

**METRO VANCOUVER REGIONAL DISTRICT
FINANCE COMMITTEE**

MEETING

Thursday, April 13, 2023

9:00 am

**Meeting conducted in-person pursuant to the Procedure Bylaw
28th Floor Committee room, 4515 Central Boulevard, Burnaby, British Columbia**

A G E N D A¹

1. ADOPTION OF THE AGENDA

1.1 April 13, 2023 Regular Meeting Agenda

That the Finance Committee adopt the agenda for its regular meeting scheduled for April 13, 2023 as circulated.

2. ADOPTION OF THE MINUTES

2.1 February 9, 2022 Regular Meeting Minutes

That the Finance Committee adopt the minutes of its regular meeting held February 9, 2023 as circulated.

pg. 4

3. DELEGATIONS

4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

5.1 2022 Metro Vancouver Final Audit Findings Report

That the Finance Committee receive for information the report dated April 5, 2023, titled "2022 Metro Vancouver Final Audit Findings Report" from BDO Canada LLP Chartered Professional Accountants.

pg. 9

¹ Note: Recommendation is shown under each item, where applicable.

- 5.2 Audited 2022 Financial Statements and Annual Financial Results** *pg. 38*
That the MVRD Board approve the Audited 2022 Consolidated Financial Statements for the Metro Vancouver Regional District;
- That the GVS&DD Board approve the Audited 2022 Financial Statements for the Greater Vancouver Sewerage and Drainage District;
- That the GVWD Board approve the Audited 2022 Financial Statements for the Greater Vancouver Water District; and
- That the MVHC Board approve the Audited 2022 Financial Statements for the Metro Vancouver Housing Corporation.
- 5.3 Capital Program Expenditure Update as at December 31, 2022** *pg. 172*
That the Finance Committee receive for information the report dated April 3, 2023, titled "Capital Program Expenditure Update as at December 31, 2022."
- 5.4 Tender/Contract Award Information – September 2022 to December 2022** *pg. 208*
That the Finance Committee receive for information the report dated February 23, 2023, titled "Tender/Contract Award Information – September 2022 to December 2022".
- 5.5 Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023** *pg. 245*
That the GVS&DD Board:
- a) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023*; and
 - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023*.
- 5.6 Award of Contract Resulting from Request for Proposal No. 22-177: Group Benefits Insurance for Metro Vancouver Regional District** *pg. 252*
That the MVRD Board:
- a) approve the award of a unit rate contract to Desjardins Financial Security Life Assurance of Company ("Desjardins), for the supply of Life, Accidental Death and Dismemberment (AD&D) and Long Term Disability (LTD) group benefits insurance services to Metro Vancouver, with an estimated 5-year value in the amount of \$13.287 million (exclusive of taxes); and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

5.7 Metro Vancouver Long Term Financial Plan – Current Policy Framework *pg. 254*
That the Finance Committee receive for information the report dated April 6, 2023, titled “Metro Vancouver Long Term Financial Planning – Current Policy Framework”.

5.8 Manager’s Report *pg. 282*
That the Finance Committee receive for information the report dated April 4, 2023, titled “Manager’s Report”.

6. INFORMATION ITEMS

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

Note: The Committee must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

That the Finance Committee close its meeting scheduled for April 13, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

- (c) labour relations or other employee relations;
- (d) the security of the property of the municipality;

10. ADJOURNMENT/CONCLUSION

That the Finance Committee adjourn/conclude its regular meeting of April 13, 2023.

Membership:

West, Brad (C) – Port Coquitlam
Klassen, Mike (VC) – Vancouver
Brodie, Malcolm – Richmond
Buchanan, Linda – North Vancouver City

Hurley, Mike – Burnaby
Kooner, Pardeep – Surrey
Kruger, Dylan – Delta
MacDonald, Nicole – Pitt Meadows

Marsden, Dennis – Coquitlam
McEwen, John – Anmore
Woodward, Eric – Langley Township

**METRO VANCOUVER REGIONAL DISTRICT
FINANCE COMMITTEE**

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Finance Committee held at 9:01 am on Thursday, February 9, 2023 in the 28th Floor Boardroom Room, 4515 Central Boulevard, Burnaby British Columbia.

MEMBERS PRESENT:

Chair, Mayor Brad West, Port Coquitlam
 Vice Chair, Councillor Mike Klassen, Vancouver
 Mayor Malcolm Brodie*, Richmond
 Mayor Linda Buchanan, North Vancouver City
 Mayor Mike Hurley*, Burnaby (arrived at 9:07 am)
 Councillor Pardeep Kooner*, Surrey
 Councillor Dylan Kruger, Delta
 Mayor Nicole MacDonald*, Pitt Meadows
 Councillor Dennis Marsden, Coquitlam
 Mayor John McEwen, Anmore
 Mayor Eric Woodward*, Langley Township

MEMBERS ABSENT:

None.

STAFF PRESENT:

Jerry W. Dobrovolny†, Chief Administrative Officer
 Dean Rear, Chief Financial Officer, General Manager, Financial Services
 Rapinder Khaira, Legislative Services Coordinator, Board and Information Services

1. ADOPTION OF THE AGENDA

1.1 February 9, 2023 Regular Meeting Agenda

It was MOVED and SECONDED

That the Finance Committee adopt the agenda for its regular meeting scheduled for February 9, 2023 as circulated.

CARRIED

† denotes electronic meeting participation

*denoted electronic meeting participation as authorized by section 3.6.2 of the *Procedure Bylaw*

2. ADOPTION OF THE MINUTES

2.1 January 19, 2022 Regular Meeting Minutes

It was MOVED and SECONDED

That the Finance Committee adopt the minutes of its regular meeting held January 19, 2023 as circulated.

CARRIED

3. DELEGATIONS

No items presented.

4. INVITED PRESENTATIONS

- 4.1 Kevin Quinn, CEO and Ralf Nielsen, Director, Enterprise Sustainability, TransLink**
Kevin Quinn, CEO; Olga Kuznetsova, Vice President, Finance; and Ralf Nielsen, Director, Enterprise Sustainability, TransLink, provided the Finance Committee with a presentation on TransLink's Climate Action Plan and Transition to Zero Emission Transit Fleet, highlighting its climate action strategy, roadmap to zero-emissions, transition to zero-emission through electrification and Renewable Natural Gas and the challenges ahead.

9:07 am Councillor Hurley arrived at the meeting.

Presentation material titled "Climate Action Plan and Transition to a Zero-Emission Transit Fleet" is retained with the February 9, 2023 Finance Committee agenda.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Authorization to Attend 2023 Standing Committee Events

Report dated January 3, 2023, from Dorothy Shermer, Deputy Corporate Officer, seeking the Finance Committee's approval of the attendance at 2023 events and conferences that were identified as part of the Board-approved budget, which will authorize remuneration for those members approved to attend.

It was MOVED and SECONDED

That the Finance Committee approve attendance at the following events within the 2023 Leadership and Engagement program budget:

- American Planning Association National Planning Conference
- American Water Works Association Annual Conference
- BC Recreation and Parks Association Symposium
- BC Lung Association Air Quality and Health Workshop
- BIO International Convention
- Canadian Housing and Renewal Association Congress
- Canadian Hydrogen Convention

- Canadian Institute of Planners
- Chartered Professional Accountants Canada Conference for Audit Committees
- CityAge Future of Health
- Climate Leadership Conference
- Coast Waste Management Association of British Columbia Annual Conference
- Collision Conference
- GLOBExCHANGE
- Government Finance Officers Association Annual Conference
- Housing Central Conference
- National Recreation and Parks Association Annual Conference
- RailVolution
- Recycling Council of BC Conference and Trade Show
- Solid Waste Association of North America: Wastecon
- Special Parks District Forum
- Water Environment Federation Technical Exhibition and Conference
- Additional events approved by the Board Chair that align with the priorities of the appropriate standing committee.

CARRIED

5.2 Authorization to Attend 2023 International Events

Report date January 19, 2023, from Sandra Jansen, General Manager, External Relations and Sue Mah, Office Manager, External Relations, seeking the Finance Committee's approval for the attendance and remuneration of board members to attend events that within the mandate of Metro Vancouver's international engagement objectives and making recommendations to the Board Chair.

It was MOVED and SECONDED

That the Finance Committee approve attendance at the following international events within the 2023 Leadership and Engagement program budget:

- United Cities and Local Government (UCLG) - 2023 Culture Summit and World Council
- ICLEI – European Urban Resilience Forum and Daring Cities (formerly ICLEI Resilient Cities)
- Asia Pacific Cities Summit and Mayors Forum
- Metropolis – Brussels Urban Summit 2023
- Study Tours
- Additional international conferences identified by the Chair that align with the priorities of the Leadership and Engagement Program.

CARRIED

5.3 Treasury Report – June 1, 2022 to December 31, 2022

Report dated January 26, 2023, from Linda Sabatini, Director, Financial Operations, providing the Finance Committee with information on investment performance and related economic information.

It was MOVED and SECONDED

That the Finance Committee receive for information the report dated January 26, 2023 titled “Treasury Report – June 1, 2022 to December 31, 2022”.

CARRIED

5.4 MVRD Audit Plan from BDO Canada LLP

Report dated January 26, 2023, from Linda Sabatini, Director, Financial Operations, providing the Finance Committee with the external auditor’s plan for the completion of the annual external audit for the Metro Vancouver District’s and Housing Corporation for fiscal year 2022.

Members were provided with a verbal update on the audit planning report, highlighting auditor’s responsibilities, audit risk areas and planned responses and materiality.

It was MOVED and SECONDED

That the Finance Committee receive for information the report dated January 26, 2023, titled “MVRD Audit Plan from BDO Canada LLP”.

CARRIED

5.5 Manager’s Report

Report dated January 30, 2023, from Dean Rear, General Manager, Financial Services/ Chief Financial Officer, providing the Finance Committee with an update on the work plan and the long-term financial plan process.

Dean Rear advised members that Metro Vancouver received the Canadian Award for Financial Reporting for its 2021 annual report from the Government Finance Officers Association.

It was MOVED and SECONDED

That the Finance Committee receive for information the report dated January 30, 2023, titles “Manager’s Report”.

CARRIED

6. INFORMATION ITEMS

No items presented.

7. OTHER BUSINESS

No items presented.

8. BUSINESS ARISING FROM DELEGATIONS

No items presented.

9. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED

That the Finance Committee close its meeting scheduled for February 9, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

- 90 (1) A part of the meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
- (d) the security of the property of the regional district.

CARRIED

10. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the Finance Committee adjourn its regular meeting of February 9, 2023.

CARRIED

(Time: 9:37 am)

Rapinder Khaira,
Legislative Services Coordinator

Brad West,
Chair

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To: Finance Committee

From: Linda Sabatini, Director, Financial Operations

Date: April 5, 2023

Meeting Date: April 13, 2023

Subject: **2022 Metro Vancouver Final Audit Findings Report**

RECOMMENDATION

That the Finance Committee receive for information the report dated April 5, 2023, titled “Metro Vancouver Regional District Audit Findings Report for December 31, 2022” from BDO Canada LLP Chartered Professional Accountants.

EXECUTIVE SUMMARY

Under provincial legislation, an external audit must be undertaken annually for all Metro Vancouver Districts’ and the Housing Corporation. The attached report, prepared by Metro Vancouver’s external auditors, BDO Canada LLP Chartered Professional Accountants, summarizes the results of the annual audit for fiscal year 2022.

The audit has been conducted by the external auditors, BDO Canada LLP Chartered Professional Accountants using Canadian generally accepted auditing standards. The 2022 financial statements have received an unqualified audit opinion by the external auditors and will be finalized upon approval by the Board on April 28, 2023.

PURPOSE

To provide the committee with our external auditor’s final report related to the annual audit for the Metro Vancouver Districts’ and Housing Corporation for fiscal year 2022.

BACKGROUND

It is required, under provincial legislation, that an external audit be undertaken annually for all Metro Vancouver Districts’ and the Housing Corporation. This audit must be conducted by a public accounting firm that is licensed to conduct such audits. The attached report summarizes the results of the annual audit for fiscal year 2022. The 2022 financial statements have received an unqualified audit opinion by the external auditors and will be finalized upon approval by the Board on April 28, 2023.

BDO Canada LLP Chartered Professional Accountants were appointed by the Board in July 2019 as our external auditors for a five-year period. Fiscal year 2022 is the fourth year of that five-year period.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The annual audit fulfills our statutory responsibility.

CONCLUSION

As prepared by BDO Canada LLP Chartered Professional Accountants, our external auditors, the final report for the 2022 external audit of the Metro Vancouver Districts' and the Housing Corporation is presented to the committee for information.

Attachments

1. 2022 Metro Vancouver Audit Findings Report

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Metro Vancouver Regional District

Audit Findings Report to the Finance Committee for the year ended December 31, 2022

Dated April 5, 2023 for presentation on April 13, 2023

START



To the Finance Committee of Metro Vancouver Regional District

We are pleased to provide you with this report to highlight and explain key issues which we believe to be relevant to the audit of :

- ▶ Metro Vancouver Regional District (“MVRD”),
- ▶ Greater Vancouver Sewerage and Draining District (“GVSDD”),
- ▶ Greater Vancouver Water District (“GVWD”), and
- ▶ Metro Vancouver Housing Corporation (“MVHC”)

(together referred to as the “District”) financial statements for the year ended December 31, 2022.

The enclosed report includes our approach to your audit, including: significant risks identified, the nature, extent, timing, and results of our audit work, and the terms of our engagement. We will also report any significant internal control deficiencies identified during our audit and confirm our independence.

During the course of our audit, management made certain representations to us—in discussions and in writing. We documented these representations in the audit working papers.

The business environment has changed for us all during the time of COVID-19. Cash flow, strategy, operations: each has received a rethink. As your auditors, we have relied on our digital audit suite to stay connected—among ourselves, with management, and with you.

We look forward to discussing our report with you. In the meantime, please feel free to contact us if you have any questions or concerns.

Yours truly,

BDO Canada LLP



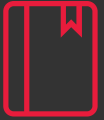


Table of contents

1	Audit at a glance	4
2	Status of the audit	5
3	Updates to auditing standards (CAS 315)	6
4	Audit findings	8
5	Internal control matters	12
6	Adjusted and unadjusted differences	13
7	Recommended resources	16
8	Spotlight of sustainability	17
9	Appendices	18



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Audit at a glance

Preliminary materiality as communicated to you in our Planning Report to the Performance and Audit Committee dated January 27, 2023. Final materiality has not been revised from planning materiality.

	Overall Materiality	TCA Materiality
MVRD (consolidated)	\$19,000,000	\$143,400,000
MVRD (non-consolidated)	\$17,100,000	\$129,060,000
GVSD	\$10,200,000	\$64,000,000
GVWD	\$5,500,000	\$57,100,000
MVHC	\$1,070,000	\$2,100,000

Overall materiality has been determined based on expenses. For our audit work over tangible capital assets (“TCA”) and other assets and liabilities related to TCA, we have set a higher materiality based on the net book value of TCA. This is to recognize the fact that the District has a significant value of TCA which is much larger in comparison to its operating activities.

We are not aware of any fraud affecting the District since our presentation of our Planning Report. If you have become aware of changes to processes or are aware of any instances of actual, suspected, or alleged fraud since our discussions held at planning, please let us know.

We have complied with relevant ethical requirements and are not aware of any relationships between Metro Vancouver Regional District and our Firm that may reasonably be thought to bear on our independence.



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[Back to contents](#)



Status of the audit

We have substantially completed our audit of the year ended December 31, 2022 consolidated financial statements, pending completion of the following items:

- ▶ Receipt of certain outstanding legal confirmations
- ▶ Completion of IS audit procedures related to CAS 315
- ▶ Approval of financial statements by the Board of Directors
- ▶ Subsequent events review through to the financial statements' approval date
- ▶ Obtain signed management representation letter

We conducted our audit in accordance with Canadian generally accepted auditing standards. The objective of our audit was to obtain reasonable, not absolute, assurance about whether the consolidated financial statements are free from material misstatement. See [Appendix A](#) for our draft independent auditor's report.

The scope of the work performed was substantially the same as that described in our Planning Report to the Finance Committee dated January 27, 2023.



Updates to Auditing Standards (CAS 315)

As reported in our planning report for the fiscal 2022 audit, Canadian Auditing Standard, CAS 315, Identifying and Assessing the Risks of Material Misstatement, was significantly revised to have more robust risk identification, assessment, and response procedures. The revised standard is required and has been implemented for the District's 2022 fiscal year.

The update to this audit standard resulted in a significant amount of additional audit work, including more focus on IT systems as they related to financial reporting. Most of the effort to implement CAS 315 was incurred in this initial year of implementation and may require a reduction of additional work in the following years.



Assessment of Inherent and Control Risk

More in depth consideration of inherent risks (risk of material misstatement without consideration of control) and control risks (risk of control not preventing or detecting material misstatement), including increased focus on risks arising from the use of IT systems



Spectrum of inherent Risks

Inherent risk is concluded based on the assessment of likelihood and magnitude of misstatement in absence of controls, considering how inherent risk factors impact the degree to which inherent risk varies.



Risk Levels

With the revised CAS 315 requirements, there are now four levels at which risks can be assessed:

- ▶ Significant Risk of Material Misstatement
- ▶ Elevated Risk
- ▶ Moderate Risk
- ▶ Low Risk

The new risk assessments resulted in an adjusted audit strategy that focuses on addressing the concluded risk level for all areas of the financial statement. This allows for more consistent and effective audits with improved responses to identified risks, improving audit quality for all stakeholders.

As part of our audit, we have performed the following:

- updated our understanding and documentation of accounting cycles and processes within the District
- updated our documentation around the information technology environment and associated controls to assess any control deficiencies that would impact our audit testing approach
- assessed risks identified and documented internal controls that address these risks
- reviewed audit procedures to ensure they align with risks identified, incorporating internal controls to ensure audit procedures are efficient
- performed stand back procedures to ensure overall audit approach is sufficient to provide effective audit evidence.

All audit testing in this area was executed with no issues to be reported.



CAS 315 - SUMMARY OF RISK ASSESSMENTS



		MVRD	GVSD	GVWD	MVHC
	Significant	1 Risk of management override of internal controls*			
	Elevated	3 Payroll costs and employee future benefits* Contaminated sites and asset retirement obligations Contingent liabilities	2 Landfill closure and post closure liabilities North Shore Wastewater Treatment Plant	0	0
	Moderate	65	22	18	20
	Low	20	30	31	28

*These risks are either mandatory under CAS or standard public sector audit risks.



Audit findings

As part of our ongoing communications with you, we are required to have a discussion on our views about significant qualitative aspects of the District’s accounting practices, including accounting policies, accounting estimates and consolidated financial statements disclosures. We look forward to exploring these topics in depth and answering your questions. A summary of the key discussion points are below. These items are highlighted due to assessed risk levels, materiality of balances, or other areas we would like to bring to your attention:

Financial statement areas	Audit approach	Audit findings
Significant		
<p>Risk of Fraudulent Revenue Recognition</p> <p>Under Canadian auditing standards, we are required to consider whether there is a risk of material misstatement due to fraudulent revenue recognition in all audits. Based on our understanding of the District’s significant revenue streams, we have rebutted this risk.</p> <p>However, there continues to be a risk of misstatement, unrelated to fraud, with respect to revenue as accounting standards over revenue recognition are complex and subject to variation in application.</p>	<ul style="list-style-type: none"> Grant funding received was confirmed through a review of agreements, which ensured that the amounts recorded exist. We also ensured the revenue was recorded accurately in accordance with the settlement of any stipulations. Other revenues streams were reviewed to ensure revenue recognition was recorded in accordance with the latest revenue recognition standards. 	<p>We have proposed adjustments related to timing of revenue recognition and classification of revenue. Certain immaterial adjustments have not been recorded by management. Please refer to the Summary of Adjusted Differences and Summary of Unadjusted Differences.</p> <p>All other audit testing in this area was executed as planned with no issues to be reported.</p>



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Audit findings (cont'd)

Financial statement areas	Audit approach	Audit findings
<p>Management Override of Internal Controls</p> <p>Management is in a unique position to perpetrate fraud because of their ability to directly or indirectly manipulate accounting records and prepare fraudulent financial statements by overriding controls that otherwise appear to be operating effectively.</p> <p>This is a mandatory risk to be addressed for all audits pursuant to Canadian audit standards</p>	<ul style="list-style-type: none"> • Reviewed transactions recorded in the various ledgers for unusual or non-recurring adjustments not addressed by other audit procedures. • Tested the appropriateness of journal entries recorded in the general ledger. • Reviewed key estimates and other adjustments made in the preparation of the financial statements. 	<p>All audit testing in this area was executed as planned with no issues to be reported.</p>
Elevated		
<p>Payroll Costs and Employee Future Benefits</p> <p>Payroll costs is a significant expenditure category that covers many employees and departments. As a public body, this figure is often of particular interest to financial statement users (taxpayers) and is a risk applicable to most public sector entities.</p> <p>Employee future benefits is a complex area that requires much estimation and reliance on actuarial experts. The District record a liability for post-employment liabilities in the consolidated financial statements. As the GVSDD, GVWD and MVHC do not have any employees directly, there is no liability recorded in those financial statements.</p>	<ul style="list-style-type: none"> • We performed tests of controls and substantive procedures over payroll transactions and year-end accruals. • We reviewed actuarial reports and audited the significant assumptions and data inputs provided by the District for completeness and accuracy. • We directly communicated with the external actuary. • We reviewed the consistency and appropriateness of allocations of staff costs and liabilities from Metro Vancouver Regional District to the other Districts and MVHC. 	<p>All audit testing in this area was executed as planned with no issues to be reported.</p>



Audit findings (cont'd)

Financial statement areas	Audit approach	Audit findings
<p>Contaminated Sites and Asset Retirement Obligations</p> <p>The contaminated sites standard is complex and therefore there is a risk that liabilities may not be identified and/or appropriately accounted for.</p> <p>The new standard PS 3280 Asset Retirement Obligations will be implemented by the District in F2023.</p>	<ul style="list-style-type: none"> Reviewed potential contaminated sites, and management’s assessment of whether a liability exists. Obtained an update of liabilities recorded for contaminated sites identified in prior years to determine if the accounting treatment continues to be appropriate and accurate. We continued to work with management to provide guidance as needed towards the future implementation of PS 3280. 	<p>All audit testing in this area was executed as planned with no issues to be reported.</p>
<p>Contingent Liabilities</p> <p>There are various lawsuits pending against the District, arising in the ordinary course of business and from specific events. There is a risk that potential losses related to these lawsuits have not been appropriately accrued for, or disclosed in, the financial statements. The District carry insurance to minimize the overall financial impacts of adverse outcomes.</p>	<ul style="list-style-type: none"> We enquired with management of ongoing litigation, and potential claims that have an impact on the District. We obtained confirmations from external solicitors of any potential contingent liabilities. We also reviewed financial statement disclosures to ensure that disclosures are complete and in accordance with Canadian public sector accounting standards. 	<p>All audit testing in this area was executed as planned with no issues to be reported.</p> <p>See below regarding discussion over the NSWWTP.</p>
<p>Landfill Closure and Post-Closure Costs</p> <p>A complex area that requires much estimation and reliance on expert reports and management assumptions and calculations.</p>	<ul style="list-style-type: none"> We enquired with management regarding any significant changes to the remaining life and associated costs of the landfill. We also evaluated key inputs used in the valuation of the landfill post-closure liability and reviewed of calculations and disclosure prepared by management. 	<p>All audit testing in this area was executed as planned with no issues to be reported.</p>



Audit findings (cont'd)

Financial statement areas	Audit approach	Audit findings
<p>North Shore Wastewater Treatment Plant</p> <p>The North Shore Wastewater Treatment Plant (“NSWWTP”) is a new tertiary treatment facility being built by GVSDD on the North Shore. The project design and construction began in 2014. On October 15, 2022, the District served notice to terminated its contract with the vendor hired to design, build and commission the NSWWTP, having determined that the vendor was in breach of contract. As of December 31, 2022, the District has paid \$309.5 million, net of GST rebates, to the vendor for work completed, which reflects management’s best estimate of the cost of work in progress.</p> <p>During the current year, the District drew on an irrevocable letter of credit of \$50.0 million available in the case of breach of contract.</p> <p>In 2022, as a result of the termination of the contract, the vendor has commenced legal action against GVSDD. GVSDD has filed a countersuit.</p>	<ul style="list-style-type: none"> • We enquired with management of the current status of the NSWWTP capital project and ongoing litigation and claims. • We obtained confirmations from external solicitors over the existence of claims to date. • We obtained an understanding of the environmental obligations and potential consequences of non-compliance with respect to Federal regulations over wastewater treatment. • We discussed with management the impact of the termination of contract over the valuation of work-in-progress assets as at December 31, 2022, and corroborated with information from the Project Delivery department. • We reviewed supporting documentation from independent certifiers regarding the status of the last progress draw prior to the termination of contract. • We reviewed supporting documentation regarding the letter of credit which was drawn subsequent to year end. • We reviewed the disclosure management has included in the notes to the financial statements regarding the estimation uncertainty over valuation of assets, contingencies, and subsequent events. 	<p>Due to the nature of the contractual payments made to the vendor under the terminated contract, the outstanding litigation and uncertainty surrounding the value of the new contract for completion of the project, the amount recorded as work-in-progress on the NSWWTP project represents management’s best estimate. This amount may be subject to material change as new information becomes available.</p> <p>We agree with management’s approach to disclose this material uncertainty in the notes to the financial statements.</p>



Internal control matters

During the audit, we performed the following procedures regarding the District's internal control environment:

- ▶ Documented operating systems to assess the design and implementation of control activities that were relevant to the audit.
- ▶ Discussed and considered potential audit risks with management.

We considered the results of these procedures in determining the extent and nature of audit testing required.



We are required to report to you in writing about any significant deficiencies in internal control that we have identified during the audit.

A significant deficiency is defined as a deficiency or combination of deficiencies in internal control that merits the attention of those charged with governance.

The audit expresses an opinion on the District's consolidated financial statements. As a result, it does not cover every aspect of internal controls—only those relevant to preparing the consolidated financial statements and designing appropriate audit procedures. This work was not for the purpose of expressing an opinion on the effectiveness of internal control.

No control deficiencies were noted that, in our opinion, are of significant importance to discuss. We have issued a management letter of observations where we believe improvements can be made; however, none of these items is considered to be significant.



Adjusted and unadjusted differences

Summary of unadjusted differences

The following is a summary of unadjusted differences noted during the course of our audit engagement:

	Debit (Credit)				
	Assets	Liabilities	Accumulated surplus, opening balance	Revenues	Expenses
MVRD					
No differences noted.					
GVSD					
Dr. Grant contributions Cr. Interest income <i>To reclassify unrestricted interest income eared from grant revenue to interest revenue.</i>				\$ 1,671,000 \$ (1,671,000)	
Dr. Operating expenses Cr. Accounts payable <i>To record accruals relating to 2022 expenses.</i>		\$ (3,148,000)			\$ 3,148,000
GVWD					
No differences noted.					



Adjusted and unadjusted differences

Summary of unadjusted differences (cont'd)

	Debit (Credit)				
	Assets	Liabilities	Accumulated surplus, opening balance	Revenues	Expenses
MVHC					
Dr. Accumulated surplus Cr. Operating expenses			\$ 90,000		\$ (90,000)
<i>To reverse prior year unadjusted accrual for expenses.</i>					
Total unadjusted differences	\$ -	\$ (3,148,000)	\$ 90,000	\$ -	\$ 3,058,000



Adjusted and unadjusted differences

Summary of adjusted differences

The following is a summary of differences that were corrected by management during the course of our audit engagement :

	Debit (Credit)			
	Assets	Liabilities	Accumulated surplus, opening balance	Annual surplus
GVSD				
Dr. Grant revenue Cr. Deferred revenue		\$ (14,676,000)		\$ 14,676,000
<i>To reduce grant income recorded during the year already recorded in prior periods.</i>				
Total unadjusted differences	\$ -	\$ (14,676,000)	\$ -	\$ 14,676,000

Summary of disclosure omissions

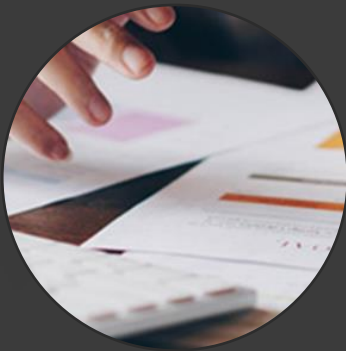
The following is a summary of disclosures that have not been made within the consolidated financial statements :

Disclosure omission	Management's response
None noted.	NA



Recommended resources

Resuming the public sector in the new normal



The COVID-19 pandemic has created a new working normal for public sector organizations. In this video, BDO discusses some of the biggest challenges facing public sector organizations as Canada enters a new phase of recovery.

BUSINESS NOT AS USUAL

How to protect against fraud and security attacks



Given the current state of vulnerability, hackers are in a prime position to take advantage. Explore optimizing the cloud for data and AI technologies, critically assessing security risks, examining best practices for online collaboration, and more.

FRAUD AND SECURITY

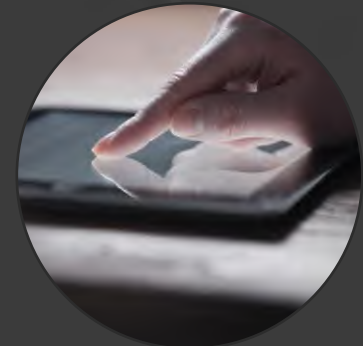
COVID-19: From surviving to thriving



Whether you're building a recovery plan, scanning new opportunities for growth, or revisiting your response—you'll find something to help you in our library of 100-plus webinars, articles, infographics, and videos.

EXPLORE OUR COVID-19 RESOURCE HUB

Key changes to financial reporting



When the rules of reporting change, you may need to fine-tune how to present financial statements and govern the organization.

ACCESS OUR KNOWLEDGE CENTRE

Spotlight on Sustainability

Transformative world events—an international health crisis, social movements, shareholder and investor values, global supply chains, energy transition, smart cities, and sustainable finance—are transforming Canadian business.

Standards and regulations are rapidly changing to reflect the goals of all your stakeholders. Organizations, investors, and customers are embracing environmental, social, and governance (ESG) considerations as important measures of success. Non-financial and financial information is becoming more interconnected.

How climate change became a business issue worth reporting



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Why manufacturers should be reviewing their ESG strategy now



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What executives need to do to align ESG with strategy



[READ ARTICLE](#)

5 reasons why businesses should care about ESG



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How does COVID-19 impact the environment?



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BDO Global Sustainability Resource Hub



Page 27 of 283

[EXPLORE NOW](#)

ESG, and the business case for dealing with climate change



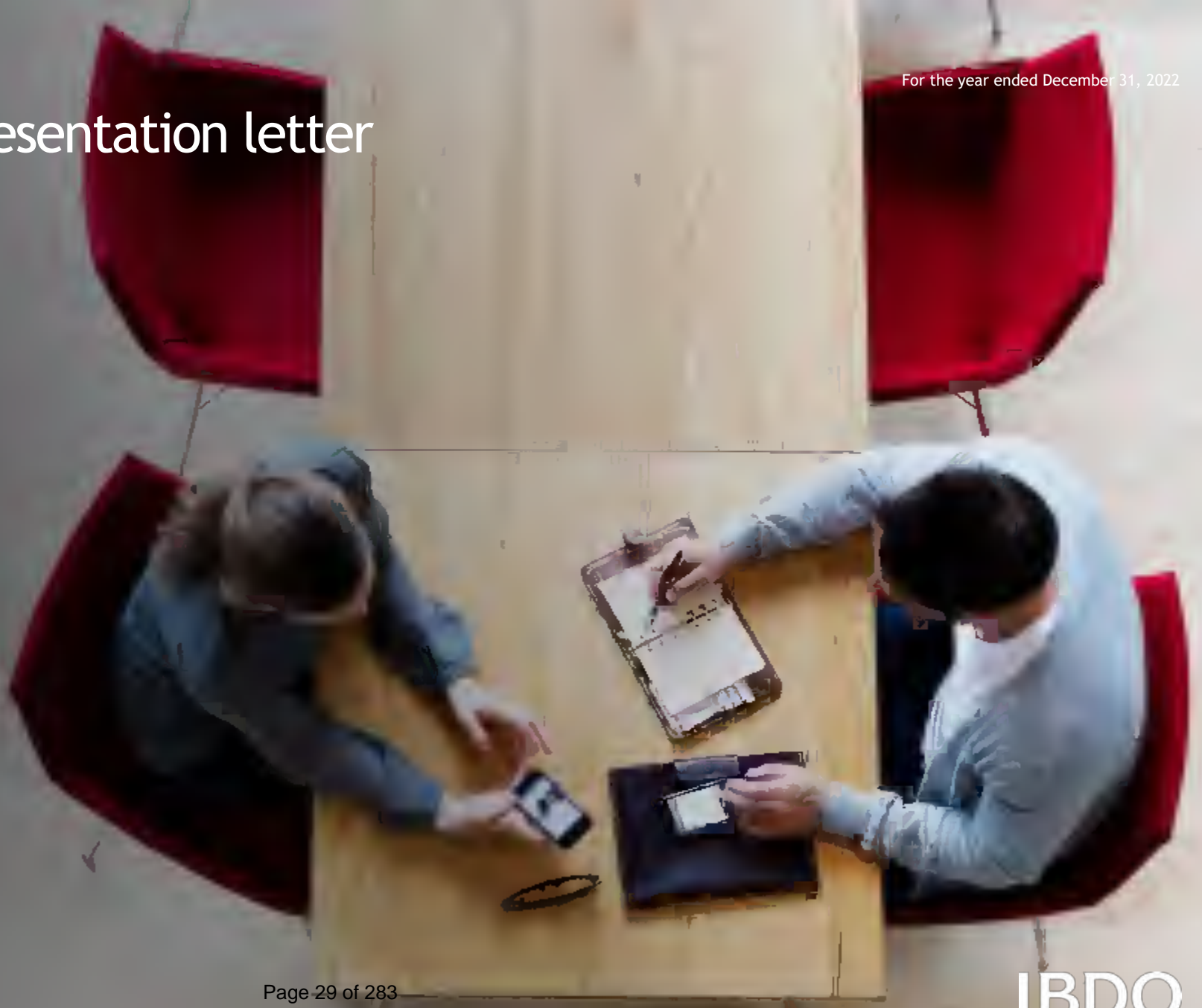
[READ ARTICLE](#)

Appendices

- ▶ Appendix A: Representation letter
- ▶ Appendix B: Management letter



Appendix A: Representation letter



TBD

BDO Canada LLP
Chartered Professional Accountants
1055 West Georgia Street PO Box 11101
Vancouver, BC V6E 3P3

This representation letter is provided in connection with your audit of the financial statements of the following entities (collectively the "District") for the year ended December 31, 2022, for the purpose of expressing an opinion as to whether the financial statements are presented fairly, in all material respects, in accordance with Canadian Public Sector Accounting Standards:

- Metro Vancouver Regional District
- Greater Vancouver Sewerage and Drainage District
- Granter Vancouver Water District
- Metro Vancouver Housing Corporation

We confirm that to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves:

Financial Statements

We have fulfilled our responsibilities, as set out in the terms of the audit engagement letter dated February 27, 2023, for the preparation of the financial statements in accordance with Canadian Public Sector Accounting Standards; in particular, the financial statements are fairly presented in accordance therewith.

- The methods, significant assumptions, and data used in making accounting estimates and their related disclosures are appropriate to achieve recognition, measurement and/or disclosure that are reasonable in accordance with Canadian Public Sector Accounting Standards.
- Related party relationships and transactions have been appropriately accounted for and disclosed in accordance with the requirements of Canadian Public Sector Accounting Standards.
- All events subsequent to the date of the financial statements and for which Canadian Public Sector Accounting Standards require adjustment or disclosure have been adjusted or disclosed.
- The financial statements of the entity use appropriate accounting policies that have been properly disclosed and consistently applied.
- The effects of uncorrected misstatements are immaterial, both individually and in the aggregate, to the financial statements as a whole. A list of the uncorrected misstatements is attached to the representation letter.
- We have reviewed and approved all journal entries recommended by the practitioners during the audit. A list of the journal entries is attached to the representation letter.

Information Provided

- We have provided you with:
 - access to all information of which we are aware that is relevant to the preparation of the financial statements, such as records, documentation and other matters;
 - additional information that you have requested from us for the purpose of the audit; and
 - unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.
- We are responsible for the design, implementation and maintenance of internal controls to prevent, detect and correct fraud and error, and have communicated to you all deficiencies in internal control of which we are aware.
- All transactions have been recorded in the accounting records and are reflected in the financial statements.
- We have disclosed to you all known instances of non-compliance or suspected non-compliance with laws and regulations whose effects should be considered when preparing the financial statements.
- We have disclosed to you the identity of the District's related parties and all the related party relationships and transactions of which we are aware.

Fraud and Error

- We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.
- We have disclosed to you all information in relation to fraud or suspected fraud that we are aware of and that affects the entity and involves:
 - management;
 - employees who have significant roles in internal control; or
 - others where the fraud could have a material effect on the financial statements.
- We have disclosed to you all information in relation to allegations of fraud, or suspected fraud, affecting the District's financial statements communicated by employees, former employees, analysts, regulators, or others.

General Representations

- Where the value of any asset has been impaired, an appropriate provision has been made in the financial statements or has otherwise been disclosed to you.
- We have provided you with significant assumptions that in our opinion are reasonable and appropriately reflect our intent and ability to carry out specific courses of action on behalf of the District when relevant to the use of fair value measurements or disclosures in the financial statements.
- Except as disclosed in the financial statements, there have been no changes to title, control over assets, liens or assets pledged as security for liabilities or collateral.

- The District has complied with all provisions in its agreements related to debt and there were no defaults in principal or interest, or in the covenants and conditions contained in such agreements.
- There have been no plans or intentions that may materially affect the recognition, measurement, presentation or disclosure of assets and liabilities (actual and contingent).
- The nature of all material uncertainties have been appropriately measured and disclosed in the financial statements, including all estimates where it is reasonably possible that the estimate will change in the near term and the effect of the change could be material to the financial statements.
- There were no direct contingencies or provisions (including those associated with guarantees or indemnification provisions), unusual contractual obligations nor any substantial commitments, whether oral or written, other than in the ordinary course of business, which would materially affect the financial statements or financial position of the District, except as disclosed in the financial statements.

Other Representations Where the Situation Exists

- We have informed you of all known actual or possible litigation and claims, whether or not they have been discussed with legal counsel. When applicable, these litigation and claims have been accounted for and disclosed in the financial statements.
- We will provide to you, when available and prior to issuance by the District, the final version of the document(s) comprising the annual report.
- We confirm the accrual related to ongoing expropriation land claims is complete and based on management's best estimate using the appropriate information and assessment of likelihood of outcome as at the date of this letter.
- We confirm we have informed you of all known actual or possible litigation, claims, and penalties with respect to the ongoing North Shore Waste Water Treatment Plant.
- We confirm the amounts recorded as work in progress over the North Shore Waste Water Treatment Plant represents management's best estimate and that amounts may be subject to material change as new information becomes available.

Yours truly,

Jerry W. Dobrovolny, P. Eng., MBA
Commissioner / Chief Administrative Officer

Dean Rear, CPA, CA
General Manager, Chief Financial Officer

Linda Sabatini, CPA, CA
Director, Finance Operations



Appendix B: Management letter



Tel: 604.688.5421
Fax: 604.688.5132
www.bdo.ca

BDO Canada LLP
Unit 1100 - Royal Centre
1055 West Georgia Street
Vancouver, BC V6E 3P3

April 5, 2022

Metro Vancouver Regional District
Mr. Jerry Dobrovolny
Chief Administrative Officer
Metrotower III
4730 Kingsway
Burnaby, BC V5H 0C6

Dear Mr. Dobrovolny:

We have audited the consolidated financial statements ("financial statements") for the year ended December 31, 2022 of Metro Vancouver Regional District, which include the balances and operations of the following entities (collectively, the "District"):

- Metro Vancouver Regional District
- Greater Vancouver Sewer and Drainage District
- Greater Vancouver Water District
- Metro Vancouver Housing Corporation

During the course of our audit, we identified matters that may be of interest to management. The objective of an audit is to obtain reasonable assurance whether the financial statements are free of any material misstatement and it is not designed to identify all matters that may be of interest to management in discharging its responsibilities. We therefore provide no assurance over the completeness of the matters we report.

The responsibility for producing financial statements and ensuring adequate internal controls and sound business practices is the responsibility of the Board of Directors through management and is a part of management's overall responsibility for the ongoing activities of the District. Policies and procedures developed by the District to safeguard its assets and to provide reasonable assurance that errors and irregularities or illegal acts are promptly identified, must be properly monitored to ensure that all staff are complying with the guidelines provided. Where we determined, from our testing, that there exists a need for improvement in existing systems of internal control or if we detected that the District's staff are not complying with the critical accounting policies and procedures provided by management, we increased our year-end testing of account balances to ensure that audit risk was kept to an appropriately low level.

The comments and concerns expressed herein did not have a material effect on the District's financial statements and, as such, our opinion thereon was without reservation. However, in order for the District to ensure the safeguarding of its assets and the accuracy of its records, we believe our comments and concerns should be taken into consideration by management. Our comments are not intended to reflect upon the honesty or competence of the District's employees.

The matters we have identified are discussed in Appendix 1.

This communication is prepared solely for the information of management and is not intended for any other purposes. We accept no responsibility to a third party who uses this communication.



We would like to express our appreciation for the cooperation and assistance which we received during the course of our audit from Dean Rear, Linda Sabatini, and Mabel Leung.

We shall be pleased to discuss with you further any matters mentioned in this report at your convenience.

Yours truly,

A handwritten signature in black ink, appearing to read 'Brian Szabo'.

Brian Szabo, CPA, CA
Partner through a corporation
BDO Canada LLP
Chartered Professional Accountants

A handwritten signature in black ink, appearing to read 'Kayan Yu'.

Kayan Yu, CPA, CA
Partner through a corporation
BDO Canada LLP
Chartered Professional Accountants

Current Year Management Letter Points**1. Accounting documentation**

In the current year we noted a number of instances where information and working papers provided to the auditors were not complete, updated or consistent. An example of this was the accounting for major capital projects spanning multiple years and involving senior government funding. We recognize that the nature of some transactions can be complex and calculations are only performed for annual financial reporting and therefore recommend that an additional level of review be given to the accounting entries and working papers. Consideration should also be given to standardizing working papers and reports across entities and implementing performance metrics, which could include monitoring the quality of working papers and efficiency of financial reporting processes.

Management response:

Management continues to investigate opportunities to reduce manual tasks, improve the year end processes and the preparation of financial statements. In 2022, Finance implemented the financial statement compilation tool and prepared the financial statements both in the new tool and using the existing manual approach. It is expected that next year, this tool will be used fully and will streamline the preparation and reconciliation of the annual statements and allow quality review over the financial information provided during the audit. We will also continue to work with our auditors and staff to ensure audit requirements are communicated and well understood prior to the commencement of the audit.

Prior Year Management Letter Points**2. Accruals for outstanding invoices**

In prior years, we noted that accruals for certain outstanding invoices are complex, spanning multiple departments, and composed of numerous individual invoices. The documentation to support these accruals are made up of complex journal entries. We noted that the manual nature of recorded these accruals can lead to cut off errors in recorded operating expenses.

During the 2022 audit fieldwork, management identified cut off errors related to 2022 operating expenses amounting to \$3 million that were not recorded as at December 31, 2022. These errors have been recorded as unadjusted audit differences in our findings report.

We continue to recommend reviewing the accrual and accounts payable reporting to explore ways to automate the process, reduce the manual inputs, and provide improved technology controls to reduce the risk for errors.

Management response:

Management continues to investigate opportunities to improve reporting and the preparation of financial statements, including the 2022 implementation of the financial statement compilation tool to assist with the preparation of the annual financial statements. This tool will streamline the preparation and reconciliation of the annual statements.



3. Risk assessment process

During 2020, we noted that the District did not have a consolidated enterprise risk matrix documenting the potential operating, financial, legal, reputational, and other risks the District is susceptible to, including risks relating to fraud. We recommended that management undertake a formal enterprise risk assessment to identify, document, and categorize the impact of each potential risks.

Management response:

Management continues to work towards implementing a formal enterprise risk management framework with a targeted completion by the end of 2023.

4. Accounting for complex transactions

In the prior year, we recommended management formally document the accounting position on transactions of large dollar value, particularly for large, complex infrastructure projects, before contracts are ratified, in particular where they involve complex or principles-based standards. The position memo should include facts of the transaction, relevant agreement terms, a discussion of the appropriate Canadian Public Sector Accounting Standards ("PSAS") guidance and interpretation, as well as any alternative interpretations, before documenting management's conclusion. This will ensure the financial reporting impact can be thoroughly understood before the district finalizes an agreement and will ensure the future impacts of the agreement are understood for subsequent financial reporting periods.

Management response:

Financial transactions are becoming more complex, and Finance continues to work on improvements to processes to ensure conclusions on the accounting for such complex transactions and arrangements are appropriate based on requirements of PSAS.

To: Finance Committee

From: Linda Sabatini, Director, Financial Operations

Date: April 5, 2023

Meeting Date: April 13, 2023

Subject: **Audited 2022 Financial Statements and Annual Financial Results**

RECOMMENDATION

That the MVRD Board approve the Audited 2022 Consolidated Financial Statements for the Metro Vancouver Regional District.

That the GVS&DD Board approve the Audited 2022 Financial Statements for the Greater Vancouver Sewerage and Drainage District.

That the GVWD Board approve the Audited 2022 Financial Statements for the Greater Vancouver Water District.

That the MVHC Board approve the Audited 2022 Financial Statements for the Metro Vancouver Housing Corporation.

EXECUTIVE SUMMARY

The attached 2022 financial results illustrate that, despite global economic uncertainty, Metro Vancouver continues to maintain a strong financial position, with excellent liquidity and solid reserves. This is critical to ensure ongoing capacity to continue to finance infrastructure investments and provide ongoing Metro Vancouver services. The annual surplus to budget, as detailed in Appendix 2, was \$36.6 million, largely a result of staffing vacancies and project delays resulting in lower than expected operational costs and debt servicing costs.

The attached 2022 financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards ("PSAS") and have received an unqualified audit opinion by the external auditors, BDO Canada LLP Chartered Professional Accountants. These statements have been prepared using a new financial statement compilation tool, which will assist the Finance team in improving and streamlining the financial statement package. The financial statements presented are currently draft and will be finalized upon approval by the Board on April 28, 2023.

PURPOSE

To present, for approval, the Audited 2022 Financial Statements for the Metro Vancouver Districts and the Metro Vancouver Housing Corporation and provide for information the 2022 financial results and surplus to budget.

BACKGROUND

Legislation requires that annual audited financial statements be prepared for the Metro Vancouver Districts and Metro Vancouver Housing Corporation and presented at a public meeting of the Board of Directors and approved and submitted to the Province by May 15th each year. The Audited Financial Statements for 2022 have been prepared by management in accordance with Canadian Public Sector Accounting Standards (“PSAS”) and have received an unqualified audit opinion by the external auditors, BDO Canada LLP Chartered Professional Accountants. These statements have been prepared using a new financial statement compilation tool, which will assist the Finance team in improving and streamlining the financial statement package. The statements presented are currently draft and will be finalized upon approval by the Board on April 28, 2023.

In addition, the annual financial results and surplus to budget are required to be presented to the Finance Committee. Included in Appendix 2 are the highlights of the financial results for the full fiscal year of 2022.

2022 FINANCIAL STATEMENTS AND RESULTS

The complete set of 2022 Audited Financial Statements is included in Attachment 1, with Financial Statement Highlights presented in *Appendix 1*. These statements are presented for the Boards’ approval and include:

- Audited 2022 Consolidated Financial Statements for the Metro Vancouver Regional District
- Audited 2022 Financial Statements for the Greater Vancouver Sewerage and Drainage District
- Audited 2022 Financial Statements for the Greater Vancouver Water District
- Audited 2022 Financial Statements for the Metro Vancouver Housing Corporation

The consolidated financial statements combine the accounts of the Metro Vancouver Regional District, Greater Vancouver Sewerage and Drainage District, Greater Vancouver Water District and the Metro Vancouver Housing Corporation.

Two key statements included in the audited package, the *Consolidated Statement of Financial Position (Exhibit A)* and the *Consolidated Statement of Operations (Exhibit B)*, similar to the Balance Sheet and Income Statement in private organizations, are the foundation of the audited statements. Highlights of the key indicators in the audited financial statements are provided below with a more detailed analysis in *Appendix 1*. In addition, the 2022 Financial Operating Results, presented based on Metro Vancouver’s annual budget are provided in *Appendix 2*.

It is important to note that there are differences between the presentation in these financial statements and the annual Metro Vancouver budget, which is prepared, in accordance with enabling legislation, to determine the annual revenue requirements to meet expenditure obligations. These differences are outlined below and included in *Appendix 1*.

Statement of Financial Position

The *Consolidated Statement of Financial Position (Exhibit A)* included in the audited financial statements provides key information to evaluate the government's ability to finance its ongoing activities to meet its liabilities and contractual obligations, as well as provide future services.

For discussion, a *Condensed Statement of Financial Position*, presented net of Translink and member municipalities' debt, is included in *Appendix 1*, along with five-year trends on the four key financial indicators in this statement (financial assets, net debt, non-financial assets and accumulated surplus).

Financial Assets

Although cash and investment resources for 2022 are lower than 2021 by \$248.5 million, Metro Vancouver has a strong liquidity position, with financial assets 2.7 times more than current liabilities. This indicates that the financial assets are more than sufficient to offset the amount of short-term obligations. The five-year cash trend in Appendix 1 shows cash balances are relatively stable, with slight fluctuations due to the timing grant funding received and the subsequent application to fund capital spending.

Net Debt

The net debt position indicates the amount by which the organizations' liabilities exceed the financial assets. Although the 2022 net debt increase of \$249.6 million appears as unfavorable, the vast majority (over 73%) of the organization's liabilities is long-term debt which is repayable over several years. As indicated above, the organization's financial assets are more than sufficient to offset the amount of short-term obligations. In addition, the debt servicing ratio, which indicates how much of the organization's revenues is utilized by debt payments is 19.6%, indicating there are sufficient revenues to meet annual long-term obligations.

Non-financial Assets

Non-financial assets increased by \$627.5 million in 2022, a direct result of the capital investments made in the year. Appendix 2 provides a summary by entity of the capital expenditures for 2022. Although non-financial assets have grown 52.9% in 5 years, from \$5.1 billion in 2018 to over \$7.8 billion in 2022, total liabilities, which includes long term debt, has only increased by 29.1% over the same time period. This indicates that more of the District's assets are pay-as-you go funded.

Accumulated Surplus

The 2022 accumulated surplus of \$6.3 billion reflects the member municipalities' net investment in the District's consolidated entity, which comprises of reserve balances of \$441.0 million and investment in tangible capital assets and capital funds of \$5.8 billion.

The accumulated surplus increased by \$378.0 million in 2022, which represents the annual accounting surplus for the year, calculated as the difference between revenues and expenses

on a PSAS basis. The chart below, shows the difference between the annual surplus for PSAS versus the annual operating surplus of \$36.6 million for budget purposes.

Operating Results

The *Consolidated Statement of Operations* (Exhibit B in the audited consolidated financial statements) provides key information about the organization’s financial activities, revenues, expenses, and annual surplus.

Annual Surplus

The annual surplus for PSAS purposes, calculated as the difference between revenues and expenses of \$378.0 million serves as the 2022 addition to the organization’s overall accumulated surplus position or net worth of \$5.9 billion. The vast majority of the surplus is attributable to lower than anticipated salary expenses due to vacancies and lower expenditures due to project delays. *Appendix 1* provides details on the financial statement revenues and expenses by category.

As noted previously, the annual surplus as presented under PSAS is different from the annual surplus as determined in the context of the annual operating budget, which is \$36.6 million. For PSAS purposes, annual surplus does not include contributions to and from reserves, capital contributions or principal payments on long-term debt. A reconciliation of the PSAS surplus to the budgeted surplus is provided below. For details regarding the 2022 Operating Results by legal entity, refer to *Appendix 2*.

Consolidated Statement of Operations and Reconciliation to Budget
For the year ended December 31, 2022
 (in thousands of dollars)

	Budget	2022	2021
Revenue	\$ 1,222,134	\$ 1,114,319	\$ 1,080,455
Expenses	(770,430)	(736,363)	(645,397)
Annual Surplus per PSAS	451,704	377,956	435,058
Applications and transfers included in operating budget			
Contributions to capital	203,053	200,721	211,063
Payments on long-term debt	140,561	140,226	109,169
Transfers to (from) reserves	1,671	18,026	23,142
PSAS items excluded from annual operating budget			
Amortization of tangible capital assets	(96,267)	(99,337)	(86,610)
Sinking fund and debt retirement income	25,566	27,936	25,748
Capital grants, DCC and other capital revenue	170,530	37,655	80,448
Reserve fund interest	6,590	10,561	4,323
Corporate program surplus (transfer to reserves)	-	5,578	11,231
	451,704	341,366	378,514
Annual Surplus based on budget	\$ -	\$ 36,590	\$ 56,544

ALTERNATIVES

The audited financial statements are a statutory requirement prepared in accordance to specific accounting principles. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications relative to the approval of the Audited 2022 Financial Statements.

CONCLUSION

The financial statements are part of the legislated reporting requirements for 2022 and staff recommends their approval. As noted in the Auditor's Report, it is the Auditor's opinion that these Financial Statements present fairly the financial position of the Metro Vancouver Districts and the Metro Vancouver Housing Corporation as of December 31, 2022, and the results of their financial activities and changes in their financial position for the year then ended in accordance with Canadian Public Sector Accounting Standards.

Attachments

- Appendix 1 2022 Financial Statement Highlights
- Appendix 2 2022 Financial Results and Surplus to Budget
- Attachment 1 Metro Vancouver Districts and Metro Vancouver Housing Corporation Financial Statements for the year ended December 31, 2022

2022 Financial Statement Highlights

The consolidated financial statements combine the accounts of the four Metro Vancouver legal entities (MVRD, GVS&DD, GVWD and MVHC). The statements have been prepared by management in accordance with Canadian public sector accounting standards and have received an unqualified audit opinion by the external auditors.

Under PSAS regulations, governments are required to present four financial statements with explanatory notes: Statement of Financial Position (Exhibit A), Statement of Operations (Exhibit B), Statement of Net Debt (Exhibit C) and Statement of Cash Flows (Exhibit D). It is important to note that there are differences between the presentation in these financial statements and the annual Metro Vancouver budget, which is prepared, in accordance with enabling legislation, to determine the annual revenue requirements to meet expenditure obligations. These differences are shown in Table 3 below.

Two key statements, the *Consolidated Statement of Financial Position* and the *Consolidated Statement of Operations*, similar to the Balance Sheet and Income Statement in private organizations, are the foundation of the audited statements. They contain five key indicators, financial assets, financial liabilities, net debt position, non-financial assets, accumulated surplus and annual surplus. These indicators form the basis of the analysis below.

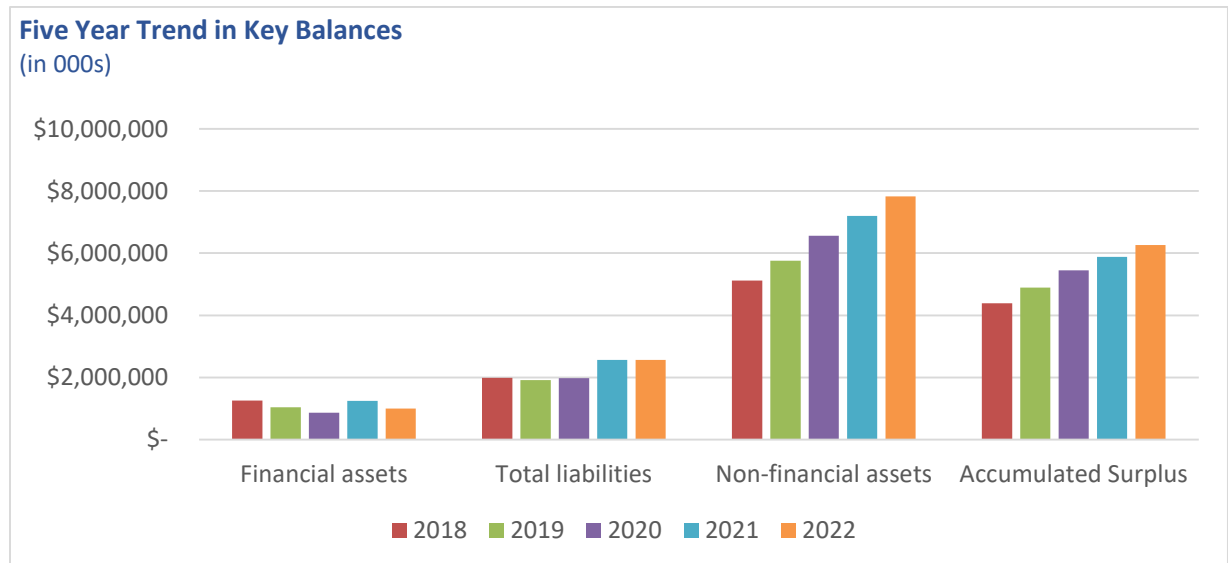
Financial Position

Maintaining a solid financial position is critical to ensure there is ongoing capacity to continue to finance infrastructure investments and provide ongoing programs for all Metro Vancouver services. The *Consolidated Statement of Financial Position (Exhibit A)* of the audited consolidated statements provides key information to evaluate the government's ability to finance its ongoing activities to meet its liabilities and contractual obligations, as well as provide future services. For discussion purposes, a *Condensed Consolidated Statement of Financial Position*, and five-year trend on key financial position indicators is presented in *Table 1* and *Table 2* below, net of Translink and member municipalities' debt. The debt owing to the Municipal Finance Authority for TransLink and member municipalities is completely offset by a receivable from these entities, reflecting the fact that these entities are responsible for their debt. Therefore, the impact on Metro Vancouver's financial position is nil and has been excluded from the condensed financial position statement below.

