Date: November 27, 2023 Item: 6.





DISTRICT OF WEST VANCOUVER

750 17TH STREET, WEST VANCOUVER BC V7V 3T3

COUNCIL REPORT

Date:	November 1, 2023
From:	Fatemeh Mansoori, Senior Manager, Engineering Utilities
	Planning, Design, and Project Delivery
Subject:	Proposed "Sewerage and Drainage Utility Fee Bylaw No. 5263, 2023
	Amendment Bylaw No. 5284, 2023" and Utility Update
File:	1700.09

RECOMMENDATION

THAT

- 1. Sewer and Drainage Utility fees be adjusted for 2024 to the amounts set out in Schedules A and B of the proposed "Sewerage and Drainage" Regulations Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023," as attached; and
- 2. Proposed "Sewerage and Drainage Regulations Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023" be read a first, second, and third time.

1.0 **Purpose**

The purpose of this report is to provide an update on activities within the Sewer and Drainage Utilities and to inform Council of the financial impacts and recommended bylaw amendments for the 2024 Sewer and Drainage Utility fee structure.

2.0 **Executive Summary**

The District's Sewer and Drainage Utility and its Five-Year Financial Plan, **Appendix A**, can be roughly divided into five main areas:

- Regional Sewage Treatment Levy from Metro Vancouver (MV), the Greater Vancouver Sewerage and Drainage District (GVS&DD)
- operation and maintenance of the municipal Citrus Wynd Wastewater **Treatment Plant**
- operation and maintenance of the sanitary sewer and storm drainage collection systems
- renewal of the sanitary sewer and drainage systems (infrastructure management capital)
- financing of vehicles and equipment associated with these functions

The sewer rate structure is separated to reflect the proportional regional levy from the local revenues, expenses, and rate projections. This is intended to provide transparency in customer billing and to better

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understand the financial drivers in the rate forecast, this is particularly true considering anticipated cost increases associated with the new North Shore Wastewater Treatment Plant (NSWWTP). The costs associated with the new NSWWTP are captured based on the best available information at the time of rate setting. Staff cannot speculate on ultimate project costs and their potential impact on the future year's rates. The projections associated with NSWWTP are subject to change once the final construction costs are realized and may also be influenced by fluctuations in the cost of sewage treatment operations by MV.

The combined increase from the Regional Sewer Levy and the municipal sewer costs results in an overall 8.4% revenue requirement increase over the 2023 sewer rates. The capital funding increases were identified as part of the 2010 Asset Management Plan (AMP) to provide for sustainable replacement funding levels. In 2022 an updated AMP was carried out using the latest standards and best practices, up-to-date asset information, pertinent studies, and financial information available since the first AMP was developed. Now that the analysis has concluded, it is anticipated that this updated plan will be brought forward to Council for endorsement in 2024.

Water consumption serves as a proxy to annual sewer usage due to the challenges associated with accurately metering sewer flows. Currently, single-family homes are billed based on their annualized winter water consumption, whereas multi-family and commercial buildings are billed for sewer and drainage based on the amount of water consumed each fiscal quarter. The proposed rates reflect an annual charge increase of \$114 for the median single-family household and \$35 for the average multi-family unit over 2023.

A proposed Five-Year Financial Plan for the utility is provided as **Appendix A.** Utility equipment funded through the rate reserves is detailed within **Appendix B**. Rates are forecast to increase each year through 2028. Sewer base rates and volume rates are specified in Schedule A and B of the proposed bylaw amendment **Appendix C**.

3.0 Legislation/Bylaw/Policy

- 3.1.1 Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007 and amendments A bylaw to establish a regulatory system for liquid waste.
- 3.1.2 Metro Vancouver Regional District Integrated Liquid Waste and Resource Management Plan (ILWRMP) 2011 A plan authorized and regulated through the BC Environmental Management Act, setting out liquid waste objectives within Metro Vancouver.

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3.1.3 Sewerage and Drainage Regulation Bylaw No. 5263, 2023- A bylaw to establish a municipal sewerage system, a municipal drainage system and make provision for the usage of these municipal systems.

