To:CouncilFile No.:5340-21, 2600-20From:Chief Administrative OfficerDate:October 9, 2024

Subject: Water and Sewer Rate Review - 2024 Update

### **PURPOSE:**

The purpose of this report is to present the recommendations from the 2024 water and sewer utility financial review completed by InterGroup Consultants Ltd. and seek Council direction for the the 2025-2029 budget process.

#### **BACKGROUND:**

In 2023 InterGroup completed a revenue requirement and rate analysis for the water and sewer utilities utilizing the 2022-2026 financial plan. The analysis included determining revenue requirements for capital reserves and operational costs, a cost of service analysis by customer group to ensure equitability, and the resultant rate design. The City requested an updated analysis based on the 2024-2028 financial plan.

Data provided for the analysis included information from the Water & Sewer Master Plans, Sustainable Infrastructure Investment Plan (SIIP), Water Smart Action Plan, 2024-2028 five year operating and capital budgets, reserve balances, water and sewer account detail, water meter consumption detail, relevant bylaws and the CVRD bulk water consumption, including futures years bulk water price projections.

For the cost of service analysis, InterGroup followed the American Water Works Association manual: M1 Principles of Water Rates, Fee and Charges. The results are summarized as a *Revenue to Cost Coverage* (RCC) ratio which illustrates if a customer class is contributing properly for the cost of the provided service.

An RCC ratio over 100% indicates a customer class is paying more than the cost of providing the service whereas an RCC ratio under 100% indicates a customer class is paying less than the cost of providing the service. If customer classes are in the RCC range of 90-110% they are considered to be in the 'range of reasonableness', where it is deemed the class is adequately and equitably funding the cost of service delivery and rate adjustments are not necessarily required. This methodology of analysis provided the basis for determining the utility rate rebalancing required to equitably distribute servicing costs amongst the customer classes. The RCC ratios presented are based on the revenue requirement forecast for 2029.

The SIIP was also instrumental in providing the long-term reserve contribution amounts, or funding requirements relative to each of the utility asset classes overall renewal requirements, as generated through frontage tax revenues. The funding allocations required to sustainably fund asset renewals are \$2.83 million per year for water and \$2.56 million per year for sewer respectively.

In the previous analysis the overall findings were as follows, for reference the initial analysis is attached as *Appendix C*:

Generally, the water utility operational and future capital costs were being adequately funded through the revenues provided by user fees and frontage taxes. However, the contributions from frontage tax to the asset management reserve was underfunded and the annual reserve contribution amount was \$300,000 per year as compared to the \$2.83 million recommended in the SIIP. While the frontage revenue was \$1.219 million, the revenue from frontage taxation was being used to fund future capital or growth, debt servicing and any minor shortfalls in the operating revenue.

In contrast, the sewer utility operational costs were being underfunded through the utility rate revenues and required a significant transfer from frontage tax revenues and prior year surplus to fund these shortfalls. The sewer frontage tax revenues of \$2.1 million were within the range of the SIIP recommended \$2.56 million, however the annual reserve contribution amount was again only \$300,000 per year.

In the 2024 water budget, for an average single residential dwelling, utility rates increased by 4.5% or \$24.16 and frontage taxes increased by \$4.39 per household.

Included in the 2024 budget was an increase to the internal reallocation of \$138,000 from Fire Protection Services general operating budget to the water revenues operating budget for the fire hydrant maintenance program, bringing the 2024 total contribution amount for the fire hydrant program to \$200,000. Also included was an increase of \$41,700 in the internal reallocation from Parks Services general operating budget to water revenues for water usage, bringing the 2024 total contribution amount for Parks water usage to \$168,000.

In the 2024 sewer budget, for an average single residential dwelling, utility rates increased by 10.0% or \$39.88 and frontage taxes increased by \$7.72 per household.

