

DISTRICT OF WEST VANCOUVER
750 17TH STREET, WEST VANCOUVER BC V7V 3T3

COUNCIL REPORT

Date:	September 1, 2024
From:	Fatemeh Mansoori, Senior Manager, Engineering Utilities Planning, Design, and Projects
Subject:	Proposed Waterworks Regulation Bylaw No 5260, 2023, Amendment Bylaw No 5349, 2024
File:	1700.09

RECOMMENDATION

THAT

1. Water Utility fees be adjusted for 2025 to the amounts set out in Schedules A and B of the proposed “Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024,” as attached; and
2. Proposed “Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024” 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 Water Utility and to inform Council of the financial impacts and recommended bylaw amendments for the 2025 Water Utility fee structure.

2.0 Executive Summary

The District’s Water Utility and its Five-Year Financial Plan, **Appendix A**, can be roughly divided into four main areas:

- purchase of bulk potable water from Metro Vancouver (MV), the Greater Vancouver Water District (GVWD)
- operation and maintenance of the Eagle Lake and Montizambert source supply systems (dams, intakes, pumps, pipelines, treatment plants, chlorination stations, etc.) as well as operation and maintenance of the water distribution system (storage reservoirs, pump stations, valves, mains, etc.)
- renewal of the supply and distribution systems (infrastructure renewal and asset management), debt servicing, and transfer to reserve
- financing of vehicles and equipment associated with these functions

The Water Utility has operated under a pay-as you-go approach. All costs attributable to the production and delivery of potable water are borne by the Water Utility and are to be paid for in the year that they occur with some exception to this policy allowing for debt servicing related to distinct investments for the utility.

In 2021, Council adopted an asset management plan which established an updated long-term approach to the water systems capital rehabilitation programming. To meet and sustain long-term funding requirements for the District's water distribution and treatment systems, an increase of annual capital investment program funding of \$500,000 per annum was incorporated into the rate setting for the Water Utility over the next 10 years. This came into effect beginning in 2022.

For 2024, staff are recommending an overall 4.5% revenue increase in the Water Utility to meet both operational and capital renewal programming funding needs. The proposed revenue increases will maintain the Operating Reserve and the Capital Reserve balances at targets consistent with industry best practices.

The proposed rates reflect an annual increase of \$34 for the median single-family household and \$12 for the average multi-family unit over 2024. The average multi-family amount is calculated from the total estimated revenues from multi-family buildings in 2025, divided by the total number of multi-family units.

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 2029. Water meter base rates and volume rates are specified in Schedule A and B of the proposed bylaw amendment **Appendix C**.

3.0 Legislation/Bylaw/Policy

The Provincial Drinking Water Protection Act – An act establishing regulations governing water suppliers in British Columbia.

Metro Vancouver Drinking Water Management Plan 2011 – A plan which sets the direction and priority for provision of safe, clean drinking water; ensures sustainable use of water resources; ensures efficient supply of water.

District of West Vancouver Waterworks Regulation Bylaw No. 5260, 2023– A bylaw to regulate the Waterworks System, the fixing of rates, connection fees, and meter rents with respect to the use of water.

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 water conservation including:

- 2.5.6 Monitor water usage and revise rate structures as necessary to continue reliable and equitable services.
- 2.5.7 Encourage use of development practices, landscape designs and built systems that reduce water demand and consumption.
- 2.5.8 Encourage water conservation through leak detection, water metering and communitywide education programs.

Council's Strategic Objectives

Supports the Municipal Services goal to deliver services more efficiently.

5.0 Financial Implications

This report recommends the adoption of Water Utility fees for 2025. The District's 2025 Water Utility budget is approximately \$25.2 million, roughly a \$0.8 million decrease over the 2024 budgeted expenditures of \$26.0 million. The year over year decrease is largely attributed to a reduction to the contribution to reserves.

For 2025, an overall 4.5% revenue increase in the Water Utility is required. The revenue increase needs will be met with a 4% increase to single family residential, multi-family, and commercial users.

The changes proposed for 2025 reflect an annual median increase of \$34 for a single-family household and an average increase of \$12 for a multi-family unit, as compared to 2024 rates.

Primary cost drivers for rates in 2025 include:

- inflation and increased operating expenses
- an increase to infrastructure construction costs associated with the utility
- an increase in the cost of bulk water purchase from MV

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 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. Preliminary work has been initiated to advance this study. However, the updated review will be deferred until further information is received from MV concerning the Northshore Wastewater Treatment Plant.