Table 1: Condensed Consolidated Statement of Financial Position

Condensed Consolidated Statement of Financial Position				
As of December 31, 2022				
<i>(in thousands of dollars)</i>				
	2022		2021	Change
Cash, cash equivalents and investments	\$	779,429	\$ 1,027,885	\$ (248,456)
Other financial assets		223,964	222,261	1,703
Total Financial Assets		1,003,393	1,250,146	(246,753)
Liabilities		670,530	701,908	(31,378)
Debt, net of Translink and members		1,898,013	1,863,798	34,215
Total Liabilities		2,568,543	2,565,706	2,837
Net Debt		(1,565,150)	(1,315,560)	(249,590)
Non-Financial Assets		7,824,748	7,197,202	627,546
Accumulated Surplus	\$	6,259,598	\$ 5,881,642	\$ 377,956
Accumulated Surplus (Equity) consists of				
Reserves		441,040	394,831	46,209
Non-financial assets, net of debt and capital funds		5,818,558	5,486,811	331,747
	\$	6,259,598	\$ 5,881,642	\$ 377,956

Table 2: Five Year Trend in Financial Position Balances



Financial Assets

Metro Vancouver's financial assets include cash, cash equivalents, investments, accounts receivables and MFA debt reserve fund. The financial assets have been relatively stable over the past five years with a slight downward trend as cash received from deferred grants and reserves were applied to capital infrastructure projects.

Cash, Cash Equivalents and Investments

Cash, cash equivalents and investments consist of cash and both long and short-term investments. The 2022 balance was lower than 2021 largely from the timing of debt financing for capital infrastructure projects and the use of deferred grants and reserves previously held in cash.

Other Financial Assets

Other financial assets include accounts receivable (\$193.7 million) and the debt reserve fund (\$30.3 million). Other financial assets were \$1.7 million higher than 2021 mainly due to:

- Slightly higher accounts receivable of \$622 thousand from the timing of billings and collections. Accounts receivable are amounts due through the normal course of District business. The balance at December 31, 2022 comprises mainly of tipping fees due from commercial solid waste haulers, development cost charge (DCC) income, industrial sewer charges from commercial customers and payments due from our member municipalities for water sales.
- Increase in the debt reserve fund balance of \$1.1 million due to new debenture debt issued in the year. The debt reserve fund represents the amount required, under agreement with the Municipal Finance Authority (MFA), as security for debt service obligations. This balance fluctuates upward with new debt issues and downward as issues mature.

Total Liabilities

Total liabilities include trade accounts payables and accrued liabilities, employee future benefits liability, landfill closure and post-closure liability, deferred revenue and long-term debt. The five-year trend shows that liabilities have increased by \$579 million, largely a result of higher debt related to capital infrastructure projects.

Liabilities

Liabilities in 2022 were lower than 2021 by \$31.4 million, mainly due to:

- Lower accounts payable and accrued liabilities of \$51.8 million, mainly due to less trade payables and construction holdbacks due to the timing of payments offset by

increase in payroll accruals for anticipated wage increases related to collective bargaining.

- Increase in landfill liability of \$8.1 million due to higher inflation and therefore higher anticipated closure costs.
- Slight increase of \$0.7 million in employee future benefit costs due to higher inflation expected inflation.
- Higher deferred revenue and refundable deposits of \$2.0 million largely from the reduced application of development cost charges (DCCs) and grant funding in 2022 caused by capital project delays

Long-term Debt

Long-term debt, net of sinking funds reflects the amount of long term borrowing outstanding at the end of 2022. Sinking funds consist of principal payments made over the term of the debt issue. These payments are invested which along with the interest earned will offset the debt repayment at maturity.

The debt for Metro Vancouver increased by \$34.2 million. New long-term borrowing during the year was \$200.0 million (\$160.0 million for GVS&DD and \$40.0 million for GVWD). This increase is offset by debt and sinking fund payments and interest of \$165.8 million.

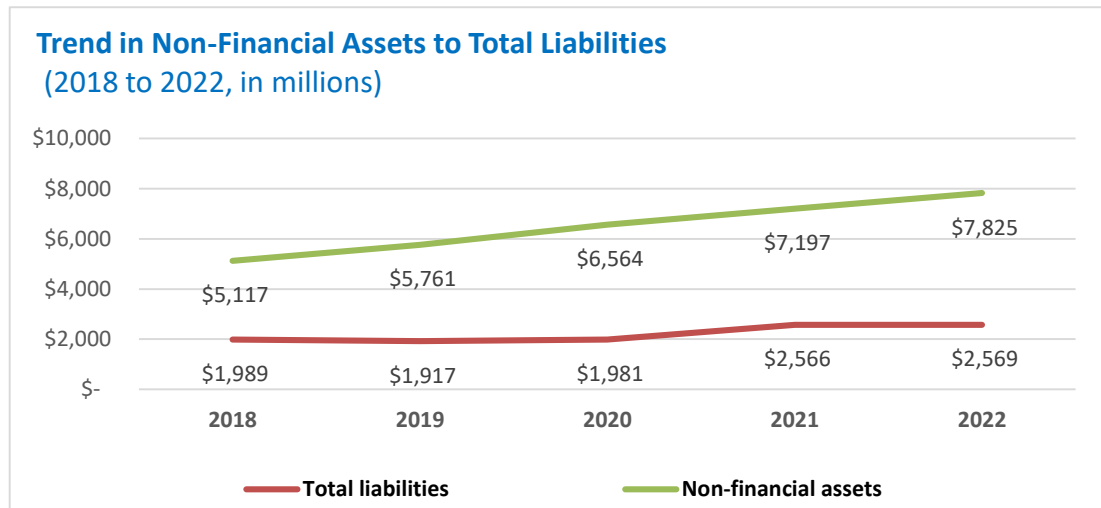
Net Debt

The net debt position indicates the amount by which the organizations' liabilities exceed the financial assets. The net debt position increased by \$249.6 million. Although the amount appears as unfavorable, the vast majority (over 73%) of the organization's liabilities is long-term debt which is repayable over several years. In addition, the organization's financial assets are more than sufficient to offset the amount of short-term obligations. The current ratio which is current assets divided by current liabilities and is a measure of an organization's liquidity is 2.7 to 1.

Non- Financial Assets

Non-financial assets increased by \$627.5 million in 2022, a direct result of the capital expenditures made in the year, the majority of which were for water and liquid waste infrastructure projects. The chart below shows that non-financial assets have grown 52.9% in 5 years, from \$5.1 billion in 2018 to over \$7.8 billion in 2022. However, total liabilities, which includes long term debt, has only increased 29.1%, from \$1.99 billion in 2018 to \$2.6 billion in 2022. This indicates that more of the District's assets are pay-as-you go funded.

Table 4: Trend in Non-Financial Assets to Total Liabilities



Accumulated Surplus

The 2022 accumulated surplus of \$6.3 billion reflects the member municipalities’ net investment in the District’s consolidated entity, which comprises of reserve balances of \$441.0 million and investment in tangible capital assets and capital funds of \$5.8 billion. It is important to note that the investment in capital assets is based on historical cost and does not represent the replacement value of the assets in service for Metro Vancouver.

The accumulated surplus increased by \$378.0 million in 2022, which represents the annual surplus for the year, calculated as the difference between revenues and expenses. Table 5 below show the difference between the annual surplus for PSAS (\$378.0 million) versus the annual surplus of \$36.6 million for budget purposes. Refer to Appendix 2 for a detailed explanation on the annual operating surplus based on budget preparation.

Financial Position Indicators

Illustrated below is the five-year trend to provide additional insight into Metro Vancouver’s financial position. These ratios show that despite the global economic uncertainty over the past few years and current inflationary pressure, Metro Vancouver continues to maintain a healthy financial position.

Table 4: Financial Indicators – Five-year Trend

Ratio	Explanation	2018	2019	2020	2021	2022
Current Ratio	A measure of the organization's ability to pay its current liabilities from its current assets.	5.3 to 1	3.3 to 1	2.8 to 1	3.2 to 1	2.7 to 1
Operating Reserves /Total Revenue	A measure of the organization's ability to adjust to unplanned events and changing circumstances.	10.3%	7.2%	9.5%	11.6%	14.5%
Debt Servicing Ratio	Percentage of the organization's income that is utilized to service debt payments (comprising of principal and interest).	17.0%	12.9%	13.8%	17.1%	19.6%
Interest Ratio	Percentage of the organization's income that is utilized for interest payments.	6.5%	4.6%	4.7%	6.0%	6.4%
MVRD Property Tax and Liquid Waste Services Levies / Total Revenue	Percentage of the organization's revenue that is comprised of property tax and levies.	37.0%	29.1%	31.5%	36.4%	37.5%

Financial Statement Operating Results

The *Consolidated Statement of Operations* (Exhibit B of the audited consolidated financial statements) provides key information about the organization's financial activities, revenues, expenses and annual surplus.

Annual Surplus

The annual surplus, calculated as the difference between revenues and expenses of \$378.0 million serves as the 2022 addition to the organization's overall accumulated surplus position or net worth of 6.3 billion.

As noted previously, the annual surplus as presented under PSAS of \$378.0 million is different from the annual surplus as determined in the context of the annual budget, which is \$36.6 million. For PSAS purposes, annual surplus does not include contributions to and from reserves, capital contributions or principal payments on long-term debt. PSAS also consolidates revenues and expenses in capital and reserve funds, including items not part of the annual operating funding requirements, such as reserve interest, capital grants and amortization of tangible assets. A reconciliation of the PSAS surplus to the budgeted surplus is provided below in Table 5.

Table 5: PSAS Annual Surplus Reconciled to Budget Surplus

Consolidated Statement of Operations and Reconciliation to Budget				
For the year ended December 31, 2022				
(in thousands of dollars)				
	Budget	2022	2021	
Revenue	\$ 1,222,134	\$ 1,114,319	\$ 1,080,455	
Expenses	(770,430)	(736,363)	(645,397)	
Annual Surplus per PSAS	451,704	377,956	435,058	
Applications and transfers included in operating budget				
Contributions to capital	203,053	200,721	211,063	
Payments on long-term debt	140,561	140,226	109,169	
Transfers to (from) reserves	1,671	18,026	23,142	
PSAS items excluded from annual operating budget				
Amortization of tangible capital assets	(96,267)	(99,337)	(86,610)	
Sinking fund and debt retirement income	25,566	27,936	25,748	
Capital grants, DCC and other capital revenue	170,530	37,655	80,448	
Reserve fund interest	6,590	10,561	4,323	
Corporate program surplus (transfer to reserves)	-	5,578	11,231	
	451,704	341,366	378,514	
Annual Surplus based on budget	\$ -	\$ 36,590	\$ 56,544	

The following is a breakdown of the surplus per entity based on budget funding requirements. Discussion regarding the 2022 financial results by entity based on budget presentation, refer to Appendix 2.

Annual Surplus per Legal Entity
For the year ended December 31, 2022
(in thousands of dollars)

	2022	2021
Water District	\$ 7,954	\$ 8,425
Sewerage & Drainage District		
Liquid Waste Services	14,021	10,677
Solid Waste Services	(2,343)	17,360
Metro Vancouver Housing Corporation	10,309	15,291
Regional Programs	6,649	4,791
Annual Surplus	\$ 36,590	\$ 56,544

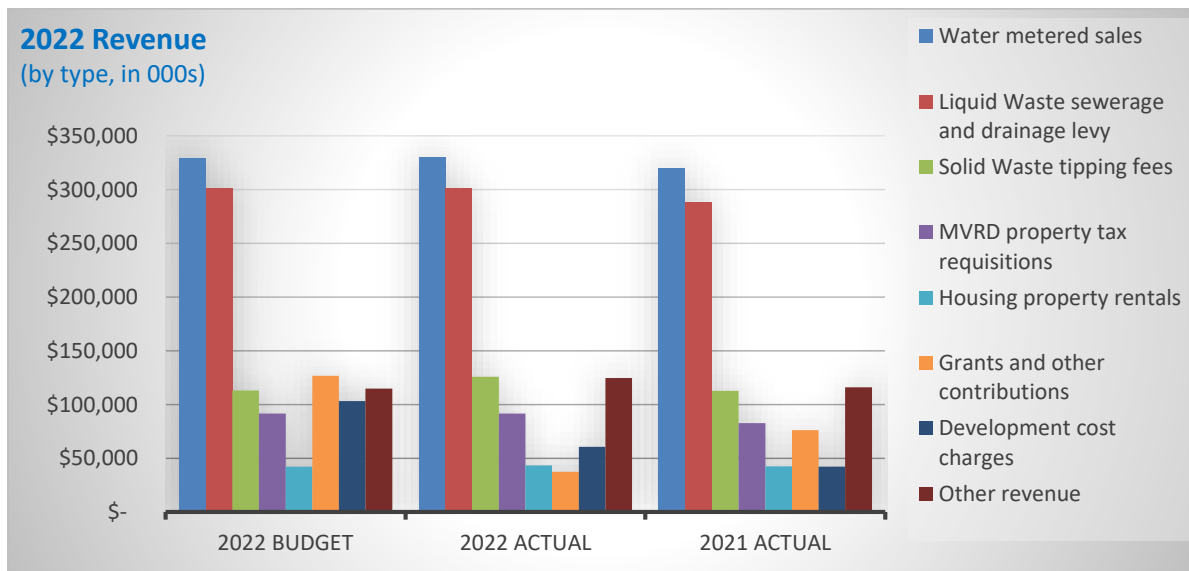
Total Financial Statement Revenue

Revenue for 2022, was \$1.11 billion, lower than budget of \$1.22 billion, mainly due to:

- Delays in capital spending resulting in \$89.5 million less grant funding and \$42.5 million less direct application of DCCs to fund capital spending.
- This decrease is offset by increases of
 - \$12.8 million in Solid Waste tipping fees due to higher construction demolition material processing, which historically haven't been delivered to the regional solid waste system, and,
 - \$9.9 million in other revenues, which includes \$4.5 million more sinking fund and interest income from higher than expected interest rates and \$5.8 million more unanticipated cost sharing recoveries related to capital projects.

The table and graph below show that tax levy revenue and metered sales of water are in line with budget and prior year.

Revenue By Category (in 000s)	2022 Budget	2022 Actual	2021 Actual
Water metered sales	\$ 329,366	\$ 329,678	\$ 319,989
Liquid Waste sewerage and drainage levy	301,425	301,425	288,226
Solid Waste tipping fees	112,910	125,797	112,610
MVRD property tax requisitions	91,708	91,708	82,714
Housing property rentals	42,051	43,267	42,416
Grants and other contributions	126,822	37,265	76,174
Development cost charges	103,080	60,583	42,204
Other revenue	114,713	124,596	116,122
Total	\$ 1,222,075	\$ 1,114,319	\$ 1,080,455



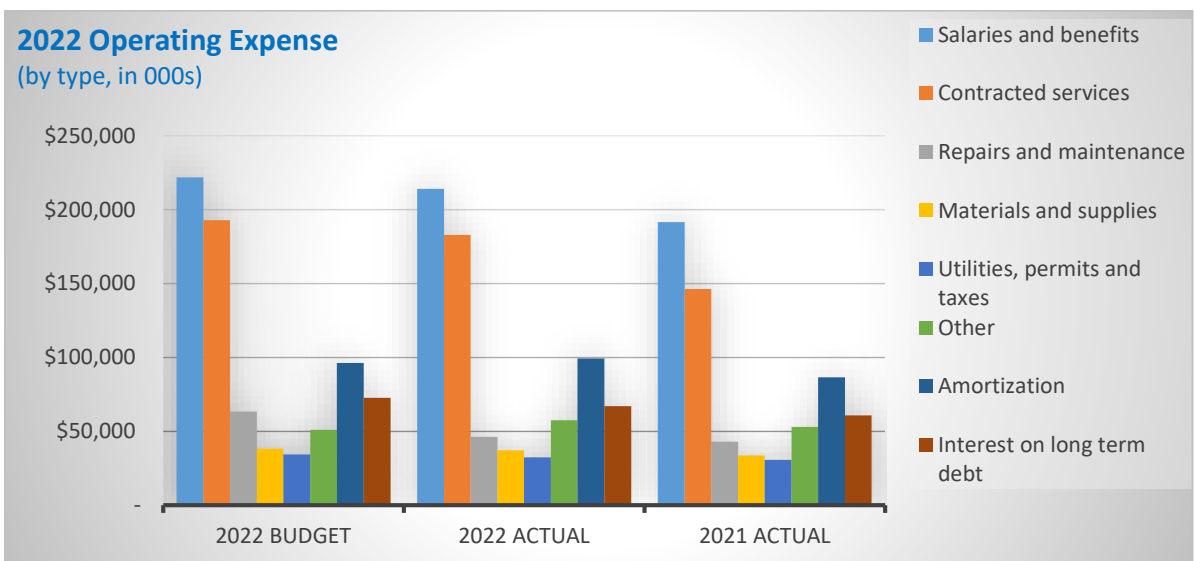
Total Financial Statement Expenses

Total expenses for 2022 were \$736.4 million, \$33.9 million lower than budget mainly from:

- staff vacancies resulting in \$7.7 million lower costs for salaries
- project delays resulting in lower than anticipated costs for contracted services, repairs, materials and permits of \$30.7 million
- capital project delays resulting in lower debt servicing costs of \$5.7 million.
- savings were offset by higher landfill closure costs of \$6.7 million and amortization of assets of \$3.0 million.

Expenses were \$91.0 million higher than prior year mainly due to overall inflationary and approved spending increases in the annual budget.

Operating Expenses by Category (in 000s)	2022 Budget	2022 Actual	2021 Actual
Salaries and benefits	\$ 221,673	\$ 213,969	\$ 191,444
Contracted services	192,812	182,918	146,256
Repairs and maintenance	63,390	46,157	43,061
Materials and supplies	38,139	37,236	33,732
Utilities, permits and taxes	34,381	32,341	30,552
Other	51,016	57,464	53,049
Amortization	96,267	99,336	86,610
Interest on long term debt	72,637	66,942	60,693
Total	\$ 770,315	\$ 736,363	\$ 645,397



2022 Financial Operating Results (Budget Presentation)

As noted previously, and presented in Appendix 1, the annual surplus in the financial statements as presented under PSAS of \$378.0 million is different from the annual operating surplus as determined in the context of the annual budget, which is \$36.6 million.

The following is the presentation of the 2022 annual operating results based on the budget presentation, including contributions to capital, reserve transfers and principal payments on long-term debt, but excluding PSAS non-operational items, such as amortization, capital grants, sinking fund revenue and reserve interest.

Metro Vancouver Districts Operating Budget Summary Year Ended December 31, 2022				
	Budget	Actual	% Actuals to Budget	Variance
REVENUES				
Key Service Revenues				
Water Sales	\$ 329,365,517	\$ 329,678,422	100%	\$ 312,905
Liquid Waste Services Levy	301,424,687	301,424,687	100%	-
Solid Waste Tipping Fees	112,909,870	125,797,097	111%	12,887,227
Metro Vancouver Regional District Requisitions	89,868,576	89,868,576	100%	-
Housing Rents	42,110,363	43,319,895	103%	1,209,532
	<u>875,679,013</u>	<u>890,088,677</u>	<u>102%</u>	<u>14,409,664</u>
Key Service Supplemental Revenues	4,012,307	3,661,882	91%	(350,425)
Variable Service Revenues	38,217,925	50,578,761	132%	12,360,836
Internal Transfers	108,256,909	83,555,605	77%	(24,701,304)
TOTAL REVENUES	\$ 1,026,166,154	\$ 1,027,884,925	100%	\$ 1,718,771
EXPENDITURES				
Greater Vancouver Water District	\$ 338,434,643	\$ 326,895,213	97%	\$ 11,539,430
Greater Vancouver Sewerage and Drainage District				
Liquid Waste Services	392,967,276	377,694,968	96%	15,272,308
Solid Waste Services	122,991,007	140,994,616	115%	(18,003,609)
Metro Vancouver Housing Corporation	54,798,873	41,299,758	75%	13,499,115
Metro Vancouver Regional District	116,974,355	104,410,054	89%	12,564,301
TOTAL EXPENDITURES	\$ 1,026,166,154	\$ 991,294,609	97%	\$ 34,871,545
SURPLUS (DEFICIT)	\$ -	\$ 36,590,316		\$ 36,590,316

Metro Vancouver
Surplus to Budget by Entity
Year ended December 31, 2022

	Budget	Actual	Variance	Commentary
Greater Vancouver Water District				
Revenues	338,434,643	334,849,556	(3,585,087)	Overall Water District had a surplus to budget of \$8.0M. Water sales were close to budget with a slight surplus of \$0.3M. The cooler spring resulted lower than expected sales earlier in the year but improved over the later part of the year, to conclude with water consumption levels only slightly less than planned. Other various revenues exceeded budget by \$2.8M offset by less reserve use than planned due to delayed projects and related underspends (\$6.6M) resulting in a (net) revenue shortfall of (\$3.5M). Staff vacancies, lower operations and maintenance costs than planned, lower than budgeted spending related to deferred operating projects, and lower than budget debt servicing costs have resulted in a surplus for expenditures of close to \$11.5M. The underspends, mainly due to work delays, consist primarily of water supply operations (\$2.2M) minor capital (\$1.6M), debt servicing costs(\$1.1M), project delivery department allocation (\$1.5M), SIF projects (\$3.1M) and other underspends for labour and other consulting work (\$2.0M).
Expenditures	338,434,643	326,895,213	11,539,430	
Surplus (Deficit)	-	7,954,343	7,954,343	
Greater Vancouver Sewerage and Drainage District				
Liquid Waste Services				
Revenues	392,967,276	391,716,144	(1,251,132)	Liquid Waste had a surplus to budget of \$14M. Staff vacancies, lower than budgeted spending related to deferred operating projects, operating and maintenance expenditures, debt servicing costs and residuals project work have all contributed to expenditure underspends of close to \$15.3M. Expenditures are under budget primarily due to delays for minor capital project works (\$2.0M), delays for residuals dewatering work (\$2.3M) at Iona, salary and some external consulting underspends across multiple programs (\$4.4M), project delivery department under-allocation (\$2.8M) due to work delays, wastewater permit fee increase delay (\$0.9M) combined with less debt servicing costs (\$2.9M). The overall revenues are under (\$1.3M) primarily due to less reserve use (for SIF and other reserve funded projects and other work with underspends.).
Expenditures	392,967,276	377,694,968	15,272,308	
Surplus (Deficit)	-	14,021,176	14,021,176	
Greater Vancouver Sewerage and Drainage District				
Solid Waste Services				
Revenues	122,991,007	138,651,852	15,660,845	Solid Waste shortfall for the year is \$2.3M, which will be covered by operating reserves. Tipping fee revenues are higher than budget and close to 12% higher than the same period in 2021. The increased fees are due to higher construction demolition materials processing, facility residuals, which historically haven't been delivered to the regional solid waste system. Economic recovery following the pandemic contributes to the increases in waste quantities. User fees/other revenues were higher than budget by \$15.7M. Higher waste flows (1,028K versus budgeted tonnage of 890K) drove the majority of this excess revenue compared to budget for 2022. Although revenues were higher than anticipated, expenditures were \$18.0M higher than budget. This overage is mainly a result of higher contingency disposal costs of \$21M and higher landfill closure and post closure costs of \$6.7M. These overages are offset by \$1.6M in lower debt servicing costs, \$4.1M less operational costs and \$4.0M less contributions than planned.
Expenditures	122,991,007	140,994,616	(18,003,609)	
Surplus (Deficit)	-	(2,342,764)	(2,342,764)	
Metro Vancouver Housing Corporation				
Revenues	54,798,873	51,609,155	(3,189,718)	Housing's rental revenues have outperformed budget by close to \$1.2M due to lower than expected tenant rental assistance than anticipated in the budget plus other revenues of close to \$1.2M (including grants) exceeded the budget. Operating expenditures were lower than budget by close to \$2.8M due primarily to underspends and delays in property operations, administrative support and some maintenance program work. The net results for the Housing function were (\$0.4M) short of the planned contribution to reserves of \$10.7M.
Expenditures	54,798,873	41,299,758	13,499,115	
Surplus (Deficit)	-	10,309,397	10,309,397	
Metro Vancouver Regional District				
Revenues	116,974,355	111,058,218	(5,916,137)	Regional District expenditures were lower than budget largely due to lower salary costs due to vacancies from staff turnover and the timing of new position hiring. In addition to salary underspends, there was less spending in consulting and contract services from projects and other work delays in a number of functions plus fewer meetings, travel, tuition and catering costs than was anticipated in the budgets.
Expenditures	116,974,355	104,410,054	12,564,301	
Surplus (Deficit)	-	6,648,164	6,648,164	

Capital Annual Expenditure Summary

Metro Vancouver					
2022 Capital Spending Summary					
For the 12 months ending December 31, 2022					
	Annual	Year to Date			
	2022 Capital Cash Flow	2022 Capital Cash Flow to December 2022	Actual Expenditures	% of Prorated Capital Cash Flow	% of Annual Capital Cash Flow
Housing Services					
Development Capital	48,300,000	48,300,000	16,041,736		
	<u>48,300,000</u>	<u>48,300,000</u>	<u>16,041,736</u>	33.2%	33.2%
Liquid Waste Services					
Collections	187,337,000	187,337,000	71,476,489		
Treatment Plants	593,115,000	593,115,000	328,907,493		
	<u>780,452,000</u>	<u>780,452,000</u>	<u>400,383,982</u>	51.3%	51.3%
Regional Parks					
Capital Development	15,505,000	15,505,000	4,245,240		
Parkland Acquisition Fund Projects	15,750,000	15,750,000	5,151,727		
	<u>31,255,000</u>	<u>31,255,000</u>	<u>9,396,967</u>	30.1%	30.1%
Solid Waste Services					
Landfills	2,350,000	2,350,000	377,964		
Recycling and Waste Centres	28,900,000	28,900,000	35,180,833		
Waste To Energy Facilities	17,750,000	17,750,000	3,544,133		
Opportunity	1,840,000	1,840,000	331,801		
	<u>50,840,000</u>	<u>50,840,000</u>	<u>39,434,732</u>	77.6%	77.6%
Water Services					
Water Mains	333,800,000	333,800,000	213,725,699		
Pump Stations	39,050,000	39,050,000	11,394,558		
Reservoirs	44,004,000	44,004,000	19,658,300		
Treatment Plants	22,025,000	22,025,000	2,526,923		
Others	32,394,000	32,394,000	50,511,428		
	<u>471,273,000</u>	<u>471,273,000</u>	<u>297,816,909</u>	63.2%	63.2%
Total	<u>1,382,120,000</u>	<u>1,382,120,000</u>	<u>763,074,326</u>	55.2%	55.2%

- Overall, total capital expenditures for 2022 were \$763.1M, which represents 55.2% of the annual capital cash flow of \$1.4B.
- For Liquid Waste, total capital expenditures for 2022 were \$400.4M, which represents 51.3% of the annual capital cash flow of \$780.5M. The underspend is primarily due to some delays in initiating construction as well as issues on the North Shore Secondary Wastewater Treatment Plant.
- For Water, total capital expenditures for 2022 were \$297.8M, which represents 63.2% of the annual cash flow of \$471.3M. The underspend is primarily due to delays in permitting, limited market capacity for projects and construction delays.

**METRO VANCOUVER DISTRICTS
AND METRO VANCOUVER HOUSING CORPORATION
(OPERATING AS METRO VANCOUVER)**

Financial Statements

Year ended December 31, 2022

DRAFT - April 3, 2023

Consolidated Financial Statements of

**METRO VANCOUVER
REGIONAL DISTRICT
(OPERATING AS METRO VANCOUVER)**

Year ended December 31, 2022

METRO VANCOUVER REGIONAL DISTRICT

Index to Consolidated Financial Statements

December 31, 2022

	Exhibit
Management Report	
Independent Auditor's Report	
Consolidated Statement of Financial Position	A
Consolidated Statement of Operations	B
Consolidated Statement of Change in Net Debt	C
Consolidated Statement of Cash Flows	D
Notes to Consolidated Financial Statements	

COVID-19 Restart Grant (unaudited)	Schedule 1
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**METRO VANCOUVER DISTRICTS
AND METRO VANCOUVER HOUSING CORPORATION
(Operating as Metro Vancouver)
MANAGEMENT REPORT**

The Consolidated Financial Statements contained in this report have been prepared by management in accordance with Canadian public sector accounting standards. The integrity and objectivity of these statements are management's responsibility. Management is responsible for all the statements and schedules, and for ensuring that this information is consistent, where appropriate, with the information contained in the financial statements.

Management is also responsible for implementing and maintaining a system of internal controls to provide reasonable assurance that reliable financial information is produced.

The Metro Vancouver Regional District's Board of Directors is responsible for approving the consolidated financial statements and for ensuring that management fulfills its responsibilities for financial reporting and internal control and exercises this responsibility through the Finance Committee of the Board.

The external auditors, BDO Canada LLP, conduct an independent examination, in accordance with Canadian generally accepted auditing standards, and express their opinion on the consolidated financial statements. Their examination does not relate to the other unaudited schedules attached to the financial statements and statements required by the *Financial Information Act*. The Independent Auditor's Report outlines the scope of the audit for the year ended December 31, 2022.

On behalf of the Metro Vancouver Regional District, Greater Vancouver Sewerage and Drainage District, Greater Vancouver Water District, and Metro Vancouver Housing Corporation.

Dean Rear, Chief Financial Officer

Date: April 28, 2023

Independent Auditor's Report

To the Board of Directors of the Metro Vancouver Regional District

Opinion

We have audited the consolidated financial statements of the Metro Vancouver Regional District (the "Consolidated Entity"), which comprise the consolidated Statement of Financial Position as at December 31, 2022, and the consolidated Statements of Operations, Change in Net Debt and Cash Flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Consolidated Entity as at December 31, 2022 and the results of its operations, change in net debt, and cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Consolidated Entity in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Consolidated Entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Consolidated Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Consolidated Entity's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Consolidated Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Consolidated Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Consolidated Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other Matter – Supplementary Information

We draw attention to the fact that the supplementary information included in Schedule 1 does not form part of the audited consolidated financial statements. We have not audited or reviewed this supplementary information and, accordingly, we do not express any opinion, review conclusion or any other form of assurance on this supplementary information.

Chartered Professional Accountants

Vancouver, British Columbia

REPORT DATE

METRO VANCOUVER REGIONAL DISTRICT

Exhibit A

Consolidated Statement of Financial Position

As at December 31, 2022

(in thousands of dollars)

	2022	2021
Financial Asset		
Cash and cash equivalents	\$ 388,043	\$ 738,303
Accounts receivable (note 2)	193,673	193,051
Due from TransLink and member municipalities (note 3)	1,260,527	1,094,140
Investments (note 4)	391,386	289,582
Debt reserve fund (note 5)	65,522	64,388
	2,299,151	2,379,464
Liabilities		
Accounts payable and accrued liabilities (note 6)	299,379	337,420
Employee future benefits (note 7)	14,602	13,907
Landfill closure and post-closure liability (note 8)	41,026	32,907
Deferred revenue and refundable deposits (note 9)	343,047	341,016
Debt reserve fund, member municipalities, and TransLink (note 5)	35,231	35,179
Debt (net of sinking funds) (note 10)		
Metro Vancouver Districts and Housing Corporation	1,884,302	1,851,489
TransLink and member municipalities	1,246,714	1,083,106
Total debt	3,131,016	2,934,595
	3,864,301	3,695,024
Net Debt	(1,565,150)	(1,315,560)
Non-Financial Assets		
Tangible capital assets (note 11)	7,796,302	7,172,479
Inventories of supplies	11,864	10,938
Prepaid land leases (note 12)	4,868	5,062
Prepaid expenses	11,714	8,723
	7,824,748	7,197,202
Accumulated Surplus (note 13)	\$ 6,259,598	\$ 5,881,642
Contractual obligations and rights (note 14)		
Contingencies (note 15)		
Budget information (note 16)		
Segmented information and expenses by object (note 17)		
Subsequent events (note 18)		

The accompanying notes are an integral part of these consolidated financial statements.

Chief Financial Officer

Board Chair

METRO VANCOUVER REGIONAL DISTRICT

Exhibit B

Consolidated Statement of Operations

Year ended December 31, 2022

(in thousands of dollars)

	2022 Budget (Note 16)	2022 Actual	2021 Actual
Revenues (note 17)			
MVRD property tax requisitions	\$ 91,708	\$ 91,708	\$ 82,714
Metered sale of water	329,366	329,678	319,989
Sewerage and drainage levy	301,425	301,425	288,226
Tipping fees	112,910	125,797	112,610
Housing property rentals	42,051	43,267	42,416
BODTSS industrial charges	12,263	12,431	12,157
Development cost charges	103,080	60,583	42,204
Grants and other contributions	126,822	37,265	76,174
User fees, recoveries, and other revenue	41,175	46,411	42,903
Sinking fund and interest income	32,110	38,682	32,840
Sinking fund income, members and TransLink	29,165	27,072	28,222
	1,222,075	1,114,319	1,080,455
Expenses (note 17)			
Liquid waste services	294,631	274,160	232,928
Solid waste services	119,856	142,930	108,040
Water operations	197,307	184,446	173,128
Housing rental operations	41,452	34,516	35,765
Regional parks	46,045	38,405	37,310
General government services	7,400	7,167	6,257
Air quality	14,826	11,101	10,082
Regional employers services	3,204	2,362	2,342
E911 emergency telephone system	5,333	5,269	4,543
Regional planning	4,756	4,140	3,101
Invest Vancouver	3,038	2,420	1,556
Housing planning and policy	1,794	1,031	1,085
Electoral areas	632	654	455
Regional global positioning system	348	169	242
Sasamat volunteer fire department	294	350	263
Regional emergency management	234	171	78
Sinking fund income attributed to members and TransLink	29,165	27,072	28,222
	770,315	736,363	645,397
Annual surplus	451,760	377,956	435,058
Accumulated surplus, beginning of year	5,881,642	5,881,642	5,446,584
Accumulated surplus, end of year (note 13)	\$ 6,333,402	\$ 6,259,598	\$ 5,881,642

The accompanying notes are an integral part of these consolidated financial statements.

METRO VANCOUVER REGIONAL DISTRICT

Exhibit C

Consolidated Statement of Change in Net Debt

Year ended December 31, 2022

(in thousands of dollars)

	2022 Budget (Note 16)	2022 Actual	2021 Actual
Annual surplus	\$ 451,760	\$ 377,956	\$ 435,058
Change in tangible capital assets			
Acquisition of tangible capital assets	(1,390,548)	(723,206)	(720,501)
Amortization of tangible capital assets	96,073	99,142	86,415
Net book value of tangible capital assets disposed	—	241	1,110
	(1,294,475)	(623,823)	(632,976)
Change in other non-financial assets			
Acquisition of prepaid expenses	—	(11,714)	(8,723)
Use of prepaid expenses	—	8,723	9,350
Amortization of prepaid land leases	194	194	195
Acquisition of inventories of supplies	—	(11,864)	(10,938)
Consumption of inventories of supplies	—	10,938	10,017
	194	(3,723)	(99)
Change in net debt	(842,521)	(249,590)	(198,017)
Net debt, beginning of year	(1,315,560)	(1,315,560)	(1,117,543)
Net debt, end of year	\$ (2,158,081)	\$ (1,565,150)	\$ (1,315,560)

The accompanying notes are an integral part of these consolidated financial statements.

METRO VANCOUVER REGIONAL DISTRICT

Exhibit D

Consolidated Statement of Cash Flows

Year ended December 31, 2022

(in thousands of dollars)

	2022	2021
Cash provided by (used in):		
Operating transactions:		
Annual surplus	\$ 377,956	\$ 435,058
Items not involving cash		
Amortization of tangible capital assets	99,142	86,415
Amortization of prepaid land leases	194	195
Sinking fund income	(54,931)	(53,932)
Debt reserve fund income	(1,455)	(1,065)
Accrued interest and unamortized premium or discount	(718)	(2,029)
Gain (loss) on disposal of tangible capital assets and asset held for sale	(1,359)	743
Employee future benefit expense	2,911	2,868
Change in landfill closure and post-closure liability	8,119	743
Change in non-cash financial assets and liabilities		
Accounts receivable	(622)	(42,424)
Due from TransLink and member municipalities	(166,387)	(93,341)
Accounts payable and accrued liabilities	(38,041)	88,148
Employee future benefits paid	(2,216)	(2,330)
Deferred revenue and refundable deposits	2,031	29,565
Debt reserve fund, member municipalities, and TransLink	52	(424)
Inventories of supplies	(926)	(921)
Prepaid expenses	(2,991)	627
Net change in cash from operating transactions	220,759	447,896
Capital transactions:		
Proceeds on sale of tangible capital assets	1,600	367
Acquisition of tangible capital assets	(723,206)	(720,501)
Net change in cash from capital transactions	(721,606)	(720,134)
Investing transactions:		
Acquisition of investments	(403,818)	(160,752)
Investment maturities	302,732	290,591
Net change in cash from investing transactions	(101,086)	129,839
Financing transactions:		
Debenture debt and mortgages issued	452,970	779,600
Debt reserve fund issuances	(4,530)	(7,796)
Debt reserve fund maturity	4,851	3,915
Sinking fund payments	(193,570)	(158,391)
maturity	(8,048)	(8,136)
Sinking fund retirement	182,352	142,080
Debenture debt maturity	(182,352)	(142,080)
Net change in cash from financing transactions	251,673	609,192
Net change in cash and cash equivalents	(350,260)	466,793
Cash and cash equivalents, beginning of year	738,303	271,510
Cash and cash equivalents, end of year	\$ 388,043	\$ 738,303

The accompanying notes are an integral part of these consolidated financial statements.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 1

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

1. Significant Accounting Policies

The consolidated financial statements of the Metro Vancouver Regional District (the “District”) are prepared by management in accordance with Canadian public sector accounting standards. Significant accounting policies adopted by the District are as follows:

Government Reporting Entity

The consolidated financial statements include the assets, liabilities, revenues, and expenses of four legal entities: the Metro Vancouver Regional District (“MVRD”), the Greater Vancouver Sewerage and Drainage District (“GVS&DD”), the Greater Vancouver Water District (“GVWD”), and the Metro Vancouver Housing Corporation (“MVHC”).

The MVRD was established under the Local Government Act of British Columbia. It provides a number of specific and agreed upon services directly to the public and its member municipalities, the major one of which is the ownership and operation of a network of regional parks. Its Board of Directors comprises mayors and councilors from the member municipalities appointed for that purpose by the municipalities. The number of directors, and the number of votes each may cast, is based upon the population of the municipality. Under the legislation, all staff, even if their work is under the authority of the related legal entities, are employees of the MVRD.

The GVS&DD was established by an Act of the same name in 1956. Its two principal responsibilities are the collection, treatment, and discharge of liquid waste for the municipalities of the MVRD, and the disposal of solid waste for the municipalities of the MVRD and the public. GVS&DD owns and operates wastewater treatment plants and a related collection network connected to the municipal collection systems, and several solid waste facilities including a waste-to-energy facility. Its Board of Directors comprises the same councilors and mayors as appointed to the MVRD Board by the participating municipalities.

The GVWD was established by an Act of the same name in 1924. Its primary responsibility is the supply of potable water to its member municipalities. Its Board of Directors comprises the same councilors and mayors as appointed to the MVRD Board by the participating municipalities. GVWD owns or holds under a 999-year lease from the Province, an extensive closed watershed network as its source of supply. It owns a series of dams, reservoirs, water treatment plants and a distribution network connecting to the municipal distribution systems. GVWD also owns and is responsible for operating and maintaining office buildings that are leased to MVRD and its related entities.

The MVHC is a wholly-owned subsidiary of the MVRD. The MVHC was incorporated under the Business Corporations Act (British Columbia) to own and operate housing sites within the Lower Mainland for the purpose of providing affordable rental housing on a non-profit basis.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 2

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

1. Significant Accounting Policies (continued)

Basis of Consolidation	The consolidated financial statements reflect the combined assets, liabilities, revenues, and expenses of the reporting entity. The reporting entity comprises the MVRD, the GVS&DD, the GVWD, and the MVHC. These organizations are controlled by the District. All transactions and balances between these legal entities have been eliminated on consolidation.
Basis of Accounting	The District follows the accrual method of accounting for revenue and expenses. Revenue is recognized in the year in which it is earned and measurable. Expenses are recognized as they are incurred and measurable as a result of the receipt of goods or services and/or the legal obligation to pay.
Government Transfers	<p>Government transfers, are recognized as revenue in the financial statements when the transfer is authorized and any eligibility criteria are met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability. The transfer of revenue is initially deferred and then recognized in the statement of operations as the stipulation liabilities are settled.</p> <p>When the District is deemed the transferor, the transfer expense is recognized when the recipient is authorized and has met the eligibility criteria.</p>
Deferred Revenue and Refundable Deposits	Deferred revenue represents licenses, permits, development cost charges, security deposits, restricted contributions, and other fees which have been collected, but for which the related services or obligations have yet to be performed. These amounts will be recognized as revenue in the fiscal year the services are performed or obligations and stipulations have been met.
Sinking Fund, Debt Retirement, and Interest Income	Interest income is reported as revenue in the period earned. When required, based on external restrictions, interest income earned on deferred revenue is added to and forms part of the deferred revenue balance, and is recognized into income when related stipulations are met. Any surpluses received from upon debt retirement are recorded in the year received.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 3

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

1. Significant Accounting Policies (continued)

Cash Equivalents Cash equivalents include highly liquid financial instruments with a term to maturity of ninety days or less at the date of acquisition. Cash equivalents are recorded at the lower of cost plus accrued interest.

Investments Investments consist of both long and short-term instruments and are recorded at amortized cost using straight-line method.

Employee Future Benefits The District and its employees participate in the Municipal Pension Plan. The Municipal Pension Plan is a multi-employer contributory defined benefit pension plan. Payments made in the year are expensed.

Under the terms of various collective agreements and compensation policies, the District provides paid sick leave to eligible employees and in certain agreements allows unused sick days to accumulate. There are no payouts of unused sick days at termination. In addition, employees acquire certain employee benefits on termination and retirement. These include days for severance based on years of service, vacation based on years of service, Worker's Compensation top-up, and a full year's vacation entitlement in the year of retirement. The costs of these benefits are actuarially determined based on service and best estimates of retirement ages and expected future salary and wage increases. The obligation under these benefit plans is accrued based on projected benefits as the employees render services necessary to earn the future benefits. Actuarial gains and losses are amortized over the expected average remaining service period of the related employee group, commencing the year after the gain or loss arises.

Landfill Closure and Post-Closure Liability The estimated present value of landfill closure and post-closure costs is recognized as a liability. This liability is recognized based on estimated future expenses, including estimated inflation discounted to the current date and accrued based on the proportion of the total capacity of the landfill used as of the date of the statement of financial position. The change in this estimated liability during the year is recorded as an expense in operations. These estimates are reviewed and adjusted annually and any changes are recorded on a prospective basis.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 4

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

1. Significant Accounting Policies (continued)

Non-Financial Assets Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

Tangible Capital Assets Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development, or betterment of the asset. The cost, less residual value, of the tangible capital assets, except land, is amortized over their estimated useful lives. All assets are amortized on a straight line basis as follows:

Asset	Useful Life - Years
Buildings	
Housing	25 – 35
Parks	50
Watershed	25
Corporate – Head Office	40
Infrastructure	
Sewer	
Wastewater treatment, pumping stations	50
Interceptors and trunk sewer, drainage	100
Solid Waste	25 – 30
Water	
Dams, reservoirs	150
Supply mains	100
Distribution systems, drinking water treatment	50
Parks	
Bridges, culverts, fencing	20 – 40
Trails	100
Roads, erosion protection, water and sewer systems	100
Information technology systems and networks	5 – 10
Vehicles	5 – 20
Machinery, equipment, furniture, and fixtures	5 – 20

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 5

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

1. Significant Accounting Policies (continued)

Non-Financial Assets (continued)

Tangible Capital Assets

a. Annual amortization

Annual amortization begins when the asset is available for use and is expensed over its useful life. Assets under construction are transferred to the appropriate asset class and are amortized from the date the asset is available for use.

b. Contributions of tangible capital assets

Contributions of tangible capital assets are recorded at their estimated fair value at the date of receipt and as contribution revenue.

c. Works of art and cultural and historic assets

Works of art and cultural and historic assets are not recorded as assets in these financial statements.

d. Interest capitalization

The Districts do not capitalize interest costs associated with the acquisition or construction of a tangible capital asset.

Inventories of Supplies

Inventories of supplies held for consumption are recorded on a first-in, first-out basis.

Prepaid Land Leases

Prepaid land leases are recorded at historical cost less accumulated amortization. Upon expiration of the lease contract, the property will revert to the lessor. Prepaid land leases are amortized on a straight-line basis over the lease term.

Revenue Recognition

Property tax revenues and sewerage and drainage revenues from member municipalities are recognized in the year they are levied. Metered sale of water, tipping fees, permits, cost sharing, and other revenues are recognized as revenue on an accrual basis according to the usage and rates approved and set by the Board. Housing property rental revenue is recognized over the rental period once the tenant commences occupancy, rent is due and collection is assured.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 6

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

1. Significant Accounting Policies (continued)

Segmented Information A segment is defined as a distinguishable activity or group of activities of a government for which it is appropriate to separately report financial information to achieve the objectives of the standard. The District has provided definitions of the District's segments as well as presented financial information in segmented format in note 17.

Liability for Contaminated Sites A liability for remediation of a contaminated site is recognized when the site is no longer in productive use and the following criteria are satisfied: an environmental standard exists; contamination exceeds the standard; the District is either directly responsible or has accepted responsibility for remediation; it is expected that future economic benefits will be given up and a reasonable estimate of the liability can be made. Liabilities for contaminated sites is reported in accounts payable and accrued liabilities (note 6).

Use of Estimates The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the period. These estimates and assumptions are based on management's best information and judgment and may differ from actual results. Adjustments, if any, will be reflected in the financial statements in the period that the change in estimate is made, as well as in the period of settlement if the amount is different.

Significant areas requiring the use of management's judgment relate to the determination of contaminated sites liabilities, the employee future benefits liability, the estimate of accruals for projects in progress, amortization rates and useful lives for tangible capital assets, the landfill closure and post-closure liability, the assessment of the impairment of tangible capital assets and work in progress, and the assessment of the outcome of contingent liabilities.

2. Accounts Receivable

	2022	2021
GVWD	\$ 68,590	\$ 48,357
GVS&DD	108,083	139,016
MVHC	2,743	624
MVRD	14,257	5,054
	\$ 193,673	\$ 193,051

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 7

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

3. Due from TransLink and Member Municipalities

The District is reimbursed for amounts paid to the Municipal Finance Authority of British Columbia ("MFA") for the obligations incurred on behalf of its member municipalities and TransLink whose undertakings were financed out of the proceeds of these obligations (refer to note 10). The amount recoverable is net of sinking funds, held and invested by the MFA, and includes accrued interest as follows:

	Net Debt Recoverable	Accrued Interest	2022	2021
TransLink	\$ 234,324	\$ 5,169	\$ 239,493	\$ 286,467
Member municipalities	1,012,390	8,644	1,021,034	807,673
	\$ 1,246,714	\$ 13,813	\$ 1,260,527	\$ 1,094,140

4. Investments

	Yields	Maturity Dates	2022	2021
Bonds:				
Government	1.91% - 3.11%	April 2023 - March 2031	\$ 60,657	\$ 78,983
Corporate	1.97% - 5.86%	June 2024 - March 2028	47,583	51,172
Unamortized premium			4,646	3,927
			112,886	134,082
Term deposits	1.30% - 5.25%	January 2023 - July 2025	63,500	98,000
GICs	1.20% - 4.57%	January 2023 - April 2028	215,000	57,500
Total			\$ 391,386	\$ 289,582

Government bonds include debt securities issued by the federal and provincial governments of Canada, and the Municipal Finance Authority of British Columbia. Corporate bonds include Schedule I and II Chartered Banks of Canada.

Market value of investments as at December 31, 2022 was \$393,365,298 (2021 - \$294,798,145).

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 8

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

5. Debt Reserve Fund

The MFA provides financing for regional districts and member municipalities. The MFA is required to establish a Debt Reserve Fund for each debenture issue equal to one-half the average annual installment of principal and interest. The debt reserve fund is comprised of cash deposits equal to 1% of the principal amount borrowed and a non-interest bearing demand note for the remaining requirement. Cash deposits held by the MFA are payable with interest to the ultimate borrower when the final obligations under the respective loan agreements have been made.

If, at any time, the District has insufficient funds to meet payments due on its obligations to the MFA, the payments will be made from the debt reserve fund. The demand notes are callable only if there are additional requirements to be met to maintain the level of the debt reserve fund. At December 31, 2022, \$130,539,983 (2021 - \$122,534,444) in callable demand notes were outstanding and have not been recorded in the statement of financial position.

	2022	2021
Cash deposits held by MFA on behalf of:		
TransLink and member municipalities	\$ 35,231	\$ 35,179
Metro Vancouver Districts	30,291	29,209
	\$ 65,522	\$ 64,388

6. Accounts Payable and Accrued Liabilities

	2022	2021
Trade accounts	\$ 166,809	\$ 233,799
Construction holdbacks	79,654	65,181
Accrued interest on debt	27,606	23,429
Wage accruals	23,815	14,249
Contaminated sites (a)	1,495	762
	\$ 299,379	\$ 337,420

(a) In 2022, the District accrued \$1,494,860 to remediate contaminated soils at two of its properties within the GVWD. The remediation work for the properties will be completed in 2024 and 2026. The remediation work accrued in 2021 within the GVS&DD was completed.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 9

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

7. Employee Future Benefits

The employee future benefits have been based on the results of an actuarial valuation done by an independent actuarial firm. A full valuation was performed as of December 31, 2022.

Information about liabilities for the District's employee benefit plans is as follows:

	2022	2021
Accrued benefit obligation:		
Balance, beginning of year	\$ 19,008	\$ 20,362
Current service cost	1,572	1,656
Interest cost	467	376
Benefits paid	(2,216)	(2,330)
Workers compensation top-up	—	(120)
Actuarial loss	(204)	(936)
Accrued benefit obligation, end of year	18,627	19,008
Unamortized actuarial loss	(4,025)	(5,101)
Accrued benefit liability, end of year	\$ 14,602	\$ 13,907

	2022	2021
Employee future benefit expense:		
Current service cost	\$ 1,572	\$ 1,656
Interest cost	467	376
Workers compensation top-up	—	(120)
Amortization of the actuarial loss	872	956
	\$ 2,911	\$ 2,868

The significant actuarial assumptions adopted in measuring the District's accrued benefit obligation are as follows:

	2022	2021
Discount rate	4.4%	2.4%
Expected future inflation rate	2.5%	2.0%
Expected average remaining service period	12 years	11 years

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 10

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

8. Landfill Closure and Post-Closure Liability

The District is responsible for its share of closure and post-closure costs at landfill sites as detailed below.

- a) The Vancouver landfill is located in Delta, BC. In accordance with an agreement with the City of Vancouver, the District is responsible for its proportionate share of the closure and post-closure liability based on usage. The present value of the District's estimated future liability for these expenses is recognized as the landfill site's capacity is used and is as follows:

	2022	2021
Landfill closure and post closure liability	\$ 41,026	\$ 32,907

The closure and post-closure liability and annual expense is calculated based on the ratio of actual utilization to total expected utilization of the site's capacity at the date of closure. It is based on estimates and assumptions with respect to events extending over the remaining life of the Vancouver landfill, including provisions contained in Metro Vancouver's Integrated Solid Waste and Resource Management Plan. The significant estimates and assumptions adopted in measuring the District's share of the closure and post-closure liability are as follows:

	2022	2021
Current actual utilization (in 000's tonnes)	23,196	22,521
tonnes)	28,300	28,219
Expected remaining capacity (in 000's tonnes)	5,104	5,698
Permitted capacity (in 000's tonnes)	33,039	33,039
Future costs (in \$000's)	\$ 212,638	\$ 197,189
Present value of future costs (in \$000's)	\$ 136,569	\$ 115,934
Proportionate share of liability	36.65%	35.57%
Utilization of total capacity, end of year	81.97%	79.81%
Discount rate	2.58%	2.73%
Expected post-closure period	30 years	30 years
Expected closure date	December 31, 2037	December 31, 2037

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 11

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

8. Landfill Closure and Post-Closure Liability (continued)

b) The Cache Creek landfill is located in the Village of Cache Creek, BC. The landfill permit obligates the Village of Cache Creek and a third party service provider to undertake closure and post-closure activities. The District, in accordance with an agreement with the Village, was required to contribute quarterly to a trust fund, held with the Province of British Columbia, to a Post Closure Maintenance and Repair Fund at rates consistent with the operational certificate for the landfill. The agreement indemnifies the Village for any post closure liabilities not covered by this fund. At December 31, 2022, the lower of amortized book value and market value of the trust was \$15,403,059 (2021 - \$16,261,510), which approximates the post-closure liability.

The Cache Creek landfill was closed December 2016. The actual utilization at closure was 10,319 thousand tonnes and the permitted capacity was 10,372 thousand tonnes. The post-closure period is expected to be 30 years. The present value of District's estimated future post-closure liability is sufficiently funded by the trust.

9. Deferred Revenue and Refundable Deposits

The deferred revenue consists of the following:

	2022	2021
MVHC externally restricted funds from BCHMC (a)		
i) Rental operations	\$ 48	\$ 47
ii) Replacement projects	3,457	3,376
	3,505	3,423
GVS&DD development cost charges (b)	273,596	258,634
Provincial grant to fund capital expenditures (c)	56,496	69,696
Facility rental security deposits	6,414	6,360
Other	3,036	2,903
Total	\$ 343,047	\$ 341,016

(a) Amounts received under the following MVHC programs have been recorded as deferred revenue:

i) Rental Operations: Under operating agreements entered into with Canada Mortgage and Housing Corporation ("CMHC") and administered by British Columbia Housing Management Commission ("BCHMC") (Homes BC, Seniors, and Investment in Housing Innovation properties), a portion of the funds received from rental operations are restricted and can only be used by MVHC according to the terms of the agreements. Restricted amounts are recorded as deferred revenue and are used when expenditures exceed revenue in the program.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 12

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

9. Deferred Revenue and Refundable Deposits (continued)

- ii) Replacement Projects: Under operating agreements entered into with Canada Mortgage and Housing Corporation (“CMHC”) and administered by BCHMC (Homes BC, Seniors, and Investment in Housing Innovation properties), a portion of the funds received from rental operations are restricted for the replacement of equipment and specified building components. These funds are deferred until spent on approved items.
- (b) The *Greater Vancouver Sewerage and Drainage District Act* restricts the District to applying money raised from development cost charges to funding sewer capital projects, including the repayment of debt raised to fund such projects.
- (c) In 2017, the GVS&DD received a grant from the Province of British Columbia in the amount of \$193.0 million for costs associated with the construction of the new North Shore Wastewater Treatment Plant Facility. During 2022, \$15.39 million (2021 - \$20.49 million) was applied against the project and recognized as revenue.

Continuity of deferred revenue and refundable deposits is as follows:

	2022	2021
Balance, beginning of year	\$ 341,016	\$ 311,451
Externally restricted contributions received:		
GVS&DD development cost charges	68,941	85,105
MVHC restricted funds	1,035	1,420
Interest earned	8,275	3,628
Total contributions received	78,251	90,153
Contributions used and recognized in revenue	(77,275)	(63,781)
Net change in externally restricted contributions	976	26,372
Change in deposits and other deferred revenues	1,055	3,193
	2,031	29,565
Balance, end of year	\$ 343,047	\$ 341,016

10. Debt

- a) The District serves as the borrowing conduit between member municipalities (excluding the City of Vancouver) and the MFA. The GVS&DD and GVWD also access the MFA through the MVRD. Prior to 2007, the District also served as the borrowing conduit for the Greater Vancouver Transportation Authority, commonly referred to as “TransLink”. The District, TransLink, and the municipalities in the transportation service region are jointly and severally liable for obligations arising under a security issued by the District on behalf of TransLink.
- b) All monies borrowed are upon the District’s credit at large and, in the event of any default, would constitute an indebtedness for which its members are jointly and severally liable.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 13

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

10. Debt (continued)

- c) Debt servicing requirements comprising sinking fund contributions, serial and mortgage principal repayments and interest are funded as incurred by revenue earned during the year.
- d) Sinking fund installments are invested by the MFA and earn income which, together with principal payments, are expected to be sufficient to retire the sinking fund debt at maturity. For sinking fund agreements, the MFA has established either a normal sinking fund or a capital repayment equalization fund.
- e) In addition to debt incurred directly by the District, the District has also incurred long-term debt on behalf of its member municipalities and TransLink through agreements with the MFA. Under the terms of these agreements, the District is required to provide for and pay to the MFA certain sums. Debt incurred on behalf of others is also presented as due from TransLink and member municipalities (note 3). Where the MFA has determined that sufficient resources exist to retire a debenture on its maturity date without further installments, debenture installments are suspended by the MFA. If the sums provided for are not sufficient, such deficiency shall be a liability of the District to the MFA until legally extinguished.