The City requested an analysis updated for 2025-2029 with five, eight- and ten-year rate projections utilizing the 2024 budget data. The intent of this request was to provide the option to smooth out rate increases over a longer time period to reduce year over year increases. The analysis and recommendations will provide direction for the 2025-2029 budget planning process.

# **DISCUSSION:**

The provided analysis is guided by the goal of establishing utility rates and frontage taxes at appropriate and equitable levels to fully fund the operational and capital costs of each utility today and into the future.

The aim of the utility funding structure is to effectively determine revenue requirements relative to all associated components that may be required to sustainably fund the utilities, while accurately forecasting the future needs required to support the ongoing operation of each utility.

Utility rates provide funding for:

- CVRD charges i.e. treatment, transmission and conveyance, capital replacement, and upgrade of regional systems in support of regional growth requirements;
- City operational costs i.e. indirect and direct utility costs, debt servicing;

Frontage taxes provide funding for:

- Contributions to reserves for asset renewal, and machinery and equipment; and,
- Future capital or growth.

InterGroup completed a comparison of five, eight- and ten-year utility rate increases with the caveat that rate estimates beyond five years are unreliable as the data available is inadequate to make long-term cost projections. Their analysis provided the same revenue at year five with the rate rebalancing completed at either year eight or year ten. The City completed its own analysis of eight- and ten-year options using the recommended fifth year utility rate (under the five-year rate rebalancing plan) extended over eight and ten years. The City's analysis in the form of a five-year plan (2025-2029) is attached in *Appendix B: Eight- and Ten-Year Rate Options*.

The analysis was jointly reviewed by Operational Services and Financial Services staff, please see *Appendix A: Utility Revenue Requirement and Rates Analysis Update* to review the memorandum.

### Water Utility Rate and Frontage Tax Analysis

The 2024 average household financial contribution to the water utility was \$694.14 which proportionally funded 49% for the CVRD bulk water charges, 32% for City administration and operations, and 19% for reserve contributions and water infrastructure renewal projects, see Figure 1.

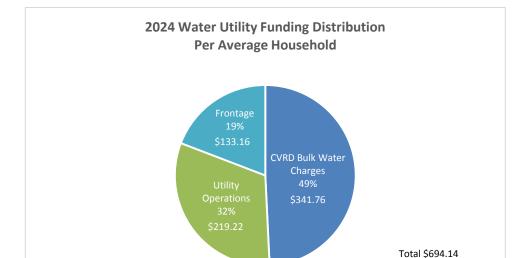


Figure 1. 2024 Average Household Water Utility Funding

The 2024 water utility rate Revenue to Cost Coverage (RCC) ratios show that multi-residential metered and commercial metered customers are contributing more than the cost to service them whereas residential and multi-residential unmetered customers, Parks Services and Fire Protection Services are contributing less than the cost to service them and commercial unmetered were within the range of reasonableness.

The cost of service analysis RCC results under the current rate distribution by customer class for water is summarized in Table 1. With the proposed (recommended) five-year utility rate changes the 2029 RCC shows the rebalancing of rates to 100% for each customer class.

Table 1. Cost of Service Analysis RCC Results for Water

Water Customer Class	2029 with Current Rate Distribution	2029 with Proposed 5 Year Changes
Residential	86%	100%
Multi-residential - Unmetered	70%	100%
Multi-residential - Metered	166%	100%
Commercial - Unmetered	104%	100%
Commercial - Metered	134%	100%
Parks Services (Water usage)	33%	100%
Fire Protection Services (Hydrant maintenance)	78%	100%