6.0 Background

6.1 Previous Decisions

At its **September 23, 2024, meeting**, the Finance & Audit Committee voted unanimously to endorse

THAT

1. the Finance and Audit Committee endorse the following bylaws:
 - Solid Waste Utility Bylaw No. 4740, 2012, Amendment Bylaw No. 5348, 2024; and
 - Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024;
 - Sewer and Drainage Regulation Bylaw No. 5263, 2023, Amendment Bylaw No. 5350, 2024;
2. the bylaws be forwarded to Council for consideration.

At its **November 27, 2023, regular meeting**, Council passed the following resolution

THAT

1. Water Utility fees be adjusted for 2024 to the amounts set out in Schedules A and B of proposed “Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5283, 2023” as attached to the report dated November 1, 2023, from the Senior Manager of Engineering Utilities Planning, Design & Project Delivery; and
2. proposed “Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5283, 2023” be read a first, second, and third time.

At its **October 30, 2023, regular meeting**, Council passed the following resolution

THAT

1. Proposed “Waterworks Regulation Bylaw No.5260, 2024” be read a first, second and third time; and
2. Proposed “Bylaw Notice enforcement Bylaw No. 4368, 2004, Amendment Bylaw No. 5274, 2023” be read a first, second, and third time.

6.2 History

The District’s Water Utility produces and delivers potable water to all residents and businesses within the municipality. Fees go directly toward providing drinking water and can be broken down into four main areas:

- purchase of bulk potable water from MV, the Greater Vancouver Water District (GVWD)
- operation and maintenance of the Eagle Lake and Montizambert source supply systems (dams, intakes, pumps, pipelines, treatment plants, chlorination stations, etc.) as well as operation and maintenance of the water distribution system (storage reservoirs, pump stations, valves, mains, etc.)
- renewal of the supply and distribution systems (infrastructure renewal and asset management), debt servicing, and transfer to reserve
- financing of vehicles and equipment associated with these functions

Since 2007, the District has been billing all consumers for water consumption under a universally metered system. The Universal Metering Project was implemented to provide customer equity, to promote water conservation, and to detect leaks.

In 2018, a four-tier rate structure was introduced within the Utility and has been used to provide incentive for water conservation since adoption.

Since the implementation of the four-tier rate structure in 2018, the number of users in tiers three and four have decreased by 1.5% and 13.8% respectively, while their total water usage has decreased by 0.3% and 3.9% respectively.

	Year	Tier 1 0 - 30 m ³	Tier 2 31 - 60 m ³	Tier 3 61 - 180 m ³	Tier 4 180+ m ³
Distribution of Customer Bills	2017	20.3%	30.4%	36.6%	12.8%
Distribution of Customer Bills	2023	21.7%	31.1%	36.0%	11.0%
Percent Change		7.1%	2.5%	-1.5%	-13.8%
Distribution of Water Use:	2017	27.1%	18.9%	30.1%	23.9%
Distribution of Water Use:	2023	27.0%	19.0%	30.0%	23.0%
Percent Change		-0.2%	0.4%	-0.3%	-3.9%

With respect to financial viability, the Water Utility has operated under a pay-as-you-go approach. All costs attributable to the production and delivery of potable water are borne by the Water Utility and are to be paid for in the year that they occur.

Exceptions to this policy have been related to the investments made in universal metering and to the development of the Eagle Lake water source. The debt servicing related to these investments appears as a separate line under the Water Utility's expenses, **Appendix A**. The balances associated with these investments will be paid in full by the end of 2029.

In 2016, a Water 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 has operated such that the planned annual contributions to capital are treated as Reserve Fund contributions and transferred to the Reserve. Through the financial planning process, the Reserve serves as a funding source for the annual capital program with appropriations from the Reserve by a Council resolution. A Council resolution would be required for any mid-year emergency appropriations from the Reserve.

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

7.0 Analysis

7.1 Discussion

Five-Year Financial Plan (2025 - 2029)

There are several short and long-term cost drivers incorporated into the Five-Year Financial Plan (2025 - 2029) for the Water Utility (Schedule A) as described below:

- ***Regional Water Rate Expenditures versus Eagle Lake Supply***

The GVWD rate increase for bulk treated water in 2025 is estimated to be 7.2%, with additional increases for 2026 to 2029 projected at 6.5%, 3.0%, 2.4%, and 1.3% respectively. Although there is uncertainty associated with GVWD rate projections, and they are expected to increase in future years.

To mitigate the rising cost of bulk water purchase from GVWD, the Eagle Lake water source was developed over a series of years culminating in the commissioning of the membrane filtration water treatment plant in 2008. The Eagle Lake Development Plan involved an initial investment of approximately \$21 million, with an additional \$7.3 million capital funding investment for subsequent additions and replacements up to the present date.