The District is reimbursed for amounts paid to the MFA for the obligations incurred on behalf of the member municipalities and TransLink whose undertakings were financed out of the proceeds of these obligations.

The following summarizes the debt incurred by the District as well as debt incurred on behalf of the member municipalities and TransLink.

	Mortgages and Debenture Debt	Less Sinking Funds	Debt, Net of Sinking Fund	
			2022	2021
GVS&DD	\$ 1,431,000	\$ 252,856	\$ 1,178,144	\$ 1,094,985
GVWD	1,207,631	544,120	663,511	711,163
MVHC	42,647	—	42,647	45,341
	2,681,278	796,976	1,884,302	1,851,489
TransLink	713,606	479,282	234,324	281,223
Member municipalities	1,254,441	242,051	1,012,390	801,883
	1,968,047	721,333	1,246,714	1,083,106
	\$ 4,649,325	\$ 1,518,309	\$ 3,131,016	\$ 2,934,595

- f) Debt (net of sinking funds) reported on the statement of financial position is comprised of the following and includes varying maturities up to 2055, with interest rates ranging from 0.30% to 5.65%.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 14

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

10. Debt (continued)

Issue number	Interest rate - %	Maturity date	Authorized to be issued	Debt Outstanding	
				2022	2021
Sinking Fund Agreements					
67	0.70-1.75	November 5, 2022	\$ 15,000	\$ —	\$ 15,000
77	0.65-1.75	June 1, 2022	100,100	—	84,100
78	2.25	December 3, 2022	89,252	—	1,252
79	2.25	June 3, 2023	74,025	225	225
85	2.25-5.47	December 2, 2024	69,760	22,760	22,760
86	5.44	December 2, 2024	50,000	50,000	50,000
95	4.77	October 13, 2025	10,900	2,300	2,300
96	4.61	April 2, 2026	50,000	50,000	50,000
97	1.53-4.90	April 19, 2036	175,000	153,000	153,000
99	4.99	October 19, 2026	66,300	16,300	16,300
100	4.59	October 19, 2026	200,000	180,000	180,000
102	2.25-5.09	December 1, 2027	436,395	289,395	369,395
103	2.65	April 23, 2023	40,000	40,000	40,000
104	2.90	November 20, 2028	56,281	56,281	56,281
105	2.25	June 3, 2029	68,300	68,300	68,300
106	2.25	October 13, 2039	140,600	125,000	125,000
110	1.28	April 8, 2030	60,730	60,730	60,730
112	1.28	October 6, 2035	74,775	74,775	74,775
116	1.47	April 4, 2036	152,292	152,292	152,292
118	3.39	April 11, 2042	96,000	96,000	96,000
120	0.30	June 29, 2022	2,000	—	2,000
121	3.39	October 4, 2037	74,961	72,286	72,286
124	3.15	April 8, 2043	3,000	3,000	3,000
126	3.85	September 26, 2043	155,209	155,209	155,209
127	3.30	April 7, 2034	115,415	115,415	115,415
130	3.00	October 14, 2029	50,000	50,000	50,000
131	2.20	April 8, 2035	121,500	121,500	121,500
137	2.60	April 19, 2046	149,772	149,772	149,772
139	2.10	October 5, 2031	55,000	55,000	55,000
141	2.80	April 7, 2047	152,463	152,463	152,463
142	3.15	October 4, 2047	77,983	77,983	77,983
145	3.15	April 23, 2048	122,275	122,275	122,275
146	3.20	September 19, 2048	282,500	282,500	282,500
147	2.66	April 9, 2034	62,000	62,000	62,000
149	2.24	October 9, 2049	140,095	140,095	140,095
150	1.99	April 9, 2050	168,133	168,133	168,133
151	1.28	June 1, 2050	185,987	185,987	185,987
153	2.41	April 15, 2046	129,000	129,000	129,000
154	2.41	May 28, 2036	500,000	500,000	500,000
156	2.58	September 27, 2046	150,600	150,600	150,600
157	3.36	April 8, 2037	207,500	207,500	—
158	4.09	September 23, 2052	245,470	245,470	—
Total sinking fund agreements (carried forward)			\$ 5,176,573	\$ 4,583,546	\$ 4,312,928

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 15

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

10. Debt (continued)

Issue number	Interest rate - %	Maturity date	Authorized to be issued	Debt Outstanding	
				2022	2021
Total sinking fund agreements (brought forward)			\$ 5,176,573	\$ 4,583,546	\$ 4,312,928
Serial Debt					
93	5.10-5.65	April 7, 2027	79,014	17,735	22,143
111	3.35	October 1, 2025	3,000	724	950
114	3.65	March 29, 2026	6,301	2,024	2,486
122	2.00	November 1, 2032	1,999	1,000	1,099
123	2.00	March 28, 2033	3,142	1,649	1,807
Total serial debt			93,456	23,132	28,485
Total debenture debt			\$ 5,270,029	\$ 4,606,678	\$ 4,341,413
MVHC Mortgages					
	1.44 - 4.87	January 2023 to December 2055		50,901	54,519
Less MVRD financed mortgages				(8,254)	(9,178)
Total MVHC mortgages				42,647	45,341
Total debt				4,649,325	4,386,754
Less sinking funds				(1,518,309)	(1,452,159)
Total debt, net of sinking funds				\$ 3,131,016	\$ 2,934,595

- g) Principal payments and sinking fund installments due within the next five years and thereafter are as follows:

	Total Long-Term Debt Payments	Less Recoverable from TransLink and Member Municipalities	Net Debt Payments
2023	\$ 216,337	\$ 69,699	\$ 146,638
2024	212,000	69,838	142,162
2025	197,289	63,051	134,238
2026	187,578	59,713	127,865
2027	173,438	48,306	125,132
Thereafter	1,327,343	489,606	837,737
Total payments	2,313,985	800,213	1,513,772
Estimated sinking fund income	817,031	446,501	370,530
Total net debt	\$ 3,131,016	\$ 1,246,714	\$ 1,884,302

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 16

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

11. Tangible Capital Assets

Year ended December 31, 2022

	Cost			Accumulated Amortization				Net Book Value December 31, 2022	
	Balance at December 31, 2021	Additions	Disposals	Balance at December 31, 2022	Balance at December 31, 2021	Disposals	Amortization Expense		Balance at December 31, 2022
Land									
Sewer and Drainage District	\$ 162,872	\$ 23,590	\$ (104)	\$ 186,358	\$ —	\$ —	\$ —	\$ —	\$ 186,358
Water District	53,664	79,050	—	132,714	—	—	—	—	132,714
Regional District	914,517	5,152	—	919,669	—	—	—	—	919,669
Metro Vancouver Housing Corporation	52,274	—	—	52,274	—	—	—	—	52,274
	1,183,327	107,792	(104)	1,291,015	—	—	—	—	1,291,015
Infrastructure									
Sewer and Drainage District	2,168,652	300,885	—	2,469,537	708,339	—	44,809	753,148	1,716,389
Water District	2,245,795	180,999	—	2,426,794	437,619	—	36,322	473,941	1,952,853
Regional District	129,501	3,505	(1,257)	131,749	68,134	(1,257)	4,761	71,638	60,111
	4,543,948	485,389	(1,257)	5,028,080	1,214,092	(1,257)	85,892	1,298,727	3,729,353
Buildings									
Water District	216,476	—	—	216,476	24,688	—	5,463	30,151	186,325
Regional District	26,880	—	—	26,880	10,357	—	540	10,897	15,983
Metro Vancouver Housing Corporation	220,339	3,250	—	223,589	176,544	—	2,290	178,834	44,755
	463,695	3,250	—	466,945	211,589	—	8,293	219,882	247,063
Vehicles									
Regional District	30,621	2,195	(413)	32,403	24,452	(413)	2,325	26,364	6,039
	30,621	2,195	(413)	32,403	24,452	(413)	2,325	26,364	6,039
Machinery, equipment, furniture & fixtures									
Sewer and Drainage District	8,818	171	—	8,989	7,875	—	360	8,235	754
Water District	13,197	425	—	13,622	7,425	—	1,042	8,467	5,155
Regional District	21,169	773	(150)	21,792	18,428	(148)	743	19,023	2,769
Metro Vancouver Housing Corporation	6,439	619	(497)	6,561	4,743	(362)	487	4,868	1,693
	49,623	1,988	(647)	50,964	38,471	(510)	2,632	40,593	10,371
Construction in progress									
Sewer and Drainage District	1,579,940	65,368	—	1,645,308	—	—	—	—	1,645,308
Water District	796,461	36,874	—	833,335	—	—	—	—	833,335
Regional District	5,391	3,725	—	9,116	—	—	—	—	9,116
Metro Vancouver Housing Corporation	8,077	16,625	—	24,702	—	—	—	—	24,702
	2,389,869	122,592	—	2,512,461	—	—	—	—	2,512,461
	\$ 8,661,083	\$723,206	\$ (2,421)	\$9,381,868	\$1,488,604	\$ (2,180)	\$ 99,142	\$1,585,566	\$7,796,302
Totals 2022									
Sewer and Drainage District	\$ 3,920,282	\$390,014	\$ (104)	\$4,310,192	\$ 716,214	\$ —	\$ 45,169	\$ 761,383	\$3,548,809
Water District	3,325,593	297,348	—	3,622,941	469,732	—	42,827	512,559	3,110,382
Regional District	1,128,079	15,350	(1,820)	1,141,609	121,371	(1,818)	8,369	127,922	1,013,687
Metro Vancouver Housing Corporation	287,129	20,494	(497)	307,126	181,287	(362)	2,777	183,702	123,424
	\$ 8,661,083	\$723,206	\$ (2,421)	\$9,381,868	\$1,488,604	\$ (2,180)	\$ 99,142	\$1,585,566	\$7,796,302

Construction in progress includes \$522.6 million (2021- \$495.7 million) related to the North Shore Wastewater Treatment Plant Project (note 15).

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 17

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

11. Tangible Capital Assets (continued)

Year ended December 31, 2021

	Cost			Accumulated Amortization				Net Book Value December 31, 2021	
	Balance at December 31, 2020	Additions	Disposals	Balance at December 31, 2021	Balance at December 31, 2020	Disposals	Amortization Expense		Balance at December 31, 2021
Land									
Sewer and Drainage District	\$ 116,050	\$ 46,822	\$ —	\$ 162,872	\$ —	\$ —	\$ —	\$ —	\$ 162,872
Water District	44,704	8,960	—	53,664	—	—	—	—	53,664
Regional District	889,758	25,869	(1,110)	914,517	—	—	—	—	914,517
Metro Vancouver Housing Corporation	52,274	—	—	52,274	—	—	—	—	52,274
	1,102,786	81,651	(1,110)	1,183,327	—	—	—	—	1,183,327
Infrastructure									
Sewer and Drainage District	1,621,113	547,539	—	2,168,652	676,347	—	31,992	708,339	1,460,313
Water District	2,118,002	127,793	—	2,245,795	402,689	—	34,930	437,619	1,808,176
Regional District	125,581	4,734	(814)	129,501	63,766	(814)	5,182	68,134	61,367
	3,864,696	680,066	(814)	4,543,948	1,142,802	(814)	72,104	1,214,092	3,329,856
Buildings									
Water District	216,476	—	—	216,476	19,225	—	5,463	24,688	191,788
Regional District	26,880	—	—	26,880	9,817	—	540	10,357	16,523
Metro Vancouver Housing Corporation	220,575	(236)	—	220,339	174,053	—	2,491	176,544	43,795
	463,931	(236)	—	463,695	203,095	—	8,494	211,589	252,106
Vehicles									
Regional District	31,093	571	(1,043)	30,621	22,693	(1,043)	2,802	24,452	6,169
	31,093	571	(1,043)	30,621	22,693	(1,043)	2,802	24,452	6,169
Machinery, equipment, furniture & fixtures									
Sewer and Drainage District	8,799	19	—	8,818	7,390	—	485	7,875	943
Water District	13,197	—	—	13,197	6,395	—	1,030	7,425	5,772
Regional District	20,776	499	(106)	21,169	17,561	(106)	973	18,428	2,741
Metro Vancouver Housing Corporation	6,463	480	(504)	6,439	4,720	(504)	527	4,743	1,696
	49,235	998	(610)	49,623	36,066	(610)	3,015	38,471	11,152
Construction in progress									
Sewer and Drainage District	1,707,335	(127,395)	—	1,579,940	—	—	—	—	1,579,940
Water District	717,260	79,201	—	796,461	—	—	—	—	796,461
Regional District	4,938	453	—	5,391	—	—	—	—	5,391
Metro Vancouver Housing Corporation	2,885	5,192	—	8,077	—	—	—	—	8,077
	2,432,418	(42,549)	—	2,389,869	—	—	—	—	2,389,869
	\$7,944,159	\$720,501	\$ (3,577)	\$8,661,083	\$1,404,656	\$ (2,467)	\$ 86,415	\$1,488,604	\$7,172,479
Totals 2021									
Sewer and Drainage District	\$3,453,297	\$466,985	\$ —	\$3,920,282	\$ 683,737	\$ —	\$ 32,477	\$ 716,214	\$3,204,068
Water District	3,109,639	215,954	—	3,325,593	428,309	—	41,423	469,732	2,855,861
Regional District	1,099,026	32,126	(3,073)	1,128,079	113,837	(1,963)	9,497	121,371	1,006,708
Metro Vancouver Housing Corporation	282,197	5,436	(504)	287,129	178,773	(504)	3,018	181,287	105,842
	\$7,944,159	\$720,501	\$ (3,577)	\$8,661,083	\$1,404,656	\$ (2,467)	\$ 86,415	\$1,488,604	\$7,172,479

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 18

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

12. Prepaid Land Leases

	2022	2021
Balance, beginning of year	\$ 5,062	\$ 5,257
Amortization	(194)	(195)
Balance, end of year	\$ 4,868	\$ 5,062

The lease terms for the properties are as follows:

Asset	Lease Expiry Dates	Lease Term (Years)
Buildings		
Habitat Villa	February 2029	50
Walnut Gardens	May 2026	42
Other prepaid land leases	May 2036 to June 2062	60

13. Accumulated Surplus

Accumulated surplus consists of individual fund surplus and reserves as follows:

	2022	2021
Reserves	\$ 441,040	\$ 394,831
Capital fund balance	(93,442)	165,821
Investment in tangible capital assets	5,912,000	5,320,990
Total	\$ 6,259,598	\$ 5,881,642

Capital fund balance represents the future expected level of funding required or accumulated.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 19

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

13. Accumulated Surplus (continued)

The reserves are classified as either operating, discretionary or statutory and are presented in the following schedules:

	December 31, 2021	Interest	Annual Operating Surplus (Deficit)	Transfers	Contributions from (to) Operations	Contributions to Capital	December 31, 2022
Reserve funds							
Operating reserves							
Metro Vancouver Regional District							
Air Quality	\$ 2,098	\$ 51	\$ 1,909	\$ —	\$ —	\$ —	\$ 4,058
E911 Emergency Telephone Service	391	9	74	—	—	—	474
Electoral Area Services	23	1	—	—	—	—	24
General Government	6,118	145	1,585	—	(739)	—	7,109
Housing Planning and Policy	198	5	223	—	—	—	426
Invest Vancouver	21	—	643	—	—	—	664
Regional Employer Services	463	11	333	—	—	—	807
Regional Emergency Management	199	5	61	—	—	—	265
Regional Geospatial Reference System	227	5	172	—	—	—	404
Regional Parks	3,373	64	1,807	—	(1,300)	—	3,944
Regional Planning	866	21	141	—	—	—	1,028
Sasamat Fire Protection Service	105	3	24	—	—	—	132
West Nile Virus	366	9	—	—	—	—	375
MVRD operating reserves	14,448	329	6,972	—	(2,039)	—	19,710
Greater Vancouver Water District							
Water Services	28,602	692	7,954	—	—	—	37,248
GVWD operating reserves	28,602	692	7,954	—	—	—	37,248
Greater Vancouver Sewerage and Drainage District							
Liquid Waste Services	32,955	797	14,021	—	(3,331)	—	44,442
Solid Waste Services	39,213	948	(2,343)	—	—	—	37,818
GVS&DD operating reserves	72,168	1,745	11,678	—	(3,331)	—	82,260
MVHC operating Reserves	2,578	62	10,309	—	—	—	12,949
Total operating reserves	117,796	2,828	36,913	—	(5,370)	—	152,167
Discretionary reserves							
Metro Vancouver Regional District							
Air Quality	1,363	32	—	—	(589)	—	806
Electoral Area Service	1,718	40	45	(130)	(21)	—	1,652
E911 Emergency Telephone Service	601	15	—	—	(584)	—	32
General Government	7,256	175	—	—	—	—	7,431
Invest Vancouver	1,288	31	—	—	(600)	—	719
Regional Emergency Management	338	8	—	—	—	—	346
Regional Employer Services	2,323	56	—	—	—	—	2,379
Regional Planning	2,583	62	—	—	(139)	—	2,506
Regional Parks	203	5	—	—	—	—	208
Centralized Support	24,899	604	2,267	—	(2,037)	—	25,733
MVRD discretionary reserves	42,572	1,028	2,312	(130)	(3,970)	—	41,812
Greater Vancouver Sewerage and Drainage District							
Biosolids Inventory	20,029	484	—	—	(4,704)	—	15,809
Liquid Waste General Debt Reserve Fund	2,123	51	—	—	—	—	2,174
Lions Gate Contingency	1,490	36	—	—	—	—	1,526
Drainage General	5,292	128	—	—	—	—	5,420
Solid Waste General	26,562	436	—	—	—	—	26,998
Landfill Post Closure	11,307	273	—	—	—	—	11,580
GVS&DD discretionary reserves	66,803	1,408	—	—	(4,704)	—	63,507
Metro Vancouver Housing Corporation							
MVHC Capital Development	43,769	1,059	—	—	—	(5,300)	39,528
MVHC Capital Replacement	5,000	13	—	—	(2,414)	—	2,599
MVHC discretionary reserves	48,769	1,072	—	—	(2,414)	(5,300)	42,127
Total discretionary reserves	158,144	3,508	2,312	(130)	(11,088)	(5,300)	147,446
Operating and discretionary reserves (carried forward)	\$ 275,940	\$ 6,336	\$ 39,225	\$ (130)	\$ (16,458)	\$ (5,300)	\$ 299,613

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 20

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

13. Accumulated Surplus (continued)

	December 31, 2021	Interest	Annual Operating Surplus (Deficit)	Transfers	Contributions from (to) Operations	Contributions to Capital	December 31, 2022
Operating and discretionary reserves							
Reserves (brought forward)	\$ 275,940	\$ 6,336	\$ 39,225	\$ (130)	\$ (16,458)	\$ (5,300)	\$ 299,613
Statutory reserves							
Metro Vancouver Regional District							
Electoral Area Community Works	563	17	—	130	38	—	748
Electoral Area Election	60	1	13	—	(60)	—	14
MVRD Sustainability Innovation Fund	12,372	300	—	—	(643)	—	12,029
Grants Reserve Fund	2,158	104	—	—	(150)	—	2,112
Housing Planning and Policy	4,252	116	—	—	1,000	—	5,368
Housing Planning and Policy Development	8,047	247	—	—	4,000	—	12,294
Regional Geospatial Reference System	1,093	26	—	—	45	—	1,164
Regional Parks Infrastructure	6,827	190	—	—	2,468	(3,239)	6,246
Parkland Acquisition	9,488	229	—	—	—	—	9,717
Parkland Acquisition and Development	11,322	454	—	—	19,570	(5,152)	26,194
Delta Airpark	162	4	—	—	(21)	—	145
Regional Parks Legacy	2,666	64	—	—	(50)	—	2,680
Sasamat Fire Protection Services	1,224	35	—	—	339	—	1,598
Corporate Self Insurance	1,188	29	—	—	350	—	1,567
Corporate Fleet	22,424	542	3,239	—	—	(2,135)	24,070
MVRD statutory reserves	83,846	2,358	3,252	130	26,886	(10,526)	105,946
Greater Vancouver Water District							
Laboratory Equipment	785	19	—	—	—	—	804
Water Services Sustainability Innovation Fund	14,310	356	—	—	(88)	—	14,578
GVWD statutory reserves	15,095	375	—	—	(88)	—	15,382
Greater Vancouver Sewerage and Drainage District							
Liquid Waste Laboratory Equipment	608	16	—	—	101	—	725
Liquid Waste Services Sustainability Innovation Fund	19,341	483	—	—	(450)	—	19,374
GVS&DD statutory reserves	19,949	499	—	—	(349)	—	20,099
Total statutory reserves	118,890	3,232	3,252	130	26,449	(10,526)	141,427
Total reserves	\$ 394,830	\$ 9,568	\$ 42,477	\$ —	\$ 9,991	\$ (15,826)	\$ 441,040

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 21

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

13. Accumulated Surplus (continued)

Investment in tangible capital assets is calculated as follows:

	2022	2021
Tangible capital assets	\$ 7,796,302	\$ 7,172,479
Amount financed by:		
Long-term debt, net of members, TransLink, and sinking fund	(1,884,302)	(1,851,489)
	\$ 5,912,000	\$ 5,320,990
Change in the investment in tangible capital assets		
Acquisition of tangible capital assets	\$ 723,206	\$ 720,501
Amortization of tangible capital assets	(99,142)	(86,415)
Disposal of tangible capital assets (net of book value)	(241)	(1,110)
	623,823	632,976
Less financing (net of members and TransLink debt)		
Sinking fund debt maturity	15,000	10,000
Sinking fund debt retirement	(136,608)	(105,326)
Sinking fund debt retirement income	(27,885)	(25,710)
Debenture debt issued	200,000	600,000
Debenture debt maturity	(15,000)	(10,000)
Payment of long-term debt	(2,694)	(2,920)
	32,813	466,044
Change in investment in tangible capital assets	591,010	166,932
Investment in tangible capital assets, beginning of year	5,320,990	5,154,058
Investment in tangible capital assets, end of year	\$ 5,912,000	\$ 5,320,990

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 22

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

14. Contractual Obligations and Rights

a) Contractual Obligations

- i) As at December 31, 2022, the District had the following commitments relating to projects in progress.

	Authorized and Outstanding Projects	Expended at December 31	Total 2022	Total 2021
GVS&DD	\$ 5,139,887	\$ (2,553,670)	\$ 2,586,217	\$ 1,757,138
GVWD	2,620,217	(1,030,341)	1,589,876	1,429,253
MVRD	45,668	(8,641)	37,027	12,846
MVHC	322,500	(24,106)	298,394	346,323
Total	\$ 8,128,272	\$ (3,616,758)	\$ 4,511,514	\$ 3,545,560

- ii) The District is committed under a number of lease and right-of-way agreements to make minimum annual payments. These agreements have varying terms, including three agreements, with annual payments to perpetuity, with adjustments annually for CPI. Estimated payments over the next ten years are as follows:

	Amount
2023	\$ 2,235
2024	2,268
2025	2,107
2026	2,123
2027	2,156
2028 - 2032	11,309
Total	\$ 22,198

b) Contractual Rights

The District is party to several property lease agreements that are anticipated to provide future revenues. These agreements are with third parties with varying terms to 2035. Amounts anticipated to be received over the future years are as follows:

	Amount
2023	\$ 6,282
2024	5,477
2025	4,400
2026	3,128
2027	1,209
Thereafter	5,474
Total	\$ 25,970

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 23

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

15. Contingencies

Lawsuits

As at December 31, 2022, there were various lawsuits pending against the District arising in the ordinary course of business. The District has retained legal counsel to defend against these lawsuits. Where the outcomes or amounts cannot be reasonably determined, no liability has been recorded. Management is of the opinion that losses, if any, in connection with these lawsuits can be sufficiently funded by reserve funds or covered by insurance. Any expected losses will be accrued and recorded as expenses at the time they are considered likely and amounts are reasonably determinable.

North Shore Wastewater Treatment Plant

The GVS&DD is building a new tertiary wastewater treatment plant on a former industrial site in North Vancouver to replace the primary-only Lions Gate Wastewater Treatment Plant. The deadline for completion of the project under federal regulation was December 31, 2020. In 2021, the GVS&DD served notice to terminate its contract with the vendor hired to design, build and commission the future North Shore Wastewater Treatment Plant, having determined that the vendor was in breach of contract. As of the contract termination date in 2021, the GVS&DD has paid \$309.5 million, net of GST rebates, to the vendor for work completed, which has been recorded as construction in progress (note 11). In 2022, the vendor commenced legal action by filing a claim against the GVS&DD in excess of \$250 million to which the GVS&DD filed a counter-claim against the vendor in excess of \$500 million. In 2022, the GVS&DD also drew on an irrevocable letter of credit in the amount of \$50.0 million as a result of the contract termination. As at December 31, 2022, the outcome of any legal proceedings related to the terminated contract and the potential consequences of not meeting the current deadline under the federal regulation is undeterminable.

Due to the nature of the contractual payments made to date under the terminated contract, the outstanding litigation and uncertainty surrounding the value of the new contract for completion of the project, the amount recorded as work in progress of \$522.6 million (2021 - \$495.7 million) represents management's best estimate. This amount may be subject to material change as new information becomes available.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 24

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

15. Contingencies (continued)

Self-Insurance Reserve

A self-insurance reserve has been established within accumulated surplus to cover losses resulting from uninsured liability exposures of the District.

Each year a review is undertaken to determine if it would be beneficial to purchase additional liability insurance. The District transfers amounts to the reserve depending on the reserve's adequacy to cover retained liability risk.

An estimate is made for all costs of investigating and settlement of claims annually and an adjustment is made to the reserve to maintain an adequate balance to cover potential losses in excess of recorded liabilities. These estimates are changed as additional information becomes known during the course of claims settlement. Any likely losses would be expensed at the time the losses are known and the amounts are reasonably determinable.

Debt Reserve Fund

The MFA is required to establish a Debt Reserve Fund for each debenture which is comprised of cash deposits and a non-interest bearing demand note (refer to note 5). If, at any time, the District has insufficient funds to meet payments due on its obligations to MFA, the payments will be made from the debt reserve fund. The demand notes are callable only if there are additional requirements to be met to maintain the level of the debt reserve fund, and therefore have not been recorded in the statement of financial position.

BCHMC Grant Funding

In 2018 and 2019, MVHC received funding of \$6.7 million in total from BCHMC relating to the re-development of Heather Place property. The conditions of the funding agreement stipulate that the property must be continuously used for the provision of housing for eligible occupants and there is no default under the loan or operating agreement over 35 years. Should a breach in the agreement occur, the outstanding balance of the funding would need to be repaid to BCHMC (\$6.7 million as at December 31, 2022). The contingent liability is reduced by 1/25th annually, commencing in the 11th year of the agreement. Payments of interest will not be required unless there is a default and consequently interest will be payable on the balance of the principal amount outstanding at prime plus 2% per annum, compounded semi-annually and not in advance.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 25

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

15. Contingencies (continued)

BCHMC Loan Funding

In 2022, MVHC entered into a demand non-revolving construction loan agreement with BC Housing Management Commission for funding for the Kingston Gardens re-development project. The maximum approved construction loan amount is \$44,642,752. Amounts drawn from the loan must be repaid no later than August 1, 2024. The BCHMC construction loan is to be repaid by a BCHMC investment of \$8,300,000 and take-out mortgage obtained through CMHC's National Housing Co-Investment Fund for \$29,411,377. Any amounts remaining of up to \$6,931,375, will be paid from MVHC's reserves.

Interest payable on the loan will be calculated based on a variable rate of not more than the Royal Bank of Canada Prime Rate plus 1.00%, compounded monthly, not in advance. As at December 31, 2022, no amounts were drawn from the demand loan.

Letters of Credit

At December 31, 2022, the GVS&DD is the named beneficiary of \$758 thousand (2021 - \$60.37 million) of irrevocable letters of credits from financial institutions related to construction projects and Solid Waste operations. These letters of credit are available under circumstances in which the service provider does not fulfil its obligation to the District and therefore the amount is not recorded as assets.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 26

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

16. Budget Information

The annual budget presented in these financial statements is based upon the 2022 operating and capital budgets originally approved by the District's Board in October 2021, with additional approval in November 2022 for adjustments to the budget as a result of the 2021 fiscal year end results. The budget is based on operational and capital expenditure requirements and their associated funding. Amortization is a non-cash item that is not funded for budget purposes. Also, contributions to or from reserves and debt principal repayments are removed from the approved budget for financial statement presentation. The schedule below reconciles the approved budget to the budget figures reported in these financial statements. Capital expenditures of \$1.39 billion were included in the capital budget approved by the Board.

	2022 Budget	2021 Budget
Budgeted annual surplus per Exhibit B - Statement of	\$ 451,760	\$ 580,551
Additional transfers from reserves, approved by Board	3,634	1,575
Adjusted annual surplus, based on originally approved budget	455,394	582,126
Items not included in the operating budget		
Amortization of tangible capital assets	96,267	86,428
Contributions from deferred revenue	(110,665)	(251,932)
Sinking fund and debt retirement income	(25,566)	(23,044)
Development cost charge revenue	(42,329)	(45,000)
MVHC development grant	(17,536)	(8,500)
Reserve interest	(6,592)	(6,079)
Items included in budget but not in financial statements		
Sinking fund and debt retirement payments	(140,561)	(108,890)
Transfers to capital fund	(203,053)	(205,371)
Transfers from reserve funds	30,865	14,940
Transfer to reserve funds	(36,224)	(34,678)
Annual surplus per approved budget	—	—

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 27

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

17. Segmented Information and Expenses by Object

The District is a diversified municipal government organization that provides a wide range of services directly to the public and its member municipalities through its four legal entities: the MVRD, the GVS&DD, the GVWD, and the MVHC. For management reporting purposes, the District's operations and activities are organized and reported by service areas within the legal entities.

The salaries and benefits reported in the segmented information below do not include \$31.47 million (2021 - \$32.88 million) directly attributable to the construction of tangible capital assets which have been capitalized and included in tangible capital assets in the Statement of Financial Position.

The legal entities disclosed in the segmented information, along with the service areas provided are as follows:

GVS&DD

Liquid Waste Services

The Liquid Waste Management Service is responsible for the collection, treatment and discharge of liquid waste for member municipalities. It operates a number of wastewater treatment plants and a related collection network connected to the member municipalities' systems.

Solid Waste Services

The Solid Waste Management Service is responsible for the disposal of solid waste both for the member municipalities and the public. It owns and operates several solid waste facilities including a waste-to-energy facility.

GVWD

Water Operations

Water Operations is responsible for the supply of potable water to its member municipalities. It owns a series of dams, reservoirs, water treatment plants and a distribution network connected to the member municipalities' systems.

Building Operations

Building Operations is responsible for operating and maintaining office buildings owned by GVWD. These facilities are leased to MVRD and its related legal entities for its head office operations as well as to external parties.

MVHC

Metro Vancouver Housing Corporation is a wholly-owned subsidiary of MVRD, which owns and operates housing sites within the Lower Mainland for the purpose of providing affordable rental housing on a non-profit basis through various housing programs, some federally and some provincially funded. MVHC's portfolio consists of "rent-geared-to-income", partial rent assistance, and low-end-of-market units.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 28

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

17. Segmented Information and Expenses by Object (continued)

MVRD

Regional Parks Regional Parks is responsible for managing, maintaining, and protecting a diverse network of Regional Parks and an expanding land base of reserves, ecological conservancy areas, and greenways, located throughout the Region.

General Government General Government includes services responsible for overall direction and monitoring and regional initiatives. This area comprises the Regional Board & Committee Remuneration, Corporate Secretary's Office, Audit, Legal and Insurance costs, Innovation, Regional Emergency Management, Regional Cultural Strategy and External Contributions and Zero Waste Collaborative Initiatives.

Air Quality Air Quality is responsible for monitoring air quality in the region, controlling industrial, commercial and some residential emissions, creating long-term plans, and conducting emission inventories.

Regional Employee Services Regional Employee Services provides collective bargaining, job evaluation, research, and other related labour relations services to those MVRD municipalities who are members of the function.

E911 Emergency Telephone Service The District contracts with E-Comm Corporation to provide 911 service for all municipalities within the region as well as the community of Whistler and the Sunshine Coast Regional District.

Regional Planning Regional Planning's core responsibilities are focused on regional growth management, utility management and air quality management. Primary activities include development and implementation of a wide range of innovative policies and plans, extensive research, modeling and technical analysis, regulation, business demand management and community education.

Invest Vancouver Invest Vancouver fosters regional and cross-sectoral collaboration on economic development issues, advises leaders on economic policy and strategy, promotes the region to a global audience, and attracts strategic investment.

Housing Planning and Policy Housing Planning and Policy contributes to processes and decisions related to the development of affordable housing projects, and in particular to the redevelopment of the MVHC portfolio of mixed-income housing complexes and the development of vacant lands owned by local government (including the MVRD).

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 29

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

17. Segmented Information and Expenses by Object (continued)

MVRD (continued)

Electoral Areas The District is responsible for providing general and local services to one unincorporated area (Electoral Area A) of the regional district. General services provided include a variety of tax-supported, regional services such as 911 emergency telephone, air quality, labour relations, regional parks, strategic planning, and general government.

Regional Global Positioning System The District's Global Positioning System (GPS) Real-Time Service is offered to member municipalities and to the public in partnership with the B.C. Crown Registry and Geographic Base (CRGB) Branch.

Sasamat Volunteer Fire Department The Sasamat Volunteer Fire Department provides volunteer fire department services to the Villages of Anmore and Belcarra. The cost to support this function is borne completely by the members who receive the service.

Regional Emergency Management Regional Emergency Management is an intergovernmental partnership between the Province of British Columbia and the District to coordinate regional emergency management planning activities and to engage all levels of government and private sector agencies in regional emergency planning initiatives for the Metro Vancouver region.

Corporate Programs Corporate programs provide centralized support for Metro Vancouver's four legal entities, including financial services, human resources, external relations, legislative service, indigenous relations, project delivery, self-insurance, and information technology.

Members and Translink Sinking Fund Income The District serves as the borrowing conduit between member municipalities (excluding City of Vancouver) and Translink and the MFA. (Note 10). Sinking fund income earned on debenture issues held on behalf of members and Translink is recorded as revenue earned on the sinking fund with the offsetting expenditure owing to these organizations.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 30

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

17. Segmented Information and Expenses by Object (continued)

a) Total Consolidated

	Other Districts (note 17(b))	Regional District (note 17(c))	Metro Vancouver Housing Corporation	Inter-district Adjustments	Consolidated Actual 2022	Consolidated Budget 2022	Consolidated Actual 2021
Revenues							
MVRD property tax requisitions	\$ —	\$ 91,708	\$ —	\$ —	\$ 91,708	\$ 91,708	\$ 82,714
Metered sale of water	329,678	—	—	—	329,678	329,366	319,989
Sewerage and drainage levy	301,425	—	—	—	301,425	301,425	288,226
Tipping fees	125,797	—	—	—	125,797	112,910	112,610
Housing property rentals	—	—	43,267	—	43,267	42,051	42,416
BODTSS industrial charges	12,431	—	—	—	12,431	12,263	12,157
Development cost charges	60,583	—	—	—	60,583	103,080	42,204
Grants and other contributions	29,870	3,965	3,430	—	37,265	126,822	76,174
User fees, recoveries, and other revenues	46,219	12,651	1,176	(13,635)	46,411	41,175	42,903
Gain on disposal of tangible capital assets	—	—	—	—	—	—	—
Sinking fund and interest income	33,247	4,098	1,448	(111)	38,682	32,110	32,840
Sinking fund income members and TransLink	—	27,072	—	—	27,072	29,165	28,222
	939,250	139,494	49,321	(13,746)	1,114,319	1,222,075	1,080,455
Expenses							
Salaries and benefits	117,428	105,711	6,661	(15,831)	213,969	221,673	191,444
Consulting, contracted and professional services	160,078	21,905	995	(60)	182,918	192,812	146,256
Asset repairs and maintenance	21,113	10,447	14,597	—	46,157	63,390	43,061
Materials and supplies	31,610	5,421	205	—	37,236	38,139	33,732
Utilities, permits, and taxes	25,839	1,904	4,601	(3)	32,341	34,381	30,552
Other	34,195	40,885	912	(18,528)	57,464	51,016	53,049
Amortization of tangible capital assets and prepaid land leases	87,996	8,369	2,971	—	99,336	96,267	86,610
Interest on long-term debt	65,758	—	1,295	(111)	66,942	72,637	60,693
	544,017	194,642	32,237	(34,533)	736,363	770,315	645,397
Corporate costs (recovery)	67,762	(90,939)	2,390	20,787	—	—	—
	611,779	103,703	34,627	(13,746)	736,363	770,315	645,397
Annual Surplus (deficit)	\$ 327,471	\$ 35,791	\$ 14,694	\$ —	\$ 377,956	\$ 451,760	\$ 435,058

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 31

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

17. Segmented Information and Expenses by Object (continued)

b) Total Other Districts

	Liquid Waste Services	Solid Waste Service	Total Sewerage & Drainage District	Water Operations	Building Operations	Elimination Entry	Total Water District	Total Other Districts Actual 2022	Total Other Districts Budget 2022	Total Other Districts Actual 2021
Revenues										
Metered sale of water	\$ —	\$ —	\$ —	\$ 329,678	\$ —	\$ —	\$ 329,678	\$ 329,678	\$ 329,366	\$ 319,989
Sewerage and drainage levy	301,425	—	301,425	—	—	—	—	301,425	301,425	288,226
Tipping fees	—	125,797	125,797	—	—	—	—	125,797	112,910	112,610
BODTSS industrial charges	12,431	—	12,431	—	—	—	—	12,431	12,263	12,157
Development cost charges	60,583	—	60,583	—	—	—	—	60,583	103,080	42,204
Grants and other contributions	29,870	—	29,870	—	—	—	—	29,870	106,415	61,062
User fees, recoveries, and other revenues	6,589	14,201	20,790	10,161	21,114	(5,846)	25,429	46,219	36,657	42,158
Gain on disposal of tangible capital assets	—	—	—	—	—	—	—	—	—	—
Sinking fund and interest income	8,439	1,969	10,408	20,745	2,094	—	22,839	33,247	28,861	27,945
	419,337	141,967	561,304	360,584	23,208	(5,846)	377,946	939,250	1,030,977	906,351
Expenses										
Salaries and benefits	65,694	6,517	72,211	44,723	494	—	45,217	117,428	125,242	110,365
Consulting, contracted, and professional services	42,471	102,396	144,867	13,308	1,903	—	15,211	160,078	154,610	124,964
Asset repairs and maintenance	13,981	860	14,841	3,955	2,317	—	6,272	21,113	22,379	18,990
Materials and supplies	18,018	45	18,063	13,493	54	—	13,547	31,610	32,995	27,788
Utilities, permits, and taxes	16,829	469	17,298	7,635	906	—	8,541	25,839	27,548	24,691
Other	9,179	16,723	25,902	7,560	733	—	8,293	34,195	26,303	26,450
Amortization of tangible capital assets	36,787	8,382	45,169	37,891	4,936	—	42,827	87,996	85,030	73,900
Interest on long-term debt	32,135	2,424	34,559	26,453	4,746	—	31,199	65,758	71,224	59,548
	235,094	137,816	372,910	155,018	16,089	—	171,107	544,017	545,331	466,696
Corporate costs (recovery)	39,066	5,114	44,180	29,428	—	(5,846)	23,582	67,762	77,844	59,301
	274,160	142,930	417,090	184,446	16,089	(5,846)	194,689	611,779	623,175	525,997
Annual surplus (deficit)	\$ 145,177	\$ (963)	\$ 144,214	\$ 176,138	\$ 7,119	\$ —	\$ 183,257	\$ 327,471	\$ 407,802	\$ 380,354

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 32

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

17. Segmented Information and Expenses by Object (continued)

c) Total Regional District

	Regional Parks	General Government	Air Quality	Regional Employees Services	E911 Emergency Telephone Service	Regional Planning	Invest Vancouver	Housing Planning and Policy	Regional Sub-total 2022
Revenues									
MVRD property tax requisitions	\$ 57,063	\$ 6,441	\$ 7,392	\$ 2,548	\$ 4,670	\$ 3,923	\$ 2,185	\$ 6,254	\$ 90,476
Grants and other contributions	1,006	1,406	250	—	—	—	178	—	2,840
User fees, recoveries, and other revenues	2,808	720	4,464	148	86	—	—	—	8,226
Gain (loss) on disposal of tangible capital assets	—	—	—	—	—	—	—	—	—
Sinking fund and interest income	1,011	(165)	83	67	24	83	32	368	1,503
Sinking fund income, members and TransLink	—	—	—	—	—	—	—	—	—
	61,888	8,402	12,189	2,763	4,780	4,006	2,395	6,622	103,045
Expenses									
Salaries and benefits	19,759	3,382	7,071	2,262	—	3,060	1,726	811	38,071
Consulting, contracted and professional services	4,204	1,119	1,326	64	5,152	623	85	110	12,683
Asset repairs and maintenance	3,335	94	74	1	—	13	2	—	3,519
Materials and supplies	985	23	249	4	—	7	9	1	1,278
Utilities, permits, and taxes	781	3	100	8	22	1	7	—	922
Other	3,408	1,651	1,047	66	—	113	455	21	6,761
Amortization of tangible capital assets	1,829	—	249	—	2	—	—	—	2,080
	34,301	6,272	10,116	2,405	5,176	3,817	2,284	943	65,314
Corporate costs (recovery)	4,104	895	985	(43)	93	323	136	88	6,581
	38,405	7,167	11,101	2,362	5,269	4,140	2,420	1,031	71,895
Annual surplus (deficit)	\$ 23,483	\$ 1,235	\$ 1,088	\$ 401	\$ (489)	\$ (134)	\$ (25)	\$ 5,591	\$ 31,150

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 33

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

17. Segmented Information and Expenses by Object (continued)

c) Total Regional District (continued)

	Carried Forward	Electoral Areas	Regional Global Positioning System	Sasamat Volunteer Fire Department	Regional Emergency Management	Corporate Programs	Members and TransLink, Sinking Fund Income	Regional Districts Actual 2022	Regional Districts Budget 2022	Regional Districts Actual 2021
Revenues										
MVRD property tax requisitions	\$ 90,476	\$ 401	\$ —	\$ 658	\$ 173	\$ —	\$ —	\$ 91,708	\$ 91,708	\$ 82,714
Grants and other contributions	2,840	213	—	—	—	912	—	3,965	1,037	13,241
User fees, recoveries, and other revenues	8,226	55	386	25	26	3,933	—	12,651	17,373	9,194
Gain (loss) on disposal of tangible capital assets	—	—	—	—	—	—	—	—	—	367
Sinking fund and interest income	1,503	58	32	38	13	2,454	—	4,098	2,288	4,360
Sinking fund income, members and TransLink	—	—	—	—	—	—	27,072	27,072	29,165	28,222
	103,045	727	418	721	212	7,299	27,072	139,494	141,571	138,098
Expenses										
Salaries and benefits	38,071	379	130	46	—	67,085	—	105,711	115,868	91,331
Consulting, contracted and professional services	12,683	17	—	41	127	9,037	—	21,905	38,594	20,660
Asset repairs and maintenance	3,519	2	—	66	—	6,860	—	10,447	22,960	7,204
Materials and supplies	1,278	5	1	23	—	4,114	—	5,421	4,958	5,775
Utilities, permits, and taxes	922	3	11	20	—	948	—	1,904	2,333	1,406
Other	6,761	208	1	96	1	6,746	27,072	40,885	43,079	40,031
Amortization of tangible capital assets	2,080	—	—	30	32	6,227	—	8,369	8,334	9,497
	65,314	614	143	322	160	101,017	27,072	194,642	236,126	175,904
Corporate costs (recovery)	6,581	40	26	28	11	(97,625)	—	(90,939)	(111,344)	(81,050)
	71,895	654	169	350	171	3,392	27,072	103,703	124,782	94,854
Annual surplus (deficit)	\$ 31,150	\$ 73	\$ 249	\$ 371	\$ 41	\$ 3,907	\$ —	\$ 35,791	\$ 16,789	\$ 43,244

18. Subsequent Events

- On March 23, 2023, the District received \$50.78 million as part of the Province of British Columbia's Growing Community Funds Program, to be applied to infrastructure projects in 2023.
- On March 28, 2023, the GVS&DD entered into a three-year contribution agreement with the Province of British Columbia, where the Province will provide \$250 million, one-third of the funding, for Phase 1 Iona Wastewater Treatment Plant. The GVS&DD will receive \$75 million in April 2023 and in April 2024, and the remaining \$100 million in April 2025.

METRO VANCOUVER REGIONAL DISTRICT

Notes to Consolidated Financial Statements, page 34

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

19. Comparative Figures

Certain prior year figures have been reclassified to conform to the presentation of the current year.

METRO VANCOUVER REGIONAL DISTRICT

Schedule 1 (unaudited)

Year ended December 31, 2022

(tabular amounts in thousands of dollars)

COVID-19 Restart Grant (unaudited)

The Province of British Columbia, under the “COVID-19 Safe Restart Grant Program”, provided the District with a grant of \$1.476 million in 2021 (\$nil in 2022) for increased operating costs arising during the pandemic. The District recognized the grant into income and applied these funds to the programs impacted as follows:

	2022	2021
Balance, beginning of the year	\$ 739	\$ 588
BC Restart Grant received	—	1,476
	739	2,064
Less Eligible Costs Incurred:		
Computer and Technology costs	—	226
External Relations	—	300
Head Office Building Operations	149	271
Liquid Waste Services	—	288
Cultural Grants	140	150
Regional Parks Services	—	32
Water Services	—	58
Metro Vancouver Housing Corporation	450	—
	739	1,325
Balance, end of year	\$ —	\$ 739

Financial Statements of

**GREATER VANCOUVER SEWERAGE
AND DRAINAGE DISTRICT**

Year ended December 31, 2022

DRAFT - APRIL 3, 2023

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Index to Financial Statements

December 31, 2022

	Exhibit
Management Report	
Independent Auditor's Report	
Statement of Financial Position	A
Statement of Operations	B
Statement of Change in Net Debt	C
Statement of Cash Flows	D
Notes to Financial Statements	

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

MANAGEMENT REPORT

The Financial Statements contained in this report have been prepared by management in accordance with Canadian public sector accounting standards. The integrity and objectivity of these statements are management's responsibility. Management is responsible for all the statements and schedules, and for ensuring that this information is consistent, where appropriate, with the information contained in the financial statements.

Management is also responsible for implementing and maintaining a system of internal controls to provide reasonable assurance that reliable financial information is produced.

The Greater Vancouver Sewerage and Drainage District's Board of Directors is responsible for approving the financial statements and for ensuring that management fulfills its responsibilities for financial reporting and internal control and exercises this responsibility through the Finance Committee of the Board.

The external auditors, BDO Canada LLP, conduct an independent examination, in accordance with Canadian generally accepted auditing Standards, and express their opinion on the financial statements. Their examination does not relate to the other schedules and statements required by the *Financial Information Act*. The Independent Auditor's Report outlines the scope of the audit for the year ended December 31, 2022.

On behalf of Greater Vancouver Sewerage and Drainage District.

Dean Rear, Chief Financial Officer

Date: April 28, 2023

Independent Auditor's Report

To the Board of Directors of the Greater Vancouver Sewerage and Drainage District

Opinion

We have audited the financial statements of the Greater Vancouver Sewerage and Drainage District (the "District"), which comprise the Statement of Financial Position as at December 31, 2022, and the Statements of Operations, Change in Net Debt and Cash Flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the District as at December 31, 2022, and the results of its operations, change in net debt and cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the District in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the District's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the District or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the District's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the District's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the District to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Vancouver, British Columbia
REPORT DATE

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit A

Statement of Financial Position

As at December 31, 2022

	2022	2021
Financial Assets		
Cash	\$ 157,253	\$ -
Accounts receivable	108,082,942	139,016,130
Due from Metro Vancouver Regional District	489,761,788	630,865,561
Debt reserve fund (note 2)	15,494,573	13,562,273
	613,496,556	783,443,964
Liabilities		
Accounts payable and accrued liabilities (note 3)	166,828,783	228,313,571
Landfill closure and post-closure liability (note 4)	41,025,735	32,906,686
Deferred revenue and refundable deposits (note 5)	330,473,282	329,169,804
Debt (net of sinking funds) (note 6)	1,178,144,091	1,094,984,832
	1,716,471,891	1,685,374,893
Net Debt	(1,102,975,335)	(901,930,929)
Non-Financial Assets		
Tangible capital assets (note 7)	3,548,808,341	3,204,067,696
Inventories of supplies	7,061,586	6,582,165
Prepaid expenses	3,871,838	2,428,408
	3,559,741,765	3,213,078,269
Accumulated surplus (note 8)	\$2,456,766,430	\$2,311,147,340

Contractual obligations and rights (note 9)

Contingencies (note 10)

Budget information (note 11)

Segmented information and expenses by object (note 12)

Subsequent event (note 13)

The accompanying notes are an integral part of these financial statements.

Chief Financial Officer

Board Chair

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit B

Statement of Operations

Year ended December 31, 2022

	2022 Budget (note 11)	2022 Actual	2021 Actual
Revenue (note 12)			
Sewerage and drainage levy	\$ 301,424,687	\$ 301,424,687	\$ 288,225,540
Tipping fees	112,909,870	125,797,098	112,609,847
BODTSS Industrial Charges	12,262,636	12,431,402	12,157,191
Development cost charges (note 5)	103,080,328	60,582,644	42,204,285
User fees, recoveries and other	19,116,187	20,789,665	15,246,793
Sinking fund, debt retirement and interest income	9,818,623	10,408,465	6,579,921
Grants and other contributions (note 5)	106,415,000	29,870,139	61,062,379
	665,027,331	561,304,100	538,085,956
Expenses (note 12)			
Liquid waste services	288,265,504	272,755,299	232,019,605
Solid waste services	119,452,219	142,929,711	107,977,251
	407,717,723	415,685,010	339,996,856
Annual surplus	257,309,608	145,619,090	198,089,100
Accumulated surplus, beginning of year	2,311,147,340	2,311,147,340	2,113,058,240
Accumulated surplus, end of year	\$ 2,568,456,948	\$ 2,456,766,430	\$ 2,311,147,340

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit C

Statement of Change in Net Debt

Year ended December 31, 2022

	2022 Budget (note 11)	2022 Actual	2021 Actual
Annual surplus	\$ 257,309,608	\$ 145,619,090	\$ 198,089,100
Change in tangible capital assets:			
Acquisition of tangible capital assets	(831,292,000)	(390,013,721)	(466,984,864)
Amortization of tangible capital assets	43,785,108	45,168,958	32,477,244
Net book value of tangible capital assets disposed	-	104,118	-
	(787,506,892)	(344,740,645)	(434,507,620)
Change in other non-financial assets:			
Acquisition of prepaid expenses	-	(3,871,838)	(2,428,408)
Use of prepaid expenses	-	2,428,408	3,069,828
Acquisition of inventories of supplies	-	(7,061,586)	(6,582,165)
Consumption of inventories of supplies	-	6,582,165	5,704,961
	-	(1,922,851)	(235,784)
Changes in net debt	(530,197,284)	(201,044,406)	(236,654,304)
Net debt, beginning of year	(901,930,929)	(901,930,929)	(665,276,625)
Net debt, end of year	\$ (1,432,128,213)	\$ (1,102,975,335)	\$ (901,930,929)

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit D

Statement of Cash Flows

Year ended December 31, 2022

	2022	2021
Cash provided by (used in):		
Operating transactions:		
Annual surplus	\$ 145,619,090	\$ 198,089,100
Items not involving cash:		
Amortization	45,168,958	32,477,244
Sinking fund income	(6,422,245)	(5,014,043)
Debt reserve fund income	(332,300)	(206,272)
Gain on disposal of tangible capital assets	(1,346,378)	-
Change in landfill closure and post-closure liability	8,119,049	742,912
Change in non-cash assets and liabilities:		
Accounts receivable	30,933,188	(53,557,937)
Prepaid expenses	(1,443,430)	641,420
Accounts payable and accrued liabilities	(61,484,788)	72,536,039
Deferred revenue	1,303,478	26,384,517
Inventories of supplies	(479,421)	(877,204)
Net change in cash from operating transactions	159,635,201	271,215,776
Capital transactions:		
Proceeds on sale of tangible capital assets	1,450,496	-
Acquisition of tangible capital assets	(390,013,721)	(466,984,864)
Net change in cash from capital transactions	(388,563,225)	(466,984,864)
Financing transactions:		
Due from Metro Vancouver Regional District	141,103,773	(121,238,995)
Debenture debt issued	160,000,000	370,000,000
Debt reserve fund issuance	(1,600,000)	(3,700,000)
Debt reserve fund maturity	-	155,756
Sinking fund payments	(70,418,496)	(49,447,673)
Debenture debt maturity	-	(10,000,000)
Sinking fund retirement	-	10,000,000
Net change in cash from financing transactions	229,085,277	195,769,088
Net change in cash and cash equivalents	157,253	-
Cash and cash equivalents, beginning of year	-	-
Cash and cash equivalents, end of year	\$ 157,253	\$ -

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 1
Year ended December 31, 2022

1. Significant Accounting Policies

The Greater Vancouver Sewerage and Drainage District (the “District”) was established by an Act of the same name in 1956. Its two primary responsibilities are the collection, treatment, and discharge of liquid waste for the municipalities of the Metro Vancouver Regional District (“MVRD”), and the disposal of solid waste both for the municipalities of the MVRD and the public.

The District owns and operates a number of wastewater treatment plants and a related collection network connected to the municipal collection systems, and several solid waste facilities including a waste-to-energy facility. Its Board of Directors comprises the same councilors and mayors as appointed to the MVRD Board by the participating municipalities. The member municipalities under the Act are jointly and severally liable for its debts.

The District’s financial statements are prepared by management in accordance with Canadian public sector accounting standards. Significant accounting policies adopted by the District are as follows:

Basis of Accounting

The District follows the accrual method of accounting for revenues and expenses. Revenues are recognized in the year in which they are earned and measurable. Expenses are recognized as they are incurred and measurable as a result of receipt of goods or services and/or the legal obligation to pay.

Government Transfers

Government transfers are recognized as revenue in the financial statements when the transfer is authorized and any eligibility criteria are met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability. The transfer of revenue is initially deferred and then recognized in the statement of operations as the stipulation liabilities are settled.

When the District is deemed the transferor, the transfer expense is recognized when the recipient is authorized and has met the eligibility criteria.

Deferred Revenue and Refundable Deposits

Deferred revenue represents development cost charges and a Provincial grant which have been collected, but for which the related services or obligations have yet to be performed. These amounts will be recognized as revenue in the fiscal year the services are performed or obligations and stipulations have been met.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 2
Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Sinking Fund, Debt Retirement, and Interest Income

Interest income is reported as revenue in the period earned. When required, based on external restrictions, interest income earned on deferred revenue is added to and forms part of the deferred revenue balance, and is recognized into income when related stipulations are met. Any surpluses received from upon debt retirement are recorded in the year received.

Cash and Investments

In order to improve cash management, the MVRD holds cash and investment transactions in pooled accounts on behalf of its four legal entities: the Metro Vancouver Regional District, the Greater Vancouver Sewerage and Drainage District, the Greater Vancouver Water District, and the Metro Vancouver Housing Corporation. The District's main cash is therefore presented as due from MVRD. Investments held by the MVRD consist of bonds issued by governments and Canadian chartered banks, money market instruments, guaranteed investment certificates, and term deposits. Interest earned on the District's fund balances is included in the amount owing from MVRD and is recorded as interest income in the Statement of Operations.

Employee Future Benefits

Employees who provide services for the District are employees of the MVRD. Employee related costs are allocated by the MVRD to the District based on services rendered. These costs are shown as expenses in the financial statements and are included in amounts owing from MVRD.

Post-employment benefits of the MVRD, including accumulated banked sick and vacation pay, retirement severance, and Worker's Compensation top-up benefits for employees pursuant to certain policies and union agreements, are actuarially determined based on service and best estimates of retirement ages and expected future salary and wage increases. The obligation under these benefit plans is allocated to the District based on projected benefits as the employees render services necessary to earn the future benefits and included in amounts owing to MVRD.

Landfill Closure and Post-Closure Liability

The estimated present value of landfill closure and post-closure costs is recognized as a liability. This liability is recognized based on estimated future expenses, including estimated inflation discounted to the current date and accrued based on the proportion of the total capacity of the landfill used as of the date of the statement of financial position. The change in this estimated liability during the year is recorded as an expense in operations. These estimates are reviewed and adjusted annually and any changes are recorded on a prospective basis.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 3
Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Non-Financial Assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They generally have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

Tangible Capital Assets

Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development, or betterment of the asset. The cost, less residual value, of the tangible capital assets, except land, is amortized over their estimated useful lives. All assets are amortized on a straight line basis as follows:

Asset	Useful Life – Years
Infrastructure	
Interceptors and trunk sewers, drainage	100
Wastewater treatment and pumping stations	50
Solid waste incinerators and transfer stations	30
Solid waste landfills	25 - 30
Information technology systems and networks	5
Machinery, Equipment, Furniture, and Fixtures	5 - 20

- a. Annual amortization:
Annual amortization begins when the asset is available for use and is expensed over its useful life. Assets under construction are transferred to the appropriate asset class and are amortized from the date the asset is available for use.
- b. Contributions of tangible capital assets:
Contributions of tangible capital assets are recorded at their estimated fair value at the date of receipt and as contribution revenue.
- c. Interest capitalization:
The District does not capitalize interest costs associated with the acquisition or construction of a tangible capital asset.