4.0 Council Strategic Objective(s)/Official Community Plan Official Community Plan

Section 2.5 of the 2018 Official Community Plan (OCP), Municipal Operations and Infrastructure, outlines several key policies related to sewage and drainage systems:

- 2.5.13 Pursue bylaw and policy changes and enhancements with the community to enable and support protection of watershed health, sustainable redevelopment, and public safety.
- 2.5.14 Consider 200-year storm events in the design of major drainage facilities and flood control works.
- 2.5.15 Employ low-impact storm and rainwater management techniques such as infiltration, absorbent landscaping, and natural environment conservation to mimic natural conditions and preserve pre-development conditions.
- 2.5.16 Reduce inflow and infiltration by rehabilitating and replacing older piping where appropriate and employ trenchless technologies where viable.
- 2.5.17 Employ green infrastructure or naturalized engineering strategies where possible to help manage anticipated increases in frequent storm events and associated flood risks.

Official Community Plan

This report also aligns with Council Strategic Objectives:

5.0 Deliver municipal services efficiently.

5.0 Financial Implications

This report recommends the adoption of Sewer and Drainage Utility fees for 2024. The 2024 needs of the combined Sewer and Drainage utility budget is approximately \$29.4 million, a \$2.15 million increase over the 2023 budgeted expenditures. This increase comprises of a \$0.68 million adjustment for the Local Levy and a \$1.47 million adjustment for the Regional Levy. The Sewer and Drainage Utility rates include the Greater Vancouver Sewerage and Drainage District (GVS&DD) Regional Levy. As part of the GVS&DD Levy increase, costs associated with the new

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NSWWTP are captured based on the best available information at the time of rate setting. The projections associated with NSWWTP are subject to change once the final construction costs are realized and may also be influenced by fluctuations in the cost of sewage treatment operations by MV. Currently, MV's Board Chair is forming a task force to conduct a review of options for delivering this key project while mitigating its potential cost impacts on the region.

Water consumption serves as a proxy to annual sewer usage due to the challenges associated with accurately metering sewer flows. Currently, single-family homes are billed based on their annualized winter water consumption, whereas multi-family and commercial buildings are billed for sewer and drainage based on the amount of water consumed each fiscal quarter.

The presented 2024 rate increases will result in a median single family household bill increase of \$115 for a per annum for a total of \$1,553. The average multi-family calculation is based upon the total anticipated revenue from multi-family properties, divided by the number of multi-family units. The annual charge for the average multi-family unit in 2024 is \$425, based on 2023 consumption. This represents an increase of \$35 over 2023.

Overall, the proposed 2024 rates reflect an 8.4% increase in the Sewer and Drainage Utility's revenue requirement, capturing the Regional Sewer Levy expenditure; this includes costs associated with the 2019 Council resolution to smooth out the increases for the future Regional Sewer Levy and other operational expenses.

The District last completed a comprehensive review of its Water and Sewer Rate Structure in 2017. The study involved review of previously established utility fiscal policies, an update of the revenue requirements analysis, re-evaluation of customer class "cost-of-service" (given improved reliability of underlying usage data) and updating the rate structures previously implemented by the District. The 2017 study recommended adjustments to utility rates, aimed at securing funding for non-growth capital initiatives, as well as the expenses associated with asset maintenance and replacement. As the anticipated five-year review cycle has concluded, staff plan to commission an updated review of the Water and Sewer Rate Study in 2024.

For two years, the Utility has relied on a temporary engineer role to assist in the engineering and planning aspects. While already funded through the existing rates, moving forward, the budget formally accounts for this engineering position(0.65FTE).

6.0 Background

6.1 Previous Decisions

From: Fatemeh Mansoori, Senior Manager, Engineering Utilities Planning, Design,

and Project Delivery

Subject: Proposed "Sewerage and Drainage Regulation Bylaw No. 5263, 2023 Amendment

Bylaw No. 5284, 2023" and Utility Update

At its **October 30, 2023, Regular Meeting**, Council passed the following resolution

THAT

- 1. Proposed "Sewerage and Drainage Regulation Bylaw No. 5263, 2023" be read a first, second and third time; and
- 2. Proposed "Bylaw Notice enforcement Bylaw No. 4368, 2004, Amendment Bylaw No. 5275, 2023" be read a first, second, and third time.

Following the adoption of the Sewerage and Drainage Regulation Bylaw No. 5263, 2023, the Sewer and Drainage Utility Fee Bylaw No. 4538, 2007 and amendments have been repealed and replaced with the Sewerage and Drainage Regulation Bylaw No. 5263, 2023. Nevertheless, the proposed rate adjustments in this report are in accordance with the endorsement received from the Finance and Audit Committee, dated September 11, 2023.

