CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: November 9, 2015
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VanRIMS No.: 08-2000-20
Meeting Date: December 9, 2015

TO: Vancouver City Council

FROM: General Manager of Engineering Services

SUBJECT: 2016 Annual Review of Sewer Rates Under the Sewer & Watercourse By-Law

RECOMMENDATION

A. THAT Council approve the amendments to the Sewer & Watercourse By-law, generally as set out in Appendix A, including the establishment of the 2016 rates and fees, with the following recommended increases:

Rate	% Increase	2015 Rate	Recommended 2016 Rate
Single Dwelling Unit	9.9%	$314	$345
Other Sanitary Sewer User Rates	9.9%	As Listed in Appendix A	
Metered Rate Per Unit (Unit = 2.8316 Cubic Meters)	9.9%	$2.021	$2.221
Water Discharge Permit User Rate Per Unit (Unit = 2.8316 Cubic Meters)	9.9%	$0.6583	$0.7235
Public Sewer Connection Fees	2.0%	As Listed in Appendix A, Part I	

B. THAT Council instruct the Director of Legal Services to bring the Sewer & Watercourse By-law amendment, generally as set out in Appendix B, forward for enactment.

REPORT SUMMARY

Each year, the Sewer Utility provides a report that describes the Utility's progress in meeting its strategic objectives, plans for the upcoming year and recommends revised rates for sanitary sewer services and connection fees.

These rates cover the sanitary sewer system while the storm system is funded through property taxes. The cost of the City's sewer system includes the levy paid to Metro Vancouver for sewage treatment, as well as capital and operating costs to maintain and improve the City's sewer system.

The key drivers of the proposed rate increase are increasing treatment costs paid to Metro Vancouver and the debt costs associated with the Sewers Capital Plan. Starting in 2016, Metro Vancouver levy increases are a result of the regulatory obligations of upgrading the Iona Wastewater Treatment Plant, which treats sewage from the City of Vancouver. The increase in the 2015-18 Capital Plan for the Sewer Utility is to accelerate the sewer separation program in order to achieve the regulatory requirement to eliminate combined sewer overflows by 2050.

For 2016, staff are recommending a 9.9% increase for sanitary service rates for flat and metered customers and a 2.0% increase for connection fees.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Sanitary sewer user fees and public sewer connection fees are reviewed annually by Council to establish the following year's rates.

On April 4, 2000, Council approved the implementation of user fees for sanitary sewer services to fund the operating portion of the sanitary sewer costs, based on volume.

In December 2008, Council approved shifting the remainder of the sanitary sewer costs (the infrastructure costs) from general taxes to payment through user fees. This shift was implemented over two years and was complete in 2010. Currently, only the storm sewer system costs are funded by property taxes.

In December 2011, Council approved annual transfers between the Water Rate Stabilization Reserve and the Sewer Rate Stabilization Reserve based on the impact that weather related water consumption has on revenues in each utility.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager and General Manager of Engineering Services RECOMMEND approval of recommendations A and B above.

REPORT

Background/Context

The City of Vancouver's sewer system has two main components. The sanitary system collects wastewater from homes and businesses, while the storm system handles surface run-off from private and public property. Liquid waste and stormwater are collected from more than

100,000 service connections from homes and businesses, and stormwater is collected from more than 45,000 catch basins through a system that is 1,400 km in length.

The system delivers liquid waste to the treatment facilities operated by the Greater Vancouver Sewerage and Drainage District (Metro Vancouver) and stormwater to outfalls along the City's waterfront.

The costs of running the system include the capital costs for renewing the system and separating sewers, the cost of sanitary treatment provided by Metro Vancouver and the operating costs to maintain the system.

The sanitary system is funded through sewer user rates based on water consumption and the storm system is funded through general property taxes.

In the City of Vancouver, only some of the Sewer Utility's customers are metered; these are mainly commercial and multi-family properties. In 2012, Council approved revisions to the Waterworks By-law requiring residential metering for all new single-family and duplex properties. Approximately 3,300 or 4% of these homes are now metered. Metered properties pay sewer costs based on water consumption as a proxy for sewer flows and unmetered single-family dwellings pay a flat rate on an annual basis.

A third group of customers, referred to as Permittees, are those industries that discharge more than 300 cubic metres of wastewater into the sanitary system over a 30-day period. These customers pay Metro Vancouver directly for sanitary treatment but also pay their share of the costs the City incurs in operating the sewer system. This is a metered rate covering only City costs and is less than the metered rate charged to other customers (which includes both City and Metro Vancouver costs).

Strategic Analysis

The mandate of the City's Sewer Utility is to protect public health, the environment and property from contamination and flooding. All of the initiatives and strategies discussed here support this mandate.

