METRO VANCOUVER REGULAR JOINT BOARD MEETING OF THE MVRD, GVS&DD, GVWD AND MVHC BOARDS

Wednesday, October 20, 2021
9:00 A.M.
28th Floor Boardroom, 4730 Kingsway, Burnaby, British Columbia
Purpose: To participate in a workshop on the 2022 Budget and 2022-2026 Financial Plan

Membership and Votes

A G E N D A[1]

A. ADOPTION OF THE AGENDA

1. October 20, 2021 Regular Joint Board Meeting Agenda
That the MVRD, GVS&DD, GVWD and MVRD Board adopt the agenda for its regular joint meeting scheduled for October 20, 2021 as circulated.

B. ADOPTION OF THE MINUTES

C. DELEGATIONS

D. INVITED PRESENTATIONS

E. CONSENT AGENDA

F. ITEMS REMOVED FROM THE CONSENT AGENDA

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

1. 2022 – 2026 Financial Plan – Metro Vancouver Districts and Housing Corporation *pg. 3*
That the MVRD/GVS&DD/GVWD/MVHC Board:
a) endorse the 2022 Budget and 2022 – 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation, as presented, and direct staff to prepare the necessary budget information to be presented at the October 29, 2021 Metro Vancouver Districts and Housing Corporation Board meetings for consideration; and
b) endorse a 30-year amortization term for the North Shore Sewerage Areas share of the debt related to North Shore Wastewater Treatment Plant Project as requested by the three north shore municipal Councils; and
c) direct staff to calculate the water rates applying the 2022 increase wholly to the peak rate; and

[1] *Note: Recommendation is shown under each item, where applicable. All Directors vote unless otherwise noted.*

d) endorse amendments to the Cost Apportionment Bylaw to enable the division of the GVS&DD levy into separate dry and wet weather components and issue a separate requisition for each component.

2. Reference Materials *pg. 101*

3. Questions and Answers, Comments from the Public *pg. 383*

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

I. OTHER BUSINESS

J. BUSINESS ARISING FROM DELEGATIONS

K. RESOLUTION TO CLOSE MEETING

L. RISE AND REPORT (Items Released from Closed Meeting)

M. ADJOURNMENT/CONCLUSION

That the MVRD/GVS&DD/GVWD/MVHC Board adjourn/conclude its regular joint meeting of October 20, 2021.

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Metro Vancouver Districts Boards of Directors
Metro Vancouver Housing Corporation Board of Directors

From: Jerry Dobrovolny, Commissioner/Chief Administrative Officer
Dean Rear, General Manager, Financial Services/Chief Financial Officer

Date: October 14, 2021 Meeting Date: October 20, 2021

Subject: **2022 - 2026 Financial Plan – Metro Vancouver Districts and Housing Corporation**

RECOMMENDATION

That the Board:

a) endorse the 2022 Budget and 2022 - 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation, as presented, and direct staff to prepare the necessary budget information to be presented at the October 29, 2021 Metro Vancouver Districts and Housing Corporation Board meetings for consideration; and
b) endorse a 30-year amortization term for the North Shore Sewerage Areas share of the debt related to North Shore Wastewater Treatment Plant Project as requested by the three north shore municipal Councils; and
c) direct staff to calculate the water rates applying the 2022 increase wholly to the peak rate; and
d) endorse amendments to the Cost Apportionment Bylaw to enable the division of the GVS&DD levy into separate dry and wet weather components and issue a separate requisition for each component.

EXECUTIVE SUMMARY

The 2022 Budget again focusses on the short term as the region and the organization continues to adapt to the challenges of a global pandemic along with evolving financial impacts from major infrastructure projects. This ongoing uncertainty requires Metro Vancouver to continuously evaluate and adapt until the challenges and conditions become clearer, while working to support the region to come out stronger.

As proposed, the 2022 budget has total operating expenditures of $1.017 Billion. For the year, the average household impact is projected to increase by $21 for a total of $595. This represents a 3.5% over the prior year.

The proposed budget contains provisions to address key Board priorities including implementing the Clean Air Plan, incentivizing Inflow and Infiltration reductions, accelerated investment in affordable housing, accelerated action on Regional Economic Prosperity, and advancing long term water source supply capacity

The proposed budget also addresses organizational needs including support services for capital program delivery, indigenous relations capacity, improved project management and asset management.

Options in this budget for consideration by the Board include:

- Consideration for amortizing debt related to the NSWWTP over 30 years for the communities in the North Shore Sewerage Area
- Continuing the practice of applying the change to the water rate equally between the peak and off-peak rates, or maintaining the non-peak rate and adding all the necessary increase to the peak rate in order to enhance demand-side management initiatives in support of delaying capital projects, where plausible
- Moving towards distinct dry weather and wet weather billings for liquid waste levies

PURPOSE

To present the 2022 Budget and 2022 - 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation for consideration.

BACKGROUND

The 2022 - 2026 Financial Plans for the Metro Vancouver Regional District (MVRD), Greater Vancouver Water District (GVWD), Greater Vancouver Sewerage and Drainage District (GVS&DD) and Metro Vancouver Housing Corporation (MVHC) have been prepared following the direction received at the April 8, 2021 Board Budget Workshop.

The Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, the current 2021 - 2025 Financial Plan, the implications of the COVID-19 pandemic, the tools that can be used to make budget adjustments, and a proposed approach for the 2022 - 2026 Financial Plan.

Staff proposed leveraging the supported tools for continued short-term action that would lessen the upward pressure on household impact for 2022. This ensures strategic goals and objectives to be maintained. If larger or more long-term adjustments are desired, a re-evaluation of long-term plans such as the *Metro Vancouver Housing Plan*, *Climate 2050*, or the *Liquid Waste Management Plan* would be required. Since an annual budget is approved, this approach will allow for adjustments to be made each year as conditions evolve based on market changes and other factors. The use of the tools will aim to avoid making severe changes that cannot be easily corrected in the short-term.

During the month of October, the 2022 - 2026 Financial Plans for Metro Vancouver's four legal entities were presented to the following ten Board Standing Committees for the individual functions that fall under the oversight of those Committees:

- Indigenous Relations
- Climate Action
- Electoral Area
- Finance and Intergovernment
- Housing
- Regional Parks
- Regional Planning
- Water
- Liquid Waste
- Zero Waste

The Metro Vancouver Standing Committees were presented with individual reports covering the 2022 Budget and 2022 - 2026 Financial Plans for each function including program highlights and financial plan highlights (see Item 3.1). The reports included financial information for multiple years

as well as a "What's Happening" summary page that described the key activities projected over the five-year period of the financial plan. Each Committee has reviewed and endorsed their individual financial plans and provided comments and direction where appropriate for consideration by the Board at the October 20, 2021 Board Budget Workshop.

The 2022 Budget and 2022 - 2026 Financial Plans reflect alignment with the legislative authority of the individual Districts and functions. Prepared with the direction provided at the Board Budget Workshop on April 8, 2021, the Financial Plan supports the vision and mission as articulated in the *Board Strategic Plan* and the corresponding Regional Management Plans.

This report is being brought forward to present the overall 2022 - 2026 Financial Plan for Metro Vancouver Districts and Housing Corporation (representing the four legal entities: MVRD, GVWD, GVS&DD, MVHC) for consideration and to forward to the Board meeting on October 29, 2021 for approval.

DEVELOPMENT OF 2022 BUDGET AND FIVE-YEAR FINANCIAL PLAN

The *Metro Vancouver Proposed 2022 - 2026 Financial Plan* (Attachment 1) provides the financial details of the proposed 2022 Budget and 2022 - 2026 Financial Plan including financial information by sub-region for the GVS&DD sewerage areas. The attachment also shows the impact of the plan on the cost to the average regional household by those sub-regions to assist member local governments in anticipating the financial impact of Metro Vancouver services to their communities.

The budget and the five-year financial plans are built upon five central themes that guide the development of Metro Vancouver's long term plans and budgets:

- Financial Sustainability
- Regional Growth
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment

The Metro Vancouver financial planning process is also framed by a number of Board policies including:

- the *Financial Management Policy*
- the *Corporate Allocation Policy*
- the *Operating, Statutory and Discretionary Reserves Policy*
- the Asset Management policies for individual functions

The 2022 Budget and 2022 - 2026 Financial Plan includes variations to temporarily move away from the principles of some of these policies based on the direction provided at the Board Budget Workshop on April 8, 2021. These variations form the basis of the action plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize impact to the ratepayers of the region.

Economic Conditions

There continues to be some economic uncertainty going forward, the 2022 Budget and 2022 - 2026 Financial Plan has been constructed to help the region withstand some of that uncertainty in the short term until the challenges and conditions become clearer. The key task for the organization is to be responsive, but to not over respond so as to significantly risk long term fiscal sustainability.

The duration and depth of the impact of the pandemic is unknown, however there are a variety of estimates of the economic future, some of which are shown below:

GDP GROWTH ESTIMATES			
Source	**2021**	**2022**	**2023**
Conference Board of Canada (Metro Vancouver GDP Growth)	6.7%	4.0%	1.1%
Central 1 Credit Union (BC GDP Growth)	5.0%	4.0%	2.8%
Parliamentary Budget Office (Canada GDP Growth)	6.1%	4.2%	1.9%

The 2022 Budget utilizes financial tools to mitigate the impact on the ratepayers of the region. As the financial planning process is an annual cycle, economic conditions are considered each year as the approach to the budget and utilization of financial tools is evaluated.

Use of the Tools

Use of Reserves

For 2022, a total of just over $8 million of reserves have been applied directly for the purpose of reducing upward pressure on the levies and tax requisition. It is important to emphasize that the impact of this is one-time only and intensifies the pressure on future levies and requisitions.

While still in accordance with the *Operating, Statutory and Discretionary Reserves Policy*, this is a departure as these resources, created out of annual surpluses, have historically been use to apply to capital and reduce borrowing.

Reducing "Pay as You Go" Funding

Just over 25% of the proposed 2022 Operating Budget is for Contribution to Capital, which is "Pay as You Go" funding for capital projects. The *Financial Management Policy* promotes increasing this so as to reduce the reliance on borrowing, particularly for capital maintenance for significant utility infrastructure.

The 2022 - 2026 Financial Plan had Contribution to Capital projected at $257.6 million for 2022, a reduction of $11 million compared to that which was projected in the prior cycle. However, reducing "Pay as You Go" funding means that there will be a need for greater borrowing, which will also contribute to increased costs in the future.

Capital Plan Deferrals

Direction provided during the Board Budget Workshop that was held on April 8th was clear that while there wasn't a desire to move away from key strategic directions at this time, it was expected that capital projects be evaluated.

With over 300 projects in various phases of development the review of projects is not an insignificant task. During the 2021 budget process, over more than $400 million in projects from the prior five-year capital plan being deferred. During the process to build the 2022 budget, a further $450 million has been deferred. While this is not insignificant, with projects that do need to proceed being challenged with escalation and scope issues, work will continue to determine if there are further opportunities to re-scope or re-time projects.

Continuous Improvement

While the region is facing many challenging issues and Metro Vancouver is experiencing scope and cost escalation challenges for its projects and programs, the organization maintains continuous improvement as a core value and is very active looking for ways to do things better and finding cost savings. Some key initiatives include:

- LIWWTP Effluent Heat Recovery
- In-House Developed Effluent Mixing Models
- Increased in-house Project Management and Field Quality Control / Assurance
- Updated Project Management Framework
- Project Controls insourcing/optimization of project support for High Value, Risk and Consequence (HVRC) projects
- Ozone optimization at Coquitlam Water Treatment Plant
- Automation of Statutory Financial Statements
- Short-Term Financing and Cash Management
- New recycling depot funding model
- New organics management contracts

Demand Side Management

Demand side management is one of the ways that the region can have an impact on the need and timing of infrastructure capital projects. The proposed 2022 – 2026 Financial Plan continues work in this initiative with continued emphasis on water conservation and incentivizing Inflow and Infiltration reductions in the liquid waste system.

The 2022 Budget proposes to continue the practice of applying the water rate increase entirely to the high season rate and focusing on water conservation initiative with the member jurisdictions. Adjustments have been made to planned timing for Coquitlam intake #2 and its related infrastructure, allowing additional time to determine if additional conservation efforts will result in further timing deferrals on such a regionally significant project.

Further, incentivizing reductions in inflow and infiltration through wet weather billing information will help manage system capacity and delay the need for additional capacity based infrastructure.

Debt Amortization

The *Financial Management Policy* sets the amortization term for any debentures issued to be 15 years. During last years' budget process there was significant discussion on this policy with the Board reaffirming the practice.

Further discussion continued commencing with the April 8th Board Budget Workshop where direction received was to further examine a 30-year amortization term for the North Shore's share of the North Shore Wastewater Treatment Plant Project.

The three member jurisdictions in the North Shore Sewerage Area have provided Council resolutions requesting 30 year amortization for North Shore's share of the North Shore Wastewater Treatment Plant Project. This can be accommodated in the financial plan and is provided in the recommendations of this report for Board consideration.

Anticipated impact on the NSSA household impact on a present value basis specific just to the anticipated borrowing is shown below.

Amortization Term	2021	2022	2030	2040	2050
15 Year	$14	$44	$182	$9	-
20 Year	$14	$44	$151	$122	-
25 Year	$14	$44	$132	$109	$5
30 Year	$14	$44	$120	$100	$77

Debt servicing costs, and thus the HHI, are always calculated based on payment and interest estimates using the Municipal Finance Authority (MFA) tools. Principal is inclusive of the actuarial estimate which is the based on approximate interest on annual principal payments held by the MFA prior to debenture maturity.

$ Millions

Amortization Term	Total Payments	Total Principal	Total Interest	Actuarial Estimate
15 Year	$303.4	$188.6	$114.8	$32.8
20 Year	$338.4	$177.8	$160.6	$43.6
25 Year	$376.2	$167.4	$208.8	$54.0
30 Year	$416.9	$157.4	$259.5	$64.0

HOUSEHOLD IMPACT

Household Impact is the key budget metric for Metro Vancouver. It estimates the impact of Metro Vancouver services on the average regional household based on services used.

