City of Richmond

Report to Committee

To:	Finance Committee	**Date:**	October 4, 2023
From:	John Irving, P.Eng., MPA General Manager, Engineering and Public Works	**File:**	10-6000-01/2023-Vol 01
	Jerry Chong, CPA, CA General Manager, Finance and Corporate Services		
Re:	**2024 Utility Budgets and Rates**		

Staff Recommendation

That the 2024 utility budgets, as presented in Option 3 for Water (page 7), Option 3 for Sewer (page 14), Option 3 for Flood Protection (page 25), and Option 2 for Solid Waste and Recycling (page 27), as outlined in the staff report titled, "2024 Utility Budgets and Rates", dated October 4, 2023, from the General Manager, Engineering and Public Works and the General Manager, Finance and Corporate Services, be approved as the basis for establishing the 2024 utility rates and included in the Consolidated 5 Year Financial Plan (2024-2028).

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Att. 2

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
REVIEWED BY SMT	INITIALS:
APPROVED BY CAO	

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Staff Report

Executive Summary

Utility fees provide dedicated funding for the delivery of Water, Sewer, Flood Protection, and Solid Waste and Recycling services within Richmond. This includes Council-endorsed programs and initiatives, and funding for the operation, maintenance and upgrade of the associated infrastructure and assets. Richmond's utilities include:

- **Water:** The Water Utility provides distribution of water to Richmond's residents and businesses. Bulk drinking water supply is purchased from Metro Vancouver and distributed through the City's pressure reducing valve stations and watermain network. This utility also supports programs to encourage water conservation within the City.

- **Sewer:** The Sewer Utility provides sewer service for properties within the regional sewerage boundaries. Sewage is collected through the City's sanitary infrastructure and conveyed to Metro Vancouver's trunk sewer system and wastewater treatment plants for treatment and discharge. Richmond pays Metro Vancouver for treatment and conveyance services each year.

- **Flood Protection:** The Flood Protection Utility provides flood protection services for Richmond, which includes a diking network to protect the City from flooding, and drainage infrastructure to convey and discharge rainwater out of the City. This utility supports infrastructure upgrades to protect the City against climate change induced sea level rise and atmospheric events.

- **Solid Waste and Recycling:** The Solid Waste and Recycling Utility includes garbage and recycling collection services and programs designed to advance broader waste reduction and recycling objectives. The City's programs and initiatives have allowed the City to remain a leader in providing robust recycling programs, currently diverting 79% of single-family residential waste.

The Water, Sewer, Flood Protection, and Solid Waste and Recycling utilities have dedicated reserve bylaws to secure funding for infrastructure upgrades and any related items that support the respective utilities.

Key Cost Drivers for the 2024 Utility Budgets and Rates

Metro Vancouver Cost Increases

Metro Vancouver's 2024 cost increases, as presented in their proposed 2024-2028 Financial Plan, are the primary drivers for the City's 2024 utility rates for the majority of these services. Metro Vancouver's proposed rate increases for 2024 are as follows:

- **Water:** Metro Vancouver's proposed 2024 water rate increase is 7.6% (2023 increase was 2.8%). Metro Vancouver water purchase cost represents 57% of the City's Water Utility user fee budget (Figure 1 on the following page).

- **Sewer:** Metro Vancouver's proposed 2024 sewer levy increase is 10.3% (2023 increase was 8.6%). Metro Vancouver's sewer levy cost represents 70% of the City's Sewer Utility user fee budget (Figure 2).

- **Solid Waste:** The Metro Vancouver solid waste tipping fees are increasing by $7 from $127 to $134 per tonne, plus an unchanged transaction fee of $5 per load. A tiered structure based on load size/weight will continue to be used for small vehicles and commercial customers.

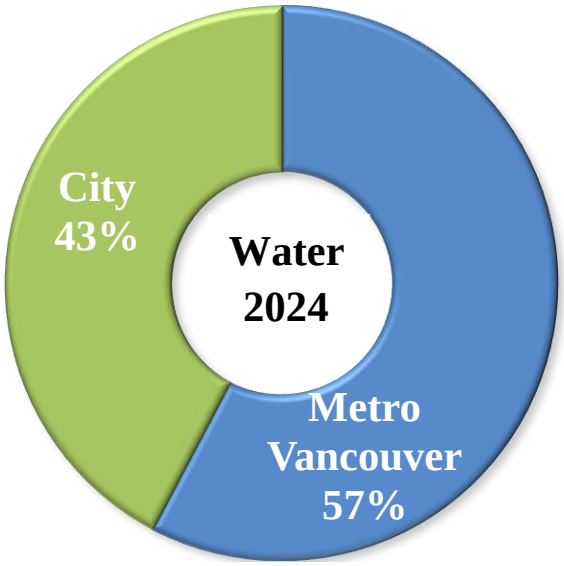


Figure 1. Proposed 2024 Water Utility Cost Breakdown

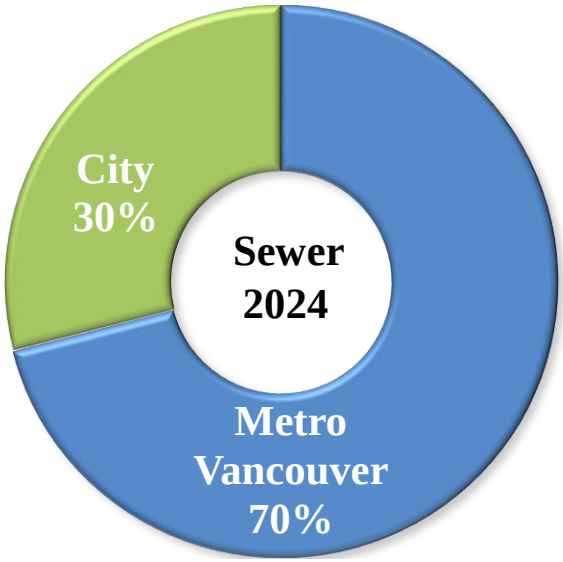


Figure 2. Proposed 2024 Sewer Utility Cost Breakdown

Accelerated Flood Protection Program (Flood Protection Utility)

Climate change scientists predict up to 1 metre of sea level rise and 0.2 metres of ground settlement by 2100. At the April 12, 2021 Regular Council Meeting, Council adopted a 50-year implementation period for an accelerated flood protection program with the objective of upgrading the City's dikes within 50 years. The program requires $30M in annual capital funding within the Flood Protection Utility by 2032, which will allow the City to upgrade flood protection infrastructure well in advance of current anticipated climate change impacts. Implementation of the new rates began in 2023. The Flood Protection Utility presented in this report reflects the continuation of the program acceleration.

Ageing Infrastructure Replacement

Another component of the City's utility budget relates to the replacement of ageing municipal infrastructure. Annual funding levels required to maintain and replace the City's utility infrastructure are assessed in the report titled "Ageing Utility and Road Infrastructure Planning – 2022 Update", dated June 8, 2022 and received for information during the July 25, 2022 Regular Council Meeting. This report identifies additional annual funding requirements of $2.9M for water and $5.9M for sanitary infrastructure. While this funding gap does not impact short term service levels, bridging the funding gap over the next decades will be required to replace

infrastructure that is nearing the end of its service life. The 2024 utility budget includes recommendations to reduce the funding gap for water and sewer utilities.

Solid Waste and Recycling Service Agreements and Market Conditions

Key cost drivers for the Solid Waste and Recycling Utility include additional costs and resources that are required to meet the City's contractual obligations. This includes inflationary contract costs stipulated in existing contracts, disposal cost increases, market fluctuations for commodities at the Recycling Depot and growth in the number of units to be serviced.

Utility Budgets and Rates Options

Recognizing the challenges of cost increases outside of the City's control and those associated with maintaining City infrastructure, staff have presented various budget and rate options for 2024. This includes three different options for each of the City's utilities.

In accordance with Council's Budget & 5-Year Financial Plan Preparation Policy (Policy 3016), Option 1 for each utility presents a same level of service budget with only non-discretionary increases specified in contractual agreements and rate regulated increases (e.g. regional or other government agency increases). Option 2 and Option 3 present actions the City can take to modify the rates or levels of service depending on the varying circumstances and needs within each budget area. The three options for each of the City utilities are presented in this report.

Staff recommend Option 3 for Water (page 7), Option 3 for Sewer (page 14), Option 3 for Flood Protection (page 25), and Option 2 for Solid Waste and Recycling (page 27). The proposed 2024 rates are summarized in Table 17 and Table 18 (page 35).

Comparison of 2023 Utility Rates with Comparator Municipalities

The City's utility budgets are carefully managed to provide high levels of service to Richmond's residents, despite external increases that are outside of the City's control.

Figure 3 on the following page compares 2023 utility rates with comparator municipalities. The 2023 rates are presented for comparator municipalities as 2024 rates have not been established yet.

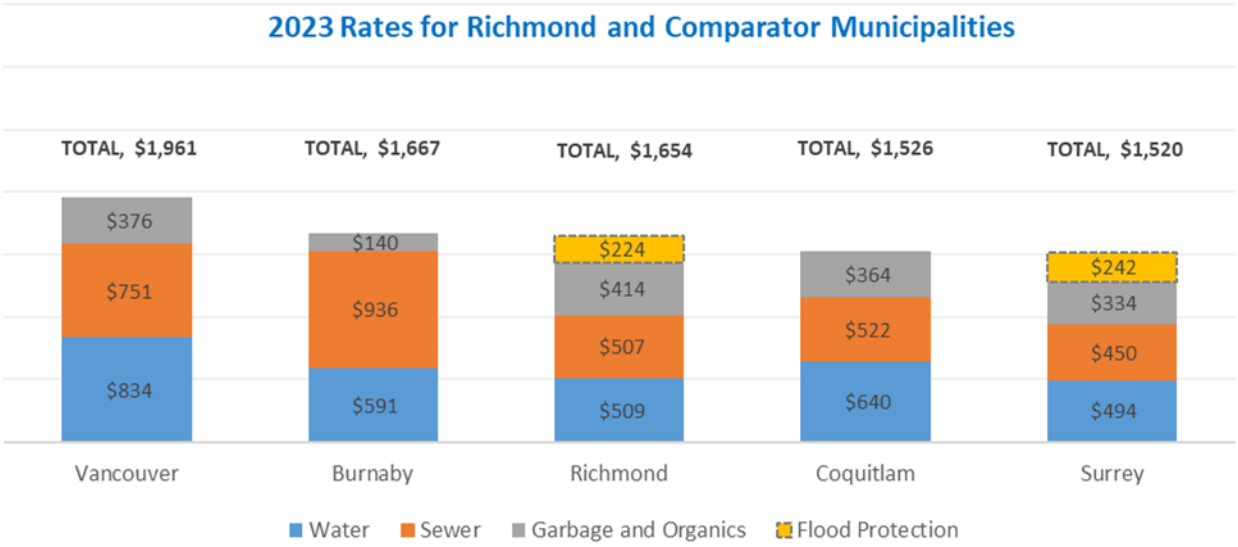


Figure 3. Comparison of Average Single Family Dwelling Utility Rates for Richmond with Comparator Municipalities (2023 Rates)

Unlike comparator municipalities, Richmond's flat topography, high water table and proximity to the water places unique challenges on the City's utility infrastructure, resulting in larger and deeper pipes, the need for over 200 drainage and sanitary pump stations and the need for an extensive flood protection system that includes 49 kilometres of perimeter dikes. In addition, the City has made substantial investments to upgrade flood protection infrastructure in advance of anticipated climate change impacts through the ongoing accelerated flood protection program. This significantly increases demand for capital and operating costs. Despite these challenges and the additional infrastructure needs, the City of Richmond continues to offer a high level of service and maintain competitive fees for utility services.