The Eagle Lake source is an opportunistic supply due to its basin size and elevation. The operation, production, and supply of treated water is managed proactively based on availability within drier, higher demand periods. The plant currently supplies approximately 40% of the municipality’s water at a unit cost below that available from MV as illustrated in **Figure 1** below. In 2025 the per unit operating costs of Eagle Lake are estimated to be \$0.73/m³ as compared to MV at a unit cost of \$1.0/m³; these unit rate costs for Eagle Lake do not reflect capital investment costs.

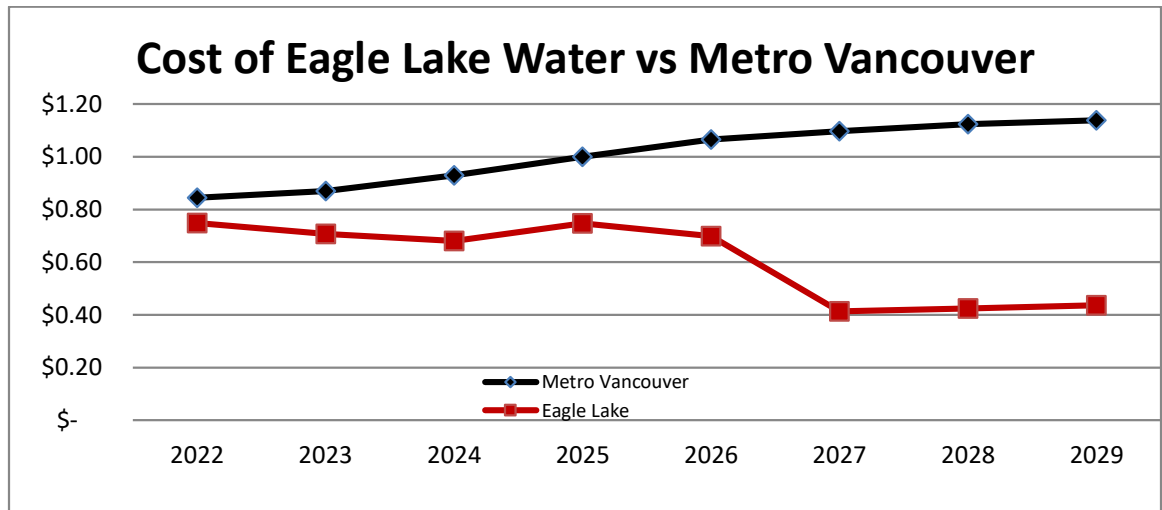


Figure 1

In 2025, the use of the water source at Eagle Lake is expected to save the District approximately \$567,000 compared to purchasing the equivalent amount of water at GVWD rates, taking only operational costs into account.

▪ **Infrastructure Replacement**

Staff continue to focus efforts on refining and implementing a prioritized infrastructure management program for the Water Utility, the basis of which is informed by the following studies:

- Water Master Servicing Study completed in 2016
- Dam Safety Review (DSR) completed in 2017
- Water System Asset Management Plan (WSAMP), completed in 2021

Based on the updated information provided by the Water Master Servicing Study and the DSR, staff completed the updated Water System Asset Management Plan (WSAMP), in 2021 to establish a revised long-term approach to the water systems capital rehabilitation program and to optimize and inform future budget investment requirements necessary for the long-term sustainability and operation of the Water Utility.

Comparing the previous 2010 System Asset Management Plan (AMP), and the 2021 WSAMP, the renewal funding requirements and the deferred maintenance backlog as captured in 2021 were significantly different than those described in 2010. The most significant drivers contributing to the difference in the backlog were construction cost inflation and immediate needs to address system service level deficiencies which was not considered as part of the original 2010 WSAMP.

As detailed in the June 23, 2021 Water Utility System Asset Management Plan 2021 staff report, endorsed by Council, there are two separate strategies to address the identified backlog projects and to secure the long term future of the Water Utility's assets. The first is to increase the existing capital renewal escalation factor to fund the asset investment required in watermains. Secondly, for the rehabilitation and construction of new nonlinear infrastructure, such as pump stations and reservoirs which will be largely reliant on funding through the Capital Reserve and borrowing.

Staff completed an analysis in 2021 and as the result, and to achieve sustainable funding levels, an increase of annual capital investment program funding of \$500,000 per annum will be incorporated into the rate setting for the Water Utility over the next 10 years. This came into effect beginning in 2022.