The projection for 2022 in the 2021 - 2025 was for an increase in the household impact of $38 to a total of $612. For this cycle, the household impact for 2022 is projected to increase by $21 for a total of $595. The total household impact compared to that projected in the previous financial plan is set out in the table below:

OVERALL HOUSEHOLD IMPACT 2022-2026						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Water	$ 171	$ 175	$ 183	$ 200	$ 221	$ 244
Liquid Waste	273	281	324	379	452	543
Solid Waste	60	63	65	68	71	74
Regional District	70	76	85	88	89	91
Total Household Impact	**$ 574**	**$ 595**	**$ 657**	**$ 735**	**$ 833**	**$ 952**
Prior Year Forecast		*$ 612*	*$ 656*	*$ 710*	*$ 784*	
Prior Year % Change		*6.4%*	*7.3%*	*8.5 %*	*10.4%*	

FINANCIAL PLAN OVERVIEW

As proposed, the 2022 - 2026 Financial Plan has total operating expenditures for 2022 of $1,017.9 million with projected capital expenditures of just over $1.38 billion as summarized in the tables below:

Operating Budget

The overall Metro Vancouver Operating budget can be categorized into Operations, Debt Service and Contributions to Capital.

Operations – These are the basic inputs for all of the services that Metro Vancouver provides – materials, supplies, labour, energy, chemicals, contractors etc. This makes up about 55% of the proposed 2022 operating budget and is projected to increase on average by about 3.8% over the term of the plan. This is essentially inflationary, especially taking into consideration regional growth.

Debt Service – This represents just under 20% of the proposed 2022 operating budget. Much of the capital program is funded through borrowing and thus debt servicing is a function of the size of that capital program, thus the growth that is projected over the five-year term.

Contribution to Capital – This is the "Pay as You Go" funding for the capital program which is a key factor in avoiding debt and keeping long term costs as low as possible. This represents about 25% of the proposed 2022 operating budget, and the easing of this program is the other key financial tool which has been used to soften the impact for 2022.

The 2022 – 2026 Metro Vancouver Districts Operating Budget is summarized in the table below.

2021-2026 METRO VANCOUVER DISTRICTS OPERATING BUDGET						
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Revenues						
Water Sales	$ 316.4	$329.3	$349.7	$389.5	$435.6	$486.3
Liquid Waste Services Levy	288.3	301.4	355.0	424.2	513.4	626.0
Solid Waste Tipping Fees	108.5	112.9	118.4	124.7	131.5	138.4
Housing Rents	41.3	42.1	42.9	46.6	49.2	57.7
MVRD Requisitions	80.9	89.9	101.8	107.9	111.0	115.3
Other Revenue	84.2	103.0	109.9	126.7	149.2	142.7
Transfer from Reserves	28.3	39.3	27.8	27.4	25.2	25.3
Total Revenues	**$ 947.9**	**$1,017.9**	**$1,105.5**	**$1,247.0**	**$1,415.1**	**$1,591.7**
Expenditures						
Water Services	$ 320.1	$335.4	$351.6	$391.6	$437.5	$488.3
Liquid Waste Services	354.4	391.2	442.8	524.3	633.8	739.8
Solid Waste Services	118.5	123.0	129.3	137.2	144.3	151.4
MVHC	53.7	54.8	60.3	66.8	68.8	76.4
MVRD	101.1	113.5	121.4	127.1	130.7	135.8
Total Expenditures	**$ 947.9**	**$1,017.9**	**$1,105.5**	**$1,247.0**	**$1,415.1**	**$1,591.7**

Capital Expenditures

The 2022 - 2026 Metro Vancouver Districts planned capital cash flows are summarized in the table below.

The 2022 - 2026 Capital plan includes at least $200 million of capital costs being carried forward as incomplete from 2020. Further, through the review of the capital projects through this budget cycle, over $450 million of projects were deferred from the previous capital plan.

ALTERNATIVES

1. That the Board:
   a) endorse the 2022 Budget and 2022 - 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation, as presented, and direct staff to prepare the necessary budget information to be presented at the October 29, 2021 Metro Vancouver Districts and Housing Corporation Board meetings for consideration; and
   b) endorse a 30-year amortization term for the North Shore Sewerage Areas share of the debt related to North Shore Wastewater Treatment Plant Project as requested by the three north shore municipal Councils; and
   c) direct staff to calculate the water rates applying the 2022 increase wholly to the peak rate; and
   d) endorse amendments to the Cost Apportionment Bylaw to enable the division of the GVS&DD levy into separate dry and wet weather components and issue a separate requisition for each component.

2. That the Board make recommendations to amend the 2022 Budget and 2022 - 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation, as presented, and endorse the 2022 Budget and 2022 - 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation as amended.

FINANCIAL IMPLICATIONS

If the Board endorses the 2022 Budget and 2022 - 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation as presented under alternative one, the cost to the average regional household will increase by $21 in 2022 for a total impact of $595 for all Metro Vancouver services.

The Board may wish to consider recommending amendments to the financial plan to reflect program priorities. Any proposed changes could require an update to the revenues required to fund the priorities in the plan.

SUMMARY / CONCLUSION

During the first two weeks of October, the 2022 Budget and 2022 - 2026 Financial Plans for Metro Vancouver's legal entities and functions were presented to the following ten Board Standing Committees for the individual functions that fall under the oversight of those Committees:

- Indigenous Relations
- Climate Action
- Electoral Area
- Finance and Intergovernment
- Housing
- Regional Parks
- Regional Planning
- Water
- Liquid Waste
- Zero Waste

The Metro Vancouver Standing Committees were presented with individual reports covering the 2022 Budget and 2022 - 2026 Financial Plans for each function including program highlights, financial plan highlights, financial information for multiple years as well as a "What's Happening" summary page that described the key activities projected over the five-year period of the financial plan. Each Committee reviewed and endorsed their individual financial plans and provided comments and

direction where appropriate for consideration by the Board at the October 20, 2021 Board Budget Workshop.

Within this report, the 2022 Budget and 2022 - 2026 Financial Plan for the Metro Vancouver Districts and Housing Corporation have been consolidated for Board consideration and present the overall financial forecast for Metro Vancouver over the next five years. The proposed Financial Plan includes significant capital investment that will be required if Metro Vancouver and its member jurisdictions are to meet the growth and regulatory demands of the region over the coming years. For 2021, the plan represents a $21 in 2021 for a total impact of $595 for all Metro Vancouver services.

Staff recommend endorsing the 2022 Budget and 2022 - 2026 Financial Plan as presented under alternative one.

Attachments:
1. Proposed 2022 - 2026 Financial Plan
2. GVWD Summary
3. GVS&DD Summary
4. MVHC Summary
5. MVRD Summary
6. Budget in Brief

2022-2026 Financial Plan

October 2021

Metro Vancouver Districts
2022 - 2026 Financial Plan Information

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METRO VANCOUVER DISTRICTS
ESTIMATED HOUSEHOLD IMPACT
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 FINAL	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
Vancouver Sewerage Area											
Water Services	$ 171	$ 175	2.3%	$ 183	4.6%	$ 200	9.3%	$ 221	10.2%	$ 244	10.3%
Liquid Waste Services	322	333	3.6%	371	11.4%	437	17.7%	549	25.7%	641	16.7%
Solid Waste Services	60	63	4.3%	65	3.4%	68	3.7%	71	4.5%	74	4.3%
Metro Vancouver Regional District Services	70	76	9.0%	85	11.0%	88	3.8%	89	1.5%	91	2.5%
Total Household Impact	**$ 623**	**$ 647**	3.9%	**$ 704**	8.7%	**$ 793**	12.5%	**$ 930**	17.3%	**$ 1,050**	12.8%
North Shore Sewerage Area											
Water Services	$ 171	$ 175	2.3%	$ 183	4.6%	$ 200	9.3%	$ 221	10.2%	$ 244	10.3%
Liquid Waste Services	365	378	3.4%	481	27.4%	592	22.9%	708	19.7%	761	7.5%
Solid Waste Services	60	63	4.3%	65	3.4%	68	3.7%	71	4.5%	74	4.3%
Metro Vancouver Regional District Services	70	76	9.0%	85	11.0%	88	3.8%	89	1.5%	91	2.5%
Total Household Impact	**$ 666**	**$ 692**	3.8%	**$ 814**	17.7%	**$ 948**	16.3%	**$ 1,089**	14.9%	**$ 1,170**	7.4%
Lulu Island West Sewerage Area											
Water Services	$ 171	$ 175	2.3%	$ 183	4.6%	$ 200	9.3%	$ 221	10.2%	$ 244	10.3%
Liquid Waste Services	248	256	3.4%	284	10.9%	344	21.1%	393	14.4%	429	8.9%
Solid Waste Services	60	63	4.3%	65	3.4%	68	3.7%	71	4.5%	74	4.3%
Metro Vancouver Regional District Services	70	76	9.0%	85	11.0%	88	3.8%	89	1.5%	91	2.5%
Total Household Impact	**$ 549**	**$ 570**	3.8%	**$ 617**	8.1%	**$ 700**	13.4%	**$ 774**	10.6%	**$ 838**	8.2%
Fraser Sewerage Area											
Water Services	$ 171	$ 175	2.3%	$ 183	4.6%	$ 200	9.3%	$ 221	10.2%	$ 244	10.3%
Liquid Waste Services	240	245	2.0%	285	16.5%	327	14.6%	380	16.1%	485	27.6%
Solid Waste Services	60	63	4.3%	65	3.4%	68	3.7%	71	4.5%	74	4.3%
Metro Vancouver Regional District Services	70	76	9.0%	85	11.0%	88	3.8%	89	1.5%	91	2.5%
Total Household Impact	**$ 541**	**$ 559**	3.2%	**$ 618**	10.6%	**$ 683**	10.4%	**$ 761**	11.3%	**$ 894**	17.5%

	2021	2022		2023		2024		2025		2026	
	Final	Prior Year Forecast	Current Year Forecast	Prior Year Forecast	Current Year Forecast	Prior Year Forecast	Current Year Forecast	Prior Year Forecast	Current Year Forecast	Prior Year Forecast	Current Year Forecast
Metro Vancouver Average											
Water Services	$ 171	$ 177	$ 175	$ 186	$ 183	$ 200	$ 200	$ 219	$ 221	N/A	$ 244
Liquid Waste Services	273	298	281	327	324	360	379	411	452	N/A	543
Solid Waste Services	60	64	63	66	65	69	68	72	71	N/A	74
Metro Vancouver Regional District Services	70	73	76	77	85	81	88	82	89	N/A	91
Total Household Impact	**$ 574**	**$ 612**	**$ 595**	**$ 656**	**$ 657**	**$ 710**	**$ 735**	**$ 784**	**$ 833**	**N/A**	**$ 952**
% Change Total			**3.5%**		**10.4%**		**11.8%**		**13.3%**		**14.3%**