Inventories of Supplies

Inventories of supplies held for consumption are recorded on a first-in-first-out basis.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 4
Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Revenue Recognition	Tipping fees, levies, electricity sales, permits, user fees, and other revenue are recognized as revenue on an accrual basis according to the usage and rates approved and set by the Board in various fees and charges bylaws.
Segmented Information	A segment is defined as a distinguishable activity or group of activities of a government for which it is appropriate to separately report financial information to achieve the objectives of the standard. Definitions of the District's segments and their related financial information are presented in note 12.
Liability for Contaminated Sites	A liability for remediation of a contaminated site is recognized when the site is no longer in productive use and the following criteria are satisfied: an environmental standard exists; contamination exceeds the standard; the District is either directly responsible or has accepted responsibility for remediation; it is expected that future economic benefits will be given up and a reasonable estimate of the liability can be made. Liabilities for contaminated sites are reported in accounts payable and accrued liabilities (note 3).
Use of Estimates	<p>The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts in the financial statements and the disclosure of contingent liabilities. These estimates and assumptions are based on management's best information and judgment and may differ from actual results. Adjustments, if any, will be reflected in the financial statements in the period that the change in estimate is made, as well as in the period of settlement if the amount is different.</p> <p>Significant areas requiring the use of management's judgment relate to the determination of landfill closure and post closure liability, contaminated sites liabilities, the estimate of accruals for projects in progress, amortization rates and useful lives of tangible capital assets, the assessment of the impairment of tangible capital assets and work in progress, and the assessment of the outcome of contingent liabilities.</p>

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 5
Year ended December 31, 2022

2. Debt Reserve Fund

The Municipal Finance Authority of British Columbia (“MFA”) provides financing for regional districts and member municipalities. The MFA is required to establish a Debt Reserve Fund for each debenture issue equal to one-half the average annual installment of principal and interest. The debt reserve fund is comprised of cash deposits equal to 1% of the principal amount borrowed and a non-interest bearing demand note for the remaining requirement. Cash deposits held by the MFA are payable with interest to the ultimate borrower when the final obligations under the respective loan agreements have been made.

If, at any time, the District has insufficient funds to meet payments due on its obligations to the MFA, the payments will be made from the debt reserve fund. The demand notes are callable only if there are additional requirements to be met to maintain the level of the debt reserve fund. At December 31, 2022, \$45,042,860 (2021 - \$39,493,543) in callable demand notes were outstanding and have not been recorded in the statement of financial position.

3. Accounts Payable and Accrued Liabilities

	2022	2021
Trade accounts	\$ 117,438,953	\$ 182,682,467
Construction holdbacks	41,729,494	38,907,540
Accrued interest on debt	7,660,336	6,423,564
Contaminated Sites (a)	—	300,000
	<u>\$ 166,828,783</u>	<u>\$ 228,313,571</u>

(a) The District accrued \$300,000 in 2021 for work to be undertaken to remediate contaminated soils for one property. As at December 31 2022, there is no work remaining to be completed.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 6
Year ended December 31, 2022

4. Landfill Closure and Post-Closure Liability

The District is responsible for its share of closure and post-closure costs at landfill sites as detailed below.

- a) The Vancouver landfill is located in Delta, BC. In accordance with an agreement with the City of Vancouver, the District is responsible for its proportionate share of the closure and post-closure liability based on usage. The present value of the District's estimated future liability for these expenses is recognized as the landfill site's capacity is used and is as follows:

	2022	2021
Landfill closure and post closure liability	\$ 41,025,735	\$ 32,906,686

The closure and post-closure liability and annual expense is calculated based on the ratio of actual utilization to total expected utilization of the site's capacity at the date of closure. It is based on estimates and assumptions with respect to events extending over the remaining life of the Vancouver landfill, including provisions contained in Metro Vancouver's Integrated Solid Waste and Resource Management Plan. The significant estimates and assumptions adopted in measuring the District's share of the closure and post-closure liability are as follows:

	2022	2021
Current actual utilization (in tonnes)	23,195,905	22,521,439
Expected utilization at closure (in tonnes)	28,299,639	28,219,409
Expected remaining capacity (in tonnes)	5,103,734	5,697,970
Permitted capacity (in tonnes)	33,039,183	33,039,183
Future costs	\$ 212,638,152	\$ 197,188,990
Present value of future costs	\$ 136,568,950	\$ 115,933,724
Proportionate share of liability	36.65%	35.57%
Utilization of total capacity, end of year	81.97%	79.81%
Discount rate	2.58%	2.73%
Expected post-closure period	30 years	30 years
Expected closure date	December 31, 2037	December 31, 2037

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 7
Year ended December 31, 2022

4. Landfill Closure and Post-Closure Liability (continued)

b) The Cache Creek landfill is located in the Village of Cache Creek, BC. The landfill permit obligates the Village of Cache Creek and a third party service provider to undertake closure and post-closure activities. The District, in accordance with an agreement with the Village, was required to contribute quarterly to a trust fund, held with the Province of British Columbia, to a Post Closure Maintenance and Repair Fund at rates consistent with the operational certificate for the landfill. The agreement indemnifies the Village for any post closure liabilities not covered by this fund. At December 31, 2022, the lower of amortized book value and market value of the trust was \$15,403,059 (2021 - \$16,261,510), which approximates the post-closure liability.

The Cache Creek landfill was closed December 2016. The actual utilization at closure was 10,318,780 tonnes and the permitted capacity was 10,371,594 tonnes. The post-closure period is expected to be 30 years. The present value of District's estimated future post-closure liability is sufficiently funded by the trust.

5. Deferred Revenue and Refundable Deposits

Deferred revenue consists of the following:

	2022	2021
Development cost charges (a)	\$ 273,595,957	\$ 258,633,516
Provincial grant to fund capital expenditures (b)	55,358,323	69,074,393
Refundable deposits	1,519,002	1,461,895
Total	\$ 330,473,282	\$ 329,169,804

a) The *Greater Vancouver Sewerage and Drainage District Act* restricts the District to applying money raised from development cost charges to funding sewer capital projects, including the repayment of debt raised to fund such projects. The balance of these amounts is included in deferred revenue until spent on approved purposes.

b) In 2017, the District received a grant from the Province of British Columbia in the amount of \$193,000,000 for future costs associated with the construction of the new North Shore Wastewater Treatment Plant Facility. During 2022, \$15,386,618 (2021 – \$20,488,722) was applied against the project and recognized as revenue. Interest earned on unspent funds in the amount of \$1,670,548 (2021 - \$1,037,820) has been recognized as grant revenue in the year.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 8
Year ended December 31, 2022

5. Deferred Revenue and Refundable Deposits (continued)

Continuity of deferred revenue is as follows:

	2022	2021
Balance, beginning of year	\$ 329,169,804	\$ 302,785,287
Development cost charges received	68,940,747	85,104,514
Interest earned	8,274,886	3,628,051
Change in refundable deposits	57,107	344,959
Amounts spent and recognized as revenue	(75,969,262)	(62,693,007)
Change in deferred revenue	1,303,478	26,384,517
Balance, end of year	\$ 330,473,282	\$ 329,169,804

6. Debt

- a) All borrowings for the District are obtained from MFA by the MVRD on the District's behalf, although the District maintains the right to finance debt without MFA involvement.

Debt, debentures or other security issued by the District is a direct, joint and several obligation and liability of the District and each and every member municipality.

Debt servicing requirements comprising sinking fund contributions, serial repayments and interest are funded as incurred by revenue earned during the year.

- b) Debt (net of sinking funds) reported on the statement of financial position comprises the following and includes varying maturities up to 2037 with interest rates ranging from 1.28% to 3.40%.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 9
Year ended December 31, 2022

6. Debt (continued)

Issue Number	Interest Rate - %	Maturity Date	Debentures authorized to be issued	Debenture debt outstanding	
				2022	2021
104	2.90	November 20, 2023	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000
106	2.25	October 13, 2024	20,000,000	20,000,000	20,000,000
116	1.47	April 4, 2026	20,000,000	20,000,000	20,000,000
118	3.39 - 3.40	April 11, 2027	20,000,000	20,000,000	20,000,000
139	2.10	October 5, 2031	55,000,000	55,000,000	55,000,000
141	2.80	April 7, 2032	50,000,000	50,000,000	50,000,000
142	3.15	October 4, 2032	50,000,000	50,000,000	50,000,000
145	3.15	April 23, 2033	120,000,000	120,000,000	120,000,000
146	3.20	September 19, 2033	270,000,000	270,000,000	270,000,000
147	2.66	April 9, 2034	40,000,000	40,000,000	40,000,000
149	2.24	October 9, 2034	46,000,000	46,000,000	46,000,000
150	1.99	April 9, 2035	125,000,000	125,000,000	125,000,000
151	1.28	June 1, 2035	70,000,000	70,000,000	70,000,000
154	2.41	May 28, 2036	370,000,000	370,000,000	370,000,000
157	3.36	April 8, 2037	160,000,000	160,000,000	—
Total debt			\$1,431,000,000	\$1,431,000,000	\$1,271,000,000
Less sinking funds				(252,855,909)	(176,015,168)
Total net debt				\$1,178,144,091	\$1,094,984,832

c) Sinking fund installments due within the next five years and thereafter are as follows:

	Amount
2023	\$ 79,490,898
2024	78,741,781
2025	77,742,959
2026	77,742,959
2027	76,669,328
Thereafter	568,886,107
Total payments	959,274,032
Estimated sinking fund income	218,870,059
Total net debt	\$1,178,144,091

d) Sinking fund installments are invested by the MFA and earn income that, together with principal payments, are expected to be sufficient to retire the sinking fund debt at maturity. For sinking fund agreements, the MFA has established either a normal sinking fund or a capital repayment equalization fund.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 10
Year ended December 31, 2022

7. Tangible Capital Assets

Year ended December 31, 2022

	Cost			Accumulated Amortization				Net Book Value December 31, 2022
	Balance at December 31, 2021	Additions (Net of Transfers)	Disposals	Balance at December 31, 2022	Balance at December 31, 2021	Amortization Expense	Balance at December 31, 2022	
Land	\$ 162,871,774	\$ 23,590,000	\$ (104,118)	\$ 186,357,656	\$ —	\$ —	\$ —	\$ 186,357,656
Infrastructure	2,168,652,126	300,884,565	—	2,469,536,691	708,339,346	44,808,849	753,148,195	1,716,388,496
Machinery, equipment, furniture & fixtures	8,817,695	171,257	—	8,988,952	7,874,742	360,109	8,234,851	754,101
Construction in progress	1,579,940,189	65,367,899	—	1,645,308,088	—	—	—	1,645,308,088
	\$3,920,281,784	\$ 390,013,721	\$ (104,118)	\$4,310,191,387	\$ 716,214,088	\$ 45,168,958	\$ 761,383,046	\$3,548,808,341

Construction in progress includes \$522.6 million (2021- \$495.7 million) related to the North Shore Wastewater Treatment Plant (note 10).

Year ended December 31, 2021

	Cost			Accumulated Amortization				Net Book Value December 31, 2021
	Balance at December 31, 2020	Additions (Net of Transfers)	Disposals	Balance at December 31, 2021	Balance at December 31, 2020	Amortization Expense	Balance at December 31, 2021	
Land	\$ 116,049,774	\$ 46,822,000	\$ —	\$ 162,871,774	\$ —	\$ —	\$ —	\$ 162,871,774
Infrastructure	1,621,113,077	547,539,049	—	2,168,652,126	676,346,965	31,992,381	708,339,346	1,460,312,780
Machinery, equipment, furniture & fixtures	8,798,644	19,051	—	8,817,695	7,389,879	484,863	7,874,742	942,953
Construction in progress	1,707,335,425	(127,395,236)	—	1,579,940,189	—	—	—	1,579,940,189
	\$3,453,296,920	\$ 466,984,864	\$ —	\$3,920,281,784	\$ 683,736,844	\$ 32,477,244	\$ 716,214,088	\$3,204,067,696

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 11
Year ended December 31, 2022

8. Accumulated Surplus

Accumulated surplus consists of individual fund surplus and reserves as follows:

	2022	2021
Reserves	\$ 165,870,733	\$ 158,922,150
Capital fund balance	(79,768,553)	43,142,326
Investment in tangible capital assets	2,370,664,250	2,109,082,864
Total	\$ 2,456,766,430	\$ 2,311,147,340

Capital fund balance represents the future expected level of funding required or accumulated.

Continuity of reserves is as follows:

	December 31, 2021	Interest	Annual Operating Surplus (Deficit)	Contributions from/ (to) operations	December 31, 2022
Operating Reserves					
Liquid Waste Services	\$ 32,955,112	\$ 797,011	\$14,021,176	\$ (3,331,000)	\$ 44,442,299
Solid Waste Services	39,213,470	948,368	(2,342,763)	—	37,819,075
	72,168,582	1,745,379	11,678,413	(3,331,000)	82,261,374
Discretionary Reserves					
Biosolids Inventory	20,029,362	484,406	—	(4,704,240)	15,809,528
Liquid Waste General Debt					
Reserve Fund	2,123,350	51,353	—	—	2,174,703
Lions Gate Contingency	1,490,171	36,039	—	—	1,526,210
Drainage General	5,291,911	127,984	—	—	5,419,895
Solid Waste General	26,562,376	436,471	—	—	26,998,847
Landfill Post-Closure	11,307,274	273,464	—	—	11,580,738
	66,804,444	1,409,717	—	(4,704,240)	63,509,921
Statutory Reserves					
Liquid Waste Laboratory Equipment	607,946	16,219	—	101,285	725,450
Liquid Waste Services Sustainability					
Innovation Fund	19,341,178	482,606	—	(449,796)	19,373,988
	19,949,124	498,825	—	(348,511)	20,099,438
Total Reserves	\$158,922,150	\$3,653,921	\$11,678,413	\$ (8,383,751)	\$ 165,870,733

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 12
Year ended December 31, 2022

8. Accumulated Surplus (continued)

Investment in tangible capital assets is calculated as follows:

	2022	2021
Tangible capital assets	\$ 3,548,808,341	\$ 3,204,067,696
Amounts financed by:		
Long-term debt	(1,178,144,091)	(1,094,984,832)
	2,370,664,250	2,109,082,864
Change in the investment in tangible capital assets		
Acquisition of tangible capital assets	390,013,721	466,984,864
Amortization of tangible capital assets	(45,168,958)	(32,477,244)
Disposal of tangible capital assets (net of book value)	(104,118)	—
	344,740,645	434,507,620
Less funding of tangible capital assets through debt		
Sinking fund debt maturity	—	10,000,000
Sinking fund and debt retirement	(70,418,496)	(49,447,673)
Sinking fund and debt retirement income	(6,422,245)	(5,014,043)
Debenture debt issued	160,000,000	370,000,000
Debenture debt maturity	—	(10,000,000)
	83,159,259	315,538,284
Change in investment in tangible capital assets	261,581,386	118,969,336
Investment in tangible capital assets, beginning of year	2,109,082,864	1,990,113,528
Investment in tangible capital assets, end of year	\$ 2,370,664,250	\$ 2,109,082,864

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 13
Year ended December 31, 2022

9. Contractual Obligations and Rights

a) Contractual Obligations

- i) As of December 31, 2022 the District had the following commitments outstanding related to capital projects in progress:

	2022	2021
Authorized for outstanding projects	\$ 5,139,887,000	\$ 4,040,767,000
Expended at December 31	(2,553,669,802)	(2,283,628,886)
Commitment remaining	\$ 2,586,217,198	\$ 1,757,138,114

- ii) The District is committed under lease and rights-of-way agreements to make minimum annual payments. These agreements have varying terms, including two agreements, with annual payments of \$454,000 to perpetuity, with adjustments annually for CPI. Estimated payments over the next ten years are as follows:

	Amount
2023	\$ 1,908,271
2024	1,939,955
2025	1,972,272
2026	2,005,236
2027	2,038,859
2028 - 2032	10,722,652
Total	\$ 20,587,245

b) Contractual Rights

The District is party to lease agreements that are anticipated to provide future revenues. These agreements are with third parties with varying terms to 2026. Amounts anticipated to be received over the future years are as follows:

	Amount
2023	\$ 1,320,183
2024	1,117,471
2025	710,899
2026	651,657
Total	\$ 3,800,210

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 14
Year ended December 31, 2022

10. Contingencies

Lawsuits

As at December 31, 2022, there were various lawsuits pending against the District arising in the ordinary course of business. The District has retained legal counsel to defend against these lawsuits. Where the outcomes or amounts cannot be reasonably determined, no liability has been recorded. Management is of the opinion that losses, if any, in connection with these lawsuits can be sufficiently funded by reserve funds or covered by insurance. Any expected losses will be accrued and recorded as expenses at the time they are considered likely and amounts are reasonably determinable.

North Shore Wastewater Treatment Plant

The District is building a new tertiary wastewater treatment plant on a former industrial site in North Vancouver to replace the primary-only Lions Gate Wastewater Treatment Plant. The deadline for completion of the project under federal regulation was December 31, 2020. In 2021, the District served notice to terminate its contract with the vendor hired to design, build and commission the future North Shore Wastewater Treatment Plant, having determined that the vendor was in breach of contract. As of the contract termination date in 2021, the District has paid \$309.5 million, net of GST rebates, to the vendor for work completed, which has been recorded as construction in progress (note 7). In 2022, the vendor commenced legal action by filing a claim against the District in excess of \$250 million to which the District filed a counter-claim against the vendor in excess of \$500 million. In 2022, the District also drew on an irrevocable letter of credit in the amount of \$50.0 million as a result of the contract termination. As at December 31, 2022, the outcome of any legal proceedings related to the terminated contract and the potential consequences of not meeting the current deadline under the federal regulation is undeterminable.

Due to the nature of the contractual payments made to date under the terminated contract, the outstanding litigation and uncertainty surrounding the value of the new contract for completion of the project, the amount recorded as work in progress of \$522.6 million (2021 - \$495.7 million) represents management's best estimate. This amount may be subject to material change as new information becomes available.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 15
Year ended December 31, 2022

10. Contingencies (continued)

Self-Insurance Reserve

A self-insurance reserve has been established within the MVRD to cover losses resulting from uninsured liability exposures of the District, other MVRD Districts, and Metro Vancouver Housing Corporation ("MVHC").

Each year a review is undertaken to determine if it would be beneficial to purchase additional liability insurance. The District, other Metro Vancouver Districts, and the MVHC transfer amounts to the reserve depending on the reserve's adequacy to cover retained liability risk.

An estimate is made for all costs of investigating and settlement of claims annually and an adjustment is made to the reserve to maintain an adequate balance to cover potential losses in excess of recorded liabilities. These estimates are changed as additional information becomes known during the course of claims settlement. Any likely losses would be expensed at the time the losses are known and the amounts are reasonably determinable.

Debt Reserve Fund

The MFA is required to establish a Debt Reserve Fund for each debenture which is comprised of cash deposits and a non-interest bearing demand note (refer to note 2).

Letters of Credit

At December 31, 2022, the District is the named beneficiary of \$758 thousand (2021 - \$60.37 million) of irrevocable letters of credits from financial institutions related to construction projects and Solid Waste operations. These letters of credit are available under circumstances in which the service provider does not fulfil its obligation to the District and therefore the amount is not recorded as assets.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 16
Year ended December 31, 2022

11. Budget Information

The annual budget presented in these financial statements is based upon the 2022 operating and capital budgets originally approved by the District's Board in October 2021, with additional approval in February 2022 for adjustments to the budget as a result of the 2021 fiscal year end results. The budget is based on operational and capital expenditure requirements and their associated funding. Amortization is a non-cash item that is not funded for budget purposes. Also, contributions to or from reserves and debt principal repayments are removed from the approved budget for financial statement presentation. The schedule below reconciles the approved budget to the budget figures reported in these financial statements. Capital expenditures of \$831,292,000 were included in the capital budget approved by the Board.

	2022 Budget	2021 Budget
Budgeted annual surplus per Exhibit B- Statement of Operations	\$ 257,309,608	\$ 397,271,819
Additional transfers from reserves, approved by Board	210,000	1,049,675
Adjusted annual surplus, based on originally approved budget	257,519,608	398,321,494
Items not included in the approved operating budget		
Capital development cost charge revenue	(42,329,000)	(45,000,000)
Capital grants and contributions	(110,665,000)	(251,931,864)
Amortization of tangible capital assets	43,785,108	35,014,719
Sinking and debt retirement fund income	(7,398,610)	(5,450,233)
Reserve interest	(2,420,014)	(2,040,238)
Items included in the budget but not in financial statements		
Debt principal payments	(70,418,497)	(49,447,674)
Transfers to capital	(76,355,495)	(80,068,136)
Transfers from reserves	8,281,900	601,932
Annual surplus per approved budget	\$ —	\$ —

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 17
Year ended December 31, 2022

12. Segmented Information and Expenses by Object

The District's primary responsibilities are the collection, treatment and discharge of liquid waste for the municipalities of the MVRD and the disposal of solid waste both for the municipalities of the MVRD and the public. For management reporting purposes, the District's operations and activities are organized and reported by these two primary areas of service.

The information reported in the segmented information does not include \$8,634,903 (2021 - \$9,052,489) of salaries and benefits directly attributable to the construction of tangible capital assets which have been included in the cost of tangible capital assets in the Statement of Financial Position.

The services disclosed in the Segmented Information are as follows:

Liquid Waste Services

The Liquid Waste Services is responsible for the collection, treatment and discharge of liquid waste for member municipalities. It operates a number of wastewater treatment plants and a related collection network connected to the member municipalities' systems.

Solid Waste Services

The Solid Waste Services is responsible for the disposal of solid waste both for the member municipalities and the public. It owns and operates several solid waste facilities including a waste-to-energy facility.

	2022 Total Budget	Liquid Waste Services	Solid Waste Services	2022 Total Actual	2021 Total Actual
Revenues					
Sewerage and drainage levy	\$ 301,424,687	\$ 301,424,687	\$ —	\$ 301,424,687	\$ 288,225,540
Tipping fees	112,909,870	—	125,797,098	125,797,098	112,609,847
BODTSS Industrial Charges	12,262,636	12,431,402	—	12,431,402	12,157,191
Development cost charges	103,080,328	60,582,644	—	60,582,644	42,204,285
User fees, recoveries, and other	19,116,187	6,588,532	14,201,133	20,789,665	15,246,793
Sinking fund, debt retirement and interest income	9,818,623	8,439,471	1,968,994	10,408,465	6,579,921
Grants and contributions	106,415,000	29,870,139	—	29,870,139	61,062,379
	665,027,331	419,336,875	141,967,225	561,304,100	538,085,956
Expenses					
Salaries and benefits	74,535,355	65,693,835	6,517,150	72,210,985	67,654,156
Consulting, contracted, and professional services	137,122,031	42,470,999	102,395,630	144,866,629	110,621,342
Asset repairs and maintenance	13,914,405	13,980,943	859,552	14,840,495	12,634,023
Materials and supplies	18,800,063	18,018,094	44,508	18,062,602	16,187,093
Utilities, permits, and taxes	18,230,199	16,828,867	468,953	17,297,820	15,883,139
Corporate costs	44,288,552	37,661,273	5,114,271	42,775,544	37,107,276
Other	18,029,271	9,179,417	16,723,815	25,903,232	17,777,435
Amortization of tangible capital assets	43,785,108	36,786,878	8,382,080	45,168,958	32,477,244
Interest on long-term debt	39,012,739	32,134,993	2,423,752	34,558,745	29,655,148
	407,717,723	272,755,299	142,929,711	415,685,010	339,996,856
Annual surplus (deficit)	\$ 257,309,608	\$ 146,581,576	\$ (962,486)	\$ 145,619,090	\$ 198,089,100

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 18
Year ended December 31, 2022

13. Subsequent Event

On March 28, 2023, the District entered into a three-year contribution agreement with the Province of British Columbia, where the Province will provide \$250 million, one-third of the funding, for Phase 1 Iona Wastewater Treatment Plant. The District will receive \$75 million in April 2023 and in April 2024, and the remaining \$100 million in April 2025.

14. Comparative Figures

Certain prior year figures have been reclassified to conform to the presentation of the current year.

Financial Statements of

**GREATER VANCOUVER
WATER DISTRICT**

Year ended December 31, 2022

DRAFT - April 3, 2023

GREATER VANCOUVER WATER DISTRICT

Index to Financial Statements

December 31, 2022

Exhibit

Management Report

Independent Auditor's Report

Statement of Financial Position

A

Statement of Operations

B

Statement of Change in Net Debt

C

Statement of Cash Flows

D

Notes to Financial Statements

GREATER VANCOUVER WATER DISTRICT

MANAGEMENT REPORT

The Financial Statements contained in this report have been prepared by management in accordance with Canadian public sector accounting standards. The integrity and objectivity of these statements are management's responsibility. Management is responsible for all the statements and schedules, and for ensuring that this information is consistent, where appropriate, with the information contained in the financial statements.

Management is also responsible for implementing and maintaining a system of internal controls to provide reasonable assurance that reliable financial information is produced.

The Greater Vancouver Water District's Board of Directors is responsible for approving the financial statements and for ensuring that management fulfills its responsibilities for financial reporting and internal control and exercises this responsibility through the Finance Committee of the Board.

The external auditors, BDO Canada LLP, conduct an independent examination, in accordance with Canadian generally accepted auditing standards, and express their opinion on the financial statements. Their examination does not relate to the other schedules and statements required by the *Financial Information Act*. The Independent Auditor's Report outlines the scope of the audit for the year ended December 31, 2022.

On behalf of Greater Vancouver Water District.

Dean Rear, Chief Financial Officer

Date: April 28, 2023

Independent Auditor's Report

To the Board of Directors of the Greater Vancouver Water District

Opinion

We have audited the financial statements of the Greater Vancouver Water District (the "District"), which comprise the Statement of Financial Position as at December 31, 2022, and the Statements of Operations, Change in Net Debt and Cash Flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the District as at December 31, 2022, and the results of its operations, change in net debt and cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the District in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the District's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the District or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the District's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the District's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the District to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Vancouver, British Columbia
REPORT DATE

GREATER VANCOUVER WATER DISTRICT

Exhibit A

Statement of Financial Position

As at December 31, 2022

	2022	2021
Financial Assets		
Cash	\$ 2,203,332	\$ 1,780,988
Accounts receivable	68,590,081	48,357,266
Due from (to) Metro Vancouver Regional District	37,192,659	169,401,485
Debt reserve fund (note 2)	14,795,936	15,647,006
	122,782,008	235,186,745
Liabilities		
Accounts payable and accrued liabilities (note 3)	75,750,659	69,616,281
Debt (net of sinking funds) (note 4)	663,510,847	711,163,290
	739,261,506	780,779,571
Net Debt	(616,479,498)	(545,592,826)
Non-Financial Assets		
Tangible capital assets (note 5)	3,110,383,676	2,855,862,044
Inventories of supplies	4,802,826	4,356,061
Prepaid expenses	543,426	562,801
	3,115,729,928	2,860,780,906
Accumulated surplus (note 6)	\$ 2,499,250,430	\$ 2,315,188,080

Contractual obligations and rights (note 7)

Contingencies (note 8)

Budget information (note 9)

Segmented information and expenses by object (note 10)

The accompanying notes are an integral part of these financial statements.

Chief Financial Officer

Board Chair

GREATER VANCOUVER WATER DISTRICT

Exhibit B

Statement of Operations

Year ended December 31, 2022

	2022 Budget (note 9)	2022 Actual	2021 Actual
Revenues (note 10)			
Metered sale of water	\$ 329,365,517	\$ 329,678,422	\$ 319,989,323
Sinking fund, debt retirement, and interest income	18,167,873	21,513,338	20,734,421
Interest income	875,003	1,324,801	630,564
Building income from Metro Vancouver Districts	9,855,082	9,551,771	9,616,135
Building income from external parties	5,928,533	5,567,080	6,634,971
Other revenue	1,657,055	10,309,539	10,660,566
	<u>365,849,063</u>	<u>377,944,951</u>	<u>368,265,980</u>
Expenses (note 10)			
Water operations	187,753,243	177,794,239	167,532,829
Building operations	17,028,404	16,088,362	16,964,422
	<u>204,781,647</u>	<u>193,882,601</u>	<u>184,497,251</u>
Annual surplus	161,067,416	184,062,350	183,768,729
Accumulated surplus, beginning of year	2,315,188,080	2,315,188,080	2,131,419,351
Accumulated surplus, end of year	\$ 2,476,255,496	\$ 2,499,250,430	\$ 2,315,188,080

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER WATER DISTRICT

Exhibit C

Statement of Change in Net Debt

Year ended December 31, 2022

	2022 Budget (note 9)	2022 Actual	2021 Actual
Annual surplus	\$ 161,067,416	\$ 184,062,350	\$ 183,768,729
Change in tangible capital assets:			
Acquisition of tangible capital assets	(471,273,000)	(297,348,541)	(215,953,824)
Amortization of tangible capital assets	41,245,313	42,826,909	41,422,851
	<u>(430,027,687)</u>	<u>(254,521,632)</u>	<u>(174,530,973)</u>
Change in other non-financial assets:			
Acquisition of prepaid expenses	-	(543,426)	(562,801)
Use of prepaid expenses	-	562,801	617,268
Acquisition of inventories of supplies	-	(4,802,826)	(4,356,061)
Consumption of inventories of supplies	-	4,356,061	4,312,253
	<u>-</u>	<u>(427,390)</u>	<u>10,659</u>
Changes in net debt	(268,960,271)	(70,886,672)	9,248,415
Net debt, beginning of year	(545,592,826)	(545,592,826)	(554,841,241)
Net debt, end of year	\$ (814,553,097)	\$ (616,479,498)	\$ (545,592,826)

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER WATER DISTRICT

Exhibit D

Statement of Cash Flows

Year ended December 31, 2022

	2022	2021
Cash provided by (used in):		
Operating transactions:		
Annual surplus	\$ 184,062,350	\$ 183,768,729
Items not involving cash:		
Amortization	42,826,909	41,422,851
Sinking fund income	(21,462,663)	(20,696,085)
Debt reserve fund income	(355,728)	(111,875)
Change in non-cash assets and liabilities:		
Accounts receivable	(20,232,815)	4,293,919
Prepaid expenses	19,375	54,467
Accounts payable and accrued liabilities	6,134,378	14,713,059
Inventories of supplies	(446,765)	(43,808)
Net change in cash from operating transactions	190,545,041	223,401,257
Capital transactions:		
Acquisition of tangible capital assets	(297,348,541)	(215,953,824)
Net change in cash from capital transactions	(297,348,541)	(215,953,824)
Financing transactions:		
Due from Metro Vancouver Regional District	132,208,826	(179,390,919)
Debenture debt issued	40,000,000	230,000,000
Debt reserve fund issuance	(400,000)	(2,300,000)
Debt reserve fund maturity	1,606,798	791,709
Sinking fund payments	(66,189,780)	(55,877,869)
Net change in cash from financing transactions	107,225,844	(6,777,079)
Net change in cash and cash equivalents	422,344	670,354
Cash and cash equivalents, beginning of year	1,780,988	1,110,634
Cash and cash equivalents, end of year	\$ 2,203,332	\$ 1,780,988

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 1

Year ended December 31, 2022

1. Significant Accounting Policies

The Greater Vancouver Water District (the “District”) was established by an Act of the same name in 1924. Its primary responsibility is the supply of potable water to its member municipalities. Its Board of Directors comprises the same councillors and mayors as appointed to the Metro Vancouver Regional District (“MVRD”) Board by the participating municipalities.

The District owns or holds under a 999-year lease from the Province an extensive closed watershed network as its source of supply. It owns a series of dams, reservoirs, water treatment plants and a distribution network connecting to the municipal distribution systems. The member municipalities under the Act are jointly and severally liable for its debts. The District also owns and is responsible for operating and maintaining office buildings that are leased to MVRD and its related entities.

The District’s financial statements are prepared by management in accordance with Canadian public sector accounting standards (“PSAS”). Significant accounting policies adopted by the District are as follows:

Basis of Accounting The District follows the accrual method of accounting for revenues and expenses. Revenues are recognized in the year in which they are earned and measurable. Expenses are recognized as they are incurred and measurable as a result of the receipt of goods or services and/or the legal obligation to pay.

Government Transfers Government transfers are recognized as revenue in the financial statements when the transfer is authorized and any eligibility criteria are met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability. The transfer of revenue is initially deferred and then recognized in the statement of operations as the stipulation liabilities are settled.

When the District is deemed the transferor, the transfer expense is recognized when the recipient is authorized and has met the eligibility criteria.

Sinking Fund, Debt Retirement, and Interest Income Interest income is reported as revenue in the period earned. When required, based on external restrictions, interest income earned on deferred revenue is added to and forms part of the deferred revenue balance and is recognized into income when related stipulations are met. Any surpluses received from upon debt retirement are recorded in the year received.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 2

Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Cash and Investments

In order to improve cash management, the MVRD holds cash and investment transactions in pooled accounts on behalf of its four legal entities: the Metro Vancouver Regional District, the Greater Vancouver Sewerage and Drainage District, the Greater Vancouver Water District, and the Metro Vancouver Housing Corporation. The District's main cash is therefore presented as due from MVRD. Investments held by the MVRD consist of bonds issued by governments and Canadian chartered banks, money market instruments, guaranteed investment certificates, and term deposits. Interest earned on the District's fund balances is included in the amount owing from MVRD and is recorded as interest income in the Statement of Operations.

Employee Future Benefits

Employees who provide services for the District are employees of the MVRD. Employee related costs are allocated by the MVRD to the District based on services rendered. These costs are shown as expenses in the financial statements and are included in amounts owing to MVRD.

Post-employment benefits of the MVRD, including accumulated banked sick and vacation pay, retirement severance and Worker's Compensation top-up benefits for employees pursuant to certain policies and union agreements, are actuarially determined based on service and best estimates of retirement ages and expected future salary and wage increases. The obligation under these benefit plans is allocated to the District based on projected benefits as the employees render services necessary to earn the future benefits and included in amounts owing to MVRD.

Non-Financial Assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 3

Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Non-Financial Assets (continued)

Tangible Capital Assets

Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development, or betterment of the asset. The cost, less residual value, of the tangible capital assets, excluding land, is amortized on a straight line basis over the estimated useful lives of the assets as follows:

Asset	Useful Life Years
Buildings	
Corporate head office	40
Watershed	25
Infrastructure	
Dams and reservoirs	150
Supply mains	100
Distribution systems, drinking water treatment	50
Bridges and roads	50
Vehicles	5 - 10
Machinery, Equipment, Furniture and Fixtures	5 - 20

a. Annual amortization:

Annual amortization begins when the asset is available for use and is expensed over its useful life. Assets under construction are transferred to the appropriate asset class and are amortized from the date the asset is available for use.

b. Contributions of tangible capital assets:

Contributions of tangible capital assets are recorded at their estimated fair value at the date of receipt and as contribution revenue.

c. Interest capitalization:

The District does not capitalize interest costs associated with the acquisition or construction of a tangible capital asset.

Inventories of Supplies

Inventories of supplies held for consumption are recorded on a first-in-first-out basis.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 4

Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Revenue Recognition Metered sale of water, building income from external tenants, Metro Vancouver Districts and Housing Corporation, and other income are recognized as revenue on an accrual basis according to the usage and rates approved and set by the Board.

Use of Estimates The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts in the financial statements and the disclosure of contingent liabilities. These estimates and assumptions are based on management's best information and judgment and may differ from actual results. Adjustments, if any, will be reflected in the financial statements in the period that the change in estimate is made, as well as in the period of settlement if the amount is different.

Significant areas requiring the use of management's judgment relates to the determination of contaminated sites liabilities, the amortization rates of tangible capital assets and the assessment of the outcome of contingent liabilities.

Segmented Information A segment is defined as a distinguishable activity or group of activities of a government for which it is appropriate to separately report financial information to achieve the objectives of the standard. Definitions of the District's segments and their related financial information are presented in note 10.

Liabilities for Contaminated Sites A liability for remediation of a contaminated site is recognized when the site is no longer in productive use and the following criteria are satisfied: an environmental standard exists; contamination exceeds the standard; the District is either directly responsible or has accepted responsibility for remediation; it is expected that future economic benefits will be given up and a reasonable estimate of the liability can be made. Liabilities for contaminated sites are reported in accounts payable and accrued liabilities (note 3).

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 5

Year ended December 31, 2022

2. Debt Reserve Fund

The Municipal Finance Authority of British Columbia (“MFA”) provides financing for regional districts and member municipalities. The MFA is required to establish a Debt Reserve Fund for each debenture issue equal to one-half the average annual installment of principal and interest. The debt reserve fund is comprised of cash deposits equal to 1% of the principal amount borrowed and a non-interest bearing demand note for the remaining requirement. Cash deposits held by the MFA are payable with interest to the ultimate borrower when the final obligations under the respective loan agreements have been made.

If, at any time, the District has insufficient funds to meet payments due on its obligations to the MFA, the payments will be made from the debt reserve fund. The demand notes are callable only if there are additional requirements to be met in order to maintain the level of the debt reserve fund. At December 31, 2022, \$39,209,792 (2021 - \$41,402,712) in callable demand notes were outstanding and have not been recorded in the statement of financial position.

3. Accounts Payable and Accrued Liabilities

	2022	2021
Trade accounts	\$ 31,593,697	\$ 37,400,180
Construction holdbacks	36,610,812	25,870,577
Accrued interest on debt	6,051,290	5,883,967
Contaminated sites (a)	1,494,860	461,557
	<u>\$ 75,750,659</u>	<u>\$ 69,616,281</u>

(a) In 2022, the District accrued \$1,494,860 to remediate contaminated soils at two of its properties. The remediation work for the properties will be completed in 2024 and 2026.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 6

Year ended December 31, 2022

4. Debt

- a) All borrowings for the District are obtained from MFA by the MVRD on the District's behalf, although the District maintains the right to finance debt without MFA involvement.

Debt, debentures or other security issued by the District is a direct, joint and several obligation and liability of the District and each and every member municipality.

Debt servicing requirements comprising sinking fund contributions, serial repayments and interest are funded as incurred by revenue earned during the year.

- b) Principal payments and sinking fund installments due within the next five years and thereafter are as follows:

	Total Payments
2023	\$ 64,541,985
2024	60,764,893
2025	53,773,139
2026	47,331,355
2027	45,720,909
Thereafter	239,717,480
Total payments	511,849,761
Estimated sinking fund income	151,661,086
Total debt	\$ 663,510,847

- c) Sinking fund installments are invested by the MFA and earn income that, together with principal payments, are expected to be sufficient to retire the sinking fund debt at maturity. For sinking fund agreements, the MFA has established either a normal sinking fund or a capital repayment equalization fund.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 7

Year ended December 31, 2022

4. Debt (continued)

- d) Debt (net of sinking funds) reported on the Statement of Financial Position comprises the following and includes varying maturities up to 2037 with interest rates ranging from 0.70% to 3.85%.

Issue number	Interest rate - %	Maturity date	Debentures authorized to be issued	Debenture debt outstanding	
				2022	2021
67	0.70%-1.75%	November 5, 2022	\$ 706,000	\$ —	\$ 706,000
67	0.70%-1.75%	November 5, 2022	14,294,000	—	14,294,000
102	2.25%	December 1, 2022	80,000,000	—	80,000,000
103	2.65%	April 23, 2023	40,000,000	40,000,000	40,000,000
104	2.90%	November 20, 2023	35,630,930	35,630,930	35,630,930
105	2.25%	June 3, 2024	60,000,000	60,000,000	60,000,000
106	2.25%	October 13, 2024	80,000,000	80,000,000	80,000,000
110	1.28%	April 8, 2025	50,000,000	50,000,000	50,000,000
112	1.28%	October 6, 2025	70,000,000	70,000,000	70,000,000
116	1.47%	April 4, 2026	30,000,000	30,000,000	30,000,000
118	3.39% - 3.40%	April 11, 2027	70,000,000	70,000,000	70,000,000
121	2.90% - 3.39%	October 4, 2027	20,000,000	20,000,000	20,000,000
126	3.85%	September 26, 2028	70,000,000	70,000,000	70,000,000
127	3.30%	April 7, 2029	60,000,000	60,000,000	60,000,000
130	3.00%	October 14, 2029	50,000,000	50,000,000	50,000,000
131	2.20%	April 8, 2030	60,000,000	60,000,000	60,000,000
137	2.60%	April 19, 2031	20,000,000	20,000,000	20,000,000
137	2.60%	April 19, 2031	80,000,000	80,000,000	80,000,000
141	2.80%	April 7, 2032	50,000,000	50,000,000	50,000,000
147	2.66%	April 9, 2034	22,000,000	22,000,000	22,000,000
150	1.99%	April 9, 2035	40,000,000	40,000,000	40,000,000
151	1.28%	June 1, 2035	30,000,000	30,000,000	30,000,000
153	2.41%	April 15, 2036	100,000,000	100,000,000	100,000,000
154	2.41%	May 28, 2036	130,000,000	130,000,000	130,000,000
157	3.36%	April 8, 2037	40,000,000	40,000,000	
Debt			\$ 1,302,630,930	\$ 1,207,630,930	\$ 1,262,630,930
Less sinking funds				(544,120,083)	(551,467,640)
Total debt (net of sinking funds)				\$ 663,510,847	\$ 711,163,290

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 8

Year ended December 31, 2022

5. Tangible Capital Assets

Year ended December 31, 2022

	Cost						Net book value December 31, 2022	Net book value December 31, 2021
	Balance at December 31, 2021	Additions	Balance at December 31, 2022	Balance at December 31, 2021	Amortization Expense	Balance at December 31, 2022		
Land	\$ 53,664,152	\$ 79,050,000	\$ 132,714,152	\$ -	\$ -	\$ -	\$ 132,714,152	\$ 53,664,152
Infrastructure	2,245,795,214	180,999,192	2,426,794,406	437,619,616	36,321,766	473,941,382	1,952,853,024	1,808,175,598
Buildings	216,476,101	-	216,476,101	24,687,670	5,463,049	30,150,719	186,325,382	191,788,431
Machinery, equipment furniture & fixtures	13,197,425	425,409	13,622,834	7,424,225	1,042,094	8,466,319	5,156,515	5,773,200
Assets under construction	796,460,663	36,873,940	833,334,603	-	-	-	833,334,603	796,460,663
	\$ 3,325,593,555	\$ 297,348,541	\$ 3,622,942,096	\$ 469,731,511	\$ 42,826,909	\$ 512,558,420	\$ 3,110,383,676	\$ 2,855,862,044

Year ended December 31, 2020

	Cost						Net book value December 31, 2021	Net book value December 31, 2020
	Balance at December 31, 2020	Additions	Balance at December 31, 2021	Balance at December 31, 2020	Amortization Expense	Balance at December 31, 2021		
Land	\$ 44,704,207	\$ 8,959,945	\$ 53,664,152	\$ -	\$ -	\$ -	\$ 53,664,152	44,704,207
Infrastructure	2,118,001,989	127,793,225	2,245,795,214	402,689,372	34,930,244	437,619,616	1,808,175,598	1,715,312,617
Buildings	216,476,101	-	216,476,101	19,224,621	5,463,049	24,687,670	191,788,431	197,251,480
Machinery, equipment furniture & fixtures	13,197,425	-	13,197,425	6,394,667	1,029,558	7,424,225	5,773,200	6,802,758
Assets under construction	717,260,009	79,200,654	796,460,663	-	-	-	796,460,663	717,260,009
	\$ 3,109,639,731	\$ 215,953,824	\$ 3,325,593,555	\$ 428,308,660	\$ 41,422,851	\$ 469,731,511	\$ 2,855,862,044	2,681,331,071

6. Accumulated Surplus

Accumulated surplus consists of individual fund surplus and reserves as follows:

	2022	2021
Reserves	\$ 52,629,741	\$ 43,696,639
Capital fund balance	(252,140)	126,792,687
Investment in tangible capital assets	2,446,872,829	2,144,698,754
Accumulated surplus, end of year	\$ 2,499,250,430	\$ 2,315,188,080

Capital fund balance represents the future expected level of funding required or accumulated.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 9

Year ended December 31, 2022

6. Accumulated Surplus (continued)

Continuity of reserves is as follows:

	December 31, 2021	Interest	Annual Operating Surplus	Contributions from / (to) operations	December 31, 2022
Designated reserves					
Sustainability innovation fund	\$ 14,309,567	\$ 355,597	\$ -	\$ (87,555)	\$ 14,577,609
Laboratory equipment	784,733	18,979	-	-	803,712
	15,094,300	374,576	-	(87,555)	15,381,321
Non-designated reserves					
Operating reserve	28,602,339	691,740	7,954,341	-	37,248,420
Total reserves	\$ 43,696,639	\$ 1,066,316	\$ 7,954,341	\$ (87,555)	\$ 52,629,741

Investment in tangible capital assets is calculated as follows:

	2022	2021
Tangible capital assets	\$ 3,110,383,676	\$ 2,855,862,044
Amounts financed by:		
Long-term debt	(663,510,847)	(711,163,290)
	\$ 2,446,872,829	\$ 2,144,698,754

The change in the investment in tangible capital assets is as follows:

	2022	2021
Change in the investment in tangible capital assets		
Acquisition of tangible capital assets	\$ 297,348,541	\$ 215,953,824
Amortization of tangible capital assets	(42,826,909)	(41,422,851)
	254,521,632	174,530,973
Less funding of tangible capital assets		
Sinking fund and debt retirement	(66,189,780)	(55,877,869)
Sinking fund income	(21,462,663)	(20,696,085)
Debenture debt issued	40,000,000	230,000,000
	(47,652,443)	153,426,046
Change in investment in tangible capital assets	302,174,075	21,104,927
Investment in tangible capital assets, beginning of year	2,144,698,754	2,123,593,827
Investment in tangible capital assets, end of year	\$ 2,446,872,829	\$ 2,144,698,754

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 10

Year ended December 31, 2022

7. Contractual Obligations and Rights

a) Contractual Obligations

- i) As at December 31, 2022, the District had the following commitments outstanding related to capital projects in progress:

	2022	2021
Authorized for outstanding projects	\$ 2,620,217,000	\$ 2,541,411,828
Expended at December 31	(1,030,341,454)	(1,112,159,228)
Commitment remaining	\$ 1,589,875,546	\$ 1,429,252,600

- ii) The District is committed under a lease agreement with annual payments of \$107,000 to perpetuity, with adjustments annually for CPI. Estimated payments over the next ten years are as follows:

	Amount
2023	\$ 117,343
2024	117,343
2025	117,343
2026	117,343
2027	117,343
2028 - 2032	586,715
Total	\$ 1,173,430

b) Contractual Rights

The District is party to several property lease agreements that are anticipated to provide future revenues. These agreements are with third parties with varying terms to 2035. Amounts anticipated to be received over the future years are as follows:

	Amount
2023	\$ 4,961,451
2024	4,359,140
2025	3,688,992
2026	2,475,990
2027	1,209,130
Thereafter	5,473,858
Total	\$ 22,168,561

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 11

Year ended December 31, 2022

8. Contingencies

Lawsuits

As at December 31, 2022, there were various lawsuits pending against the District arising in the ordinary course of business. The District has retained legal counsel to defend against these lawsuits. Where the outcomes or amounts cannot be reasonably determined, no liability has been recorded. Management is of the opinion that losses, if any, in connection with these lawsuits can be sufficiently funded by reserve funds or covered by insurance. Any expected losses will be accrued and recorded as expenses at the time they are considered likely and amounts are reasonably determinable.

Self-Insurance Reserve

A self-insurance reserve has been established within the MVRD to cover losses resulting from uninsured liability exposures of the District, other MVRD Districts, and Metro Vancouver Housing Corporation ("MVHC").

Each year a review is undertaken to determine if it would be beneficial to purchase additional liability insurance. The District, other Metro Vancouver Districts, and the MVHC transfer amounts to the reserve depending on the reserve's adequacy to cover retained liability risk.

An estimate is made for all costs of investigating and settlement of claims annually and an adjustment is made to the reserve to maintain an adequate balance to cover potential losses in excess of recorded liabilities. These estimates are changed as additional information becomes known during the course of claims settlement. Any likely losses would be expensed at the time the losses are known and the amounts are reasonably determinable.

Debt Reserve Fund

The MFA is required to establish a Debt Reserve Fund for each debenture which is comprised of cash deposits and a non-interest bearing demand note (refer to note 2). If, at any time, the District has insufficient funds to meet payments due on its obligations to MFA, the payments will be made from the debt reserve fund. The demand notes are callable only if there are additional requirements to be met to maintain the level of the debt reserve fund, and therefore have not been recorded in the statement of financial position.

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 12

Year ended December 31, 2022

9. Budget Information

The annual budget presented in these financial statements is based upon the 2022 operating and capital budgets originally approved by the District's Board in October 2021, with additional approval in February 2022 for adjustments to the budget as a result of the 2021 fiscal year end results. The budget is based on operational and capital expenditure requirements and their associated funding. Amortization is a non-cash item that is not funded for budget purposes. Also, contributions to or from reserves and debt principal repayments are removed from the approved budget for financial statement presentation. The schedule below reconciles the approved operating budget to the budget figures reported in these financial statements. Capital expenditures of \$471,273,000 were included in the capital budget approved by the Board.

	2022 Budget	2021 Budget
Budgeted annual surplus per Exhibit B - Statement of Operations	\$ 161,067,416	\$ 163,254,271
Additional transfers from reserves, approved by Board	1,540,000	-
Adjusted annual surplus, based on originally approved budget	162,607,416	163,254,271
Items not included in the operating budget		
Amortization of tangible capital assets	41,245,313	40,552,047
Sinking and debt retirement fund income	(18,167,873)	(17,594,045)
Reserve interest	(875,003)	(713,060)
Items included in the budget but not in financial statements		
Debt principal payments	(66,189,780)	(55,877,869)
Transfers to capital	(123,769,144)	(130,975,759)
Transfers from reserve funds	7,412,071	2,102,934
Transfers to reserve funds	(2,263,000)	(748,519)
Annual surplus per approved budget	\$ -	\$ -

GREATER VANCOUVER WATER DISTRICT

Notes to Financial Statements, page 13

Year ended December 31, 2022

10. Segmented Information and Expenses by Object

The District's primary responsibilities are the supply of potable water to the municipalities of the MVRD and the property management of the office buildings owned by the District. For management reporting purposes, the District's operations and activities are organized and reported by these two primary areas of service. The information reported in the segmented information does not include \$6,003,235 (2021 - \$7,168,137) of salaries and benefits directly attributable to the construction of tangible capital assets which have been included in the cost of tangible capital assets in the Statement of Financial Position.

The services disclosed in the Segmented Information are as follows:

Water Operations Water Operations is responsible for the supply of potable water to the District's member municipalities. The District owns a series of dams, reservoirs, water treatment plants and a distribution network connected to the member municipalities' systems.

Building Operations Building Operations is responsible for operating and maintaining office buildings owned by the District. These facilities are leased to MVRD and its related entities for its head office operations as well as to external parties.

	2022 Budget	Water Operations	Building Operations	Inter-Program Adjustments	2022 Total	2021 Total
Revenue						
Metered sale of water	\$ 329,365,517	\$ 329,678,422	\$ -	\$ -	\$ 329,678,422	\$ 319,989,323
Sinking fund, debt retirement and interest income	18,167,873	19,419,734	2,093,604	-	21,513,338	20,734,421
Interest income	875,003	1,324,801	-	-	1,324,801	630,564
Building income from Metro Vancouver Districts	9,855,082	-	15,397,687	(5,845,916)	9,551,771	9,616,135
Building income from external parties	5,928,533	-	5,567,080	-	5,567,080	6,634,971
Other income	1,657,055	10,160,578	148,961	-	10,309,539	10,660,566
	365,849,063	360,583,535	23,207,332	(5,845,916)	377,944,951	368,265,980
Expenses						
Salaries and benefits	50,706,726	44,722,966	493,511	-	45,216,477	42,710,659
Consulting, contracted and professional services	17,487,775	13,308,351	1,902,629	-	15,210,980	14,342,178
Asset repairs and maintenance	8,465,028	3,955,126	2,317,214	-	6,272,340	6,355,983
Materials and supplies	14,194,938	13,492,858	53,979	-	13,546,837	11,601,114
Utilities, permits and taxes	9,317,986	7,635,055	906,011	-	8,541,066	8,807,621
Corporate costs	22,978,942	28,622,413	-	(5,845,916)	22,776,497	20,691,464
Other	8,173,955	7,559,072	733,071	-	8,292,143	8,672,974
Amortization of tangible capital assets	41,245,313	37,890,999	4,935,910	-	42,826,909	41,422,851
Interest on long-term debt	32,210,984	26,453,315	4,746,037	-	31,199,352	29,892,407
	204,781,647	183,640,155	16,088,362	(5,845,916)	193,882,601	184,497,251
Annual surplus	\$ 161,067,416	\$ 176,943,380	\$ 7,118,970	\$ -	\$ 184,062,350	\$ 183,768,729

Financial Statements of

**METRO VANCOUVER
HOUSING CORPORATION**

Year ended December 31, 2022

DRAFT - April 3, 2023

METRO VANCOUVER HOUSING CORPORATION

Index to Financial Statements

December 31, 2022

	Exhibit
Management Report	
Independent Auditor's Report	
Statement of Financial Position	A
Statement of Operations	B
Statement of Change in Net Debt	C
Statement of Cash Flows	D
Notes to Financial Statements	

METRO VANCOUVER HOUSING CORPORATION

MANAGEMENT REPORT

The Financial Statements contained in this report have been prepared by management in accordance with Canadian public sector accounting standards. The integrity and objectivity of these statements are management's responsibility. Management is responsible for all the statements and schedules, and for ensuring that this information is consistent, where appropriate, with the information contained in the financial statements.

Management is also responsible for implementing and maintaining a system of internal controls to provide reasonable assurance that reliable financial information is produced.

The Metro Vancouver Housing Corporation's Board of Directors is responsible for approving the financial statements and for ensuring that management fulfills its responsibilities for financial reporting and internal control and exercises this responsibility through the Finance Committee of the Board.

The external auditors, BDO Canada LLP, conduct an independent examination, in accordance with Canadian generally accepted auditing standards, and express their opinion on the financial statements. Their examination does not relate to the other schedules and statements required by the *Financial Information Act*. The Independent Auditor's Report outlines the scope of the audit for the year ended December 31, 2022.

On behalf of Metro Vancouver Housing Corporation.

Dean Rear, Chief Financial Officer

Date: April 28, 2023

Independent Auditor's Report

To the Board of Directors of the Metro Vancouver Housing Corporation

Opinion

We have audited the financial statements of the Metro Vancouver Housing Corporation (the "Corporation"), which comprise the Statement of Financial Position as at December 31, 2022, and the Statements of Operations, Change in Net Debt and Cash Flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Corporation as at December 31, 2022, and the results of its operations, change in net debt and cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Corporation in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Corporation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Corporation or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Corporation's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Corporation's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Corporation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Corporation to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Vancouver, British Columbia
REPORT DATE

METRO VANCOUVER HOUSING CORPORATION

Exhibit A

Statement of Financial Position

As at December 31, 2022

	2022	2021
Financial Assets		
Accounts receivable	\$ 2,742,766	\$ 623,427
Due from Metro Vancouver Regional District	55,984,565	61,528,240
	58,727,331	62,151,667
Liabilities		
Accounts payable and accrued liabilities (note 3)	7,458,181	5,051,559
Deferred revenue and refundable deposits (note 4)	7,163,751	6,535,981
Mortgages and loans payable (note 5)	50,900,959	54,518,957
	65,522,891	66,106,497
Net Debt	(6,795,560)	(3,954,830)
Non-Financial Assets		
Tangible capital assets (note 6)	123,426,386	105,843,374
Prepaid land leases (note 7)	4,867,502	5,062,302
Prepaid expenses	930,027	784,143
	129,223,915	111,689,819
Accumulated surplus (note 8)	\$ 122,428,355	\$ 107,734,989

Contractual obligations (note 9)

Contingencies (note 10)

Budget information (note 11)

The accompanying notes are an integral part of these financial statements.