▪ ***Major Infrastructure Projects***

Westmount Pump Station and Reservoir

The Westmount pump station and reservoir are currently undersized to meet existing and future water conveyance, water supply redundancy, and fire fighting needs, based on the latest hydraulic modelling studies available. They form the critical backbone of the supply system that pumps MV water to the western portions of the District. Without the upsizing of these critical assets, there is significant risk towards the future uninterrupted supply of potable water to the western portions of the District during hot summer periods when there is a limited water supply at the District's Eagle Lake source.

Based on a Class C cost estimates, the total cost of the project is estimated at \$15.4 million (in 2020 dollars). As these projects benefit future growth, there is opportunity for development funding contributions, depending on future population servicing needs. The preliminary design is

currently being carried out for these two projects. The cost and the year in which it is incurred will be further refined as more information becomes available throughout the project planning and design process.

11th Street Pump Station Renewal

As part of the 2024 Division programming, the design phase for the 11th Street Pump Station replacement was completed, and the project has recently been awarded to the selected contractor through a competitive public tender process.

The existing 11th Street Pump station was constructed in 1960 and has reached its end of useful life. It is a critical infrastructure site within the water distribution system, providing for MV supply to the western portion of the municipality as necessary and, depending on the time of year and availability of the Eagle Lake source, supply to many neighbourhoods above the Upper Levels Highway.

The total value of the awarded contract is \$5.35 million, of which \$1.3 million is to be funded from external contributions, \$3.8 million from the Capital Reserve, and the remainder from a portion of the Infrastructure Management Funding from the water utility rates. Construction is tentatively scheduled to commence in late 2024 or early 2025, with substantial completion anticipated by the end of 2025.

Lookout Reservoir

The system addition of a second Lookout Reservoir, located at the second switchback on Cypress Bowl Road, will provide for storage capacity for the neighbourhoods situated above the highway including Rodgers Creek. Its purpose is to address existing deficiencies in water service levels for the area; a component of the infrastructure's capacity will benefit future neighbourhoods in the service area.

The overall project expenditure is projected to amount to \$4.2 million of which \$2.1 million will be funded by the District from the Capital Reserve. The construction has been recently completed.

▪ **Operations & Maintenance**

An increase of \$1,284,000 from the 2024 budget has been incorporated into the 2025 Operating Budget. This is due to inflationary increases to the District's operations, including increased MV rates for water.

▪ **Contribution to Operating Reserve**

An increase of \$0.7 million has been incorporated in the rates to maintain 120 days of operating expenses, providing for a buffer should water use or GVWD bulk purchase increase beyond that projected. A utility rate review completed in 2017 recommended building an Operating Reserve equivalent to 120 days of operating expenses. Unused Operating Reserve funds exceeding this amount are transferred into the Capital Reserve

Fund. This amount will maintain the Operating Reserve at 120 days and set aside funds in the Capital Reserve for future works.

▪ **Equipment Replacement**

To have the functions of the Water Utility carry the full cost of the operating and capital needs, the capital replacement of vehicles and equipment primarily used within the utilities department is funded through the Water Utility funds. The planned 2025 capital vehicle and equipment replacement purchases attributable to the Water Utility are detailed in **Appendix B**.

Figure 2 shows the breakdown of the proposed Water Utility expenditures for 2025.