At its **September 11, 2023, meeting, the Finance & Audit Committee** passed the following resolution

THAT

- 1. the Finance and Audit Committee endorse the following bylaws:
 - Solid Waste Utility Bylaw No. 4740, 2012, Amendment Bylaw No. 5246, 2023;
 - Waterworks Regulation Bylaw No. 4490, 2006, Amendment Bylaw No. 5244, 2023;
 - Sewer and Drainage Utility Fee Bylaw No. 4538, 2007, Amendment Bylaw No. 5245, 2023;
 - and the bylaws be forwarded to Council for consideration

At its **June 29, 2023, meeting, the Finance & Audit Committee** received for information a memo titled "Utility Funding and Rate Setting", as an introduction to utility funding and rate setting within the District. It was Moved and Seconded

THAT

the Utility Funding and Rate Setting presentation and memobe received for information.

At its **July 11, 2022, Regular Meeting**, Council passed the following resolution

THAT

 Sewer and Drainage Utility fees be increased for 2023 to the amounts set out in Schedules A and B of proposed "Sewer and Drainage Utility Fee Bylaw No. 4538, 2007, Amendment Bylaw No. 5190, 2022" as attached to the report dated March 1, 2022, from the Senior Manager of Engineering Utilities Planning, Design & Project Delivery; and

From: Fatemeh Mansoori, Senior Manager, Engineering Utilities Planning, Design,

and Project Delivery

Subject: Proposed "Sewerage and Drainage Regulation Bylaw No. 5263, 2023 Amendment

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2. Proposed "Sewer and Drainage Utility Fee Bylaw No. 4538, 2007, Amendment Bylaw No. 5190, 2022" be read a first, second. and third time.

6.2 History

The District's Sewer and Drainage Utility conveys, treats, and disposes of sanitary sewage effluent and storm run-off for residents and businesses within the municipality. The collected fees go directly to providing sewer and drainage services and can be broken down into four main areas:

- Regional Sewage Treatment Levy from MV, the Greater Vancouver Sewerage and Drainage District
- operation and maintenance of the municipal Citrus Wynd Wastewater Treatment Plant
- operation and maintenance of the sanitary sewer and storm drainage collection systems
- renewal of the sanitary sewer and drainage systems (infrastructure management capital) as well as financing of vehicles and equipment associated with these functions

Traditionally, the Sewer and Drainage Utility has operated under a pay-asyou-go approach. All costs attributable to the collection and treatment of sewerage have been borne by the Utility and are to be paid for in the year they occur.

However, in 2016, a Sewer and Drainage Utility Reserve (the Reserve) was adopted for the following reasons:

- to provide a mechanism to accumulate funds for future infrastructure investments
- to be consistent with Divisional long term financial planning
- to mitigate the effects of escalating regional costs by providing an alternative to unrealistic rate increases (rate stabilization)
- to provide a funding source for operating emergencies which may occur from time to time

Since establishment, the Reserve is operated such that the planned annual contributions to capital are treated as Reserve Fund contributions and transferred to the Reserve. Through the financial plan process, the Reserve serves as a funding source for the annual capital program with appropriations from the Reserve by a Council resolution. Unspent funds remain within the Reserve. As the Sewer and Drainage Utility's annual contribution to capital approaches the CPI-adjusted long-term infrastructure funding level, the Reserve holds the funds until they are needed. A Council resolution would be required for any mid-year emergency appropriations from the Reserve.

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The Reserve is treated as appropriated equity and accrues interest. The earned interest becomes part of the accumulated balance of the Reserve and would be subject to the Reserve guidelines for use.

The sewer rate structure is separated to reflect the proportional Regional Levy from the local revenues, expenses, and rate projections. This is intended to provide transparency in customer bills to better understand the financial drivers in the forecast, this is particularly true considering anticipated cost increases associated with the new NSWWTP as well as the MV wet weather pricing approach.

Wet Weather Pricing

The MV region has been facing increasing challenges from climate change induced events such as atmospheric rivers, along with aging public and private assets. These challenges have led to higher volumes of inflow and infiltration (I&I) of groundwater and rainwater entering the sanitary sewers.

This overloads the capacity of the region's sanitary sewage systems resulting in an increasing number of wet weather sanitary sewer overflow events.

