



2024 Proposed Utility Budget & Rate Increases Workshop

November 27, 2023



NEW WESTMINSTER

ON TABLE
Council Workshop
November 27, 2023
re: Item 2.2

Agenda

- ❑ Introduction of Presenters
- ❑ Recommendation and Purpose
- ❑ Background and Overview
- ❑ 2024 Budget and 2024 - 2028 Proposed Five Year Capital Plan & 2024 Multi-Year Capital Budget
- ❑ Department Presentation and Financial Review
 - ✓ Electrical
 - ✓ Climate Action
 - ✓ Water
 - ✓ Sewer
 - ✓ Solid Waste
- ❑ Summary and Impact to Ratepayers
- ❑ Q&A and Feedback from Council

Introduction - Presenters

- ❑ Steven Faltas, Acting Senior Manager - Electrical
- ❑ Leya Behra, Manager - Climate Action
- ❑ Kwaku Agyare-Manu, Senior Manager Engineering
- ❑ Jacqueline Dairon, Acting CFO/Director of Finance
- ❑ Ron Au, Senior Financial Services Analyst

Recommendation & Purpose

THAT Council approve in principle the 2024 Proposed Utility Budgets and Annual Rate Increases, including the 2024 Service Enhancements and 2024 – 2028 Capital Plan, with respect to the Electric, Water, Sewer and Solid Waste Utilities; THAT Council approves 2024 Service Enhancements and 2024 – 2028 Capital Plan with respect to the Climate Action Fund and THAT Council direct staff to prepare the necessary bylaws to amend the City's utility rates for 2024 as outlined in the Utility report.

The Purpose of the Utility report is to provide Council with the detailed information on the 2024 Proposed Utility Fund Budgets. The Utility report also provides the proposed 2024 Utility rate increases, including Service Enhancements, for the Electric, Climate, Water, Sewer and Solid Waste Utilities and Five Year Financial Plans (2024 – 2028)

The Utility Budget Workshop will set the direction for staff to prepare the necessary bylaws to amend the City's 2024 Utility Rates which will be in effect as of January 1, 2024.

2024 Key Remaining Budget Timeline & Process

Date	Description
27-Nov-23	2024 Utility Rates Workshop
4-Dec-23	2024 Utility Rates Three Readings
11-Dec-23	2024 Utility Rates Bylaw Adoption 2024 Operating Budget Workshop – Proposed Property Tax Rates 2023 Quarterly Capital and Operating Performance Review
8-Jan-24	2024 Capital Workshop – Refinements
22-Jan-24	2024 Operating Workshop - Refinements
5-Feb-24	Commence Bylaw Readings



Overview and Background

2024-2028 Council Proposed Plan:

- Electrical Rate Increase 3.3%/year
- Water Rate Increase 6%/year
- Sewer Rate Increase 8%/year
- Solid Waste Rate Increase 12%/year for 3 years followed by 8%/year
- Capital Expenditures \$271.5M

Influences and Factors

- ❑ Growing demand for electricity create need for infrastructure capital investment
- ❑ Proposal for new organizational structure combining Electric Utility and Climate Action Team under same management structure. Funds remain separate.
- ❑ New Sewer Asset Management Plan and construction inflation create Sewer cost pressures
- ❑ Increase in cost in solid waste vehicles and equipment require increased equipment reserve

Financial Sustainability Principles

SUSTAINABLE

Maintain assets in a state of good repair through **reasonable tax / rate increases, and without disruptions to services**; living within our means

ADAPTABLE

The ability to change debt levels or **leverage reserves**; ability to ramp up or down on spending

STABLE

Predictability of City's sustainable revenue sources and less reliance on external funding or third party funding

ACCOUNTABLE

Fiscally prudent & responsible; the ability to ensure that the City's financial decisions are in the best interest of all

Budget Engagement: Utility

What was heard in 2023:

- 67% want a balance of spending and saving
- 78% support or somewhat support Council's strategic priorities
- 74% support a 4% or more tax increase in 2024

2024 Highlighted Projects:

- Continuing sewer separation work as required by Metro Vancouver
- Building retrofit and heat pump incentives program
- eMobility Strategy



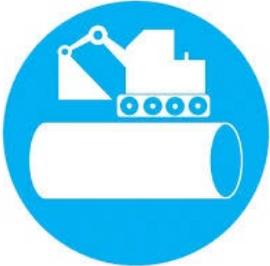
Utility Funds - Simplified



Collection of rates & Other Third Party or Developer Fees



Cost of Power from BC Hydro, Water, Sewer, Solid Waste Levies from Metro Vancouver & CNW Operating Expenses & Debt Servicing Costs



Transfers from Reserve or increased borrowing: Renewal/Replacement & Growth Related Capital Works

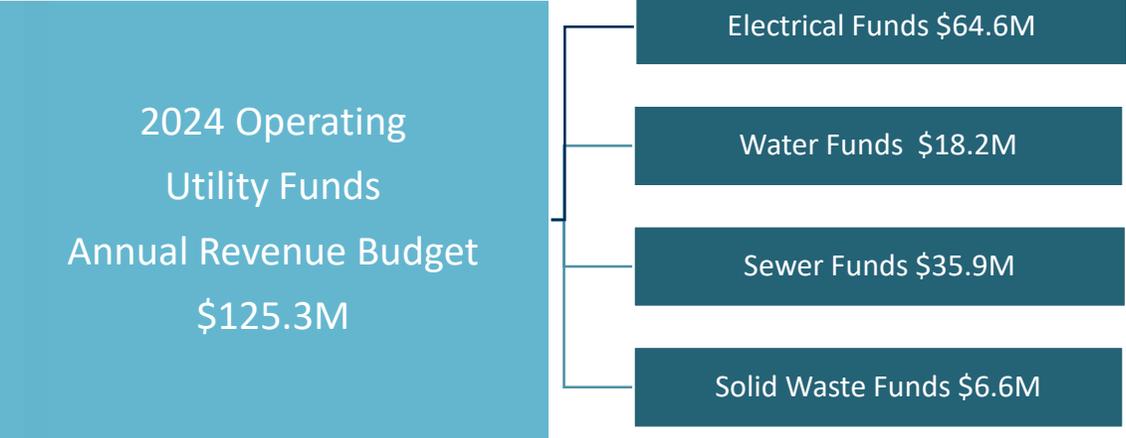
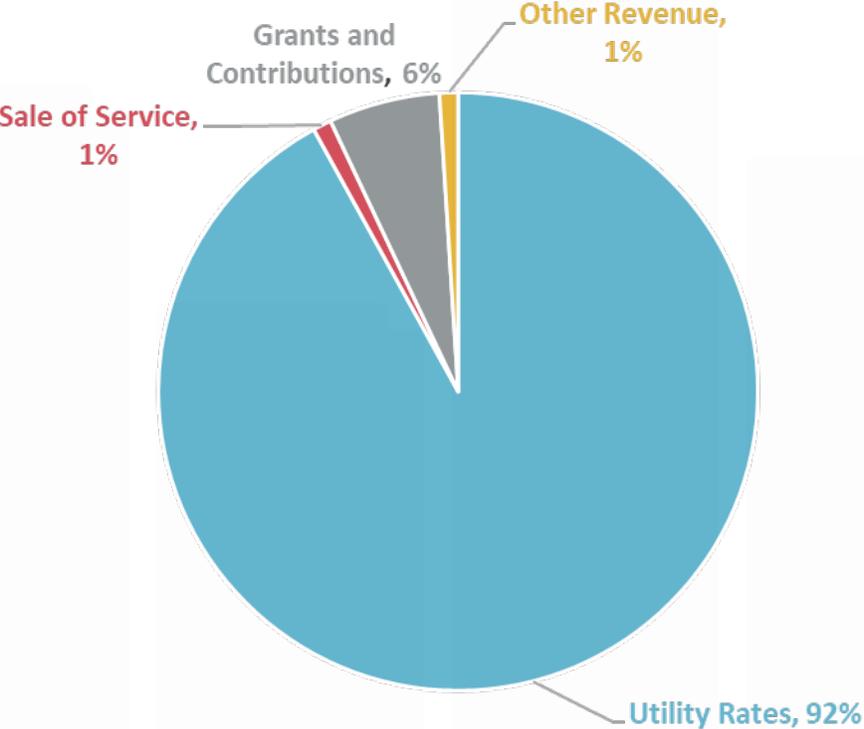