Director

Director

METRO VANCOUVER HOUSING CORPORATION

Exhibit B

Statement of Operations

Year ended December 31, 2022

	2022 Budget (Note 11)	2022 Actual	2021 Actual
Revenues			
Property rental	\$ 42,050,709	\$ 43,266,817	\$ 42,416,407
Contributions:			
British Columbia Housing Management	1,834,061	1,538,412	1,749,788
Grants and other contributions	17,535,892	1,891,423	120,703
Interest income	1,072,075	1,447,918	655,358
Other revenues	6,639,490	1,176,493	900,466
	69,132,227	49,321,063	45,842,722
Expenses			
Asset repairs and maintenance	20,407,318	14,597,085	16,866,033
Amortization of tangible assets and prepaid land	2,902,673	2,971,035	3,212,445
Utilities, permits, and taxes	4,505,744	4,601,247	4,454,801
Salaries and benefits	6,988,036	6,660,947	6,411,113
Interest and fees on long-term debt	1,527,945	1,294,759	1,265,098
Corporate costs	2,417,247	2,390,454	2,095,291
Consulting, contracted, and professional services	1,173,163	995,466	632,423
Other	1,045,723	911,773	778,431
Materials and supplies	186,451	204,931	168,507
	41,154,300	34,627,697	35,884,142
Annual surplus	27,977,927	14,693,366	9,958,580
Accumulated surplus, beginning of year	107,734,989	107,734,989	97,776,409
Accumulated surplus, end of year	\$ 135,712,916	\$ 122,428,355	\$ 107,734,989

The accompanying notes are an integral part of these financial statements.

METRO VANCOUVER HOUSING CORPORATION

Exhibit C

Statement of Change in Net Debt

Year ended December 31, 2022

	2022 Budget (Note 11)	2022 Actual	2021 Actual
Annual surplus	\$ 27,977,927	\$ 14,693,366	\$ 9,958,580
Change in tangible capital assets			
Acquisition of tangible capital assets	(48,300,000)	(20,493,998)	(5,436,056)
Amortization of tangible capital assets	2,707,874	2,776,235	3,017,646
Disposal of tangible capital assets	—	134,751	—
	(45,592,126)	(17,583,012)	(2,418,410)
Change in other non-financial assets			
Payment of prepaid expenses	—	(930,027)	(784,143)
Use of prepaid expenses	—	784,143	721,541
Amortization of prepaid land leases	194,799	194,800	194,799
	194,799	48,916	132,197
Change in net debt	(17,419,400)	(2,840,730)	7,672,367
Net debt, beginning of year	(3,954,830)	(3,954,830)	(11,627,197)
Net debt, end of year	\$ (21,374,230)	\$ (6,795,560)	\$ (3,954,830)

The accompanying notes are an integral part of these financial statements.

METRO VANCOUVER HOUSING CORPORATION

Exhibit D

Statement of Cash Flows

Year ended December 31, 2022

	2022	2021
Cash provided by (used in):		
Operating transactions:		
Annual surplus	\$ 14,693,366	\$ 9,958,580
Items not involving cash		
Amortization of tangible capital assets	2,776,235	3,017,646
Amortization of prepaid land leases	194,800	194,799
Loss on disposal of tangible capital assets	134,751	—
Change in non-cash assets and liabilities		
Accounts receivable	(2,119,339)	5,602,271
Accounts payable and accrued liabilities	2,406,622	1,161,863
Deferred revenue and refundable deposits	627,770	885,587
Prepaid expenses	(145,884)	(62,602)
Net change in cash from operating transactions	18,568,321	20,758,144
Capital transactions:		
Acquisition of tangible capital assets	(20,493,998)	(5,436,056)
Net change in cash from capital transactions	(20,493,998)	(5,436,056)
Financing transactions:		
Due from Metro Vancouver Regional District	5,543,675	(11,478,558)
Principal repayments on mortgages and loans	(3,617,998)	(3,843,530)
Net change in cash from financing transactions	1,925,677	(15,322,088)
Net change in cash and cash equivalents	—	—
Cash and cash equivalents, beginning of year	—	—
Cash and cash equivalents, end of year	\$ —	\$ —

The accompanying notes are an integral part of these financial statements.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 1

Year ended December 31, 2022

1. Significant Accounting Policies

The Metro Vancouver Housing Corporation (“MVHC” or the “Corporation”) is a wholly-owned subsidiary of the Metro Vancouver Regional District (“MVRD”). The MVHC is incorporated under the Business Corporations Act (British Columbia) as a not-for-profit corporation for the purpose of supplying public rental accommodation, and is exempt from income taxes.

The Corporation’s financial statements are prepared by management in accordance with Canadian public sector accounting standards. Significant accounting policies adopted by the MVHC are as follows:

Basis of Accounting

The Corporation follows the accrual method of accounting for revenue and expenses. Revenue is recognized in the year in which they are earned and measurable. Expenses are recognized as they are incurred and measurable as a result of the receipt of goods or services and/or the legal obligation to pay.

Government Transfers

Government transfers are recognized as revenue in the financial statements when the transfer is authorized and any eligibility criteria are met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability. The transfer of revenue is initially deferred and then recognized in the statement of operations as the stipulation liabilities are settled.

When the Corporation is deemed the transferor, the transfer expense is recognized when the recipient is authorized and has met the eligibility criteria.

Deferred Revenue and Refundable Deposits

Deferred revenues represent tenant security deposits, restricted contributions and revenues, and rental income which have been collected, but which the related services or obligations have yet to be performed. These amounts will be recognized as revenues in the fiscal year the services are performed or obligations have been met.

Amounts received under the following programs have been recorded as deferred revenue:

- i) Rental Operations: Under operating agreements entered into with Canada Mortgage and Housing Corporation (“CMHC”) and administered by BC Housing Management Commission (“BCHMC”) (Homes BC, Seniors, and Investment in Housing Innovation properties), a portion of the funds received from rental operations are restricted and can only be used by MVHC according to the terms of the agreements. Restricted amounts are recorded as deferred revenue and are used when expenditures exceed revenue in the program.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 2

Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Deferred Revenue and Refundable Deposits (continued) ii) Replacement Projects: Under operating agreements entered into with Canada Mortgage and Housing Corporation (“CMHC”) and administered by BCHMC (Homes BC, Seniors, and Investment in Housing Innovation properties), a portion of the funds received from rental operations are restricted for the replacement of equipment and specified building components. These funds are deferred until spent on approved items.

Interest Income Interest income is reported as revenue in the period earned. When required, based on external requirements, interest income earned on deferred revenue and refundable deposits is added to and forms part of the deferred revenue and refundable deposit balance.

Cash and Investments In order to improve cash management, the MVRD holds cash and investment transactions in pooled accounts on behalf of its four legal entities: the Metro Vancouver Regional District, the Greater Vancouver Sewerage and Drainage District, the Greater Vancouver Water District, and the Metro Vancouver Housing Corporation. The Corporation’s cash is therefore presented as due from MVRD. Investments held by the MVRD consist of bonds issued by governments and Canadian chartered banks, money market instruments, guaranteed investment certificates, and term deposits. Interest earned on the Corporation’s fund balances is included in the amount owing from MVRD and is recorded as interest income in the Statement of Operations.

Employee Future Benefits Employees who provide services for MVHC are employees of the MVRD. Employee related costs are allocated by the MVRD to MVHC based on services rendered. These costs are shown as expenses in the financial statements and are included in amounts owing from MVRD.

Post-employment benefits of the MVRD, including accumulated banked sick and vacation pay, retirement severance, and Worker’s Compensation top-up benefits for employees pursuant to certain policies and union agreements, are actuarially determined based on service and best estimates of retirement ages and expected future salary and wage increases. The obligation under these benefit plans is allocated to MVHC based on projected benefits as the employees render services necessary to earn the future benefits and included in amounts owing to the MVRD.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 3

Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Non-financial assets Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

Tangible Capital Assets Tangible capital assets are recorded at cost, which includes amounts that are directly attributable to acquisition, construction, development, or betterment of the asset. The cost, less residual value, of the tangible capital assets, excluding land, is amortized on a straight-line basis over the estimated useful lives of the assets as follows:

Asset	Useful Life - Years
Buildings	
Manor House and Regal Hotel	25
Other buildings	35
Furniture and fixtures	6 - 10

1) Annual amortization:

Annual amortization begins when the asset is available for use and is expensed over its useful life. Assets under construction are transferred to the appropriate asset class and are amortized from the date the asset is available for use.

2) Interest capitalization:

The Corporation does not capitalize interest costs associated with the acquisition or construction of a tangible capital asset.

Prepaid Land Leases Prepaid land leases are recorded at historical cost less accumulated amortization. Upon expiration of the lease contract, the property will revert to the lessor. Prepaid land leases are amortized on a straight-line basis over the lease term.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 4

Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Financial Instruments

Financial instruments are recorded at fair value on initial recognition.

Unrealized changes in fair value are recognized in the Statement of Remeasurement Gains and Losses until they are realized, when they are transferred to the Statement of Operations.

Financial instruments are adjusted by transaction costs incurred on acquisition and financing costs, which are amortized using the straight-line method.

All financial assets are assessed for impairment on an annual basis. When a decline is determined to be other than temporary, the amount of the loss is reported in the Statement of Operations and any unrealized gain is adjusted through the Statement of Remeasurement Gains and Losses.

When the asset is sold, the unrealized gains and losses previously recognized in the Statement of Remeasurement Gains and Losses are reversed and recognized in the Statement of Operations.

There are no financial instruments carried at fair value as at year end and as a result, the Statement of Remeasurement Gains and Losses has not been prepared.

Functional and Segmented Presentation of Revenue and Expenses

A segment is defined as a distinguishable activity or group of activities of a government for which it is appropriate to separately report financial information to achieve the objectives of the standard. Management believes that MVHC's activities are comprised of only one segment and hence no additional disclosure is required. Furthermore, as the operations of MVHC are comprised of a single function, supply of public rental accommodation, the Statement of Operations presents revenue and expenses by object.

Revenue Recognition

Property rental income, contributions, and other revenues are recognized as revenue on an accrual basis. Housing property rental revenue is recognized over the rental period once the tenant commences occupancy, rent is due and collection is assured. Annual property rental increases are based on rates established by provincial tenancy legislation. Contributions from CMHC and BCHMC are based on provisions set in agreements and outlined in note 2.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 5

Year ended December 31, 2022

1. Significant Accounting Policies (continued)

Liability for Contaminated Sites

A liability for remediation of a contaminated site is recognized when the site is no longer in productive use and the following criteria are satisfied; an environmental standard exists; contamination exceeds the standard; MVHC is either directly responsible or has accepted responsibility for remediation; it is expected that future economic benefits will be given up and a reasonable estimate of the liability can be made.

Use of Estimates

The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts and disclosure of contingent liabilities, in the financial statements. These estimates and assumptions are based on management's best information and judgment and may differ from actual results. Adjustments, if any, will be reflected in the financial statements in the period that the change in estimate is made, as well as in the period of settlement if the amount is different.

Significant areas requiring the use of management's judgment relate to the determination of contaminated sites liabilities, the amortization rates of tangible capital assets and the assessment of the outcome of contingent liabilities.

2. Senior Government Assistance

BCHMC is the administrator and provides the related government assistance for all of MVHC's Federal programs and Provincial operating agreements (Homes BC, Seniors, and Investment in Housing Innovation properties). In 2007, CMHC devolved its operations relating to the MVHC's federal programs to BCHMC, which provides BCHMC with the authority to manage MVHC's federal programs.

Details of senior government assistance are as follows:

CMHC mortgage insurance

Pursuant to Section 6 of the *National Housing Act* ("NHA"), CMHC has undertaken to insure mortgages payable by the MVHC.

NHA Section 82.1(a) and 82.1(b) subsidy

Rental supplements are authorized under Section 82.1(a) and 82.1(b) of the NHA and are funded jointly by BCHMC on behalf of the both the Federal Government and the Province of British Columbia.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 6

Year ended December 31, 2022

3. Accounts Payable and Accrued Liabilities

	2022	2021
Trade accounts	\$ 6,185,191	\$ 4,649,286
Construction holdbacks	1,191,181	314,806
Accrued interest on mortgages and debenture debt	81,809	87,467
	\$ 7,458,181	\$ 5,051,559

4. Deferred Revenue and Refundable Deposits

	2022	2021
Externally restricted funds for programs under BCHMC Agreements:		
Rental operations	\$ 48,464	\$ 47,320
Replacement provisions	3,456,305	3,375,308
	3,504,769	3,422,628
MVHC tenant security deposits	2,156,638	2,097,391
Rent and subsidies received in advance	365,561	394,878
Grant received in advance	1,136,783	621,084
Total	\$ 7,163,751	\$ 6,535,981

	2022	2021
Balance, beginning of year	\$ 6,535,981	\$ 5,650,394
Contributions received	1,034,628	1,419,568
Contributions earned	(436,788)	(667,784)
Change in security deposits and prepaid rents	29,930	133,803
	627,770	885,587
Balance, end of year	\$ 7,163,751	\$ 6,535,981

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 7

Year ended December 31, 2022

5. Mortgages and Loans Payable

- a) MVHC's loans for Cedarwood, Crown Manor, Earle Adams, Euclid Square, Grandview Gardens, Kelly Court, Manor House, Regal Hotel and Semlin Terrace are financed through the MVRD at MVRD's internal variable rate which was 1.70% in 2022 (2021 - 1.30%). Financing arrangements are approved through the Boards of MVRD and MVHC and renewed every 5 years. There are no charges or liens on these properties.
- b) Mortgages and loans outstanding (see note 5(d)) are expected to be renegotiated on a long-term basis. Annual principal repayments assuming extension to maturity are as follows:

	Payments for		Total
	MVRD	Payments for	Payments
	Loans	Mortgages	
2023	\$ 923,583	\$ 2,604,471	\$ 3,528,054
2024	923,583	2,654,964	3,578,547
2025	923,583	2,721,853	3,645,436
2026	923,583	2,790,528	3,714,111
2027	923,583	2,741,515	3,665,098
Thereafter	3,636,519	29,133,194	32,769,713
Total	\$ 8,254,434	\$ 42,646,525	\$ 50,900,959

- c) Properties funded by BCHMC mortgages are collateralized by a general assignment of rents and the benefit of all covenants and agreements included in any lease.
- d) Mortgages and loans are comprised of the following and includes varying maturities up to 2055 with interest rates ranging from 1.44% to 4.87%.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 8

Year ended December 31, 2022

5. Mortgages and Loans Payable (continued)

Rental Property	Financed by	Interest Rate - %	Renewal Date	Expected Maturity Date	2022	2021
Investment in Housing Innovation Projects:						
Heather Place A	Other	1.44	December 1, 2030	December 1, 2055	\$ 12,739,503	\$ 13,039,238
Total Investment in Housing Innovation projects					12,739,503	13,039,238
Seniors projects:						
Alderwood Place	CHMC	2.55	—	July 1, 2027	1,236,421	1,487,817
Cedarwood Place	CHMC	2.39	—	January 1, 2023	14,037	179,732
Cedarwood Place	MVRD	1.70	July 1, 2024	July 1, 2038	3,302,389	3,508,789
Total Seniors projects					4,552,847	5,176,338
Homes BC projects:						
Chateau de Ville	Other	4.87	July 1, 2027	July 1, 2035	6,471,833	6,840,730
Claude Douglas	Other	2.56	November 1, 2029	November 1, 2036	1,744,214	1,847,421
Fraserwood	Other	1.44	December 1, 2030	December 1, 2035	2,880,070	3,080,169
Inlet Centre	Other	1.58	October 1, 2030	October 1, 2038	4,907,839	5,178,448
Maplewood	Other	2.62	May 1, 2027	May 1, 2037	2,205,283	2,329,800
Odlinwood	Other	2.03	August 1, 2026	August 1, 2036	4,099,335	4,357,318
Total Homes BC projects					22,308,574	23,633,886
MVHC projects:						
Crown Manor	MVRD	1.70	July 15, 2024	July 15, 2038	610,534	649,208
Earle Adams Village	MVRD	1.70	June 1, 2022	June 1, 2027	1,325,352	1,590,405
Euclid Square	MVRD	1.70	June 1, 2022	June 1, 2027	389,321	467,186
Grandview Gardens	MVRD	1.70	June 1, 2022	June 1, 2027	277,849	333,419
Kelly Court	MVRD	1.70	June 1, 2022	June 1, 2027	551,387	661,665
Manor House	MVRD	1.70	March 15, 2024	March 15, 2038	1,023,571	1,088,218
Meridian Village	Other	2.46	September 1,	July 1, 2031	3,990,636	4,403,694
Minato West	Other	2.22	October 1, 2021	October 1, 2031	2,357,354	2,596,594
Regal Place Hotel	MVRD	1.70	March 15, 2024	March 15, 2038	363,415	386,367
Semlin Terrace	MVRD	1.70	June 1, 2022	June 1, 2027	410,616	492,739
Total MVHC projects					11,300,035	12,669,495
Total mortgages and loans payable					\$ 50,900,959	\$ 54,518,957
Mortgages and loans payable consists of:						
Loans payable to MVRD					\$ 8,254,434	\$ 9,177,996
Mortgages payable to CMHC and financial institutions					42,646,525	45,340,961
Total mortgages and loans payable					\$ 50,900,959	\$ 54,518,957

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 9

Year ended December 31, 2022

6. Tangible Capital Assets

Year ended December 31, 2022

	Cost			Accumulated Amortization				Net Book Value December 31, 2022	
	Balance at December 31, 2021	Additions	Disposals	Balance at December 31, 2022	Balance at December 31, 2021	Disposals	Amortization Expense		Balance at December 31, 2022
Land	\$ 52,274,381	\$ —	\$ —	\$ 52,274,381	\$ —	\$ —	\$ —	\$ —	\$ 52,274,381
Buildings	220,339,606	3,250,133	—	223,589,739	176,544,478	—	2,289,708	178,834,186	44,755,553
Furniture & fixtures	6,439,458	618,571	(496,915)	6,561,114	4,742,709	(362,164)	486,527	4,867,072	1,694,042
Construction in progress	8,077,116	16,625,294	—	24,702,410	—	—	—	—	24,702,410
	\$ 287,130,561	\$ 20,493,998	\$ (496,915)	\$ 307,127,644	\$ 181,287,187	\$ (362,164)	\$ 2,776,235	\$ 183,701,258	\$ 123,426,386

Year ended December 31, 2021

	Cost			Accumulated Amortization				Net Book Value December 31, 2021	
	Balance at December 31, 2020	Additions	Disposals	Balance at December 31, 2021	Balance at December 31, 2020	Disposals	Amortization Expense		Balance at December 31, 2021
Land	\$ 52,274,381	\$ —	\$ —	\$ 52,274,381	\$ —	\$ —	\$ —	\$ —	\$ 52,274,381
Buildings	220,575,387	(235,781)	—	220,339,606	174,053,428	—	2,491,050	176,544,478	43,795,128
Furniture & fixtures	6,463,268	479,849	(503,659)	6,439,458	4,719,772	(503,659)	526,596	4,742,709	1,696,749
Construction in progress	2,885,128	5,191,988	—	8,077,116	—	—	—	—	8,077,116
	\$ 282,198,164	\$ 5,436,056	\$ (503,659)	\$ 287,130,561	\$ 178,773,200	\$ (503,659)	\$ 3,017,646	\$ 181,287,187	\$ 105,843,374

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 10

Year ended December 31, 2022

7. Prepaid Land Leases

	2022	2021
Balance, beginning of year	\$ 5,062,302	\$ 5,257,101
Amortization	(194,800)	(194,799)
Balance, end of year	\$ 4,867,502	\$ 5,062,302

The lease terms for the properties are as follows:

Asset	Lease Expiry Dates	Lease Term (Years)
Buildings		
Habitat Villa	February 2029	50
Walnut Gardens	May 2026	42
Other prepaid land leases	May 2036 to June 2062	60

8. Accumulated Surplus

Accumulated surplus consists of authorized and issued 2,000 common shares with a par value of \$1 per share and individual fund surplus and reserves as follows:

	2022	2021
Reserves	\$ 55,075,513	\$ 51,346,270
Capital fund	(5,174,585)	5,062,302
Investment in tangible capital assets	72,525,427	51,324,417
Share capital	2,000	2,000
	\$ 122,428,355	\$ 107,734,989

Continuity of reserves is as follows:

	2022	2021
Balance, beginning of year	\$ 51,346,270	\$ 47,454,831
Interest	1,133,900	535,652
Contribution to operations	(2,414,053)	(7,075,873)
Contribution to capital	(5,300,000)	(4,859,212)
Annual operating surplus	10,309,396	15,290,872
	\$ 55,075,513	\$ 51,346,270

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 11

Year ended December 31, 2022

8. Accumulated Surplus (continued)

Investment in tangible capital assets is calculated as follows:

	2022	2021
Tangible capital assets	\$ 123,426,386	\$ 105,843,374
Amounts financed by:		
Long-term debt	(50,900,959)	(54,518,957)
	\$ 72,525,427	\$ 51,324,417

The change in investment in tangible capital assets is as follows:

	2022	2021
Change in the investment in tangible capital assets		
Acquisition of tangible capital assets	\$ 20,493,998	\$ 5,436,056
Amortization of tangible capital assets	(2,776,235)	(3,017,646)
Disposal of tangible capital assets (net of book value)	(134,751)	—
	17,583,012	2,418,410
Less financing of tangible capital assets through debt		
Payment of long-term debt	(3,617,998)	(3,843,530)
	(3,617,998)	(3,843,530)
Change in investment in tangible capital assets	21,201,010	6,261,940
Investment in tangible capital assets, beginning of year	51,324,417	45,062,477
Investment in tangible capital assets, end of year	\$ 72,525,427	\$ 51,324,417

9. Contractual Obligations

a) Contractual Obligations

- i) As at December 31, 2022, the Corporation had the following commitments relating to projects in progress.

Authorized and Outstanding Projects	Expended at December 31	Total 2022	Total 2021
\$ 322,500,000	\$ (24,106,220)	\$ 298,393,780	\$ 346,322,885

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 12

Year ended December 31, 2022

10. Contingencies

Lawsuits

As at December 31, 2022, there were various lawsuits pending against the Corporation arising in the ordinary course of business. The Corporation has retained legal counsel to defend against these lawsuits. Where the outcomes or amounts cannot be reasonably determined, no liability has been recorded. Management is of the opinion that losses, if any, in connection with these lawsuits can be sufficiently funded by reserve funds or covered by insurance. Any expected losses will be accrued and recorded as expenses at the time they are considered likely and amounts are reasonably determinable.

Self-Insurance Reserve

A self-insurance reserve has been established within the MVRD to cover losses resulting from uninsured liability exposures of the Metro Vancouver Districts, and the MVHC.

Each year a review is undertaken to determine if it would be beneficial to purchase liability insurance. The MVRD, its related Districts, and the MVHC transfer amounts to the reserve depending on the reserve's adequacy to cover retained liability risk.

An estimate is made for all costs of investigating and settlement of claims incurred annually and an adjustment is made to the reserve to maintain an adequate balance to cover potential losses in excess of recorded liabilities. These adjustments are changed as additional information becomes known during the course of claims settlement. Any likely losses would be expensed by at the time the losses are known and the amounts are reasonably determinable.

BC Homes Repayable Assistance

Under the operating agreements, the cumulative Non-Rent Geared to Income (Non-RGI) assistance is contingently repayable to BCHMC in the event that BCHMC's unit rent contribution for any unit exceeds the economic or breakeven rent of the units occupied by Non-RGI tenants in any year. MVHC is required to commence repayment of the cumulative Non-RGI assistance on the first day of the fiscal year following the fiscal year in which the preceding event occurs. The balance then bears interest at bank prime and the required monthly payments are set annually based upon the amount by which Non-RGI BCHMC's unit rent contributions exceed economic rent for these units in the prior year. Currently the estimated total Repayable Assistance at December 31, 2022 is \$nil (2021 - \$nil). However, the balance will be reconciled and finalized once BCHMC completes the financial review for the fiscal year ended December 31, 2022.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 13

Year ended December 31, 2022

10. Contingencies (continued)

BCHMC Grant Funding

In 2018 MVHC entered into a forgivable loan agreement (the "Agreement") with BC Housing Management Commission for funding for the Heather Place Facility. MVHC received funding in the amounts of \$5,137,797 and \$1,547,723 in 2018 and 2019, respectively. The loan term is 35 years and is forgivable in the amount of 1/25th of the final balance of \$6,685,520 commencing in the 11th year after completion of construction and commencement of operations, which occurred in 2020. Upon commencement of operations of the facility, the amount of funding received was recorded as revenue from government transfer as the remaining stipulation of continuing to operate the facility in accordance with the Agreement is not considered to create a liability.

Forgiveness of the loan under the Agreement requires that the property must be continuously used for the provision of housing for eligible occupants and there is no default under the loan or operating agreement. Should a breach in the agreement occur, the outstanding balance of the funding not previously forgiven would need to be repaid to BCHMC immediately. Payments of interest will not be required unless there is a default, which would result in interest being payable on the unforgiven balance of the principal amount then outstanding at prime plus 2% per annum, compounded semi-annually and not in advance. As management does not consider it likely that the amount will be repaid, no liability is recorded in the financial statements.

CMHC Grant Funding

In 2022 MVHC entered into an agreement with the Canada Mortgage and Housing Corporation for funding for the repair of the Kelly Court Facility, totalling \$1,321,824. As of December 31, 2022, \$1,182,147 of the grant was expended and recorded as grant revenue and accounts receivable. Stipulations of the grant agreement requires that MVHC maintain the affordability of the building for eligible occupants, that the project meets minimum energy efficiency requirements and that there is no default under the funding agreement. Should a breach in the agreement occur, the contribution, in whole or part, would be repayable to CMHC immediately. As management does not consider it likely that the amount will be repaid, no liability is recorded in the financial statements.

METRO VANCOUVER HOUSING CORPORATION

Notes to Financial Statements, page 14

Year ended December 31, 2022

10. Contingencies (continued)

BCHMC Loan Funding

In 2022, MVHC entered into a demand non-revolving construction loan agreement with BC Housing Management Commission for funding for the Kingston Gardens re-development project. The maximum approved construction loan amount is \$44,642,752. Amounts drawn from the loan must be repaid no later than August 1, 2024. The BCHMC construction loan is to be repaid by a BCHMC investment of \$8,300,000 and take-out mortgage obtained through CMHC's National Housing Co-Investment Fund for \$29,411,377. Any amounts remaining of up to \$6,931,375, will be paid from MVHC's reserves.

Interest payable on the loan will be calculated based on a variable rate of not more than the Royal Bank of Canada Prime Rate plus 1.00%, compounded monthly, not in advance. As at December 31, 2022, no amounts were drawn from the demand loan.

11. Budget Information

The annual budget presented in these financial statements is based upon the 2022 operating and capital budgets approved by the Corporation's Board in October 2021. The budget is based on operational and capital expenditure requirements and their associated funding. Amortization is a non-cash item that is not funded for budget purposes. Contributions to or from reserves and debt principal repayments are removed from the approved budget for financial statement presentation. The schedule below reconciles the approved budget to the budget figures reported in these financial statements. Capital expenditures of \$48,300,000 were included in the Capital Budget approved by the Board.

	2022 Budget	2021 Budget
Budgeted annual surplus per Exhibit B	\$ 27,977,927	\$ 12,739,949
Items not included in the operating budget		
Amortization of tangible capital assets and prepaid land	2,902,673	2,108,764
Reserve interest	(1,007,075)	(942,813)
Development grant	(17,535,892)	(8,500,000)
Items included in the budget but not in financial statements		
Debt principal payments	(3,952,669)	(3,564,408)
Transfers to reserves	(8,384,964)	(1,841,492)
Annual surplus per approved budget	\$ —	\$ —

To: Finance Committee

From: Sonu Kailley, Acting Director, Financial Planning

Date: April 3, 2023 Meeting Date: April 13, 2023

Subject: **Capital Program Expenditure Update as at December 31, 2022**

RECOMMENDATION

That the Finance Committee receive for information the report dated April 3, 2023, titled “Capital Program Expenditure Update as at December 31, 2022.”

EXECUTIVE SUMMARY

Updates on the capital program and its expenditures are brought to the Committee to keep members informed on Metro Vancouver’s financial performance. This is the final report for the 2022 fiscal year. Attachment 1 provides a summary of the 2022 actual capital spending compared to the planned capital cash flow. Attachment 2 provides additional information and narrative by department regarding the spending variances outlined in Attachment 1.

For 2022, Metro Vancouver’s actual capital cash flow expenditures were approximately 55% of planned spend and were underspent by \$619.0 million. The underspend, primarily timing differences, is due to a variety of factors, including: limited market capacity for projects, delays in permitting, challenges in acquiring property rights, and construction delays.

PURPOSE

To present the Committee with the final report on the financial performance of the capital program for the year ending December 31, 2022.

BACKGROUND

Updates on the capital program and its expenditures are brought to the Committee to keep members informed on Metro Vancouver’s financial performance. These updates include the actual financial progress of Metro Vancouver’s capital expenditures compared to the planned cash flow limits.

Three updates were planned for the fiscal year 2022, which is consistent with the Finance Committee Terms of Reference. This is the final report for the 2022 fiscal year. However, for 2023 onwards, the capital program expenditure update will increase its frequency to quarterly reporting.

Separate reports containing the financial information specific to that function are also presented to the Water, Liquid Waste, Zero-Waste, Housing and Regional Parks Committees.

CAPITAL PROGRAM FUNDING

The capital program for Liquid Waste, Solid Waste and Water are funded through a combination of grants, interagency funding, reserves and in the in case of Liquid Waste, development cost charges

(DCCs) as well as through the Operating Budget by a combination of contribution to capital (pay-as-you-go funding) and debt service costs (principal and interest payments) which is generated annually from the regional ratepayers. In 2022, the impact on the ratepayers for the Liquid Waste, Solid Waste and Water capital cash flow of \$1,302.6 million is the capital funding of \$397.8 million (contribution to capital and debt service costs) included in the 2022 Operating Budget.

In the case of Regional Parks, the capital program is funded from existing reserves and grants. Contribution to these capital reserves is generated from the MVRD Tax Requisition. In 2022, the impact on the Operating Budget for Regional Parks planned capital cash flow is the reserve contributions totaling \$25.8 million, with the remaining \$1.6M of reserve funding being funded from existing reserve balances.

For Housing Services, the capital program is funded through grants and subsidies and through the Operating Budget from a combination of reserves, and debt service costs (principal and interest payments) which are primarily generated from housing rents. In 2022, the impact on the Operating Budget for the Housing Services planned capital cash flow is reserve contributions totaling \$17.6 million and \$5.5 million from debt service costs.

2022 CAPITAL PROGRAM PROGRESS

The annual capital cash flow comprises the projected spending for a list of capital projects either continuing or to be started within the calendar year. Projecting the spending on these projects represents a timing exercise which is often subject to uncontrollable circumstances. These uncontrollable circumstances are more likely when projects are in certain phases of completion. Where a project is in the definition, pre-design or detailed design phases, it is more likely that a project may be subject to delays from necessary permitting, access, clarification of design details or procurement complexities which will result in a lag in spending. Conversely, when a project is within the construction phase where a contractor is in place and working effectively on site, actual spending is usually very close to budgeted expectations.

Attachment 1 provides a summary of the 2022 actual capital spending compared to the planned capital cash flow. Attachment 3 provides additional information and narrative by department regarding the spending variances outlined in Attachment 1.

For 2022, Metro Vancouver's actual capital expenditures were approximately 55% of planned cash flow and were underspent by \$619.0 million.

Housing Services

Actual capital expenditures for Housing Services were \$16.0 million compared to the planned capital cash flow of \$48.3 million, with the majority of the spending related to capital replacement and Kingston Gardens – Phase 1.

The capital underspend in Housing Services was primarily due to additional lead time required to obtain the building permit for Welcher Avenue that delayed the start of construction to November 2022. Construction of Kingston Gardens – Phase 1 commenced in 2022 and was at close to 50% completion at the end of 2022.

The “Housing Services Capital Project Update as of December 31, 2022” included in Attachment 2 provides further information.

Liquid Waste Services

Actual capital expenditures for Liquid Waste Services were \$400.4 million compared to a planned capital cash flow of \$780.5 million. The majority of the spending is related to the Northwest Langley Wastewater Treatment Project and the North Shore Wastewater Treatment Plant replacement.

The underspend is primarily due to a variety of factors, including limited market capacity for projects, delays in tendering works or initiating construction, protracted property negotiations and permitting delays. In addition, the North Shore Wastewater Treatment Plant project was previously forecasted to have significant work completed in 2022, however, there was a termination of the contract and Metro Vancouver is now working with a new contractor.

The “Liquid Waste Services Capital Project Update as of December 31, 2022” included in Attachment 2 provided further information.

Regional Parks Services

Actual capital expenditures for Regional Parks were \$9.4 million compared to a planned capital cash flow of \$31.3 million, with the majority of the spending being for park land acquisition and capital development. The 2022 planned capital cash flow for Regional Parks is funded through reserves. Any amounts unspent from 2022 will remain in the reserve for future use.

The underspends were predominantly related to the delays in Widgeon Marsh Regional Park development. The project had a 2022 planned capital cash flow of \$7.5M which was deferred to provide time for additional First Nations engagement. The Capilano River and Pacific Spirit Regional Park service yard projects were also delayed due to permitting requirements. Both projects are proceeding in 2023.

The “Regional Parks Capital Project Update as of December 31, 2022” included in Attachment 2 provides further information.

Solid Waste Services

Actual capital expenditures for Solid Waste Services were \$39.4 million compared to a planned capital cash flow of \$50.8 million with a majority of spending occurring in the Recycling and Waste Centre category.

The underspend is primarily due to the timing of the pre-construction phases of the Waste-to-Energy Facility projects.

The “Solid Waste Services Capital Project Update as of December 31, 2022” included in Attachment 2 provides further information.

Water Services

Actual capital expenditures for Water Services were \$297.8 million compared to a planned capital cash flow of \$471.3 million. A majority of spending occurred in the Growth projects including Annacis Main No.5 Marine Crossing and Resilience projects including Second Narrows Crossing Tunnel.

The current underspend is due to several factors including delays in permitting, limited market capacity for projects and construction delays.

The “Water Services Capital Project Update as of December 31, 2022” included in Attachment 2 provides further information.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

For 2022, primarily due to the timing of expenditures, Metro Vancouver’s actual capital expenditures were approximately 55% of the planned capital cash flow resulting in an underspend of \$619.0 million.

Regional Parks and Housing, whose capital expenditures are funded from reserves, will have no resulting surplus from the underspending of the 2022 planned capital cash flow as the monies will remain in the reserve. As the underspending is due to timing, these funds are expected to be expended in future years.

CONCLUSION

In 2022, Metro Vancouver’s actual capital expenditures were approximately 55% of planned capital cash flow resulting in an underspend of \$619.0 million. The majority of the capital program relates to Liquid Waste, Solid Waste and Water with the underspending primarily due to limited market capacity for projects, permitting issues, and construction delays, which contributed to timing of expenditures differing from expectations.

Although the 2022 Capital Cash Flow was underspent overall, the variances are generally a result of timing, with the actual overall spending on a capital project expected to be close to the overall budget.

Attachments

1. 2022 Capital Spending Summary as at December 31, 2022
2. Capital Project Update as of December 31, 2022 – by Department
3. Capital Project Status Information – by Department

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Metro Vancouver

2022 Capital Spending Summary

For the 12 months ending December 31, 2022

	Annual	Year to Date		% of Prorated Capital Cash Flow	% of Annual Capital Cash Flow
	2022 Capital Cash Flow	2022 Capital Cash Flow to December 2022	Actual Expenditures		
Housing Services					
Development Capital	48,300,000	48,300,000	16,041,736		
	48,300,000	48,300,000	16,041,736	33.2%	33.2%
Liquid Waste Services					
Collections	187,337,000	187,337,000	71,476,489		
Treatment Plants	593,115,000	593,115,000	328,907,493		
	780,452,000	780,452,000	400,383,982	51.3%	51.3%
Regional Parks					
Capital Development	15,505,000	15,505,000	4,245,240		
Parkland Acquisition Fund Projects	15,750,000	15,750,000	5,151,727		
	31,255,000	31,255,000	9,396,967	30.1%	30.1%
Solid Waste Services					
Landfills	2,350,000	2,350,000	377,964		
Recycling and Waste Centres	28,900,000	28,900,000	35,180,833		
Waste To Energy Facilities	17,750,000	17,750,000	3,544,133		
Opportunity	1,840,000	1,840,000	331,801		
	50,840,000	50,840,000	39,434,732	77.6%	77.6%
Water Services					
Water Mains	333,800,000	333,800,000	213,725,699		
Pump Stations	39,050,000	39,050,000	11,394,558		
Reservoirs	44,004,000	44,004,000	19,658,300		
Treatment Plants	22,025,000	22,025,000	2,526,923		
Others	32,394,000	32,394,000	50,511,428		
	471,273,000	471,273,000	297,816,909	63.2%	63.2%
Total	1,382,120,000	1,382,120,000	763,074,326	55.2%	55.2%

Date Run: 03/27/2023



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment		
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031						
Capital Development																		
Heather Place - Building B	Expand/Re-develop	Vancouver													48,100,000	47,000,000	7%	Abatement work was completed in Spring 2022. Construction expected to begin in Fall 2023.
Kingston Gardens - Phase 1	Expand/Re-develop	Surrey													44,600,000	44,700,000	48%	Construction progression at nearly 50% complete.
Welcher Avenue	Expand/Re-develop	Port Coquitlam													36,100,000	36,100,000	13%	Construction started in November 2022.
Eastburn Square (2021 Projects in Planning)	Expand/Re-develop	Burnaby													63,800,000	73,500,000	15%	Rezoning and preliminary design in progress through 2022.
Malaspina (2021 Projects in Planning)	Expand/Re-develop	Coquitlam													38,700,000	81,700,000	2%	Rezoning and preliminary design in progress through 2022.
Pitt Meadows Town Centre (2021 Projects in Planning)	Expand/Member Partnerships	Pitt Meadows													45,800,000	74,700,000	2%	Rezoning and preliminary design occurred through 2022.
Southwynde - Burnaby (2021 Projects in Planning)	Expand/Member Partnerships	Burnaby													45,400,000	64,500,000	12%	Rezoning and preliminary design in progress through 2022.
Projects in Planning	Expand/Re-develop and Member Partnerships														-	143,300,000	0%	
Total Capital Development												322,500,000	565,500,000					
Grand Total Metro Vancouver Housing Corporation												322,500,000	565,500,000					



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment		
			2022-2026 Capital Plan					2027	2028	2029	2030	2031						
Collections																		
8th Avenue Interceptor Air Treatment Facilities	Upgrade	Vancouver											500,000	14,200,000	3%			
Albert Street Trunk Sewer	Growth	Port Moody											10,250,000	10,250,000	98%	Project in service		
Big Bend Forcemain - Gate Replacement	Maintenance	Richmond											180,000	2,700,000	3%			
Burnaby Lake North Interceptor Cariboo Section	Growth	Burnaby											-	41,000,000	0%	Project deferred to 2024 to suit resourcing and coordinate with other works.		
Burnaby Lake North Interceptor Winston Section	Growth	Burnaby											116,950,000	110,000,000	29%	Construction underway, project expected to be completed under budget		
Burnaby South Slope Interceptor	Growth	Burnaby											500,000	22,700,000	0%	Project deferred to 2023 to enable better scope definition		
Cloverdale Pump Station Capacity Upgrade	Growth	Surrey											700,000	36,400,000	1%	Deferred to better define scope of upgrades		
Cloverdale Trunk Sewer Capacity Upgrade	Growth	Surrey											1,200,000	29,000,000	1%	Project deferred to 2023 to enable better scope definition. Procurement initiated for project initiation work		
Combined Sewer Overflow Sampling Station Enhancements	Maintenance	Regional											1,900,000	1,600,000	42%	Project expected to be completed under budget		
Glen Eagles Pump Stations Phase 2	Maintenance	West Vancouver											-	10,000,000	0%			
Crescent Beach FM - Replacement	Maintenance	Surrey											26,820,000	32,000,000	60%	Additional budget and schedule required to address unforeseen ground conditions.		
Eagle Creek (Lower Section) Channel Restoration	Resilience	Burnaby											750,000	750,000	0%			
Lozells Sanitary Trunk Golf Course Section	Growth	Burnaby											-	27,650,000	0%			
Manitoba Street Combined Trunk Sewer Separation	Upgrade	Vancouver											-	93,750,000	0%			
EMQC Chemistry Laboratory and Environmental Field Services	Upgrade	Burnaby											3,500,000	31,000,000	0%			
Fraser Sewerage Area Integrated Resource Recovery (IRR) Study	Opportunity	Regional											1,200,000	1,200,000	13%			
Front Street Pressure Sewer Access Hatches Reinforcement	Maintenance	New Westminster											5,000,000	5,000,000	7%	Construction deferred to 2023 to suit work by others		
FSA Flow Metering Program	Maintenance	Regional											3,500,000	3,500,000	54%			
FSA River Crossing Scour Protection Program - Phase 1	Maintenance	Regional											4,200,000	4,200,000	0%	Phase 1 Construction delayed to Jan 2023 due to properties and permitting issues.		
FSA Sewer Relocations and Protections	Maintenance	Regional											32,750,000	11,700,000	1%	Construction timing depends on third party actions which are delayed. Work was rescope and costs are expected to be lower than previously anticipated.		
FSA Statutory Right of Way Acquisitions Phase 1	Maintenance	Delta/Port Moody											35,100,000	35,100,000	31%	For acquisition of rights-of-way as opportunities arise.		
Gilbert/Brighthouse Trunk Pressure Sewer	Maintenance	Richmond											169,601,000	192,850,000	38%	Tenders (2) were delayed, but one is now awarded and the other award is in progress. Rehabilitation of the existing sewer will be considered after current construction is complete. This latter item has been budgetted but is not yet approved.		
Glen Eagles Forcemain Replacement	Maintenance	WestVancouver											10,234,000	15,850,000	34%	Construction delayed due to properties and permitting issues		
Glen Eagles Pump Stations Phase 1	Maintenance	WestVancouver											22,500,000	33,300,000	9%	Tendering was delayed due to properties, but is now proceeding with award in process.		
Glenbrook Combined Trunk Kingsway Sanitary Section	Growth	Burnaby											7,200,000	7,200,000	10%			
Harbour Pump Station Discharge Header Repair and Valve Replacements	Maintenance	Vancouver											2,500,000	2,500,000	8%	Design underway. Construction expected in summer 2024.		
Harbour Pump Station Power Distribution Equipment Replacement	Maintenance	Vancouver											1,600,000	3,300,000	10%			
Hastings-Cassiar Intake Connection	Growth	Vancouver											2,350,000	4,200,000	24%	Project budget adjusted for BY2023. Project is now substantially complete.		
Highbury Interceptor Diversion Junction Chamber Wall Rehabilitation	Maintenance	Vancouver											500,000	6,000,000	0%	Project delayed to coordinate with other work.		
Highbury Interceptor North Arm Crossing - Upgrade of Siphons	Resilience	Vancouver											12,500,000	12,500,000	98%	Project substantially complete		
Jervis Pump Station 25kV Voltage Conversion	Maintenance	Vancouver											1,300,000	1,300,000	11%			
Kent Pump Station High Voltage Switchgear Replacement	Maintenance	Vancouver											1,150,000	2,000,000	4%			



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022-2026 Capital Plan														
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031					
Surrey Central Valley Capacity Upgrade	Growth	Surrey											-	60,800,000	0%		
Lake City Access and Parking Improvements	Maintenance	Burnaby											2,850,000	3,750,000	0%		
LSA Flow Metering Program	Maintenance	Richmond											300,000	300,000	25%		
Marshend Pump Station	Growth	Burnaby											10,125,000	21,150,000	9%	9% Project delayed to properly define scope.	
New CSO Management Gates for New Westminster Interceptor	Upgrade	New Westminster											5,925,000	1,300,000	22%	Project cancelled, as remaining work was determined to not be cost effective.	
New West Interceptor - Annacis Section 2	Maintenance	Delta											45,000,000	42,000,000	15%		
New West Interceptor Grit Chamber	Maintenance	New Westminster											9,300,000	9,300,000	2%	Project delayed to coordinate with Sapperton PS completion and focus on higher priority work.	
New Westminster Interceptor Repair Columbia St. Section	Maintenance	New Westminster											35,752,000	39,550,000	51%	Project under construction and experiencing some delays in execution.	
New Westminster Interceptor West Branch and Columbia Extension Rehabilitation	Maintenance	New Westminster											1,900,000	28,300,000	1%		
North Road Trunk Sewer	Growth	Coquitlam											11,675,000	11,700,000	59%	Majority of works complete. Protracted permitting and negotiations are delaying the railway crossing component.	
North Road Trunk Sewer Phase 2	Growth	Coquitlam											8,450,000	8,450,000	13%		
North Surrey Interceptor - Port Mann Section - Odour Control	Upgrade	Surrey											7,500,000	29,600,000	5%	Project delayed due to resourcing and scope definition. Project now proceeding	
North Surrey Interceptor Annieville Channel Crossing Scour Protection	Maintenance	Regional											4,350,000	4,350,000	40%		
North Surrey Interceptor Roebuck Section Rehabilitation - Phase 1	Maintenance	Surrey											2,750,000	18,100,000	7%		
NSA Flow Metering Program	Maintenance	West Vancouver											900,000	900,000	29%		
NSA Scour Protection Upgrades	Maintenance	Regional											2,250,000	2,250,000	3%		
NSI 104th Ave Extension	Growth	Surrey											12,950,000	12,950,000	38%	Project had been on hold for several years, and is being rescoped to suit changing municipal requirements and NW Langley WWTP plans.	
NSI Flow Management	Upgrade	Surrey											11,500,000	94,500,000	6%		
NSI Rehab or Replacement	Maintenance	Surrey											16,450,000	49,450,000	11%	Port Mann rehabilitation nearing completion, Manson Road section delayed to confirm future flow requirements.	
Ocean Park Trunk Manholes Lining	Maintenance	Surrey											1,200,000	1,050,000	0%	Project deferred to 2024	
Ocean Park Trunk Sewer - Air Management Facility	Upgrade	Surrey											2,750,000	7,750,000	20%	On hold due to protracted property negotiations. Property now purchased.	
Port Coquitlam Pump Station Refurbishment	Maintenance	Port Coquitlam											2,300,000	58,850,000	1%		
Port Moody Pump Station Capacity Upgrade	Growth	Port Moody											2,300,000	19,550,000	5%	Project on hold since Aug 2020 to revise scope with regard to revised flow requirements.	
Port Moody South Interceptor Capacity Upgrade	Growth	Port Moody											-	3,450,000	0%		
Port Moody Storm Drain Rehabilitation	Maintenance	Port Moody											200,000	1,650,000	0%		
Rosemary Heights Pressure Sewer Capacity Upgrade	Growth	Surrey											-	10,750,000	0%	Project deferred until 2025	
Royal Ave PS Rehabilitation	Maintenance	New Westminster											8,238,000	10,100,000	21%	Project delayed due to resource constraints	
Sapperton Pump Station	Growth	New Westminster											94,815,000	97,500,000	98%	Substantial completion in July 2021. Work to upgrade backup power system and decommission old station underway.	
Sapperton Pump Station Emergency Backup Power	Resilience	New Westminster											5,000,000	5,000,000	1%	Project on hold to coordinate with other work.	
Sewer Heat Projects	Opportunity	Regional											18,800,000	46,500,000	0%		
South Surrey Interceptor Johnston Section	Growth	Surrey											84,026,000	84,050,000	60%		
SSI - King George Section - Odor Control Facility (OCF) and Grit C	Growth	Surrey											19,550,000	19,550,000	90%		
SSI Influent Control Chamber Repair and Replace Gates	Maintenance	Delta											1,285,000	1,300,000	1%	Project on hold to confirm scope of repairs	
SSI Sulfide Odour and Corrosion Control	Upgrade	Delta											9,200,000	9,550,000	20%	Project delayed due to equipment supply issues	
Stoney Creek Sanitary Trunk	Growth	Burnaby											700,000	67,700,000	1%		
Surrey Corrosion Control Facility Replacement	Maintenance	Surrey											7,250,000	7,300,000	14%	Project delayed due to protracted permitting issues.	
VSA Emergency Backup Power	Resilience	Vancouver											24,310,000	29,000,000	55%	5 of 7 units are complete, 2 stations (Jervis and Chilco PS) are delayed due to protracted property and permitting issues.	



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031					
2022-2026 Capital Plan																	
VSA Flow Metering Program	Maintenance	Regional												5,800,000	5,800,000	14%	
VSA Grit Chamber Access Improvements	Maintenance	UEL - UEL												900,000	2,000,000	0%	
VSA Sewer Relocations and Protections	Maintenance	Regional												30,650,000	31,750,000	18%	Construction activities dependant on third party works
Westridge FM Replacement	Maintenance	Burnaby												3,650,000	7,600,000	27%	Project delayed to focus on higher priority work, but is now in process.
Westridge Pump Stations 1 & 2 Refurbishment	Maintenance	Burnaby												5,790,000	16,250,000	7%	
White Rock Forcemain Rehabilitation	Maintenance	White Rock/Surrey												1,200,000	14,800,000	1%	
Works Yard	Maintenance	Burnaby												32,000,000	32,000,000	83%	
Total Collections														1,028,276,000	1,834,200,000		
Treatment Plants																	
AIWWTP Ammonia Removal – Sidestream	Upgrade	Delta												900,000	126,000,000	1%	Continuing with data collection with more analyses to confirm study results. Design currently not scheduled to start until late in the decade - this will likely need to get accelerated so that the pilot plant work is started in 2024 or 2025.
AIWWTP Chemical Lab UPS System Replacement	Maintenance	Delta												600,000	900,000	9%	
AIWWTP Cogen Building Refurbishment	Maintenance	Delta												1,500,000	1,200,000	97%	Only record drawings remain to be completed.
AIWWTP Cogeneration Backup Power	Resilience	Delta												80,503,000	80,500,000	97%	
AIWWTP Electrical Distribution System Protection Control and Monitoring	Upgrade	Delta												2,650,000	2,650,000	48%	
AIWWTP Fibre Optic Infrastructure	Maintenance	Delta												1,500,000	1,500,000	99%	
AIWWTP Hydrothermal Processing Pilot	Opportunity	Delta												19,450,000	28,650,000	14%	Design is planned to be completed in 2023, and construction will not be started until funding is secured.
AIWWTP ICS Replacement Program	Maintenance	Delta												14,350,000	14,350,000	1%	Delayed to give way to Stage V Activities.
AIWWTP Influent System Remediation	Maintenance	Delta												2,400,000	82,500,000	1%	Project definition has been completed.
AIWWTP IPS Gates Replacements	Maintenance	Delta												100,000	100,000	0%	Gates complete under hydraulic gate replacement project, 1 gate remaining in 2023
AIWWTP IPS Pump Building Roof Replacement Phase 2	Maintenance	Delta												-	800,000	0%	
AIWWTP Outfall Repair	Maintenance	Delta												-	1,550,000	0%	Contingency in case repair is required until new outfall and bypass pipe are complete
AIWWTP Replacement of ICS Equipment	Maintenance	Delta												4,445,000	4,445,000	97%	
AIWWTP Replacement of Protective Relays	Maintenance	Delta												3,308,000	3,008,000	95%	
AIWWTP Scheduled 64kV Potential & Current Transformer Replacements	Maintenance	Delta												800,000	800,000	95%	Project at close out stages and will see a surplus.
AIWWTP Scum Pump Replacement	Maintenance	Delta												-	1,350,000	0%	
AIWWTP Secondary Clarifier Corrosion Repair	Maintenance	Delta												58,484,000	36,000,000	99%	Facilities in service and project projected to be completed significantly under budget
AIWWTP Secondary Effluent Discharge Flowmeter Replacement	Maintenance	Delta												400,000	50,000	99%	Project is complete, and will be significantly under budget by coordination with other works.
AIWWTP Spare Trickling Filter Pump & Motor Purchase	Maintenance	Delta												1,950,000	1,950,000	80%	
AIWWTP Station Battery Replacement	Maintenance	Delta												1,207,000	1,207,000	99%	
AIWWTP Trickling Filter Media & Distributor Arms & Ducting Replacement	Maintenance	Delta												90,700,000	80,000,000	70%	three TF's complete. Fourth TF will be completed in 2023 and some additional work on TF1 will be undertaken in 2024. Project is expected to show a significant surplus
AIWWTP UPS Condition Monitoring System	Resilience	Delta												-	550,000	0%	Project on hold pending confirmation of scope.
All WWTPs Power Quality Monitoring & Outage Alarming Network	Upgrade	Regional												2,870,000	2,870,000	95%	
Annacis Influent System Surge Control Refurbishment	Growth	Delta												22,000,000	16,000,000	40%	Construction underway, but delayed to address safe access issues. Project is expected to show a surplus.
Annacis MCC 80 051, 80 070, 80 071 Replacement	Maintenance	Delta												2,850,000	2,850,000	95%	



Project Name	Primary Driver	Project Location	Years					Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment
			2022	2023	2024	2025	2026				
2022-2026 Capital Plan											
Ferguson Road Paving Refurbishment	Upgrade	Richmond						1,100,000	600,000	27%	Project delayed to address permitting issues. Project is expected to show a surplus.
IWWTP - Biogas Lines Relocation	Resilience	Richmond						5,780,000	4,800,000	95%	Project will be completed under budget
IWWTP Biosolids Dewatering Facility	Upgrade	Richmond						61,300,000	61,300,000	97%	Commissioning will be completed in September 2023.
IWWTP CEPT Winterization	Maintenance	Vancouver						750,000	1,500,000	0%	construction deferred to 2023 to coordinate with other works. Additional scope added to address aging infrastructure.
IWWTP ICS IPS Control Replacement	Maintenance	Richmond						1,750,000	1,750,000	29%	
IWWTP ICS Replacement Program	Maintenance	Richmond						750,000	750,000	1%	
IWWTP Influent Gate Refurbishment	Maintenance	Richmond						1,350,000	1,350,000	41%	
IWWTP IPS Drive Remediation	Maintenance	Richmond						1,400,000	1,400,000	1%	
IWWTP MCC/Power Distribution Assess/Replace - Phase 2	Maintenance	Richmond						1,000,000	800,000	60%	Project at close out stages and will see a surplus.
IWWTP PA-Sed Tank & Gallery Wall Refurbishment	Maintenance	Richmond						750,000	950,000	0%	Work delayed to confirm scope of repair.
IWWTP Replacement of CoGen Control System	Maintenance	Richmond						2,500,000	2,500,000	70%	
IWWTP Siphon Chamber Refurbishment	Maintenance	Richmond						2,150,000	2,150,000	0%	Project delayed to allow improved coordination of other related works and improve safe operating conditions for work site.
IWWTP Sludge Lagoons Dewatering Facility	Upgrade	Richmond						4,000,000	4,000,000	77%	Delayed due to supply chain issues.
IWWTP Solids Handling Refurbishment	Maintenance	Richmond						65,400,000	58,000,000	98%	Project substantially complete and will show a surplus
IWWTP Standby Diesel Generators	Resilience	Richmond						2,000,000	5,000,000	1%	Project on hold to confirm scope
Iona Island Control & Instrumentation Replacement 2011	Maintenance	Richmond						2,750,000	2,750,000	77%	
LIWWTP Admin Dewatering Building Roof Repair	Maintenance	Richmond						100,000	800,000	0%	
LIWWTP Biogas Clean-up Project	Opportunity	Richmond						13,800,000	13,800,000	99%	
LIWWTP CCT Isolation Gates	Maintenance	Richmond						2,050,000	2,050,000	34%	
LIWWTP Effluent Heat Recovery Project	Opportunity	Richmond						10,000,000	10,000,000	1%	
LIWWTP Ground Fault Detection System Replacement	Maintenance	Richmond						1,550,000	1,550,000	1%	
LIWWTP High Efficiency Boiler	Maintenance	Richmond						1,300,000	1,300,000	16%	Rescheduled until after Biogas Cleanup Project is completed and in operation. Project is combined with the Effluent Heat Recovery Project.
LIWWTP ICS Replacement Program	Maintenance	Richmond						6,750,000	6,750,000	19%	
LIWWTP PA-Sed Tank Refurbishment	Maintenance	Richmond						4,115,000	3,500,000	2%	
LIWWTP Pilot Digestion Optimization Facility	Opportunity	Richmond						2,850,000	4,850,000	65%	
LIWWTP Power Reliability	Resilience	Richmond						8,202,000	12,400,000	36%	Project delayed due to procurement and to coordinate design issues.
LIWWTP SCL Refurbishment	Maintenance	Richmond						850,000	34,000,000	0%	Project delayed due to resourcing
LIWWTP Trickling Filter Refurbishment	Maintenance	Richmond						500,000	43,050,000	0%	Project delayed due to resourcing
NLWWTP Screw Pump Replacement	Maintenance	Langley Township						1,550,000	1,300,000	83%	Project complete and will show a surplus
NLWWTP Standby Diesel Generator	Resilience	Langley Township						400,000	1,000,000	0%	Purchase of equipment upon approval
NWL WWTP 25 kV Substation Replacement	Maintenance	Langley Township						10,050,000	9,800,000	93%	Project in closeout phase and will show a surplus
WWTPs Electrical System Studies & Upgrades	Resilience	Regional						750,000	1,900,000	13%	Project was delayed to coordinate with other works but is now underway
Total Treatment Plants								532,514,000	789,430,000		
Grand Total Liquid Waste Services								1,560,790,000	2,623,630,000		



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031					
			2022-2026 Capital Plan														
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031					
Treatment Plants																	
AIWWTP Digester No. 5	Growth	Delta											-	330,650,000	0%	Delayed due to staff availability.	
AIWWTP Stage 5 Expansion & Outfall System	Growth	Delta											1,191,500,000	944,100,000	60%	Detailed design of Phase 2 works delayed. Outfall construction is approximately 80% complete.	
Biosolids Dryer	Opportunity	Delta											22,700,000	337,700,000	3%	Delayed due to staff availability.	
IWWTP Outfall Refurbishment	Maintenance	Vancouver											20,000,000	325,000,000	1%		
Iona Secondary Wastewater Treatment - Phase 1	Upgrade	Richmond											1,060,000,000	9,940,000,000	1%	Baseline budget and schedule has been established as part of final Project Definition Report and Stage Gate 1 approval in March 2022. Schedule is 5-years beyond regulatory deadline.	
North Shore WWTP Secondary Upgrade, Conveyance and Decommissioning	Upgrade	Dist of North Van											1,057,867,000	1,057,900,000	54%	Construction of treatment plant 37% complete. Design Build Finance contract terminated. New Designer and Contractor engaged for detailed design and construction execution planning. Update expected Q3 2023.	
Northwest Langley Wastewater Treatment Program	Growth	Langley Township											1,629,700,000	2,280,650,000	14%	Program delayed due to unexpected archeological findings on the WWTP site. Budget has been updated in the 2023 capital plan.	
Total Treatment Plants													4,981,767,000	15,216,000,000			
Grand Total Liquid Waste - Project Delivery													4,981,767,000	15,216,000,000			

* Progress status for each project will be presented in a future report.