METRO VANCOUVER DISTRICTS
REVENUE AND EXPENDITURE SUMMARY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Water Sales	$ 316,341,192	$ 329,365,517	4.1%	$ 349,671,026	6.2%	$ 389,568,205	11.4%	$ 435,512,851	11.8%	$ 486,439,366	11.7%
Liquid Waste Services Levy	288,225,540	301,424,687	4.6%	354,996,628	17.8%	424,243,103	19.5%	513,355,412	21.0%	625,975,409	21.9%
Solid Waste Tipping Fees	108,516,645	112,909,870	4.0%	118,375,791	4.8%	124,657,561	5.3%	131,471,016	5.5%	138,384,365	5.3%
Metro Vancouver Regional District Requisitions	80,939,658	89,868,576	11.0%	101,830,420	13.3%	107,887,056	5.9%	111,024,874	2.9%	115,315,783	3.9%
Compensation Services Revenue	484,531	503,691	4.0%	510,310	1.3%	520,172	1.9%	533,079	2.5%	538,446	1.0%
Collective Bargaining Services Revenue	900,427	934,437	3.8%	948,056	1.5%	964,568	1.7%	985,392	2.2%	997,791	1.3%
Housing Rents	41,303,421	42,110,363	2.0%	42,910,062	1.9%	46,572,836	8.5%	49,231,139	5.7%	57,651,998	17.1%
Liquid Waste Industrial Charges	11,756,424	12,262,636	4.3%	12,495,626	1.9%	12,733,043	1.9%	12,974,971	1.9%	13,221,495	1.9%
Energy Sales	6,239,530	6,401,758	2.6%	6,568,204	2.6%	6,738,977	2.6%	6,914,190	2.6%	7,093,959	2.6%
Transfer from DCC Reserves	43,145,119	60,751,328	40.8%	65,014,135	7.0%	78,051,107	20.1%	99,223,872	27.1%	91,952,659	(7.3%)
User Fees	5,184,946	5,977,543	15.3%	7,416,180	24.1%	8,694,278	17.2%	9,546,095	9.8%	9,754,489	2.2%
Housing Mortgage Subsidies	2,099,058	1,885,840	(10.2%)	1,921,671	1.9%	2,408,182	25.3%	2,445,387	1.5%	2,483,298	1.6%
Non-Road Diesel Permit Fees	1,365,000	1,070,000	(21.6%)	1,070,000	0.0%	1,070,000	0.0%	1,070,000	0.0%	1,070,000	0.0%
Regional Global Positioning System User Fees	288,091	287,366	(0.3%)	292,684	1.9%	298,846	2.1%	304,020	1.7%	309,373	1.8%
Electoral Area Requisition	389,401	400,973	3.0%	416,018	3.8%	420,991	1.2%	438,926	4.3%	447,422	1.9%
Love Food Hate Waste	492,000	400,000	(18.7%)	375,000	(6.3%)	375,000	0.0%	375,000	0.0%	375,000	0.0%
Zero Waste Conference	325,000	337,000	3.7%	350,500	4.0%	366,200	4.5%	366,200	0.0%	366,200	0.0%
Other External Revenues	11,537,524	11,768,988	2.0%	12,479,905	6.0%	14,009,628	12.3%	14,062,386	0.4%	14,096,253	0.2%
Transfer from Sustainability Innovation Fund Reserves	6,456,883	2,711,001	(58.0%)	697,001	(74.3%)	442,001	(36.6%)	-	(100.0%)	-	0.0%
Transfer from Reserves	21,882,993	36,560,225	67.1%	27,145,711	(25.8%)	26,955,348	(0.7%)	25,235,203	(6.4%)	25,251,050	0.1%
TOTAL REVENUES	**$ 947,873,383**	**$ 1,017,931,799**	**7.4%**	**$ 1,105,484,928**	**8.6%**	**$ 1,246,977,102**	**12.8%**	**$ 1,415,070,013**	**13.5%**	**$ 1,591,724,356**	**12.5%**
EXPENDITURES											
Operating Programs:											
Greater Vancouver Water District	$ 320,118,682	$ 335,418,572	4.8%	$ 351,645,444	4.8%	$ 391,611,166	11.4%	$ 437,469,848	11.7%	$ 488,295,616	11.6%
Greater Vancouver Sewerage and Drainage District:											
Liquid Waste	354,405,786	391,216,210	10.4%	442,846,481	13.2%	524,324,140	18.4%	633,814,301	20.9%	739,838,192	16.7%
Solid Waste	118,512,571	122,991,007	3.8%	129,345,395	5.2%	137,215,550	6.1%	144,266,385	5.1%	151,422,703	5.0%
Metro Vancouver Housing Corporation	53,692,021	54,798,873	2.1%	60,287,835	10.0%	66,763,753	10.7%	68,820,418	3.1%	76,409,277	11.0%
Metro Vancouver Regional District											
Air Quality	12,560,687	12,498,252	(0.5%)	12,840,167	2.7%	12,873,244	0.3%	13,054,849	1.4%	13,761,638	5.4%
E911 Emergency Telephone Service	4,633,573	4,748,693	2.5%	4,866,654	2.5%	4,987,528	2.5%	5,111,386	2.5%	5,238,304	2.5%
Electoral Area Service	678,891	797,641	17.5%	687,686	(13.8%)	703,074	2.2%	694,009	(1.3%)	807,505	16.4%
General Government Administration	5,681,876	6,799,517	19.7%	6,939,384	2.1%	7,033,110	1.4%	7,139,823	1.5%	7,150,546	0.2%
General Government-Zero Waste Collaboration Initiatives	1,660,020	1,606,945	(3.2%)	1,591,377	(1.0%)	1,609,503	1.1%	1,609,240	0.0%	1,608,129	(0.1%)
Housing Planning and Policy	6,554,912	6,353,628	(3.1%)	8,248,312	29.8%	8,276,572	0.3%	8,296,943	0.2%	8,423,367	1.5%
Regional Emergency Management	228,945	233,731	2.1%	234,540	0.3%	236,381	0.8%	218,128	(7.7%)	213,230	(2.2%)
Regional Economic Prosperity	1,530,000	2,785,217	82.0%	3,351,233	20.3%	3,443,526	2.8%	3,488,095	1.3%	3,534,479	1.3%
Regional Employers Services	3,102,235	3,057,423	(1.4%)	3,022,613	(1.1%)	3,072,678	1.7%	3,127,170	1.8%	3,168,958	1.3%
Regional Global Positioning System	324,719	337,366	3.9%	343,684	1.9%	350,866	2.1%	357,080	1.8%	363,494	1.8%
Regional Parks	58,915,373	68,717,860	16.6%	73,920,687	7.6%	79,116,862	7.0%	82,097,601	3.8%	85,840,118	4.6%
Regional Planning	4,139,538	4,302,565	3.9%	4,415,797	2.6%	4,452,402	0.8%	4,588,700	3.1%	4,723,287	2.9%
Sasamat Fire Protection Service	1,133,554	1,268,299	11.9%	897,639	(29.2%)	906,747	1.0%	916,038	1.0%	925,513	1.0%
	101,144,323	113,507,137	12.2%	121,359,773	6.9%	127,062,493	4.7%	130,699,062	2.9%	135,758,568	3.9%
TOTAL EXPENDITURES	**$ 947,873,383**	**$ 1,017,931,799**	**7.4%**	**$ 1,105,484,928**	**8.6%**	**$ 1,246,977,102**	**12.8%**	**$ 1,415,070,014**	**13.5%**	**$ 1,591,724,356**	**12.5%**

GREATER VANCOUVER WATER DISTRICT
WATER SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Water Sales	$ 316,341,192	$ 329,365,517	4.1%	$ 349,671,026	6.2%	$ 389,568,205	11.4%	$ 435,512,851	11.8%	$ 486,439,366	11.7%
Other External Revenues	1,674,556	1,657,055		1,878,418		1,946,961		1,860,997		1,760,250	
Transfer from Sustainability Innovation Fund Reserves	2,006,934	900,000		-		-		-		-	
Transfer from Reserves	96,000	3,496,000		96,000		96,000		96,000		96,000	
TOTAL REVENUES	**$ 320,118,682**	**$ 335,418,572**	**4.8%**	**$ 351,645,444**	**4.8%**	**$ 391,611,166**	**11.4%**	**$ 437,469,848**	**11.7%**	**$ 488,295,616**	**11.6%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Reserve	$ 723,000	$ 723,000		$ 723,000		$ 723,000		$ 723,000		$ 723,000	
Research and Innovation	588,600	588,445		589,580		602,319		626,435		632,230	
Utility Modeling and Data Analytics	1,626,994	2,101,727		2,113,657		2,179,661		2,229,587		2,278,452	
Utility Policy and Planning	1,357,556	1,601,001		1,509,808		1,523,153		1,560,467		1,595,395	
	4,296,150	5,014,173	16.7%	4,936,045	(1.6%)	5,028,133	1.9%	5,139,489	2.2%	5,229,077	1.7%
Engineering and Construction											
Minor Capital Projects	8,542,892	9,416,652		9,795,046		10,193,664		10,615,180		10,872,264	
Infrastructure Operations Support	1,462,536	2,025,714		2,053,668		2,137,784		2,174,998		2,232,360	
Dispatch	129,772	131,424		134,031		137,114		140,269		143,392	
	10,135,200	11,573,790	14.2%	11,982,745	3.5%	12,468,562	4.1%	12,930,447	3.7%	13,248,016	2.5%
Shared and Support Services											
Engineers in Training	325,547	434,233		442,311		452,219		462,354		472,728	
Business & Shared Services Support	751,910	732,088		746,253		763,465		781,078		799,094	
Shared & Utility Services	-	656,000		159,520		163,907		168,303		172,802	
Minor Capital Projects	812,108	1,016,387		1,057,229		1,100,253		1,145,750		1,173,498	
Records Management	109,200	111,408		113,626		116,308		119,054		121,863	
	1,998,765	2,950,116	47.6%	2,518,939	(14.6%)	2,596,152	3.1%	2,676,539	3.1%	2,739,985	2.4%
Watershed and Environmental Management											
Watershed and Environmental Management	12,644,885	12,855,271		12,645,688		12,921,311		13,177,550		13,734,765	
	12,644,885	12,855,271	1.7%	12,645,688	(1.6%)	12,921,311	2.2%	13,177,550	2.0%	13,734,765	4.2%
Operations and Maintenance											
Drinking Water Residuals	1,002,120	1,108,925		1,132,417		1,158,811		1,185,934		1,213,811	
Lake City Operations	955,508	966,185		978,113		1,000,616		1,023,633		1,045,321	
Maintenance	9,173,510	9,263,780		10,004,767		10,608,148		10,964,987		11,628,872	
SCADA Control Systems	5,487,404	5,873,474		5,970,169		6,160,652		6,376,736		6,600,226	
Secondary Disinfection	1,438,767	1,225,831		1,277,907		1,351,678		1,430,400		1,640,091	
Seymour Capilano Filtration Plant	9,621,163	9,712,427		9,925,006		10,194,044		10,471,911		10,893,383	
Coquitlam Water Treatment Plant	6,580,751	6,584,655		6,727,731		7,012,601		7,303,176		7,501,952	
Energy Management	122,421	210,569		273,267		285,992		294,752		303,334	
Utility Voice Radio	124,754	122,467		123,894		127,275		130,547		133,193	
Water Supply	19,278,229	21,016,987		20,144,464		21,046,997		21,644,617		22,438,646	
	53,784,627	56,085,300	4.3%	56,557,735	0.8%	58,946,814	4.2%	60,826,693	3.2%	63,398,829	4.2%
Interagency Projects and Quality Control											
Drinking Water Quality Control	2,866,332	2,879,943		2,898,162		2,965,429		3,067,980		3,204,930	
Interagency Projects	552,535	562,330		562,524		769,688		786,922		831,616	
	3,418,867	3,442,273	0.7%	3,460,686	0.5%	3,735,117	7.9%	3,854,902	3.2%	4,036,546	4.7%
Administration and Department Support	2,158,078	2,207,260	2.3%	2,314,202	4.8%	2,369,363	2.4%	2,425,822	2.4%	2,482,762	2.3%
Communications Program	440,000	448,360	1.9%	456,879	1.9%	465,560	1.9%	474,406	1.9%	483,420	1.9%
Allocation of Centralized Support Costs	26,052,630	28,824,858	10.6%	28,281,238	(1.9%)	28,363,072	0.3%	28,677,338	1.1%	28,882,147	0.7%
Total Operating Programs	114,929,202	123,401,401	7.4%	123,154,157	(0.2%)	126,894,084	3.0%	130,183,186	2.6%	134,235,547	3.1%
Allocation of Project Delivery Cost	2,889,566	4,073,330	41.0%	5,415,922	33.0%	5,650,644	4.3%	5,687,996	0.7%	5,700,215	0.2%
Debt Service	71,324,155	84,174,697	18.0%	94,759,076	12.6%	118,622,866	25.2%	137,751,307	16.1%	156,267,438	13.4%
Contribution to Capital	130,975,759	123,769,144	(5.5%)	128,316,289	3.7%	140,443,572	9.5%	163,847,359	16.7%	192,092,416	17.2%
TOTAL EXPENDITURES	**$ 320,118,682**	**$ 335,418,572**	**4.8%**	**$ 351,645,444**	**4.8%**	**$ 391,611,166**	**11.4%**	**$ 437,469,848**	**11.7%**	**$ 488,295,616**	**11.6%**
Blended Water Rate ($/m3)	$ 0.8110	$ 0.8444	4.1%	$ 0.8958	6.1%	$ 0.9912	10.6%	$ 1.1072	11.7%	$ 1.2345	11.5%

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Water Mains									
Angus Drive Main	$ 30,700,000	$ 50,000	$ -	$ -	$ -	$ -	$ 50,000	Construction	Growth
Annacis Main No. 2 - Queensborough Crossover Improvement	900,000	500,000	-	-	-	-	500,000	Construction	Maintenance
Annacis Main No. 2 and Barnston Island Main Online Chlorine and pH Analyzers	750,000	450,000	300,000	-	-	-	750,000	Construction	Upgrade
Annacis Main No. 3 Annieville Channel Crossing Scour Protection	850,000	500,000	-	-	-	-	500,000	Construction	Maintenance
Annacis Main No. 3 BHP Potash Facility Pipe Protection	600,000	300,000	-	-	-	-	300,000	Construction	Maintenance
Annacis Main No. 5 (North)	60,600,000	1,600,000	16,500,000	15,000,000	5,500,000	20,000,000	58,600,000	Construction	Growth
Annacis Main No. 5 (South)	11,100,000	1,100,000	1,000,000	14,000,000	14,000,000	16,800,000	46,900,000	Construction	Growth
Annacis Water Supply Tunnel	488,000,000	66,000,000	70,000,000	80,000,000	70,000,000	65,000,000	351,000,000	Construction	Growth
Boundary Road Main No. 2 & No. 3 Decommissioning	1,500,000	750,000	-	-	-	-	750,000	Construction	Maintenance
Burnaby Mountain Main No. 2	-	-	300,000	1,600,000	400,000	-	2,300,000	Not started	Maintenance
Cambie-Richmond Water Supply Tunnel	55,250,000	18,200,000	2,000,000	8,000,000	8,500,000	3,500,000	40,200,000	Design	Resilience
Central Park Main No. 2 (10th Ave to Westburnco)	2,750,000	900,000	1,200,000	5,500,000	6,000,000	8,000,000	21,600,000	Design	Maintenance
Central Park Main No. 2 (Patterson to 10th Ave)	91,900,000	19,700,000	17,500,000	13,000,000	-	-	50,200,000	Construction	Maintenance
Clayton Langley Main No. 2	700,000	400,000	600,000	700,000	200,000	3,000,000	4,900,000	Design	Resilience
Coquitlam Water Main	118,220,000	31,500,000	65,600,000	76,300,000	90,400,000	157,000,000	420,800,000	Multiple	Growth
Douglas Road Main No. 2 - Kincaid Section	12,300,000	1,000,000	1,000,000	500,000	-	-	2,500,000	Construction	Maintenance
Douglas Road Main No. 2 (Flow Meter 169) Replacement	1,000,000	500,000	500,000	-	-	-	1,000,000	Construction	Maintenance
Douglas Road Main No. 2 (Vancouver Heights Section)	21,486,000	300,000	-	-	-	-	300,000	Construction	Maintenance
Douglas Road Main No. 2 Still Creek	63,100,000	14,600,000	16,000,000	13,500,000	6,000,000	-	50,100,000	Construction	Maintenance
Douglas Road Main Protection	1,500,000	550,000	500,000	400,000	-	-	1,450,000	Construction	Maintenance
First Narrows Tunnel Isolation Chamber Improvements	7,000,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Haney Main No. 4 (West Section)	1,900,000	400,000	350,000	-	-	-	750,000	Multiple	Growth
Haney Water Supply Tunnel	25,250,000	5,000,000	15,000,000	5,000,000	5,000,000	10,000,000	40,000,000	Definition	Resilience
Improvements to Capilano Mains No. 4 and 5	1,700,000	1,000,000	550,000	-	-	-	1,550,000	Construction	Maintenance
Kennedy Newton Main	122,300,000	23,850,000	13,000,000	9,500,000	-	-	46,350,000	Construction	Growth
Lulu Island - Delta Main - Scour Protection Phase 2	3,550,000	2,650,000	800,000	-	-	-	3,450,000	Construction	Maintenance
Lulu-Delta Water Supply Tunnel	-	-	4,000,000	5,500,000	7,500,000	8,000,000	25,000,000	Not started	Maintenance
Maple Ridge Main West Lining Repairs	3,500,000	-	500,000	1,500,000	1,300,000	-	3,300,000	Construction	Maintenance
Newton Reservoir Connection	-	-	450,000	1,100,000	4,500,000	-	6,050,000	Not started	Growth
Online Chlorine Monitoring Stations	-	-	-	-	450,000	1,000,000	1,450,000	Not started	Upgrade
Port Mann Main No. 2 (South)	36,800,000	500,000	-	-	-	-	500,000	Multiple	Growth
Port Mann No. 1 South Section Decommissioning	200,000	100,000	750,000	-	-	-	850,000	Design	Maintenance
Port Moody Main No. 1 Christmas Way Relocation	2,350,000	1,900,000	400,000	-	-	-	2,300,000	Construction	Maintenance
Port Moody Main No. 3 Dewdney Trunk Rd Relocation	2,700,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Port Moody Main No. 3 Scott Creek Section	1,000,000	550,000	1,000,000	2,500,000	2,000,000	2,000,000	8,050,000	Design	Maintenance
Queensborough Main Royal Avenue Relocation	7,500,000	2,300,000	2,200,000	700,000	-	-	5,200,000	Construction	Maintenance
Rehabilitation of AN2 on Queensborough Bridge	2,500,000	1,700,000	-	-	-	-	1,700,000	Construction	Maintenance
Relocation and Protection for MOTI Expansion Project Broadway	8,900,000	650,000	500,000	1,500,000	1,500,000	3,500,000	7,650,000	Construction	Maintenance
Relocation and Protection for MOTI George Massey Crossing Replacement	450,000	25,000	25,000	-	-	700,000	750,000	Design	Maintenance
Relocation and Protection for Translink Expansion Project Surrey Langley SkyTrain	600,000	25,000	-	1,100,000	2,200,000	2,200,000	5,525,000	Design	Maintenance
Sapperton Main No. 1 New Line Valve and Chamber	3,800,000	1,100,000	1,500,000	-	-	-	2,600,000	Construction	Upgrade
Sapperton Main No. 2 North Road Relocation and Protection	6,500,000	4,550,000	1,600,000	-	-	-	6,150,000	Construction	Maintenance
Scour Protection Assessments and Construction General	4,000,000	1,300,000	-	150,000	1,000,000	-	2,450,000	Construction	Resilience
Second Narrows Crossing 1 & 2 (Burrard Inlet Crossing Removal)	2,000,000	500,000	1,000,000	500,000	1,000,000	12,000,000	15,000,000	Design	Maintenance
Second Narrows Water Supply Tunnel	468,550,000	75,000,000	70,000,000	30,000,000	20,600,000	-	195,600,000	Construction	Resilience
Seymour Main No. 2 Joint Improvements	3,252,000	750,000	1,000,000	-	1,000,000	1,000,000	3,750,000	Construction	Resilience
Seymour Main No. 5 III (North)	8,000,000	250,000	-	-	-	100,000	350,000	Design	Resilience
South Delta Main No. 1 - 28 Ave to 34B Ave	22,650,000	100,000	-	-	-	-	100,000	Construction	Upgrade