Utility Reserves

Fiscal Management: Insulate Rate Payers from Significant Increases; financial stability assurance

Operating Revenues – Utility Fund

2024 OPERATING REVENUES - UTILITY FUNDS



2024 Operating Revenue Budget \$125.3M

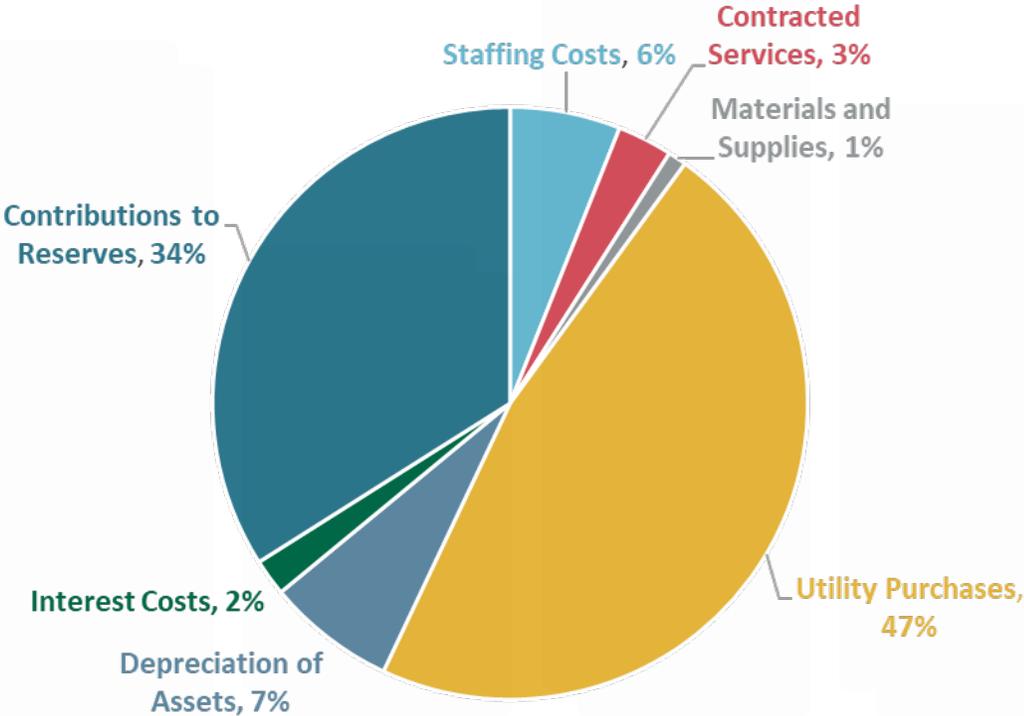
Sources

- Utility Billings - Consumption
- Grants and contributions
- Other Revenue/Sale of Service

Operating Expenses – Utility Fund

2024 OPERATING EXPENSES - UTILITY FUNDS

% PERCENTAGE OF TOTAL REVENUE



2024 Operating Utility Fund Annual Operating Budget \$81.9M

- Electrical \$47.4M
- Water \$10.6M
- Sewer \$19.0M
- Solid Waste \$4.9M

2023 Operating Expense Budget \$81.9M

Uses of revenue:

- Utility purchases – Metro Vancouver/BC Hydro
- Depreciation of assets
- Staffing costs
- Contracted services
- Materials and supplies
- Debt servicing costs
- Contributions to reserves and capital

2024 Operating Margin

□ Operating margin is the difference between operating revenue and the expenditures

○ Operating revenue and /Fee for Services \$125.3M



○ Operating Expenditures (without Capital Expense) \$81.9M

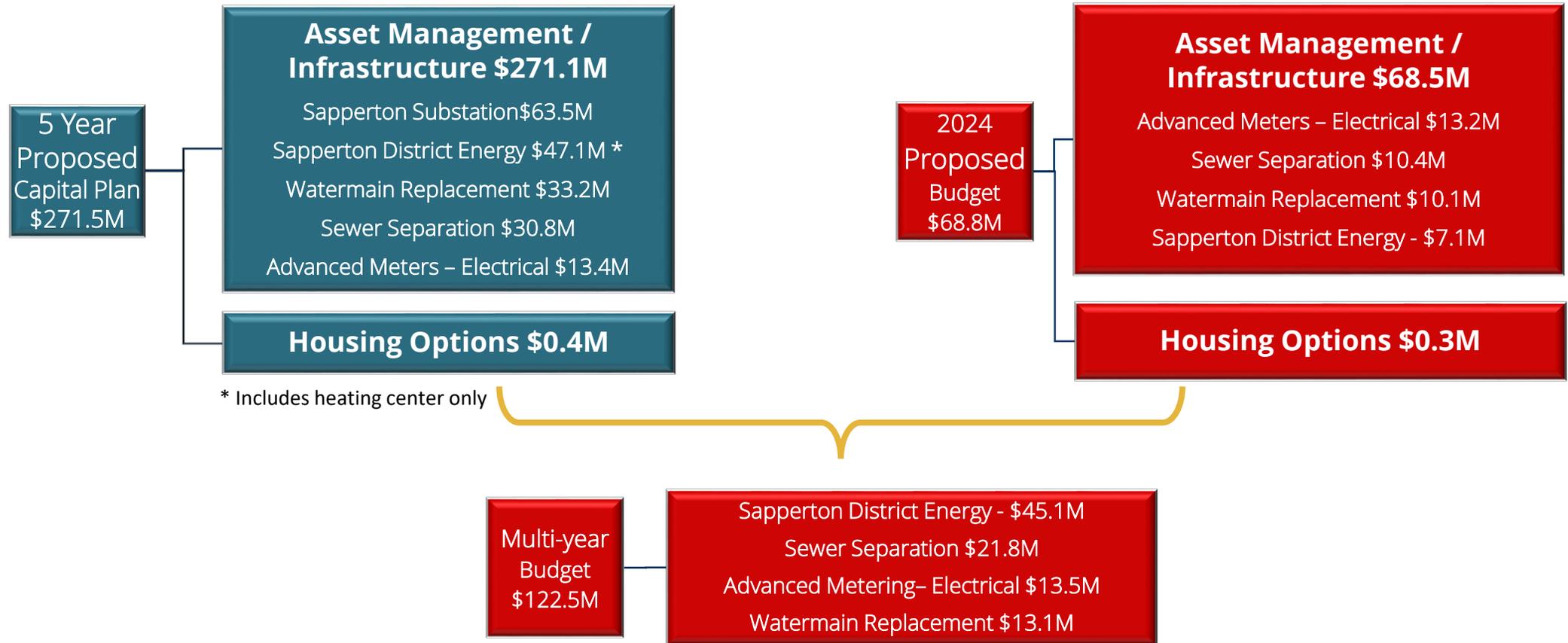


□ Operating Margin, is used to fund: \$43.4M

✓ 2024 Capital investment \$68.8M

✓ Reserves – “rainy day account” (expense stabilization, unplanned costs)