One of the City's strategic priorities is to accelerate the sewer separation program in order to achieve the elimination of combined sewer overflows by 2050. This change is required under provincial regulation and detailed in the region's Liquid Waste Management Plan (LWMP). The change not only protects the environment and local receiving water bodies from combined sewer overflows, it also mitigates sewer backups and overland flooding damage to properties.

The City-Wide Integrated Rainwater Management Plan (IRMP) and Musqueam Creek Integrated Rainwater Management Plan (IRMP) will provide action items and implementation options to best manage rainwater run-off. Management of rainwater run-off has a number of primary benefits including improving and protecting watershed water quality along with the secondary benefit of mitigating the effects of climate change during rain events.

The following sections highlight the important work being done in these areas and what is planned for next year.

2015 Update

As mandated by the Liquid Waste Management Plan (LWMP), the City is working to eliminate combined sewer overflow by 2050 through the sewer separation program and by supporting programs such as rainwater management. This major capital program replaces combined sanitary and storm sewers at or near the end of their service life with separated (storm and sanitary) sewers that have much greater capacity to handle rain events, providing both environmental protection and flood prevention.

In 2015, the sewers utility completed 7.1 km of sewer separation and replacement and issued a two km construction tender for delivery in 2016. Major trunk sewers were constructed on MacDonald Street, Hemlock Street, Alma Street and Lanark Street, as well as multi-branch installations on Hemlock Street and King Edward Avenue as part of coordinated projects that also saw water mains replaced and streets repaved. Trunk sewers are the main arteries of the City of Vancouver sewer network; they collect flow from branch sewers, while branch sewers collect the flow from homes and businesses for discharge to trunk sewers. Innovative trenchless delivery methods were also utilized to minimize impacts to a city park and to minimize traffic disruptions along Granville Street and in the downtown core.

The utility issued 1,200 permits for sewer and water connections to new homes and renovated buildings, which included separation of private property connections and installation of water meters. Permit issuance was consistent with the level of construction and development in the city.

As part of the ongoing replacement of aging pump stations, the City completed upgrading an outdated sewage pump station at Skeena Street and Cornett Road. The City also completed a feasibility study to evaluate replacing or abandoning an outdated sewage pump station at East 7th Ave and Glen Street. Pump station upgrades protect and strengthen the sewer utility network by reducing the risk of sewer overflows into receiving bodies, including city streams, False Creek, English Bay and the Fraser River, during times of mechanical problems and power outages.

In 2015, the City completed an Integrated Rainwater Management Plan (IRMP). The plan provides action items and options to best manage rainwater run-off and improve watershed water quality. The work program included internal and external workshops with stakeholders, generating a comprehensive action plan with recommended short- and long-term priorities.

The City continued working toward the Musqueam Creek Integrated Rainwater Management Plan, in partnership with the Musqueam First Nation. Technical watershed investigation, stakeholder engagement, visioning and goals and action plans were completed in 2015.

Extensive sewer system investigative work was performed for the Still Creek Conservancy Program, in response to Metro Vancouver reports of elevated fecal coliform counts at various locations in the Still Creek Watershed. The work included manhole inspections and investigating both City and private sewer services for cross connections to improve Still Creek's water quality.

Finally, Sewer, Street and Sanitation Operations worked together to develop and implement a coordinated flood management protocol for both forecasted and unplanned storm events.

This protocol is designed to reduce overland flooding as a result of intense rain, falling leaves and clogged catch basins.

Table 1 – Sewers and Stormwater Service Metrics

Service	Metric Type	COV Metric	2011	2012	2013	2014	2015F
Sewers and Storm Water	**Quantity**	Km of sewers separated per year	12.9	12.7	10.5	9.6	7.1
	Quality	% of system which has separated storm and sanitary sewers (Note 1)	49.80%	50.80%	51.60%	52.30%	52.80%
	Result	# of sewer connection trouble calls	761	750	869	870	875
		# of home / business flooding claims received	48	38	122	90	135
		# of coliform limit exceedances (beaches and False Creek)	0	0	2	2	3
	Cost	cost per KM of sewer weighted average	$2,645,000	$2,286,000	$2,382,000	$2,482,000	$2,873,000
		cost per KM branch size sewer	NDA	NDA	NDA	NDA	$2,231,000
		cost per KM trunk size sewer	NDA	NDA	NDA	NDA	$3,726,000

Note 1: "% of system which has separated storm and sanitary sewers" metric adjusted based on updated GIS data, for all years shown

The number of kilometers separated was lower than previous years as a result of more trunk size sewer projects being delivered. These larger sewers require more time and resources compared to smaller branch size sewers.