On October 29, 2021, the GVS&DD Board endorsed amendments to the Cost Apportionment Bylaw to enable the division of the regional levy into separate dry and wet weather components and issue a separate requisition for each component.

The current cost apportionment model used by the GVS&DD is based on dry weather flows or some other method that approximates dry weather flows (sanitary sewer flows that occur during dry weather).

The approach for implementation will be to phase in wet weather pricing over a ten-year period, with the establishment of the final apportionment methodology among GVS&DD members currently underway.

Rate Setting, Asset Management and Financial Analysis

In 2010 the District completed an Asset Management Plan (AMP) for both the sewer and drainage collection systems within the District. At the time, capital funding increases were identified as part of the AMP to provide for sustainable asset replacement funding levels. In 2022 an updated AMP was carried out for the sanitary sewer system which applied the latest standards and best practices, up-to-date asset information, pertinent studies, and financial information available since the first AMP was developed. Now that the analysis has concluded, it is anticipated that this updated plan will be brought forward to Council for endorsement. An updated Drainage Asset Management Plan is anticipated to be commissioned within the next five-year planning horizon.

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7.0 Analysis

7.1 Discussion

Five-Year Financial Plan (2024-2028)

There are several short and long-term cost drivers that have been incorporated into the Five-Year Financial Plan (2024-2028) for the Sewer and Drainage Utility as described below and illustrated in **Appendix A**:

Regional Sewer Levy

The increase to the Sewer Utility Fund revenue required to meet the District's share of this expense is 8.4% in 2024. At this time, there is \$3.4 million set aside in a reserve aimed to set aside funds to smooth out future rate increases associated with the construction of the NSWWTP. The proposed budget includes an additional \$1.06M contribution to the reserve in 2024 to smooth high increases to Metro Vancouver's rates anticipated in 2025 and 2026.

Municipal Sewer Costs: Infrastructure Replacement

The high-level Sewer Asset Infrastructure Management Baseline Study completed in February of 2010 is now considered dated and obsolete for the purposes of informing investment in the Sewer and Drainage Utility as an asset owner. After more than 10 years, a new Sanitary Asset Management Study was commissioned as part of the Division's 2021 work plan and completed in 2022.

The new Sanitary Asset Management Plan (AMP) incorporates new information available through the completion of the 2019 Sewer Master Servicing Study. The approach to asset management efforts included the following initiatives:

- continuing condition assessment of sanitary infrastructure to better refine the District's infrastructure management needs
- continuing to ensure that the capital plans between the Water, Sewer and Drainage, and Roads are coordinated as to the extent possible, ensuring capital renewal works are delivered in a costeffective manner

The 2024 proposed local rate increase incorporates an increase of annual capital program funding of \$220,000 and \$210,000 respectively for the Sewerage and Drainage Utility systems, over the 2023 annual capital investment. These capital funding increases were identified as part of the 2010 AMP to provide for sustainable replacement funding levels for the assets making up the sewer system. As part of the updated Sanitary AMP described earlier in this report, projected sustainable infrastructure replacement funding levels will be updated and incorporated into future

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year rates for the purposes of capital programming as required.

Municipal Sewer Costs: Operations & Maintenance

An increase of \$411,000 over the 2023 budget has been incorporated into the 2024 Operating Budget. The overall increase is due to rising costs associated with labour, materials, and equipment.

Municipal Sewer Costs: Equipment Replacement

To have the Sewer and Drainage Utility functions carry the full cost of their operating and capital needs, the capital replacement of vehicles and equipment primarily used within the Department is funded through the Utility funds. An hourly charge is incorporated into the vehicle charge out rates to recover the capital investment cost. These charge out rates are applied to operations, capital projects, and third-party work functions. The planned 2024 capital vehicle and equipment replacement purchases associated with the Utility are detailed in **Appendix B**.

Summary of 2024 Sewer and Drainage Utility Expenditures

Figure 1 shows the breakdown of the proposed Sewer and Drainage Utility expenses for 2024.

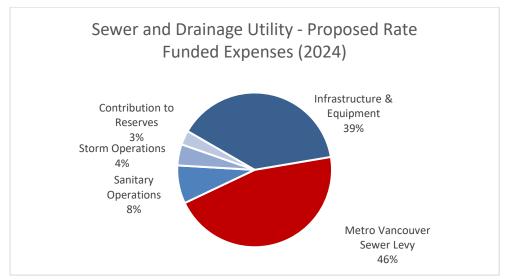


Figure 1

The combined increase from the 12% Regional Sewer Levy and the 5.5% municipal sewer costs results in an overall 8.4% revenue requirement increase over the 2023 sewer rates. The proposed increase for 2024 is consistent with Council's recommendation during the 2023 rate setting process.