Multi-Year Capital Plan and Budgets



Definitions:

- “Plan” is an Estimate of Spend and Associated Funding Sources
- “Budgets” are Approved Rates and Expenditures
- **Budgets** need to be in place before awarding contracts or committing the organization
- Major construction projects and capital programs can run over multiple years – approving a multi-year budget for these projects is a preferred approach

Reserves

- ✓ City's Reserve Management Policy that recommends maintaining a reserve balance of 5.0% to 10.0% of the current replacement value of assets
- ✓ The Reserves act as "rainy day account" to address risks and unforeseen expenditures



2024 Utility Reserves
Ending Budget \$67.5M

- ✓ The Reserves and act as a "float" to cover ups and downs in the expense cycle:



Electrical

Electric Operations

2023 Accomplishments

- Queensborough Electric Substation Energized
- Major distribution network upgrade on Boyd Street
- AMI detailed planning complete; Factory Acceptance testing complete; Network designed and installed.
- Several Major New Services Connections
- Affordable housing service connection at 831 6th Street
- Recruitment: meter tech, administrator, 2 sub-foreman, project lead

2024 Workplan

- Advanced Meter Infrastructure replacement project implementation \$13.4M
- District Energy site plan and 30% detailed design \$700k (\$45.3M overall)
- Phase I – Asset management planning
- Additional Recruitment: PLT, Sr. PM (carryover from 2023), meter supervisor (promotion), new meter tech
- R02 Land Acquisition (\$4M)
- Voltage Conversion Study + Minor infrastructure \$500k (Gradually increasing to \$3M annual program)



Proposed 2024 Electrical Utility Rate 3.3%

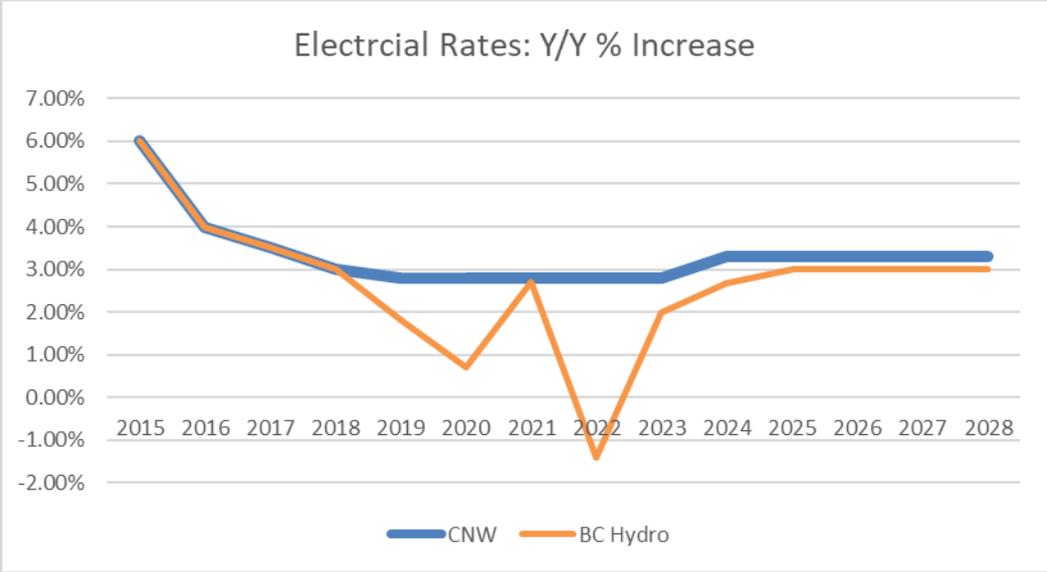
Electric Utility	Budget Projections (\$ in millions)				
	2024	2025	2026	2027	2028
Revenues	\$ 64.62	\$ 81.57	\$ 79.30	\$ 72.47	\$ 75.43
Operating Expenses	\$ 47.46	\$ 50.66	\$ 52.05	\$ 53.07	\$ 56.98
Capital	\$ 35.75	\$ 31.33	\$ 23.22	\$ 9.83	\$ 69.77
Reserves	\$ 17.41	\$ 24.00	\$ 30.71	\$ 34.84	\$ 35.78
Rate Increase	3.3%	3.5%	3.5%	3.5%	3.5%

Major Cost Driver: Capital Spending Projection over 5 Years: \$169.4M

- ❑ Sapperton Substation - \$63.5M

2024 Budget Outlook Considerations:

- ❑ Increase in Cost of Power Purchases \$0.6M.
- ❑ Fixed Cost & Salary Increases of \$0.3M
- ❑ New Service Enhancement Requests \$0.75M:
 - AMI - \$440k
 - Substation maintenance - \$225k
 - Tree and Pole maintenance - \$85k



- ❑ Anticipated rate increase from BC Hydro of 2.3%, followed by assumed at the rate of inflation (assumed 3% YoY)

Electrical Reserve

2024-2028 Reserve Target

- ❑ Policy: Target Reserve balance : 5% - 10% of current replacement value (~\$600M)
- ❑ 2028 Reserve Balance is forecasted at \$35.8M, or 6.0% of estimated asset replacement value after increasing rates to 3.3-3.5%

Electric Utility	Budget Projections (\$ in millions)				
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Rate Increase	3.3%	3.5%	3.5%	3.5%	3.5%
Reserves / Replacement Value	2.9%	4.0%	5.1%	5.8%	6.0%



Climate Action

Climate Action

2023 Accomplishments

- Energy and Zero Carbon Step Codes implementation plan for 2024 - 2027
- Developed draft Climate Action Decision Making Framework
- Completed a review of technical challenges of EV Ready retrofits
- Developed draft non-residential EV Ready requirements
- Supported 15 families with multilingual services to complete applications for free AC units through the ECAP program
- Provided incentives to local builders and community members



2024 Proposed Capital Projects

- Development of public EV Charging network expansion plan
- Implement Climate Action Decision Making Framework
- Development of climate action focused financial tools
- Initiate Extreme Heat Response Building Retrofit needs assessment and program plan
- Implement Non-Residential EV Charging Requirements
- Deliver incentives for residential and commercial energy and emissions reductions