The number of sewer connection trouble calls reflect the condition of the sewer system, irrespective of the weather. The number of sewer connection trouble calls in 2015 was similar to the count for 2014, though the number of flooding claims was slightly higher. This latter increase is primarily due to the dry spring and summer months which resulted in more root

intrusion into public and private service connections. Clogged catch basins impacting overland flow during rain events were also a factor.

As a result of the 2015 coliform exceedances experienced in False Creek, a False Creek Water Quality Working Group was established to identify potential sources of fecal contamination and corresponding remedial actions. The group is comprised of stakeholders and technical experts on water quality.

Plans for 2016

The Sewer Utility plans to deliver up to 10 km (0.75% of system) of sewer separation projects through a combination of internally delivered capital works and contracted construction services. A number of the sewer separation projects will be part of the department's 2016 coordinated Engineering capital projects, including projects on Burrard Street, Point Grey Road and SW Marine Drive.

The Musqueam Creek IRMP, which will be completed in 2016, will provide policy direction and recommended tools to both the City and Musqueam First Nation to protect and improve the quality of stormwater discharge and reduce environmental impacts in this salmon bearing stream.

Implementation planning for the Citywide IRMP and Musqueam Creek IRMP will commence in 2016, along with a review of flood management best practices.

The design for replacement of the outdated Glen Drive and East 7th Ave sewage pump station will be completed, along with project planning for the 49th Ave/Dunbar and Jericho pump stations to replace the facilities' aging infrastructure and provide emergency back-up power and bypass pumping provisions.

The Sewer Precautionary Rodding Program provides sewer connection cleaning to homes within the city that have experienced connection blockages and sewer backups. As connections age, more tree roots infiltrate and compromise those connections. The success of the program has resulted in a 40% reduction in reactive blockage calls. However, due to the increasing demand for precautionary maintenance, a review, to be conducted in 2016, will inform an optimized strategy for maintenance versus replacement of aging sewer connections.

The Sewer Operations Branch will continue its investigative work for the Still Creek Conservancy Program to identify and rectify sewer cross connection in the Still Creek Basin.

The Iona Wastewater Treatment Plant provides primary sewage treatment to the City of Vancouver and drives the costs for the Vancouver Sewerage Area. The Iona plant must be upgraded to secondary treatment by no later than 2030. Costs associated with the plant upgrade are being realized in this capital plan and will continue in future years. Metro Vancouver's operating costs at the Iona Wastewater Treatment Plant (WWTP) will begin to increase significantly due to the transport and disposal of existing biosolid stockpiles to prepare the site for a new treatment plant. Metro charges will further increase year over year not only as a result of existing biosolids stockpile management, but also due to the planned design, construction and operation of the new plant and subsequent decommissioning of the

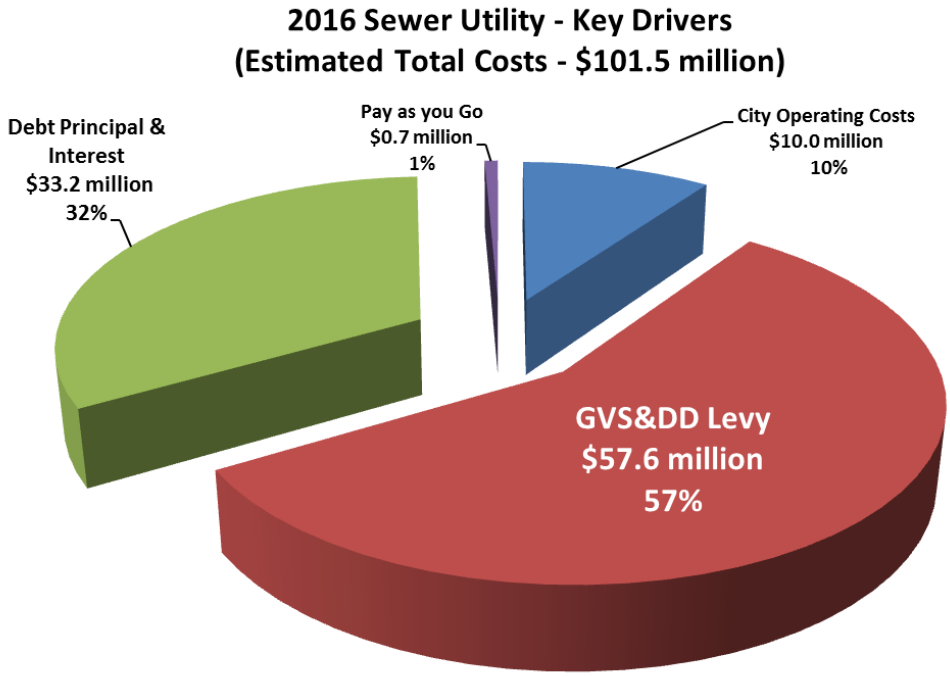
old facility. The upgrade of the plant is required to be completed by 2030 but site preparation of biosolids removal is now underway.