Detailed budget and rate information for each utility, with options for Council's consideration, are presented in this report.

Origin

This report presents the recommended 2024 utility budgets and rates for Water, Sewer, Flood Protection, and Solid Waste and Recycling.

Should the utility budgets and rates presented in this report be endorsed by the Finance Committee, a subsequent report will be presented to Council to introduce amendment bylaws that reflect the approved utility rates. The report will be presented at subsequent Regular Council Meetings to give the amendment bylaws first, second, and third readings prior to adoption. The utility rates are required to be established by December 31, 2023 to take effect on January 1, 2024. This report supports the following strategies within Council's Strategic Plan 2022-2026:

Strategy #3 A Safe and Prepared Community:

> *Community safety and preparedness through effective planning, strategic partnerships and proactive programs.*
>
> *3.1 Advance proactive, sustainable, and accelerated flood protection in collaboration with other governments and agencies.*
>
> *3.2 Leverage strategic partnerships and community-based approaches for comprehensive safety services.*
>
> *3.3 Ensure the community is collectively prepared for emergencies and potential disasters.*
>
> *3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.*

Strategy #4 Responsible Financial Management and Governance:

> *Responsible financial management and efficient use of public resources to meet the needs of the community.*
>
> *4.1 Ensure effective financial planning to support a sustainable future for the City.*
>
> *4.2 Seek improvements and efficiencies in all aspects of City business.*
>
> *4.3 Foster community trust through open, transparent and accountable budgeting practices and processes.*
>
> *4.4 Work with all levels of governments for grant and funding opportunities.*

Strategy #5 A Leader in Environmental Sustainability:

> *Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.*
>
> *5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.*
>
> *5.2 Support the preservation and enhancement of Richmond's natural environment.*
>
> *5.3 Encourage waste reduction and sustainable choices in the City and community.*

Analysis

Water Utility

The three budget options for the Water Utility are shown in Table 1. Italicized values represent the difference between the 2023 rates and the 2024 rate options. The 2024 base budget for each option is equal to the sum of the 2023 base budget plus the changes in italics. Rows in green denote the key budget areas with options, which are further discussed in subsequent sub-sections of this report.

Table 1. 2024 Water Utility Budget

Key Budget Areas	2023 Base Level Budget (Restated for Comparison[1])	Option 1 Non-discretionary Increases, Including a 1% Rate Increase for the Multi-Family Water Metering Program	Option 2 Option 1 + $250,000 Increase to Capital Infrastructure Replacement Program	Option 3 (Recommended) Option 1 + $500,000 Increase to Capital Infrastructure Replacement Program
Expenditures				
Salary	$6,998,800	*$346,100*	*$346,100*	*$346,100*
Operating Expenditures	$3,808,400	*$63,900*	*$63,900*	*$63,900*
Water Meter Reading and Maintenance	$182,400	*$0*	*$0*	*$0*
Toilet Rebate Program	$100,000	*$0*	*$0*	*$0*
Metro Vancouver Water Purchases	$29,235,400	*$2,645,700*	*$2,645,700*	*$2,645,700*
Capital Infrastructure Replacement Program	$7,500,000	*$0*	*$250,000*	*$500,000*
Residential Water Metering Program	$3,085,900	*$0*	*$0*	*$0*
Firm Price/Receivable	$2,889,700	*$81,400*	*$81,400*	*$81,400*
Overhead Allocation	$1,160,600	*$7,100*	*$7,100*	*$7,100*
Total Base Level Expenditure Budget	**$54,961,200**	**$58,105,400**	**$58,355,400**	**$58,605,400**
Revenues				
Water Levy Provision (Rate Stabilization)	$0	*$0*	*$0*	*$0*
Investment Income	-$220,000	*-$44,000*	*-$44,000*	*-$44,000*
Firm Price/Receivable	-$2,889,700	*-$81,400*	*-$81,400*	*-$81,400*
Meter Rental	-$1,982,400	*-$65,300*	*-$65,300*	*-$65,300*
YVR Maintenance	-$30,000	*$0*	*$0*	*$0*
Water Levy Provision (Toilet Rebate/Flushing)	-$306,900	*$16,300*	*$16,300*	*$16,300*
Meter Re-Reads and Other Services	-$233,300	*$0*	*$0*	*$0*
Reserve (Residential Water Metering Program)	-$900,000	*$450,000*	*$450,000*	*$450,000*
Total Base Level Revenue Budget	**-$6,562,300**	**-$6,286,700**	**-$6,286,700**	**-$6,286,700**
Net Budget	**$48,398,900**	**$51,818,700**	**$52,068,700**	**$52,318,700**
Net Difference Over 2023 Base Level Budget		***$3,419,800***	***$3,669,800***	***$3,919,800***

[1] *The 2023 Base Level budget has been restated to include approved operating budget impacts.*

The revenues and expenditures for the Water Utility budget reductions and increases given in Table 1 are outlined below.

Expenditures

The key driver for the Water Utility is Metro Vancouver Water Purchases. Secondary drivers include Capital Infrastructure Replacement, Residential Water Metering Programs, Salary and Operating expenditures.

Metro Vancouver Water Purchases

Bulk water is purchased from Metro Vancouver on a volumetric basis. Metro Vancouver's water rate will increase by 7.6% in 2024, as compared to a 2.8% increase in 2023. Metro Vancouver's 2024 rate increase corresponds to a $2.6M increase in water purchase cost based on the City's projected water consumption. This accounts for the majority of the 2024 non-discretionary expenditure increase. The City's 2024 water rates are based on Metro Vancouver's proposed 2024-2028 Financial Plan (Table 2).

Table 2. Metro Vancouver Water Rate Projection – Proposed 2024-2028 Financial Plan

	2024	**2025**	**2026**	**2027**	**2028**
Blended Rate ($/m^3)	$0.9333	$1.0164	$1.0814	$1.1192	$1.1494
% Change	7.6%	8.9%	6.4%	3.5%	2.7%

Metro Vancouver's water rate increases are forecasted to be significant in 2024 and beyond due to major upcoming infrastructure projects required to improve system capacity, resilience, and reliability. Since 2006, the Metro Vancouver water rate has increased by 225%, or an average annual increase of 6.8%. These increases are notably higher than the City's water utility rates, which increased by 54% over the same period.

Due to these increases, Metro Vancouver costs have increased from accounting for 44% of Richmond's water utility rate in 2006 to 57% in 2024 (Figure 4 on the following page). The increases in Metro Vancouver costs are a primary budget driver for the Water Utility.

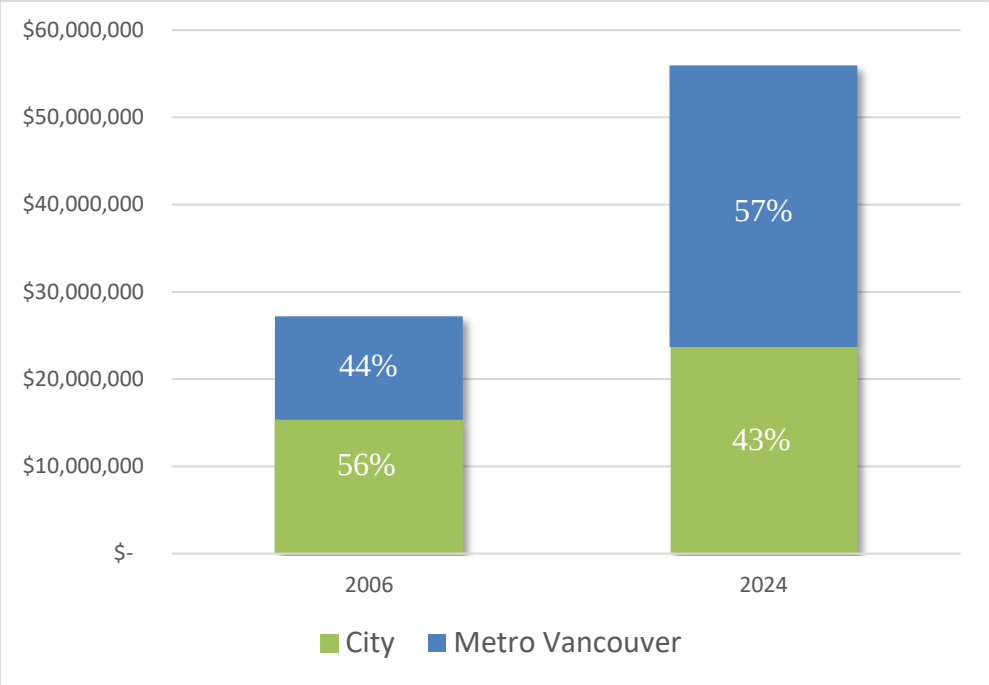


Figure 4. 2006 vs 2024 Water Utility User Fee Breakdown

Water Capital Infrastructure Replacement Program Contribution

The Water Capital Infrastructure Replacement Program facilitates proactive management of the City's water assets, which allows the City to maintain a high level of service by minimizing watermain breaks and service disruptions. Through proactive management of ageing infrastructure and implementation of the City's water pressure management program, the City has successfully reduced water losses due to pipe leakage in the water distribution system. This has resulted in additional cost savings from avoided Metro Vancouver water purchase costs as well as associated emergency response expenditures. Council's proactive approach to infrastructure replacement is also a sound preventative maintenance strategy.

The annual capital contribution for water infrastructure replacement is currently $7.5M, excluding the amount currently dedicated to the water metering program. The "Ageing Utility and Road Infrastructure Planning – 2022 Update" report identified a long-term annual funding requirement of $10.4M, with a target funding range of $8.4M to $12.3M. Option 2 and Option 3 include increases to the Water Capital Infrastructure Replacement Program in the amount of $250,000 and $500,000, respectively, at Council's discretion to bridge the gap between current and targeted funding levels. Bridging the funding gap between current and targeted funding levels supports proactive infrastructure replacement, thereby offsetting financial obligations for future years. This will continue to be an important consideration in future utility budgets.

Water Metering (Avoided Water Purchase Costs)

Water metering plays an essential role in the City's water demand management program, which improves equity to ratepayers by providing volume-based user fees and reduces bulk water purchase costs by promoting water conservation and reducing private-side leakage. Since the inception of the program in 2003, the City's total water use has decreased by 15% despite an

increase in population of 29%. The reduction in per capita water usage is estimated to result in annual savings of $15M in avoided water purchase cost.

The City has made significant advances in water metering since the program was first introduced. Approximately 83% of the City's water use is currently metered. All single-family and Industrial, Commercial and Institutional (ICI) properties are metered and 56% of multi-family units are metered.

Water Salary and Operating Expenditures

The City's total operating expenditures (excluding Metro Vancouver costs and the increased funding to implement universal multi-family water metering) is below the Consumer Price Index (CPI). The main cost drivers for the operating expenditure increase include the following:

- Estimates for salary and fringe benefit impacts for union agreements yet to be negotiated for 2024 (when the collective bargaining process is completed, adjustments may be required, which would be included in the next budget cycle);
- Senior government increases such as license permit fees and changes to WorkSafeBC rates; and
- Material cost increases.

The City's operating expenditures are carefully managed and considerable measures have been taken to minimize cost increases where possible. The average increase to the City's non-discretionary operating expenditures since 2021 has been 2.0%, which is below the CPI over the same period.

Revenues

Reserve (Residential Water Metering Program)

At the November 8, 2021 Regular Council Meeting, through the 2022 Utility Budgets and Rates report, Council endorsed increasing the annual funding level for the water metering program to $3M to implement a universal multi-family water metering program. The increased funding was to be achieved through a phased annual 1% increase to the water rate over the next four years, along with utilization of the Watermain Replacement Reserve to make up the difference over that period. All options include this 1% annual rate increase, 2024 will be the 3rd year of the 4 phases.