Image: <https://www.hydropower.org/iha/discover-facts-about-hydropower>

Climate Action Reserve

2024-2028 Reserve

- ❑ Projected 2024 Climate Levy collection of \$2.0M which represent a 3.5% levy on Electric rate revenue and increasing with inflation in future years
- ❑ Budgeted carbon credit sales of \$3.6M, annually from 2024 to 2028
- ❑ 2024 Fixed Cost & Salary Increases related to climate action team of \$0.6M
- ❑ 2024 New Operating Expense Service Enhancement "Requests" \$0.6M mainly comprising staffing increases
- ❑ 2024 Proposed Capital Spending of \$1.2M

Climate Action	Budget Projections (\$ in millions)				
	2024	2025	2026	2027	2028
Revenues	\$ 5.57	\$ 5.64	\$ 5.71	\$ 5.78	\$ 5.86
Operating Expenses	\$ 1.02	\$ 1.48	\$ 1.49	\$ 1.50	\$ 1.54
Capital	\$ 1.28	\$ 0.70	\$ 0.50	\$ 0.50	\$ 0.50
Reserves	\$ 40.53	\$ 43.99	\$ 47.70	\$ 51.48	\$ 55.30

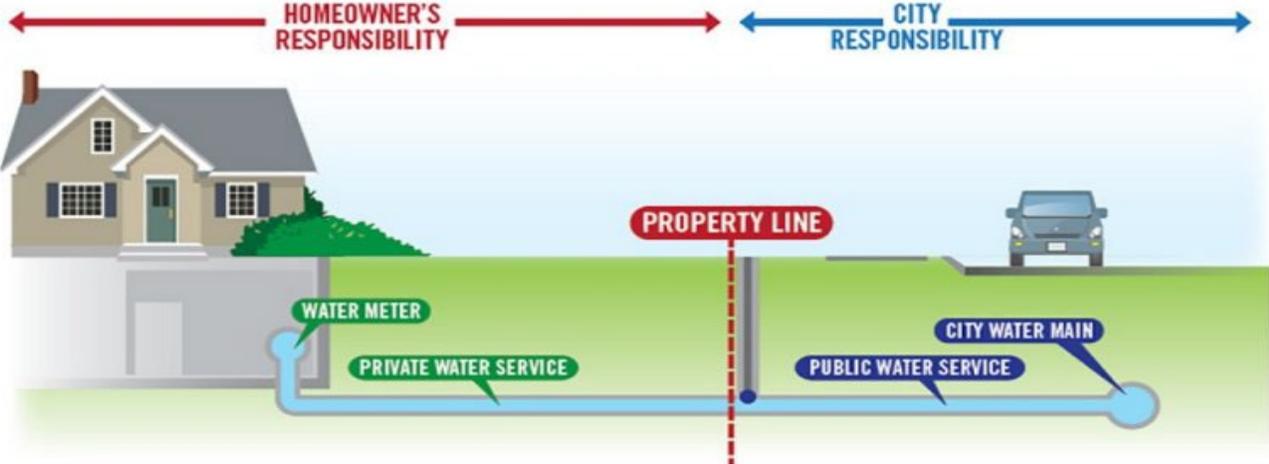


Water

Water Core Services

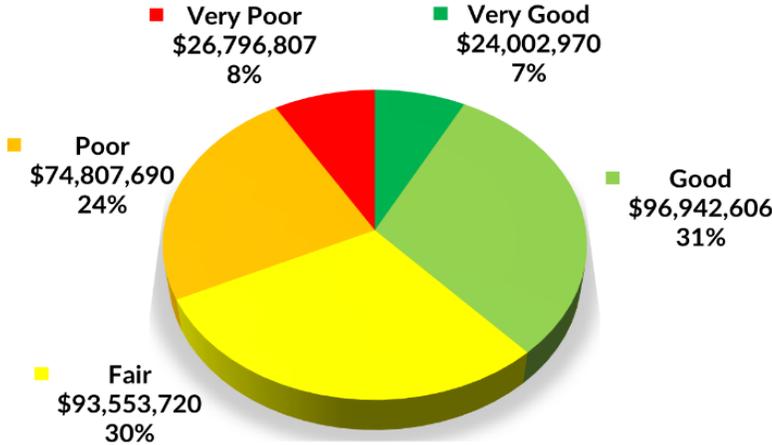
2023 Accomplishments & Highlights

- Continued to successfully operate, maintain and repair over 270Km of water mains
- Maintained water quality levels while distributing potable drinking water across the City
- Continued to implement the watermain replacement program despite lingering supply chain challenges and increasing construction costs
- Repaired broken water mains and completed new service connections
- Continued to focus on replacement and rehabilitation as per the Water AMP, to maintain the system in a good state of repair.



<https://www.calgary.ca/water/customer-service/lead-water-service-lines.html>

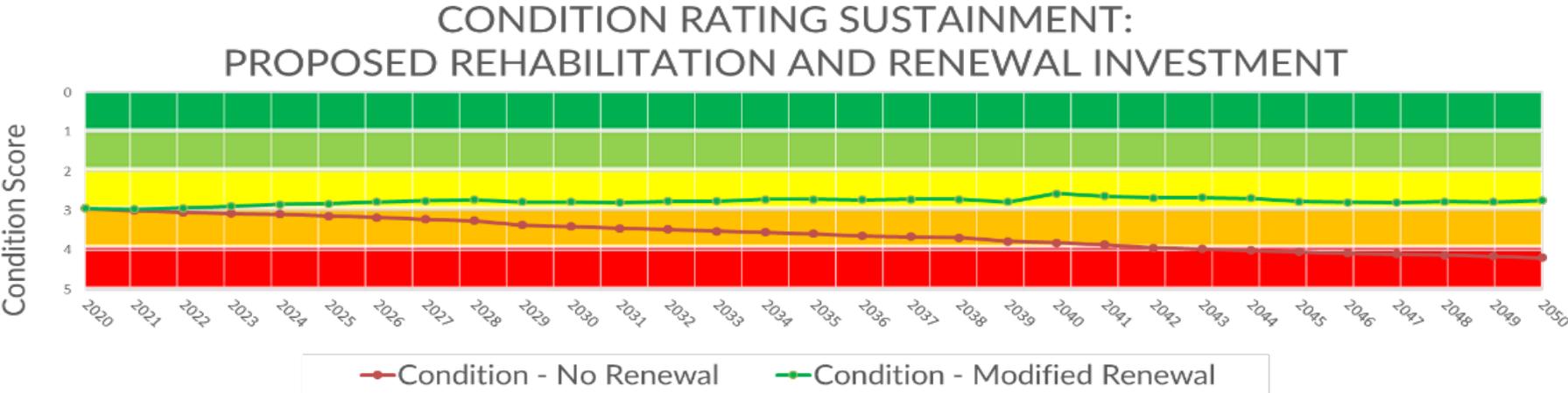
2020 CONDITION PROFILE - BASELINE
(ALL ASSETS WEIGHTED BY CRV)