Financial Implications

Key Cost Drivers

Sewer Utility expenditures consist of three components: the Greater Vancouver Sewerage and Drainage District (GVS&DD) levy which makes up about 57% of the total budget, City of Vancouver operating costs which make up about 10% of the total budget and costs associated with Sewers Capital Plan expenditures which make up about 33% of the budget as shown graphically in Figure 1 below. A description of each component and its related activities follows.

Figure 1 – Sewer Utility Costs



GVS&DD Levy

Metro Vancouver imposes a levy on each member municipality annually to cover the cost of regional liquid waste collection and sewage treatment facilities. The levy is a fixed amount based on the operating and capital budgets in each of the sewerage areas in the region. Current year levy increases are associated with the management of existing stockpiled biosolids to make room for the new plant. Future year levy increases will be associated with biosolid dewatering and secondary treatment biosolids management, but are primarily due to the high capital cost associated with the new plant. Metro Vancouver is currently working on multi-year funding strategy and debt structure options for evaluation and input. The levy, which also covers the operating and capital costs of the regional collection system, will increase by 7.4% in 2016.

Sewer Capital Program

The Sewers capital program has historically been funded through debentures. The impact of debt on the operating budget is gradual and spread over 10 years. In 2015, the City instituted a small 'pay-as –you-go' contribution towards capital expenditures on the sanitary sewer system. In 2016, a decrease of $0.5 million to the 'Pay as you Go' contributions is planned based on rate increase pressures related to the introduction of biosolids management at the Iona plant, bringing the contribution down to $0.7 million. The plan is to keep the 'Pay as you Go' contribution flat at this level in the near term.

Operating and Maintenance

Sewer operating and maintenance costs are associated with cleaning, repairing, inspecting and managing the infrastructure, as well as emergency response for sewer backups and flooding. Tasks include unblocking mains and connections, clearing tree root intrusions, completing CCTV inspections, cleaning and maintaining catch basins, maintaining sewer pump stations and working with property owners to locate and eliminate cross connections.

2015 Budget Performance

Table 2 summarizes the operating budget and current forecast for the Sewer Utility in 2015.

Table 2 – 2015 Budget Performance

Sewer Utility	2015 Forecast	2015 Budget	$ Variance	% Variance
$ millions				
Revenues				
General Tax Levy	$ 34.8	$ 34.8	$ 0.0	0%
Sewer Fees - Metered	35.9	34.7	1.2	3%
Sewer Fees - Flat Rate	25.4	24.9	0.5	2%
Industrial Waste Water Fees	0.7	0.7	(0.0)	-1%
Other Revenues	1.2	0.9	0.3	33%
Total Revenues	**98.0**	**96.0**	**2.0**	**2%**
Expenses				
GVS&DD Levy	53.6	53.6	-	0%
Sewers Operating Costs	10.0	9.8	0.3	3%
Debt Interest	8.9	8.9	-	0%
Total Expenses	72.6	72.3	0.3	0%
Transfers				
Debt Transfers	22.4	22.4	-	0%
Transfer to/(from) Stabilization Reserve	1.8	0.1	1.7	2563%
"Pay as you Go" Capital	1.2	1.2	-	0%
Total Transfers	25.4	23.7	1.7	7%
Total Expenditures & Transfers	**98.0**	**96.0**	**2.0**	**2%**
Surplus/(Deficit)	**$ (0.0)**	**$ (0.0)**	**$ (0.0)**	**0%**

Tables may not sum due to rounding

2015 Revenues

The revenues from General Tax Levy fund the storm component of the sewer system and the utility fee supported revenues fund the sanitary component of the system. While the proportions can vary from year to year, the storm component typically makes up about 37% of the total sewer expenditures.

The current forecast for metered revenues is about $1.2 million more than budgeted. Metered sewer revenues are associated with the water used by metered customers since the volume of water consumed serves as a proxy for waste flows. Metered customers in all sectors consumed more water consumed in 2015 due to record-setting drought conditions with an unseasonably warm and dry spring and summer. Flat rate revenues are higher than budgeted due to additional revenue generated from the number and type of flat-rate customers. For further discussion of this trend, refer to the 2016 Annual Review of the Water Utility (RTS 11085). Finally, the increase in other revenues is largely due to the recoveries at the City's Vernon

Drive Grit Facility. This facility de-waters and provides environmental handling for wet slurries from catch basin cleaning and other "sucker-truck" tasks; these services are also offered to private operators of similar equipment, on a fee-for-service (cost recovery) basis.