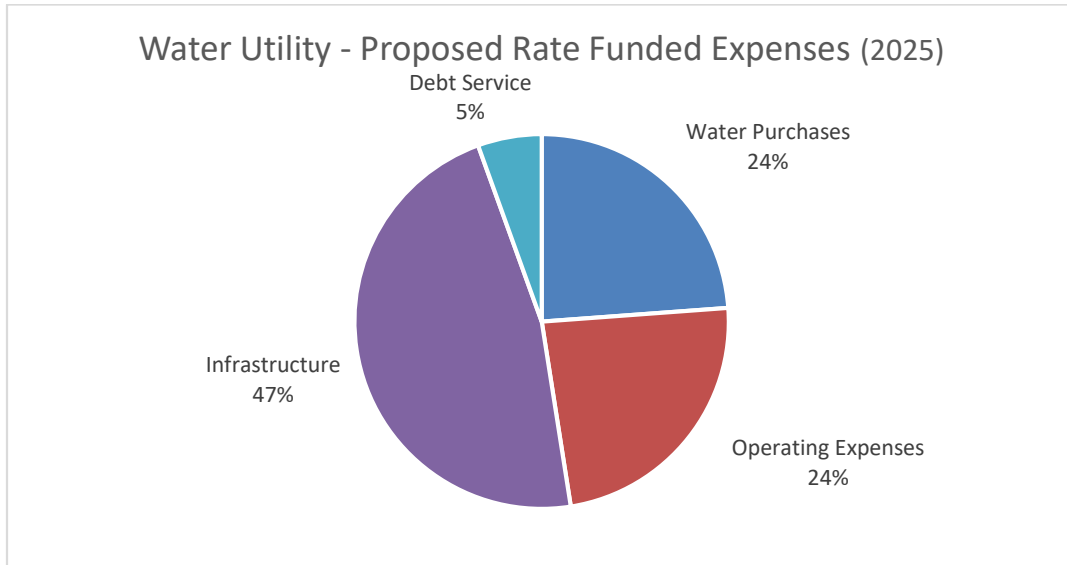


Figure 2

The proposed 2025 - 2029 revenue increases will maintain the Operating Reserve to 120 days of expenses in 2025, maintain the Capital Reserve to 0.5% of total capital assets, and set aside funds for future works including the meter replacement program.

Additional revenue requirements anticipated for the 2025 - 2029 budget years are projected to be 4.5%, 3.9%, 3.6%, 7.1%, and 1.9% per year, respectively. Further refinements will be made with continuing efforts related to implementation of the asset management program, fluctuations in the cost of bulk water from MV, the influence of market forces and inflation on system operations and renewal, and the potential to optimize the Eagle Lake water supply when conditions permit.

Figure 3 shows the difference of budgeted expenditures from 2024 to 2025.

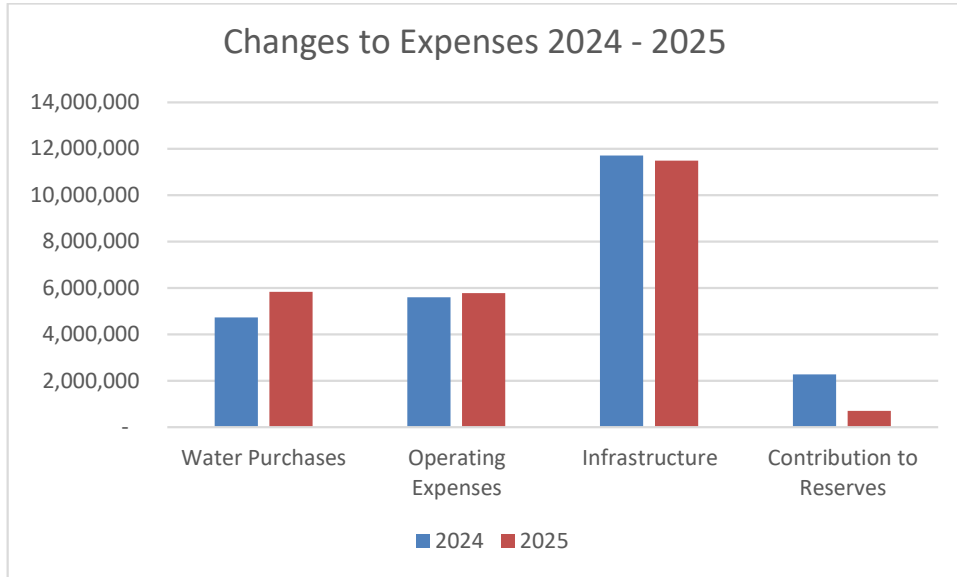


Figure 3

The estimated annual charge for the median single-family household in 2025 is \$888, based on 2023 consumption. This represents an increase of \$34 or 4% over 2024.

There are approximately 7,900 multi-family units in West Vancouver which represents about 12.9% of the total residential water usage. The estimated annual charge for the average multi-family unit in 2025 is \$317, based on 2023 consumption. This represents an increase of \$12 or 4% over 2024. This is calculated by the total estimated revenue from multi-family buildings in 2025, divided by the number of multi-family units.

7.2 Climate Change & Sustainability

The District's universal metering program provides the ability for residents to monitor and control their water usage which helps to foster conservation.

The District has also made notable progress in integrating climate change considerations into its infrastructure renewal planning. By addressing the impacts, risks, and threats posed by climate change, the District ensures that infrastructure projects are designed to be resilient and adaptive to evolving environmental conditions. This approach enables the District to proactively identify and address potential climate-related challenges, thereby enhancing its capacity to manage and mitigate risks.

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 Water Utility.

The District's universal water meter system enables targeted engagement and outreach on issues pertaining to the Water Utility. Using water meter data during the summer months, the Engineering Department sends targeted letters to the highest residential water users to encourage water conservation. The high-water user letter has shown to reduce consumption in some of the District's highest water users.

The District also leverages MV's engagement and outreach material regarding the Drinking Water Conservation Plan and staged seasonal water restrictions. Warmer temperatures and longer dry spells due to climate change will likely result in more frequent implementation of higher and more restrictive stages. Engagement and outreach will continue to be important tools to encourage water conservation and reduce the strain on our existing local and regional water supply now and in the future.