Water Core Services

2024 Proposed Initiatives

- Continue to distribute water purchased from Metro Vancouver (Core service)
- Continue to operate, maintain and repair water distribution system
- Continue to implement the watermain replacement capital project incl. works in the West End
- Continue to support the CMMS (Cityworks) implementation to support our O&M and asset management practices
- Provide education and support for the regional lawn watering restrictions



Proposed 2024 Water Utility Rate 6.0%

Water Utility	Budget Projections (\$ in millions)				
	2024	2025	2026	2027	2028
Revenues	\$ 18.21	\$ 19.65	\$ 20.06	\$ 21.25	\$ 22.53
Operating Expenses	\$ 10.60	\$ 11.40	\$ 12.10	\$ 12.55	\$ 12.90
Capital	\$ 12.29	\$ 6.11	\$ 6.31	\$ 6.66	\$ 8.03
Reserves	\$ 18.35	\$ 20.72	\$ 22.66	\$ 25.06	\$ 27.01
Rate Increase	6.0%	6.0%	6.0%	6.0%	6.0%

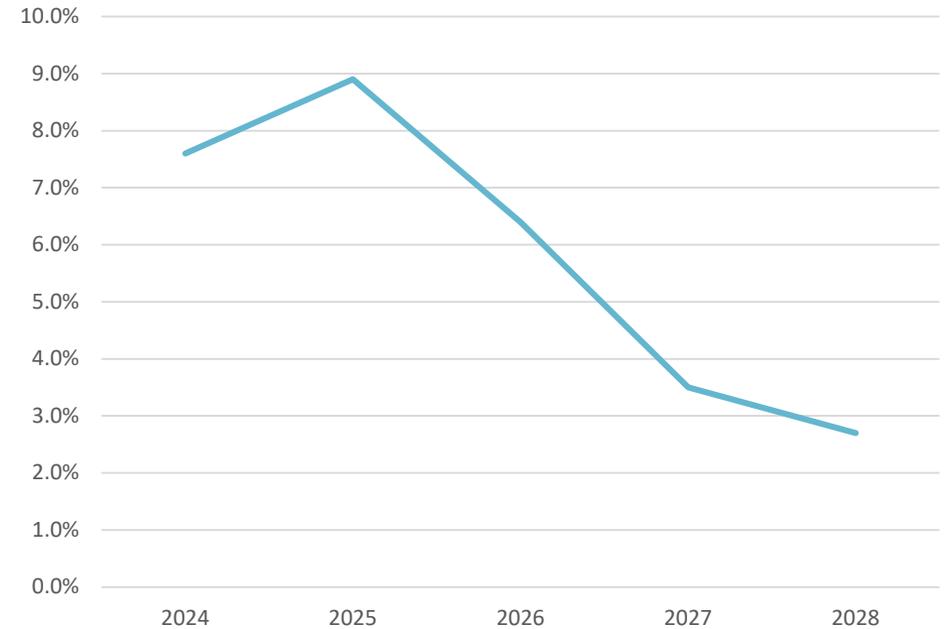
Capital Spending Projection over 5 Years: \$39.4M

- Annual Water-main Renewal/Replacement Rate
- Annual Replacement of Operational Equipment and Service Vehicles

2024 Budget Outlook Considerations:

- Projected 2024 Increase in Metro Vancouver Water Levies \$0.6M
- Fixed Cost & Salary Increases of \$0.1M
- Proposed Capital Spending of \$12.3M
- 2024 New Service Enhancement Requests \$0.1M
 - \$30K Supplies and Materials due to rising costs
 - \$63K Water Ops subcontract expense due to rising costs
 - \$22K 0.5 FTE Co-op student aux salary

Metro Levy Projections - Water



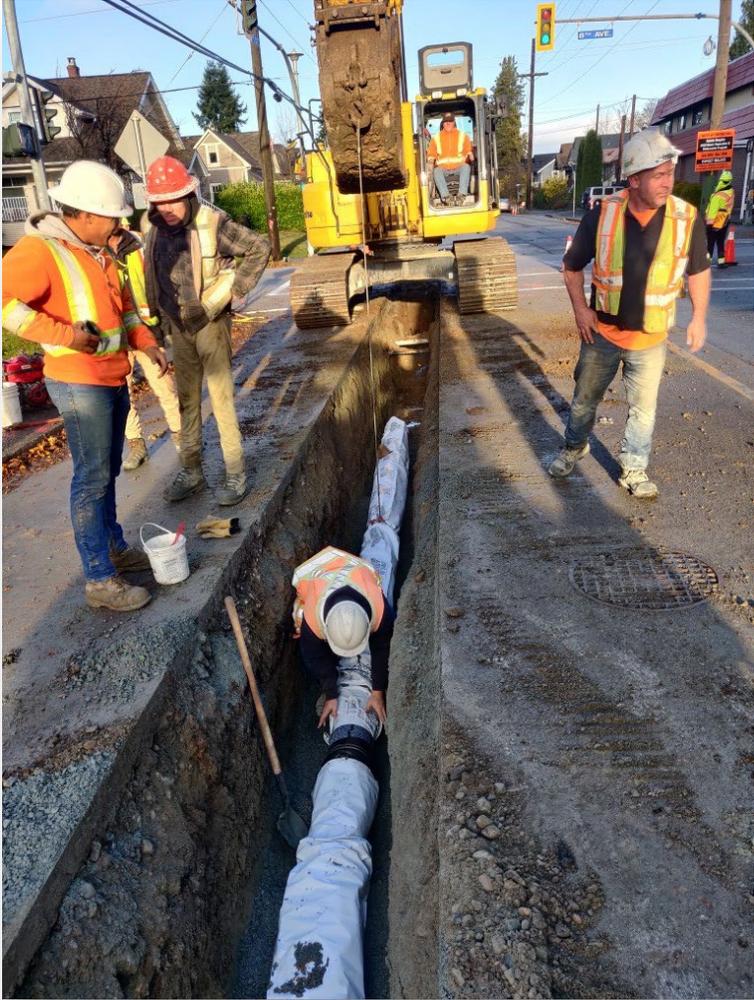
- Metro Levy Rates forecasted to decline due to Metro's push towards growth-paying-for-growth by shifting more of the growth costs to DCC's
- Major Cost Driver Metro Levy: ~76% of annual operating costs; ~\$10.6M in 2024

Water Reserve

2024-2028 Reserve Target

- ❑ Policy: Target Reserve balance : **5% - 10%** of current replacement value
- ❑ Estimated Asset Replacement Value: \$316M
- ❑ 2028 Reserve Balance is forecasted at \$26.8M, or 7.0% of estimated infrastructure asset replacement value; recommend reducing the rate to from 7% to 6% in order to shift overall utility rate increases toward Utility funds with urgent capital replacement programs while make holding overall increases to prior year levels to maintain affordability

Water Utility	Budget Projections (\$ in millions)				
	2024	2025	2026	2027	2028
Revenues	\$ 18.21	\$ 19.65	\$ 20.06	\$ 21.25	\$ 22.53
Operating Expenses	\$ 10.60	\$ 11.40	\$ 12.10	\$ 12.55	\$ 12.90
Capital	\$ 12.29	\$ 6.11	\$ 6.31	\$ 6.66	\$ 8.03
Reserves	\$ 18.35	\$ 20.72	\$ 22.66	\$ 25.06	\$ 27.01
Rate Increase	6.0%	6.0%	6.0%	6.0%	6.0%
Reserves / Replacement Value	4.8%	5.4%	5.9%	6.6%	7.1%