2015 Expenditures & Transfers

The expenses for 2015 are expected to be over budget by less than 1%, mainly due to demand driven program costs (i.e. additional work for False Creek coliform investigation and flushing).

The anticipated additional transfer to the Rate Stabilization Reserve is related to the higher metered and flat revenues described above and the ongoing need to build the reserve in anticipation of large capital projects in the future.

2016 Proposed Budget and Rates

The average Sewer Levy set by Metro Vancouver is set to increase by 4.1%. However, the levy, imposed on every Metro Vancouver member municipality, is a fixed amount based on the operating and capital costs of each specific sewage area. The Metro Vancouver levy to the City of Vancouver covers the cost of regional collection and sewage treatment facilities. The City's sewage area costs are increasing at greater than the average rate in part due to the costs associated with the Iona wastewater treatment plant and, as a result, the City faces a 7.4% increase.

The key drivers of the proposed 9.9% rate increase are the 7.4% increase in the Metro Vancouver Sewer Levy Rate charged for sewer treatment and stockpiled biosolids management costs, the 6% increase in debt costs associated with increased sewer separation and decreased volume of sewer revenues projected in 2016 as a result of anticipated reduced water consumption. While this levy does include GVS&DD capital costs, the increase this year is driven by increased Metro operating costs at the Iona Wastewater Treatment Plant and biosolids management and the allocation of these costs fully to the sanitary system.

Since sewage flows are not directly metered, an estimate is made on the basis of water consumed. As discussed in the Annual Review of Water Rates, water consumption has been higher than expected in 2015 and the estimate has been adjusted for the 2016 budget and beyond.

The 2016 proposed budget is summarized in Table 3 with the restated 2015 budget and forecast for comparison.

Table 3 - Proposed 2016 Budget

Sewer Utility	2015 Forecast	2015 Budget	2016 Proposed	$ Change from 2015 Budget	% Change
Water Consumption Volume	113,181,687	112,000,000	110,320,000		
$ millions					
Revenues					
General Tax Levy	$ 34.8	$ 34.8	$ 35.3	$ 0.5	1%
Metered Rate Revenues	35.9	34.7	37.0	2.3	7%
Flat Rate Revenues	25.4	24.9	27.5	2.6	11%
Industrial Waste Water Fees	0.7	0.7	0.8	0.1	7%
Other Revenues	1.2	0.9	0.9	-	0%
Total Revenues	**98.0**	**96.0**	**101.5**	**5.5**	**6%**
Expenses					
GVS&DD Levy	53.6	53.6	57.6	4.0	7%
Sewers Operating Costs	10.0	9.8	10.0	0.2	2%
Debt Interest	8.9	8.9	10.3	1.4	15%
Total Expenses	72.6	72.3	77.9	5.6	8%
Transfers					
Debt Principal	22.4	22.4	22.9	0.5	2%
Transfer to/(from) Stabilization Reserve	1.8	0.1	-	(0.1)	-100%
"Pay as you Go" Capital	1.2	1.2	0.7	(0.5)	-42%
Total Transfers	25.4	23.7	23.6	(0.1)	0%
Total Expenditures & Transfers	**98.0**	**96.0**	**101.5**	**5.5**	**6%**
Surplus/(Deficit)	$ -	$ -	$ -	$ -	**0%**

Tables may not sum due to rounding

Revenues

The proposed rate increase for both flat and metered sewer utility customers is 9.9% in 2016. The net increase of $2.3 million in metered revenues is a result of an increase of $3.2 million attributed to the change in the rate charged offset by a $0.9 million decrease attributed to the estimated reduction in volume of water consumption, which serves as a proxy for liquid waste flows.

Prior to 2012, all single-family dwellings and duplexes paid a flat annual rate for water. Since January 1, 2012, all new single family homes and duplexes are metered and no longer pay the flat rate. Approximately 1,200 homes per year are moving to a metered rate. The net increase of $2.6 million in flat rate revenues is a result of a $2.8 million increase attributable to the flat rate increase and type of flat rate customers offset by a $0.2 million decrease attributable to the decrease in the number of customers paying the flat rate.

The $0.5 million increase in the tax supported portion of the sewer budget represents the cost of the storm component of the sewer system which is calculated to be about 35% of the total expenses and transfers.

Expenditures & Transfers

Debt charges (debt interest and principle combined) associated with the sewer capital program are increasing by 6% in 2016. These capital costs are related to our ongoing prioritization of the sewer separation program.