Water Construction Period Revenues

The City receives construction period revenues from development customers for water use during construction. This revenue is not budgeted due to its long-term variability. Any actual revenue will be transferred to the Water Levy Stabilization Provision for future rate stabilization funding.

Water Levy Provision for Rate Stabilization

The Water Levy Provision was established by Council as a funding source for water rate stabilization. The Provision has a balance of $15.6M as of August 31, 2023, and is intended to offset significant future increases in regional water purchase costs.

The annual funding from the Water Levy Provision was eliminated in the 2023 utility budget to preserve the Provision for the future, when larger Metro Vancouver water purchase rate increases

are anticipated. None of the options for 2024 include a planned drawdown from the Water Levy Provision, and staff recommend that the Provision continue to be preserved in anticipation of future large Metro Vancouver rate increases.

Impact on 2024 Water Rates

The impact of the three budget options on water rates is shown in Table 3 and Table 5 on page 12. Table 3 shows the options for metered customers and Table 5 shows the options for flat rate customers. The rates presented include fixed costs for metering, such as meter reading, billing and maintenance. The italicized numbers represent the difference between 2023 rates and the rate options for 2024.

Option 1 represents non-discretionary increases that are required to maintain existing levels of services. Option 2 includes everything in Option 1 and a $250,000 increase to the Water Capital Infrastructure Replacement Program. Option 3 is the recommended option and includes everything in Option 1 and a $500,000 increase to the Water Capital Infrastructure Replacement Program.

Table 3. 2024 Metered Rate Water Options (Net of Discount)

Customer Class	**2023 Rates**	**Option 1**	**Option 2**	**Option 3 (Recommended)**
Single-Family Dwelling (based on 325 m^3 average consumption)	$508.47	$545.75 *$37.28*	$548.32 *$39.85*	$550.85 *$42.38*
Townhouse (based on 218 m^3 average consumption)	$348.09	$373.09 *$25.00*	$374.82 *$26.73*	$376.52 *$28.43*
Apartment (based on 157 m^3 average consumption)	$233.76	$251.77 *$18.01*	$253.01 *$19.25*	$254.23 *$20.47*
Metered Rate ($/$m^3$)	$1.4316	$1.5463 *$0.1147*	$1.5542 *$0.1226*	$1.5620 *$0.1304*
Metro Vancouver % Change		***6.2%***	***6.2%***	***6.2%***
City % Change		*1.8%*	*2.4%*	*2.9%*
Total % Change		*8.0%*	*8.6%*	*9.1%*

Table 4 on the following page shows the Metro Vancouver and City portion of the rate impacts for each of the metered rate options. The Metro Vancouver rate impacts are italicized on the left and the City rate impacts are italicized on the right.

Table 4. Cost Increase Broken Down by Metro Vancouver vs City Rate Impacts for 2024 Metered Rate Water Options (Net of Discount)

Customer Class	**Option 1** Total		**Option 2** Total		**Option 3 (Recommended)** Total	
	MV	*City*	*MV*	*City*	*MV*	*City*
Single-Family Dwelling (based on 325 m^3 average consumption)	$37.28		$39.85		$42.38	
	$28.84	*$8.44*	*$28.84*	*$11.01*	*$28.84*	*$13.54*
Townhouse (based on 218 m^3 average consumption)	$25.00		$26.73		$28.43	
	$19.34	*$5.66*	*$19.34*	*$7.39*	*$19.34*	*$9.09*
Apartment (based on 157 m^3 average consumption)	$18.01		$19.25		$20.47	
	$13.93	*$4.08*	*$13.93*	*$5.32*	*$13.93*	*$6.54*
Metered Rate ($/$m^3$)	$0.1147		$0.1226		$0.1304	
	$0.0887	*$0.0260*	*$0.0887*	*$0.0339*	*$0.0887*	*$0.0417*

Table 5. 2024 Flat Rate Water Options (Net of Discount)

Customer Class	**2023 Rates**	**Option 1**	**Option 2**	**Option 3 (Recommended)**
Single-Family Dwelling	$760.26	$821.17	$825.32	$829.47
		$60.91	*$65.06*	*$69.21*
Townhouse	$622.32	$672.19	$675.58	$678.98
		$49.87	*$53.26*	*$56.66*
Apartment	$401.03	$433.16	$435.35	$437.54
		$32.13	*$34.32*	*$36.51*
Metro Vancouver % Change		***6.2%***	***6.2%***	***6.2%***
City % Change		*1.8%*	*2.4%*	*2.9%*
Total % Change		*8.0%*	*8.6%*	*9.1%*

Table 6 shows the Metro Vancouver and City portion of the rate impacts for each of the flat rate options. The Metro Vancouver rate impacts are italicized on the left and the City rate impacts are italicized on the right.

Table 6. Cost Increase Broken Down by Metro Vancouver vs. City Rate Impacts for 2024 Flat Rate Water Options (Net of Discount)

Customer Class	**Option 1** Total		**Option 2** Total		**Option 3 (Recommended)** Total	
	MV	*City*	*MV*	*City*	*MV*	*City*
Single-Family Dwelling	$60.91		$65.06		$69.21	
	$47.12	*$13.79*	*$47.12*	*$17.94*	*$47.12*	*$22.09*
Townhouse	$49.87		$53.26		$56.66	
	$38.58	*$11.29*	*$38.58*	*$14.68*	*$38.58*	*$18.08*
Apartment	$32.13		$34.32		$36.51	
	$24.85	*$7.28*	*$24.85*	*$9.47*	*$24.85*	*$11.66*

The City's Waterworks and Water Rates Bylaw No. 5637 provides a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The rates outlined in Table 3 and Table 5 are net discounted rates.

Water Utility Options Summary

The following is a summary of the Water Utility budgets and rates for Option 1:

Option 1

- Represents the minimum increase necessary to maintain the current level of service; and
- Includes an additional 1% rate increase for the multi-year phased increase to fund the multi-family water metering program in accordance with the Council-endorsed staff report titled "2022 Utility Budgets and Rates", dated October 22, 2021.

The following is a summary of the Water Utility budgets and rates for Option 2:

Option 2

- Includes everything in Option 1; and
- Increases the Water Capital Infrastructure Replacement Program by $250,000.

The following is a summary of the Water Utility budgets and rates for Option 3:

Option 3 (Recommended)

- Includes everything in Option 1; and
- Increases the Water Capital Infrastructure Replacement Program by $500,000.

Water Utility Recommended Option

Staff recommend the budgets and rates identified in Option 3 for the Water Utility. This option will support the City's progress in the multi-family water metering program and includes increases to the Water Capital Infrastructure Replacement Program to facilitate the proactive replacement of ageing infrastructure.

Sewer Utility

The three budget options for the Sewer Utility are shown in Table 7. Italicized values represent the difference between the 2023 rates and the 2024 rate options. The 2024 base budget for each option is equal to the sum of the 2023 base budget plus the changes in italics. Rows in green denote the key budget areas with options, which are further discussed in subsequent sub-sections of this report.

Table 7. 2024 Sewer Utility Budget

Key Budget Areas	2023 Base Level Budget (Restated for Comparison[1])	Option 1 Non-discretionary Increases	Option 2 Option 1 + $512,100 Increase for Mainline Flushing, Forcemain Flushing and Valve Maintenance	Option 3 (Recommended) Option 2 + $500,000 increase to the Capital Infrastructure Replacement Program
Expenditures				
Salary	$3,802,800	*$198,300*	*$327,500*	*$327,500*
Operating Expenditures	$2,552,100	*$25,100*	*$408,000*	*$408,000*
Metro Vancouver Sewer Levy (Debt and O&M Components)	$31,177,900	*$3,221,200*	*$3,221,200*	*$3,221,200*
Capital Infrastructure Replacement Program	$6,306,400	*$0*	*$0*	*$500,000*
Firm Price/Receivable	$690,300	*$18,300*	*$18,300*	*$18,300*
Overhead Allocation	$769,700	*$8,200*	*$8,200*	*$8,200*
Total Base Level Expenditure Budget	**$45,299,200**	**$48,770,300**	**$49,282,400**	**$49,782,400**
Revenues				
Sewer Levy Provision (Rate Stabilization)	$0	*$0*	*$0*	*$0*
Investment Income	-$85,000	*-$17,000*	*-$17,000*	*-$17,000*
Firm Price/Receivable	-$690,300	*-$18,300*	*-$18,300*	*-$18,300*
Total Base Level Revenue Budget	**-$775,300**	**-$810,600**	**-$810,600**	**-$810,600**
Net Budget	**$44,523,900**	**$47,959,700**	**$48,471,800**	**$48,971,800**
Net Difference Over 2023 Base Level Budget		***$3,435,800***	***$3,947,900***	***$4,447,900***

[1] *The 2023 Base Level budget has been restated to include approved budget reallocations.*

The revenue and expenditures for the Sewer Utility budget reductions and increases given in Table 7 are outlined below.

Expenditures

The key driver for the Sewer Utility is the Metro Vancouver Sewer Levy cost. Secondary drivers include Salary and Operating expenditures (including mainline flushing, forcemain flushing and valve maintenance) and the Capital Infrastructure Replacement Program.

Metro Vancouver Sewer Levy

Richmond pays Metro Vancouver a Sewer Levy for bulk transmission and treatment of liquid waste on a flat rate basis. The Metro Vancouver Sewer Levy includes an operations and maintenance component as well as a debt component. The overall levy is funded through utility rates and is increasing by $3.2M (10.3%) to $34.4M in 2024. In comparison, the 2023 Sewer Levy increased by $2.5M (8.6%) to $31.2M. Metro Vancouver's 2024 increase accounts for 92% of the non-discretionary expenditure increases proposed for the 2024 sewer rates.

Richmond's 2024 sewer rates are based on Metro Vancouver's proposed 2024-2028 Financial Plan (Table 8).

Table 8. Metro Vancouver 5-Year Overall Sewer Levy Cost – Projected Rate Increases from the Proposed 2024-2028 Financial Plan (Lulu Island Sewerage Area)

	2024	**2025**	**2026**	**2027**	**2028**
% Change	10.3%	21.6%	13.5%	9.2%	4.9%

Metro Vancouver rate increases for the Lulu Island Sewerage Area are significant, and are anticipated to continue rising in future years due to the Gilbert Trunk Sewer project and regional wastewater treatment plant upgrade projects for which some costs are shared by all sewerage areas. Since the projected costs for Metro Vancouver's major infrastructure projects throughout the region have increased by billions of dollars in recent years, the impact to Richmond's rates will be significant even with the majority of costs being allocated to other sewerage areas.

Metro Vancouver's Sewer Levy has increased by 158% since 2006, which is an average annual increase of 5.4%. This is notably higher than the City's sewer utility rate increases, which have increased by 83% over the same period.

Due to these increases, Metro Vancouver's Sewer Levy costs have increased from accounting for 63% of Richmond's sewer utility rate in 2006 to 70% in 2024 (Figure 5 on the next page). The increases in Metro Vancouver costs are a primary budget driver for the Sewer Utility.