7.4 Other Communication, Consultation, and Research

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

8.0 Options

8.1 Recommended Option

THAT

1. Water Utility fees be increased for 2025 to the amounts set out in Schedules A and B of the proposed "Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024," as attached; and
2. The proposed "Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024", be read a first, second and third time.

8.2 Considered Options

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

Date: September 1, 2024 Page 13
From: Fatemeh Mansoori, Senior Manager, Engineering Utilities Planning, Design, and
Projects
Subject: Proposed Waterworks Regulation Bylaw No 5260, 2023, Amendment Bylaw No
5349, 2024

9.0 Conclusion

This report recommends the adoption of Water Utility fees for 2025. Staff recommend that a Water Utility Fund revenue increase of 4.5% be approved for 2025.

Author: 
Fatemeh Mansoori, Senior Manager Engineering Utilities
Planning, Design and Project Delivery

Concurrence 
Isabel Gordon, Director, Finance & Corporate Services

Appendices:

Appendix A - Water Utility – Five-Year Financial Plan (2025-2029)
Appendix B - Planned 2025 Water Capital Vehicle and Equipment Purchases
Appendix C - Proposed Waterworks Regulation Bylaw No. 5260, 2023
Amendment Bylaw No. 5349, 2024

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District of West Vancouver

Water Utility - Five-Year Financial Plan

APPENDIX A

Summary

Revenue Requirements	2024	2025	2026	2027	2028	2029
	FORECASTED ACTUALS	PROPOSED	PROPOSED	PROPOSED	PROPOSED	PROPOSED
Revenues						
Utility Fee Revenue	\$ 23,622,100	\$ 23,622,100	\$ 24,700,600	\$ 25,699,800	\$ 26,726,500	\$ 28,754,400
Utility Fee Early Payment Discount	\$ (2,362,200)	\$ (2,362,200)	\$ (2,470,100)	\$ (2,570,000)	\$ (2,672,700)	\$ (2,875,400)
Internal / Equipment Recoveries	\$ 150,000	\$ 228,200	\$ 235,046	\$ 242,097	\$ 249,360	\$ 256,841
Transfer from Reserves	\$ 2,987,387	\$ 2,564,300	\$ 2,837,454	\$ 5,162,903	\$ 4,297,862	\$ -
Other Revenue	\$ 1,340,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Interest Earnings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Revenues	\$ 25,737,287	\$ 24,092,400	\$ 25,343,000	\$ 28,574,800	\$ 28,641,022	\$ 26,175,841
Expenses						
Operating Expenses	\$ 10,086,300	\$ 11,619,600	\$ 12,158,800	\$ 11,531,200	\$ 11,703,800	\$ 11,786,100
Debt Service	\$ 1,784,900	\$ 1,350,300	\$ 1,146,800	\$ 129,000	\$ 542,500	\$ 542,500
Infrastructure Replacement	\$ 11,710,000	\$ 11,492,500	\$ 12,672,500	\$ 15,905,000	\$ 16,495,000	\$ 11,951,000
Contribution to Reserves	\$ 2,384,233	\$ 708,500	\$ 364,100	\$ 2,036,300	\$ 1,514,100	\$ 1,978,100
Total Expenses	\$ 25,965,433	\$ 25,170,900	\$ 26,342,200	\$ 29,601,500	\$ 30,668,900	\$ 26,671,200
Net Revenue Required from Rate Increases	(228,146)	(1,078,500)	(999,200)	(1,026,700)	(2,027,900)	(495,400)
Annual Rate Revenue Requirement		4.5%	3.9%	3.6%	7.1%	1.9%
Cumulative Annual Rate Adjustment		4.5%	8.4%	12.0%	19.1%	21.0%
Net Rate Revenues After Rate Increase	\$ 21,259,900	\$ 22,110,300	\$ 22,994,700	\$ 23,914,500	\$ 24,871,000	\$ 25,865,900
Net Cash Flow After Rate Increase (Inc use of reserves)	2,384,200	708,500	364,100	2,036,300	1,514,100	1,978,100
Metro Vancouver Rate Increases		7.2%	6.5%	3.0%	2.4%	1.3%

Operating Expenses	2024	2025	2026	2027	2028	2029
Water Purchased from GVRD	5,421,494	5,833,100	6,372,200	5,744,700	5,917,300	5,999,600
Administration	1,077,200	1,476,100	1,476,100	1,476,100	1,476,100	1,476,100
Meters Maintenance	427,412	468,200	468,200	468,200	468,200	468,200
System Operating						
Supply	682,400	1,109,700	1,109,700	1,109,700	1,109,700	1,109,700
Distribution	1,377,100	1,660,500	1,660,535	1,660,535	1,660,535	1,660,535
Treatment	1,100,700	1,072,100	1,071,991	1,071,991	1,071,991	1,071,991
Total	\$ 10,086,306	\$ 11,619,700	\$ 12,158,726	\$ 11,531,226	\$ 11,703,826	\$ 11,786,126