The 2016 budget for the GVS&DD levy for Vancouver is increasing by 7.4% over the 2015 budget. While this levy does include GVS&DD capital costs, the increase this year is driven by increased Metro operating costs at the Iona Wastewater Treatment Plant and biosolids management and the allocation of these costs fully to the sanitary system.

Transfer to the Rate Stabilization Reserve was higher than budgeted in 2015, which was a result of an average 2% increase of water consumption over budgeted volumes.

Staff are proposing a $0.5 million decrease to the Pay as You Go strategy to alleviate rate increase pressures related to the introduction of biosolids management at the Iona plant.

In order to offset inflationary increases, staff are continually looking for ways to maintain services at a lower cost. For the 2016 budget, staff were able to find $0.11 million in savings in operations by utilizing sewer inspection testing to prioritize and reduce mainline maintenance activities.

Five Year Outlook

The Utility's five-year outlook and estimated balance of the rate stabilization reserve is summarized in Table 4.

Table 4 – Sewer Utility Five-year Outlook

Sewer Utility	2016	2017	2018	2019	2020
Assumptions:					
Water Consumption Volume	110,320,000	108,665,200	107,035,222	105,429,694	103,848,248
Debt Cost Increases	6.0%	6.0%	7.0%	7.0%	7.0%
Metro Levy Price Increase	7.4%	7.5%	8.0%	10.0%	10.0%
City Rate Increase	9.9%	9.5%	9.8%	9.7%	9.3%
$ millions					
Revenues					
General Tax Levy	$ 35.3	$ 37.6	$ 40.3	$ 43.6	$ 47.2
Sewer Fees - Metered	37.0	39.9	43.2	46.7	50.2
Sewer Fees - Flat Rate	27.5	29.6	32.0	34.6	37.2
Industrial Waste Water Fees	0.8	0.8	0.9	1.0	1.1
Other Revenues	0.9	0.9	1.0	1.0	1.0
Total Revenues	**101.5**	**108.9**	**117.3**	**126.8**	**136.8**
Expenses					
GVS&DD Levy	57.6	62.3	68.6	75.2	82.1
Sewers Operating Costs	10.0	10.2	10.4	10.6	10.8
Debt Interest	10.3	12.0	12.7	14.7	15.4
Total Expenses	77.9	84.5	91.6	100.5	108.3
Transfers					
Debt Transfers	22.9	23.2	25.0	25.6	27.7
Transfer to Stabilization Reserve	-	0.5	-	-	-
"Pay as you Go" Capital	0.7	0.7	0.7	0.7	0.7
Total Transfers	23.6	24.4	25.7	26.3	28.4
Total Expenditures & Transfers	**101.5**	**108.9**	**117.3**	**126.8**	**136.8**
Surplus/(Deficit)	$ -	$ -	$ -	$ -	$ -

	Forecast 2015					
Reserve Balance ($ millions)	4.3	4.3	4.8	4.8	4.8	4.8
% of Water Purchases (target 5 - 10%)	5.9%	6.0%	6.5%	6.4%	6.3%	6.2%

Tables may not sum due to rounding

The GVS&DD levy for Vancouver is increasing by 7.4% in 2016 and the projections for the increase in the GVS&DD levy for the next four years range from 7.5% - 10% per year. These projections are based on operating and capital costs at the Iona Wastewater Treatment Plant and have been adjusted for biosolid removal costs. The Iona plant must be upgraded to secondary treatment no later than 2030 and the Lions Gate Treatment Plant no later than 2020. As such, we expect to see larger increases in Metro costs in the future.

Debt costs are expected to increase as we continue to invest in our sewer infrastructure and strive to meet the LWMP requirement of eliminating combined sewer overflows by 2050. In order to do this, we will increase separating the sewer system to an average rate of more than 1% of the system per year. We will deliver 10 km of separated sewers in 2016 and more than this in each remaining year of the 2015-2018 Capital Plan. Increases in future capital plans will be required for the city to meet its regulatory obligation regarding separated sewers.

Although this five-year outlook assumes inflationary increases in the sewer operating costs, we will continue to look for ways to provide the service at a lower cost by finding more efficient ways to maintain the system.

Related Fees

To be consistent with other flow related rate increases, a 9.9% increase in rates for specific types of disposals is proposed. These include discharge of contaminated groundwater, ship wastewater and discharges by Utilities (per manhole connected).

Connection Fees

All new development projects in the City are required to install separated sanitary and storm sewer service connections on private property and pay connection fees for the corresponding connections on City property. These fees are updated regularly to ensure cost recovery.