Figure 2 shows the difference of the budgeted expenditures from 2023 to 2024.

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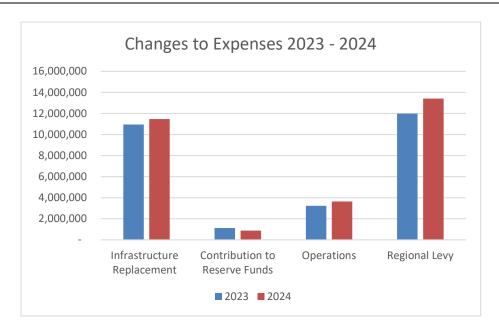


Figure 2

This overall revenue requirement will result in an estimated annual charge of \$1,552 for the median single family household, (based on 2022 average winter water consumption). These charges represent an increase of \$115 over 2023.

There are approximately 7,800 multi-family units in West Vancouver, which represents about 13.9% of the total sewer usage. The estimated annual charge for the average multi-family unit in 2024 is \$425, based on 2022 consumption. These charges represent an increase of \$35 over 2023. The average multi-family calculation is based upon the total anticipated revenue from multi-family properties, divided by the number of multi-family units.

Future Years Beyond 2024

Regional sewer revenue requirements anticipated for the 2025 - 2028 budget years are estimated to be 40.6%, 24.1%, 11.2% and 1.6%; these projected increases are mainly attributed to the capital investment costs associated with the NSWWTP.

These projected rates are intended to be adjusted to 20% per year in 2025-2026, 15% in 2027 and 10% in 2028 with the application of additional revenue which was intended for rate smoothing and collected in 2019-2024. The costs associated with the new NSWWTP are captured based on the best available information at the time of rate setting. The projections associated with NSWWTP are subject to change once the final construction costs are realized and may also be influenced by fluctuations in the cost of sewage treatment operations by MV.

From: Fatemeh Mansoori, Senior Manager, Engineering Utilities Planning, Design,

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Additional local sewer revenue requirements anticipated for the 2025 - 2028 budget years are projected to be 5.5%, 5.0%, 3.0%, and 3.0%, respectively. These estimates are subject to change with continuing efforts related to development of the asset management program.

The total combined local and regional sewer revenue requirements anticipated for the 2025-2028 budget years are projected to be 12.2%, 12.4%, 9.3%, and 6.9%.

7.2 Sustainability

The District's Universal Metering Program provides the ability for residents to monitor and control their water usage which helps to foster conservation. As the sanitary sewage use is closely related to the quantity of water used, conservation also results in savings for residents on their Sewer and Drainage Utility bills.

Natural Capital

In 2019, the District completed an inventory of its natural capital assets, placing a value of nearly \$574 million on the eco-system services contributed by its abundant water assets, including natural assets such as streams, which are an integral part of the storm water management system. Maintenance and enhancement of these assets forms a key part of the asset management plans of the Sewer and Drainage Utility. In the context of existing neighbourhoods, the regulation of creek flows, particularly during severe weather events, is best managed by integrating natural systems with constructed infrastructure; staff will continue to seek additional ways to move this integration forward.

7.3 Public Engagement and Outreach

Staff apply the District's Community Outreach and Engagement Policy when communicating and engaging with residents on issues pertaining to the Sewer and Drainage Utility.

7.4 Other Communication, Consultation, and Research

This report and the rate setting exercise for the Sewer Utility Fund is a collaborative effort with the Financial Services Division. This report and other reports pertaining the Sewer and Drainage Utility are included as part of the communications related to the overall District Budget process.

8.0 Options

8.1 Recommended Option

THAT

1. Sewer and Drainage Utility fees be adjusted for 2024 to the amounts set out in Schedules A and B of the proposed "Sewerage and Drainage Regulations Bylaw No. 5263, 2023, Amendment

Fatemeh Mansoori, Senior Manager, Engineering Utilities Planning, Design, From:

and Project Delivery

Proposed "Sewerage and Drainage Regulation Bylaw No. 5263, 2023 Amendment Subject:

Bylaw No. 5284, 2023" and Utility Update

Bylaw No. 5284, 2023," as attached; and

2. The proposed "Sewerage and Drainage Regulations Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023," be read a first, second, and third time.