Infrastructure Management	2024	2025	2026	2027	2028	2029
Long Term - Infrastructure Management						
Capital projects	\$ 11,400,000	\$ 11,200,000	\$ 12,100,000	\$ 15,500,000	\$ 16,400,000	\$ 11,856,000
Equipment Renewals	\$ 310,000	\$ 292,500	\$ 572,500	\$ 405,000	\$ 95,000	\$ 95,000
Total	\$ 11,710,000	\$ 11,492,500	\$ 12,672,500	\$ 15,905,000	\$ 16,495,000	\$ 11,951,000
Funding Sources						
Infrastructure Replacement Funding from Rates	\$ 7,800,000	\$ 8,700,000	\$ 9,600,000	\$ 10,500,000	\$ 11,400,000	\$ 11,856,000
Internal / Equipment Recoveries	\$ 150,000	\$ 228,200	\$ 235,046	\$ 242,097	\$ 95,000	\$ 95,000
Use of Available Capital Reserves	\$ 2,987,387	\$ 2,564,300	\$ 2,837,454	\$ 5,162,903	\$ 4,297,862	\$ -
Total	\$ 11,710,000	\$ 11,492,500	\$ 12,672,500	\$ 15,905,000	\$ 15,792,862	\$ 11,951,000

Equipment Renewal	2022	2025	2026	2027	2028	2029
Acquisitions	\$ 310,000	\$ 292,500	\$ 572,500	\$ 405,000	\$ 95,000	\$ 95,000
Recoveries	\$ (150,000)	\$ (228,200)	\$ (235,046)	\$ (242,097)	\$ (249,360)	\$ (256,841)
Total Expense from Reserve	\$ 160,000	\$ 64,300	\$ 337,454	\$ 162,903	\$ (154,360)	\$ (161,841)

Water Funds	2024	2025	2026	2027	2028	2029
Water - Operating Surplus Beginning Balance	\$ 3,367,206	\$ 3,306,986	\$ 3,820,159	\$ 3,997,423	\$ 3,791,096	\$ 3,837,328
plus: Net Cash Flow after Rate Increase	\$ 2,384,233	\$ 708,544	\$ 364,051	\$ 2,036,310	\$ 1,514,055	\$ 1,978,077
less: Transfer of surplus to Capital	\$ (2,444,454)	\$ (195,370)	\$ (186,787)	\$ (2,242,638)	\$ (1,467,823)	\$ (1,940,506)
Ending Balance	\$ 3,306,986	\$ 3,820,159	\$ 3,997,423	\$ 3,791,096	\$ 3,837,328	\$ 3,874,898
Water - Capital Fund Beginning Balance	\$ 6,338,496	\$ 5,937,724	\$ 4,868,794	\$ 7,218,127	\$ 4,297,862	\$ 1,622,183
plus: Infrastructure Replacement From Rates	\$ 7,027,387	\$ 8,700,000	\$ 9,600,000	\$ 10,500,000	\$ 11,400,000	\$ 11,856,000
plus: Internal / Equipment Recoveries	\$ 150,000	\$ 228,200	\$ 235,046	\$ 242,097	\$ 249,360	\$ 256,841
plus: Transfers from Operating Fund	\$ 2,444,454	\$ 195,370	\$ 186,787	\$ 2,242,638	\$ 1,467,823	\$ 1,940,506
plus: Grants / Other Outside Sources	\$ -	\$ -	\$ 5,000,000	\$ -	\$ -	\$ -
plus: Interest Earnings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
less: Capital Expenditures	\$ (8,722,613)	\$ (10,192,500)	\$ (12,672,500)	\$ (15,905,000)	\$ (15,792,862)	\$ (11,951,000)
Ending Balance	\$ 5,937,724	\$ 4,868,794	\$ 7,218,127	\$ 4,297,862	\$ 1,622,183	\$ 3,724,530
Water - Future Water Projects Beginning Balance	\$ 2,987,387	\$ 1,300,000	\$ (0)	\$ (0)	\$ (0)	\$ (702,138)
plus: Infrastructure Replacement From Rates	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
plus: Transfers from Water Reserve Fund	\$ 1,300,000	\$ -	\$ -	\$ -	\$ -	\$ -
plus: Interest Earnings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
less: Capital Expenditures	\$ (2,987,387)	\$ (1,300,000)	\$ -	\$ -	\$ (702,138)	\$ -
Ending Balance	\$ 1,300,000	\$ (0)	\$ (0)	\$ (0)	\$ (702,138)	\$ (702,138)
Total	\$ 10,544,709	\$ 8,688,953	\$ 11,215,550	\$ 8,088,958	\$ 4,757,373	\$ 6,897,290