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022-2026 Capital Plan					2027	2028	2029	2030	2031					
Major Projects																	
Grouse Mountain - Regional Park Trail and Amenity Improvements	Capacity, Growth & Ecological Resilience	North Vancouver	[Gantt bar: 2022-2026]										3,075,000	3,075,000	50%	Project underway - extensive trail improvements complete. Trailhead expansion planned for 2023.	
Widgeon Marsh - Regional Park Development	Capacity, Growth & Ecological Resilience	Coquitlam	[Gantt bar: 2022-2026]										19,100,000	19,100,000	5%	Preliminary planning, archeology and cultural study complete. Project will proceed pending the completion of additional First Nation engagement.	
Campbell Valley - Management Plan Implementation	Capacity, Growth & Ecological Resilience	Langley	[Gantt bar: 2022-2026]										8,100,000	8,100,000	5%	Project underway - greenway construction proceeding in 2023.	
Belcarra - South Day Use Area	Capacity, Growth & Ecological Resilience	Port Moody	[Gantt bar: 2022-2026]										-	5,950,000	10%	Detailed design underway.	
Codd Wetland - Park Development	Capacity, Growth & Ecological Resilience	Pitt Meadows	[Gantt bar: 2022-2026]										-	9,900,000	0%	Future project.	
West Creek Wetlands - Park Development	Capacity, Growth & Ecological Resilience	Langley	[Gantt bar: 2022-2026]										-	2,800,000	0%	Future project.	
Burns Bog - Fire Restoration	Capacity, Growth & Ecological Resilience	Delta	[Gantt bar: 2022-2026]										-	4,500,000	0%	Future project.	
Total Major Projects													30,275,000	53,425,000			
Greenways																	
Aldergrove - Rock'n Horse Trail Connector	Connected Network	Aldergrove	[Gantt bar: 2022-2026]										400,000	400,000	100%	Project completed.	
DNR/DSSG Management Plan Implementation	Connected Network	Delta	[Gantt bar: 2022-2026]										-	10,600,000	5%	Advanced design, archeological investigation and First Nation engagement underway.	
Boundry Bay - Perimeter Trail	Connected Network	Delta	[Gantt bar: 2022-2026]										-	1,650,000	10%	Advanced design, archeological investigation and First Nation engagement underway.	
Tynehead - Perimeter Trail	Connected Network	Surrey	[Gantt bar: 2022-2026]										-	2,500,000	10%	Advanced design, archeological investigation and First Nation engagement underway.	
Other Greenways Upgrades	Connected Network		[Gantt bar: 2022-2026]										-	4,800,000	5%	Preliminary planning underway for regional greenway connections across the system	
Total Greenways													400,000	19,950,000			
Service Facilities																	
Burnaby Lake - Service Yard Building Replacement	Facility Replacement & Asset Management	Burnaby	[Gantt bar: 2022-2026]										1,000,000	1,700,000	0%	Pre-planning underway.	
Capilano - New Service Yard	Facility Replacement & Asset Management	North Vancouver	[Gantt bar: 2022-2026]										943,000	943,000	35%	Detailed design complete. Construction to proceed pending DNV permit approvals and archeological impact assessment completion.	
Total Service Facilities													1,943,000	2,643,000			
Park Development																	
Crippen - Davies Orchard	Capacity, Growth & Ecological Resilience	Bowen Island	[Gantt bar: 2022-2026]										1,750,000	1,750,000	20%	Construction underway.	
Derby Reach - Full Service Washroom	Capacity, Growth & Ecological Resilience	Langley	[Gantt bar: 2022-2026]										2,014,000	2,014,000	100%	Project completed.	
Crippen - Dorman Point Acces and Amenities	Facility Replacement & Asset Management	Bowen Island	[Gantt bar: 2022-2026]										500,000	500,000	100%	Phase 1 completed.	
Colony Farm - TMX Agreement Projects	Capacity, Growth & Ecological Resilience	Port Coquitlam	[Gantt bar: 2022-2026]										1,000,000	1,000,000	5%	First Nation engagement underway.	
Belcarra - Admiralty Heights Trail Decommissioning	Capacity, Growth & Ecological Resilience	Port Moody	[Gantt bar: 2022-2026]										-	1,050,000	0%	Pre-planning underway.	



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022-2026 Capital Plan					2027	2028	2029	2030	2031					
Belcarra - White Pine Redevelopment & Improvements	Capacity, Growth & Ecological Resilience	Port Moody												-	1,750,000	0%	Pre-planning underway.
Campbell Valley - Little River Loop Boardwalk	Facility Replacement & Asset Management	Langley												-	1,700,000	0%	Detailed design underway.
Pacific Spirit - Beach Access & Trail Improvements	Facility Replacement & Asset Management	Vancouver												-	1,650,000	0%	Pre-planning underway.
Advanced Design Work for Future Projects	Capacity, Growth & Ecological Resilience													1,300,000	1,300,000	10%	Planning and design of projects underway across the system.
Park Amenities and Visitor Experience	Capacity, Growth & Ecological Resilience													4,500,000	4,500,000	10%	Planning, design and implementation of small scale projects are underway across the system.
Other Replacement, Restoration & Upgrade Projects	Facility Replacement & Asset Management													4,610,000	4,610,000	10%	Planning, design and implementation of projects underway across the system.
Total Park Development														15,674,000	21,824,000		
Regional Parks Land Acquisition																	
Regional Parks Land Acquisition	Land Acquisition													15,750,000	15,750,000		Several land acquisitions in Burnaby Lake and Kanaka Creek completed in 2022. Additional acquisitions under contract and planned for 2023.
Total Regional Parks Land Acquisition														15,750,000	15,750,000		
Grand Total Regional Parks														64,042,000	113,592,000		



Project Name	Primary Driver	Project Location	Years											Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031						
2022-2026 Capital Plan																		
Landfills																		
Alternative Fuel and Recyclables Recovery Centre	Opportunity	Coquitlam													-	60,000,000	0%	
Coquitlam Landfill East Closure	Resilience	Coquitlam													-	5,000,000	0%	
Coquitlam Landfill Gas Collection Upgrades	Maintenance	Coquitlam													7,300,000	8,100,000	82%	
Coquitlam Landfill Lot 3 Development	Resilience	Coquitlam													5,000,000	5,000,000	90%	
Coquitlam Landfill Pump Station Upgrade	Maintenance	Coquitlam													1,600,000	3,400,000	50%	
Coquitlam Landfill: Leachate Collection System Grade Realignment	Resilience	Coquitlam													200,000	1,000,000	0%	
Total Landfills															14,100,000	82,500,000		
Recycling and Waste Centres																		
Central Surrey Recycling and Waste Centre	Growth	Surrey													50,300,000	50,000,000	99%	
Langley Recycling Depot Development	Upgrade	Langley Township													250,000	5,500,000	0%	
Maple Ridge Transfer Station Upgrades	Maintenance	Maple Ridge													2,000,000	2,000,000	0%	
North Shore Recycling and Waste Centre Compactor Replacement	Maintenance	North Vancouver													-	2,500,000	0%	
North Surrey Recycling and Waste Centre Compactor Replacement	Maintenance	Surrey													-	3,000,000	0%	
North Surrey Recycling Depot Development	Upgrade	Surrey													20,250,000	25,500,000	0%	
United Boulevard Recycling and Waste Centre	Growth	Coquitlam													77,600,000	77,600,000	99%	
Western Region Recycling and Waste Centre Replacement	Resilience	Regional													-	75,000,000	0%	
Total Pump Stations															150,400,000	241,100,000		
Waste To Energy Facilities																		
Acid Gas Reduction	Upgrade	Burnaby													2,000,000	47,500,000	1%	
Air System Piping Replacement	Maintenance	Burnaby													-	300,000	0%	
Biosolids Processing	Resilience	Burnaby													1,750,000	22,500,000	2%	
Boiler and APC Roof Replacement	Maintenance	Burnaby													-	1,750,000	0%	
Bottom Ash Crane Replacement	Maintenance	Burnaby													1,500,000	1,400,000	5%	
Bottom Ash Processing	Opportunity	Burnaby													6,800,000	6,800,000	95%	
Compressed Air System Replacement	Maintenance	Burnaby													3,000,000	3,000,000	3%	
Electrical Transformers Replacement	Maintenance	Burnaby													5,000,000	5,000,000	1%	
Fabric Filter Hopper and Pulse Header Refurbishment	Maintenance	Burnaby													2,250,000	2,150,000	6%	
Feed Hopper/Chute	Maintenance	Burnaby													2,600,000	2,600,000	90%	
Feedwater Pump Replacement	Maintenance	Burnaby													1,000,000	1,000,000	60%	
Fire Suppression System	Maintenance	Burnaby													1,000,000	1,400,000	1%	
Fly Ash Silo Refurbishment	Maintenance	Burnaby													1,000,000	1,000,000	0%	
Generation Bank Replacement	Maintenance	Burnaby													-	9,000,000	0%	
Primary Economizer Replacement	Maintenance	Burnaby													7,000,000	7,000,000	35%	
Primary Superheaters Replacement	Maintenance	Burnaby													4,000,000	4,000,000	0%	
Programmable Logic Controllers Replacement	Maintenance	Burnaby													2,000,000	2,000,000	1%	
Pug Mill Enclosure Ventilation System Replacement	Maintenance	Burnaby													1,000,000	1,000,000	0%	



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031					
2022-2026 Capital Plan																	
Refuse Crane	Maintenance	Burnaby												16,800,000	16,800,000	1%	
Refuse Pit Bunker Door Replacement	Maintenance	Burnaby												600,000	600,000	0%	
Secondary Economizers Replacement	Maintenance	Burnaby												6,000,000	6,000,000	0%	
Soot Blower Piping Replacement	Maintenance	Burnaby												-	300,000	0%	
Special Handle Waste Direct Feed System	Opportunity	Burnaby												-	5,000,000	0%	
Stack Refurbishment	Maintenance	Burnaby												-	350,000	0%	
WTE Facility District Heating	Opportunity	Burnaby												55,000,000	55,000,000	2%	
Total Waste To Energy Facilities														120,300,000	203,450,000		
Opportunity																	
WTE Facility District Heating Opportunities	Opportunity	Burnaby												2,310,000	2,300,000	33%	
Total Opportunity														2,310,000	2,300,000		
Grand Total Solid Waste Services																	
													287,110,000	529,350,000			

* Progress status for each project will be presented in a future report.



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment				
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031								
2022-2026 Capital Plan																				
Water Mains																				
Angus Drive Main	Growth	Vancouver															30,700,000	30,700,000	96%	
Annacis Main No. 2 - Queensborough Crossover Improvement	Maintenance	New Westminster															900,000	1,200,000	0%	Likely not required. MOTI may not relocate Queensborough Main.
Annacis Main No. 2 and Barnston Island Main Online Chlorine and pH Analyzers	Upgrade	Regional															750,000	750,000	10%	
Annacis Main No. 3 Annieville Channel Crossing Scour Protection	Maintenance	Surrey															850,000	850,000	36%	Construction completed by LWS. Final cost to be
Annacis Main No. 3 BHP Potash Facility Pipe Protection	Maintenance	Surrey															600,000	600,000	Cancelled	IPQC - BHP have withdrawn from the project. No current engagement with land owner (DPWorld). No expenses anticipated.
Annacis Main No. 5 (North)	Growth	New Westminster															60,600,000	69,100,000	3%	
Annacis Main No. 5 (South)	Growth	Surrey															11,100,000	58,150,000	20%	
Boundary Road Main No. 2 & No. 3 Decommissioning	Maintenance	Burnaby															1,500,000	1,250,000	100%	
Burnaby Mountain Main No. 2	Maintenance	Burnaby															-	10,500,000	0%	
Central Park Main No. 2 (10th Ave to Westburnco)	Maintenance	Burnaby															2,750,000	28,350,000	1%	
Central Park Main No. 2 (Patterson to 10th Ave)	Maintenance	Burnaby															91,900,000	109,100,000	45%	
Clayton Langley Main No. 2	Resilience	Surrey															700,000	16,900,000	1%	
Douglas Road Main No. 2 - Kincaid Section	Maintenance	Burnaby															12,300,000	12,300,000	100%	
Douglas Road Main No. 2 (Flow Meter 169) Replacement	Maintenance	Burnaby															1,000,000	2,000,000	4%	
Douglas Road Main No. 2 (Vancouver Heights Section)	Maintenance	Burnaby															21,486,000	21,450,000	95%	Tie-ins delayed due to scheduling conflicts.
Douglas Road Main No. 2 Still Creek	Maintenance	Burnaby															63,100,000	60,000,000	53%	Installation costs came in under budget.
Douglas Road Main Protection	Maintenance	Burnaby															1,500,000	1,500,000	4%	
First Narrows Tunnel Isolation Chamber Improvements	Maintenance	Dist of North Van															7,000,000	4,650,000	100%	Costs to complete came in under budget.
Haney Main No. 4 (West Section)	Growth	Port Coquitlam															1,900,000	115,150,000	1%	
Improvements to Capilano Mains No. 4 and 5	Maintenance	Dist of North Van															1,700,000	1,700,000	6%	
Kennedy Newton Main	Growth	Surrey															122,300,000	140,450,000	57%	
Lulu Island - Delta Main - Scour Protection Phase 2	Maintenance	Richmond															3,550,000	3,550,000	0%	Not started.
Maple Ridge Main West Lining Repairs	Maintenance	Maple Ridge															3,500,000	3,500,000	7%	
Newton Reservoir Connection	Growth	Surrey															-	27,050,000	0%	
Online Chlorine Monitoring Stations	Upgrade	Regional															-	4,150,000	0%	
Port Mann Main No. 2 (South)	Growth	Surrey															36,800,000	33,600,000	98%	
Port Mann No. 1 South Section Decommissioning	Maintenance	Coq/Surrey															200,000	850,000	0%	
Port Moody Main No. 1 Christmas Way Relocation	Maintenance	Coquitlam															2,350,000	2,350,000	0%	
Port Moody Main No. 3 Dewdney Trunk Rd Relocation	Maintenance	Coquitlam															2,700,000	2,700,000	95%	IPQC - 3rd party owned project
Port Moody Main No. 3 Scott Creek Section	Maintenance	Coquitlam															1,000,000	29,450,000	5%	
Queensborough Main Royal Avenue Relocation	Maintenance	New Westminster															7,500,000	7,500,000	20%	IPQC - Pattullo Bridge replacement project owned by MoTI.
Rehabilitation of AN2 on Queensborough Bridge	Maintenance	New West/Delta															2,500,000	3,850,000	41%	
Relocation and Protection for MOTI Expansion Project Broadway	Maintenance	Vancouver															8,900,000	8,900,000	50%	CAP4 relocation complete (blowdown deferred) CAP5 Support-in-Place in progress
Relocation and Protection for MOTI George Massey Crossing Replacement	Maintenance	Delta/Richmond															450,000	2,450,000	0%	
Relocation and Protection for Translink Expansion Project Surrey Langley SkyTrain	Maintenance	Surrey															600,000	6,600,000	0%	
Sapperton Main No. 1 New Line Valve and Chamber	Upgrade	New Westminster															3,800,000	3,850,000	47%	
Sapperton Main No. 2 North Road Relocation and Protection	Maintenance	Coquitlam															6,500,000	6,500,000	10%	
Scour Protection Assessments and Construction General	Resilience	Regional															4,000,000	4,000,000	25%	
Seymour Main No. 2 Joint Improvements	Resilience	Dist of North Van															3,252,000	5,300,000	20%	
Seymour Main No. 5 III (North)	Resilience	Dist of North Van															8,000,000	384,150,000	3%	
South Delta Main No. 1 - 28 Ave to 34B Ave	Upgrade	Delta															22,650,000	22,650,000	100%	
South Delta Main No. 1 - Ferry Road Check Valve Replacement	Maintenance	Delta															600,000	600,000	37%	



Project Name	Primary Driver	Project Location	Years	Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment
2022-2026 Capital Plan							
South Delta Mains - 28 Ave Crossover	Upgrade	Delta		10,500,000	10,500,000	100%	
South Surrey Main No. 1 Nickomekl Dam Relocation	Maintenance	Surrey		7,100,000	7,100,000	0%	
South Surrey Main No. 2	Growth	Surrey		2,000,000	143,700,000	1%	
South Surrey Main No. 2 Nickomekl Dam Prebuild	Growth	Surrey		2,000,000	2,000,000	0%	
South Surrey Supply Main (Serpentine River) Bridge Support Modification	Maintenance	Surrey		1,350,000	1,350,000	20%	
Tilbury Junction Chamber Valves Replacement with Actuators	Upgrade	Richmond		5,600,000	5,600,000	82%	Tie-ins delayed due to railway permitting requirements.
Tilbury Main North Fraser Way Valve Addition	Maintenance	Burnaby		3,100,000	3,100,000	14%	
Water Chamber Improvements and Repairs	Maintenance	Burnaby		2,000,000	2,000,000	6%	
Water Meter Upgrades	Upgrade	Regional		22,400,000	22,400,000	44%	
Water Optimization - Flow Meters (Non-billing) Phase 1	Upgrade	Regional		-	16,500,000	0%	
Water Optimization - Flow Meters (Non-billing) Phase 2	Upgrade	Regional		3,000,000	19,500,000	0%	
Water Optimization - Instrumentation	Upgrade	Regional		1,500,000	11,400,000	0%	
Water Optimization Automation & Instrumentation	Upgrade	Regional		9,550,000	9,550,000	88%	
Whalley Kennedy Main No. 2	Growth	Surrey		-	96,000,000	0%	
Whalley Main	Growth	Surrey		31,800,000	31,800,000	96%	
Total Water Mains				655,388,000	1,632,700,000		
Pump Stations							
Barnston/Maple Ridge Pump Station - Back-up Power	Resilience	Pitt Meadows		14,000,000	20,600,000	3%	Delayed due to property selection.
Burnaby Mountain Pump Station No. 2	Maintenance	Burnaby		1,300,000	21,000,000	1%	Scope of work under review.
Cape Horn Pump Station No. 3	Growth	Coquitlam		6,800,000	183,050,000	1%	
Capilano Raw Water Pump Station - Back-up Power	Resilience	Dist of North Van		42,000,000	55,000,000	36%	
Capilano Raw Water Pump Station Bypass PRV Upgrades	Maintenance	Dist of North Van		1,700,000	3,200,000	14%	
Central Park WPS Starters Replacement	Maintenance	Burnaby		8,000,000	11,000,000	22%	Delayed due to re-zoning.
Grandview Pump Station Improvements	Resilience	Surrey		2,600,000	3,500,000	19%	
Newton Pump Station No. 2	Growth	Surrey		50,500,000	72,550,000	23%	
Pebble Hill Pump Station Seismic Upgrade	Resilience	Delta		-	1,800,000	0%	
Westburnco Pump Station - Back-up Power	Resilience	New Westminister		23,500,000	24,500,000	6%	
Westburnco Pump Station No. 2 VFD Replacements	Maintenance	New Westminister		2,550,000	2,550,000	17%	
Total Pump Stations				152,950,000	398,750,000		
Reservoirs							
Burnaby Mountain Tank No. 2	Resilience	Burnaby		3,350,000	21,650,000	1%	
Burnaby Mountain Tank No. 3	Resilience	Burnaby		3,400,000	21,400,000	1%	
Cape Horn Reservoir Condition Assessment and Structural Repair	Maintenance	Coquitlam		-	1,700,000	0%	
Capilano Energy Recovery Facility 66" PRV Replacement	Maintenance	City of North Van		-	7,000,000	0%	
Central Park Reservoir Structural Improvements	Maintenance	Burnaby		-	2,100,000	0%	
Clayton Reservoir	Resilience	Surrey		27,600,000	25,750,000	99%	
Dechlorination for Reservoir Overflow and Underdrain Discharges	Maintenance	Burnaby		2,700,000	2,700,000	5%	
Fleetwood Reservoir	Growth	Surrey		56,367,000	56,367,000	28%	
Grandview Reservoir Unit No. 2	Growth	Surrey		-	26,000,000	0%	
Hellings Tank No. 2	Growth	Delta		43,911,000	43,911,000	15%	
Kersland Reservoir No. 1 Structural Improvements	Maintenance	Vancouver		6,250,000	6,250,000	85%	
Little Mountain Reservoir Roof Upgrades	Maintenance	Vancouver		3,450,000	3,450,000	100%	
Pebble Hill Reservoir No. 3 Seismic Upgrade	Resilience	Delta		500,000	9,500,000	4%	
Pebble Hill Reservoir Seismic Upgrade	Resilience	Delta		13,600,000	12,350,000	60%	



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment
			2022-2026 Capital Plan					2027	2028	2029	2030	2031				
Reservoir Isolation Valve Automation	Resilience	Regional	█										6,450,000	6,450,000	19%	
Reservoir Sampling Kiosks - Multi Location	Upgrade	Regional	█	█	█							-	1,300,000	0%		
Sunnyside Reservoir Units 1 and 2 Seismic Upgrade	Resilience	Surrey	█	█	█							9,100,000	19,300,000	50%		
Vancouver Heights System Resiliency Improvements	Resilience	Burnaby	█	█	█							500,000	2,500,000	6%		
Whalley Reservoir Condition Assessment and Repairs	Maintenance	Surrey	█	█	█							2,500,000	2,500,000	100%		
Total Reservoirs													179,678,000	272,178,000		
Treatment Plants																
Coquitlam Intake Tower Seismic Upgrade	Resilience	Coquitlam	█	█	█							2,000,000	26,500,000	8%		
Critical Control Sites - Back-Up Power	Resilience	Regional				█	█	█				-	1,800,000	0%		
CWTP CO2 System Improvements	Maintenance	Coq/P.Coq				█	█	█				-	3,750,000	0%		
CWTP Mobile Disinfection System	Upgrade	Regional				█	█	█				-	2,750,000	0%		
CWTP Ozone Back-up Power	Resilience	Coquitlam				█	█	█				-	7,450,000	0%		
CWTP Ozone Generation Upgrades for Units 2 & 3	Upgrade	Coquitlam				█	█	█				7,000,000	7,500,000	80%	Delay due to operational requirements.	
CWTP Ozone Sidestream Pipe Heat Trace and Insulation	Maintenance	Coquitlam				█	█	█				900,000	900,000	18%	Postponed to 2023	
CWTP Ozone Sidestream Pump VFD Replacement	Maintenance	Coquitlam				█	█	█				1,400,000	1,400,000	10%		
CWTP Temporary Water Supply	Maintenance	Coq/P.Coq				█	█	█				500,000	2,000,000	0%		
Online Chlorine and pH Analyzers	Upgrade	Regional				█	█	█				-	6,000,000	0%		
SCFP Additional Pre-Treatment	Upgrade	Dist of North Van							█	█	█	-	130,000,000	0%		
SCFP Centralized Compressed Air System	Maintenance	Dist of North Van				█	█	█				900,000	1,900,000	13%		
SCFP Clearwell Baffle Replacement	Maintenance	Dist of North Van				█	█	█				-	12,300,000	0%		
SCFP Clearwell Membrane Replacement	Maintenance	Dist of North Van				█	█	█				-	17,800,000	0%	Ok to differed to 2025	
SCFP OMC Building Expansion	Maintenance	Dist of North Van				█	█	█				150,000	2,800,000	5%		
SCFP Polymer System Upgrade	Maintenance	Dist of North Van				█	█	█				4,650,000	4,650,000	21%		
SCFP SCADA/ICS Controller Upgrade	Maintenance	Burnaby				█	█	█				-	1,400,000	0%		
Total Treatment Plants													17,500,000	230,900,000		
Others																
Beach Yard Facility - Site Redevelopment	Maintenance	Dist of North Van							█	█	█	-	45,500,000	0%		
Burwell Alpine Reservoir Valve Improvements	Upgrade	Electoral Area A				█	█	█				650,000	650,000	98%		
Capilano Hydropower	Opportunity	Dist of North Van							█	█	█	4,250,000	156,250,000	1%	Project currently on hold.	
Capilano Mid-Lake Debris Boom	Resilience	Dist of North Van							█	█	█	750,000	750,000	53%		
Capilano Reservoir and Seymour Reservoir Dam Safety Boom Replacement	Maintenance	Dist of North Van							█	█	█	200,000	3,700,000	0%		
Capilano Reservoir Boat Wharf	Resilience	Dist of North Van							█	█	█	850,000	850,000	52%		
Capilano Watershed Bridge Replacements - Crown Creek and Capilano River	Maintenance	Dist of North Van							█	█	█	-	1,300,000	0%		
Capilano Watershed Security Gatehouse	Maintenance	Dist of North Van							█	█	█	3,350,000	4,700,000	23%		
CLD & SFD Fasteners Replacement & Coating Repairs	Maintenance	Dist of North Van							█	█	█	2,100,000	2,350,000	83%		
Cleveland Dam - Lower Outlet HBV Rehabilitation	Maintenance	Dist of North Van							█	█	█	4,900,000	4,900,000	75%		
Cleveland Dam Drumgate Seal Replacement	Maintenance	Dist of North Van							█	█	█	250,000	1,300,000	22%		
Cleveland Dam East Abutment Additional GV Series Pump Wells	Upgrade	Dist of North Van							█	█	█	750,000	750,000	94%		
Cleveland Dam Lower Outlet Trashrack Replacement and Debris Removal	Maintenance	Dist of North Van							█	█	█	-	7,700,000	0%		
Cleveland Dam Power Resiliency Improvements	Resilience	Dist of North Van							█	█	█	1,700,000	1,700,000	3%		
Cleveland Dam Public Warning System and Enhancements	Maintenance	Dist of North Van							█	█	█	10,000,000	10,000,000	17%		
Cleveland Dam Seismic Stability Evaluation	Resilience	Dist of North Van							█	█	█	800,000	800,000	0%		



Project Name	Primary Driver	Project Location	2022-2026 Capital Plan											Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment		
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031							
Cleveland Dam Spillway Resurfacing	Maintenance	Dist of North Van														-	7,800,000	0%	
Lower Seymour Conservation Reserve Learning Lodge Replacement	Upgrade	Dist of North Van														5,000,000	5,050,000	60%	
Newton Rechlorination Station No. 2	Maintenance	Surrey														-	5,700,000	0%	Project delayed to coordinate with Newton Pump Station Project.
Pitt River Rechlorination Station Reconstruction	Maintenance	Pitt Meadows														-	4,500,000	0%	
Rechlorination Station SHS Storage Tank Replacement	Maintenance	Regional														1,200,000	1,200,000	47%	
Rechlorination Station Upgrades	Maintenance	Regional														1,300,000	21,500,000	3%	
Scour Protection - General	Maintenance	Regional														2,000,000	2,000,000	93%	
Seymour Falls Boat Wharf	Resilience	Dist of North Van														800,000	800,000	55%	
Seymour Falls Dam Public Warning System	Maintenance	Dist of North Van														-	10,000,000	0%	
Seymour Falls Dam Seismic Stability Assessment	Resilience	Dist of North Van														1,800,000	13,800,000	0%	
Seymour Lake Debris Boom	Resilience	Dist of North Van														800,000	800,000	62%	
Seymour Reservoir Mid-Lake Debris Boom	Resilience	Dist of North Van														2,300,000	2,300,000	91%	
South Fraser Works Yard	Maintenance	Regional														32,000,000	71,000,000	74%	Property pricing higher than budgeted/ Board approved.
Total Others																77,750,000	389,650,000		
Grand Total Water Services																1,083,266,000	2,924,178,000		

* Progress status for each project will be presented in a future report.



Project Name	Primary Driver	Project Location	Years										Approved Capital Budget	Current Estimated Total Project Cost	% Complete	Comment	
			2022-2026 Capital Plan					2027	2028	2029	2030	2031					
Water Mains																	
Annacis Water Supply Tunnel	Growth	New West/Surrey												488,000,000	482,100,000	22%	
Cambie-Richmond Water Supply Tunnel	Resilience	Richmond/Van												55,250,000	647,800,000	6%	
Coquitlam Water Main	Growth	Coquitlam												118,220,000	1,120,700,000	5%	
Haney Water Supply Tunnel	Resilience	P.Coq/P.Meadows												25,250,000	595,250,000	1%	
Lulu-Delta Water Supply Tunnel	Maintenance	Richmond												-	441,000,000	0%	
Second Narrows Crossing 1 & 2 (Burrard Inlet Crossing Removal)	Maintenance	Burnaby												2,000,000	27,000,000	0%	
Second Narrows Water Supply Tunnel	Resilience	Burnaby/DNV												468,550,000	468,550,000	85%	
Stanley Park Water Supply Tunnel	Maintenance	Vancouver												340,000,000	340,000,000	5%	
Total Water Mains														1,497,270,000	4,122,400,000		
Treatment Plants																	
Coquitlam Lake Water Supply	Growth	Coquitlam												160,730,000	3,915,750,000		1% Protracted engagement for the regulatory and permitting phase. Project construction is deferred to 2038 completion (approximately 5-year delay).
Total Treatment Plants														160,730,000	3,915,750,000		
Grand Total Water - Project Delivery														1,658,000,000	8,038,150,000		

* Progress status for each project will be presented in a future report.

Capital Project Status Information December 31, 2022

The progress details of the Metro Vancouver Housing Corporation (MVHC) capital projects are highlighted below:

Heather Place – Building B

Rezoning and design in progress through 2022. Abatement and deconstruction work began in mid-2022.

Kingston Gardens

Construction progression at nearly 50% complete at the end of 2022.

Salal Landing (formerly called Welcher Avenue)

Approval and permitting process concluded and construction started in November 2022.

Malaspina Village – Phase 1

Preliminary design in progress through 2022.

Heron's Nest (formerly called Pitt Meadows Civic Centre site)

Rezoning and design in progress through 2022.

The Connection (formerly called Eastburn Square)

Rezoning and design in progress through 2022.

The Steller (formerly called Southwynde Ave)

Rezoning and design in progress through 2022.

Capital Project Status Information December 31, 2022

GREATER VANCOUVER SEWERAGE & DRAINAGE DISTRICT (Liquid Waste Services)

The majority of projects under the GVS&DD Capital Program are delivered by the Liquid Waste Services Department. The following narrative provides details and status updates on the more significant of these projects. Seven projects (as identified in Attachment 2B), are being delivered by the Project Delivery Department. As those projects provide separate updates to the Liquid Waste Committee and GVS&DD Board, no additional information on them is provided here.

Infrastructure Growth Program

- **FSA – Burnaby Lake North Interceptor – Winston Street Section** – Phase 1 of the work was completed in 2021. In 2022, GVS&DD awarded Pomerleau Bessac Infrastructure (PBI) a contract for Phase 2 of the project, which involves 2.9 km of 2134 mm diameter plastic-lined concrete pipe, to be installed via trenchless methods. The trenchless section follows Winston Street, starting 140m south of Greenwood Street, extending east up to approximately 500m west of the junction with Brighton Avenue. Construction began in May 2022. Currently, there is a schedule delay of about 4 months due to tunneling issues. Projected completion date is Q4 2024.
- **FSA - Annacis Island WWTP Outfall – Surge Control** - This project involves the replacement of four hydraulic gates in the Influent Control Chamber and ancillary equipment to mitigate the risk of transient surges (water hammer) to upstream infrastructure. The GVS&DD awarded the construction contract to Maple Reinders Construction Limited in March 2021. Long lead equipment submittals have been approved for fabrication, and construction is approximately 45% complete. The project is delayed by 1 year to allow safe access during the low flow summer period. Substantial completion is expected in late Q3 2024.
- **FSA - North Road Trunk Sewer No. 2** – Construction of Phase 1A covering the sections between Brunette River and Lougheed Highway was completed in 2020. Construction of Phase 1B involving a railway crossing is pending for resolution of property issue with Burlington Northern Santa Fe Railway. Phase 2, involving replacement of the existing 250mm/300mm diameter sewer with 1.3 km of new 450mm and 600mm diameter sewer between Lougheed Highway and Clarke Road, was tendered in the Q4 2022 and is now seeking construction award approval by the GVS&DD Board in March 2023. Construction of Phase 2 will begin in the summer of 2023, and is expected to take 60 weeks until substantial completion.

Infrastructure Maintenance Program

- **LSA – Gilbert Trunk Sewer Twinning** - Construction of the 5.3 km long Phase 1 and 2 is complete. The remaining 2 Phases have a total length of 4.7 km consisting of 1.8 m diameter sewers. Phase 4, from Steveston Highway to the Lulu Island WWTP, was tendered in 2020 but due to contractual issues, the procurement process was collapsed and restarted. It was re-tendered and the contract was awarded to

Jacob Brothers in July 2022. Construction commenced in February 2023 and is expected to be complete in fall 2025. Phase 3, which extends from Blundell Road south to Steveston Highway, was awarded to BD Hall in October 2022. Construction is expected to commence in April 2023 and is expected to be complete in fall 2025.

- **NSSA – Gleneagles Pump Station Improvements** – This project involves upgrading or replacing five existing wastewater pump stations located in West Vancouver in order to replace aging equipment, expand system capacity, and meet seismic standards. A \$14M contract was awarded to Industria Construction in December 2022 for major upgrades to both Gleneagles 4 and 5. Construction will begin at Gleneagles 5 in mid-2023 with completion in 2024, followed by construction at Gleneagles 4 in 2024-2025. Gleneagles 3 began the conceptual design phase in December 2022, which is expected to conclude in 2023. Gleneagles 1 and 2 are in the preliminary design phase and staff are working closely with the District of West Vancouver in order to optimize design and construction. Preliminary design for Gleneagles 1 and 2 is scheduled to be complete in 2023.
- **FSA – River Scour Protection Program – Scour Protection at Maple Ridge Forcemain, Fraser River Crossing**
The Maple Ridge Forcemain under the Fraser River was constructed in 1981 and consists of twin 762 mm diameter steel pipe. The crossing is about 400 m downstream of Barnston Island where the river is about 600 m wide. The river channel has recently experienced scour, which posed a risk to the forcemain. This project involves adding additional rip rap to the existing scour protection apron. The work was tendered in Q4 2022 and JJM Construction began construction on January 3rd 2023 and was substantially completed on February 8th 2023. Additional scour protection projects will be completed in 2023 and 2024 at other crossings.
- **FSA - North Surrey Interceptor (NSI) Rehab or Replacement** - This project involves two components. The first is rehabilitating approximately 220m of the existing NSI near the Port Mann Bridge, plus relocating and upgrading the City of Surrey connection to the NSI. PW Trenchless successfully completed the construction in June 2022.

The second part of this project is twinning and rehabilitation of approximately 760m of the existing NSI-Manson Road section. Currently in preliminary design for twinning by microtunneling is underway, with construction expected to commence in mid-2024. Rehabilitation of the existing line will be scheduled post-twinning, in order to reduce costs and risks associated with work in a live sewer.

- **FSA - Crescent Beach FM Replacement** – This project involves the design and construction of approximately 2 km of 1.2 m diameter sanitary force main to replace the existing 500 mm diameter FRP (fiber reinforced plastic) pipe which is aging and in poor condition. The GVS&DD awarded the construction contract to JJM Construction in July 2021. Construction started in the fall of 2021, and unforeseen ground conditions and property challenges has delayed the project. The project is now planned to be complete by the end of 2023.
- **FSA - New Westminster Interceptor Repair – Columbia Street Section** – This project involves the rehabilitation of 1.6 km of the 1.5 m diameter New Westminster Interceptor from Front St. to McBride Blvd in New Westminster. The GVS&DD awarded the contract to Southland Holdings. Construction started in July 2021. Phase 1, which involves the first 400 m of sliplining, was completed in November 2022. Phase 2, which also involves 400m of sliplining, was completed in January 2023. Phases 3 and 4 are in construction and are scheduled to be complete in May 2023. Phases 5 and 6 have been removed from the scope of work due to schedule and access issues with the Patullo Bridge Replacement Project.

- **FSA – Annacis Island WWTP Secondary Clarifier Corrosion Repair** – This project involves replacing 12 secondary clarifier mechanisms that have been damaged by corrosion and are at the end of their service life. This project is combined with the Secondary Clarifier Flow Control project, which involves the addition of 12 new influent flow balancing gates and the replacement of 12 effluent launders and weirs. The work has been phased over several years to address priority areas and to coordinate equipment shut downs with other work. The final construction contract, awarded to NAC Constructors Ltd. in March 2019, consists of the replacement of the 5 remaining mechanism units, the addition of 9 flow balancing gates and the replacement of the 12 existing effluent launders and weirs. Construction started in May 2020 and was substantially completed in June 2022.
- **FSA – Annacis Island WWTP Trickling Filter Media, Distributor and FOA Duct Replacement** – This project replaces the rotary distributors, plastic media and foul air ducting for the four Trickling Filters (TF) at the AIWWTP. These components have been in service for over 20 years and are reaching the end of their service life. The distributors and ducting have experienced significant corrosion, resulting in equipment failures that required emergency maintenance. The construction is being completed under two contracts. The first contract was awarded to Maple Reinders Construction Ltd., in 2019 for the rehabilitation of TF 1 and 3. It is complete. The work for TF 2 and 4 was awarded to Pomerleau in 2021. They completed TF 4 in 2022 and will complete TF 2 in 2023.

Infrastructure Resilience Program

- **VSA – Emergency Backup Power** - This project involves design, supply and installation of standby emergency backup generators at the Chilco, Columbia, Harbour, Hudson, Jervis, Kent and Willingdon pump stations to allow the stations to remain operational during power failure events and reduce the risk of a spill. Three separate tenders for the Columbia, Harbour, Hudson, Kent and Willingdon upgrades were issued in Q4 2019. The construction at Harbour, Hudson, Kent and Willingdon pump stations were completed earlier in 2021 and the generators were commissioned. The Columbia PS generator was completed and commissioned in Q4 of 2021. The Vancouver Parks Board approved the Jervis PS generator concept in the fall of 2019, the detailed design and RFP are completed and permitting of the Jervis facility is advancing. Construction has been rescheduled until late 2023, due to unresolved property issues. The Chilco facility concept is currently being reviewed with the Vancouver Parks Board, prior to starting the detailed design. To prevent future spills during power outages, MV is actively working on design and installation of temporary generators at both Chilco and Jervis PS in 2023.

Infrastructure Upgrade Program

- **VSA – Iona Island WWTP Biosolids Dewatering Facility** – This project involves the construction of a mechanical dewatering facility to dewater on-going plant production of biosolids so that they can be transported for beneficial reuse or disposal. This facility will permit the decommissioning of the four existing digested sludge lagoons and the sludge drying area to make space for the construction of the new tertiary treatment plant. The \$52 million design-build contract was awarded to NAC Constructors in April 2019. The design phase was completed in 2020 and construction phase is complete as of December 2022. Deficiencies on the hopper screw conveyors were discovered during testing and commissioning, which are currently being addressed by the contractor. The dewatering facility is targeted for final acceptance by MV in Q3 2023 with 30 days of Owner Commissioning commencing in Q2 2023.

Opportunity Program

- **FSA – Annacis Island WWTP Hydrothermal Liquefaction** – This work involves the design and construction of a demonstration scale plant to convert wastewater biomass to biocrude as a low carbon fuel. The objective of the demonstration scale is to assess the technology performance and the feasibility of full-scale implementation at an existing or future WWTP. Six separate contracts are anticipated as part of this project including a qualitative risk analysis of the HTL system and an operations-maintenance contract independent of the AIWWTP facility operations. A contract for the progressive design-build of the mechanical facility was issued in January 2022, and design of the facility is currently underway, and final pricing is expected in Q3 2023. Design of the ancillary systems and connections to the WWTP are under way, and will be finalized after completion of the design of the mechanical systems. The entire HTL demonstration plant is scheduled to be completed in 2025 and put in operation from 2025 to 2027.
- **LSA – LIWWTP Pilot Digestion Optimization Facility (PDOF)** - The PDOF is a facility to evaluate sludge digestion optimization techniques without risking full-scale operations. Lessons learnt at the pilot scale could be incorporated in existing and future plants leading to the deferral of significant investments such as building new digesters as well as improved performance and reduction in greenhouse gases. The PDOF is designed to be adaptable and transportable (being built in modules) to other WWTP sites (such as AIWWTP or ARC) for further research and testing purposes. Staff from O&M and PPA, in cooperation with UBC Okanagan research staff will be able to undertake experimentation, data collection and trend analyses.

The GVS&DD awarded the contract for the PDOF fabrication and installation to Trittech in Q1 2021. Onsite construction is at 86% complete. Early in 2023 the system is to be pre-commissioned/tested with an expected completion date of Q2 2023.

**Capital Project Status Information
December 31, 2022**

2022 Regional Park Major Capital Project Update

Regional Parks capital development projects are proceeding throughout the region. Project updates are provided below.

MAJOR PROJECTS

Widgeon Marsh - Grouse Mountain Trail and Amenity Improvements

An archeological impact assessment and Katzie First Nation cultural study, intended to guide park design and management over the long term, were completed in 2022.

Phase 1 implementation planned for 2022 has been deferred to provide time for additional relationship building and collaboration with First Nations. Regional Parks staff continue to engage First Nations in sharing information, seeking input and exploring opportunities for the project to move forward collaboratively.

This project has received a \$2.6 million grant funding from the Investing in Canada Infrastructure – Community, Culture and Recreation Program. The grant will fund the first phase of implementation which includes trail, road, safety and geotechnical improvements.

təmtə́míxʷtən/Belcarra Regional Park South Picnic Area Project

Planning and design of the təmtə́míxʷtən/Belcarra Regional Park South Picnic Area Project is underway. Completion of detailed design is planned for 2023, with construction to take place in 2024 and 2025.

The development of the South Picnic Area at təmtə́míxʷtən/Belcarra Regional Park will provide visitors with improved beach access, an expanded shoreline trail network, and forested park lands. Existing cabins will be restored to serve as landscape displays, and the Bole House will be renovated for public use.

The planning of Interpretive elements will be undertaken through engagement with Tsleil Waututh First Nation. Landscape improvements include removal of invasive species, replanting with native plants, and ecological restoration of an existing pond.

Campbell Valley Regional Park Management Plan Implementation

A multidisciplinary team is guiding the implementation of the MVRD Board approved Campbell Valley Regional Park Management Plan. The scope of this project includes expanding the trail and greenway network, improving park access and ecology, enhancing the Little River Bowl area, and developing and opening McLean Pond for public access. Construction will extend from 2022-2025.

Metro Vancouver is working closely with Kwantlen First Nation on archeological investigation, and opportunities to work collaboratively on cultural planning, naming, art, interpretation, restoration and signage.

Advanced design and permitting for the McLean Pond will continue through 2023. Greenway construction, of the Perimeter Trail, was initiated in 2022 and will continue through 2023.

Grouse Mountain Regional Park - Grouse Mountain Trail and Amenity Improvements

In 2020, the Government of Canada and Province of BC announced a \$2.5 million grant for the Grouse Mountain Trail and Amenity Improvement Project under the Investing in Canada Infrastructure Program.

The purpose of the project is to implement the park management plan, and improve access and safety for park users. The project timeline is from 2020 to 2024.

Significant improvements to the Grouse Grind and BCMC Trail have been completed since 2020. In 2022 a new lower mountain trail was constructed. In 2023 an expanded park entrance, trailhead and trail closure system will be constructed to enhance the visitor experience and expand access to the park.

GREENWAYS

Delta South Surrey Greenway – 72nd to Nordel Way

An integrated project team is advancing design of improvements to the Delta South Surrey Greenway from 72nd Ave to Nordel Way, in City of Delta. Regional Park staff are working closely with the City of Delta and Metro Vancouver Liquid Waste Services on the project.

The project will improve flood resilience, visitor experience, ecological connections and protection of sensitive bog habitat. Detailed design, archeology and permitting will proceed through 2023. Construction will begin in 2024. Improvements to the greenway are expected to proceed in 2024.

Tynehead Perimeter Trail

Planning and design for the Tynehead Perimeter Trail expansion is underway and will be complete in 2023. Construction will proceed in 2024 and 2025.

This project will connect the Perimeter Trail to the City of Surrey greenway network and provide a continuous multi-use path around the park. Interpretive elements for this trail will be developed in collaboration with First Nations.

Boundary Bay Perimeter Trail Extension

Detailed design of the Perimeter Trail extension, in Boundary Bay Regional Park is underway. The trail will be extended along Boundary Bay Road from the park entrance to the River Trail.

In 2023, archeological investigation, design and permitting will be completed, with implementation to begin in 2024.

SERVICE PROJECTS

Regional Park Service Yards

Construction of a replacement service yard for Crippen Regional Park was completed in 2022.

Construction of the replacement Pacific Spirit service yard is underway. The Capilano River service yard replacement project is in the final stages of archeological investigation and development permitting with District of North Vancouver.

These upgrades will ensure continued safe and efficient operation, maintenance and stewardship of regional parks sites.

PARK DEVELOPMENT

Crippen Regional Park – Davies Orchard Revitalization

Phase I construction, including upgrades to five historic cottage buildings, servicing improvements and site improvements is underway and will be complete in 2023.

In November 2017, the Metro Vancouver Board approved a concept plan for Davies Orchard with a vision to improve public access, add new features and amenities, and enhance the historic cottages and orchard. In early 2021, this project was awarded a \$450,000 provincial grant from the Unique Heritage Infrastructure stream of the Community Economic Recovery Infrastructure Program (CERIP).

Phase II, which includes site and public space improvements will proceed in 2022. Staff are working with Bowen Island Municipality and stakeholders as the project moves forward.

Derby Reach Regional Park - Edgewater Bar Washrooms

Construction of a full service washroom facility at Edgewater Bar in Derby Reach Regional Park is complete and will open to public use in spring 2023.

The new facility will improve the day use and camping visitor experience. Accessibility will be enhanced, capacity will be expanded, site circulation and open space will be improved and environmental impacts will be reduced.

Crippen Regional Park – Dorman Point Development

In 2022 regional Park staff completed site planning and design of trail access and site amenities for the recently acquired Dorman Point area of Crippen Regional Park.

Phase I Construction of the access trail was completed in 2022. Phase II construction of beach access stairs, a weather shelter and viewpoints will proceed in 2023, and the site will be opened for public access and enjoyment.

Solid Waste Services Capital Project Status Information
December 31, 2022

The two recycling and waste centre construction projects, United Boulevard Recycling and Waste Centre and Central Surrey Recycling and Waste Centre are now complete and other major capital projects are expected to be completed within budget. The purchase of land for a new recycling depot at the North Surrey Recycling and Waste Centre is complete as well. Waste-to-Energy Facility projects are proceeding slower than expected and have resulted in reduced expenditures in 2022 compared to projected cash flows.

Recycling and Waste Centre Program

- The United Boulevard Recycling and Waste Centre construction started in May 2018 with site grading works. The full construction contract was awarded in December 2018. The facility opened on March 14, 2022 and has been operating as expected since opening.
- The Central Surrey Recycling and Waste Centre project received rezoning and a development permit in late 2018. The construction contract was awarded in the summer of 2020. Construction was initiated in July 2020. The facility opened on September 9, 2022 and has been operating as expected since opening.

Landfills Program

- Construction of Phase 2 landfill gas collection system upgrades was completed as a part of the construction of the United Boulevard Recycling and Waste Centre. The new landfill gas infrastructure was commissioned prior to United Boulevard Recycling and Waste Centre opening.
- A landfill gas collection system upgrade is required which includes a new control room and compressor at the blower flare station. Detailed design will be awarded via a procurement process.
- In the leachate collection system, the west pump station upgrade is operational and design for the east pump station is expected to commence in 2023 with assistance from Liquid Waste Services.
- The leachate collection system realignment/upgrade has been deferred by one year. Assessment and design is expected to begin in 2023 after procurement and award of a new 5-year comprehensive environmental consulting services contract.

Waste-to-Energy Program

- The refuse crane replacement project commenced with preliminary engineering in 2019. The next phases of the project include detailed design and procurement of the major capital items.

- Covanta commenced replacement of the back-up feedwater pumps as they have reached the end of their useful life.
- The feed hopper / chute replacement project started in late 2019. The feed hopper and feed chute replacement is now complete.
- Ministry of Environment and Climate Change Strategy has approved proceeding with managing up to 25,000 tonnes per year of biosolids at the Waste-to-Energy Facility. Procurement award for a detailed design engineering study is pending.
- The primary economizer project commenced with engineering and procurement services on November 6, 2020. Installation of the works is expected to occur during 2023 outages.
- The compressed air system replacement project is underway, an engineering study commenced on October 18, 2021 and is 90% complete.
- The fabric filter / pulse header refurbishment project is underway, an engineering study commenced on December 2, 2021 and is 90% complete.

GVWD Capital Project Status Information

December 31, 2022

GREATER VANCOUVER WATER DISTRICT

Major GVWD capital projects are generally proceeding on schedule and within budget. The following capital program items and exceptions are highlighted:

Infrastructure Growth Program

- **Annacis Main No. 5 (Marine Crossing)** – A 2.3 kilometer (km) long, 4.5 metre (m) diameter water supply tunnel is required under the Fraser River to meet growing water demand south of the Fraser and to provide increased system resiliency. The construction contract was awarded in late October 2021, and construction commenced in March 2022. The construction of the south shaft is on-going. The contractor has mobilized to the north site and is preparing to commence construction of the north shaft during spring 2023. The tunnel boring machine is in the process of being fabricated.
- **Annacis Main No. 5 (South)** – This project comprises approximately 3.0 km of 1.8 m diameter steel pipe connecting the south shaft of the Annacis Water Supply Tunnel to the Kennedy Reservoir in the City of Surrey. Detailed design is nearing completion and will continue until mid-2023.
- **Annacis Main No. 5 (North)** – This project comprises approximately 2.8 km of 1.8 m diameter steel pipe connecting the north shaft of the Annacis Water Supply Tunnel in the City of New Westminster to the South Burnaby Main #2 in the City of Burnaby. Preliminary design has been completed, and detailed design is in progress and is expected to be complete by fall 2023.
- **Cape Horn Pump Station No. 3** – Cape Horn Pump Station No. 3 with a back-up power system, will supplement the existing pump station No. 2 to deliver Coquitlam source water to meet growing demand in the areas south of the Fraser River. Preliminary design of the new station is complete. Detailed design is underway.
- **Coquitlam Intake No. 2 (Coquitlam Lake Water Supply)** – A new intake, tunnel and treatment plant are proposed at the Coquitlam Reservoir to increase the regional supply from this source and meet growing future demand. A Value Engineering Optimization exercise, completed in early 2021, confirmed a preferred project option of a North Intake with Smaller Initial Filtration Treatment, which was endorsed by the Board. The Project Definition Report has been issued. The project is now in the permitting and regulatory phase, which will focus on engagement with First Nations, the City of Coquitlam, regulators and stakeholders. The Request for Proposal for Phase 2 site investigations has been issued. The procurement for treatment pilot testing is anticipated to start in the second half of 2023.

- **Coquitlam Main No. 4 (Coquitlam Water Main)** – This 12 km long steel water main, consisting of the Central, South, South Tunnel and Cape Horn Sections, will increase the transmission capacity from the Coquitlam source to the Cape Horn Pump Station and Reservoir in the City of Coquitlam. This project is required to address capacity constraints in the existing Coquitlam transmission system and also provide additional transmission capacity for the Coquitlam Intake No. 2. Detailed design of the Central and Cape Horn Sections continues. Preliminary design of the South Tunnel Section is anticipated to be completed in 2023. Award of the construction contract for the South Section is in March 2023 and construction is scheduled to commence in mid-2023.
- **Fleetwood Reservoir** – Phase 1 of the Fleetwood Reservoir project includes a 13.6 ML reservoir, valve chamber, piping, access building and associated work located at Meagan Ann MacDougall Park in the City of Surrey. Construction began in August of 2022 and is scheduled to complete in the fall of 2024.
- **Kennedy Newton Main** – This project comprises approximately 9.0 km of 1.8 m diameter steel water main between the Kennedy Reservoir and the Newton Reservoir in the City of Surrey and is divided into 3 phases. Construction of Phase 1, between 72nd Avenue and 84th Avenue, is complete. Construction of Phase 2, between 72nd Avenue and Newton Reservoir is nearing completion. Due to the complexity of the work within Phase 3, the installation work has been divided into three separate sections. Construction for the first section (Scott Road) commenced in fall 2022. The procurement for the south section is complete with construction expected to commence in Q2 2023. The north section will be tendered in late 2023.
- **Newton Pump Station No. 2** – This project, located at 6287 128th Street in the City of Surrey, consists of replacing the existing Newton Pump Station and includes full back-up power redundancy, connections to existing and future infrastructure, and installation of new outlets to the existing Newton Reservoir. The detailed design is complete and the construction of the new reservoir outlets is underway with the main pump station construction planned to commence in late-2023.
- **Hellings Tank No. 2** –The project scope was reviewed and reduced at this time and the timing for the new reservoir was revised to a future date.
- **South Surrey Main No. 2** – This project involves installing approximately 12km of 1m diameter steel water main in the City of Surrey between the Newton Pump Station and the Sunnyside Reservoir. The project route was confirmed in 2022 and the preliminary design is commencing in 2023.

Infrastructure Maintenance Program

- **Douglas Road Main No. 2** – Still Creek Section - This project comprises approximately 2.5 km of 1.5 m diameter steel pipe with trenchless crossings of Highway 1, Still Creek and the BNSF rail line. The Project is being constructed in three phases, with the North Open Cut Section and the Trenchless Crossing Section largely complete. Design of the South Open Cut Section is complete and will be tendered in the spring of 2023.

- **Douglas Road Main No. 2** – Vancouver Heights Section - This project comprises approximately 2.0 km of 1.5 m diameter steel pipe connecting the Vancouver Heights Reservoir to the Douglas Road Main No. 2 at Beta Avenue and Albert Street in the City of Burnaby. The installation construction contract is complete. Final tie-ins and commissioning are planned for fall 2023.
- **Central Park Main No. 2** – Patterson to 10th Ave - This project comprises approximately 7.0 km of 1.2 m diameter steel pipe connecting the Central Park Pump Station in Burnaby to the existing Central Park Main in New Westminister at 10th Avenue. The water main is divided into three phases with the 500 m long Maywood Pre-build completed in December 2020. Construction of Phase 1 of the project is largely complete. Design of Phase 2 is underway and is expected to be complete in spring 2023.
- **Capilano Main No. 5 (Stanley Park Section)** – This 1.4 km long steel water main, in a tunnel, will replace the aged existing Capilano Main No. 4 through Stanley Park to meet growing water demand and provide increased system resiliency. Detailed design is essentially complete. Work to secure permits and land agreements is on-going. The procurement phase for construction has been delayed due to challenges in obtaining approvals from the Vancouver Park Board. Procurement is now scheduled to commence in Summer 2023 with construction anticipated to start in early 2024 if approvals from the Park Board can be obtained soon.
- **Capilano Reservoir and Seymour Reservoir Dam Safety Boom Replacement** – To replace the aged dam safety booms for Seymour and Capilano Reservoirs. KWL has been selected as design consultant and is working on phase one of design of both booms. Assessments of on-shore and in-reservoir anchors will be undertaken in Q2.
- **Capilano Watershed Security Gatehouse** – This project consists of constructing a new security gatehouse building near the entrance to the Capilano Water Supply Area. The Board has approved the Construction Contract, and the Contractor is expected to mobilize by Summer 2023.
- **Central Park WPS Starters Replacement** – This project includes upgrades at the Central Park Water Pump Station. Upgrades include replacing the existing fixed speed pump drives with adjustable speed drives and soft start motor controllers. The project was delayed due to rezoning requirements. The detailed design is now estimated to be completed by Q2 of 2024.
- **Kersland Reservoir No. 1 Structural Improvements** – This project involves completing structural improvements to Unit 1 and installing a new balancing pipe between Unit 1 and Unit 2. Construction of the Unit 1 improvements are complete and the balancing pipe is scheduled to be installed by Metro Vancouver forces during the winter of 2023/2024.
- **Rechlorination Upgrades** – This project is to upgrade the existing Cape Horn, Pitt River, and Clayton Rechlorination Stations. The required upgrades will include new buildings, modifications/additions of backup power systems, and replacement of existing process, mechanical and EIC systems. Preliminary design is 50% complete.
- **SCFP Polymer System Upgrade** – This project consists of installing new dry polymer systems for the Filter Aid Polymer and Wash Water Recovery processes at the Seymour Capilano Filtration Plant. The construction started December 2022 and is expected to complete by Q1 2024.