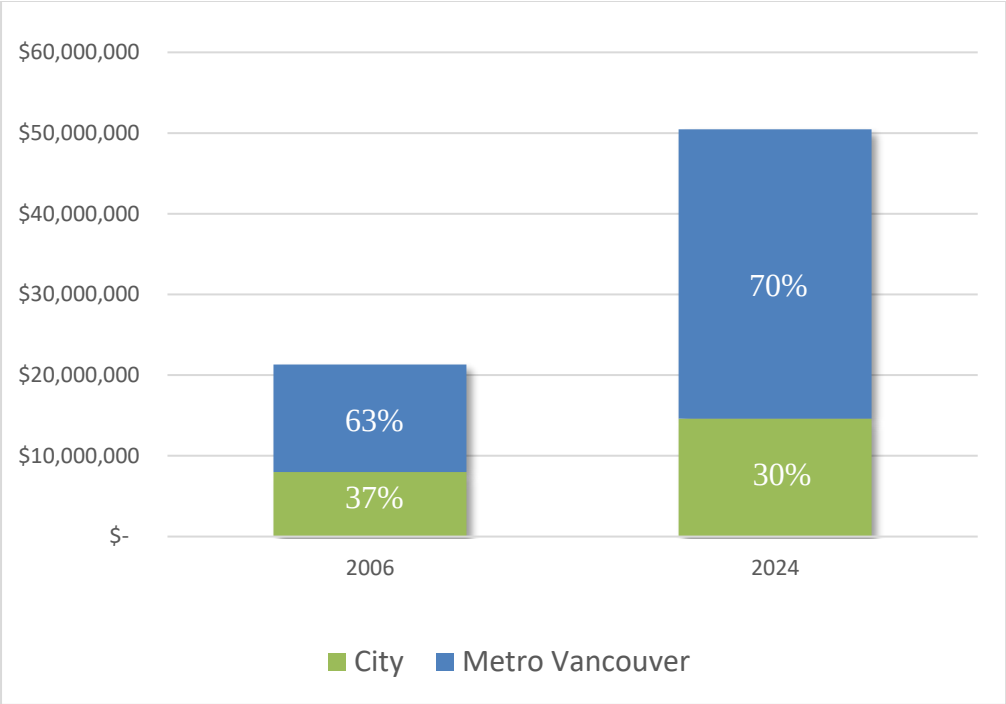


Figure 5. 2006 vs 2024 Sewer Utility User Fee Breakdown

Sewer Salary and Operating Expenditures

The main cost drivers for the operating expenditure increase include the following:

- Estimates for salary and fringe benefit impacts for union agreements yet to be negotiated for 2024 (when the collective bargaining process is completed, adjustments may be required, which would be included in the next budget cycle);
- Senior government increases such as changes to WorkSafeBC rates;
- Electricity increases; and
- Equipment cost increases.

The City's operating expenditures are carefully managed and considerable measures have been taken to minimize cost increases where possible. The average increase to the City's operating expenditures (excluding Metro Vancouver costs and increases to the funding levels for the capital infrastructure program) since 2021 has been 3.3%, which is below the CPI over the same period.

Enhanced Mainline Flushing and Dedicated Forcemain Flushing and Valve Maintenance Programs

Option 2 and Option 3 include a request for an enhanced mainline flushing program and dedicated forcemain flushing and valve maintenance programs. As part of the City's sewer salary and operating expenditures, the objective of these programs is to extend the service life of sewer infrastructure by expanding preventative maintenance measures. As the City's growth rate increases, additional resources are required to maintain sewer service levels and avoid unplanned repair costs associated with increasing demand maintenance. In recent years, the strategic installation of access valves has permitted City staff to more efficiently access sewer infrastructure to identify the locations where flushing is required to prevent blockages that can occur within sewer pipes. Without additional utility funding for the mainline flushing and

dedicated utility funding for the forcemain flushing and valve maintenance programs, there is an increased risk of unplanned repair work and costly service disruptions. These programs are necessary to avoid acceleration in the current sewer capital infrastructure replacement program.

Sewer Capital Infrastructure Replacement Program

The Sewer Capital Infrastructure Replacement Program facilitates proactive management of the City's sewer assets, which allows the City to maintain a high level of service by minimizing sewer breaks and service disruptions.

The annual capital contribution for sewer infrastructure replacement is currently $6.3M. The "Ageing Utility and Road Infrastructure Planning – 2022 Update" report identified a long-term annual funding requirement of $12.2M, with a target funding range of $9.2M to $15.2M. Option 3 includes a $500,000 increase to the Sewer Capital Infrastructure Replacement Program for the replacement of ageing infrastructure to bridge the gap between current and targeted funding levels. Bridging the funding gap increases the level of proactive infrastructure replacement, thereby offsetting financial obligations for future years. This will continue to be an important consideration in future utility budgets. Increasing the funding this year is recommended as it will narrow the funding gap in advance of the significant Metro Vancouver rate increases projected for the future.

Revenues

Construction Period Revenues

The City receives construction period revenues from development customers for sewer use during construction. This revenue is not budgeted due to its long-term variability. Any actual revenue will be transferred to the Sewer Levy Stabilization Provision for future rate stabilization funding.

Sewer Levy Provision for Rate Stabilization

The Sewer Levy Provision was established by Council as a funding source for sewer rate stabilization. The Provision has a balance of $9.9M as of August 31, 2023 and is intended to offset increases in regional sewer collection and treatment costs.

The drawdown from the Sewer Levy Provision was eliminated in the 2022 utility budget to preserve the Provision for the future, when larger Metro Vancouver sewer levy increases are anticipated. All options maintain a $0 drawdown from the Sewer Levy Provision.

Impact on 2024 Sewer Rates

The impact of the three budget options on sewer rates is shown in Table 9 on the next page and Table 11 on page 19. Table 9 shows the options for metered customers and Table 11 shows the options for flat rate customers. The italicized numbers represent the difference between 2023 and the rate options for 2024.

Option 1 represents non-discretionary increases that are required to meet demands placed on the City by factors outside of the City's direct control. Option 2 includes everything in Option 1 and a $512,100 increase for an enhanced mainline flushing program and dedicated forcemain flushing and valve maintenance programs. Option 3 is the recommended option and includes everything in Option 2 and a $500,000 increase to the Sanitary Capital Infrastructure Replacement Program.

Table 9. 2024 Metered Rate Sewer Options (Net of Discount)

Customer Class	**2023 Rates**	**Option 1**	**Option 2**	**Option 3 (Recommended)**
Single-Family Dwelling (based on 325 m^3 average consumption)	$507.26	$550.32 *$43.06*	$556.30 *$49.04*	$562.12 *$54.86*
Townhouse (based on 218 m^3 average consumption)	$340.25	$369.14 *$28.89*	$373.15 *$32.90*	$377.05 *$36.80*
Apartment (based on 157 m^3 average consumption)	$245.05	$265.85 *$20.80*	$268.74 *$23.69*	$271.55 *$26.50*
Metered Rate ($/$m^3$)	$1.5608	$1.6933 *$0.1325*	$1.7117 *$0.1509*	$1.7296 *$0.1688*
Metro Vancouver % Change		***8.0%***	***8.0%***	***8.0%***
City % Change		*0.5%*	*1.7%*	*2.9%*
Total % Change		*8.5%*	*9.7%*	*10.9%*

Table 10 shows the Metro Vancouver and City portion of the rate impacts for each of the metered rate options. The Metro Vancouver rate impacts are italicized on the left and the City rate impacts are italicized on the right.

Table 10. Cost Increase Broken Down by Metro Vancouver vs City Rate Impacts for 2024 Metered Rate Sewer Options (Net of Discount)

Customer Class	**Option 1** Total		**Option 2** Total		**Option 3 (Recommended)** Total	
	MV	*City*	*MV*	*City*	*MV*	*City*
Single-Family Dwelling (based on 325 m^3 average consumption)	$43.06 *$40.37*	*$2.69*	$49.04 *$40.37*	*$8.67*	$54.86 *$40.37*	*$14.49*
Townhouse (based on 218 m^3 average consumption)	$28.89 *$27.08*	*$1.81*	$32.90 *$27.08*	*$5.82*	$36.80 *$27.08*	*$9.72*
Apartment (based on 157 m^3 average consumption)	$20.80 *$19.50*	*$1.30*	$23.69 *$19.50*	*$4.19*	$26.50 *$19.50*	*$7.00*
Metered Rate ($/$m^3$)	$0.1325 *$0.1242*	*$0.0083*	$0.1509 *$0.1242*	*$0.0267*	$0.1688 *$0.1242*	*$0.0446*

Table 11. 2024 Flat Rate Sewer Options (Net of Discount)

Customer Class	2023 Rates	Option 1	Option 2	Option 3 (Recommended)
Single-Family Dwelling	$639.92	$694.24 *$54.32*	$701.77 *$61.85*	$709.13 *$69.21*
Townhouse	$585.50	$635.21 *$49.71*	$642.10 *$56.60*	$648.83 *$63.33*
Apartment	$487.64	$529.04 *$41.40*	$534.77 *$47.13*	$540.38 *$52.74*
Metro Vancouver % Change		***8.0%***	***8.0%***	***8.0%***
City % Change		*0.5%*	*1.7%*	*2.9%*
Total % Change		*8.5%*	*9.7%*	*10.9%*

Table 12 shows the Metro Vancouver and City portion of the rate impacts for each of the flat rate options. The Metro Vancouver rate impacts are italicized on the left and the City rate impacts are italicized on the right.

Table 12. Cost Increase Broken Down by Metro Vancouver vs City Rate Impacts for 2024 Flat Rate Sewer Options (Net of Discount)

Customer Class	Option 1 Total		Option 2 Total		Option 3 (Recommended) Total	
	MV	*City*	*MV*	*City*	*MV*	*City*
Single-Family Dwelling	$54.32 *$50.93*	*$3.39*	$61.85 *$50.93*	*$10.92*	$69.21 *$50.93*	*$18.28*
Townhouse	$49.71 *$46.60*	*$3.11*	$56.60 *$46.60*	*$10.00*	$63.33 *$46.60*	*$16.73*
Apartment	$41.40 *$38.81*	*$2.59*	$47.13 *$38.81*	*$8.32*	$52.74 *$38.81*	*$13.93*

The City's Sanitary Sewer Bylaw No. 10427 provides a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The rates outlined in Table 9 and Table 11 are net discounted rates.

Sewer Utility Options Summary

The following is a summary of the Sewer Utility budgets and rates for Option 1:

Option 1

- Represents the minimum increase necessary to maintain the current level of service.

The following is a summary of the Sewer Utility budgets and rates for Option 2:

Option 2

- Includes everything in Option 1; and
- Includes a $512,100 increase for an enhanced mainline flushing program and dedicated forcemain flushing and valve maintenance programs.

The following is a summary of the Sewer Utility budgets and rates for Option 3:

Option 3 (Recommended)

- Includes everything in Option 2; and
- Increases the Sewer Capital Infrastructure Replacement Program by $500,000.

Sewer Utility Recommended Option

Staff recommend the budgets and rates identified in Option 3 for the Sewer Utility. This option will support the City's preventative maintenance programs and includes increases to the Sewer Capital Infrastructure Replacement Program to facilitate the proactive replacement of ageing infrastructure.

Flood Protection Utility

At the November 14, 2022 Regular Council Meeting, as outlined in the report titled "2023 Utility Budgets and Rates" dated October 18, 2023, Council endorsed the renaming of the Drainage and Diking Utility to the Flood Protection Utility.

The Flood Protection Utility was created to fund the operation, maintenance, and upgrade of Richmond's flood protection infrastructure. Since 2003, Council has approved increasing annual funding levels for the utility from $0.6M to its current level of $18.0M, inclusive of operating and capital budget amounts. This has facilitated significant improvements to the City's flood protection system.