Current Five Year Plan Includes the following Assumptions:

Estimated contractual staff/labour increases

Increases to the Metro Vancouver Bulk Water Rate as provided by Metro Vancouver in Fall 2023 (See above)

Increases in the Infrastructure Management Program to reach CPI adjusted sustainable funding levels per the 2020 Water Asset Management Plan

Planned 2025 Utilities Capital Vehicle and Equipment Purchases

Type	Details	Cost	Water	Sewer	Disposal Proceeds
Replace 2015 Tandem Crane Truck	Replace a 2015 Western Star tandem crane truck. The District lifecycle replacement schedule for this class of vehicle is 10 years, meaning the existing vehicle is proposed for replacement consistent with its recommended useful life The vehicle is used to transport equipment and supplies for various functions in Engineering, including water and sewer general maintenance, capital projects, and third party requests.	\$600,000	\$292,500	\$292,500	\$15,000
Replace 2016 Ford F-250 Unit M017	Replace a 2016 Ford F-250 and service canopy. The District lifecycle replacement schedule for this class of vehicle is 9- 10 years, meaning the existing vehicle is proposed for replacement consistent with its recommended useful life. The truck is utilized to transport staff and equipment to perform a variety of functions in the sewer utilities Engineering department.	\$107,000		\$105,000	\$2,000
Total Vehicles & Equipment		\$707,000	\$292,500	\$397,500	\$17,000

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District of West Vancouver

**Waterworks Regulation
Bylaw No. 5260, 2023,
Amendment Bylaw No. 5349, 2024**

Effective Date:

District of West Vancouver

**Waterworks Regulation
Bylaw No. 5260, 2023,
Amendment Bylaw No. 5349, 2024**

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District of West Vancouver

Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024

A bylaw to amend the fees related to the use of water.

Previous amendments: Amendment bylaw 5283.

WHEREAS the Council of The Corporation of the District of West Vancouver deems it expedient to amend Waterworks Regulation Bylaw No. 5260, 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 Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024.

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 Amendment

- 3.1 Waterworks Regulation Bylaw No. 5260, 2023, is amended as follows:

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

Part 4 Effective Date

- 4.1 Waterworks Regulation Bylaw No. 5260, 2023, Amendment Bylaw No. 5349, 2024 will be effective on January 1, 2025.

Schedules

Schedule A – Water Meter Base Rates
Schedule B – Water Meter Volume Rates

READ A FIRST TIME on [Date]

READ A SECOND TIME on [Date]

READ A THIRD TIME on [Date]

ADOPTED by the Council on [Date].

Mayor

Corporate Officer

Schedule A – Water Meter Base Rates

Water Base Charge (Quarterly) for Universal Metered Customers

Meter Size	Single Family Residential	Multi-Family Residential	Commercial
16 mm	\$102.47	\$229.89	\$306.51
19 mm	\$102.47	\$229.89	\$306.51
25 mm	\$102.47	\$229.89	\$306.51
38 mm	\$161.11	\$410.36	\$564.22
50 mm	\$255.78	\$531.94	\$898.86
75 mm	\$681.65	\$1,435.87	\$1,896.04
100 mm	\$955.33	\$2,231.12	\$3,007.80
150 mm	\$1,656.77	\$4,173.72	\$5,734.65
200 mm		\$5,913.02	\$8,993.67
250 mm		\$9,144.66	\$12,646.78

Schedule B – Water Meter Volume Rates

Metered Water Volume Rates Based on Quarterly Consumption

	First 30 Cubic Metres (0 - 30 m ³)	From 31 - 60 Cubic Metres (31 - 60 m ³)	From 61 - 180 Cubic Metres (61 - 180 m ³)	All in Excess 181 Cubic Metres (Over 181 m ³)
Single Family Residential	\$1.70	\$1.94	\$2.97	\$4.04

	All Usage Per Cubic Meter (m ³)
Multi-Family Residential	\$2.29
Commercial	\$2.29

Per section 13.5.5 of “Waterworks Regulation Bylaw No. 5260, 2023,” the fee due and payable that are shown in Schedule “A” and Schedule “B” shall be subject to a discount of ten (10) per cent, provided rates for the current billing are paid in full on or before the close of business on the due date set out on the billing form.