It is recommended that a 2.0% increase for flat rate connection and removal fees be approved. This increase is required to cover increases in equipment rental and materials.
Further, to ensure fees recover actual costs for commercial connections that are subject to extraordinary costs associated with traffic management requirements, public safety provisions, arterial or collector street impacts and connection complexity, amendments to the by-law to allow "at cost" fees are proposed. These amendments for "at-cost" fee recovery align with provisions within the Water Works By-Law for water connections.

The connection fees are based on an average price model, and the underlying complexities can vary by job. The number of complex connections has also increased, putting pressure on the average cost. In an effort to ensure fees are appropriate, a comprehensive review of fees for the connections program is planned for 2016.

Legal Implications

The Sewer and Watercourse By-law annual rate changes are contained in Appendix A.

In addition to the annual rate and fee changes, this report recommends administrative amendments to provide "at cost" fee recovery for sewer connections consistent with provisions within the Water Works By-Law.

CONCLUSION

Rates for sewer services are adjusted annually to offset cost increases in the sewer utility, including operating and debt costs and the Metro (GVS&DD) levy. Based on a review of the proposed sewer costs for 2016, it is recommended that flat and metered sewer fees be increased by 9.9% and service and connection fees be increased by 2.0%.

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Appendix A
Sewer & Watercourse By-law No. 8093
2016 Rate Changes

Schedule A

Part I: Sewer Connection Flat Rates

	2015	Proposed 2016	% Increase
1. Public Sewer Connection, for One-Family or Two-Family Dwellings	$8,782	$8,958	2.0%
2. Public Sewer Connection, other than One-Family or Two-Family Dwellings			2.0%
a) 4 inch/100 mm diameter	$12,215	$12,459	2.0%
b) 6 inch/150 mm diameter	$14,744	$15,039	2.0%
c) 8 inch/200 mm diameter	$16,679	$17,013	2.0%
d) 10 inch/250 mm diameter	$19,241	$19,626	2.0%
e) 12 inch/300 mm diameter	$21,864	$22,301	2.0%
f) 15 inch/375 mm diameter	$24,449	$24,938	2.0%
g) Connection to building sewer where installation cost is greater than 1.5 times the applicable flat rate connection fee set out in this Schedule	At Cost pursuant to Sentence 2.7 (2)		
h) Manhole installation in conjunction with a public sewer connection pursuant to Sentence 2.7 (3) of Sewer and Watercourse By-law	At Cost pursuant to Sentence 2.7 (3)		
3. Where a public sewer connection will be placed more than 5 feet below the ground elevation, taken to the nearest foot and measured at the centre line of the street or lane as determined by the City Engineer, the fees payable shall be an amount equivalent to an increase of 10%, for each additional foot below 5 feet, of the fee otherwise payable by section 1 or 2 above.			
4. New fitting on a twin sewer pursuant to Sentence 2.7 (4)	$4,557	$4,648	2.0%
5. New fitting on a single sewer pursuant to Sentence 2.7 (4)	$2,009	$2,049	2.0%
6. Inspection of a plumbing system, subsoil drainage pipes and a building sewer	$287	$293	2.0%

Part III: Flat Rates for Unmetered Property

	2015	Proposed 2016	% Increase
Single Family Dwelling	$314	$345	9.9%
Single Family Dwelling with Suite	$424	$466	9.9%
Single Family Dwelling with Laneway House	$424	$466	9.9%
Single Family Dwelling with Suite and Laneway House	$535	$588	9.9%
Strata Duplex (per dwelling unit)	$213	$234	9.9%
2 Services, 1 Lot	$628	$690	9.9%
3 Services, 1 Lot	$941	$1,034	9.9%
4 Services, 1 Lot	$1,256	$1,380	9.9%
Parking Lot/Garden	$179	$197	9.9%

Part IV: Flat Rates for Other Property or Shut Off Water Service

	2015	Proposed 2016	% Increase
Other Property	$179	$197	9.9%
Turned Off, 1 Service	$179	$197	9.9%
Turned Off, 2 Services	$179	$197	9.9%
Turned Off, 3 Services	$179	$197	9.9%

Part V: Unit-Based Rates for Metered Property

	2015	Proposed 2016	% Increase
Metered Property Rate	$2.021	$2.221	9.9%
Waste Discharge Permit User Rate	$0.6583	$0.7235	9.9%

Part VI: Flat Rate for Specific Types of Discharges/Disposals

	2015	Proposed 2016	% Increase
For the discharge of contaminated groundwater pursuant to Section 7.11 (per cubic metre)	$0.92	$1.01	9.9%
For the disposal of ship wastewater pursuant to Section 7.12 (per cubic metre)	$0.92	$1.01	9.9%
For discharges by Utilities pursuant to Section 7.13 (per manhole connected)	$242	$266	9.9%

BY-LAW NO. _____

**A By-law to amend
Sewer and Watercourse By-law No. 8093
regarding 2016 fee increases**

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This By-law amends the indicated provisions of By-law No. 8093.