8.2 **Considered Options**

Council may request additional information or provide alternate direction (to be specified).

9.0 Conclusion

This report recommends the adoption of Sewer and Drainage fees for 2024. Staff recommend that a Sewer Utility Fund revenue increase of 5.5% for the Local Levy and 12% for the Regional Levy (combined overall 8.4%) be approved for 2024.

Author:

Fatemeh Mansoori, Senior Manager, Engineering Utilities

Planning, Design, and Project Delivery

Concurrence

Isabel Gordon, Director, Financial Services

Appendices:

Appendix A – Sewer Utility – 5-Year Financial Plan (2024-2028)

Appendix B – Planned 2024 Utilities Capital Vehicle and Equipment Purchases

Appendix C - Sewer and Drainage Utility Fee Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023

District of West Vancouver

Sewer Utility - 5 Year Financial Plan

Summary



		2023		2024		2025		2026		2027		2028
LOCAL Revenue Requirements		FORECASTED		Projection		Projection		Projection		Projection		Projection
_												
Revenues		16 514 000	_	16 514 000	e e	47 240 700		10 162 100	r	10 000 100	r	10.610
Utility Fee Revenue	\$	16,514,000	\$	16,514,000		17,249,700 \$		18,163,100		18,889,100		19,612,
Utility Fee Early Pay Discount	\$	(1,651,400)		(1,651,400)		(1,725,000) \$		(1,816,300)		(1,888,900)		(1,961,
Internal / Equipment Recoveries Transfer from Reserves	\$	228,200	\$	228,200		228,200 \$			\$		\$	228,
Interest Earnings	\$	93,600	\$		\$ \$	104,300 \$ 98,400 \$			\$ \$		\$ \$	172
_												
Total Revenues	\$	15,184,400	\$	15,262,600	\$	15,955,600 \$	•	16,998,900	\$	17,552,550	\$	18,052
Expenses												
Operating Expenses	\$	3,236,000	\$	3,647,000	\$	3,778,000 \$	3	3,914,300	\$	4,056,100	\$	4,203
Infrastructure Replacement	\$	10,958,000	\$	11,473,000		11,941,500 \$			\$	12,952,300	\$	13,154
Contribution to Reserve Funds	\$	878,282	\$	878,300	\$	1,149,500 \$	3	1,211,600	\$	1,267,600	\$	1,470
Total Expenses	\$	15,072,282	\$	15,998,300		16,869,000 \$		17,724,900	\$	18,276,000	\$	18,828
Net Revenue Required from Rate Increases	\$	112,118	\$	(735,700)	\$	(913,400) \$;	(726,000)	\$	(723,450)	\$	(776
Annual Local Rate Adjustment Requirement	·	, -	Ċ	5.5%		5.5%		5.0%		3.0%		,
Cumulative Local Rate Adjustment		0.0%		5.5%		11.0%		16.0%		19.0%		2
Operating Expenses		2023		2024		2025		2026		2027		2028
Sanitany Operating & Maintanance	\$	2,073,800	\$	2,346,000	œ	2,432,400 \$		2,522,300	¢	2,615,800	¢	2,713
Sanitary Operating & Maintenance	\$	1,162,200	\$		э \$	1,345,600 \$			\$		\$	1,490
Storm Operating & Maintenance Total	\$	3,236,000	\$	3,647,000		3,778,000 \$		3,914,300		4,056,100		4,20
Total	,	3,230,000	Ψ.	3,047,000	Ψ	3,770,000 \$	<u> </u>	3,314,300	Ψ	4,030,100	Ψ	4,20
Infrastructure Management		2023		2024		2025		2026		2027		2028
Long Term - Infrastructure Management												
Storm Infrastructure Management Program	\$	5,491,000	\$	5,711,000	\$	5,939,000 \$	3	6,177,000	\$	6,424,000	\$	6,68
Sanitary Infrastructure Management Program	\$	5,242,000	\$	5,452,000		5,670,000 \$			\$		\$	6,378
Equipment Replacement	\$	225,000	\$	310,000	\$	332,500 \$;		\$	395,250	\$	95
Total	\$	10,958,000	\$	11,473,000	\$	11,941,500 \$;	12,599,000	\$	12,952,250	\$	13,154
Funding Sources												
Infrastructure Replacement Funding	\$	10,733,000	\$	11,473,000	\$	10,733,000 \$	6	10,733,000	\$	10,733,000	\$	10,733
Internal Equipment Recoveries	\$	228,200	\$	228,200	\$	228,200 \$	3	228,200	\$	228,200	\$	95
Use of Capital Reserves	\$	-	\$	81,800	\$	104,300 \$	3	296,800	\$	167,050	\$	
Total	\$	10,961,200	\$	11,783,000	\$	11,065,500 \$;	11,258,000	\$	11,128,250	\$	10,828
Equipment Renewal		2023		2024		2025		2026		2027		2028
Acquisitions	\$	225,000	\$	310,000	\$	332,500 \$;	525,000	\$	395,250	\$	98
Recoveries	\$	(228,200)	\$		\$	(228,200) \$			\$		\$	(228
Total Expense from Capital Reserve	\$	(3,200)	\$	81,800	\$	104,300 \$;	296,800	\$	167,050	\$	(13
		2022		2024		2025		2026		2027		2028
REGIONAL Revenue Requirements		2023 FORECASTED		2024 Projection		2025 Projection		Projection		2027 Projection		2028 Projection
								,				
Regional Levy Revenue	\$	11,980,471	\$	13,418,100		16,101,800 \$		19,322,100		22,220,400		24,442
Current Metro Vancouver Levy	\$	11,358,800	\$		\$	17,375,800 \$			\$		\$	24,362
New Metro Vancouver Levy	\$	-	\$		\$	- \$		-	\$		\$	
Transfer to/(from) Reserves	, \$	621,671	\$ I	1,059,700	\$	(1,274,000) \$	6	(2,241,300)	\$	(1,758,100)	\$	80
Annual Regional Rate Adjustment Requirement				12.0%		20.0%		20.0%		15.0%		
Cumulative Regional Rate Adjustment		0.0%		12.0%		32.0%		52.0%		67.0%		
Metro Vancouver Rate Increase				8.8%		40.6%		24.1%		11.2%		
Cumulative Metro Rate Increase				8.8%		49.4%		73.5%		84.7%		
		2023		2024		2025		2026		2027		2028