- **South Surrey Main Pipe Support Modification** – Consultation with First Nations including Kwantlen and Tsleil-Waututh Nation FN. Tender to begin mid-2023.

Infrastructure Resilience Program

- **Second Narrows Water Supply Tunnel** – This project comprises a 1.1 km long, 6.5 m diameter water supply tunnel under Burrard Inlet, between North Vancouver and Burnaby, to increase the reliability of supply in the event of a major earthquake and provide additional long-term supply capacity. Construction commenced in early 2019. Construction of the north and south shafts, tunnel and installation of the three steel water mains inside the tunnel are complete. Construction of the north and south valve chambers is in progress. Overall construction is scheduled to be complete by spring 2024, followed by site restoration and final tie-ins and commissioning later in 2024 and then in 2025-2026.
- **Capilano Raw Water Pump Station - Back-up Power** – This project consists of installing diesel generators to provide 8 MW of back-up power to the pump station. The Board has approved the Construction Contract, and the Contractor is expected to mobilize by Summer 2023. after the contractor completed submittals and a building permit is issued.
- **Coquitlam Intake Tower Seismic Upgrade** – The Coquitlam Intake Tower is located in the southeast corner of the Coquitlam Reservoir. Constructed in 1913, the tower provides the GVWD its primary intake of water from Coquitlam Reservoir. The Tower is a 27 m-high and 5.5 m diameter unreinforced concrete structure, founded on bedrock. Detailed design of the seismic upgrade is 85% complete. Completion of detailed design is expected in Q4 of 2023. Due to coordination with BC Hydro work and water supply operations, construction will be completed over two winter periods 2026 to 2028.
- **Pebble Hill Reservoir No. 1, 2 and 3 Seismic Upgrade** – Pebble Hill Reservoir in south Delta is comprised of three units. Construction is scheduled to be completed in stages. Construction of Unit 1 and Unit 2 are ongoing and will complete in the summer of 2023. A separate tender will be issued for Unit 3 which is not expected to start until 2027.
- **Westburnco Pump Station – Back-up Power** – This project consists of installing diesel generators to provide 5 MW of back-up power to the pump station. Preliminary design was completed in 2019 and detailed design is on hold and will resume after the Capilano Raw Water Pump Station Backup Power project construction is underway.
- **Cambie-Richmond Water Supply Tunnel** – This project comprises an approximately 1 km long 4.5 m diameter tunnel under the Fraser River between the City of Vancouver and the City of Richmond to increase the reliability of supply in the event of a major earthquake and provide additional long-term supply capacity. Conceptual design commenced in 2019 and is complete. Procurement for preliminary and detailed design services is underway and preliminary design is scheduled to commence later this year.
- **Clayton Langley Main No. 2** – This project will install an emergency direct connection to the City of Langley. The new main will connect the 192 St main to the City of Langley's distribution system. Preliminary design commenced in fall 2022

- **Grandview Pump Station Improvements** – This project is to increase the capacity and improve operations of the pump station by adding a 4th pump and by replacing the existing variable frequency drives. The HVAC system will also be replaced along with the transformer. Detailed Design has been completed and construction is scheduled to start in Q4 of 2023.
- **Reservoir Isolation Valve Automation** – Identified key reservoir isolation valves are to be automated so that utility system controllers can remotely isolate all of the water storage reservoirs in an emergency. Currently, six (6) locations classified as initial priority locations with a total of eleven (11) manual valves to be automated. Design is complete, procurement of the valves is underway with the first isolation valves replacement planned for October 2023.
- **Scour Protection Assessments and Construction General** – Scour Protection design for Annacis Main No. 2 Annacis Channel Phase II complete. Construction to be tendered in Q3 2023 after permits are revised. Construction is expected to begin in January 2024.

Infrastructure Upgrade Program

- **Cleveland Dam Public Warning System** – This project involves design and construction of a permanent public warning system along Capilano River, downstream of the Cleveland Dam. Design has commenced, and construction is planned to be complete by end of 2024.
- **Coquitlam Ozone Upgrade** – This project consists of upgrades to the ozone generators at the Coquitlam Water Treatment Plant. The generators for units 1, 2 and 3 have been replaced and units 1 and 2 are in service. Testing and commissioning of unit 3 is scheduled for Q2 2023. Completion of the upgrades to the ozone control system will follow.
- **Haney Water Supply Tunnel** – This project comprises an approximately 1 km long 4.5 m diameter tunnel under the Pitt River between the City of Port Coquitlam and the City of Pitt Meadows to increase the reliability of supply in the event of a major earthquake and provide additional long-term supply capacity. Conceptual design is underway and anticipated to conclude in early 2024 with preliminary design scheduled to commence in late 2024.
- **Water Meter Upgrades** – Metro Vancouver has water meters monitoring the supply draw throughout their network at various municipal connection points. As the Corporation's water supply grows to meet the growing demands the existing meters require upgrading. The Corporation has created a program of thirty-five (35) sites that require either a new water meter or an upgrade to the existing meter. Twenty (20) flow meter sites have design complete. Ten (10) have been constructed/installed, 2 are under construction.
- **Water Optimization** – The Corporation installs various instrumentation devices and meters to monitor flows and pressures to verify performance within the water distribution network. The Corporation is installing additional flow and pressure meters at various locations to optimize, monitor performance, and eventually automate the network. Network-wide, one hundred forty three (143) locations for new meters and instrumentation have been identified under this program. Thirteen (13) instrumentation devices have been constructed/installed and 49 are in the design phase.

To: Finance Committee

From: George Kavouras, Director, Procurement
Procurement and Real Estate Services Department

Date: March 23, 2023 Meeting Date: April 13, 2023

Subject: **Tender/Contract Award Information – September 2022 to December 2022**

RECOMMENDATION

That the Finance Committee receive for information the report dated March 23, 2023, titled “Tender/Contract Award Information – September 2022 to December 2022”.

EXECUTIVE SUMMARY

During the period September 1, 2022 and December 31, 2022, the Procurement Division issued fourteen (14) new contracts, each with a value in excess of \$500,000 (exclusive of taxes). In addition, there were eleven (11) existing contracts requiring contract amendments which necessitate further reporting to the Finance Committee. The 11 amendments experienced additional costs resulting from either scope changes and project extensions due to site conditions or third party regulatory requirements.

All awards and amendments were issued in accordance with the “*Officers and Delegation Bylaws 1208, 284 and 247 – 2014*” and the “*Procurement and Real Property Contracting Authority Policy*”.

PURPOSE

To provide the Finance Committee information with regard to contracts, handled through the Procurement Division, with a total anticipated value at or in excess of \$500,000 (exclusive of taxes).

BACKGROUND

The Procurement Division of Metro Vancouver awards contracts for goods, services and construction in accordance with the “*Officers and Delegation Bylaws 1208, 284 and 247 – 2014*” (*Bylaws*), and the “*Procurement and Real Property Contracting Authority Policy*” (*Policy*) adopted by the Board of Directors on July 11, 2014, effective September 1, 2014. These *Bylaws* and *Policy* outline thresholds for competitive bidding and contracting authorities. Contracts in excess of \$500,000 will be reported to the Finance Committee to align with the thresholds outlined in the *Policy*.

Capital projects may result in the awarding of one or more contracts to complete the project. Budget availability is verified prior to the execution of contracts.

NEW CONTRACTS - \$500,000 to \$5,000,000

The following contracts were **awarded** during the months of *September 2022 to December 2022* (Details attached as **APPENDIX A**):

	<u>(Exclusive of taxes)</u>	<u>Entity</u>
1. Ross Morrison Electrical Ltd. Tender No. 21-157 <i>Construction – AIWWTP Chemistry Lab UPS System</i>	\$589,575	GVS&DD
2. CB Process Instrumentation & Controls RFP No. 21-491 <i>Supply and Delivery of Metal-Seated Triple Offset Butterfly Valves for Coquitlam Main No.4 - South Section</i>	\$2,021,396	GVWD
3. BBA Engineering Ltd. Brown and Caldwell Consultants Ltd. Wood Canada Limited Tetra Tech Canada Inc. MTS Engineering Inc. RFP No. 22-033 <i>EIC Engineering Consulting Services for Wastewater Treatment Plants</i>	\$4,000,000	GVS&DD
4. Chemtrade Chemicals Canada Ltd. RFP No. 22-076 <i>Supply and Delivery of 48% Aluminum Sulphate Aqueous Solution (Liquid Alum)</i>	\$4,872,000	GVS&DD
5. Worley Canada Services Ltd., operating as Advisian RFP No. 22-122 <i>Iona Island/x̄w̄əyeyət Biophysical Baseline Data Collection and Long-term Monitoring Plan</i>	\$839,859	GVS&DD
6. Mitchell Installations Ltd. RFP No. 22-169 <i>Supply and Installation of Cleveland Dam Lower Outlet Fixed Cone Valve Hoods</i>	\$1,450,303	GVWD
7. Pomerleau Inc. Tender No. 22-220 <i>Inspection and Membrane Replacement for AIWWTP and LIWWTP LSG Gas Holder Tank</i>	\$2,466,800	GVS&DD
8. ADS Environmental Technologies Inc. RFP No. 22-251 <i>Temporary Sewer Flow Monitoring Services</i>	\$505,550	GVS&DD

9.	AECOM Canada Ltd. Associated Engineering (B.C.) Ltd. BBA Engineering Ltd. Read Jones Christoffersen Ltd. RFP No. 22-292 <i>Structural Engineering Consulting Services for Liquid Waste Services</i>	\$2,000,000	GVS&DD
10.	Terra Archaeology Limited Invitation to Quotes No. 22-309 <i>Archaeological Services for the construction of the two manholes on the New Westminster Interceptor Fraser River Crossing</i>	\$584,732	GVS&DD
11.	Chemtrade Chemicals Canada Ltd. Sole Source No. 22-356 <i>Supply and Delivery of 48% Aluminum Sulphate Aqueous Solution (Liquid Alum)</i>	\$578,000	GVS&DD
12.	JJM Construction Ltd. Tender No. 22-400 <i>Supply & Installation of Scour Protection for Maple Ridge Forcemain, Fraser River Crossing</i>	\$1,342,385	GVS&DD
13.	Drake Excavating (2016) Ltd. Tender No. 22-410 <i>Coquitlam Landfill Lot 3 Temporary Grading Plan</i>	\$535,000	GVS&DD

NEW CONTRACT – BOARD APPROVED

The following contracts were **authorized for execution** by the GVS&DD Board of Directors during the months of *September 2022 to December 2022* (as such no further information is included in this report):

		<u>(Exclusive of taxes)</u>	<u>Entity</u>
1.	CH2M Hill Canada Limited RFP No. 18-101 <i>Construction and Commissioning Engineering Services for Coquitlam Main No. 4 – South Section – Phase B</i>	\$6,950,902	GVWD

2.	Katzie Development Limited Partnership Sole Source No. 18-163 <i>Archaeological Services for Northwest Langley Wastewater Treatment Plant Phase 2 Ground Improvements</i>	\$5,900,997	GVS&DD
3.	Pomerleau Inc. Tender No. 19-243 <i>Northwest Langley Wastewater Treatment Plant Ground Improvements and Preload Project</i>	\$10,238,205	GVS&DD
4.	Brenntag Canada Inc. RFP No. 21-306 <i>Supply and Delivery of Sodium Carbonate for Coquitlam Water Treatment Plant</i>	\$6,863,300	GVWD
5.	NorLand Limited / BEL Contracting RFP No. 21-405 <i>Construction of South Surrey Interceptor No. 2, Johnston Road Section Phase 3 – Open Cut Segments</i>	9,452,661	GVS&DD
6.	BD Hall Constructors Corporation RFP No. 22-007 <i>Construction of Gilbert Trunk Sewer No.2 Gilbert Road Central Section</i>	\$44,333,000	GVS&DD
7.	Kerr Wood Leidal Associates Ltd. RFP No. 22-066 <i>Professional Engineering Services for the Waste-to-Energy Facility District Energy System Project</i>	\$4,999,500	GVS&DD
8.	Stantec Consulting Ltd. RFP No. 22-074 <i>Consulting Engineering Services for Cape Horn Pump Station No. 3</i>	\$7,566,020	GVWD
9.	Carollo Engineers Inc. RFP No. 22-103 <i>Program Management and Technical Services for Northwest Langley Wastewater Treatment Plant Expansion Program</i>	\$16,886,338	GVS&DD
10.	Matcon Civil Constructors Inc. RFP No. 22-197 <i>Kennedy Newton Main – Phase 3 Scott Road Section</i>	\$10,286,500	GVWD

11.	Industra Construction Corp. Tender No. 22-256 <i>Construction Services - Upgrades of Two Gleneagles Pump Stations - Gallagher and Kensington</i>	\$13,967,755	GVS&DD
12.	Golder Associates Ltd. RFP No. 21-425 <i>Ground Improvements and Preload Engineering Services for the Iona Island Wastewater Treatment Plant (IIWWTP) Upgrades Program</i>	\$9,285,048	GVS&DD

AMENDED CONTRACTS

The following '**not previously reported**' contracts were **amended** during the months of *September 2022 to December 2022 (APPENDIX B)*:

		<u>Value of Amendments</u>	<u>Total Amended Value of Contract</u>
1.	Finning (Canada) a division of Finning International Inc. RFP No. 19-030 <i>Supply and Delivery of One 500 kW Genset - Columbia Pump Station</i>	\$7,488	\$502,335
2.	GHD Limited RFQ No. 19-278 <i>Assessment of Regional Solid Waste System</i>	\$257,388	\$557,188
3.	WSP Canada Inc. RFP No. 21-194 <i>Geotechnical Engineering Support During Drilling Program – IIWWTP</i>	\$366,614	\$866,603
4.	Arrow Speed Controls ITT No. 21-397 <i>Supply and Delivery of Variable Frequency Drives – Grandview, Katzie, and Port Coquitlam Pump Stations</i>	\$150,550	\$552,142

The following **previously reported** contracts were **amended** during the months of *September 2022 to December 2022* (Details attached as **APPENDIX C**):

	<u>Value of Amendments</u>	<u>Total Amended Value of Contract</u>
1. Ausenco Engineering Canada Inc. RFP No. 16-097 <i>Consulting Engineering Services - Detailed Design and Construction for the Fleetwood Reservoir</i>	\$2,957,732	\$5,754,528
2. Katzie Development Limited Partnership Sole Source No. 18-163 <i>Archaeological Monitoring for Geotechnical Exploration for the Northwest Langley Wastewater Treatment Plant Projects</i>	\$906,035	\$4,990,581
3. CH2M Hill Canada Limited (Jacobs) RFP No. 19-007 <i>Northwest Langley Wastewater Treatment Plant – Design and Construction Engineering Services</i>	\$4,694,765	\$45,325,366
4. Clearway Construction Inc. ITT No. 20-122 <i>Construction - Douglas Road Main No. 2 - Still Creek Section North Open Cut</i>	\$1,647,325	\$5,933,480
5. Maple Reinders Constructors Ltd. ITT No. 20-202 <i>Annacis Island Wastewater Treatment Plant Gates and Hydraulic System for the Influent Control Chamber Channel</i>	\$1,015,047	\$8,235,547
6. Geotech Drilling Services Ltd. RFP No. 21-146 <i>Geotechnical Exploration Services for the Iona Island Wastewater Treatment Plant Projects</i>	\$656,851	\$2,831,058
7. Worley Canada Services Ltd. (Advisian) RFP No. 21-238 <i>Iona Island Foreshore Ecological Restoration Projects: Data Collection, Modelling and Design</i>	\$660,806	\$2,192,117

COMPETITIVE SELECTION PACKAGES - anticipated to be greater than \$500,000 (Issued but not awarded) (Details attached as **APPENDIX D**).

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The contract approval process includes a review of available budget. The contracts presented herein are consistent with budget authority provided by the respective Boards.

CONCLUSION

The contracts presented herein were awarded in accordance with the *“Officers and Delegation Bylaws 1208, 284 and 247 – 2014” (Bylaws)* and the *“Procurement and Real Property Contracting Authority Policy” (Policy)* and comply with competitive bidding laws and applicable legislation.

Further, the competitive selection packages were carefully crafted by teams of subject matter experts resulting in the award of contracts that are fiscally responsible, and balance risk, economic, ethical and legal obligations.

Attachments

APPENDIX A: Information with regard to newly awarded contracts - \$500,000 to \$5,000,000.

APPENDIX B: Contract amended to a value of more than \$500,000 but not previously reported to the Finance Committee.

APPENDIX C: Previously reported contracts that have been amended.

APPENDIX D: Competitive Selection Packages anticipated to be greater than \$500,000 (Issued but not awarded).

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AWARD OF CONTRACT

TENDER No. 21-157

1. A contract was awarded, December 15, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: **Ross Morrison Electrical Ltd.**

in the amount of **\$589,575** (exclusive of taxes) for Construction – AIWWTP Chemistry Lab UPS System.

The contract price is within the overall budget.

2. Four (4) firms were shortlisted as a result of RFQ No. 21-155 (publicly advertised on Metro Vancouver’s and BC Bid websites) and invited to bid on ITT No. 21-157 on October 25, 2022.

Closing Date: November 15, 2022

3. Tenders received (exclusive of taxes):

Ross Morrison Electrical Ltd.	\$589,575
JA Electric Inc.	\$663,740
Mott Electric General Partnership	\$681,849
Status Electrical Corporation	\$880,907

4. Tenders reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

5. Award was made to the lowest compliant bidder.

AWARD OF CONTRACT

RFP No. 21-491

1. A contract was awarded, December 2, 2022, for the **Greater Vancouver Water District**.

To: ***CB Process Instrumentation & Controls***

in the anticipated amount of up to **\$2,021,396** (exclusive of taxes) for Supply and Delivery of Metal-Seated Triple Offset Butterfly Valves for Coquitlam Main No.4 - South Section. The anticipated amount is a combination of the successful supplier proposed price of \$2,085,108 (exclusive of taxes) less \$63,712 (exclusive of taxes) to account for issues identified during negotiations as allowed for in the RFP.

The contract price is within the overall budget.

2. Four (4) firms were shortlisted as a result of RFQ No. 21-357 (publicly advertised on Metro Vancouver's and BC Bid websites) and invited to bid on RFP No. 21-491 on June 17, 2022.

Closing Date: July 26, 2022

3. Proposals received (exclusive of taxes):

CB Process Instrumentation & Controls	\$2,085,108
CG Industrial Specialties Ltd.	\$6,084,342

4. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Water Services Department Staff

5. Award was made to the highest ranked proponent and lowest cost based on the evaluation criteria established in the RFP.

AWARD OF CONTRACT

RFP No. 22-033

1. A contract was awarded, October 3, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***BBA Engineering Ltd., Brown and Caldwell Consultants Ltd., Wood Canada Limited, Tetra Tech Canada Inc., MTS Engineering Inc.***

in the anticipated amount of up to \$4,000,000 (exclusive of taxes) for EIC Engineering Consulting Services for Wastewater Treatment Plants over a three (3) year period. Award to the five (5) highest ranked consulting engineering firms for the provision of electrical, instrumentation and control (EIC) on the Corporation's five wastewater treatment plants. Projects of less than \$250,000 will be made rotationally and negotiated. Values exceeding \$250,000 up to \$500,000 will attract competition from up to the five (5) selected consulting engineering firms.

2. Proponents were invited by Metro Vancouver's and BC Bid websites and private invitation on May 12, 2022.

Closing Date: June 17, 2022

3. Proposals received (exclusive of taxes):

Wood Canada Limited	\$1,003,000
MTS Engineering Inc.	\$1,010,000
Tetra Tech Canada Inc.	\$1,124,250
BBA Engineering Ltd.	\$1,155,400
CIMA Canada Inc.	\$1,176,000
Brown and Caldwell Consultants Ltd.	\$1,216,575
WSP Canada Inc.	\$1,303,250
KGS Group	\$1,325,550

4. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

5. Award was made to the five (5) highest ranked proponents based on the evaluation criteria established in the RFP.

AWARD OF CONTRACT

RFP No. 22-076

1. A contract was awarded, December 13, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***Chemtrade Chemicals Canada Ltd.***

in the anticipated amount of up to **\$4,872,000** (exclusive of taxes) for the Supply and Delivery of 48% Aluminum Sulphate Aqueous Solution (Liquid Alum) over a three (3) year period.

The contract price is within the overall budget.

2. Proponents were invited by Metro Vancouver's and BC Bid websites and private invitation on August 29, 2022.

Closing Date: September 22, 2022

3. Proposals received (exclusive of taxes):

Chemtrade Chemicals Canada Ltd.

Based on rates provided

4. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

5. Award was made to the sole responding bidder based on the evaluation criteria established in the RFP.

AWARD OF CONTRACT

RFP No. 22-122

1. A contract was awarded, December 12, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***Worley Canada Services Ltd., operating as Advisian***

in the anticipated amount of up to **\$839,859** (exclusive of taxes) for Iona Island/xʷəyeyət Biophysical Baseline Data Collection and Long-term Monitoring Plan. The anticipated amount is a combination of the successful consultants' proposed price of \$639,976 (exclusive of taxes) and an additional \$199,883 (exclusive of taxes) to account for issues identified during negotiations on October 18, 2022 as allowed for in the RFP.

The contract price is within the overall budget.

2. Proponents were invited by Metro Vancouver's and BC Bid websites and private invitation on June 8, 2022.

Closing Date: June 30, 2022

3. Proposals received (exclusive of taxes):

Worley Canada Services Ltd., operating as Advisian	\$639,976
Golder Associates	\$883,666

4. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Project Delivery Department Staff

5. Award was made to the highest ranked proponent and lowest cost based on the evaluation criteria established in the RFP.

AWARD OF CONTRACT

RFP No. 22-169

1. A contract was awarded, November 14, 2022, for the **Greater Vancouver Water District**.

To: ***Mitchell Installations Ltd.***

in the anticipated amount of up to **\$1,450,303** (exclusive of taxes) for Supply and Installation of Cleveland Dam Lower Outlet Fixed Cone Valve Hoods. The anticipated amount is a combination of the successful consultants' proposed price of \$1,281,819 (exclusive of taxes) and an additional \$168,484 (exclusive of taxes) to account for issues identified during negotiations as allowed for in the RFP.

The contract price is within the overall budget.

2. Three (3) firms were shortlisted as a result of RFQ No. 22-168 (publicly advertised on Metro Vancouver's and BC Bid websites) and invited to bid on RFP No. 22-169 on August 22, 2022.

Closing Date: September 16, 2022

3. Proposals received (exclusive of taxes):

Mitchell Installations Ltd.	\$1,281,819
Pacific Rope Access	\$1,375,282

4. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Water Services Department Staff

5. Award was made to the highest ranked proponent and lowest cost based on the evaluation criteria established in the RFP.

AWARD OF CONTRACT

TENDER No. 22-220

1. A contract was awarded, October 31, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***Pomerleau Inc.***

in the amount of **\$2,466,800** (exclusive of taxes) for Inspection and Membrane Replacement for AIWWTP and LIWWTP LSG Gas Holder Tank.

The contract price is within the overall budget.

2. Tenderers were invited by Metro Vancouver by private invitation on June 17, 2021.
3. Tenders received (exclusive of taxes):

Pomerleau Inc.	\$2,466,800
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4. Tenders reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

5. Award was made to the only compliant bidder.

AWARD OF CONTRACT

RFP No. 22-251

1. A contract was awarded, September 13, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***ADS Environmental Technologies Inc***

in the anticipated amount of up to **\$2,500,000** (exclusive of taxes) for Temporary Sewer Flow Monitoring Services over a five (5) year period. The initial award of \$505,550 (exclusive of taxes) is for a period of one (1) year with an option to extend for four (4) additional one year periods, upon mutual agreement with the successful proponent.

The contract price is within the overall budget.

2. Proponents were invited by Metro Vancouver's and BC Bid websites and private invitation on June 21, 2022.

Closing Date: July 13, 2022

3. Proposals received (exclusive of taxes):

ADS Environmental Technologies Inc	\$505,550
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4. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

5. Award was made to the sole responding bidder based on the evaluation criteria established in the RFP.

AWARD OF CONTRACT

RFP No. 22-292

6. A contract was awarded, October 7, 2022 and October 11, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***AECOM Canada Ltd., Associated Engineering (B.C.) Ltd., BBA Engineering Ltd., Read Jones Christoffersen Ltd.***

in the anticipated amount of up to **\$2,000,000** (exclusive of taxes) for Structural Consulting Engineering Services for Liquid Waste Services over a three (3) year period. Award to the four (4) highest ranked consulting engineering firms for the provision of structural engineering services for Corporation's miscellaneous pumping stations and related infrastructure. Projects of less than \$250,000 will be made rotationally and negotiated. Values exceeding \$250,000 up to \$500,000 will attract competition from up to the four (4) selected consulting engineering firms.

7. Proponents were invited by Metro Vancouver's and BC Bid websites and private invitation on July 12, 2022.

Closing Date: August 10, 2022

8. Proposals received based on 3600 hours (exclusive of taxes):

Tetra Tech Canada Ltd.	\$499,175
CIMA Canada Inc.	\$517,169
BBA Engineering Ltd.	\$539,225
AECOM Canada Ltd.	\$556,375
Read Jones Christoffersen Ltd.	\$579,825
Associated Engineering (B.C.) Ltd.	\$632,175
Klohn Crippen Berger	\$697,000

9. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

10. Award was made to the four (4) highest ranked proponents based on the evaluation criteria established in the RFP.

AWARD OF CONTRACT

Invitation to Quotes No. 22-309

1. A contract was awarded, October 24, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***Terra Archaeology Limited***

in the amount of up to **\$584,732** (exclusive of taxes) for Archaeological Services for the construction of the two manholes on the New Westminster Interceptor Fraser River Crossing.

The contract price is within the overall budget.

2. Six (6) First Nations preferred firms as provided by Indigenous Relations were invited to bid on ITQ No. 22-309 on July 4, 2022.

Closing Date: July 19, 2022

3. Tender received (exclusive of taxes):

Terra Archaeology Limited	\$584,732
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4. Tender reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

5. Award was made to the only compliant bidder.

AWARD OF SOLE SOURCE CONTRACT

No. 22-356

1. A contract was awarded October 26, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***Chemtrade Chemicals Canada Ltd.***

in the amount of **\$578,000** (exclusive of taxes) for the Supply and Delivery of 48% Aluminum Sulphate Aqueous Solution (Liquid Alum).

A sole source contract was awarded to Chemtrade Chemicals Canada Ltd. (Chemtrade) for the Supply and Delivery of 48% Aluminum Sulphate Aqueous Solution (Liquid Alum). The recent contract (Tender No. 17-118) expired on July 26, 2022, and staff are working on issuing a Request for Proposal for a new contract to start in November 2022. Procurement and Wastewater Treatment Plant staff negotiated with Chemtrade this additional and final four (4) month term to ensure the continued supply of Liquid Alum and avoid disruptions to daily operations until the new contract is in place; the contract price will remain fixed without change for the duration of this four (4) month term.

AWARD OF CONTRACT

TENDER No. 22-400

1. A contract was awarded, December 2, 2022, for the **Greater Vancouver Sewerage and Drainage District**

To: ***JJM Construction Ltd.***

in the amount of **\$1,342,385** (exclusive of taxes) for Supply & Installation of Scour Protection for Maple Ridge Forcemain, Fraser River Crossing.

The contract price is within the overall budget.

2. Three (3) firms were shortlisted as a result of RFQ No. 22-271 (publicly advertised on Metro Vancouver's and BC Bid websites) and invited to bid on ITT No. 22-400 on October 21, 2022.

Closing Date: November 22, 2022

3. Tenders received (exclusive of taxes):

JJM Construction Ltd.	\$1,342,385
Vancouver Pile Driving Ltd.	\$1,717,240
Fraser River Pile & Dredge (GP) Inc.	\$1,903,840

4. Tenders reviewed by:

Contractual: Procurement Division Staff

Technical: Liquid Waste Services Department Staff

5. Award was made to the lowest compliant bidder.

AWARD OF CONTRACT

TENDER No. 22-410

1. A contract was awarded, October 27, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***Drake Excavating (2016) Ltd.***

in the amount of **\$535,000** (exclusive of taxes) for Coquitlam Landfill Lot 3 Temporary Grading Plan.

The contract price is within the overall budget.

2. Tenderers were invited by Metro Vancouver's private invitation* on September 9, 2022.

Closing Date: September 26, 2022

3. Tenders received (exclusive of taxes):

Drake Excavating (2016) Limited	\$535,000
BD Hall Constructors	\$681,116

4. Tenders reviewed by:

Contractual: Procurement Division Staff

Technical: Solid Waste Services Department Staff

5. Award was made to the lowest compliant bidder.

*The recent construction of the United Boulevard Recycling and Waste Centre has changed the surface water flow characteristics of Lot 3 at Coquitlam Landfill which resulted in a spill that was reported to Emergency Management British Columbia. Site modifications are required to minimize the risk of another spill. The Solid Waste Services Department initially estimated the project value at \$200,000; however, the bids received were above this value.

AWARD OF CONTRACT

RFP No. 22-420

1. A contract was awarded, December 9, 2022, for the **Greater Vancouver Sewerage and Drainage District**.

To: ***A. Lanfranco and Associates Inc.***

in the initial award of up to **\$806,970** (exclusive of taxes) for Waste to Energy Facility Stack Testing over a three-year period.

The anticipated amount of \$1,344,950 (exclusive of taxes) is for a period of three (3) years with an option to extend for an additional two (2) year extension, upon mutual agreement with the successful proponent.

The contract price is within the overall budget.

2. Proponents were invited by Metro Vancouver's and BC Bid websites and private invitation on September 26, 2022.

Closing Date: October 21, 2022

3. Proposals received (exclusive of taxes):

A. Lanfranco and Associates Inc.	\$806,970
Ortech Consulting Inc.	\$832,500

4. Proposals reviewed by:

Contractual: Procurement Division Staff

Technical: Solid Waste Services Department Staff

5. Award was made to the highest ranked proponent and lowest cost based on the evaluation criteria established in the RFP.

CONTRACTS AMENDED TO A VALUE OF
MORE THAN \$500,000
BUT NOT PREVIOUSLY REPORTED TO THE
PERFORMANCE AND AUDIT COMMITTEE

RFP No. 19-030
PURCHASE ORDER No. 622311

Finning (Canada) a division of Finning International Inc.

Supply and Delivery of One 500 kW Genset - Columbia Pump Station
for the **Greater Vancouver Sewerage and Drainage District**

1.	Original Value of Contract (exclusive of taxes):	\$494,847
2.	Amendment Value (exclusive of taxes):	\$7,488
3.	Amendment Number:	01
4.	Total Amended Value of Contract (exclusive of taxes):	\$502,335

5. Budget Status:

This contract is funded within the capital budget for this project.

6. Reasons for Amendment to Contract: Original award amount was just under \$500,000. With four (4) small Change Orders in cumulative amount of \$7,488, the value of overall contract has triggered the reporting requirement.

Appendix B

No. 2

CONTRACTS AMENDED TO A VALUE OF
MORE THAN \$500,000
BUT NOT PREVIOUSLY REPORTED TO THE
PERFORMANCE AND AUDIT COMMITTEE

RFQ No. 19-278
PURCHASE ORDER No. 657082

GHD Limited

Assessment of Regional Solid Waste System
for the **Greater Vancouver Sewerage and Drainage District**

1.	Original Value of Contract (exclusive of taxes):	\$299,800
2.	Amendment Value (exclusive of taxes):	\$257,388
3.	Amendment Number:	01
4.	Total Amended Value of Contract (exclusive of taxes):	\$557,188

5. Budget Status:

This contract is funded within the capital budget for this project.

6. Reasons for Amendment to Contract:

Four (4) Amendments were approved over the course of the project to consolidate an understanding of and to evaluate the regional solid waste system to assist in planning for future upgrading and replacement of solid waste facilities.

Amendment 1 - Work Plan for the Financial Analysis of the Recycling Depot and Organic Drop-Off at North Shore Transfer Station (\$53,653).

Amendment 2 - Work Plan for Microsimulation Model of the North Shore Transfer Station Recycling Depot (\$71,172).

Amendment 3 - Work Plan for the Conceptual Design and Costing of the Langley and Surrey Recycling Depots (\$27,193).

Amendment 4 - Assessment of Regional Solid Waste System (\$105,370).
This work involves technical analysis at the Vancouver Landfill.

CONTRACTS AMENDED TO A VALUE OF
MORE THAN \$500,000
BUT NOT PREVIOUSLY REPORTED TO THE
PERFORMANCE AND AUDIT COMMITTEE

RFP No. 21-194
PURCHASE ORDER No. 724766

WSP Canada Inc.

Geotechnical Engineering Support During Drilling Program - IWWTP
for the **Greater Vancouver Sewerage and Drainage District**

1.	Original Value of Contract (exclusive of taxes):	\$499,989
2.	Amendment Value (exclusive of taxes):	\$366,614
3.	Amendment Number:	01
4.	Total Amended Value of Contract (exclusive of taxes):	\$866,603
5.	Budget Status:	

This contract is funded within the capital budget for this project.

6. Reasons for Amendment to Contract:

Additional consulting services from WSP Canada Inc. are required to support the IWWTP Geotechnical Investigation Program due to the unexpected subsurface conditions encountered at the site to date. Changes in methodology and additional testing is required to understand the geological profile and the properties of the soil to develop an appropriate ground improvements design and quantify potential cost savings.

CONTRACTS AMENDED TO A VALUE OF
MORE THAN \$500,000
BUT NOT PREVIOUSLY REPORTED TO THE
PERFORMANCE AND AUDIT COMMITTEE

ITT No. 21-397
PURCHASE ORDER No. 749464

Arrow Speed Controls

Supply and Delivery of Variable Frequency Drives – Grandview, Katzie, and Port Coquitlam Pump
Stations for the **Greater Vancouver Sewerage and Drainage District**

1.	Original Value of Contract (exclusive of taxes):	\$401,592
2.	Amendment Value (exclusive of taxes):	\$150,550
3.	Amendment Number:	01
4.	Total Amended Value of Contract (exclusive of taxes):	\$552,142
5.	Budget Status:	

This contract is funded within the operating budget for this project.

6. Reasons for Amendment to Contract:

Additional scope for Arrow Speed Controls to supply and deliver additional equipment and components. This Change Order represents a 37.5% increase from the original contract value.

AMENDMENT TO A PREVIOUSLY REPORTED CONTRACT

RFP No. 16-097

PURCHASE ORDER No. 140737

Consulting Engineering Services - Detailed Design and Construction for the Fleetwood Reservoir
for the **Greater Vancouver Water District**

1. Name of Contractor: Ausenco Engineering Canada Inc.
2. Date Contract Reported: **October 2016**
3. Original Awarded Value of Contract - Phase A: \$1,418,080
Value of Awarded Amendment - Phase B: \$937,656
Value of Amendment No. 01 (CO's 1 to 7): \$441,060
Subtotal: **\$2,796,796**
4. Amendment Number: 02
5. Value of Amendment (exclusive of taxes): \$2,957,732
6. Amendment Type: Additional Services
7. Total Revised Anticipated Amended Value of Contract (exclusive of taxes): \$5,754,528
8. Previous Amendment Explanation (Reported to Performance and Audit Committee January, 2021).

Amendment No. 01 is the sum of seven (7) Change Orders totaling \$441,060 and an increase of \$258,500 to Phase B Construction/Post-Construction services over the originally proposed fee for Phase B. The most recent Change Order, totaling \$207,743 is the result of placing the project on hold for over two (2) years at the request of the City. Additional effort was required to restart the project and update the design to meet the building code requirements.
9. Budget Status:

This contract is funded within the capital budget for this program.
10. Amendment No. 02 is the result of increased design and construction engineering services to accommodate new requirements after restarting the project in 2020 following a two (2) year delay. Additional design services are required to address unforeseen building permit requirements and construction engineering services are amended for an increased construction scope and schedule. Further effort is required to meet new EGBC PGA requirements and to provide a full time site inspector. The Amendment also includes rate adjustment as the original RFP was awarded in 2017.

AMENDMENT TO A PREVIOUSLY REPORTED CONTRACT

Sole Source No. 18-163
PURCHASE ORDER No. 604471

Archaeological Monitoring for Geotechnical Exploration for the
Northwest Langley Wastewater Treatment Plant Projects
for the **Greater Vancouver Sewerage and Drainage District (GVS&DD)**

- | | | |
|----|--|---|
| 1. | Name of Contractor: | Katzie Development Limited Partnership (KDLP) |
| 2. | Date Contract Reported: | April 2021 |
| 3. | Original Awarded Value of Contract: | \$466,289 |
| | Value of previous Amendment No. 01: | \$979,517 |
| | Value of previous Amendment No. 02: | \$576,782 |
| | Value of previous Amendment No. 03: | \$542,793 |
| | Value of previous Amendment No. 04: | \$1,519,165 |
| | Subtotal: | <u>\$4,084,546</u> |
| 4. | Amendment Number: | 05 |
| 5. | Value of Amendment (exclusive of taxes): | \$906,035 |
| 6. | Amendment Type: | Additional Services |
| 7. | Total Revised Anticipated Amended Value of Contract (exclusive of taxes): | \$4,990,581 |
| 8. | Previous Amendment Explanation (Reported to Performance and Audit Committee - April 2021, July 2021, October 2021 and January 2022). | |

Amendment No. 01 is for archaeological inspection services and assessment of deposits found when monitoring of the Phase 2 ground improvement subgrade at Northwest Langley. Several archaeological sites have been identified for inspection.

Amendment No. 02 is the result of the second phase of archaeological inspection services and sifting of archaeological deposits recovered from the site identified through monitoring of the Phase 2 ground improvement subgrade at Northwest Langley.

Amendment No. 03 is for archaeological monitoring of the sub grade excavation in Area 11E and archaeological machine testing of the Influent Sewer Alignment. Area 11E is located along the eastern site boundary, where the valve chamber and waterline will be installed and the Influent Sewer Alignment is located along the southern haul road. This is related to Northwest Langley Wastewater Treatment Plant expansion project.

Amendment No. 04 is for the investigation of positive intact archeological sites in Areas 7, 8, and 9 that were discovered through archaeological monitoring of Phase 2 Ground Improvements. The work will include Systematic Data Recovery (SDR) methods and require duration of 84 filed days.

9. Budget Status:

This contract is funded within the capital budget for this program.

10. Amendment No. 05 relates to a 2-month extension of KDLP's services during September and October of 2022, while a more comprehensive Board report is being prepared for Liquid Waste Committee and the GVS&DD Board meeting on October 28, 2022. The services required are to continue heritage investigation in Areas 11A-D and Area 11E, as well as costs for two (2) weeks of machine testing that was completed in October of 2022.

AMENDMENT TO A PREVIOUSLY REPORTED CONTRACT

RFP No. 19-007
PURCHASE ORDER No. 623129

Northwest Langley Wastewater Treatment Plant – Design and Construction Engineering Services
for the **Greater Vancouver Sewerage and Drainage District**

- | | |
|--|-----------------------------------|
| 1. Name of Contractor: | CH2M Hill Canada Limited (Jacobs) |
| 2. Date Contract Reported: | October 2019 |
| 3. Original Board Approved - Phase A & B: | \$35,327,087 |
| Value of Board Approved - Phase C: | \$5,303,514 |
| Subtotal: | <u>\$40,630,601</u> |
| 4. Amendment Number: | 01 |
| 5. Value of Amendment (exclusive of taxes): | \$4,694,765 |
| 6. Amendment Type: | Additional Services |
| 7. Total Revised Anticipated Amended Value of Contract (exclusive of taxes): | \$45,325,366 |
| 8. Budget Status: | |

This contract is funded within the capital budget for this program.

9. Amendment No. 01 is the result of Change Orders 1 to 22 which includes:

Change Order 01

Influent wastewater sampling and analysis to support the detailed design of treatment processes for the new Northwest Langley Wastewater Treatment Plant (NLWWTP) (\$87,522).

Change Order 02

In January 28, 2020, Metro Vancouver Steering Committee approved interpretative design elements on the Odour Control Stack (\$47,936).

Change Order 03

In January 28, 2020, Metro Vancouver Steering Committee approved the NLWWTP to be a Regional Trucked Liquid Waste facility. This Change Order cost captured the additional design effort required (\$566,804).

Change Order 04

The additional design allowances identified in the 'Initial Build Design Allowances for Future Process Technologies' technical memorandum to modify Bioreactor and waste secondary sludge processes (\$119,128).

Change Order 08

Geotechnical investigations were conducted on a property adjacent to the treatment plant site, to provide additional subsurface information for the detailed design of gravity sewer and liquid stream infrastructure (\$406,248).

Change Order 09

Environmental and Geotechnical investigations were conducted on an acquired property to determine site contamination condition and collect information for the foundational detailed design of the new treatment plant (\$30,697).

Change Order 10

As per Hydraulic Institute Standards Physical modeling of the influent and effluent pump stations was performed for the NLWWTP (\$212,500).

Change Order 11

Partial credit for Change Order 03. In October 2020, Metro Vancouver Operations and Maintenance confirmed that a covered truck Wash Down Station would not be required for the facility resulting in a credit of (\$133,516).

Change Order 12

Additional infrastructure and more complex installation of the 25-kV Substation Facility at the NLWWTP was requested by the Metro Vancouver EIC team during the Electrical Feed Coordination Meeting held on October 14, 2020 (\$173,094).

Change Order 13

Additional testing required to complete the Stage 2 Preliminary Site Investigations to verify the presence or absence of Potential Contaminants of Concern in the soil, groundwater and/or soil vapour, so that it can be remediated or disposed of offsite (\$148,147).

Change Order 18

The Detailed Site Investigation and soil confirmatory sampling at the Phase 3 and 4 ground improvements sites involved soil and groundwater monitoring and sampling activities to meet the Certificate of Completion requirement for excavation and disposal of contaminated materials (\$215,296).

Change Order 22

In October 2021, detailed design of the Northwest Langley Wastewater Treatment Plant was paused to conduct value engineering in order to determine Cost Reduction Measures (CRMs). While reviewing the CRMs, Policy Planning & Analysis requested a capacity increase of the Stage 1 expansion to include the 104 Ave Catchment in Surrey. To incorporate the CRMs and increase the plant capacity, Jacobs needs to re-conceptualize and re-establish the design basis. This requires a change in the scope of work and is estimated to cost (\$2,820,909).

AMENDMENT TO A PREVIOUSLY REPORTED CONTRACT

ITT No. 20-122
PURCHASE ORDER No. 678685

Construction - Douglas Road Main No. 2 - Still Creek Section North Open Cut
for the **Greater Vancouver Water District**

- | | |
|---|----------------------------|
| 1. Name of Contractor: | Clearway Construction Inc. |
| 2. Date Contract Reported: | October 2020 |
| 3. Original Anticipated Reported Value of Contract
(exclusive of taxes): | \$4,286,155 |
| 4. Amendment Number: | 01 |
| 5. Value of Amendment (exclusive of taxes): | \$1,647,325 |
| 6. Amendment Type: | Additional Services |
| 7. Total Revised Anticipated Amended Value of Contract
(exclusive of taxes): | \$5,933,480 |
| 8. Budget Status: | |

This contract is funded within the capital budget for this program.

9. Amendment No. 01 is the result of Change Orders 1 to 8:

Change Order No. 01: \$133,500 FortisBC Main Relocation
Change Order No. 02: (\$27,461) Ovality Credit
Change Order No. 03: \$35,489 Removal and Disposal of Abandoned ACP Sanitary Sewer and Steel Watermain
Change Order No. 04: \$148,827 Traffic lane modification
Change Order No. 05: \$103,674 Standard Street Works Permit Delay
Change Order No. 06: \$125,705 Standard Street Works Permit Delay
Change Order No. 07: \$527,593 Additional Paving Scope
Change Order No. 08: \$600,000 Outstanding claims on project.

AMENDMENT TO A PREVIOUSLY REPORTED CONTRACT

ITT No. 20-202
PURCHASE ORDER No. 708368

Annacis Island Wastewater Treatment Plant Gates and Hydraulic System
for the Influent Control Chamber Channel
for the **Greater Vancouver Sewerage and Drainage District**

- | | |
|--|----------------------------------|
| 1. Name of Contractor: | Maple Reinders Constructors Ltd. |
| 2. Date Contract Reported: | April 2021 |
| 3. Original Anticipated Reported Value of Contract (exclusive of taxes): | \$7,220,500 |
| 4. Amendment Number: | 01 |
| 5. Value of Amendment (exclusive of taxes): | \$1,015,047 |
| 6. Amendment Type: | Additional Services |
| 7. Total Revised Anticipated Amended Value of Contract (exclusive of taxes): | \$8,235,547 |
| 8. Budget Status: | |

This contract is funded within the capital budget for this program.

9. Amendment No. 01 is the result of Change Orders 01 to 09, which involved purchasing and testing new aluminum stop logs for influent channel isolation, skid modifications due to access/maintenance constraints and schedule extension due to multiple delays experienced on the project. These delays were associated to equipment/fabrication delays due to the ongoing Supply Chain impacts, late change in stop log isolation location, WorkSafeBC regulations discussions and skid layout discussions. This resulted in a 1-year shift of the schedule given the construction/commissioning can only be completed in the Summer period.

AMENDMENT TO A PREVIOUSLY REPORTED CONTRACT

RFP No. 21-146
PURCHASE ORDER No. 756239

Geotechnical Exploration Services for the Iona Island Wastewater Treatment Plant Projects
for the **Greater Vancouver Sewerage and Drainage District**

- | | |
|---|--------------------------------|
| 1. Name of Contractor: | Geotech Drilling Services Ltd. |
| 2. Date Contract Reported: | July 2022 |
| 3. Original Anticipated Reported Value of Contract
(exclusive of taxes): | \$2,174,207 |
| 4. Amendment Number: | 01 |
| 5. Value of Amendment (exclusive of taxes): | \$656,851 |
| 6. Amendment Type: | Additional Services |
| 7. Total Revised Anticipated Amended Value of Contract
(exclusive of taxes): | \$2,831,058 |
| 8. Budget Status: | |

This contract is funded within the capital budget for this program.

9. Amendment No. 01 is the result of Change Orders 01 to 03. The changes are to assist in the development of a planned breach to the West of the existing plant and to capitalize on the already mobilized equipment. The consultant drilled a shallow borehole North of the Iona Beach Regional Parking lot and collected environmental samples to help characterize the native soils. A Navigable Waters Act permit is required to have an assist tug boat on standby for 3 drilling locations in the North Arm. Lastly, an additional drilling contractor services are required to characterize unexpected soil conditions on the project site.

AMENDMENT TO A PREVIOUSLY REPORTED CONTRACT

RFP No. 21-238
PURCHASE ORDER No. 752245

Iona Island Foreshore Ecological Restoration Projects: Data Collection, Modelling and Design
for the **Greater Vancouver Sewerage and Drainage District**

- | | | |
|----|--|---|
| 1. | Name of Contractor: | Worley Canada Services Ltd.
(Advisian) |
| 2. | Date Contract Reported: | April 2022 |
| 3. | Original Anticipated Reported Value of Contract
(exclusive of taxes): | \$1,531,311 |
| 4. | Amendment Number: | 01 |
| 5. | Value of Amendment (exclusive of taxes): | \$660,806 |
| 6. | Amendment Type: | Additional Services |
| 7. | Total Revised Anticipated Amended Value of Contract
(exclusive of taxes): | \$2,192,117 |

8. Budget Status:

This contract is funded within the capital budget for this program.

9. Amendment No. 01 is the result of Change Order 02 consisting of:
- Inclusion of participation in Integrated Design Process (IDP);
 - Developing a field program scoping recommendation for the expansion of field programs;
 - Additional budget to account for the delay of the hydrodynamic model calibration; and
 - Inclusion of the design of a multi-use path.

**Competitive Selection Packages Anticipated to be greater than \$500,000
(Issued but not awarded)**

Note: All contracts listed below are within the project budgets approved by the Board of Directors

Tender/RFP	Closing Date
Tender No. 20-028 <i>Construction of Hellings Tank No.2 (Cancelled)</i>	September 7, 2022
Tender No. 21-047 <i>Backup Power Installation of Capilano Raw Water Pump Station</i>	December 21, 2022
RFP No. 21-307 <i>Supply and Delivery of Coagulant Aid Polymer for the Seymour Capilano Filtration Plant</i>	July 6, 2022
RFP No. 21-435 <i>District Heating and Reclaimed Water for the Iona Island Wastewater Treatment Plant (IIWWTP) Projects</i>	December 9, 2022
RFP No. 22-009 <i>Supply and Installation of North Road Trunk Sewer No. 2 – Phase 2 (Lougheed Highway to Clarke Road)</i>	December 21, 2022
RFP No. 22-090 <i>Consulting Engineering Services for Process and Water Treatment Projects</i>	November 15, 2022
RFP No. 22-139 <i>Construction of the Coquitlam Main No. 4 South Section Robson Drive to Guildford Way</i>	January 13, 2023
RFP No. 22-186 <i>Municipal Solid Waste Contingency Disposal Services</i>	November 18, 2022
RFP No. 22-187 <i>Contingency Disposal Services for Biosolids</i>	September 13, 2022
RFP No. 22-278 <i>Prime Consulting Services for Roof Replacements</i>	November 17, 2022

RFP No. 22-280 <i>Consulting Engineering Services for Causeway Improvement Design IWWTP</i>	September 26, 2022
RFP No. 22-281 <i>Early Works Electrical Engineering Services for the Iona Island Wastewater Treatment Plant Upgrade Project</i>	October 17, 2022
Tender No. 22-310 <i>Supply, Delivery and Installation of a Genset at Chilco Pump Station</i>	January 19, 2023
RFP No. 22-357 <i>Consulting Engineering Services for Outfall Rehabilitation (Land Section) at Iona Island Wastewater Treatment Plant</i>	November 24, 2022
RFP No. 22-361 <i>Construction Management of Coquitlam Main No. 4 (COQ4) South Section</i>	February 7, 2023
RFP No. 22-363 <i>Consulting Engineering Services to Complete the Highbury Interceptor Relocation Study</i>	February 28, 2023
RFP No. 22-367 <i>Supply and Delivery of Turf Equipment</i>	January 30, 2023
RFP No. 22-380 <i>Kennedy Newton Main - Phase 3C 86th Avenue and 120th Street to 84th Avenue and 123rd Street</i>	December 15, 2022
RFP No. 22-402 <i>Consulting Engineering Services for the New Westminster Interceptor West Branch (NWW) and Columbia Extension (NWX) Rehabilitation Project</i>	December 21, 2022
RFP No. 22-435 <i>LIWWTP Blower Building ICS I/O Upgrade Project Engineering Services</i>	January 17, 2023
RFP No. 22-454 <i>Construction Services for the Seymour Main No. 2 Joint Improvement Project</i>	November 29, 2022
Tender No. 22-490 <i>Supply & Installation of Scour Protection for North Surrey Interceptor, and Annacis Main No. 3, Fraser River Crossing</i>	December 8, 2022

Tender No. 22-493

January 6, 2023

Supply and Installation of Scour Protection for Annacis Main No.2

NOIC No. 22-511

December 9, 2022

*Development and Implementation of Environmental Management
Systems for Metro Vancouver's Water and Liquid Waste Services Utilities*

To: Finance Committee

From: Sonu Kailley, Acting Director, Financial Planning

Date: March 28, 2023 Meeting Date: April 13, 2023

Subject: **Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023**

RECOMMENDATION

That the GVS&DD Board:

- a) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023*; and
 - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023*.
-

EXECUTIVE SUMMARY

Utilization of Development Cost Charges (DCCs) are required to be approved by the GVS&DD Board by bylaw. The attached DCC Expenditure Bylaw No. 364, 2023 provides authority for 2022 annual funding applied for growth capital debt servicing amounts and growth capital project expenditures. In total, \$60.6 million of DCC's were applied for growth capital debt servicing in 2022, which is in line the budgeted amount of \$60.8 million over the four defined sewerage areas. There was no application to direct growth capital expenditures due to underspends in the growth capital program for Liquid Waste Services.

Total DCCs collected in 2022 was \$68.9 million, down from \$85.1 million in 2021. Total DCCs held in deferred revenue reserve balances as at December 31, 2022 were \$273.6 million. DCC rates will now be reviewed annually as part of the budget process to ensure that Metro Vancouver stays current and maximizes this revenue stream to reduce rate impacts of the Liquid Waste growth capital program.

PURPOSE

To meet the statutory requirements to use DCCs for funding of the liquid waste growth capital program. This bylaw completes the authority for the required transfer of DCC's to fund the 2022 growth capital projects.

BACKGROUND

The regional sewer development cost charges are governed under the GVS&DD Act and were introduced in 1997, pursuant to the philosophy that "growth pays for growth." Funds received through the collection of DCC's are set aside as deferred revenue in reserve accounts on a sewerage area basis for the funding of growth capital projects, which enhance system capacity to respond to regional population growth. This use of DCC revenue funding reduces the reliance on the sewer levy which is generated directly from the GVS&DD's member municipalities.

Under the Act, transfers of any revenues collected out of the DCC Reserve Funds can only be for the purposes intended and must be authorized by bylaw. This report brings forward the bylaw required for the authority to transfer DCC revenues to fund the 2022 growth debt and growth capital projects.

2022 DCC APPLICATIONS

DCC's are collected based on development in the region, held in reserve and applied either to fund debt payments related to growth capital expenditures or to fund growth capital project expenditures directly to avoid additional debt financing requirements. As a result of the volume of capital projects undertaken within the Liquid Waste Services function, long-term funding is not secured on a project by project basis but rather on a pooled basis by expenditure type (i.e. defined growth projects) by sewer area as funding is required.

As part of the year-end accounting processes, the actual DCC revenue requirements are determined and Board authority for the necessary reserve fund transfers is requested through the attached bylaw. The funding required for 2022, as set out in the annual financial statements, is \$60.6 million for debt servicing and no direct application of DCCs to growth capital expenditures is required due to underspends in the growth capital program. These applications are summarized by sewer area below:

Fraser Sewer Area

\$ 50,181,935 - debt

This funding relates to a series of growth related projects due to required expansions/upgrades of the liquid waste collection system and the wastewater treatment plants in the Fraser Sewerage Area.

North Shore Sewer area

\$ 1,548,581 - debt

This funding relates to a series of growth related projects due to required expansions/upgrades of the liquid waste collection system and the wastewater treatment plant in the North Shore Sewerage Area.

Vancouver Sewer Area

\$ 5,383,166 - debt

This funding relates to a series of growth related projects primarily due to required expansions/upgrades of the liquid waste collection system in the Vancouver Sewerage Area.

Lulu Island West Sewer Area

\$ 3,468,962 - debt

This funding relates to a series of growth related projects primarily due to required expansions/upgrades of the liquid waste collection system in the Lulu Island West Sewerage Area.

The balances in the DCC deferred revenue reserves at December 31, 2022, after the application of the growth funding amounts contemplated in this bylaw, are as follows:

Fraser Sewer Area	\$ 191,136,498
Vancouver Sewer Area	50,953,782
Lulu Island Sewer Area	23,893,554
North Shore Sewer area	7,612,123
	\$ 273,595,957

In comparison to 2021, there has been an increase in DCCs applied of \$18.4 million, illustrating the increase in growth capital activity within the Liquid Waste Services. This trend is likely to continue due to the rising growth capital program.

DCC Funding Applied

(\$ millions)	Fraser	Lulu	North Shore	Vancouver	Total
2022 DCC's Applied-Total	\$50.182	\$3.469	\$1.548	\$5.383	\$60.582
2021 DCC's Applied-Total	\$33.922	\$1.351	\$1.548	\$5.383	\$42.204

DCC COLLECTIONS

Regional GVS&DD DCCs are collected on behalf of Metro Vancouver, as set out in the Board approved DCC Bylaw, by member municipalities and remitted twice a year. The collections received for 2022 were \$68.9 million down from \$85.1 million in 2021 (19% reduction). Though there were some noticeable increases in Lulu Island West and Vancouver Sewerage Areas, the collections were lower in Fraser and North Shore Sewerage Areas. DCC collections received by sewerage area are as follows:

DCC's Collected

(\$ millions)	Fraser	Lulu	North Shore	Vancouver	Total
2022 TOTAL	\$51.836	\$3.744	\$0.681	\$12.680	\$68.941
2021 TOTAL	\$70.762	\$1.235	\$2.067	\$11.041	\$85.105

Building permit activity in the Region has been relatively consistent over the last 12 months with January to December 2022 building permit values totaling approximately \$16.0 billion (January to December 2021 permit value - \$10.0 billion). The bulk of the recent 2022 building permit activity has been in the residential development sector (averaging close to 66% of building permit values over the period January to December 2022) with the balance being generated in the industrial (2%), commercial (18%) and institutional/governmental (14%) development sectors over the same period [compare to 2021 - residential 72%, industrial 3%, commercial 20%, institutional/governmental 5%.]

The DCC collections are net of waivers for qualifying affordable housing developments under the GVS&DD DCC Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing Bylaw, No. 314, 2018, adopted in May 2018. Previously, waivers were permitted under GVS&DD DCC Development Cost Charge Bylaw No. 254, 2010. For 2022, DCC waivers were provided for 2,511

rental housing units, located in the Fraser Sewerage Area (58 %) and Vancouver Sewerage Area (42 %), This equates to close to \$6.4 million in forgone DCC collections. The amount of DCC revenues forgone in 2022 increased by approximately 47 % compared to that for 2021 (\$4.4 million) while the number of waived units increased by about 13 % (2021 – 2,223 units were waived.) Since 2010, the cumulative amount of DCC waivers issued is close to \$16.9 million (for 10,650 rental housing units.)