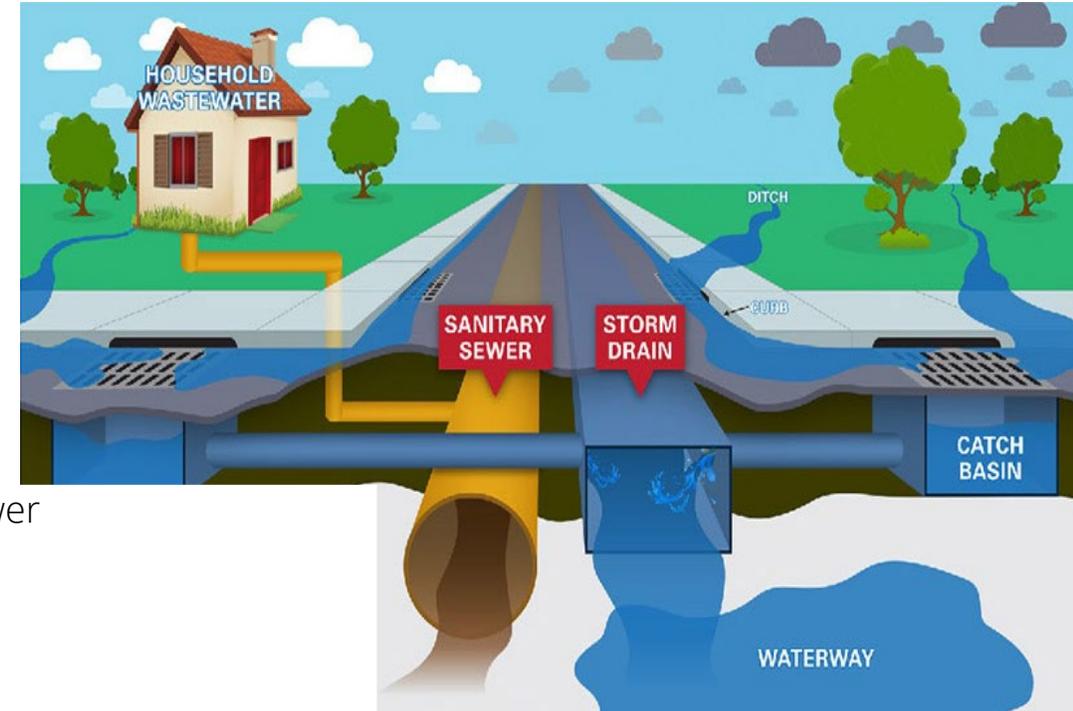


Sewer & Drainage

Sewer & Drainage Core Services

2023 Accomplishments & Highlights

- Operate, maintain and repaired the following system components:
 - 160km of Combined sewer mains,
 - 40km of Sanitary mains,
 - 90 km of Storm sewer mains,
 - 39 pump stations and
 - 7km of open drainage ditches
- Continued with combined sewer separation (2075 regulatory requirement), sewer main rehab and renewal
- Completed the Sewer & Drainage Asset Management plan
- Flood Resilience Plan Update
- Kicked off the \$10m grant funded West End Sewer Separation project
- Emergency management efforts with Spring Freshet
- Challenges with multiple pump stations, due primarily to an aging SCADA system



<https://mywaterearth.com/storm-drain-system-vs-sanitary-sewer-system/>

Sewer & Drainage Core Services

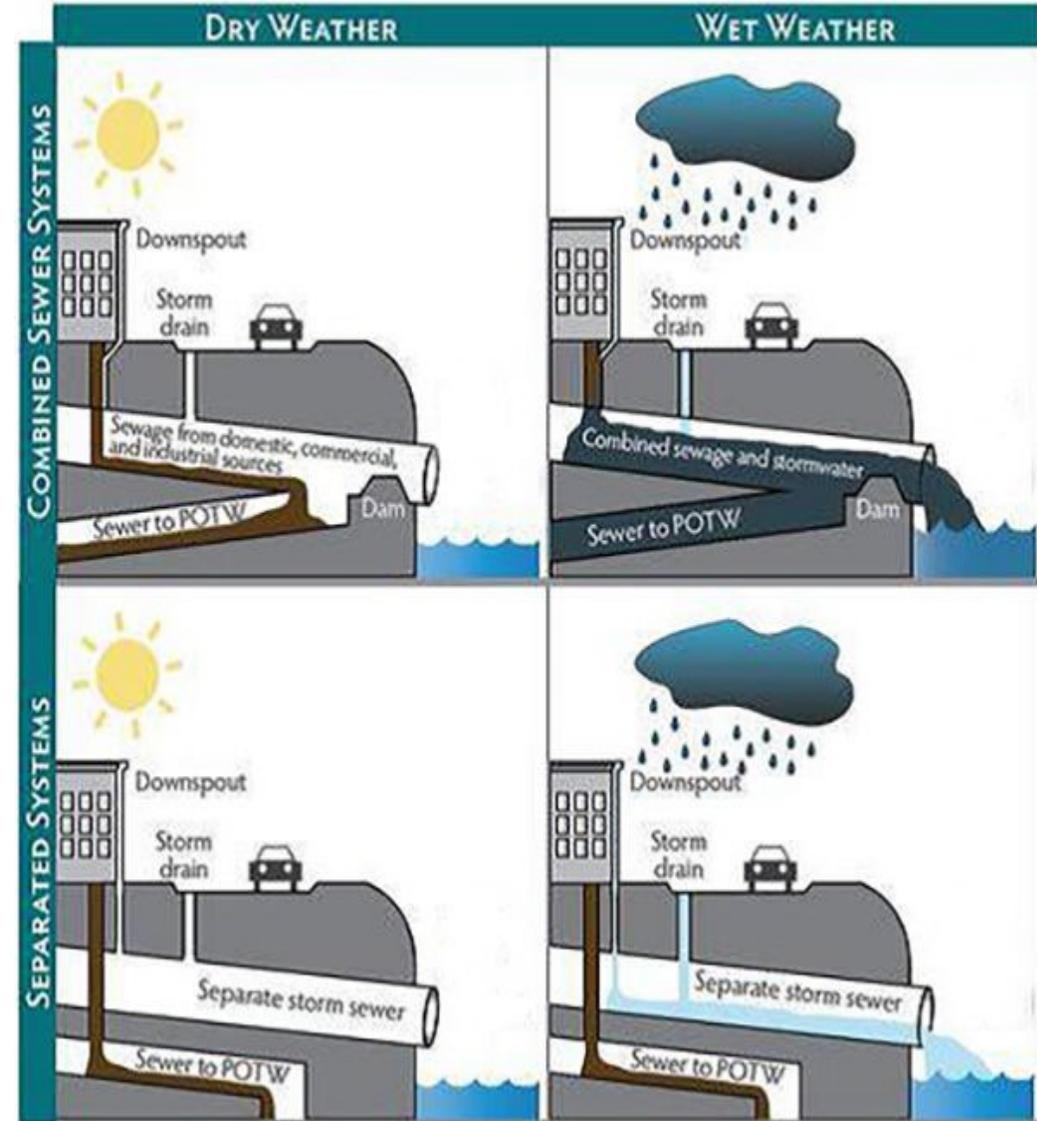
2024 Proposed Initiatives

- West End Sewer Separation project,
- Continue infrastructure renewal capital programs
- Advance green infrastructure projects to improve rainwater management
- Continue efforts to maintain our SCADA system while planning for a future SCADA system replacement
- Continue to provide this utility core service and maintain the current level of service.