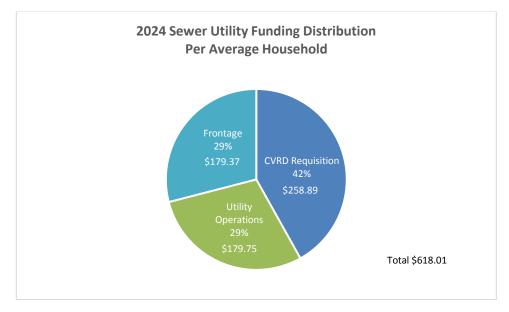
For an average household, under the five-year utility rate rebalancing plan, the overall increase is \$289.82; the total increase for CVRD charges is \$194.05 and the total increase for City administration and operations is \$95.77. See Table 6 under Financial Implications. The CVRD increase includes the changes to bulk water pricing and changes in consumption due to growth. To be noted, in the previous analysis the projected CVRD water rate increases were 0% in 2025 and 2026 for both water and sewer. However, in the updated 2024-2028 budget the CVRD bulk water charge is now projected to increase by 3% in 2025 and 2026.

To meet the funding levels recommended in the SIIP for the asset management reserve, the frontage tax rate would be increased by \$7.65 per metre over the five years, with an impact to the average household of \$167.01.

# **Sewer Utility Rate and Frontage Tax Analysis**

The 2024 average household financial contribution to the sewer utility was \$618.01 which proportionally funded 42% for the CVRD requisition, 29% for City administration and operations, and 29% for reserve contributions and sewer infrastructure renewal projects.

Figure 2. 2024 Average Household Sewer Utility Funding



In contrast to the previous analysis, the 2024-2028 five-year sewer capital plan included some significant changes to the debt servicing costs in response to capital works funded through financing including the 1<sup>st</sup> Street Lift Station renewal, Comox Road Sewer Crossing, Anderton Lift Station and the South Courtenay Sewer System projects. In the 2024-2028 financial plan the increase in debt to fund sewer capital works is \$20 million. Debt servicing costs are funded by utility rate revenues.

The 2024 sewer utility rate RCC ratios show that commercial customers are underfunding the cost to service them whereas institutional customers are overfunding their cost. Residential customers were within the range of reasonableness. With the proposed five-year utility rate changes the 2029 RCC ratio shows the rebalancing of rates to 100% for the residential and commercial classes and a reduction to 110% for institutional classes, see Table 4. With the low RCC ratio of the commercial customer class the annual rate changes are considerable to increase their level of funding to align with the cost to service; the five-year rate rebalancing increase is 23% annually from 2025-2029.

Table 2. Cost of Service Analysis RCC Results for Sewer

Sewer Customer Class <sup>1</sup>	2029 with Current Rate Distribution	2029 with Proposed 5 Year Changes
Residential	109%	100%
Commercial	59%	100%
Institutional	132%	110%

In their 2024-2028 budget the CVRD requisition rate increases are projected to be 5.6% in 2025 and 5.3% in 2026 for sewer. For an average household, under the five-year utility rate rebalancing plan, the overall increase is \$233.17; the total increase of the CVRD requisition is \$121.00 and the total increase for City administration and operations is \$112.17. For the commercial customer classes the increase to 2025 is

\$100.89 from the base rate of \$438.64, and an increase of \$201.77 from the base rate of \$877.25. See Table 7 and Table 8 under Financial Implications.

To meet the funding levels recommended in the SIIP for the asset management reserve the frontage tax rate would be increased by a total of \$1.69 per metre over the five years, with an impact to the average household of \$28.39.

#### **RECOMMENDATIONS:**

Under the five-year rate rebalancing plan each customer class would be equitably funding the water and sewer utilities, and contributions from frontage taxes to the asset management reserves would meet the recommendations from the SIIP by 2029. The eight- and ten-year rate rebalancing plans, as provided in *Appendix B*, would lower utility rate changes from 2025-2029; however, each utility will continue to remain underfunded for both the operational and frontage apportionments. Additionally, actual expenses beyond the five-year financial plan will need to be revised and adjusted annually in order to adequately fund the utilities as a whole.