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
South Delta Main No. 1 - Ferry Road Check Valve Replacement	600,000	500,000	-	-	-	-	500,000	Construction	Maintenance
South Delta Mains - 28 Ave Crossover	10,500,000	50,000	-	-	-	-	50,000	Construction	Upgrade
South Surrey Main No. 1 Nickomekl Dam Relocation	7,100,000	1,700,000	3,000,000	2,100,000	-	-	6,800,000	Construction	Maintenance
South Surrey Main No. 2	2,000,000	1,100,000	500,000	500,000	1,000,000	3,500,000	6,600,000	Design	Growth
South Surrey Main No. 2 Nickomekl Dam Prebuild	2,000,000	500,000	1,000,000	500,000	-	-	2,000,000	Construction	Growth
South Surrey Supply Main (Serpentine River) Bridge Support Modification	1,350,000	950,000	-	-	-	-	950,000	Construction	Maintenance
Stanley Park Water Supply Tunnel	340,000,000	38,900,000	50,000,000	70,000,000	50,000,000	55,000,000	263,900,000	Construction	Maintenance
Tilbury Junction Chamber Valves Replacement with Actuators	5,600,000	300,000	-	-	-	-	300,000	Construction	Upgrade
Tilbury Main North Fraser Way Valve Addition	3,100,000	800,000	1,400,000	450,000	-	-	2,650,000	Construction	Maintenance
Water Chamber Improvements and Repairs	2,000,000	1,000,000	-	-	-	-	1,000,000	Construction	Maintenance
Water Meter Upgrades	22,400,000	2,700,000	3,950,000	3,500,000	3,500,000	3,600,000	17,250,000	Construction	Upgrade
Water Optimization - Flow Meters (Non-billing) Phase 1	-	-	1,500,000	2,000,000	3,000,000	4,000,000	10,500,000	Not started	Upgrade
Water Optimization - Flow Meters (Non-billing) Phase 2	3,000,000	250,000	1,500,000	750,000	2,000,000	3,000,000	7,500,000	Design	Upgrade
Water Optimization - Instrumentation	1,500,000	750,000	2,100,000	2,500,000	2,500,000	2,500,000	10,350,000	Design	Upgrade
Water Optimization Automation & Instrumentation	9,550,000	850,000	900,000	-	-	-	1,750,000	Construction	Upgrade
Whalley Kennedy Main No. 2	-	-	1,000,000	1,300,000	1,300,000	2,000,000	5,600,000	Not started	Growth
Whalley Main	31,800,000	150,000	-	-	-	-	150,000	Construction	Growth
Total Water Mains	**$ 2,152,658,000**	**$ 333,800,000**	**$ 374,475,000**	**$ 371,150,000**	**$ 312,350,000**	**$ 387,400,000**	**$ 1,779,175,000**		
Pump Stations									
Barnston/Maple Ridge Pump Station - Back-up Power	$ 14,000,000	$ 8,700,000	$ 4,500,000	$ 600,000	$ 2,000,000	$ 2,700,000	$ 18,500,000	Construction	Resilience
Burnaby Mountain Pump Station No. 2	1,300,000	100,000	900,000	1,100,000	700,000	9,000,000	11,800,000	Design	Maintenance
Cape Horn Pump Station No. 3	6,800,000	1,500,000	2,250,000	4,500,000	22,000,000	59,000,000	89,250,000	Design	Growth
Capilano Raw Water Pump Station - Back-up Power	42,000,000	13,050,000	13,000,000	1,000,000	-	-	27,050,000	Construction	Resilience
Capilano Raw Water Pump Station Bypass PRV Upgrades	1,700,000	700,000	500,000	200,000	-	-	1,400,000	Construction	Maintenance
Central Park WPS Starters Replacement	8,000,000	4,500,000	1,550,000	-	-	-	6,050,000	Construction	Maintenance
Grandview Pump Station Improvements	2,600,000	1,550,000	100,000	-	-	-	1,650,000	Construction	Resilience
Newton Pump Station No. 2	50,500,000	5,400,000	20,400,000	13,500,000	5,000,000	-	44,300,000	Construction	Growth
Pebble Hill Pump Station Seismic Upgrade	-	-	-	150,000	650,000	1,000,000	1,800,000	Not started	Resilience
Westburnco Pump Station - Back-up Power	23,500,000	1,900,000	2,950,000	5,500,000	4,500,000	7,000,000	21,850,000	Construction	Resilience
Westburnco Pump Station No. 2 VFD Replacements	2,550,000	1,650,000	300,000	-	-	-	1,950,000	Construction	Maintenance
Total Pump Stations	**$ 152,950,000**	**$ 39,050,000**	**$ 46,450,000**	**$ 26,550,000**	**$ 34,850,000**	**$ 78,700,000**	**$ 225,600,000**		
Reservoirs									
Burnaby Mountain Tank No. 2	$ 3,350,000	$ 1,249,000	$ 1,700,000	$ 7,000,000	$ 7,000,000	$ 4,000,000	$ 20,949,000	Design	Resilience
Burnaby Mountain Tank No. 3	3,400,000	800,000	1,700,000	500,000	7,000,000	7,000,000	17,000,000	Design	Resilience
Cape Horn Reservoir Condition Assessment and Structural Repair	-	-	250,000	250,000	1,200,000	-	1,700,000	Not started	Maintenance
Capilano Energy Recovery Facility 66" PRV Replacement	-	-	-	1,500,000	-	3,500,000	5,000,000	Not started	Maintenance
Central Park Reservoir Structural Improvements	-	-	-	300,000	200,000	1,100,000	1,600,000	Not started	Maintenance
Clayton Reservoir	27,600,000	550,000	-	-	-	-	550,000	Construction	Resilience
Dechlorination for Reservoir Overflow and Underdrain Discharges	2,700,000	1,050,000	1,000,000	300,000	-	-	2,350,000	Construction	Maintenance
Fleetwood Reservoir	56,367,000	23,000,000	15,350,000	2,150,000	-	-	40,500,000	Construction	Growth
Grandview Reservoir Unit No. 2	-	-	-	400,000	800,000	1,400,000	2,600,000	Not started	Growth
Hellings Tank No. 2	43,911,000	4,500,000	6,000,000	11,500,000	9,800,000	5,700,000	37,500,000	Construction	Growth
Kersland Reservoir No. 1 Structural Improvements	6,250,000	4,000,000	-	-	-	-	4,000,000	Construction	Maintenance
Little Mountain Reservoir Roof Upgrades	3,450,000	150,000	-	-	-	-	150,000	Construction	Maintenance
Pebble Hill Reservoir No. 3 Seismic Upgrade	500,000	50,000	25,000	-	5,000,000	4,000,000	9,075,000	Design	Resilience
Pebble Hill Reservoir Seismic Upgrade	13,600,000	5,545,000	2,500,000	-	-	-	8,045,000	Construction	Resilience
Reservoir Isolation Valve Automation	6,450,000	500,000	1,000,000	1,000,000	1,250,000	1,150,000	4,900,000	Construction	Resilience
Reservoir Sampling Kiosks - Multi Location	-	-	500,000	500,000	300,000	-	1,300,000	Not started	Upgrade
Sunnyside Reservoir Units 1 and 2 Seismic Upgrade	9,100,000	60,000	3,000,000	7,200,000	-	-	10,260,000	Design	Resilience

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Vancouver Heights System Resiliency Improvements	500,000	150,000	500,000	500,000	-	-	1,150,000	Design	Resilience
Whalley Reservoir Condition Assessment and Repairs	2,500,000	2,400,000	100,000	-	-	-	2,500,000	Construction	Maintenance
Total Reservoirs	**$ 179,678,000**	**$ 44,004,000**	**$ 33,625,000**	**$ 33,100,000**	**$ 32,550,000**	**$ 27,850,000**	**$ 171,129,000**		
Treatment Plants									
Coquitlam Intake Tower Seismic Upgrade	$ 2,000,000	$ 400,000	$ -	$ 5,000,000	$ 14,000,000	$ 5,000,000	$ 24,400,000	Design	Resilience
Coquitlam Lake Water Supply	160,730,000	14,000,000	33,000,000	30,000,000	39,000,000	45,000,000	161,000,000	Multiple	Growth
Critical Control Sites - Back-Up Power	-	-	-	200,000	300,000	400,000	900,000	Not started	Resilience
CWTP CO2 System Improvements	-	-	500,000	1,750,000	1,500,000	-	3,750,000	Not started	Maintenance
CWTP Mobile Disinfection System	-	-	750,000	2,000,000	-	-	2,750,000	Not started	Upgrade
CWTP Ozone Back-up Power	-	-	500,000	1,450,000	4,000,000	1,500,000	7,450,000	Not started	Resilience
CWTP Ozone Generation Upgrades for Units 2 & 3	7,000,000	2,050,000	100,000	-	-	-	2,150,000	Construction	Upgrade
CWTP Ozone Sidestream Pipe Heat Trace and Insulation	900,000	200,000	-	-	-	-	200,000	Construction	Maintenance
CWTP Ozone Sidestream Pump VFD Replacement	1,400,000	850,000	250,000	-	-	-	1,100,000	Construction	Maintenance
CWTP Temporary Water Supply	500,000	500,000	1,250,000	250,000	-	-	2,000,000	Design	Maintenance
Online Chlorine and pH Analyzers	-	-	600,000	1,200,000	1,200,000	1,500,000	4,500,000	Not started	Upgrade
SCFP Additional Pre-Treatment	-	-	-	-	-	1,000,000	1,000,000	Not started	Upgrade
SCFP Centralized Compressed Air System	900,000	575,000	150,000	-	-	-	725,000	Construction	Maintenance
SCFP Clearwell Baffle Replacement	-	-	450,000	1,300,000	250,000	-	2,000,000	Not started	Maintenance
SCFP Clearwell Membrane Replacement	-	-	200,000	1,200,000	-	5,500,000	6,900,000	Not started	Maintenance
SCFP OMC Building Expansion	150,000	50,000	50,000	350,000	1,600,000	500,000	2,550,000	Design	Maintenance
SCFP Polymer System Upgrade	4,650,000	3,400,000	500,000	-	-	-	3,900,000	Construction	Maintenance
SCFP SCADA/ICS Controller Upgrade	-	-	700,000	700,000	-	-	1,400,000	Not started	Maintenance
Total Treatment Plants	**$ 178,230,000**	**$ 22,025,000**	**$ 39,000,000**	**$ 45,400,000**	**$ 61,850,000**	**$ 60,400,000**	**$ 228,675,000**		
Others									
Beach Yard Facility - Site Redevelopment	-	$ -	$ -	$ -	$ 500,000	$ 1,000,000	$ 1,500,000	Not started	Maintenance
Burwell Alpine Reservoir Valve Improvements	$ 650,000	100,000	-	-	-	-	100,000	Construction	Upgrade
Capilano Hydropower	4,250,000	1,000,000	1,750,000	-	-	-	2,750,000	Definition	Opportunity
Capilano Mid-Lake Debris Boom	750,000	50,000	-	-	-	-	50,000	Construction	Resilience
Capilano Reservoir and Seymour Reservoir Dam Safety Boom Replacement	200,000	200,000	3,000,000	500,000	-	-	3,700,000	Design	Maintenance
Capilano Reservoir Boat Wharf	850,000	50,000	-	-	-	-	50,000	Construction	Resilience
Capilano Watershed Bridge Replacements - Crown Creek and Capilano River	-	-	-	-	-	95,000	95,000	Not started	Maintenance
Capilano Watershed Security Gatehouse	3,350,000	1,450,000	1,150,000	-	-	-	2,600,000	Construction	Maintenance
CLD & SFD Fasteners Replacement & Coating Repairs	2,100,000	350,000	600,000	-	-	-	950,000	Construction	Maintenance
Cleveland Dam - Lower Outlet HBV Rehabilitation	4,900,000	200,000	1,200,000	-	-	-	1,400,000	Construction	Maintenance
Cleveland Dam Drumgate Seal Replacement	250,000	-	-	500,000	500,000	-	1,000,000	Design	Maintenance
Cleveland Dam East Abutment Additional GV Series Pump Wells	750,000	50,000	-	-	-	-	50,000	Construction	Upgrade
Cleveland Dam Lower Outlet Trashrack Replacement and Debris Removal	-	-	-	-	-	500,000	500,000	Not started	Maintenance
Cleveland Dam Power Resiliency Improvements	1,700,000	1,389,000	-	-	-	-	1,389,000	Construction	Resilience
Cleveland Dam Public Warning System and Enhancements	10,000,000	3,000,000	7,000,000	-	-	-	10,000,000	Construction	Maintenance
Cleveland Dam Seismic Stability Evaluation	800,000	600,000	-	-	-	-	600,000	Design	Resilience
Cleveland Dam Spillway Resurfacing	-	-	-	-	-	400,000	400,000	Not started	Maintenance
Lower Seymour Conservation Reserve Learning Lodge Replacement	5,000,000	1,900,000	100,000	-	-	-	2,000,000	Construction	Upgrade
Newton Rechlorination Station No. 2	-	-	400,000	600,000	1,500,000	1,500,000	4,000,000	Not started	Maintenance
Pitt River Rechlorination Station Reconstruction	-	-	-	-	500,000	1,000,000	1,500,000	Not started	Maintenance
Rechlorination Station SHS Storage Tank Replacement	1,200,000	250,000	-	-	-	-	250,000	Construction	Maintenance
Rechlorination Station Upgrades	1,300,000	600,000	1,500,000	1,500,000	1,000,000	6,000,000	10,600,000	Design	Maintenance
Scour Protection - General	2,000,000	55,000	-	-	-	-	55,000	Construction	Maintenance
Seymour Falls Boat Wharf	800,000	50,000	-	-	-	-	50,000	Construction	Resilience
Seymour Falls Dam Public Warning System	-	-	1,000,000	4,000,000	5,000,000	-	10,000,000	Not started	Maintenance

