Category	2023	February 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027			
Sewer Service Sharing Buy-In								
5/8" meter - 0.0-0.9 MWD(litre/sec)	\$3,100	\$3,200	\$3,400	\$3,500	\$3,700			
3/4" meter - 0.91-1.3MWD(litre/sec)	\$4,600	\$4,800	\$5,000	\$5,200	\$5,400			
1" meter - 1.31-2.4 MWD(litre/sec)	\$7,700	\$8,000	\$8,400	\$8,700	\$9,100			
1.5" meter - 2.41-3.8 MWD(litre/sec)	\$15,600	\$16,300	\$17,000	\$17,700	\$18,500			
2" meter - 3.81-7.6 MWD(litre/sec)	\$25,000	\$26,000	\$27,200	\$28,400	\$29,600			
3" meter - >7.6 MWD(litre/sec)	\$47,000	\$49,000	\$51,100	\$53,300	\$55,600			
4" meter - >7.6 MWD(litre/sec)	\$72,500	\$75,600	\$78,900	\$82,300	\$85,800			

	Approved	Recommended	Recommended	Recommended	Recommended	
Category	2023	April 1, 2024	January 1, 2025	January 1, 2026	January 1, 2027	
Other		-				
Standpipe Water (per m3)	\$4.25	\$5.25	\$5.56	\$5.89	\$6.23	
	Approved	Recommended				
	2023	April 1, 2024				
Watermain Local (per frontage foot)	\$122.00	\$165.00				
Wastewater Sewer (per frontage foot)	\$122.00	\$181.00				
Land Drainage Sewer Laterals (per frontage foot)	\$40.00	\$144.00				
Land Drainage Sewer Trunks (per frontage foot)	\$55.00	\$76.00]			

Advances in Water Research, A Water Research Foundation Publication on Residential End Uses (REUS) of Water. Winnipeg's indoor water use percentage breakdown provided for comparison is based on the REUS data (WWD Engineering Services).



APPENDIX C CAPITAL SPENDING

Projected capital spending over the 10-year financial plan incorporates: water main renewal, sewer system rehabilitation, environmental projects, water meter renewal, land drainage, and retained earnings funded capital.



APPENDIX D BENCHMARKING

	Winnipeg	Calgary	Edmonton	Regina	Saskatoon	
	Yes	Yes	Yes	Yes	Yes	
Dividends	11% budgeted gross water and sewer sales	8.5% as a return on equity	9.64% as a return on equity	EdmontonReginaYesYesYesYes4% as a return on equityFranchise Fee 7.5% previous year's budgeted revenue10 wa inf2Franchise Fee 7.5% previous year's 	10% of budgeted water, sewer and infrastructure levy revenue	
Water rate structure	Uniform	Uniform	Inclining residential Declining non- residential	Uniform	Inclining residential Uniform non-residential	
Consumption	Declining	Declining	Declining	Declining	Declining	
Capital reserves	Yes	Yes	No	Yes	Yes	
Separate land drainage fee	No	Yes	Yes	Yes	Yes	
Rates based on cost of service	Yes	Yes	Yes	Yes	Yes	
Advanced meter system	No	Yes	Yes	Yes	Yes	
Frequency of rate approval	4 year	4 year	5 year	2 year	2 year	

APPENDIX E WATER AND SEWER UTILITY PRINCIPLES OF OPERATIONS

Self-Supporting Utilities: The Utilities do not receive subsidies from the mill rate.

Cost of Service Rates: Customers pay water and sewer rates, which represent the operating and capital costs of providing the utility services.

Debt Servicing: The Utilities' revenues are sufficient to service the Utilities' long-term debt.

Working Capital Reserves: The Water and Sewer Utilities maintain working capital reserves to protect the Utilities' financial position and prevent significant rate fluctuations that may otherwise result from a decline in consumption or major unforeseen expenditures. On an annual basis, the Utilities strive to maintain a minimum combined working capital position of 8 percent of sales or between 30 to 60 days cash and investments on hand.

10-Year Financial Plan: Rates in the Water and Sewer Utilities are planned over a 10-year time frame to mitigate the effects of year over year fluctuations and to coincide with the longer-term infrastructure development and renewal planning.