Accelerated Flood Protection Program

Climate change scientists predict up to 1 m of sea level rise and 0.2 m of ground settlement by 2100. The City's Flood Protection Management Strategy identifies the need to raise the City's dikes by approximately 1.2 m to protect the City against flooding. At the April 12, 2021 Regular Council Meeting, Council adopted a 50-year implementation period for an accelerated flood protection program with the objective of upgrading the City's dikes within 50 years. The program requires an annual capital budget of $30M by 2032 (Figure 6), which will allow the City to upgrade flood protection infrastructure well in advance of anticipated climate change impacts. Implementation of the new rates began in 2023. All utility options presented in the report include increasing the annual capital budget from $13.0M to $15.8M to support acceleration of this program as a component of the overall flood protection budget.

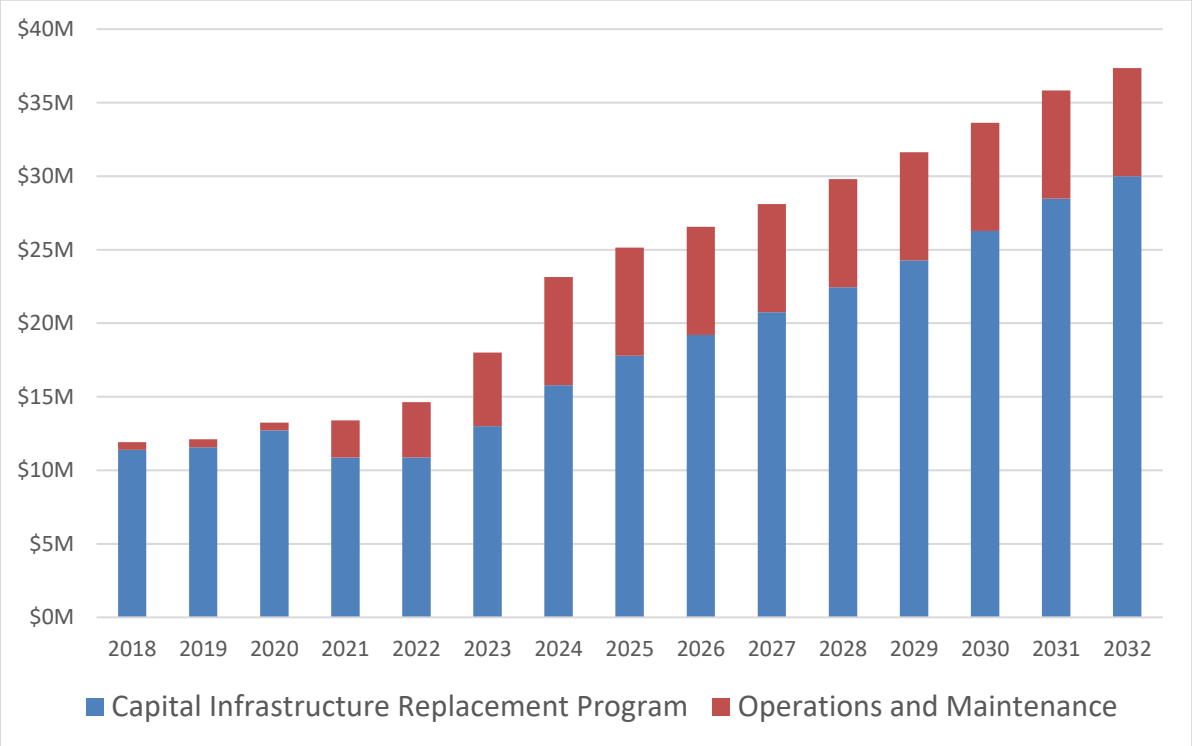


Figure 6. Flood Protection Utility Projections per Accelerated Flood Protection Program

Figure 6 includes the Flood Protection Utility funding for the Capital Infrastructure Replacement Program and Operations and Maintenance. Before 2021, the majority of the flood protection operations and maintenance costs were funded from the operating budget. Since 2021, these costs have been gradually re-allocated from the operating budget to the Flood Protection Utility as part of a multi-year phased approach.

Given the City's proactive flood protection planning efforts, the City has been successful in obtaining approximately $42.0M in senior government grants since 2010 to support the advancement of this work. A strong capital program allows the City to continue leveraging opportunities to secure grant funding, such that money collected from Richmond's residents is multiplied and provides greater value for investments into Richmond's flood protection infrastructure.

Resources for Implementation of the Accelerated Flood Protection Program

As outlined in the report titled "Accelerated Flood Protection Program Concept and Flood Protection Rate Structure Review" dated February 26, 2021 and endorsed during the April 12, 2021 Regular Council Meeting, implementation of the accelerated flood protection program requires additional regular full-time staff to manage the design, environmental permitting, compensation, and monitoring, regulatory permitting, property and legal negotiations, and project management for this program.

The four positions listed below with Position Complement Control (PCC) are proposed for 2024 and are included within the three options for the Flood Protection Utility options. The Staff Solicitor position was identified in the report titled "Accelerated Flood Protection Program Concept and Flood Protection Rate Structure Review" dated February 26, 2021. The Project Coordinator, Manager, Flood Protection, and Departmental Associate 2 positions are required to support flood protection infrastructure upgrades that are completed through the ongoing accelerated flood protection program.

- **Staff Solicitor** – This position will be responsible for providing legal support for land acquisition that is required for flood protection upgrades and negotiating legal agreements to facilitate the delivery of capital flood protection upgrade works.

- **Project Coordinator** – This position will support flood protection upgrade project planning, prepare and coordinate grant applications, and manage regulatory approvals and permits. Grant funding applications are typically issued multiple times per year and include tight submission deadlines with complex application requirements. These applications have recently become more complex and have required increased staff time for preparation. This position will help ensure that thorough and high quality grant applications are submitted to governing agencies, thereby increasing the City's chances of securing funding. In addition, given the increased regulatory requirements and long lead times for permitting, this position will help identify permit requirements through the project planning phase. This will allow the accelerated flood protection program to continue in accordance with the approved schedule.

- **Manager, Flood Protection** – Maintenance of flood protection infrastructure is currently split between two departments. This position will centralize the management and coordination of resources to help ensure that the City's flood protection infrastructure

continuously meets the needs of the community. The position will also support the proactive maintenance, repair and emergency response associated with Richmond's flood protection infrastructure.

- **Departmental Associate 2** – This position will provide administrative support to the Manager, Flood Protection to help ensure the proactive maintenance, repair and emergency response associated with flood protection infrastructure is coordinated. This position will also help ensure that flood protection inquiries from residents and internal stakeholders are efficiently and effectively addressed.

Funding for the Staff Solicitor position will be from the flood protection operations and maintenance budget, and is captured in proposed Option 2 and Option 3.

Funding for the Project Coordinator position will be through the capital budget, and is captured within the capital budget increase in proposed Option 3.

Funding for the Manager, Flood Protection and Departmental Associate 2 positions will be from the flood protection operations and maintenance budget, and is captured in proposed Option 3. This option also include annual operating costs to support the Manager, Flood Protection position, including a vehicle for inspection, monitoring and after hours response operations.

A summary of the proposed positions, including the respective funding source and classification are outlined in Attachment 2. Additional positions required to support this program may be requested as part of future budget processes.

Flood Protection Operations and Maintenance Costs

Non-Discretionary Increases

The City's operating budget expenditures have increased due to factors beyond the City's control and contractual obligations, including the following:

- Estimates for salary and fringe benefit impacts for union agreements yet to be negotiated for 2024 (when the collective bargaining process is completed, adjustments may be required, which would be included in the next budget cycle);
- Senior government increases such as license permit fees and changes to WorkSafeBC rates; and
- Material cost increases; and
- Electricity increases.

Transfer of Operations and Maintenance Costs to the Flood Protection Utility

The City's operating expenditures are carefully managed and considerable measures have been taken to minimize cost increases where possible. The flood protection operations and maintenance cost has been included in the City's operating budget since its inception in 2001. It is appropriate for the Flood Protection Utility to fund both capital and operating expenditures, which is consistent with the Water Utility and Sewer Utility. Since 2021, flood protection operations and maintenance costs have been gradually re-allocated from the operating budget to the Flood Protection Utility as part of a multi-year phased approach. To date, $5.0M has been re-allocated to the Flood Protection Utility. Option 1 includes an additional re-allocation of $1.8M which

completes the transition process, whereby the Flood Protection Operations budget is fully collected within the Flood Protection Utility instead of as part of the Operating Budget. There will be a corresponding reduction of $1.8M in the City's 2024 Operating Budget.

All proposed options will completely transfer all of the flood protection operating budget to the utility.

Impact on Flood Protection Rates and Rate Classes

Starting in 2016, Council has endorsed the creation of flood protection rate classes that differentiated between the various types of property in the City. Prior to this, all accounts paid the same rate regardless of parcel size or assessed value. Creating equity between these rate classes is an ongoing effort as property values, land use and construction costs continue to evolve. The proposed flood protection rates improve the balance between the rate classes. In general, groups with higher value assets will be contributing more to flood protection and the rate increases reflect the different levels of demand that properties place on the City's flood protection system. Staff will continue to review the business rate classes in 2024 to further improve balance and equity and will bring forward any resulting recommendations for Council's consideration.

Table 13 on the next page provides a summary of the proposed flood protection rates for each rate class and the impact on the net utility budget. Numbers in italics represent the difference between the 2023 rate and the rate options for 2024. Rows in green denote the key budget areas with options.

The City's Flood Protection Bylaw No. 10426 provides a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The rates outlined in Table 13 are net discounted rates.

Table 13. 2024 Flood Protection Rate Options (Net of Discount)

Rate Class	**2023 Rates**	**Option 1** Non-discretionary Increases + Capital Budget increases per the Accelerated Flood Protection Report, + Additional $1.8M Transfer of Flood Protection O&M to Flood Protection Utility	**Option 2** Option 1 + One New Position per the Accelerated Flood Protection Program (Staff Solicitor)	**Option 3 (Recommended)** Option 2 + Three New Positions to support the Accelerated Flood Protection Program (Project Coordinator, Manager, Flood Protection & Departmental Associate 2)
Single-family Residential	$224.08	$268.77 *$44.69*	$268.87 *$44.79*	$269.91 *$45.83*
Agricultural	$224.08	*$268.77* *$44.69*	*$268.87* *$44.79*	*$269.91* *$45.83*
Multi-family Residential	$176.66	$194.16 *$17.50*	$194.20 *$17.54*	$194.61 *$17.95*
Small or Stratified ICI (less than 800m^2)	$224.08	$268.77 *$44.69*	$268.87 *$44.79*	$269.91 *$45.83*
Non-Stratified ICI (between 800m^2 and 2,000m^2)	$522.96	$540.24 *$17.28*	$540.27 *$17.31*	$540.68 *$17.72*
Medium Non-Stratified ICI (between 2,000m^2 and 10,000m^2)	$661.03	$892.39 *$231.36*	$941.97 *$280.94*	$991.55 *$330.52*
Large Non-Stratified ICI (between 10,000m^2 and 20,000m^2)	$1,416.79	$2,408.54 *$991.75*	$2,621.06 *$1,204.27*	$2,833.58 *$1,416.79*
Large Non-Stratified ICI (between 20,000m^2 and 50,000m^2)	$1,507.19	$4,672.29 *$3,165.10*	$5,350.52 *$3,843.33*	$6,028.76 *$4,521.57*
Large Non-Stratified ICI (between 50,000m^2 and 100,000m^2)	$1,658.48	$6,302.22 *$4,643.74*	$7,297.31 *$5,638.83*	$8,292.40 *$6,633.92*
Large Non-Stratified ICI (between 100,000m^2 and 500,000m^2)	$1,734.42	$9,018.98 *$7,284.56*	$10,579.96 *$8,845.54*	$12,140.94 *$10,406.52*
Largest Non-Stratified ICI (above 500,000m^2)	$1,810.51	$13,216.72 *$11,406.21*	$15,660.91 *$13,850.40*	$18,105.10 *$16,294.59*
Net Budget	**$18,000,000**	**$22,595,900**	**$22,841,900**	**$23,141,900**
Capital Infrastructure Replacement Program	$13,000,000	$15,779,500	$15,779,500	$15,779,500
Flood Protection Operations and Maintenance	$5,000,000	$6,816,400	$7,062,400	$7,362,400
Net Difference Over 2023 Base Level Budget		***$4,595,900***	***$4,841,900***	***$5,141,900***
Overall % Change Over 2023 Base Level Budget		*25.5%*	*26.9%*	*28.6%*

Flood Protection Utility Options Summary

The following is a summary of the Flood Protection Utility budgets and rates for Option 1:

Option 1

- Increases the Flood Protection Capital Infrastructure Replacement Program by $2.8M; and
- Includes an additional $1.8M transfer of operations and maintenance to the utility, which will increase the total flood protection operations and maintenance budget that is funded from the utility to $6.8M. This will complete the transfer of the flood protection operations and maintenance costs to the utility and these costs will no longer be funded from the City's operating budget.