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Seymour Falls Dam Seismic Stability Assessment	1,800,000	1,000,000	800,000	-	-	-	1,800,000	Construction	Resilience
Seymour Lake Debris Boom	800,000	50,000	-	-	-	-	50,000	Construction	Resilience
Seymour Reservoir Mid-Lake Debris Boom	2,300,000	50,000	-	-	-	-	50,000	Construction	Resilience
South Fraser Works Yard	32,000,000	20,000,000	1,500,000	-	-	-	21,500,000	Design	Maintenance
Total Others	**$ 77,750,000**	**$ 32,394,000**	**$ 20,000,000**	**$ 7,100,000**	**$ 9,000,000**	**$ 10,495,000**	**$ 78,989,000**		
TOTAL CAPITAL EXPENDITURES	**$ 2,741,266,000**	**$ 471,273,000**	**$ 513,550,000**	**$ 483,300,000**	**$ 450,600,000**	**$ 564,845,000**	**$ 2,483,568,000**		
CAPITAL FUNDING									
New External Borrowing	$ 1,804,866,000	$ 332,133,000	$ 373,790,000	$ 309,100,000	$ 261,420,000	$ 343,945,000	$ 1,620,388,000		
DCCs	46,080,000	-	-	24,010,000	16,370,000	16,170,000	56,550,000		
Contribution to Capital	826,130,000	123,770,000	128,320,000	140,440,000	163,850,000	192,090,000	748,470,000		
Reserve	27,590,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000		
External Funding - Interagency	36,600,000	10,370,000	6,440,000	4,750,000	3,960,000	7,640,000	33,160,000		
Total	**$ 2,741,266,000**	**$ 471,273,000**	**$ 513,550,000**	**$ 483,300,000**	**$ 450,600,000**	**$ 564,845,000**	**2,483,568,000**		
SUMMARY BY DRIVER									
Growth	$ 1,223,728,000	$ 175,150,000	$ 246,400,000	$ 260,250,000	$ 263,300,000	$ 375,400,000	$ 1,320,500,000		
Maintenance	696,736,000	145,830,000	130,725,000	136,650,000	92,350,000	121,495,000	627,050,000		
Resilience	723,402,000	138,643,000	120,875,000	73,950,000	82,000,000	51,350,000	466,818,000		
Upgrade	93,150,000	10,650,000	13,800,000	12,450,000	12,950,000	16,600,000	66,450,000		
Opportunity	4,250,000	1,000,000	1,750,000	-	-	-	2,750,000		
Total	**$ 2,741,266,000**	**$ 471,273,000**	**$ 513,550,000**	**$ 483,300,000**	**$ 450,600,000**	**$ 564,845,000**	**$ 2,483,568,000**		