Infrastructure Renewal: The Water Main Renewal and Sewer System Rehabilitation Reserves were established to provide a consistent approach to financing infrastructure renewal.

Maintaining the reserves ensures this approach continues. Reserve contributions are based on an asset management strategy developed by the Utilities and approved through the capital and operating budget processes. The WMtrRR is based upon the same principle.

Capital Reserve Funds: The Utilities establish reserves to fund major capital projects. The pay-as-you-go capital program is more economical than traditional debt financing, which equates to lower rates for customers. In addition, for specific and cost-intensive projects, the Department has developed a strategy whereby a portion of the project is funded through reserves and a portion through debt financing. This strategy facilitates an equitable, intergenerational approach for short- and long-term funding.

Dividends: The Utilities pay an annual dividend to the City of Winnipeg General Revenue Fund as a return on investment. City Council reviews this policy every four years.

APPENDIX F WATER WORKS AND SEWAGE DISPOSAL SYSTEM FUND FINANCIAL PROJECTIONS

Financial Projection 2024-2033 (\$000s)										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Revenue										
Sales Revenue	360,425	386,652	410,786	438,036	465,381	477,525	472,642	483,444	489,990	493,067
Other	21,615	22,617	23,695	24,774	24,682	25,806	27,063	28,244	29,389	30,470
Total Revenue	382,040	409,269	434,482	462,810	490,063	503,331	499,706	511,688	519,379	523,537
Expenditures and Appropriations to Capital										
Operating	292,241	310,187	326,886	340,231	362,702	378,716	388,071	394,333	398,002	397,317
Utility Dividend	39,647	42,532	45,187	48,184	51,192	52,528	51,991	53,179	53,899	54,237
Appropriations to Capital	64,336	57,323	72,272	66,655	66,410	65,395	62,925	64,513	66,448	70,442
Total Expenditures and Appropriations to Capital	396,224	410,042	444,345	455,070	480,304	496,638	502,987	512,025	518,350	521,996
Surplus(Deficit)	(14,184)	(773)	(9,863)	7,740	9,759	6,693	(3,281)	(337)	1,029	1,541
Opening Working Capital	42,970	28,786	28,012	18,150	25,890	35,649	42,342	39,061	38,724	39,753
Ending Working Capital	28,786	28,012	18,150	25,890	35,649	42,342	39,061	38,724	39,753	41,294
Water Rate \$dollars Sewer Rate \$dollars	\$2.04 \$3.21	\$2.09 \$3.47	\$2.15 \$3.74	\$2.23 \$4.00	\$2.28 \$4.29	\$2.34 \$4.41	\$2.41 \$4.65	\$2.48 \$4.74	\$2.56 \$4.75	\$2.64 \$4.64
Long-Term Debt Summary										
Water										
New debt	-	2,250,000	-	-	-	-	-	-	-	-
Estimated Debt outstanding closing balance	101,151,108	94,903,218	90,797,318	84,157,367	77,220,583	69,973,607	62,402,482	54,492,620	46,228,779	37,595,029
Sewer Now dobt	E1 010 404	102 166 602	64 404 000	71 046 004	E1 076 007	20 167 202				
New Gebt	51,212,101	103,100,093	04,491,980	11,240,801	31,3/0,88/	39,107,292	- 106 222 012	-	-	452 247 092
Estimated Debt outstanding closing balance	201,334,309	303,674,309	303,014,542	420,042,070	400,000,123	491,300,004	400,333,912	475,491,507	404,497,090	400,047,062
Total Estimated Debt oustanding closing balance	308,485,497	400,777,587	454,411,860	510,999,443	545,905,705	567,362,291	548,736,394	529,984,187	510,726,477	490,942 <u>,</u> 111

APPENDIX G COMPETITIVENESS TO OTHER CANADIAN CITIES

Presented below are known fees and charges applied in other cities that are included in Winnipeg's water and sewer rates. The following tables reflect estimated annual customer impacts in cities of similar size using 2023 rates and select consumption per year -- residential (200 m³), and commercial (1,600 m³).