As illustrated in the 2023 - 2027 Financial Plan endorsed by the Board last fall, DCC utilization levels due to growth projects is expected to increase significantly. A review of the DCC program was recently completed which led to the implementation of new rates effective June 24, 2022 to derive additional future funding of regional growth related requirements. Due to the in-stream provisions within enabling legislation, it is expected that there will likely not be substantive additional collections at the new rates until later on in 2023 (2nd half of year) and thereafter. The next review of the DCC rates for Liquid Waste is expected to be completed by late 2023, early 2024.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023*; and
 - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023*.
2. That the GVS&DD Board receive for information the report titled “Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023”, dated March 28, 2023 and provide alternate direction.

FINANCIAL IMPLICATIONS

This bylaw as presented under alternative one finalizes the required DCC funding for growth debt and capital as contemplated in the 2022 Liquid Waste Services budgeted operating and capital revenues.

Should this bylaw be amended or not approved, sewer levy funding may need to be used to fund debt on growth related capital expenditures rather than DCC’s as intended a part of the DCC program. This would reduce the funding available for the other areas of the service and likely lead to an increase in the levy to member municipalities.

CONCLUSION

The adoption of the bylaw as included under alternative one is recommended. The 2022 budget contemplated the transfer of DCC revenues collected to meet actual debt charge and capital funding requirements related to the Liquid Waste growth capital program. This bylaw completes that process.

Attachments

1. *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023*.

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BYLAW NO. 364, 2023
A Bylaw to Expend Development Cost Charge Reserve Fund**

WHEREAS:

- A. The Greater Vancouver Sewerage and Drainage District (the "Corporation") enacted "*Development Cost Charge Bylaw 254, 2010*", (further amended by Greater Vancouver Sewerage and Drainage District Amending Bylaws 286, 2014 and 292, 2015 and 305, 2017) which was effective as of April 23, 2010 (repealing *Development Cost Charge Bylaw 187, 1996*, which was effective as of January 1, 1997), pursuant to which the Corporation has imposed development cost charges to assist the Corporation in paying capital costs incurred to provide, construct, alter or expand sewerage facilities to service development;
- B. The Corporation has established a Development Cost Charge Reserve Fund pursuant to "*Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Bylaw No. 188, 1997*", which was enacted pursuant to Section 58.6 of the *Greater Vancouver Sewerage and Drainage District Act*, into which fund the Corporation has deposited and continues to deposit the monies collected pursuant to "*Development Cost Charge Bylaw No. 254, 2010*" (further amended by *Greater Vancouver Sewerage and Drainage District Amending Bylaws 286, 2014 and 292, 2015 and 305, 2017*) which was effective as of April 23, 2010 (repealing *Development Cost Charge Bylaw 187, 1996* which was effective as of January 1, 1997);
- C. The Development Cost Charge Reserve Fund is divided into 4 separate accounts, pursuant to "*Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Bylaw No. 188, 1997*", being the Fraser Area Account, the Lulu Island West Area Account, the North Shore Area Account and the Vancouver Area Account; and
- D. The Corporation is authorized to pay from the Development Cost Charge Reserve Fund the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within the area of the Corporation or principal and interest on a debt incurred by the Corporation as a result of an expenditure for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within the area of the Corporation.

NOW THEREFORE the Board of the Greater Vancouver Sewerage and Drainage District enacts as follows:

1. The sum of \$50,181,935, held in the Fraser Area Account shall be paid out of such account and used to pay the portion of the principal on the debt incurred by the Corporation that has been apportioned to the Fraser Sewerage Area, which debt was incurred by the Corporation to pay for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation and the sum of \$0 held in the Fraser Area Account shall be paid out of such account to fund capital apportioned to the Fraser Sewerage Area to pay for the capital costs of providing,

constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation.

2. The sum of \$1,548,581, held in the North Shore Area Account shall be paid out of such account and used to pay the portion of the principal on the debt incurred by the Corporation that has been apportioned to the North Shore Sewerage Area, which debt was incurred by the Corporation to pay for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation and the sum of \$0 held in the North Shore Area Account shall be paid out of such account to fund capital apportioned to the North Shore Sewerage Area to pay for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation.
3. The sum of \$5,383,166 held in the Vancouver Area Account shall be paid out of such account and used to pay the portion of the principal on the debt incurred by the Corporation that has been apportioned to the Vancouver Sewerage Area, which debt was incurred by the Corporation to pay for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation and the sum of \$0 held in the Vancouver Area Account shall be paid out of such account to fund capital apportioned to the Vancouver Sewerage Area to pay for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation.
4. The sum of \$3,468,962 held in the Lulu Island West Area Account shall be paid out of such account and used to pay the portion of the principal on the debt incurred by the Corporation that has been apportioned to the Lulu Island West Sewerage Area, which debt was incurred by the Corporation to pay for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation and the sum of \$0 held in the Lulu Island West Area Account shall be paid out of such account to fund capital apportioned to the Lulu Island West Sewerage Area to pay for the capital costs of providing, constructing, altering or expanding sewerage facilities that relate to development within that area of the Corporation.
5. This bylaw may be cited as “Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 364, 2023”.

Read a first, second and third time this _____ day of _____, _____.

Passed and finally adopted this _____ day of _____, _____.

George V. Harvie, Chair

Dorothy Shermer, Corporate Officer

To: Finance Committee

From: Tarynne Summers, Deputy General Manager
HR Services

Date: March 3, 2023 Meeting Date: April 13, 2023

Subject: **Award of Contract Resulting from Request for Proposal No. 22-177: Group Benefits Insurance for Metro Vancouver Regional District**

RECOMMENDATION

That the MVRD Board:

- a) approve the award of a unit rate contract to Desjardins Financial Security Life Assurance of Company (“Desjardins), for the supply of Life, Accidental Death and Dismemberment (AD&D) and Long Term Disability (LTD) group benefits insurance services to Metro Vancouver, with an estimated 5-year value in the amount of \$13.287 million (exclusive of taxes); and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
-

EXECUTIVE SUMMARY

Metro Vancouver’s employee benefit plans include provisions for group benefits insurance services, including Basic Life Insurance, Accidental Death and Disablement (AD&D) Insurance, and Long Term Disability (LTD) Insurance, and is currently provided through a third-party insurance carrier, Canada Life Insurance Company. The plan was last marketed in 2015.

A RFP was issued by Metro Vancouver in June of 2022 and consisted of a two-phased approach, including evaluation of Request for Proposal (RFP) submissions and a finalist presentation from the top three proponents. Eight insurance carriers responded to the RFP. Desjardins was the lead proponent for insured benefits after evaluation of the RFP responses and short-list presentations. The proposed contract calls for coverage to be transferred from Canada Life Insurance Company to Desjardins on September 1, 2023. The estimated 5-year value of the contract is \$13.287 million and savings over current arrangements for these benefits are estimated at \$5.313 million.

PURPOSE

This report is to recommend the award of the unit rate contract for Life, AD&D and LTD insurance benefits to Desjardins Financial Security Life Assurance Company (“Desjardins”) with an estimated 5-year value of \$13.287 million.

BACKGROUND

Pursuant to the “Officers and Delegation Bylaw No. 1208” and the Procurement and Real Property Contracting Authority Policy, procurement contracts which exceed a value of \$5 million require the approval of the Board of Directors. Further, the policy states that contracting authority for multi-phase contracts is determined based on the anticipated total value of the services to be provided over all phases. This report is being brought forward to the Finance Committee to consider a

recommendation to the MVRD Board to award a contract for the supply of insured benefits under our Employee Benefits plan. There are no benefit plan changes as a result of the RFP.

A RFP for the supply of Life, AD&D, and LTD insurance was issued in June 2022. Eight insurance carriers responded to the RFP and a comprehensive evaluation process followed, including an evaluation of responses and short-list presentations. Desjardins was the lead proponent following the evaluation. Proceeding with an award of the contract to Desjardins, with a proposed September 1st, 2023 transition date, results in an estimated \$5.313 million savings versus remaining with the current benefits provider. The estimated 5-year value of the contract is \$13.287 million.

ALTERNATIVES

1. That the MVRD Board:
 - a) approve the award of a unit rate contract to Desjardins Financial Security Life Assurance of Company ("Desjardins), for the supply of Life, Accidental Death and Dismemberment (AD&D) and Long Term Disability (LTD) group benefits insurance services to Metro Vancouver, with an estimated 5-year value in the amount of \$13.287 million (exclusive of taxes); and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
2. That the MVRD Board terminate the Request for Proposals No. 22-177: Group Benefits Insurance for Metro Vancouver Regional District and direct staff to report back to the MVRD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS

If the MVRD Board approves Alternative 1, a contract will be awarded to the Desjardins Financial Security Life Assurance Company for the provision of insured employee benefits. This amount is within the budget for employee benefits.

CONCLUSION

Metro Vancouver issued a RFP for employee benefits in June of 2022. Based on the evaluation of proposals, it is recommended that, in response to the RFP, the MVRD Board authorize the Commissioner and Corporate Officer to award and execute a unit rate contract to the Desjardins Financial Security Life Assurance Company with an approximate 5-year value of \$13.287 million.

To: Finance Committee

From: Sonu Kailley, Acting Director Financial Planning, Financial Services

Date: April 6, 2023 Meeting Date: April 13, 2023

Subject: **Metro Vancouver Long Term Financial Planning – Current Policy Framework**

RECOMMENDATION

That the Finance Committee receive for information the report dated April 6, 2023, titled “Metro Vancouver Long Term Financial Planning – Current Policy Framework”.

EXECUTIVE SUMMARY

Since 2017, Metro Vancouver has made a concerted effort to formalize and establish financial policies to guide its financial planning and operations to ensure financial sustainability and effective financial management. Over this time period, Metro Vancouver has established a suite of policy frameworks including: Financial Management Policy, Corporate Allocation Policy, Operating, Statutory, and Discretionary Reserves Policy and updates to the Corporate Investments Policy. When establishing these policies, the long range capital plans, macroeconomic assumptions and management plans at that time were key inputs to the policy direction.

Since the establishment of these policies, the landscape for financial planning at Metro Vancouver has changed significantly, specifically in terms of timing and costs of major projects and the macroeconomic environment with inflation and interest rates increasing. This has necessitated a reassessment of Metro Vancouver’s current policy frameworks to ensure they still support financial sustainability for current and future ratepayers, which was one of the key priorities coming out of the 2023 Board Strategic Planning Workshop. This report provides information on key components and considerations of Metro Vancouver’s current policies, which will form the basis for the implementation of the Long-term Financial Plan.

PURPOSE

The objective of this report is to provide information to the Finance Committee on the current financial policy framework for Metro Vancouver and its implications and considerations for the implementation of the Long Term Financial Plan.

BACKGROUND

Metro Vancouver is an infrastructure intensive organization with over 300 projects having been identified for inclusion in the capital program, within its Water Services, Liquid Waste Services, Solid Waste Services, Metro Vancouver Housing Corporation and Regional Parks functions as part of the 2023-2027 Financial Plan. These projects are complex due to age, capacity, or regulatory requirements with a long time horizon spanning over the next 10 to 20 years.

Metro Vancouver currently works within a suite of Board approved financial policies that guide the financial framework for the organization. These policies provide guidance during the annual budget process, capital planning process and the financial operations of the Financial Services Department.

CURRENT POLICIES

Financial Management Policy

The *Financial Management Policy* was approved in October 2018 with the intent to guide decision making on funding current and long term operating and capital expenditures for the Greater Vancouver Water District (GVWD), Greater Vancouver Sewerage and Drainage District (GVS&DD), the Metro Vancouver Regional District (MVRD) and the Metro Vancouver Housing Corporation (MVHC). The policy sets out the following principles:

- Funding of ongoing and recurring expenditures directly in the year in which they are incurred;
- Funding from Reserves in accordance with the *Operating, Statutory and Discretionary Reserves Policy*;
- Funding of expenditures matches the realization of the benefit from those expenditures when expenditures are not ongoing or recurring;
- Consistency with legislative requirements;
- Financial flexibility to meet future financial requirements; and
- Mitigation of current and future financial risk.

In applying these principles there are three components that the policy outlines:

1. **Pay-As-You-Go Funding:** This refers to funding ongoing and recurring directly through contribution to capital in the year in which they are incurred such that Metro Vancouver is minimizing borrowing costs related to consistent capital expenditures incurred. The objective is to increase the level of contribution to capital such that Metro Vancouver can fund recurring and ongoing capital requirement to ensure sustainable funding of its ongoing capital requirements.
2. **Debt Amortization Period:** The policy prescribes that long-term debt procured by Metro Vancouver will be amortized over 15 years. The intent is to reduce the risks associated with interest rate fluctuations over the term of the debt, reduce the total amount of interest paid by retiring the debt sooner, which will provide greater financial flexibility.
3. **Debt Service Level:** The policy stipulates that the debt service level, which is a measure of the amount of annual revenues required to pay for debt service costs, shall not exceed 40%. The intent was to balance the risk associated with borrowing with the financial flexibility needed to meet financial requirements. Furthermore, consideration was given to the implication of the region's overall credit rating.

Operating, Statutory, and Discretionary Reserves Policy

Reserves are a key financial tool to provide financial security against an unforeseen financial loss, such as a revenue shortfall or unexpected expenditures, and for meeting a future financial obligation. They also are used to manage rate fluctuations over time to provide certainty for ratepayers.

Metro Vancouver’s reserves policy, outline the principles and requirements that guide the establishment, use and management of Metro Vancouver reserves. A key governance component to the policy is that all reserves contributions and applications must be approved by the appropriate Board.

The Operating, Statutory, and Discretionary Reserves Policy defines the following reserves:

1. **Operating Reserves:** Operating reserves are established for each legal entity and function for the purpose of financial security should there be an unforeseen financial loss beyond the control of the corporation. This can involve a sudden drop in water sales due to the weather or a reduction in tipping fee revenues due to the construction market. Each legal entity and function has a minimum reserve required based on the inherent level of risk of a financial loss. The table below outlines the operating reserve minimum balances.

Legal Entity/Statutory Function	Operating Reserve Amount
Greater Vancouver Water District	15% of prior year’s net operating expenditures (approximately 2 months of operating costs)
Greater Vancouver Sewerage and Drainage District Solid Waste	15% of prior year’s net operating expenditures (approximately 2 months of operating costs)
Greater Vancouver Sewerage and Drainage District Liquid Waste	10% of prior year’s net operating expenditures (approximately 1 month of operating costs)
Metro Vancouver Housing Corporation	10% of prior year’s net operating expenditures (approximately 1 month of operating costs)
Metro Vancouver Regional District	5% of prior year’s net operating expenditures (approximately 0.5 month of operating costs)

2. **Statutory Reserves:** Statutory reserves are established where reserves are required under a legislative framework that governs their purpose and usage. These are established by provincial legislation (Local Government Act or Community Charter), Board approved bylaw or governing agreement with another level of government or entity. An example would be Liquid Waste Development Cost Charges and Park Land Acquisition and Development.
3. **Discretionary Reserves:** Discretionary reserves are established by the Board for legal entities and statutory functions for the purpose of funding a known or anticipated future obligation. These reserves are not guided by a legal framework and serve as an additional revenue source in reducing need for rates, levies and tax requisitions to fund expenditures.

Corporate Allocation Policy

The Corporate Allocation Policy establishes the appropriate methodology in allocating costs incurred by centralized support services in delivering support services to all business activities of Metro Vancouver’s four legal entities. Under the Local Government Act, the full costs incurred by a regional district must be reflected within the service provided, which includes centralized support services.

The policy outlines allocation methodologies for centralized support costs depending on the delivery model. The majority of Metro Vancouver services are considered internal service delivery model, whereby Metro Vancouver staff are engaged in the direct delivery of the service such as Water Services, Liquid Waste Services and Regional Parks. The second delivery model is defined as an external delivery model in which Metro Vancouver services are delivered externally and as such staff are engaged to a lesser extent in the delivery of the service. Sasamat Fire Protection Service is an example of an external service delivery model.

Corporate Investments

The Corporate Investments Policy provide guidelines within which investment decisions are made on behalf of all the corporate entities to ensure safety of capital, adequate liquidity and a reasonable rate of return. This involves ensuring that investments at all times are in compliance with the legislation specifically the *Community Charter*.

REVIEW WORK CURRENTLY UNDERWAY

There has been significant work currently underway in reviewing financial planning frameworks to help guide the long-term financial planning process. This includes establishing a Regional Finance Advisory Committee (RFAC) subcommittee to review financial strategies with respect to debt management and DCCs. The results of this work will be key inputs into the Long-term Financial Plan.

When developing these policies, specifically the Financial Management Policy, key assumptions were used at the time with respect to the long range capital plan (including the timing and costs of projects), macro-economic indicators and the work plans. These assumptions have a significant impact on the policy framework and any large changes can result in variations in the policy outcomes. As part of the long-term financial planning process, further examination of these policies is paramount for Metro Vancouver to ensure financial sustainability in short term and long term. This will include assessing the appropriate level of pay-as-you-go funding, debt service level and amortization periods.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications for this report as it is for information only.

CONCLUSION

Since 2017, Metro Vancouver has prioritized formalizing financial policies to help guide its financial planning and operations. These policies were drafted with information at that time, which has drastically changed, specifically with respect to the long range capital plan and macroeconomic environment. As part of the work to complete the Long-term Financial Plan it is imperative that Metro Vancouver reassesses its current policy frameworks on the new information to ensure the organization can support effective financial management.

Attachments

1. *Financial Management Policy*
2. *Operating, Statutory, and Discretionary Reserves Policy*
3. *Corporate Allocation Policy*
4. *Corporate Investments*

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FINANCIAL MANAGEMENT

Effective Date: October 26, 2018

Approved By: MVRD/GVWD/GVS&DD/MVHC Boards

Policy No. FN-026

PURPOSE

To establish the principles that will guide decision making with respect to funding long term operating and capital expenditures for the Greater Vancouver Water District (GVWD), Greater Vancouver Sewerage and Drainage District (GVS&DD), the Metro Vancouver Regional District (MVRD) and the Metro Vancouver Housing Corporation (MVHC).

DEFINITIONS

“Operating Expenditures” are the costs that are incurred consistently year to year in the delivery of services including labour costs and the day-to-day costs related to staff support, utilities, equipment usage, supplies and the ongoing maintenance of assets and infrastructure, as defined under Generally Accepted Accounting Principles. These are expenditures where the value is realized and charged against revenue in the year incurred;

“Capital Expenditures” are costs that are incurred for expanding, enhancing, upgrading and replacing infrastructure used in the delivery of services as well as the purchase of equipment. These are expenditures where the value is realized for multiple years. These expenditures are treated as assets where the realization of their utilized value is charged to revenues proportionately over their useful life; and

“Debt Amortization” is the term over which a debt obligation will be repaid.

POLICY

As the primary regional service and utility provider for the region, Metro Vancouver is responsible for ensuring that the services it delivers provide value to its member jurisdictions, to its businesses and to its residents. Ensuring this value is achieved for ratepayers over the long term requires an adherence to sound fiscal policies that balance equity, affordability and continuous improvement through responsible fiscal management.

This Policy supports Metro Vancouver’s mandate by establishing sound financial management parameters that will guide the implementation of Metro Vancouver’s long term financial plan for its four Metro Vancouver legal entities.

1. FINANCIAL MANAGEMENT PRINCIPLES

Metro Vancouver’s financial management approach is to balance between two sources of funding for operating and capital expenditures incurred by the legal entities and functions comprising Metro Vancouver:

- pay-as-you-go funding
- long-term debt funding

The approach of relying on these two sources of funding is consistent with the requirement of maintaining a sound financial position for Metro Vancouver's four legal entities while also ensuring that they are fiscally sustainable in the long term.

The objective is to strike a balance between the ability of ratepayers to 'pay-as-you-go' for operating and capital expenditures and the need to secure long term financing for expenditures with a significant financial burden or that form part of a long term capital infrastructure program. It is critical to ensure that the level of long term borrowing does not exceed accepted fiscal parameters which would result in a greater burden on ratepayers in the long term than the benefit derived by this debt.

To achieve the financial management objectives described above, the following principles are established for all Metro Vancouver functions:

- Funding of ongoing and recurring expenditures directly in the year in which they are incurred;
- Funding from Reserves in accordance with the *Operating, Statutory and Discretionary Reserves Policy*;
- Funding of expenditures matches the realization of the benefit from those expenditures when expenditures are not ongoing or recurring;
- Consistency with legislative requirements;
- Financial flexibility to meet future financial requirements; and
- Mitigation of current and future financial risk.

Fundamental to the application of these principles is to ensure the necessary balance between fiscal sustainability and the financial impact on current and future ratepayers of the region.

a) Pay-As-You-Go Funding

Using pay-as-you-go funding, annual operating and capital expenditures are funded directly through annual revenues from user rates, fees, levies and requisitions or through the application of reserves in accordance with the *Operating, Statutory and Discretionary Reserves Policy*. Prudent financially sustainable funding includes:

- Funding ongoing and recurring expenditures directly in the year in which they are incurred; and
- Matching the funding of expenditures with the realization of the benefit from those expenditures when expenditures are not ongoing or recurring.

BOARD POLICY

Operating expenditures are, by their nature, generally ongoing and recurring and when they are not, the benefit is realized in the year incurred; therefore, operating expenditures will always be funded on a pay-as-you-go basis.

Where specific reserves exist to fund capital expenditures, capital expenditures should be funded on a pay-as-you-go basis from those Reserves in accordance with the *Operating, Statutory and Discretionary Reserves Policy*. These capital expenditures include MVHC capital replacement, laboratory equipment, Park Land acquisition, Parks infrastructure, Air Quality monitoring equipment, Head Office improvements, computer hardware and fleet vehicles.

Capital expenditures that are not generally funded through Reserves will be funded on a pay-as-you-go basis at a minimum annual level that represents the amount of total capital expenditures incurred consistently from year to year.

b) Long-Term Debt Funding

Long-term debt funding will only be used to fund capital expenditures. More specifically, those capital expenditures not funded from Reserve and in excess of the amount of total capital expenditures incurred consistently from year to year which are funded on a pay-as-you-go-basis.

c) Pay-As-You-Go Vs Long-Term Debt Funding

Funding capital expenditures on a pay-as-you-go basis and avoiding long-term debt funding provides significant benefits to Metro Vancouver. The avoidance of debt eliminates the risk associated with fluctuating interest rates, reduces the overall cost to the organization through the savings of interest payments and provides financial capacity should unforeseen funding needs be required. In addition, the funding of this consistent level of capital expenditures annually provides a measure of generational equality whereby each generation pays their consistent share.

d) Debt Service Level

To achieve pay-as-you-go funding to a level of consistent annual capital expenditures, pay-as-you-go funding will be gradually increased over time such that the amount of annual revenues required to pay for debt service cost does not exceed 40%. This balances the inherent risk associated with borrowing with the financial flexibility needed to meet financial requirements and manage the regions assets in an affordable manner and consistent with the principles of this Policy.

e) Debt Amortization Period

Long-term debenture financing procured by Metro Vancouver will be amortized over 15 years. The shorter amortization term reduces the risk associated with interest rate fluctuations over the term of the debt, reduces the overall cost by reducing the total amount

of interest paid and by retiring the debt sooner, Metro Vancouver has more financial flexibility to absorb new financial requirements.

2. METRO VANCOUVER FINANCING

a) GVWD, GVS&DD and MVRD

Where debt funding is deemed appropriate in accordance with this Policy, financing for GVWD, GVS&DD and MVRD projects will be obtained through long-term debenture financing procured through the Municipal Finance Authority (MFA) which is available twice per year, March and October.

Long-term financing. Long-term debenture financing requires the repayment of the debt obligations through a combination of principal repayments and interest payments. Principal repayments, paid annually, are based on a sinking fund methodology where payments are deposited into an interest earning sinking fund and at the end of the debt term the combination of principal repayments and interest earned is sufficient to retire the outstanding debt obligation. The amount of the principal repayment amount, paid annually, is actuarially determined based in the debt term or amortization and the expected earnings of the sinking fund. Interest, paid semi-annually, is based on the financing terms as determined by the financial markets.

Short-term financing. The capital expenditures incurred between times when long-term financing is available will be funded on a short-term basis either through the MFA or through the usage of internal savings. Short-term financing requires payments to cover interest only. Long-term debt funding will not be procured in advance of incurring capital expenditures unless specifically authorized by the Board.

DCC funding. In the GVS&DD Liquid Waste function, annual debt service costs for long-term debt associated with capital expenditures for infrastructure growth projects are funded using Development Costs Charges in accordance to the *GVS&DD Development Cost Charges Bylaw*.

b) Metro Vancouver Housing Corporation (MVHC)

Capital expenditures for the MVHC are those associated with the development of new affordable housing units. The MVHC maintains a development reserve in order to provide partial funding of development and redevelopment opportunities.

The MVHC development expenditures are funded through a combination of funding from the MVHC Development Reserve applied in accordance with the *Operating, Statutory and Discretionary Reserves Policy*, any funding received from other levels of government and traditional mortgage financing. The level of mortgage financing, either through the Province or Financial Institution, is determined based on the maximum annual mortgage payment amount and amortization period that can be supported by the applicable tenant rental revenue.

BOARD POLICY

Each development and redevelopment opportunity will be evaluated on its own merits financially in terms of the rental revenue expectations along with the appropriate combination of funding.

OPERATING, STATUTORY AND DISCRETIONARY RESERVES

Effective Date: April 27, 2018

Approved By: MVRD/MVHC/GVWD/GVS&DD Boards

Policy No. FN-016

PURPOSE

To outline principles and requirements that guide the establishment, use and management of Metro Vancouver reserves.

DEFINITIONS

“Annual Surplus” means excess of revenues over expenditures for the current year;

“Legal Entity” means Greater Vancouver Water District (GVWD), Greater Vancouver Sewerage and Drainage District (GVS&DD), which includes the legal functions of Liquid Waste and Solid Waste, Metro Vancouver Housing Corporation (MVHC) and Metro Vancouver Regional District (MVRD); and

“Statutory Functions” mean functions related to the Metro Vancouver Regional District, which include: Affordable Housing, Air Quality, Electoral Area, General Government, Labour Relations, Regional Global Positioning System (GPS), Regional Parks, Regional Planning, E911 Emergency Telephone Service, Regional Emergency Management and Sasamat Fire Protection Service.

POLICY

Reserves are funds that are appropriated as a means of providing financial security against an unforeseen financial loss, such as a revenue shortfall and unexpected expenditures, or for meeting future financial obligations. They are a key element of Metro Vancouver’s long term financial sustainability and they provide a mechanism to ensure a strong financial position. Metro Vancouver reserves are categorized as Operating, Statutory or Discretionary.

Metro Vancouver’s Reserves Policy supports the following principles:

- Financial stability, security and sustainability
- Consistent with long term financial plans, Board and Corporate strategic goals
- In accordance with legal requirements under applicable legislation

In addition to these guiding principles, reserves shall be established and managed in accordance with the following:

- All reserve contributions and applications must be approved by the Board
- All reserve balances will earn interest at a rate based on Metro Vancouver’s average return on investments
- All reserves exclusively belong to a specific legal entity or statutory function and can only be applied to fund business activities of that legal entity or statutory function.

- Financial Services is responsible for the stewardship and oversight of all Metro Vancouver reserves.

1. OPERATING RESERVES

Operating Reserves are established for each legal entity and statutory function to serve as a measure of financial security should there be an unforeseen financial loss beyond the control of the organization.

A legal entity or statutory function's inherent risk of experiencing an unforeseen financial loss increases both with the level of business activity as well as the nature of that business activity. Operating expenditures serve as a measure of an entity or function's level of business activity; therefore, the greater the business activity the greater the risk of an unforeseen financial event. Risk of an unforeseen financial loss also increases with volatility associated with the business activity.

Minimum Reserve. The minimum required Operating Reserve amount for a legal entity or statutory function shall be determined as a percentage of the legal entity or statutory function's prior year operating expenditures net of reserve contributions, contributions to capital and debt service costs and is based on the inherent risk of incurring a financial loss. As noted above, the higher the level of inherent risk, the higher the required reserve minimum balance.

Operating Reserve balances must be maintained at the established minimum amounts in order to ensure security against unforeseen financial impacts as this financial security is paramount to financial sustainability. Should the Operating Reserve balance fall below the established minimum, the Operating Reserve must be replenished to the minimum level within two budget years.

Contributions to Reserve. Contributions to Operating Reserves are made through the appropriation of annual surpluses generated from operations within a legal entity and statutory function.

Usage of Reserve. The usage of Operating Reserve balances will only be contemplated for the funding of unforeseen revenue shortfalls or expenditures obligations where other sources of funding is not available.

a) Greater Vancouver Water District (GVWD) Operating Reserve

The required Operating Reserve for the Water Services function is equal to 15% of net operating expenditures representing approximately two months of operating costs.

The GVWD is an entity whose primary revenue source is the sale of water based on a unit rate per cubic metre of water consumed within the region. The unit rate is set at a rate to cover annual expenditures and based on an estimated volume of overall regional consumption. The

actual level of consumption, however, may vary from expectation due to many factors including weather, effectiveness of conservation measures and the implementation of watering restrictions. This potential volatility in consumption and that the majority of expenditures are not variable with the level of consumption and cannot easily be adjusted should there be a drop in consumption, results in the GVWD having a higher relative level of inherent risk associated with their business activities.

b) Greater Vancouver Sewerage and Drainage District (GVS&DD) – Solid Waste

The required Operating Reserve for the Solid Waste function is equal to 15% of net operating expenditures representing approximately two months of operating costs.

Solid Waste is a function whose primary revenue source is Tipping Fee revenue based on a unit rate per cubic tonne of waste disposed of within the region. The unit rate is set to cover annual expenditures and is based on an estimated volume of overall regional waste tonnage. The actual level of waste tonnage, however, may vary from expectation due to many factors including level of construction and demolition, effectiveness of waste diversion activities and waste migration. While some expenditures in Solid Waste are somewhat variable with waste volumes, many are fixed. This along with the potential volatility in waste volumes leads to Solid Waste having a higher relative level of inherent risk associated with their business activities.

c) Greater Vancouver Sewerage and Drainage District (GVS&DD) – Liquid Waste

The required Operating Reserve for the Liquid Waste function is equal to 10% of net operating expenditures representing approximately one month of operating costs.

Liquid Waste is a function whose primary revenue source is an annual sewer levy collected from member jurisdictions and as a result are low risk in terms of collection. While the majority of revenues in Liquid waste carry a high level of certainty, the nature of the business of collecting and treating sewage has operating risks including weather related overflows, impacts from power interruption and infrastructure failure. As a result, Liquid Waste has a moderate relative level of inherent risk associated with their business activities.

d) Metro Vancouver Housing Corporation (MVHC)

The required Operating Reserve for the Housing Corporation function is equal to 10% of net operating expenditures representing approximately one month of operating costs.

The MVHC is reliant on tenant rents to support the annual expenditures to provide affordable housing. The level of rental revenue has some inherent risk of volatility due to factors including vacancy rates, tenant turnover and rental losses caused by required repairs and maintenance activities. The nature of the housing complexes being of wood construction, include a level of risk of unforeseen significant maintenance requirements. As a result, the MVHC has a moderate relative level of inherent risk associated with their business activities.

BOARD POLICY

e) Metro Vancouver Regional District (MVRD)

The required Operating Reserve for each MVRD Statutory function is equal to 5% of net operating expenditures representing approximately one half of one month of operating costs.

The statutory functions of the MVRD are reliant on tax requisition collected from member jurisdictions and therefore, have low risk in terms of revenue collection. In addition, the MVRD statutory function's operating expenditures are relatively consistent annually and quite predictable. As a result, the MVRD statutory functions have a low relative level of inherent risk associated with their business activities.

SUMMARY OF OPERATING RESERVE MINIMUMS	
Legal Entity/Statutory Function	Operating Reserve Amount
Greater Vancouver Water District	15% of prior year's net operating expenditures (approximately 2 months of operating costs)
Greater Vancouver Sewerage and Drainage District Solid Waste	15% of prior year's net operating expenditures (approximately 2 months of operating costs)
Greater Vancouver Sewerage and Drainage District Liquid Waste	10% of prior year's net operating expenditures (approximately 1 month of operating costs)
Metro Vancouver Housing Corporation	10% of prior year's net operating expenditures (approximately 1 month of operating costs)
Metro Vancouver Regional District Affordable Housing Air Quality E911 Emergency Telephone Service Electoral Area Service General Government Labour Relations Regional Emergency Management Regional Global Positioning System Regional Parks Regional Planning Sasamat Fire Protection Service	5% of prior year's net operating expenditures (approximately 0.5 month of operating costs)

2. STATUTORY RESERVES

Statutory Reserves are established where reserves are required within a legal framework which governs their composition and application. Statutory Reserves are reserves set aside for a legal entity and statutory function for a specific purpose in accordance with the applicable terms and conditions within the establishing legal framework as follows:

- Legal statute
- Board approved bylaw
- Governing agreement with another level of government or entity

Examples of Statutory Reserves include Liquid Waste Development Cost Charges, Cultural Grants and Park Land Acquisition.

Contributions to Reserve. Contributions to Statutory Reserves are made through annual budget contributions and the appropriation of the annual surplus generated from operations in accordance with legal statute, Board approved bylaw, or governing agreement.

Usage of Reserves. The usage of Statutory Reserve balances will only be authorized for the purpose designated by the Statutory Reserve and must be withdrawn in accordance with legal statute, Board approved bylaw, or governing agreement.

3. DISCRETIONARY RESERVES

Discretionary Reserves are established by the Board for legal entities and statutory functions as an appropriation of annual surplus to meet a known or anticipated future financial obligation.

Contributions to Reserve. Contributions to Discretionary Reserves are made through the appropriation of the annual surplus generated from operations for a known or anticipated future financial obligation, or for general future usage in accordance with the priority sequence as outlined under “Appropriation of Annual Surplus.”

Usage of Reserves. The usage of Discretionary Reserve balances will fund expenditures as an additional annual revenue source to support Metro Vancouver’s goals and priorities in reducing the need for revenue from rates, levies and tax requisitions. The usage of Discretionary Reserves will be included, where applicable, within the five-year financial plan.

4. APPROPRIATION OF ANNUAL SURPLUS

After ensuring that all Operating Reserves meet the minimum balances as established under this Policy and that all requirements for Statutory Reserves and Discretionary Reserves are met, any annual surplus remaining will be utilized in accordance with the following priority sequence:

- Fund capital expenditures or pay down existing debt.** This is consistent with debt avoidance and the mitigation of future financial obligations
- Fund one-time expenditures.** This includes but is not limited to funding equipment purchases and consulting initiatives and projects.
- Rate stabilization for a legal entity or statutory function.** This involves smoothing out utility rates, levies or tax requisitions resulting from operating budget expenditures.

BOARD POLICY

Usage of reserves for rate stabilization is only used in circumstances where priorities 1) and 2) are not applicable, or have been met. This application is discretionary and may not be applicable. If not applicable, then move to priority 4.

- iv. **Maintain as a Statutory or Discretionary Reserve.** This can represent an addition to an existing Statutory or Discretionary Reserve or the establishment of a new Discretionary Reserve based on new information regarding a future financial obligation.

Management of Reserves

When the Board has approved the use of reserves to fund expenditures, the funding must be spent for the intended purpose within the year of approval, or the following budget year.

Although reserves are to only be used for their intended purpose, there may be instances when short-term internal borrowing from reserves is financially beneficial or required. Internal borrowing is permitted to temporarily finance funding requirements to avoid external temporary borrowing or to fund emergencies as required, in accordance with the applicable legislation. If money from one reserve is used for temporary financing purposes, there must be repayment of the amount used to the reserve, plus interest within five years of borrowing.

Internal borrowing and transferring of funds from Reserves must be approved by the Board.

CORPORATE ALLOCATION

Effective Date: July 28, 2017

Approved By: MVRD Board

Policy No. FN-015

PURPOSE

To provide a framework for establishing the appropriate allocation of costs incurred by centralized support services in delivering support services to all business activities of Metro Vancouver's four legal entities.

DEFINITIONS

"Centralized Support Services" are services delivered by centralized departments to support all four Metro Vancouver legal entities and regional district functions through the following: Corporate Planning, Corporate Services, External Relations, Financial Services, Human Resources, and Legal and Legislative Services;

"Net Centralized Support Costs" means expenditures incurred by centralized support services that are net of any costs allocated directly to a legal entity or function and any revenues generated by the centralized support service; and

"Metro Vancouver Service" refers to a service provided by one of the four legal entities to which costs of centralized support services are allocated. The legal entities include the Metro Vancouver Housing Corporation (MVHC), Greater Vancouver Water District (GVWD), Greater Vancouver Sewerage and Drainage District (GVS&DD), which includes the legal functions of Liquid Waste and Solid Waste, and the Metro Vancouver Regional District (MVRD), which includes the statutory functions of Air Quality, Electoral Area, General Government, Labour Relations, Regional GPS, Regional Parks, Regional Planning, E911 Telephone Service, Regional Emergency Management and Sasamat Fire Protection Service.

POLICY

The *Local Government Act* requires that all costs incurred by a regional district in relation to a service, including the costs of administration attributable to the service, are part of the costs of that service. As such, rates, fees and charges must reflect the full cost of Metro Vancouver services to which they relate including those costs incurred by centralized support services. This Policy serves to appropriately account for all costs of providing Metro Vancouver services and matching those costs with supporting revenues.

All costs incurred by centralized support services will be allocated to the benefiting Metro Vancouver service utilizing a methodology approximating the level of service provided. The methodology for calculating corporate allocation based on an approximation of service level is provided below.

CORPORATE ALLOCATION PRINCIPLES

Every Metro Vancouver service utilizes resources of centralized support departments to some extent in the delivery of that service. The extent of centralized support may range from providing simple contract administration or Metro Vancouver Board and Committee support services, to more extensive support that includes human resources, legal, legislative, communications, financial, information technology, building operations, emergency planning and corporate safety services. The methodology for approximating the level of service provided by each these centralized support services is guided by the following principles:

- Efficient – the method and process of allocating net centralized support costs are easily administered, replicable and comprehensible
- Equitable – net centralized support costs are apportioned fairly across Metro Vancouver services and to the extent possible, upholds a user-pay approach for the level of service provided
- Consistent – net centralized support costs are allocated in a way that mitigates large fluctuations and ensures relative certainty, based on level of use
- Transparent – net centralized support costs allocated to Metro Vancouver services are clearly identified

Staffing and Business Activity Requirements

Within the guiding principles defined in this Policy is the understanding that the approximate level of service provided to a Metro Vancouver service is often measured by the impact of two primary factors: (1) number of staff or (2) level of business activity.

For example, those services with larger staff complements will require more centralized support in the areas of payroll, recruiting services, organizational support, benefit administration, IT computer support, training and head office building operations and therefore, will be allocated a higher proportion of these centralized support costs. Alternatively, services that incur significant capital expenditures and procurement activity will require more centralized support in the areas of purchasing, accounts payable, debt management, budgeting, accounts receivable, legal, business applications and corporate planning and consequently, will be allocated a higher proportion of these centralized costs.

To ensure the appropriate allocation of corporate costs, direct delivery services will be allocated a proportion of net centralized support costs based on their prior year operating budget using the parameters described above. Salaries and benefits will serve as indicators that reflect the number of staff supported while other expenditures will serve as indicators of the level of business activity.

Lower Impact Activity Requirements

Some budget items may inflate expenditures but have a lower overall impact on the requirement for centralized support services. These budget items include contributions to reserve, a portion of large third party operating contracts and MVHC long-term mortgages. In order to better reflect the level

of service provided by the centralized support services, the calculation of apportionment costs in annual operating budgets will be adjusted for those budget items not requiring centralized support.

Specific Direct Service Activity Requirements

In cases where it can be demonstrated and quantified that a Metro Vancouver service receives a specific direct benefit from an activity, the associated costs will be allocated directly to that service. These costs typically include, but are not limited to, costs related to programs such as Metro Vancouver's pooled fleet vehicles and equipment acquisitions, external legal counsel services and contracted security services.

METRO VANCOUVER SERVICES – INTERNAL SERVICE DELIVERY

The majority of Metro Vancouver services are delivered to members through an internal direct service model. This means that Metro Vancouver staff are engaged in the direct delivery of the service, including most or all of the operating and capital activities. For these services, the proportionate allocation of net centralized support costs shall be apportioned as follows:

Greater Vancouver Water District (GVWD)

The GVWD will be allocated a proportionate share of the net centralized support costs based on its prior year's operating budget excluding centralized support cost allocation and contributions to reserve.

Greater Vancouver Sewerage and Drainage District (GVS&DD) – Liquid Waste

The Liquid Waste function will be allocated a proportionate share of the net centralized support costs based on its prior year's operating budget excluding centralized support cost allocation and contributions to reserve.

Greater Vancouver Sewerage and Drainage District (GVS&DD) – Solid Waste

The Solid Waste function will be allocated a proportionate share of the net centralized support costs based on its prior year's operating budget excluding centralized support cost allocation, 80% of large third party operating contracts and contributions to reserve. The adjustment for a portion of third party operating contracts is to reflect that they require a lower level of service compared to other business activities.

Metro Vancouver Housing Corporation (MVHC)

The MVHC will be allocated a proportionate share of the net centralized support costs based on its prior year's operating budget excluding centralized support cost allocation, contributions to reserve and 80% of annual mortgage payments.

Metro Vancouver Regional District (MVRD)

The MVRD functions of Air Quality, Electoral Area, General Government, Labour Relations, Regional GPS, Regional Parks and Regional Planning will be allocated a proportionate share of the net

centralized support costs based on their prior year's operating budget excluding centralized support cost allocation, contributions to reserve and large one-time asset purchases.

METRO VANCOUVER SERVICES – EXTERNAL SERVICE DELIVERY

While the majority of Metro Vancouver services are provided through the internal service delivery model some regional services engage the use of an external service provider to deliver services to members through an external service delivery model. This means that Metro Vancouver staff are engaged to a lesser extent in the delivery of the service, its operating activities and its capital activities. For these services, the proportionate allocation of net centralized support costs shall be apportioned as follows:

E911 Emergency Telephone Service

E911 Emergency Telephone Service will be allocated net centralized support costs equal to 2% of its current year's operating program budget excluding contributions to reserve. This reflects the level of service associated with the administration of the E911 Telephone Service operating contract and routine finance support.

Regional Emergency Management

Regional Emergency Management will be allocated net centralized support costs equal to 5% of its current year's operating program budget excluding contributions to reserve. This reflects the level of service associated with the overall administration of the program, purchasing support and accounts payable.

Sasamat Fire Protection Service

Sasamat Volunteer Fire Service will be allocated net centralized support costs equal to 10% of its current year's operating program budget excluding contributions to reserve and large one-time asset purchases. This reflects the level of service associated with function management, fleet vehicle administration, procurement, accounts payable, payroll, budgeting and accounting.

CORPORATE INVESTMENTS

Effective Date: May 30, 1999 (revised November 27, 2020)

Approved By: MVRD Board

Policy No. FN-020

PURPOSE

To provide guidelines within which investment decisions are made to ensure safety of capital, adequate liquidity and a reasonable rate of return.

APPLICATION

This Policy applies to all investments on behalf of the corporate entities.

POLICY**A. General Objectives****i) Safety of Capital**

This is the foremost objective of this Policy. Prudent investments shall be chosen in a manner that ensures preservation of capital. Consideration therefore must be given to both credit and interest rate risk in all investment decisions.

ii) Liquidity

Investment portfolios will provide sufficient liquidity to meet the ongoing needs of all Metro Vancouver Districts and the Housing Corporation. Investment terms will be structured as much as possible to meet anticipated cash needs.

iii) Yield

Portfolios will be invested to produce the highest yield after first considering objectives i) and ii) above and within the investment guidelines in **Appendix A**.

iv) Sustainable Investing

Metro Vancouver applies exclusionary screening in its portfolios to avoid direct investments in fossil fuel. Metro Vancouver will gradually implement additional sustainable investing criteria in its investments through further inclusion of environmental, social and governance (ESG) and socially responsible investment (SRI) principles.

B. Standard of Care

The standard of care to be applied by staff in carrying out their duties is that of a prudent person, in the context of the management of a diversified portfolio. This in turn translates as the exercise of discretion and judgment, in conformity with policies, with the purpose being investment, rather than speculation.

BOARD POLICY

The *Employee Code of Ethics Policy* requires performance to a high standard of integrity, and specifically forbids conflict of interest situations.

C. Investment Parameters

Investments will at all times be governed by legislation, specifically the *Community Charter* Section 183 (copy attached as **Appendix C**).

Short Term Investments (maximum term 365 days) are restricted to those with a minimum short term credit rating of Standard and Poor's (S&P) equivalent of A-1 or Dominion Bond Rating Service (DBRS) equivalent of R1Low.

Short term investments will be permitted in non-qualifying institutions when such investments are guaranteed by a qualified institution. An example of this would be an investment in a Credit Union in BC which is in turn guaranteed by the Province of BC.

Long Term Investments must have at a minimum a long term credit rating of 'A-' by S&P or DBRS equivalent (A-low).

Both our short term and long term investments are limited to primarily Government debt (provincial and federal) and Canadian financial institutions. The specific details of the qualified investments as well as the maximum portfolio percentages are listed in **Appendix A**.

In instances where an investment falls below one, but not both of the recommended rating agencies (S&P and DBRS), the investment will remain to qualify as an approved investment.

D. Investment Terms

Short Term Investments will have a maximum term of 365 days and are restricted to terms listed on **Appendix A** attached.

Long Term Investments are those with term exceeding 365 days. Long term investments will also be restricted to terms listed on **Appendix A** attached.

E. Tendering

Short Term Investments (under 365 days)

Investments of terms greater than 15 days require at least three quotes from qualifying dealers. (See comments below concerning Long Term Investments as a potential exception to this rule)

Long Term Investments (over 365 days)

Long term investments do not necessarily lend themselves to direct comparison. Often there is difficulty in finding the same name or similar credit quality in exactly the same term. This requires that those responsible for long term investing use considerable judgement in determining the investment choice.

Where direct comparisons are possible between like or similar investments at least three quotes from qualifying dealers will be required.

Where direct product comparisons are not available, those responsible for investing must ensure that the offering under consideration is priced fairly. This can be done by verifying spread levels (over benchmark or equivalent term Canada bonds) obtained from two other dealers which support the offering being considered. These spreads should be recorded for subsequent review by internal audit.

F. Safekeeping

Investments will be held for safekeeping at either RBC Investor Services (Dexia), Royal Bank Dominion Securities, Bank of Montreal or Clearing and Depository Services Inc. (CDS) for securities whose transfer is book-based rather than by physical delivery. Transfers that are neither book-based nor physical delivery such as cash, term deposits and guaranteed investment certificates are held for safekeeping at the respective credit union or issuing bank or held in nominee (in trust) with the Authorized Investment Dealer.

G. Authorized Investment Dealers

Authorized Investment Dealers must meet one of the following criteria:

- Wholly owned subsidiary of a Canadian chartered bank that is included in the Approved Investments list in **Appendix A**;
- Member of the Investment Industry Regulatory Organization of Canada (IIROC) and the Canadian Investor Protection Fund (CIPF), and hold assets under management greater than \$10 billion;
- Institution whose deposits or debts are guaranteed by the Credit Union Deposit Insurance Corporation (CUDIC) or a Province of Canada.

Any changes to the Authorized Investment Dealer must be approved by the Investment Management Committee as defined in section H Review, Oversight and Reporting. The Investment Management Committee will also review the list of Authorized Investment Dealers on as needed basis.

H. Review, Oversight and Reporting

The statutory authority of the CFO for investment decisions is delegated to the Director, Financial Planning and Operations; Division Manager, Financial Planning and Processes and the Treasury Manager including any appointed in an acting capacity.

BOARD POLICY

While day to day investment operations are the responsibility of the Treasury Manager, the Division Manager, Financial Planning and Processes is responsible for its supervision, including review of internal control issues and policy enforcement.

Summary reports on investment positions and performance will be prepared monthly for the CFO and the Director, Financial Planning and Operations.

The CFO; Director, Financial Planning and Operations; Division Manager, Financial Planning and Processes and the Treasury Manager will meet quarterly (or more frequently as required) as the Investment Management Committee (“Committee”) to review the investment activities as well as current investments issues. The Committee will establish the percentage split of the portfolio between long and short term investments as well as the average term of the portfolio based on existing market conditions and expected future conditions.

An Approved List of Investments (“Approved List”), based on the Investment Parameters in section C, will be developed and maintained by the Division Manager, Financial Planning and Processes, subject to the approval of the Committee.

While changes to the Approved List outlined in **Appendix A** are subject to the Committee's specific approval, any member of the Investment Management Committee may immediately suspend a previously approved investment at any time on their own authority and, in fact, must do so when he has reason to believe it no longer meets the necessary requirements. *The member will immediately advise the other Investment Management Committee members of the decision for suspension along with the reason and repercussions.*

Quarterly, the investment ratings of all entities included in the Approved List will be reviewed by the Division Manager, Financial Planning and Processes.

Upon knowledge of a decrease in the credit rating of an approved investment to a level below the parameters outlined in this Policy, the Division Manager, Financial Planning and Processes will immediately advise the Investment Management Committee. As this rating is below the minimum acceptable credit rating, the investment position should be sold with all considerations given to losses and/or penalties.

A report will be presented to the Board as of April 30, August 31, and December 31 each year and will include a position statement, performance results compared to benchmark comments and other relevant issues.

Metro Vancouver purchases investments with the intention of holding these until maturity and not with further trading in mind. For this reason we will not adjust the portfolio value based on changes in unrealized market value, but rather report investment performance based on actual return to maturity.

BOARD POLICY

Our short term investment performance will be compared to the Benchmarks detailed on **Appendix B**. Finding a benchmark for our long term investments is difficult as most available benchmarks will reflect changes in market valuation. With this in mind, we will provide the benchmarks included on **Appendix B** as a reasonable general comparison to our long term investment performance.

In addition to the audit activities and procedures performed annually by the external auditors and the oversight of the Director, Financial Planning and Operations, the Internal Auditor will review internal controls and ensure compliance with policy and procedures bi-annually.

All changes to this Policy require Board approval.

Appendices:

- Appendix A: Approved Investments (Updated October 2016)
- Appendix B: Investment Performance Benchmarks
- Appendix C: *Community Charter* (Section 183)

BOARD POLICY

APPENDIX A

Approved Investments (October 2016)

	Rating		Proposed	
	Short Term	Long Term	Max %	Max Term
<u>Governments:</u>				
Canada	A-1+	AAA	Unlimited	30 years (5% max > 10 years)
Provinces rated AA- or better by S&P (or equivalent)*				
British Columbia	A-1+	AAA	50%	
Alberta	A-1+	AA	50%	
Saskatchewan	A-1+	AA+	50%	
Manitoba	A-1+	AA-	50%	
<i>Total Provinces rated AA- or better Limit</i>			Unlimited	30 years (5% max > 10 years)
Provinces rated A- or better by S&P (or equivalent)*				
New Brunswick	A-1+	A+	30%	
Ontario	A-1+	A+	30%	
Quebec	A-1+	A+	30%	
Nova Scotia	A-1+	A+	30%	
Newfoundland	A-1	A	30%	
Prince Edward Island	A-1	A	30%	
<i>Total Provinces rated A- or better Limit</i>			50%	30 years (5% max > 10 years)
Municipal Finance Authority of BC	A-1+	AAA	15%	30 years (5% max > 10 years)
Total Governments				
<u>Financial Institutions</u>				
Schedule 1 Banks				
Bank of Montreal	A-1	A+	20%	10 years
Bank of Nova Scotia	A-1	A+	20%	10 years
CIBC	A-1	A+	20%	10 years
Royal Bank of Canada	A-1+	AA-	20%	10 years
TD Bank	A-1+	AA-	20%	10 years
National Bank of Canada	A-1	A	15%	10 years
Manulife Bank	A-1	A+	15%	3 years
Canadian Western Bank	R1L (DBRS)	AL (DBRS)	15%	3 years
Schedule 2 Banks				
HSBC Bank Canada	A-1+	AA-	15%	10 years
<u>BC Credit Unions</u>				
Vancity	BC Provincial Guaranty**		20%	
Coast Capital Savings	BC Provincial Guaranty**		20%	
Westminster Credit Union	BC Provincial Guaranty**		20%	
Blue Shore Credit Union	BC Provincial Guaranty**		20%	
First West Credit Union	BC Provincial Guaranty**		20%	
Prospera Credit Union	BC Provincial Guaranty**		20%	
<i>Total BC Credit Unions Limit</i>			50%	5 years (max 30% > 1 year)
Other				
Caisse Central Desjardins	A-1	A+	5%	3 years

*Includes provincially guaranteed institutions

** Implied BC Provincial guaranty

APPENDIX B

Investment Performance Benchmarks

The benchmarks listed below are used as a guideline to assess the performance / investment returns on investments held.

Short Term Investments

- Municipal Finance Authority Money Market Fund*
- Average One Month Banker's Acceptance Rate**
- Average Three Month Banker's Acceptance Rate**

Long Term Investments

- Municipal Finance Authority Intermediate Bond Fund
- Municipal Finance Authority Long-term Bond Fund

*Available on the MFA website

**Calculated from the Bank of Canada website

APPENDIX C

Community Charter Section 183

Investment of Municipal Funds

- 183 Money held by a municipality that is not immediately required may only be invested or reinvested in one or more of the following:
- (a) securities of the Municipal Finance Authority;
 - (b) pooled investment funds under section 16 of the *Municipal Finance Authority Act*;
 - (c) securities of Canada or of a province;
 - (d) securities guaranteed for principal and interest by Canada or by a province;
 - (e) securities of a municipality, regional district or greater board;
 - (f) investments guaranteed by a chartered bank;
 - (g) deposits in a savings institution, or non-equity or membership shares of a credit union;
 - (h) other investments specifically authorized under this or another Act.

To: Finance Committee

From: Dean Rear, General Manager, Financial Services
Chief Financial Officer

Date: April 4, 2023

Meeting Date: April 13, 2023

Subject: **Manager's Report**

RECOMMENDATION

That the Finance Committee receive for information the report dated April 4, 2023, titled "Manager's Report".

Finance Committee Work Plan

Attachment 1 to this report sets out the Committee's Work Plan for 2023. The status of the Committee's key priorities is shown as pending, in progress, or complete together with the quarter that each is expected to be considered by the Committee.

Water Development Cost Charges

In October 28 2022, the Greater Vancouver Water District Board (GVWD) gave three readings to the *Greater Vancouver Water District Development Cost Charge Bylaw No. 257, 2022* and subsequently sent the Greater Vancouver Water District Development Cost Charge Bylaw No. 257, 2022 to the Inspector of Municipalities for approval.

Upon reviewing the *Greater Vancouver Water District Development Cost Charge Bylaw No. 257, 2022*, the Province had indicated that the GVWD is not permitted to directly exempt secondary suites and laneway houses in accordance with the Local Government Act. To address this change and ensure consistency with the provisions of the GVS&DD DCC bylaw, the definitions were amended such that secondary suites and laneway houses are not subject to DCCs if they are situated on a single family residential dwelling.

Third reading of *Greater Vancouver Water District Development Cost Charge Bylaw No. 257, 2022* was rescinded and reread with the new definition in the bylaw on January 27th, 2023 and resubmitted to the Province. The bylaw has now been formally approved by the Inspector of Municipalities and will go forward directly to the GVWD Board for adoption on April 28th.

As the bylaw will take effect upon adoption, communication materials have been prepared and are being circulated to the member municipalities to aid in the application and collection of the charge.

Attachments

1. 2023 Finance Committee Work Plan

ATTACHMENT 1

Finance Committee **2023 Work Plan** Report Date: April 13, 2023

Priorities

1st Quarter	Status
Review and Endorse Committee 2023 Priorities and Work Plan	Complete
Review 2022 External Audit Plan	Complete
Review First 2023 Progress	Complete
Municipal Borrowing Requests for MFA Spring 2023 Issue (If Applicable)	Complete
2022 Summary: Tender / Contact Award Information	In progress
Financial Policy Review (as required)	Pending
Long Term Financial Plan	In progress
TransLink Federal Gas Tax Application	Pending
Development Cost Charge Update	In progress
2nd Quarter	Status
2022 Audited Financial Statements	In progress
2022 External Audit Findings Report	In progress
Review 2022 Final Results	In progress
Review Second 2023 Progress	Pending
GVS&DD DCC Revenue Fund Expenditure Bylaw	In progress
Procurement and Real Property Contracting Authority	Pending
2022 Statement of Financial Information	Pending
Wet Weather Pricing	Pending
Long Term Financial Plan	Pending
Board Budget Workshop Review	Pending
3rd Quarter	Status
Review 2023 Third Progress	Pending
Municipal Borrowing Requests for MFA Fall 2023 Issue (If Applicable)	Pending
Financial Policy Review (as required)	Pending
Long Term Financial Plan	Pending
TransLink Federal Gas Tax Report	Pending
4th Quarter	Status
Review 2023 Fourth Progress	Pending
Municipal Borrowing Requests for MFA Spring 2023 Issue (If Applicable)	Pending
Financial Policy Review (as required)	Pending
Annual Budget and Five Year Financial Plan	Pending
Long Term Financial Plan	Pending