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 288,225,540	$ 301,424,687	4.6%	$ 354,996,628	17.8%	$ 424,243,103	19.5%	$ 513,355,412	21.0%	$ 625,975,409	21.9%
User Fees	2,562,238	3,370,229		4,300,637		5,230,547		6,161,956		6,278,447	
Transfer from DCC Reserves	43,145,119	60,751,328		65,014,135		78,051,107		99,223,872		91,952,659	
BOD/TSS Industrial Charges	11,756,424	12,262,636		12,495,626		12,733,043		12,974,971		13,221,495	
Other External Revenues	1,400,000	1,414,821		1,426,909		1,438,999		1,451,091		1,463,185	
Transfer from Sustainability Innovation Fund Reserves	2,206,676	947,001		697,001		442,001		-		-	
Transfer from Reserves	5,109,789	11,045,508		3,915,545		2,185,340		646,998		946,997	
TOTAL REVENUES	**$ 354,405,786**	**$ 391,216,210**	**10.4%**	**$ 442,846,481**	**13.2%**	**$ 524,324,140**	**18.4%**	**$ 633,814,300**	**20.9%**	**$ 739,838,192**	**16.7%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 1,127,000	$ 1,127,000		$ 1,127,000		$ 1,127,000		$ 1,127,000		$ 1,127,000	
Utility Analysis and Infrastructure	3,233,331	2,977,326		3,478,875		4,129,706		4,532,735		4,636,901	
Utility Policy and Planning	3,063,269	3,563,541		3,909,584		4,072,069		3,941,132		4,010,604	
Wastewater Research and Innovation	3,031,617	2,161,469		1,933,555		1,869,651		1,459,182		1,495,155	
	10,455,217	9,829,336	(6.0%)	10,449,014	6.3%	11,198,426	7.2%	11,060,049	(1.2%)	11,269,660	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	489,001	492,843		492,921		493,012		493,111		510,703	
Dispatch	137,689	145,550		148,436		151,851		155,345		158,805	
Energy Management	285,649	210,568		273,267		285,992		294,751		303,334	
Engineers in Training	499,947	666,857		679,264		694,478		710,042		725,975	
Management Systems Utility Services	989,560	1,013,613		1,021,553		1,031,400		1,041,372		1,061,258	
Records Management	115,862	123,383		125,839		128,810		131,851		134,960	
Utility Voice Radio	162,808	159,823		161,687		166,099		170,368		173,821	
	2,680,516	2,812,637	4.9%	2,902,967	3.2%	2,951,642	1.7%	2,996,840	1.5%	3,068,856	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	12,290,197	12,823,691		13,769,028		14,212,147		14,700,077		15,389,067	
Source Compliance Monitoring	410,963	419,306		419,984		429,657		439,541		598,349	
Contribution to Reserve	101,285	101,284		104,284		104,951		105,630		108,495	
	12,802,445	13,344,281	4.2%	14,293,296	7.1%	14,746,755	3.2%	15,245,248	3.4%	16,095,911	5.6%
Project Delivery											
Minor Capital Projects	8,915,484	9,225,154		9,508,436		9,707,735		9,927,346		10,088,180	
	8,915,484	9,225,154	3.5%	9,508,436	3.1%	9,707,735	2.1%	9,927,346	2.3%	10,088,180	1.6%
Operations and Maintenance											
Lake City Operations	955,508	966,184		978,113		1,000,613		1,023,633		1,045,320	
Liquid Waste Residuals	33,291,360	34,406,220		30,736,502		31,661,052		32,648,752		33,637,561	
Maintenance	31,165,529	32,496,440		34,653,292		36,216,137		37,423,787		40,590,797	
SCADA Control Systems	1,065,995	1,097,380		1,113,832		1,154,795		1,180,307		1,203,845	
Urban Drainage	1,157,299	1,263,704		1,292,675		1,326,264		1,374,402		1,430,033	
Wastewater Collection	15,896,966	16,800,336		17,205,107		17,611,590		18,371,413		19,535,286	
Wastewater Treatment	45,473,059	49,626,692		54,187,765		58,271,004		60,390,427		64,871,578	
	129,005,716	136,656,956	5.9%	140,167,286	2.6%	147,241,455	5.0%	152,412,721	3.5%	162,314,420	6.5%
Administration and Department Support	2,156,200	2,674,487	24.0%	2,709,336	1.3%	2,762,325	2.0%	2,840,662	2.8%	2,892,858	1.8%
Communications Program	450,000	475,001	5.6%	475,001	0.0%	480,000	1.1%	490,000	2.1%	500,000	2.0%
Environmental Regulation and Enforcement	2,041,164	2,169,508	6.3%	2,235,376	3.0%	2,287,842	2.3%	2,341,912	2.4%	2,396,896	2.3%
Allocation of Centralized Support Costs	27,044,682	31,092,091	15.0%	32,262,255	3.8%	34,566,515	7.1%	37,178,682	7.6%	40,440,659	8.8%
Total Operating Programs	195,551,424	208,279,451	6.5%	215,002,967	3.2%	225,942,695	5.1%	234,493,460	3.8%	249,067,440	6.2%
Allocation of Project Delivery Cost	5,082,413	7,590,456	49.3%	10,092,313	33.0%	10,529,706	4.3%	10,599,309	0.7%	10,622,075	0.2%
Debt Service	73,703,813	98,990,808	34.3%	135,577,497	37.0%	197,720,347	45.8%	273,362,275	38.3%	348,504,796	27.5%
Contribution to Capital	80,068,136	76,355,495	(4.6%)	82,173,704	7.6%	90,131,392	9.7%	115,359,257	28.0%	131,643,881	14.1%
TOTAL EXPENDITURES	**$ 354,405,786**	**$ 391,216,210**	**10.4%**	**$ 442,846,481**	**13.2%**	**$ 524,324,140**	**18.4%**	**$ 633,814,301**	**20.9%**	**$ 739,838,192**	**16.7%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
VANCOUVER SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 90,044,826	$ 94,622,596	5.1%	$ 107,124,159	13.2%	$ 128,245,948	19.7%	$ 162,786,879	26.9%	$ 191,711,312	17.8%
User Fees	652,388	914,177		1,187,010		1,459,593		1,732,490		1,764,534	
Transfer from DCC Reserves	5,094,257	6,320,559		7,324,049		7,238,665		7,239,251		7,174,705	
BOD/TSS Industrial Charges	3,148,010	3,135,617		3,195,194		3,255,903		3,317,765		3,380,803	
Other External Revenues	154,282	154,282		154,282		154,282		154,282		154,282	
Transfer from Sustainability Innovation Fund Reserves	845,377	358,250		263,675		167,209		-		-	
Transfer from Reserves	5,029,789	8,293,508		3,785,545		1,960,711		516,998		627,739	
TOTAL REVENUES	**$ 104,968,929**	**$ 113,798,989**	**8.4%**	**$ 123,033,914**	**8.1%**	**$ 142,482,311**	**15.8%**	**$ 175,747,665**	**23.3%**	**$ 204,813,375**	**16.5%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 431,754	$ 426,344		$ 426,344		$ 426,344		$ 426,344		$ 426,344	
Utility Analysis and Infrastructure	1,213,810	1,097,950		1,223,548		1,468,214		1,619,100		1,656,890	
Utility Policy and Planning	1,146,347	1,320,993		1,451,776		1,513,090		1,463,398		1,489,518	
Wastewater Research and Innovation	1,161,412	817,684		731,464		707,289		552,009		565,617	
	3,953,323	3,662,971	(7.3%)	3,833,132	4.6%	4,114,937	7.4%	4,060,851	(1.3%)	4,138,369	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	194,622	186,443		186,472		186,507		186,544		193,199	
Department Technical Training	-										
Dispatch	41,173	42,945		43,797		44,804		45,835		46,856	
Energy Management	85,417	62,129		80,630		84,385		86,969		89,502	
Engineers in Training	191,526	252,274		256,967		262,723		268,611		274,638	
Management Systems Utility Services	295,908	299,117		301,460		304,366		307,309		313,177	
Records Management	34,646	36,404		37,129		38,006		38,903		39,820	
Utility Voice Radio	58,456	57,383		58,054		59,638		61,171		62,411	
	901,748	936,695	3.9%	964,509	3.0%	980,429	1.7%	995,342	1.5%	1,019,603	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	4,529,371	4,679,095		5,036,956		5,197,163		5,379,378		5,630,811	
Source Compliance Monitoring	163,563	158,623		158,880		162,539		166,278		226,355	
Contribution to Reserve	37,327	37,388		38,496		38,742		38,992		40,050	
	4,730,261	4,875,106	3.1%	5,234,332	7.4%	5,398,444	3.1%	5,584,648	3.4%	5,897,216	5.6%
Project Delivery											
Minor Capital Projects	2,869,331	3,625,573		3,744,094		3,822,118		3,906,741		3,966,721	
	2,869,331	3,625,573	26.4%	3,744,094	3.3%	3,822,118	2.1%	3,906,741	2.2%	3,966,721	1.5%
Operations and Maintenance											
Lake City Operations	366,055	365,508		370,020		378,533		387,241		395,445	
Liquid Waste Residuals	19,784,445	19,977,101		17,990,162		18,362,311		18,620,296		19,430,769	
Maintenance	8,157,588	8,842,743		9,239,101		9,559,248		9,850,145		10,278,115	
SCADA Control Systems	293,653	315,205		319,931		331,696		339,023		345,785	
Wastewater Collection	4,208,255	4,004,729		4,141,669		4,163,889		4,341,629		4,635,253	
Wastewater Treatment	12,958,525	14,465,043		15,334,853		15,884,691		16,233,732		16,740,580	
	45,768,521	47,970,329	4.8%	47,395,736	(1.2%)	48,680,368	2.7%	49,772,066	2.2%	51,825,947	4.1%
Administration and Department Support	644,768	789,241	22.4%	799,525	1.3%	815,162	2.0%	838,279	2.8%	853,682	1.8%
Communications Program	172,395	179,693	4.2%	179,693	0.0%	181,584	1.1%	185,367	2.1%	189,150	2.0%
Environmental Regulation and Enforcement	363,123	382,701	5.4%	394,320	3.0%	403,575	2.3%	413,113	2.4%	422,812	2.3%
Allocation of Centralized Support Costs	8,137,092	9,205,419	13.1%	9,387,267	2.0%	9,603,164	2.3%	10,132,473	5.5%	11,263,759	11.2%
Total Operating Programs	67,540,562	71,627,728	6.1%	71,932,608	0.4%	73,999,781	2.9%	75,888,880	2.6%	79,577,259	4.9%
Allocation of Project Delivery Cost	1,211,306	2,015,337	66.4%	2,679,604	33.0%	2,795,736	4.3%	2,814,216	0.7%	2,820,261	0.2%
Debt Service	9,186,351	10,969,678	19.4%	19,685,918	79.5%	34,855,795	77.1%	52,415,989	50.4%	69,734,705	33.0%
Contribution to Capital	27,030,710	29,186,246	8.0%	28,735,784	(1.5%)	30,830,999	7.3%	44,628,580	44.8%	52,681,150	18.0%
TOTAL EXPENDITURES	**$ 104,968,929**	**$ 113,798,989**	**8.4%**	**$ 123,033,914**	**8.1%**	**$ 142,482,311**	**15.8%**	**$ 175,747,665**	**23.3%**	**$ 204,813,375**	**16.5%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
NORTH SHORE SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 28,616,123	$ 30,045,674	5.0%	$ 38,952,335	29.6%	$ 48,813,747	25.3%	$ 59,141,748	21.2%	$ 64,319,205	8.8%
User Fees	71,039	62,515		63,654		64,816		66,001		67,210	
Transfer from DCC Reserves	1,748,354	2,256,693		2,343,337		2,063,417		2,083,514		2,107,118	
BOD/TSS Industrial Charges	861,405	907,707		924,953		942,527		960,435		978,683	
Other External Revenues	14,872	18,693		18,781		18,871		18,963		19,057	
Transfer from Sustainability Innovation Fund Reserves	149,171	65,817		48,442		30,719		-		-	
Transfer from Reserves	-	915,000		-		11,253		-		22,506	
TOTAL REVENUES	**$ 31,460,964**	**$ 34,272,099**	**8.9%**	**$ 42,351,502**	**23.6%**	**$ 51,945,350**	**22.7%**	**$ 62,270,661**	**19.9%**	**$ 67,513,779**	**8.4%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 76,185	$ 78,327		$ 78,327		$ 78,327		$ 78,327		$ 78,327	
Utility Analysis and Infrastructure	214,183	201,712		224,786		269,735		297,456		304,398	
Utility Policy and Planning	202,279	242,688		266,715		277,980		268,851		273,649	
Wastewater Research and Innovation	204,937	150,222		134,382		129,941		101,413		103,913	
	697,584	672,949	(3.5%)	704,210	4.6%	755,983	7.4%	746,047	(1.3%)	760,287	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	32,421	34,253		34,258		34,264		34,271		35,494	
Dispatch	12,017	12,968		13,224		13,529		13,841		14,149	
Energy Management	24,929	18,762		24,348		25,482		26,262		27,027	
Engineers in Training	33,799	46,354		47,217		48,274		49,356		50,464	
Management Systems Utility Services	86,359	90,313		91,020		91,898		92,786		94,558	
Records Management	10,112	10,993		11,212		11,476		11,747		12,024	
Utility Voice Radio	15,497	15,213		15,390		15,810		16,216		16,545	