Current funding levels to the asset management reserves for both water and sewer are inadequate and if continued will impact long-term service delivery, asset maintenance and renewal. Without adequate reserves overall debt and subsequent debt servicing costs will continue to increase. Deferring the recommended utility rate and frontage tax increases will create larger funding gaps in the future.

The recommended annual reallocation of funds from Fire Protection Services to the operations budget for hydrant maintenance and Parks Services contributions from the operating budget to the water revenues for water usage have been included in the 2025-2029 budget. These changes represent a purposeful and transparent correction from the current RCC ratios of 78% and 33% respectively, to 100% for both by 2029.

#### **Next Steps**

To further improve the equitability amongst sewer rates for commercial, institutional and industrial (ICI) customer classes an additional analysis will be completed by InterGroup to determine if a volumetric rate based on a percentage of metered water consumption can be effectively implemented. Volumetric rate distribution is a common and well accepted practice for determining equitable rate distribution amongst ICI customers as it representative of sewerage volumes entering the sanitary collection system. It is further recommended that this proposed rate will have a fixed and variable rate structure. The fixed portion will be independent of the volumetric rate to effectively ensure that the City's operations and maintenance apportionments are adequately funded, while the variable rate will cover the CVRD treatment costs.

To accommodate fluctuations in fixed costs to the utilities and unexpected replacements and renewals i.e. emergency appurtenance failures outside of current year budgets, and variable rate costs i.e. actual CVRD bulk consumption volumes Operational Services will be developing a policy to ensure year to year surplus are reinvested within the utility. The intention is that surplus funds are used to fund operational shortfalls in the following year's budgets i.e. forecasted consumption versus real consumption volumes, and to effectively buffer utility rate changes year over year.

#### **FINANCIAL IMPLICATIONS:**

The financial impact to average households have been summarized as per the recommended five-year rate rebalancing plan. The cumulative water and sewer utility changes over the recommended five-year rate

rebalancing period for an average household are represented in Table 3. The year over year financial impacts to average single residential households for water and sewer are summarized in Table 4 and Table 5.

Table 3. Average Household Changes 2024-2029

Average Household Changes	Water	Sewer
CVRD Requisition	\$194.05	\$121.00
Utility Operations	\$95.77	\$112.17
Frontage Tax	\$167.01	\$28.39
Total	\$456.83	\$261.57

Table 4. Average Household Water Utility Fee and Frontage Tax Changes 2025-2029

Water	2024 (Current)	%/\$ Change	2025	%/\$ Change	2026	%/\$ Change	2027	%/\$ Change	2028	%/\$ Change	2029
CRD Bulk Water Charges	\$341.76		\$386.40		\$411.87		\$461.92		\$510.04		\$535.81
Utility Operations	\$219.22		\$237.97		\$270.57		\$283.98		\$286.59		\$314.99
Household Utility Rate	\$560.98	11% \$63.39	\$624.37	9% \$58.07	\$682.44	9% \$63.47	\$745.90	7% \$50.72	\$796.63	7% \$54.17	\$850.80
Household Frontage Tax	\$133.16	18% \$23.44	\$156.61	18% \$27.64	\$184.24	18% \$32.61	\$216.85	18% \$38.19	\$255.04	18% \$45.13	\$300.17
Average Household Total	\$694.14	13% \$86.84	\$780.98	11% \$85.70	\$866.68	11% \$96.07	\$962.75	9% \$88.92	\$1051.67	9% \$99.30	\$1150.97

Table 5. Average Household Sewer Utility Fee and Frontage Tax Changes 2025-2029 11

Sewer	2024 (Current)	%/\$ Change	2025	%/\$ Change	2026	%/\$ Change	2027	%/\$ Change	2028	%/\$ Change	2029
CVRD Requisition	\$258.89		\$281.35		\$301.21		\$325.07		\$369.96		\$378.89
Utility Operations	\$179.75		\$196.33		\$218.98		\$241.42		\$246.95		\$291.92
Household Utility Rate	\$438.64	9% \$39.04	\$477.68	9% \$42.51	\$520.19	9% \$46.30	\$566.49	9% \$50.42	\$616.91	9% \$54.90	\$671.81