Fund Balances		2023 FORECASTED		2024 Projection		2025 Projection		2026 Projection	2027 Projection	2028 Projection
Sewer - Operating Surplus Beginning Balance	s	3,743,364	\$	3,598,713	s.	3,935,730	s	5,085,262	\$ 6,282,190	\$ 6,912,653
plus: Net Cash Flow after Rate Increase	s	1,215,404		878,282		1,149,532		1,211,573	1,267,560	1,470,847
less: Transfer of surplus to Capital and Rate Smoothing	s	(1,360,056)		(541,264)	\$	-	\$	(14,646)	(637,097)	(1,359,135)
Ending Balance	\$	3,598,713	_	3,935,730		5,085,262	\$	6,282,190	 6,912,653	7,024,364
Regional Rate Smoothing Beginning Balance	\$	3,422,841	\$	4,544,533	\$	5,604,309	\$	4,330,220	\$ 2,088,903	\$ 330,799
plus: Regional Rate Revenue	\$	11,980,471	\$	13,418,127	\$	16,101,753	\$	19,322,103	\$ 22,220,419	\$ 24,442,461
plus: Transfer from Reserve	\$	500,000								
less: Payment to Metro Vancouver	\$	(11,358,779)	\$	(12,358,351)	\$	(17,375,842)	\$	(21,563,420)	\$ (23,978,523)	\$ (24,362,179)
Ending Balance	\$	4,544,533	\$	5,604,309	\$	4,330,220	\$	2,088,903	\$ 330,799	\$ 411,080
Sewer Capital Fund Beginning Balance	\$	9,675,441	\$	10,780,583	\$	11,819,562	\$	11,134,751	\$ 9,789,965	\$ 8,680,761
plus: Infrastructure Replacement from Rates	\$	10,733,000	\$	11,473,000	\$	10,733,000	\$	10,733,000	\$ 10,733,000	\$ 10,733,000
plus: Internal / Equipment Recoveries	\$	228,200	\$	228,200	\$	228,200	\$	228,200	\$ 228,200	\$ 95,000
plus: Transfers from Operating Fund	\$	860,056	\$	541,264	\$	-	\$	14,646	\$ 637,097	\$ 1,359,135
plus: Interest Earnings	\$	241,886	\$	269,515	\$	295,489	\$	278,369	\$ 244,749	\$ 217,019
less: Capital Expenditures	\$	(10,958,000)	\$	(11,473,000)	\$	(11,941,500)	\$	(12,599,000)	\$ (12,952,250)	\$ (13,154,000)
Ending Balance	\$	10,780,583	\$	11,819,562	\$	11,134,751	\$	9,789,965	\$ 8,680,761	\$ 7,930,916
Total - Reserves	\$	18,923,829	\$	21,359,601	\$	20,550,233	\$	18,161,058	\$ 15,924,213	\$ 15,366,360