	215,134	228,856	6.4%	236,669	3.4%	240,733	1.7%	244,479	1.6%	250,261	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	925,963	984,044		1,049,652		1,084,527		1,119,706		1,172,576	
Source Compliance Monitoring	27,247	29,142		29,189		29,861		30,548		41,585	
Contribution to Reserve	7,631	7,598		7,823		7,873		7,924		8,139	
	960,841	1,020,784	6.2%	1,086,664	6.5%	1,122,261	3.3%	1,158,178	3.2%	1,222,300	5.5%
Project Delivery											
Minor Capital Projects	545,939	114,978		117,422		120,273		124,191		125,431	
	545,939	114,978	(78.9%)	117,422	2.1%	120,273	2.4%	124,191	3.3%	125,431	1.0%
Operations and Maintenance											
Lake City Operations	64,593	67,150		67,979		69,543		71,143		72,650	
Liquid Waste Residuals	849,489	949,148		1,550,283		1,856,060		1,938,054		1,933,365	
Maintenance	3,281,647	3,505,038		4,426,764		4,598,134		4,738,424		4,945,435	
SCADA Control Systems	152,669	153,686		155,989		161,726		165,299		168,596	
Wastewater Collection	2,552,254	2,775,013		2,823,247		2,963,165		3,065,770		3,238,559	
Wastewater Treatment	6,221,673	6,519,751		6,989,377		8,639,819		11,073,159		11,394,136	
	13,122,325	13,969,786	6.5%	16,013,639	14.6%	18,288,447	14.2%	21,051,849	15.1%	21,752,741	3.3%
Administration and Department Support	188,171	238,297	26.6%	241,402	1.3%	246,123	2.0%	253,103	2.8%	257,754	1.8%
Communications Program	30,420	33,013	8.5%	33,013	0.0%	33,360	1.1%	34,055	2.1%	34,750	2.0%
Environmental Regulation and Enforcement	119,816	118,238	(1.3%)	121,828	3.0%	124,687	2.3%	127,634	2.4%	130,631	2.3%
Allocation of Centralized Support Costs	2,352,724	2,751,915	17.0%	2,829,191	2.8%	3,323,195	17.5%	3,681,409	10.8%	3,961,554	7.6%
Total Operating Programs	18,232,954	19,148,816	5.0%	21,384,038	11.7%	24,255,062	13.4%	27,420,945	13.1%	28,495,709	3.9%
Allocation of Project Delivery Cost	643,067	662,773	3.1%	881,226	33.0%	919,418	4.3%	925,495	0.7%	927,483	0.2%
Debt Service	4,913,012	5,689,202	15.8%	12,782,355	120.0%	19,530,862	52.8%	25,098,120	28.5%	28,229,918	12.5%
Contribution to Capital	7,671,931	8,771,308	14.3%	7,303,883	(16.7%)	7,240,008	(0.9%)	8,826,101	21.9%	9,860,669	11.7%
TOTAL EXPENDITURES	**$ 31,460,964**	**$ 34,272,099**	**8.9%**	**$ 42,351,502**	**23.6%**	**$ 51,945,350**	**22.7%**	**$ 62,270,661**	**19.9%**	**$ 67,513,779**	**8.4%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
LULU ISLAND WEST SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 25,620,747	$ 26,919,245	5.1%	$ 30,416,699	13.0%	$ 37,618,578	23.7%	$ 43,590,946	15.9%	$ 48,088,300	10.3%
User Fees	136,691	150,695		153,597		156,557		159,576		162,656	
Transfer from DCC Reserves	1,630,909	2,391,566		2,455,209		2,414,964		2,426,447		2,438,066	
BOD/TSS Industrial Charges	755,482	918,747		936,203		953,991		972,117		990,587	
Other External Revenues	655,268	666,268		678,268		690,268		702,268		714,268	
Transfer from Sustainability Innovation Fund Reserves	153,143	66,101		48,651		30,852		-		-	
Transfer from Reserves	-	1,000,000		-		10,967		-		21,933	
TOTAL REVENUES	**$ 28,952,240**	**$ 32,112,622**	**10.9%**	**$ 34,688,627**	**8.0%**	**$ 41,876,177**	**20.7%**	**$ 47,851,354**	**14.3%**	**$ 52,415,810**	**9.5%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 78,214	$ 78,665		$ 78,665		$ 78,665		$ 78,665		$ 78,665	
Utility Analysis and Infrastructure	219,886	202,582		225,756		270,900		298,740		305,712	
Utility Policy and Planning	207,665	243,736		267,867		279,180		270,011		274,830	
Wastewater Research and Innovation	210,394	150,871		134,962		130,502		101,851		104,362	
	716,159	675,854	(5.6%)	707,250	4.6%	759,247	7.4%	749,267	(1.3%)	763,569	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	34,426	34,400		34,406		34,412		34,419		35,647	
Dispatch	11,538	11,882		12,118		12,397		12,682		12,964	
Energy Management	23,933	17,191		22,310		23,348		24,064		24,764	
Engineers in Training	34,694	46,540		47,406		48,468		49,554		50,666	
Management Systems Utility Services	82,915	82,711		83,359		84,162		84,976		86,599	
Records Management	9,709	10,073		10,273		10,516		10,764		11,018	
Utility Voice Radio	13,639	13,389		13,545		13,914		14,272		14,561	
	210,854	216,186	2.5%	223,417	3.3%	227,217	1.7%	230,731	1.5%	236,219	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	900,489	942,577		1,008,547		1,041,624		1,076,330		1,126,975	
Source Compliance Monitoring	28,932	29,268		29,315		29,990		30,680		41,765	
Contribution to Reserve	7,421	7,405		7,624		7,673		7,723		7,932	
	936,842	979,250	4.5%	1,045,486	6.8%	1,079,287	3.2%	1,114,733	3.3%	1,176,672	5.6%
Project Delivery											
Minor Capital Projects	1,147,833	1,739,157		1,778,062		1,814,097		1,852,343		1,881,167	
	1,147,833	1,739,157	51.5%	1,778,062	2.2%	1,814,097	2.0%	1,852,343	2.1%	1,881,167	1.6%
Operations and Maintenance											
Lake City Operations	66,312	67,439		68,272		69,840		71,448		72,962	
Liquid Waste Residuals	1,736,066	1,826,052		1,548,123		1,594,632		1,674,661		1,693,655	
Maintenance	2,702,049	2,732,955		2,826,651		3,067,169		3,147,426		3,212,106	
SCADA Control Systems	31,880	31,358		31,827		32,999		33,727		34,400	
Wastewater Collection	641,766	532,955		541,726		562,411		582,102		644,561	
Wastewater Treatment	5,410,890	5,915,085		6,035,802		6,384,882		6,517,367		6,776,524	
	10,588,963	11,105,844	4.9%	11,052,401	(0.5%)	11,711,933	6.0%	12,026,731	2.7%	12,434,208	3.4%
Administration and Department Support	180,668	218,238	20.8%	221,082	1.3%	225,406	2.0%	231,798	2.8%	236,057	1.8%
Communications Program	31,230	33,155	6.2%	33,155	0.0%	33,504	1.1%	34,202	2.1%	34,900	2.0%
Environmental Regulation and Enforcement	190,849	217,168	13.8%	223,761	3.0%	229,013	2.3%	234,425	2.4%	239,929	2.3%
Allocation of Centralized Support Costs	2,260,778	2,550,425	12.8%	2,665,491	4.5%	2,721,959	2.1%	2,995,104	10.0%	3,067,870	2.4%
Total Operating Programs	16,264,176	17,735,277	9.0%	17,950,105	1.2%	18,801,663	4.7%	19,469,334	3.6%	20,070,591	3.1%
Allocation of Project Delivery Cost	275,720	426,312	54.6%	566,826	33.0%	591,392	4.3%	595,301	0.7%	596,580	0.2%
Debt Service	5,110,522	6,268,165	22.7%	9,407,161	50.1%	14,678,024	56.0%	17,403,179	18.6%	20,331,494	16.8%
Contribution to Capital	7,301,822	7,682,868	5.2%	6,764,535	(12.0%)	7,805,098	15.4%	10,383,540	33.0%	11,417,145	10.0%
TOTAL EXPENDITURES	**$ 28,952,240**	**$ 32,112,622**	**10.9%**	**$ 34,688,627**	**8.0%**	**$ 41,876,177**	**20.7%**	**$ 47,851,354**	**14.3%**	**$ 52,415,810**	**9.5%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
FRASER SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 141,736,027	$ 147,917,479	4.4%	$ 176,395,242	19.3%	$ 207,394,914	17.6%	$ 245,613,080	18.4%	$ 319,569,236	30.1%
User Fees	1,702,120	2,242,842		2,896,376		3,549,581		4,203,889		4,284,047	
Transfer from DCC Reserves	34,671,599	49,782,510		52,891,540		66,334,061		87,474,660		80,232,770	
BOD/TSS Industrial Charges	6,991,527	7,300,565		7,439,276		7,580,622		7,724,654		7,871,422	
Other External Revenues	575,578	575,578		575,578		575,578		575,578		575,578	
Transfer from Sustainability Innovation Fund Reserves	1,058,985	456,833		336,233		213,221		-		-	
Transfer from Reserves	-	707,000		-		72,410		-		144,819	
TOTAL REVENUES	**$ 186,735,836**	**$ 208,982,807**	**11.9%**	**$ 240,534,245**	**15.1%**	**$ 285,720,387**	**18.8%**	**$ 345,591,861**	**21.0%**	**$ 412,677,872**	**19.4%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 540,847	$ 543,664		$ 543,664		$ 543,664		$ 543,664		$ 543,664	
Utility Analysis and Infrastructure	1,520,510	1,400,082		1,560,242		1,872,234		2,064,641		2,112,830	
Utility Policy and Planning	1,436,002	1,684,502		1,851,274		1,929,459		1,866,094		1,899,401	
Wastewater Research and Innovation	1,454,874	1,042,692		932,747		901,919		703,909		721,263	
	4,952,233	4,670,940	(5.7%)	4,887,927	4.6%	5,247,276	7.4%	5,178,308	(1.3%)	5,277,158	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	227,532	237,747		237,785		237,829		237,877		246,363	
Dispatch	71,880	76,846		78,370		80,173		82,018		83,845	
Energy Management	149,125	111,168		144,269		150,987		155,611		160,142	
Engineers in Training	239,928	321,689		327,674		335,013		342,521		350,207	
Management Systems Utility Services	516,610	535,187		539,380		544,580		549,845		560,344	
Records Management	60,485	65,143		66,440		68,008		69,614		71,256	
Utility Voice Radio	75,216	73,838		74,698		76,737		78,709		80,304	
	1,340,776	1,421,618	6.0%	1,468,616	3.3%	1,493,327	1.7%	1,516,195	1.5%	1,552,461	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	5,934,374	6,217,975		6,673,873		6,888,834		7,124,663		7,458,705	
Source Compliance Monitoring	191,221	202,273		202,600		207,267		212,035		288,644	
Contribution to Reserve	48,906	48,893		50,341		50,663		50,991		52,374	
	6,174,501	6,469,141	4.8%	6,926,814	7.1%	7,146,764	3.2%	7,387,689	3.4%	7,799,723	5.6%
Project Delivery											
Minor Capital Projects	3,872,930	3,520,446		3,639,583		3,717,616		3,806,001		3,872,268	
	3,872,930	3,520,446	(9.1%)	3,639,583	3.4%	3,717,616	2.1%	3,806,001	2.4%	3,872,268	1.7%
Operations and Maintenance											
Lake City Operations	458,548	466,087		471,842		482,697		493,801		504,263	
Liquid Waste Residuals	10,921,360	11,653,919		9,647,934		9,848,049		10,415,741		10,579,772	
Maintenance	16,858,101	17,256,083		17,985,249		18,807,607		19,496,945		21,953,374	
SCADA Control Systems	566,287	576,324		584,967		606,479		619,879		632,239	
Wastewater Collection	8,375,543	9,487,639		9,698,465		9,922,125		10,381,912		11,016,913	
Wastewater Treatment	20,881,971	22,726,813		25,827,733		27,361,612		26,566,169		29,960,338	
	58,061,810	62,166,865	7.1%	64,216,190	3.3%	67,028,569	4.4%	67,974,447	1.4%	74,646,899	9.8%
Administration and Department Support	1,125,667	1,412,129	25.4%	1,430,530	1.3%	1,458,507	2.0%	1,499,869	2.8%	1,527,429	1.8%
Communications Program	215,955	229,140	6.1%	229,140	0.0%	231,552	1.1%	236,376	2.1%	241,200	2.0%
Environmental Regulation and Enforcement	1,367,376	1,451,401	6.1%	1,495,467	3.0%	1,530,567	2.3%	1,566,740	2.4%	1,603,524	2.3%
Allocation of Centralized Support Costs	14,114,667	16,380,193	16.1%	17,208,990	5.1%	18,737,557	8.9%	20,201,413	7.8%	21,991,371	8.9%
Total Operating Programs	91,225,915	97,721,873	7.1%	101,503,257	3.9%	106,591,735	5.0%	109,367,038	2.6%	118,512,033	8.4%
Allocation of Project Delivery Cost	2,952,320	4,482,098	51.8%	5,959,423	33.0%	6,217,699	4.3%	6,258,800	0.7%	6,272,243	0.2%
Debt Service	54,493,928	76,063,763	39.6%	93,702,063	23.2%	128,655,666	37.3%	178,444,987	38.7%	230,208,679	29.0%
Contribution to Capital	38,063,673	30,715,073	(19.3%)	39,369,502	28.2%	44,255,287	12.4%	51,521,036	16.4%	57,684,917	12.0%
TOTAL EXPENDITURES	**$ 186,735,836**	**$ 208,982,807**	**11.9%**	**$ 240,534,245**	**15.1%**	**$ 285,720,387**	**18.8%**	**$ 345,591,861**	**21.0%**	**$ 412,677,872**	**19.4%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
DRAINAGE