Sewer Separation ->

<- Sewer Rehab



Proposed 2024 Sewer Utility Rate 8.0%

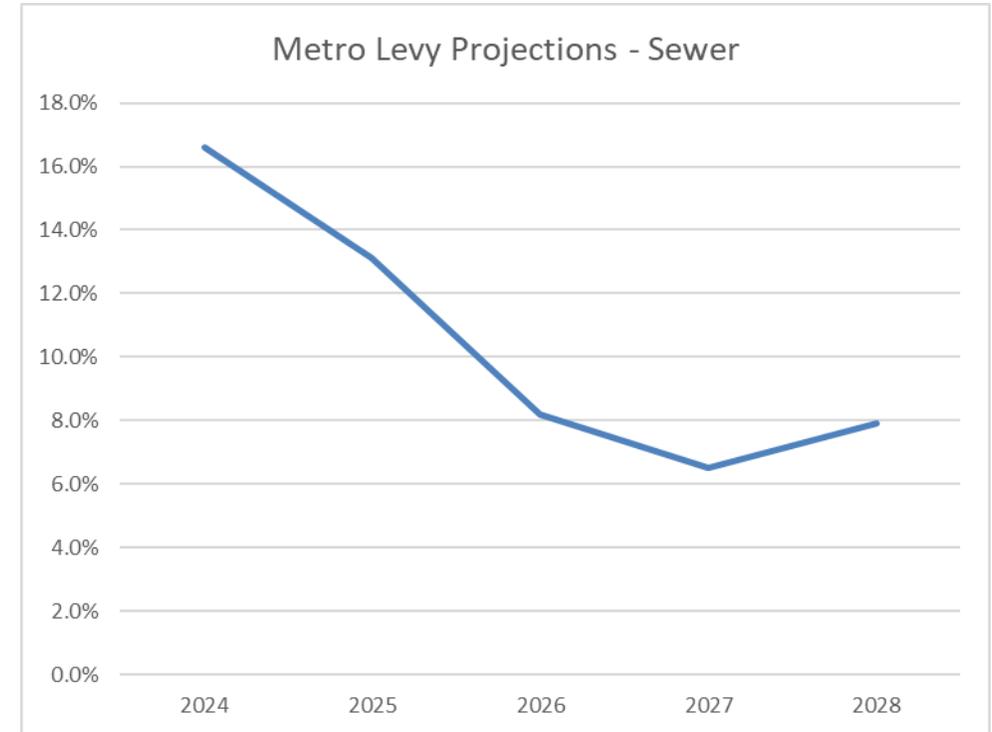
Sewer Utility	Budget Projections (\$ in millions)				
	2024	2025	2026	2027	2028
Revenues	\$ 35.82	\$ 36.02	\$ 37.03	\$ 40.56	\$ 41.80
Operating Expenses	\$ 18.95	\$ 20.88	\$ 22.30	\$ 23.54	\$ 25.02
Capital	\$ 19.76	\$ 10.29	\$ 9.26	\$ 10.64	\$ 8.99
Reserves	\$ 30.44	\$ 36.51	\$ 43.29	\$ 51.06	\$ 60.22
Rate Increase	8.0%	8.0%	8.0%	8.0%	8.0%

Major Cost Driver: Capital Spending Projection over 5 Years: \$58.9M

- Annual Sewer Separation program plus Rehabilitation/Replacement Rate
- Sewer-main Separation acceleration offset by \$10.5M grant
- New Storm Sewers & Trench Restoration Works
- Annual Replacement of Operational Equipment and Service Vehicles

2024 Budget Outlook Considerations:

- Increase in Metro Vancouver Sewer Levies \$2.0M
- Fixed Cost & Salary Increases of \$0.2M
- Proposed Capital Spending of \$19.8M
- Grant of \$10.5M over 5-year period, to offset the cost of sewer separation
- 2024 New Service Enhancement Requests of \$0.2M
 - \$70K Supplies and Materials due to rising costs
 - \$22K 0.5 FTE Co-op student
 - \$83K – Salary adjustments



- Metro Levy Rates forecasted to decline due to Metro's push towards growth-paying-for-growth by shifting more of the growth costs to DCC's
- Major Cost Driver Metro Levy: ~74% of annual operating costs; ~\$19.0M in 2024

Sewer Reserve

2024-2028 Reserve Target

- ❑ Policy: Target Reserve balance : **5% - 10%** of replacement value
- ❑ Estimated Asset Replacement Value now: \$918M
- ❑ 2028 Reserve Balance is forecasted at \$64M, or 6.3% of estimated asset replacement value; recommend raising the rate to 8% and a higher reserve target as results of the Asset Management Plan indicate rising costs and a current replacement value of assets of \$918M which is significantly higher than previously estimated in prior years of \$750M

Sewer Utility	Budget Projections (\$ in millions)				
	2024	2025	2026	2027	2028
Revenues	\$ 35.82	\$ 36.02	\$ 37.03	\$ 40.56	\$ 41.80
Operating Expenses	\$ 18.95	\$ 20.88	\$ 22.30	\$ 23.54	\$ 25.02
Capital	\$ 19.76	\$ 10.29	\$ 9.26	\$ 10.64	\$ 8.99
Reserves	\$ 30.44	\$ 36.51	\$ 43.29	\$ 51.06	\$ 60.22
Rate Increase	8.0%	8.0%	8.0%	8.0%	8.0%
Reserves / Replacement Value	3.2%	3.8%	4.6%	5.4%	6.4%



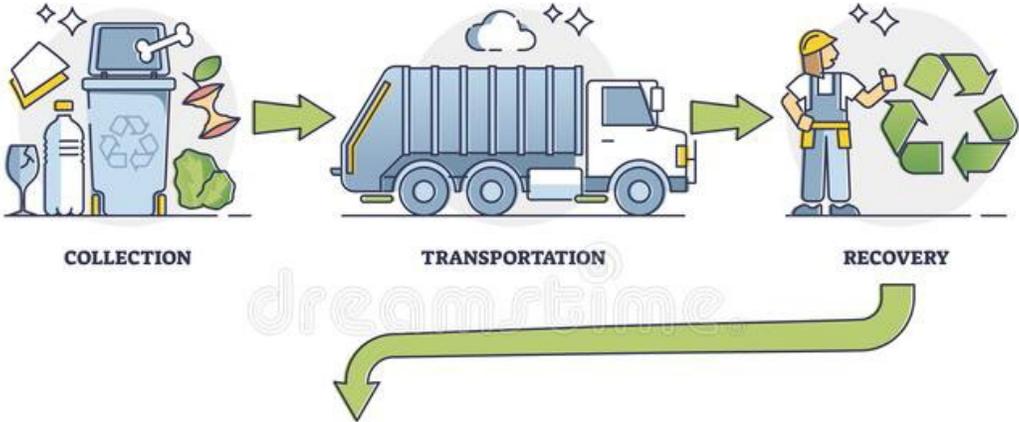
Solid Waste

Solid Waste

2023 Accomplishments & Highlights

- Weekly yard and food scraps collection
- Bi-weekly single-stream curbside and multifamily collection of mixed paper and containers
- Introduced multi-family glass container collection program

SOLID WASTE MANAGEMENT



Metro Vancouver Regional
Solid Waste Process

Solid Waste

2024 Proposed Initiatives

- Enhanced education and enforcement to reduce contamination in recyclable waste stream
- Improved street cleaning and litter collection, particularly in Downtown and other business areas
- Continue to provide this core service and maintain the current level of service.