The following is a summary of the Flood Protection Utility budgets and rates for Option 2:

Option 2

- Includes everything in Option 1; and
- Includes one new PCC for the regular full-time Staff Solicitor position that is required to support acceleration of the flood protection program. This position will be funded from the flood protection operations and maintenance budget and will increase the total budget to $7.1M.

The following is a summary of the Flood Protection Utility budgets and rates for Option 3:

Option 3 (Recommended)

- Includes everything in Option 2; and
- Includes the addition of new PCCs for three regular full-time positions to help support the acceleration of the flood protection program. The Project Coordinator position will be funded from the Flood Protection Capital Infrastructure Program. The Manager, Flood Protection and Departmental Associate 2 positions will be funded from the flood protection operations and maintenance budget. This increases the total flood protection operations and maintenance budget to $7.4M.

Recommended Option

Staff recommend the budgets and rates identified in Option 3 for the Flood Protection Utility. This option includes increases to the capital budget, the complete transfer of flood protection operations and maintenance to the utility, and the addition of new positions to support acceleration of the flood protection program. Additional capital budget increases will be added in future years, which may require new positions to support the acceleration of the flood protection program.

Solid Waste and Recycling

Table 14 presents three budget options for the Solid Waste and Recycling Utility. Rows in green denote the key budget areas with options, which are further discussed in subsequent sub-sections.

Table 14. 2024 Solid Waste and Recycling Budget

Key Budget Areas	**2023 Base Level Budget**	**Option 1** Base Level Services	**Option 2 (Recommended)** $250,000 Contribution to Reserve + Encampment Clean-up	**Option 3** Option 2 + $250,000 Additional Contribution to Reserve
Expenditures				
Salaries	$5,106,500	$303,500	$303,500	$303,500
Contracts	$10,617,400	$441,300	$441,300	$441,300
Equipment/Materials	$1,319,400	$2,700	$2,700	$2,700
Disposal Costs	$1,585,900	$52,300	$52,300	$52,300
Recycling Materials Processing	$4,688,100	$112,100	$112,100	$112,100
Container Rental/Collection	$403,900	$24,800	$24,800	$24,800
Operating Expenditures	$445,100	$10,800	$10,800	$10,800
Agreements	$125,000	$0	$0	$0
Rate Stabilization	$668,400	$0	$0	$0
Encampment Clean-up	$0	$0	$179,500	$179,500
Transfer to Reserve	$0	$0	$250,000	$500,000
Base Level Expenditure Budget	**$24,959,700**	**$25,907,200**	**$26,336,700**	**$26,586,700**
Revenues				
General Application Fees	-$112,600	$0	$0	$0
Recycling Materials	-$541,300	$124,800	$124,800	$124,800
Garbage Tags	-$20,000	$0	$0	$0
Unrealized Discounts	-$108,000	-$2,000	-$2,000	-$2,000
Revenue Sharing Grant/Other	-$126,600	$24,000	$24,000	$24,000
Recycling Commission	-$281,900	-$19,000	-$19,000	-$19,000
Recycle BC Incentive	-$2,622,800	-$165,500	-$165,500	-$165,500
Provision (OBI Adjustment)	-$532,100	$50,000	$50,000	$50,000
Base Level Revenue Budget	**-$4,345,300**	**$12,300**	**$12,300**	**$12,300**
Net Budget	**$20,614,400**	**$21,574,200**	**$22,003,700**	**$22,253,700**
Net Difference Over 2023 Base Level Budget		**$959,800**	**$1,389,300**	**$1,639,300**

Below is an explanation of the budget reductions and increases outlined in Table 14.

Contracts

Contract costs under Option 1 are increased in accordance with overall growth in the number of units serviced and escalation clauses as stipulated in the City's various solid waste and recycling service contracts. Additionally, the *Recycling and Solid Waste Management Report 2022 – Taking Action to Reduce Waste* identified a dog waste collection program as part of public spaces recycling to support sustainable waste management. Staff expect to secure a service provider to implement a dog waste collection program to commence in 2024.

Salaries

Salary and fringe benefit impacts per union agreements are the primary driver for non-discretionary utility budget increases. Estimates for salary and fringe benefit impacts for union agreements yet to be negotiated for 2024 have been included. When the collective bargaining process is completed, adjustments may be required which would be included in the next budget cycle.

Transfer to Reserve

The creation of the new *Solid Waste and Recycling Reserve Fund Establishment Bylaw No. 10417* was approved at the November 14, 2022 Council meeting. Option 2 would provide for a contribution of $250,000 to the reserve and Option 3 would increase that contribution to $500,000 for future funding needs for Solid Waste and Recycling programs. The current annual reserve target is $3.5 million and is required to ensure a funding source for facilities, equipment and infrastructure for City services including the Recycling Depot, litter operations and collection receptacles used by residents.

Encampment Clean-up

Costs under Option 2 and Option 3 include additional labour costs associated with increasing demand for encampment clean-ups. The increasing number of incidences has reached levels that are beyond what can be absorbed without adding resources to safely remove and dispose of encampment materials. Option 2 and Option 3 include added contract costs for contractor support to handle, remove and dispose of encampment materials that are hazardous and require special handling as well as an allowance for additional equipment to remove overgrowth and maintain clear sight lines.

Recycling Materials Processing

Recycling materials processing cost increases under all options are primarily associated with increased organics tonnage collected from townhomes and multi-family buildings, as well as increasing volumes of yard trimming materials dropped off at EcoWaste by residents. Additionally, there is an increase in processing costs associated with market fluctuations for commodities collected at the Recycling Depot, most notably for paper, newspaper and plastic.

Disposal Costs

The Metro Vancouver regional tipping fee projections for local governments indicate a $7 per tonne increase, or from $127 per tonne in 2023 to $134 per tonne in 2024.

Container Collection Costs

Container collection costs have increased primarily due to an increased hauling rate for upholstered furniture collected at the Recycling Depot, and an overall increase in number of hauls for commodities at the Recycling Depot, Works Yard and in-ground garbage containers in the community.

Operating Expenditures

The marginal increase in operating expenditures relates to various service fee items including mobility charges.

Equipment and Material Costs

Equipment and material cost increases under all options are adjusted marginally associated with inflationary cost factors to support items for litter collection and Recycling Depot operations. In 2024, these increased costs are offset by removing the one-time costs associated with the trash skimmer device, which was purchased and installed in 2023.

Agreements

There is no change to costs associated with agreements, which principally support the rodent and mosquito control programs administered by City staff.

General Solid Waste & Recycling Rate Stabilization provision (Rate Options)

The General Solid Waste and Recycling Provision was established by Council as a funding source for rate stabilization. The provision has a balance of $7.5M as of August 31, 2023.

Solid Waste and Recycling – Key Project Updates

Commercial Recycling Services Review

As per the staff report titled "Commercial Recycling Services Review" dated September 12, 2023, the City will transition from providing commercial garbage and recycling collection services and instead shift to providing hands-on support for businesses through the development and implementation of a Business Education and Advisory Program, on a pilot basis.

Based on feedback received through consultation with Richmond businesses, industry and other stakeholders, the most appropriate approach for the City to support businesses in this space is to educate and bring awareness to existing options on the market for commercial garbage and recycling services. To pilot this approach, the City will provide at no cost to business a one-on-one education and support advisory program tailored to each businesses needs to help them better understand their waste streams and determine which options work best for their operations.

This hands-on program will be implemented in two phases. Phase 1: Develop and Implement the Business Education and Advisory Pilot Program will include the development and implementation of a Business Education Toolkit, which will include information such as existing available services, how to create a waste disposal and diversion plan and best practices. The toolkit will supplement the development and implementation of a Business Advisory Program which will include hands-on support from the City such as site visits, waste assessments,

coaching on how to contract services and on-going educational workshops for staff. This phase will conclude after one-full year of implementation, which will trigger Phase 2: Evaluation of the Business Education and Advisory Pilot Program. This will include further engagement with the business community to review and determine uptake, effectiveness and overall feedback from the business community. Upon evaluation, staff will report back to Council with recommendations on formalization.

The current funding allocation of $360,000 for this pilot project is maintained under the budget presented above, with an offset from provision for no impact to the rates charged to residents.

Multi-Family Grease Collection Pilot

Council approved the one-year Multi-Family Grease Collection Pilot, which was implemented in September 2022. The pilot was rolled out to six multi-family complexes with 934 units having access to participate in the program. Residents are able to collect used cooking oil and grease in City provided containers with lids and deposit them in a designated and centrally located collection cart for pickup. Collection containers and program instructional brochure packages were provided at in-person information sessions, and where feasible, additional packages were left behind with the on-site building representative for distribution to units not in attendance. If residents need additional containers during the pilot, they are made available through their strata or at the Recycling Depot.

Resident participation in the pilot program varied from building to building, but overall participation and materials collected to date are lower than anticipated with a total of 939 containers and 462 kilograms collected over the twelve month pilot. This equates to one container and 0.49 kilogram per unit. There have been challenges with residents using the dedicated carts for general garbage instead of grease containers. Used cooking oil and grease collected weekly through the pilot program are stored and consolidated for delivery to a facility for processing. Staff will continue communications in an attempt to increase program uptake within the participating complexes, as well as explore and evaluate alternative initiatives to further reduce the impact of grease in City sewer systems.

Water-Based Trash Skimmer Pilot Project

On June 8, 2023, World Oceans Day, the City installed the Collec'Thor trash skimmer device at the Fisherman's Wharf located in Steveston Village. From its location on the dock, the Collec'Thor will collect both solid and liquid waste that floats in the water's surface. The City is piloting the device with the Steveston Harbor Authority and Ocean Wise Conservation Association (Ocean Wise). Swim Drink Fish is no longer able to support the initiative.

Ocean Wise is a global conservation organization that will be conducting waste characterization audits of the material retrieved from the Collec'Thor. This data will help the City gain a better understanding of the types of materials being pulled from the water and help inform future actions, as appropriate.

As of September 26, 2023, staff have removed 57.79 kilograms of materials from the Collec'Thor, which primarily consists of organics (driftwood and seaweed), Styrofoam pieces, flexible plastics and cutlery. The first waste characterization audit will be conducted in mid-October.

Initial feedback from staff indicates the device works well, however there have been minor operational issues such as blocked pumps and malfunctioning openings. Staff have also noticed that the amount of material collected is heavily influenced by wind and tides.

The pilot remains in progress and staff will present information to Council with findings and recommendations once further information from the pilot is available.