2. Council strikes out section 2.7 (2) and substitutes

"2.7 (2) Despite the provisions of Section 2.7(1) of this By-Law, if, in the opinion of the Engineer, the installation cost of a public sewer connection to a building sewer is or will be greater than 1.5 times the applicable flat rate connection fee set out in Schedule A, Part I, Section 2:

(a) the installation must be billed to the customer on an "at cost" basis;

(b) the cost of the "at cost" installation must include the amount expended by the City for gross wages and salaries, employee fringe benefits, materials, equipment rentals at rates paid by the City or set by the City for its own equipment, and any other expenditures incurred in doing the work, plus administration charges;

(c) the Engineer may supply an estimate of the installation cost;

(d) the Engineer may require advance payment prior to commencement of the work;

(e) in the event that the Engineer requires advance payment, such advance payment must be based on an estimate of installation cost made by the Engineer;

(f) in the event that the actual installation cost is different than the estimated cost, the Engineer must bill any additional cost to the customer, and must credit any surplus to the customer's account; and

(g) in the event that the actual installation cost is 1.5 times the applicable flat rate connection fee or less, the Engineer must apply the applicable flat rate connection fee and must credit any surplus to the customers' account."

3. In subsection 7.2(3)(b)(iii), Council strikes out "III" and substitutes "IV".

4. Council repeals Parts I, III, IV, V, and VI of Schedule A to the Sewer and Watercourse By-law, and substitutes:

"**PART I**

SEWER CONNECTION RATES

Every applicant for a public sewer connection must, at the time of application, pay to the City the following rates:

1.	Public sewer connection, for One-Family or Two-Family Dwellings with or without a Laneway House		$ 8,958.00
2.	Public sewer connection, other than One-Family or Two-Family Dwellings with or without a Laneway House:		
	a)	4 inch/100 mm diameter	$12,459.00
	b)	6 inch/150 mm diameter	$15,039.00
	c)	8 inch/200 mm diameter	$17,013.00
	d)	10 inch/250 mm diameter	$19,626.00
	e)	12 inch/300 mm diameter	$22,301.00
	f)	15 inch/375 mm diameter	$24,938.00
	g)	connection to building sewer where installation cost is greater than 1.5 times the applicable flat rate connection fee set out in this Schedule	At cost, pursuant to Section 2.7(2)
	h)	manhole installation in conjunction with a public sewer connection, pursuant to Sentence 2.7(3) of Sewer and Watercourse By-law	At cost, pursuant to Sentence 2.7(3)
3.		Where a public sewer connection will be placed more than 5 feet below the ground elevation, taken to the nearest foot and measured at the centre line of the street or lane, as determined by the City Engineer, the fees payable shall be an amount equivalent to an increase of 10%, for each additional foot below 5 feet, of the fee otherwise payable by section 1 or 2 above	

4.		New fitting on a twin sewer pursuant to Sentence 2.7(4)	$4,648.00
5.		New fitting on a single sewer pursuant to Sentence 2.7(4)	$2,049.00
6.		Inspection of a plumbing system, subsoil drainage pipes, and a building sewer	$293.00

PART III

FLAT RATES
FOR UNMETERED PROPERTY

Single Family Dwelling	$345.00
Single Family Dwelling with Suite	$466.00
Single Family Dwelling with Laneway House	$466.00
Single Family Dwelling with Suite and Laneway House	$588.00
Strata Duplex (per dwelling unit)	$234.00
2 Services, 1 Lot	$690.00
3 Services, 1 Lot	$1,034.00
4 Services, 1 Lot	$1,380.00
Parking Lot/Garden	$197.00

PART IV

FLAT RATES FOR OTHER PROPERTY
OR SHUT OFF WATER SERVICE

Other Property	$197.00
Turned Off, 1 Service	$197.00
Turned Off, 2 Services	$197.00
Turned Off, 3 Services	$197.00

PART V

UNIT-BASED RATES FOR METERED PROPERTY

Metered Property Rate	$2.221
Waste Discharge Permit User Rate	$0.7235

PART VI

FLAT RATE FOR SPECIFIC TYPES OF DISCHARGES/DISPOSALS

For the discharge of contaminated groundwater, pursuant to Section 7.11 (per cubic metre)	$1.01
For the disposal of ship wastewater, pursuant to Section 7.12 (per cubic metre)	$1.01
For discharges by Utilities, pursuant to Section 7.13 (per manhole connected)	$266.00

"

5. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

6. This By-law is to come into force and take effect on January 1, 2016.

ENACTED by Council this day of , 2015

Mayor

City Clerk