Proposed 2024 Solid Waste Utility Rate 12.0%

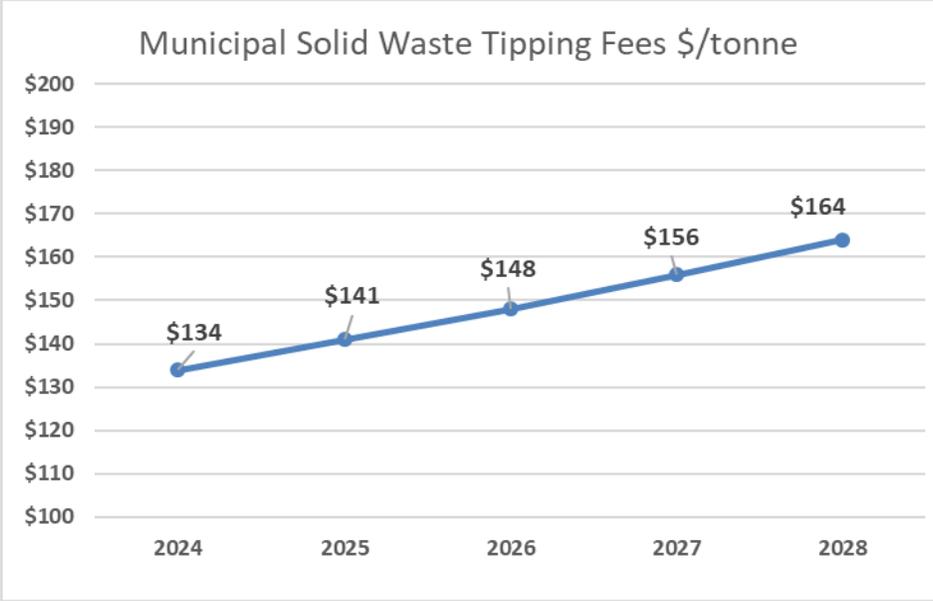
Solid Waste Utility	Budget Projections (\$ in millions)				
	2024	2025	2026	2027	2028
Revenues	\$ 6.60	\$ 7.46	\$ 8.25	\$ 8.83	\$ 9.46
Operating Expenses	\$ 4.94	\$ 5.11	\$ 5.02	\$ 5.21	\$ 5.41
Capital	\$ 1.23	\$ 1.02	\$ 0.78	\$ 0.63	\$ 1.06
Reserves	\$ 1.33	\$ 2.32	\$ 4.48	\$ 7.21	\$ 9.95
Rate Increase	12.0%	12.0%	12.0%	8.0%	8.0%

Major Cost Driver: Capital Spending Projection over 5 Years: \$4.7M

- ❑ Annual Replacement of Operational Equipment/Garbage Collection Vehicles

2024 Budget Outlook Considerations:

- ❑ Cumulative projected 2024 Increase in Metro Vancouver Tipping Fees \$0.2M
- ❑ Fixed Cost & Salary Increases of \$0.1M
- ❑ Proposed Capital Spending of \$1.2M



Major Cost Driver:

- ❑ Metro Vancouver Tipping Fees
- ❑ Long-term Reserve Replenishment

Solid Waste Reserve

2024-2028 Reserve Target

Solid Waste reserves has 2 components:

- ❑ Equipment reserve and General Solid Waste Fund provisions. Most critical component is Equipment Reserve as vehicles and equipment make up virtually all of Solid Waste assets

Equipment Reserve:

- ❑ Solid Waste collection equipment is a short-lived asset;
- ❑ Reserve needs to support full replacement of all assets (approx. \$6.3-6.9M) within 5-10 years that have increased significantly in costs
- ❑ Reserve requirements are higher if vehicle fleet is to electrify
- ❑ Recommend reducing YoY rate of increase from 14% to 12% from 2024 to 2026 to rebuild Equipment Reserve to \$5.9M (covering 80% of full replacement value of equipment and vehicles) and stabilize to 8% when Equipment Reserves are healthy

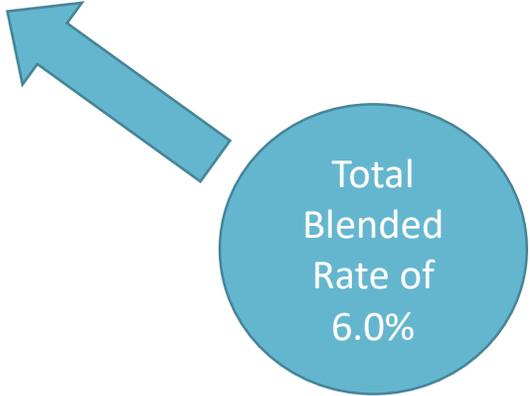
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Rate Increase	12.0%	12.0%	12.0%	8.0%	8.0%

Summary of Proposed Utility Rates

Average Single Family Household	Electric	Water	Sewer	Solid Waste	Blended Rate
	Based on 1,000 KWH	net of 5% discount	net of 5% discount	net of 5% discount	
Current 2023	\$ 1,623	\$ 740	\$ 1,044	\$ 366	\$ 3,756
Proposed 2024 \$ Increase	\$ 54	\$ 44	\$ 84	\$ 44	\$ 225
New Proposed 2024 Annual Cost	\$ 1,677	\$ 784	\$ 1,127	\$ 409	\$ 3,982
2024 % Rate Increase	3.3%	6.0%	8.0%	12.0%	6.0%

Considerations / Highlights:

- Investment in electric capacity
- Sewer AMP and rising construction costs
- Solid waste equipment replacement and cost increases
- Metro Vancouver levies
- Ratepayer affordability



Q&A: Questions and Answers

Feedback from Council

There are four options for Council's consideration; they are:

Option 1 - THAT Council approves in principle the 2024 Utility Rates with respect to the Electric, Water, Sewer and Solid Waste Utilities;

Option 2 - THAT Council directs staff to prepare the necessary bylaws to amend the City's utility rates for 2024 as outlined in this report;

Option 3 - THAT Council approve the Utility Fund 2024 – 2028 Capital Plans and the 2024 Utility Fund Service Enhancement Requests in Attachment #1 - 4 and Climate Action Fund Service Enhancement Requests and 2024 – 2028 Capital Plan in Attachment #5; or.

Option 4 – THAT Council provides further direction.

Staff recommend Options 1, 2 and 3