Bike Re-Use Pilot

As highlighted in the *Recycling and Solid Waste Management – Report 2022: Taking Action to Reduce Waste*, ten to fifteen bikes are dropped off at the Recycling Depot each week for recycling. In an effort to support a more circular economy and foster reuse in the community, staff have reviewed options for a bike reuse pilot at the Recycling Depot, which will include working with a partner organization to divert suitable bikes from recycling for repair and redistribution in the community. Staff's initial assessment is there are no known organizations in Richmond for such a partnership, therefore a request for proposals will be issued to the marketplace to determine interested parties. The pilot is expected to launch in approximately Q2 2024. Staff note that e-bikes and e-scooters will not be included within the scope of this pilot since these items are currently handled within established extended producer responsibility programs.

Construction Period Revenues

The City receives construction period revenues from development customers for solid waste and recycling during construction. This revenue is not budgeted due to the long term variability in these revenues. Any actual revenues will be transferred to the General Solid Waste and Recycling provision for future rate stabilization funding.

Revenues – General Solid Waste and Recycling Provision

Recycling Materials

Recycling material revenue decreased due to extreme market fluctuations in commodity values for materials collected at the Recycling Depot. The decreased revenues are primarily related to reduction in revenue for scrap metal, aluminum, cardboard and paper based on market conditions. Revenue also decreased due to a reduction in glass tonnage collected from curbside and multi-family homes, as well as at the Recycling Depot. Overall, recycling materials revenues are applied to program costs to help offset the rates charged to residents.

Provision

All options include a reduction in the use of rate stabilization funding associated with the one-time cost of $50,000 for the purchase of the Collec'Thor trash skimmer device.

Other Revenues

The decrease in other revenue is associated with a reduction in the amount of upholstered furniture dropped off at the Recycling Depot by commercial businesses.

Unrealized Discounts

Residents are entitled to a 10% utility bill discount if the amount owing is paid on or before the due date. Unrealized discounts are comprised of late payments wherein the owner did not receive the discount, therefore the discount amount is then considered a revenue for the City. These revenues are estimated by the Finance Department based on the trend of historic payments.

Recycling Commission

Metro Vancouver approached the City with a funding strategy to recognize the contribution municipally operated recycling depots provide to supplement the regional recycling system. As a result, the City entered into an agreement with Metro Vancouver in 2022 to receive annual funding, in exchange for the Recycling Depot accepting base recycling materials drop-off from regional customers. The increase for 2024 represents a CPI adjustment as outlined in the agreement.

Recycle BC Incentive

The net Recycle BC revenue incentive is increased due to changes to the financial incentive paid to collectors. Additionally, the revenue is adjusted to offset inflationary cost increases in order to maintain no net impact in the Blue Box/Multi-Family Recycling rate. Overall, the Recycle BC program is expected to generate net revenues of approximately $330,000 for 2024 and can be deposited into the *Solid Waste and Recycling Reserve Fund* account subject to Council approval. This is in alignment with previous Council direction (November 25, 2013) when the decision to join Recycle BC was made.

Impact on 2024 Solid Waste and Recycling Rates

The impact of the budget options to ratepayers is provided in Table 15 and Table 16. The principal reason for the increase in 2024 relates to estimated wage settlements to be negotiated, inflationary contract costs stipulated in existing contracts, disposal cost increases, and market fluctuations for commodities at the Recycling Depot. Numbers in italics represent the difference between 2023 rates and the various rate options for 2024.

Table 16 provides total costs based on standard garbage cart sizes for single-family (240L) and townhouse (120L). Table 15 provides a more detailed breakdown of recommended Option 2 rates based on the four different garbage cart size options that are available to residents in single-family and townhouse units. The percentage of container sizes subscribed by each customer class is also presented for reference. Residents are able to reduce or increase the amount they pay based on the cart size they select for garbage collection services.

Table 15. 2024 Solid Waste and Recycling Rate Options (Net of Discount)

Customer Class	2023 Rates	Option 1	Option 2 (Recommended)	Option 3
Single-Family Dwelling (Standard 240L Cart)	$414.15	$424.10 *$9.95*	$428.70 *$14.55*	$431.40 *$17.25*
Townhouse (Standard 120L Cart)	$290.75	$298.15 *$7.40*	$302.75 *$12.00*	$305.45 *$14.70*
Apartment	$138.85	$143.50 *$4.65*	$148.10 *$9.25*	$150.80 *$11.95*
Business Rate	$43.27	$44.16 *$0.89*	$48.76 *$5.49*	$51.46 *$8.19*

Table 16. 2024 Single-Family and Townhouse Net Rates by Garbage Cart Size (Per Recommended Option 2)

Cart Size	Single Family		Townhomes	
	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size	Full Service Rate (Including Recycling, Organics, Other Services)	Approximate Percent - Subscribed Size
80L	$373.70	*4%*	$275.50	*15%*
120L	$400.95	*11%*	$302.75	*75%*
240L	$428.70	*78%*	$330.50	*9%*
360L	$544.70	*7%*	$446.50	*1%*

The rates outlined in Table 15 and Table 16 are net rates. The *Solid Waste & Recycling Regulation Bylaw* provides a 10% discount for utility bills paid prior to the due date. The rates shown in the bylaw will be before the 10% discount is applied, in order to achieve full cost recovery.

Regional Issues

In addition to standard operating programs, Metro Vancouver is continuing to undertake consultation as part of preparing an update to the region's solid waste management plan, with the pre-engagement public consultation set to conclude in November 2023. Updates to the North Surrey and Langley Recycling and Waste Centres continue to be delayed and remain in preliminary stages. Completion of these projects is expected beyond 2025. Metro Vancouver is hosting a workshop with member municipalities and reuse partners to explore options to expand Reuse Days to greater encourage a shift towards reduction, reuse and repair. Regional campaigns remain focused on textiles, single-use items, food waste, illegal dumping, the annual Zero Waste Conference and related initiatives. Metro Vancouver continues to support the National Zero Waste Council to advance waste reduction, reuse and circularity within Metro Vancouver and across Canada.

Solid Waste and Recycling Options Summary

Option 1

- Represents full recovery via rates of all program costs, including costs associated with managing increasing operating costs, disposal costs and recycling material processing fees;
- Meets the City's contractual obligations related to inflationary aspects of agreements and contracts; and
- Continues the work of various pilot initiatives such as the Commercial Business Education and Advisory Program and grease collection pilot, offset by provision funding.

Option 2 (Recommended)

- Includes everything in Option 1;
- Includes additional staff labour, contractor costs and equipment for encampment clean-ups; and
- Includes a $250,000 contribution to the *Solid Waste and Recycling Reserve Fund* for future solid waste and recycling programming inclusive of Recycling Depot improvement and replacement costs, facilities and equipment to support services to the community, and initiatives designed to further circular economy objectives.

Option 3

- Includes everything in Option 2; and
- Includes a $500,000 contribution to the *Solid Waste and Recycling Reserve Fund* for future solid waste and recycling programming inclusive of Recycling Depot improvement and replacement costs, facilities and equipment to support services to the community, and initiatives designed to further circular economy objectives.

Recommended Option

Staff recommend the budget and rates identified in Option 2 for Solid Waste and Recycling. This option provides full funding for all existing programs and ensures appropriate resources are in place to support these programs. Additionally, this option includes essential funding for encampment clean-ups, contributions to the *Solid Waste and Recycling Reserve Fund* and continues the work of current pilot initiatives related to the Commercial Business Education and Advisory Program and multi-family grease collection program.

Total Recommended 2024 Utility Rate Option

In light of the significant challenges associated with the impacts of regional costs and new programs in the City, staff recommend the budget and rate options as follows:

- Option 3 is recommended for Water
- Option 3 is recommended for Sewer
- Option 3 is recommended for Flood Protection
- Option 2 is recommended for Solid Waste and Recycling

Table 17 on the next page summarizes the estimated total metered rate utility charge, based on average water and sewer consumption. Table 18 on the next page summarizes the total flat rate utility charge. Numbers in italics represent the difference between 2023 rates and 2024 proposed rates.

Table 17. 2024 Estimated Total Net Rates to Metered Customers

Customer Class	2023 Estimated Net Metered Rates	2024 Estimated Net Metered Rates	% Change
Single-Family Dwelling	$1,653.96	$1,811.58 *$157.62*	*9.5%*
Townhouse (on City garbage service)	$1,155.75	$1,250.93 *$95.18*	*8.2%*
Townhouse (not on City garbage service)	$1,090.69	$1,136.93 *$46.24*	*4.2%*
Apartment	$794.32	$868.49 *$74.17*	*9.3%*
Metered Water ($/m^3)	$1.4316	$1.5620 *$0.1304*	*9.1%*
Metered Sewer ($/m^3)	$1.5608	$1.7296 *$0.1688*	*10.8%*

Table 18. 2024 Total Net Rates to Flat Rate Customers

Customer Class	2023 Net Flat Rates	2024 Net Flat Rates	% Change
Single-Family Dwelling	$2,038.41	$2,237.21 *$198.80*	*9.8%*
Townhouse (on City garbage service)	$1,675.23	$1,825.17 *$149.94*	*9.0%*
Townhouse (not on City garbage service)	$1,636.80	$1,711.16 *$74.36*	*4.5%*
Apartment	$1,204.18	$1,320.63 *$116.45*	*9.7%*

The rates outlined in Table 17 and Table 18 are net rates. The bylaws provide a 10% discount for utility bills paid prior to the due date. To achieve full cost recovery, the rates shown in the bylaw will be before the 10% discount is applied. The gross rates charged to residents are outlined in Attachment 1. These rates would be reflected in the amending bylaws for each utility area, should they be approved by Council.

Flat Rate and Metered Customers

All single-family and ICI properties in the City are metered. The single-family residential flat rate will continue to apply to duplex units that share one water service. These units require significant internal plumbing separation work to facilitate metering and were not included in the universal metering program. 44% of townhouses and apartments are still on flat rate utility services. However, the number of units with meters will continue to increase with on-going

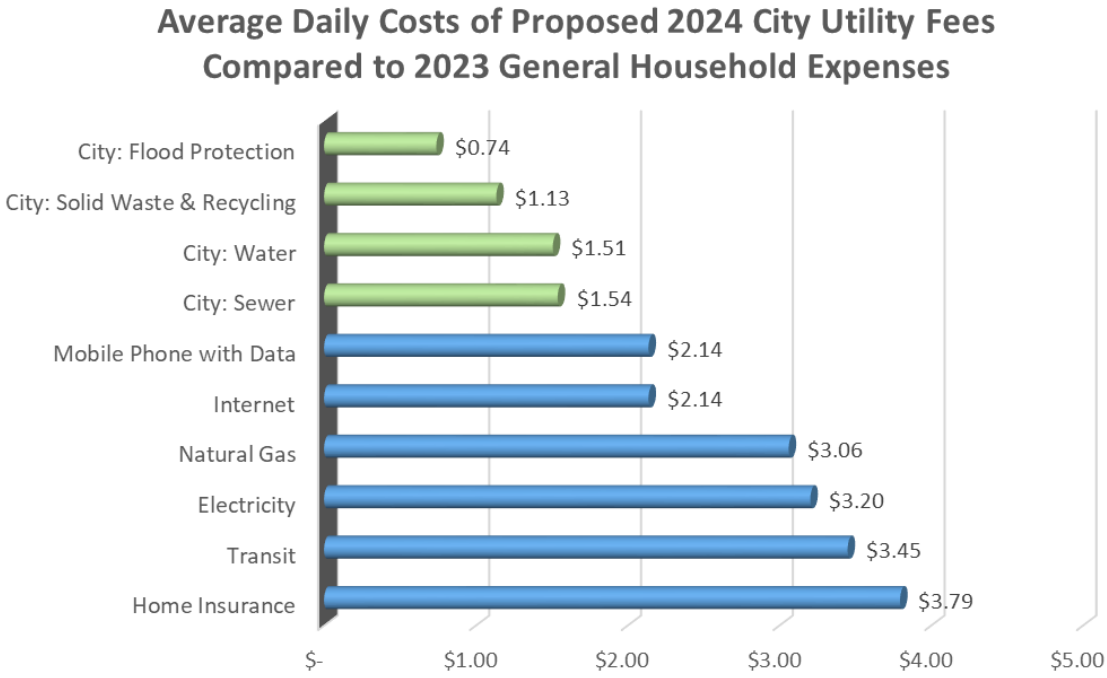
implementation of the universal multi-family water metering program. The number of units by customer class is presented in Table 19.