Household Frontage Tax	\$179.37	16% \$28.39	\$207.77	0% \$0.00	\$207.77	0% \$0.00	\$207.77	0% \$0.00	\$207.77	0% \$0.00	\$207.77
Average Household Total	\$618.01	11% \$67.43	\$685.45	6% \$42.51	\$727.96	6% \$46.30	\$774.26	7% \$50.42	\$824.68	7% \$54.90	\$879.58

The recommended commercial customer class increase of 23% is proposed to be applied in 2025, see Table 6. After further analysis is completed by InterGroup, metered ICI properties will move to a volumetric rate structure for implementation in 2026.

Table 6. Commercial Sewer Utility Fee Changes in 2025

Commercial Customer Class	2024 (Current)	2025	Difference
Utility Rate 1	\$438.64	\$539.53	\$100.89
Utility Rate 2	\$877.25	\$1079.02	\$201.77
Utility Rate – Car Wash	\$1315.92	\$1618.58	\$302.66
Utility Rate – Laundry	\$3506.06	\$4312.47	\$806.40
Utility Rate – Hotel/Motel per unit	\$176.62	\$217.24	\$40.62
Utility Rate – Trailer park or Campground per serviced site	\$91.14	\$112.10	\$20.96

Included in the 2025-2029 financial plan are the recommended reallocations from Park Services and Fire Protection Services to equitably fund the utility for the cost the provision of water to City parks and hydrant maintenance.

Table 7. Parks Services and Fire Protection Services Transfer to Water Utility Revenues 2025-2029

Water – Internal Transfers	2024 (Current)	% Increase	2025	% Increase	2026	% Increase	2027	% Increase	2028	% Increase	2029
Parks Services	\$168,000	34%	\$224,851	32%	\$296,444	32%	\$390,713	29%	\$505,192	29%	\$653,213
Fire Protection	\$200,000	13%	\$226,000	11%	\$252,655	11%	\$281,458	9%	\$306,508	9%	\$333,787

### **ADMINISTRATIVE IMPLICATIONS:**

The completion of the water and sewer rate review aims to inform the 2025-2029 financial planning and budget development process. Beyond the outcome of this analysis, staff have recommended next steps to further the equability framework that was laid out by this report. The 2025 work plan could include such items as the ICI Sewer Rate review to determine if a volumetric rate based on a percentage of metered water consumption can be effectively implemented and when, and the development of reserve bylaws for both the water and sewer utilities to ensure that year to year surplus are reinvested within the utilities.

#### STRATEGIC PRIORITIES REFERENCE:

This initiative addresses the following strategic priorities:

- Financial Sustainability Review City Financial processes: Review fees, charges, and fines
- Financial Sustainability Ensure capacity to accommodate big change

#### **PUBLIC ENGAGEMENT:**

Staff would inform the public based on the IAP2 Spectrum of Public Participation:

http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/imported/IAP2%20Spectrum\_vertical.pdf

# **OPTIONS:**

- 1. THAT Council receive the Water and Sewer Rate Review 2024 Update report for information and direct staff to implement the five-year utility rate rebalancing recommendations.
- 2. THAT Council receive the Water and Sewer Rate Review 2024 Update report for information and direct staff to implement the eight-year utility rate rebalancing recommendations.
- 3. THAT Council receive the Water and Sewer Rate Review 2024 Update report for information and direct staff to implement the ten-year utility rate rebalancing recommendations.
- 4. THAT Council provide alternative direction to staff.

#### **ATTACHMENTS:**

- 1. Appendix A: Utility Revenue Requirement and Rates Analysis Update
- 2. Appendix B: Five- Eight- and Ten-Year Rate Options
- 3. Appendix C: 2022 Water and Sewer Rate Review

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