Current Five Year Plan Includes the following Assumptions
Estimated contractual staff/labour increases
4% Increases to infrastructure replacement for five years 2024-2028
Increases to the Metro Vancouver Sewer Levy as provided by Metro Vancouver (See above)

Planned 2024 Utilities Capital Vehicle and Equipment Purchases

Туре	Details	Cost	Water	Sewer
Crew Van	Replace 2011 workhorse crew van, M003. M003 has come to the end of its useful life. This van will be replaced with an all-electric van, which will greatly reduce the District's GHG emissions.	\$620,000	\$310,000	\$310,000
Total Vehicles & Ed	\$620,000	\$310,000	\$310,000	

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APPENDIX C



District of West Vancouver

Sewerage and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023

Effective Date:

5674577v1

District of West Vancouver

Sewerage and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023

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Sewerage and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023

District of West Vancouver

Sewerage and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023

A bylaw to amend the fees related to the use of the Municipal Sewerage and Drainage System

WHEREAS the Council of The Corporation of the District of West Vancouver deems it expedient to amend the Sewerage and Drainage Regulation Bylaw No. 5263, 2023;

NOW THEREFORE, the Council of The Corporation of the District of West Vancouver enacts as follows:

Part 1 Citation

1.1 This bylaw may be cited as Sewerage and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023.

Part 2 Severability

2.1 If a portion of this bylaw is held invalid by a Court of competent jurisdiction, then the invalid portion must be severed and the remainder of this bylaw is deemed to have been adopted without the severed section, subsection, paragraph, subparagraph, clause or phrase.

Part 3 Amendments

3.1 Sewerage and Drainage Regulation Bylaw No. 5263, 2023 is amended as follows:

Deleting Schedules "A" and "B" and replacing with new Schedules A and B, as attached hereto.

Sewerage and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023

Part 4 Effective Date

4.1 Sewerage and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5284, 2023 will be effective on January 1, 2024.

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Schedule A – Sewer Meter Base Rates

Schedule B – Sewer Meter Volume Rates

READ A FIRST TIME on

READ A SECOND TIME on

READ A THIRD TIME on

Mayor
Corporate Officer

Schedule A – Sewer Meter Base Rates

Sewer Base Charge Per Unit (Quarterly)

Customer Class	Sanitary Local Levy	Sanitary Regional Levy	Drainage Levy	Quarterly Fixed Charge: Total
Single Family Residential	\$21.87	\$40.59	\$154.69	\$217.10
Multi-Family Residential	\$21.87	\$40.59	\$154.69	\$217.10
Commercial	\$21.87	\$40.59	\$154.69	\$217.10
No Water Sewer*				\$388.26

^{*}No Water Sewer: customers, who are not charged metered water, pay a flat rate based on the median SFR quarterly bill.

Schedule B - Sewer Meter Volume Rates

1. Metered Sewer Volume Rates Based on Quarterly Consumption

Customer Class	Volume Charge Per Cubic Metre (m³) Local	Volume Charge Per Cubic Metre (m³) Regional
Single Family Residential*	\$1.62	\$2.42
Multi-Family Residential**	\$1.62	\$2.42
Commercial**	\$1.62	\$2.42

^{*}Single Family Residential Volume Rate applied quarterly to average winter period usage.

For discharge of contaminated groundwater to the sewer system the fee is \$1.50 per cubic meter for groundwater discharged.

Per section 15.2.1 of "Sewerage and Drainage Regulation Bylaw No. 5263, 2023" the rates shown in Schedule "A" and Schedule "B" shall be subject to a discount of ten (10) per cent, provided full payment for the current billing is made on or before the close of business on the due date set out on the billing form.

^{**}All other class rates applied to total water usage.