Table 19. Flat Rate and Metered Property Unit Counts

	2023 percentages (Mid-Year)	**2023 Counts (Mid-Year)**	**2024 Counts (Mid-Year Estimated)**	**Difference**
Single-Family Residential	Flat Rate (3%)	764	764	0
	Metered (97%)	27,975	27,975	0
Townhouse	Flat Rate (57%)	10,533	9,480	-1,053
	Metered (43%)	7,793	8,846	1,053
Apartment	Flat Rate (38%)	14,207	12,786	-1,421
	Metered (62%)	23,554	26,975	3,421
Total Residential Units		**84,826**	**86,826**	**2,000**
Commercial Units	**Metered**	**3,545**	**3,545**	**0**
Farms	**Metered**	**51**	**51**	**0**

Comparison of 2024 City Utility Rates to Other Major Household Expenses

The proposed 2024 City utility fees represent approximately 20% of total average daily household expenses (2023 values) and are of good value when compared with common household expenses. Water, sewer, solid waste and recycling, and flood protection services are fundamental to the quality of life for residents and necessary infrastructure to support the local economy. Figure 7 illustrates the value of these services based on the proposed 2024 rates when compared to 2023 costs for other common daily household expenses.



Sources: BC Hydro, Fortis BC, Rogers, Shaw, TD Insurance, and Translink

Figure 7. Cost Comparison of Main Household Expenses for a Single-Family Dwelling

Comparison of 2023 City Utility Rates with Comparator Municipality Utility Fees

The City's utility budgets are carefully managed to provide high levels of service to Richmond's residents, despite external increases that are outside of the City's control. Figure 8 provides a comparison between the City's average single-family dwelling utility fees with fees for comparator municipalities in 2023. The 2023 rates are presented for comparator municipalities as 2024 rates have not been established yet.

All utility fees presented below are net of applicable discounts. Richmond and Surrey water and sewer rates include applicable metering costs and are based on average annual consumptions. All other comparator municipalities are predominately charging a flat rate for water and sewer services. Blue box, general recycling and waste management fees have been excluded in the garbage and organics fee presented for comparison purposes, as not all municipalities offer the same services.

Unlike comparator municipalities, Richmond's flat topography, high water table and proximity to the water places unique challenges on the City's utility infrastructure, resulting in larger and deeper pipes, the need for over 200 drainage and sanitary pump stations and the need for an extensive flood protection system that includes 49 kilometres of perimeter dikes. In addition, the City has made substantial investments to upgrade flood protection infrastructure in advance of anticipated climate change impacts through the ongoing accelerated flood protection program. This significantly increases demand for capital and operating costs. Despite these challenges and the additional infrastructure needs, the City of Richmond continues to offer a high level of service with the proposed utility fees.

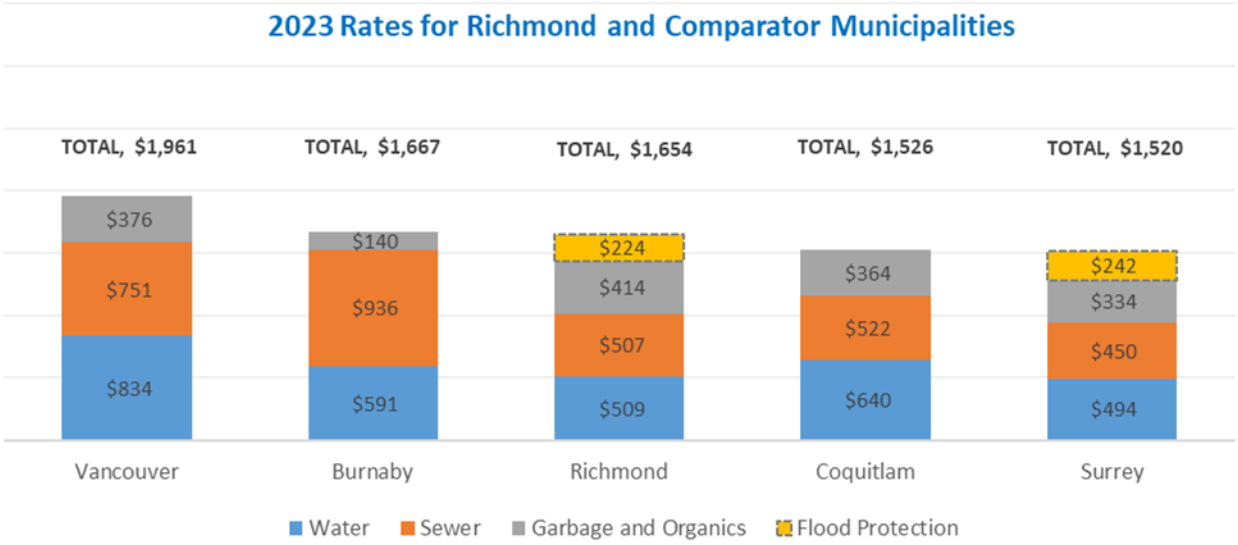


Figure 8. Comparison of Average Single Family Dwelling Utility Rates for Richmond with Comparator Municipalities (2023 Rates)

Sources:

City of Surrey - Based on metered rate
Waterworks Regulation and Charges By-law 2007, No 16337 ; Amendment Bylaw No. 20825
Sanitary Sewer Regulation and Charges By-law 2008, No. 16611; Amendment Bylaw No. 20823
Waste Management Regulations and Charges Bylaw 2015, No. 18412; Amendment Bylaw No. 20824
Drainage Parcel Tax By-law 2001, No. 14593; Amendment Bylaw No. 20822

City of Coquitlam - Based on flat rate
Water Distribution Bylaw No. 4428; Amendment Bylaw No. 5282
Sewer and Drainage Bylaw No. 4429; Amendment Bylaw No. 5283
Solid Waste Management Bylaw No. 4679; Amendment Bylaw No. 5284

City of Burnaby - Based on metered rate
Burnaby Consolidated Fees and Charges Bylaw Amendment Bylaw No. 14485
Waterworks Regulation Bylaw No 1953 ; Amendment Bylaw No. 14537
Sewer Charge Bylaw No. 1961; Amendment Bylaw No. 14535
Solid Waste & Recycling Bylaw No. 2010; Amendment Bylaw No. 14532
Sewer Parcel Tax Bylaw No. 1994; Amendment Bylaw No. 14535

City of Vancouver - Based on flat rate
Water Works By-law No. 4848; Amendment Bylaw No. 13580
Sewer & Watercourse By-law No. 8093; Amendment Bylaw No. 13579
Solid Waste By-law No. 8417; Amendment Bylaw No. 13578

Financial Impact

The budget and rate impacts associated with each option are outlined in detail in this report. In all options, the budgets and rates represent full cost recovery for each City service.

Staff recommend the following budgets by utility:

- Option 3 is recommended for Water, for a net budget of $52.3M;
- Option 3 is recommended for Sewer, for a net budget of $49.0M;
- Option 3 is recommended for Flood Protection, for a net budget of $23.1M;
- Option 2 is recommended for Solid Waste and Recycling, for a net budget of $22.0M; and
- An overall net utility budget of $146.4M.

Considerable effort has been made to minimize City costs and other costs within the City's control to minimize the impact to property owners.

Conclusion

This report presents the 2024 proposed utility budgets and rates for City services relating to the provision of water, sewer, flood protection, as well as solid waste and recycling. Considerable measures have been taken to reduce costs where possible to minimize rate increases. A significant portion of the City's costs relate to impacts from influences outside of the City's direct control, such as regional and contract cost impacts. Regional costs are expected to continue increasing to meet demands for high quality drinking water and sewer treatment. Staff recommend that the budgets and rates, as outlined in this report, be approved and that the appropriate amending bylaws be brought forward to Council to bring these rates into effect.



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Att. 1: 2024 Annual Utility Charges – Recommended Gross Rates per Bylaw
Att. 2: 2024 Recommended Utility - Funded Additional Level Positions

2024 Annual Utility Charges – Recommended Gross Rates per Bylaw (Estimated Metered and Actual Flat Rates)

	Water	Sewer	Flood Protection	Garbage/ Recycling	Total
Metered (Based on Average Consumption)					
Single-Family Dwelling	$612.06	$624.58	$299.90	$476.33	**$2,012.87**
Townhouse (with City garbage)	$418.36	$418.94	$216.23	$336.39	**$1,389.92**
Townhouse (no City garbage)	$418.36	$418.94	$216.23	$209.72	**$1,263.25**
Apartment	$282.48	$301.72	$216.23	$164.56	**$964.99**
Flat Rate (Actual)					
Single-Family Dwelling	$921.63	$787.92	$299.90	$476.33	**$2,485.78**
Townhouse (with City garbage)	$754.42	$720.92	$216.23	$336.39	**$2,027.96**
Townhouse (no City garbage)	$754.42	$720.92	$216.23	$209.72	**$1,901.29**
Apartment	$486.16	$600.42	$216.23	$164.56	**$1,467.37**
General – Other/Business					
Metered Water ($/m^3)	$1.7356				
Metered Sewer ($/m^3)		$1.9218			
Business: Garbage				$54.18	
Small or Stratified ICI (less than 800m^2)			$299.90		
Non-Stratified ICI (between 800m2 and 2,000m2)*			$600.76		
Medium Non-Stratified ICI (between 2,000m2 and 10,000m2)*			$1,101.72		
Large Non-Stratified ICI (between 10,000m2 and 20,000m2)*			$3,148.42		
Large Non-Stratified ICI (between 20,000m2 and 50,000m2)*			$6,698.62		
Large Non-Stratified ICI (between 50,000m2 and 100,000m2)*			$9,213.78		
Large Non-Stratified ICI (between 100,000m2 and 500,000m2)*			$13,489.93		
Largest Non-Stratified ICI (above 500,000m2)*			$20,116.78		
ICI: Flood Protection (Others)			$299.90		

2024 Recommended Utility-Funded Additional Level Positions

Position	Classification	Funding Source	Description
Staff Solicitor	Exempt	Flood Protection Utility (rate impact)	Position to provide legal support to the flood protection team to facilitate the planning, land acquisition, and delivery of the Council-endorsed accelerated flood protection program.
Project Coordinator	CUPE 718	Capital (Flood Protection)	Position to support the planning of capital flood protection upgrade projects and the preparation of grant applications as part of the Council-endorsed accelerated flood protection program.
Manager, Flood Protection	Exempt	Flood Protection Utility (rate impact)	Position to centralize the management of resources for the proactive maintenance, repair, and emergency response associated with Richmond's flood protection infrastructure.
Departmental Associate 2	CUPE 718	Flood Protection Utility (rate impact)	Position to provide administrative support to the Manager, Flood Protection and to ensure inquiries from residents and internal stakeholders are efficiently and effectively addressed.