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 2,207,817	$ 1,919,693	(13.1%)	$ 2,108,193	9.8%	$ 2,169,916	2.9%	$ 2,222,759	2.4%	$ 2,287,356	2.9%
Transfer from Reserves	80,000	130,000		130,000		130,000		130,000		130,000	
TOTAL REVENUES	**$ 2,287,817**	**$ 2,049,693**	**(10.4%)**	**$ 2,238,193**	**9.2%**	**$ 2,299,916**	**2.8%**	**$ 2,352,759**	**2.3%**	**$ 2,417,356**	**2.7%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Utility Analysis and Infrastructure	$ 64,942	$ 75,000		$ 244,543		$ 248,623		$ 252,798		$ 257,071	
Utility Policy and Planning	70,976	71,622		71,952		72,360		72,778		73,206	
	135,918	146,622	7.9%	316,495	120.0%	320,983	1.4%	325,576	1.4%	330,277	1.4%
Support Services and Strategic Initiatives											
Dispatch	1,081	909		927		948		969		991	
Energy Management	2,245	1,318		1,710		1,790		1,845		1,899	
Management Systems Utility Services	7,768	6,285		6,334		6,394		6,456		6,580	
Records Management	910	770		785		804		823		842	
	12,004	9,282	(22.7%)	9,756	5.1%	9,936	1.8%	10,093	1.6%	10,312	2.2%
Project Delivery											
Minor Capital Projects	479,451	225,000		229,275		233,631		238,070		242,593	
	479,451	225,000	(53.1%)	229,275	1.9%	233,631	1.9%	238,070	1.9%	242,593	1.9%
Operations and Maintenance											
Maintenance	166,144	159,621		175,527		183,979		190,847		201,767	
SCADA Control Systems	21,506	20,807		21,118		21,895		22,379		22,825	
Urban Drainage	1,157,299	1,263,704		1,292,675		1,326,264		1,374,402		1,430,033	
Wastewater Collection	119,148	-		-		-		-		-	
	1,464,097	1,444,132	(1.4%)	1,489,320	3.1%	1,532,138	2.9%	1,587,628	3.6%	1,654,625	4.2%
Administration and Department Support	16,926	16,582	(2.0%)	16,797	1.3%	17,127	2.0%	17,613	2.8%	17,936	1.8%
Allocation of Centralized Support Costs	179,421	204,139	13.8%	171,316	(16.1%)	180,640	5.4%	168,282	(6.8%)	156,105	(7.2%)
Total Operating Programs	2,287,817	2,045,757	(10.6%)	2,232,959	9.2%	2,294,455	2.8%	2,347,262	2.3%	2,411,848	2.8%
Allocation of Project Delivery Cost	-	3,936	100.0%	5,234	33.0%	5,461	4.3%	5,497	0.7%	5,508	0.2%
TOTAL EXPENDITURES	**$ 2,287,817**	**$ 2,049,693**	**(10.4%)**	**$ 2,238,193**	**9.2%**	**$ 2,299,916**	**2.8%**	**$ 2,352,759**	**2.3%**	**$ 2,417,356**	**2.7%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Collections									
8th Avenue Interceptor Air Treatment Facilities	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000	$ 500,000	Definition	Upgrade
Albert Street Trunk Sewer	10,250,000	255,000	-	-	-	-	255,000	Construction	Growth
Big Bend Forcemain - Gate Replacement	180,000	-	-	600,000	650,000	650,000	1,900,000	Design	Maintenance
Burnaby Lake North Interceptor Cariboo Section	-	-	100,000	600,000	1,700,000	11,200,000	13,600,000	Not started	Growth
Burnaby Lake North Interceptor Winston Section	116,950,000	20,050,000	59,300,000	12,000,000	-	-	91,350,000	Construction	Growth
Burnaby South Slope Interceptor	500,000	50,000	200,000	750,000	650,000	3,500,000	5,150,000	Multiple	Growth
Cloverdale Pump Station Capacity Upgrade	700,000	350,000	900,000	900,000	900,000	15,000,000	18,050,000	Design	Growth
Cloverdale Trunk Sewer Capacity Upgrade	1,200,000	100,000	200,000	1,050,000	1,150,000	950,000	3,450,000	Design	Growth
Combined Sewer Overflow Sampling Station Enhancements	1,900,000	450,000	350,000	250,000	-	-	1,050,000	Construction	Maintenance
Glen Eagles Pump Stations Phase 2	-	-	-	5,000,000	-	-	5,000,000	Not started	Maintenance
Crescent Beach FM - Replacement	26,820,000	15,000,000	4,550,000	-	-	-	19,550,000	Construction	Maintenance
Eagle Creek (Lower Section) Channel Restoration	750,000	750,000	-	-	-	-	750,000	Construction	Resilience
Lozells Sanitary Trunk Golf Course Section	-	-	-	-	50,000	400,000	450,000	Not started	Growth
Manitoba Street Combined Trunk Sewer Separation	-	-	-	-	-	100,000	100,000	Not started	Upgrade
EMQC Chemistry Laboratory and Environmental Field Services	3,500,000	2,000,000	1,000,000	500,000	-	-	3,500,000	Construction	Upgrade
Fraser Sewerage Area Integrated Resource Recovery (IRR) Study	1,200,000	100,000	500,000	438,000	-	-	1,038,000	Design	Opportunity
Front Street Pressure Sewer Access Hatches Reinforcement	5,000,000	3,500,000	1,500,000	-	-	-	5,000,000	Construction	Maintenance
FSA Flow Metering Program	3,500,000	600,000	300,000	500,000	450,000	-	1,850,000	Multiple	Maintenance
FSA River Crossing Scour Protection Program - Phase 1	4,200,000	830,000	3,330,000	1,550,000	630,000	-	6,340,000	Construction	Maintenance
FSA Sewer Relocations and Protections	32,750,000	16,300,000	5,250,000	-	-	-	21,550,000	Multiple	Maintenance
FSA Statutory Right of Way Acquisitions Phase 1	35,100,000	9,000,000	9,000,000	8,100,000	-	-	26,100,000	Design	Maintenance
Gilbert/Brighouse Trunk Pressure Sewer	169,601,000	10,150,000	60,200,000	10,150,000	600,000	2,400,000	83,500,000	Multiple	Maintenance
Glen Eagles Forcemain Replacement	10,234,000	600,000	4,000,000	2,250,000	-	-	6,850,000	Multiple	Maintenance
Glen Eagles Pump Stations Phase 1	22,500,000	4,150,000	7,201,000	7,000,000	2,400,000	-	20,751,000	Construction	Maintenance
Glenbrook Combined Trunk Kingsway Sanitary Section	7,200,000	100,000	4,900,000	1,500,000	-	-	6,500,000	Construction	Growth
Harbour Pump Station Discharge Header Repair and Valve Replacements	2,500,000	1,000,000	1,400,000	-	-	-	2,400,000	Construction	Maintenance
Harbour Pump Station Power Distribution Equipment Replacement	1,600,000	300,000	2,200,000	400,000	-	-	2,900,000	Design	Maintenance
Hastings-Cassiar Intake Connection	2,350,000	2,450,000	1,050,000	-	-	-	3,500,000	Construction	Growth
Highbury Interceptor Diversion Junction Chamber Wall Rehabilitation	500,000	250,000	5,500,000	-	-	-	5,750,000	Design	Maintenance
Highbury Interceptor North Arm Crossing - Upgrade of Siphons	12,500,000	500,000	-	-	-	-	500,000	Construction	Resilience
Jervis Pump Station 25kV Voltage Conversion	1,300,000	750,000	300,000	-	-	-	1,050,000	Construction	Maintenance
Kent Pump Station High Voltage Switchgear Replacement	1,150,000	650,000	1,000,000	350,000	-	-	2,000,000	Design	Maintenance
Surrey Central Valley Capacity Upgrade	-	-	-	-	-	150,000	150,000	Not started	Growth
Lake City Access and Parking Improvements	2,850,000	2,710,000	100,000	-	-	-	2,810,000	Construction	Maintenance
LSA Flow Metering Program	300,000	50,000	50,000	50,000	-	-	150,000	Construction	Maintenance
Marshend Pump Station	10,125,000	1,875,000	2,300,000	10,800,000	3,700,000	-	18,675,000	Multiple	Growth
New CSO Management Gates for New Westminster Interceptor	5,925,000	300,000	2,300,000	1,200,000	-	-	3,800,000	Construction	Upgrade
New West Interceptor - Annacis Section 2	45,000,000	4,800,000	8,350,000	5,700,000	6,600,000	6,600,000	32,050,000	Construction	Maintenance
New West Interceptor Grit Chamber	9,300,000	1,000,000	3,800,000	4,000,000	-	-	8,800,000	Construction	Maintenance
New Westminster Interceptor Repair Columbia St. Section	35,752,000	12,500,000	1,450,000	50,000	-	-	14,000,000	Construction	Maintenance
New Westminster Interceptor West Branch and Columbia Extension Rehabilitation	1,900,000	750,000	2,300,000	13,850,000	7,200,000	4,200,000	28,300,000	Design	Maintenance
North Road Trunk Sewer	11,675,000	300,000	3,500,000	1,200,000	-	-	5,000,000	Construction	Growth
North Road Trunk Sewer Phase 2	8,450,000	1,020,000	4,000,000	2,500,000	-	-	7,520,000	Construction	Growth
North Surrey Interceptor - Port Mann Section - Odour Control	7,500,000	500,000	1,150,000	4,500,000	1,000,000	-	7,150,000	Construction	Upgrade
North Surrey Interceptor Annieville Channel Crossing Scour Protection	4,350,000	2,378,000	1,082,000	-	-	-	3,460,000	Construction	Maintenance
North Surrey Interceptor Roebuck Section Rehabilitation - Phase 1	2,750,000	1,048,000	803,000	4,450,000	4,157,000	847,000	11,305,000	Design	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
NSA Flow Metering Program	900,000	100,000	150,000	100,000	50,000	-	400,000	Multiple	Maintenance
NSA Scour Protection Upgrades	2,250,000	1,250,000	1,000,000	-	-	-	2,250,000	Construction	Maintenance
NSI 104th Ave Extension	12,950,000	-	-	6,500,000	1,500,000	-	8,000,000	Construction	Growth
NSI Flow Management	11,500,000	2,650,000	2,450,000	20,000,000	30,000,000	30,000,000	85,100,000	Multiple	Upgrade
NSI Rehab or Replacement	16,450,000	2,000,000	4,400,000	13,000,000	11,500,000	5,000,000	35,900,000	Construction	Maintenance
Ocean Park Trunk Manholes Lining	1,200,000	1,050,000	150,000	-	-	-	1,200,000	Construction	Maintenance
Ocean Park Trunk Sewer - Air Management Facility	2,750,000	1,750,000	500,000	2,500,000	2,500,000	-	7,250,000	Design	Upgrade
Port Coquitlam Pump Station Refurbishment	2,300,000	1,300,000	1,100,000	11,600,000	22,300,000	14,800,000	51,100,000	Design	Maintenance
Port Moody Pump Station Capacity Upgrade	2,300,000	800,000	550,000	4,950,000	3,100,000	-	9,400,000	Design	Growth
Port Moody South Interceptor Capacity Upgrade	-	-	150,000	350,000	1,000,000	1,000,000	2,500,000	Not started	Growth
Port Moody Storm Drain Rehabilitation	200,000	50,000	400,000	600,000	600,000	-	1,650,000	Design	Maintenance
Rosemary Heights Pressure Sewer Capacity Upgrade	-	-	150,000	300,000	400,000	650,000	1,500,000	Not started	Growth
Royal Ave PS Rehabilitation	8,238,000	3,100,000	2,700,000	400,000	-	-	6,200,000	Construction	Maintenance
Sapperton Pump Station	94,815,000	1,000,000	950,000	-	-	-	1,950,000	Multiple	Growth
Sapperton Pump Station Emergency Backup Power	5,000,000	1,500,000	3,000,000	500,000	-	-	5,000,000	Construction	Resilience
Sewer Heat Projects	18,800,000	1,300,000	2,700,000	5,200,000	7,800,000	9,000,000	26,000,000	Construction	Opportunity
South Surrey Interceptor Johnston Section	84,026,000	1,800,000	10,500,000	13,000,000	7,000,000	-	32,300,000	Construction	Growth
SSI - King George Section - Odor Control Facility (OCF) and Grit C	19,550,000	1,700,000	500,000	-	-	-	2,200,000	Construction	Growth
SSI Influent Control Chamber Repair and Replace Gates	1,285,000	700,000	440,000	-	-	-	1,140,000	Construction	Maintenance
SSI Sulfide Odour and Corrosion Control	9,200,000	7,800,000	100,000	-	-	-	7,900,000	Construction	Upgrade
Stoney Creek Sanitary Trunk	700,000	350,000	450,000	1,500,000	1,500,000	3,900,000	7,700,000	Design	Growth
Surrey Corrosion Control Facility Replacement	7,250,000	3,051,000	2,901,000	-	-	-	5,952,000	Construction	Maintenance
VSA Emergency Backup Power	24,310,000	1,000,000	5,000,000	4,000,000	1,250,000	-	11,250,000	Construction	Resilience
VSA Flow Metering Program	5,800,000	600,000	600,000	1,000,000	1,000,000	1,000,000	4,200,000	Multiple	Maintenance
VSA Grit Chamber Access Improvements	900,000	900,000	-	-	-	-	900,000	Construction	Maintenance
VSA Sewer Relocations and Protections	30,650,000	20,250,000	4,300,000	-	-	-	24,550,000	Multiple	Maintenance
Westridge FM Replacement	3,650,000	2,550,000	-	-	-	-	2,550,000	Construction	Maintenance
Westridge Pump Stations 1 & 2 Refurbishment	5,790,000	4,420,000	5,400,000	5,000,000	450,000	-	15,270,000	Multiple	Maintenance
White Rock Forcemain Rehabilitation	1,200,000	500,000	600,000	10,300,000	3,300,000	-	14,700,000	Design	Maintenance
Works Yard	32,000,000	4,400,000	900,000	-	-	-	5,300,000	Construction	Maintenance
Total Collections	**$ 1,028,276,000**	**$ 187,337,000**	**$ 257,457,000**	**$ 202,988,000**	**$ 127,087,000**	**$ 111,847,000**	**$ 886,716,000**		
Treatment Plants									
AIWWTP Ammonia Removal – Sidestream	$ 900,000	$ 150,000	$ -	$ -	$ -	$ -	$ 150,000	Design	Upgrade
AIWWTP Chemical Lab UPS System Replacement	600,000	200,000	-	-	-	-	200,000	Construction	Maintenance
AIWWTP Cogen Building Refurbishment	1,500,000	600,000	800,000	-	-	-	1,400,000	Construction	Maintenance
AIWWTP Cogeneration Backup Power	80,503,000	2,650,000	770,000	-	-	-	3,420,000	Multiple	Resilience
AIWWTP Electrical Distribution System Protection Control and Monitoring	2,650,000	650,000	500,000	400,000	-	-	1,550,000	Construction	Upgrade
AIWWTP Digester No. 5	-	-	300,000	2,500,000	2,800,000	5,500,000	11,100,000	Not started	Growth
AIWWTP Fibre Optic Infrastructure	1,500,000	400,000	-	-	-	-	400,000	Construction	Maintenance
AIWWTP Hydrothermal Processing Pilot	19,450,000	2,550,000	7,500,000	3,800,000	2,500,000	1,925,961	18,275,961	Construction	Opportunity
AIWWTP ICS Replacement Program	14,350,000	500,000	1,500,000	2,500,000	2,500,000	2,500,000	9,500,000	Construction	Maintenance
AIWWTP Influent System Remediation	2,400,000	500,000	1,850,000	14,500,000	20,700,000	1,000,000	38,550,000	Design	Maintenance
AIWWTP IPS Gates Replacements	100,000	100,000	200,000	400,000	-	-	700,000	Design	Maintenance
AIWWTP IPS Pump Building Roof Replacement Phase 2	-	-	-	100,000	500,000	200,000	800,000	Not started	Maintenance
AIWWTP Outfall Repair	-	-	800,000	750,000	-	-	1,550,000	Not started	Maintenance
AIWWTP Replacement of ICS Equipment	4,445,000	150,000	-	-	-	-	150,000	Multiple	Maintenance
AIWWTP Replacement of Protective Relays	3,308,000	150,000	200,000	600,000	-	-	950,000	Construction	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
AIWWTP Scheduled 64kV Potential & Current Transformer Replacements	800,000	150,000	250,000	250,000	-	-	650,000	Construction	Maintenance
AIWWTP Scum Pump Replacement	-	-	-	200,000	150,000	500,000	850,000	Not started	Maintenance
AIWWTP Secondary Clarifier Corrosion Repair	58,484,000	1,050,000	1,950,000	3,200,000	1,535,000	1,100,000	8,835,000	Multiple	Maintenance
AIWWTP Secondary Effluent Discharge Flowmeter Replacement	400,000	200,000	100,000	-	-	-	300,000	Construction	Maintenance
AIWWTP Spare Trickling Filter Pump & Motor Purchase	1,950,000	1,080,000	90,000	-	-	-	1,170,000	Construction	Maintenance
AIWWTP Stage 5 Expansion & Outfall System	1,191,500,000	62,800,000	62,486,000	91,000,000	108,000,000	111,165,000	435,451,000	Multiple	Growth
AIWWTP Station Battery Replacement	1,207,000	100,000	100,000	-	-	-	200,000	Multiple	Maintenance
AIWWTP Trickling Filter Media & Distributor Arms & Ducting Replacement	90,700,000	20,800,000	18,050,000	16,400,000	-	-	55,250,000	Construction	Maintenance
AIWWTP UPS Condition Monitoring System	-	-	400,000	150,000	-	-	550,000	Not started	Resilience
All WWTPs Power Quality Monitoring & Outage Alarming Network	2,870,000	100,000	-	-	-	-	100,000	Construction	Upgrade
Annacis Influent System Surge Control Refurbishment	22,000,000	4,400,000	4,400,000	1,000,000	8,398,000	-	18,198,000	Construction	Growth
Annacis MCC 80 051, 80 070, 80 071 Replacement	2,850,000	200,000	-	-	-	-	200,000	Construction	Maintenance
Biosolids Dryer	22,700,000	500,000	2,500,000	11,000,000	40,000,000	76,500,000	130,500,000	Design	Opportunity
Ferguson Road Paving Refurbishment	1,100,000	1,100,000	-	-	-	-	1,100,000	Construction	Upgrade
IIWWTP - Biogas Lines Relocation	5,780,000	600,000	-	-	-	-	600,000	Construction	Resilience
IIWWTP Biosolids Dewatering Facility	61,300,000	620,000	1,050,000	-	-	-	1,670,000	Construction	Upgrade
IIWWTP CEPT Winterization	750,000	750,000	-	-	-	-	750,000	Construction	Maintenance
IIWWTP ICS IPS Control Replacement	1,750,000	900,000	150,000	-	-	-	1,050,000	Construction	Maintenance
IIWWTP ICS Replacement Program	750,000	100,000	200,000	200,000	200,000	-	700,000	Construction	Maintenance
IIWWTP Influent Gate Refurbishment	1,350,000	300,000	350,000	-	-	-	650,000	Construction	Maintenance
IIWWTP IPS Drive Remediation	1,400,000	400,000	550,000	200,000	-	-	1,150,000	Construction	Maintenance
IIWWTP MCC/Power Distribution Assess/Replace - Phase 2	1,000,000	50,000	300,000	-	-	-	350,000	Construction	Maintenance
IIWWTP Outfall Refurbishment	20,000,000	500,000	1,500,000	2,000,000	3,000,000	3,000,000	10,000,000	Design	Maintenance
IIWWTP PA-Sed Tank & Gallery Wall Refurbishment	750,000	50,000	100,000	150,000	140,000	-	440,000	Construction	Maintenance
IIWWTP Replacement of CoGen Control System	2,500,000	150,000	300,000	-	-	-	450,000	Construction	Maintenance
IIWWTP Siphon Chamber Refurbishment	2,150,000	60,000	800,000	960,000	330,000	-	2,150,000	Construction	Maintenance
IIWWTP Sludge Lagoons Dewatering Facility	4,000,000	700,000	319,550	-	-	-	1,019,550	Construction	Upgrade
IIWWTP Solids Handling Refurbishment	65,400,000	1,245,000	1,400,000	500,000	500,000	2,500,000	6,145,000	Multiple	Maintenance
IIWWTP Standby Diesel Generators	2,000,000	650,000	1,050,000	1,300,000	1,300,000	500,000	4,800,000	Design	Resilience
Iona Island Control & Instrumentation Replacement 2011	2,750,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Iona Secondary Wastewater Treatment Phase 1	1,060,000,000	57,500,000	198,500,000	219,500,000	249,000,000	294,000,000	1,018,500,000	Definition	Upgrade
LIWWTP Admin Dewatering Building Roof Repair	100,000	10,000	90,000	700,000	-	-	800,000	Design	Maintenance
LIWWTP Biogas Clean-up Project	13,800,000	500,000	1,800,000	-	-	-	2,300,000	Construction	Opportunity
LIWWTP CCT Isolation Gates	2,050,000	150,000	900,000	-	-	-	1,050,000	Construction	Maintenance
LIWWTP Effluent Heat Recovery Project	10,000,000	100,000	3,000,000	4,000,000	2,000,000	900,000	10,000,000	Construction	Opportunity
LIWWTP Ground Fault Detection System Replacement	1,550,000	400,000	900,000	250,000	-	-	1,550,000	Construction	Maintenance
LIWWTP High Efficiency Boiler	1,300,000	70,000	509,633	300,000	300,000	-	1,179,633	Construction	Maintenance
LIWWTP ICS Replacement Program	6,750,000	2,000,000	1,500,000	1,100,000	350,000	-	4,950,000	Construction	Maintenance
LIWWTP PA-Sed Tank Refurbishment	4,115,000	1,000,000	1,000,000	1,000,000	400,000	-	3,400,000	Construction	Maintenance
LIWWTP Pilot Digestion Optimization Facility	2,850,000	900,000	390,336	-	-	-	1,290,336	Construction	Opportunity
LIWWTP Power Reliability	8,202,000	3,000,000	2,000,000	-	-	-	5,000,000	Construction	Resilience
LIWWTP SCL Refurbishment	850,000	100,000	1,250,000	1,600,000	900,000	4,000,000	7,850,000	Design	Maintenance
LIWWTP Trickling Filter Refurbishment	500,000	500,000	1,000,000	2,000,000	10,500,000	12,500,000	26,500,000	Design	Maintenance
NLWWTP Screw Pump Replacement	1,550,000	100,000	300,000	-	-	-	400,000	Construction	Maintenance
NLWWTP Standby Diesel Generator	400,000	200,000	400,000	400,000	-	-	1,000,000	Design	Resilience
North Shore WWTP Secondary Upgrade, Conveyance and Decommissioning	1,057,867,000	267,030,000	132,440,000	97,350,000	17,400,000	53,670,000	567,890,000	Construction	Upgrade
Northwest Langley Wastewater Treatment Program	1,629,700,000	150,600,000	182,650,000	394,350,000	432,300,000	150,200,000	1,310,100,000	Multiple	Growth
NWL WWTP 25 kV Substation Replacement	10,050,000	350,000	400,000	950,000	-	-	1,700,000	Construction	Maintenance
WWTPs Electrical System Studies & Upgrades	750,000	350,000	450,000	300,000	400,000	250,000	1,750,000	Design	Resilience

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Total Treatment Plants	**$ 5,514,281,000**	**$ 593,115,000**	**$ 642,295,519**	**$ 877,860,000**	**$ 906,103,000**	**$ 721,910,961**	**$ 3,741,284,480**		
TOTAL CAPITAL EXPENDITURES	**$ 6,542,557,000**	**$ 780,452,000**	**$ 899,752,519**	**$ 1,080,848,000**	**$ 1,033,190,000**	**$ 833,757,961**	**$ 4,628,000,480**		
CAPITAL FUNDING									
New External Borrowing funded by Levy	$ 4,122,492,000	$ 493,249,000	$ 497,908,519	$ 496,296,000	$ 833,073,000	$ 595,593,961	$ 2,916,120,480		
New Borrowing funded by DCC	926,980,000	53,754,000	234,961,000	367,002,000	-	-	655,717,000		
DCCs	253,811,000	42,329,000	64,268,000	60,445,000	11,347,000	1,149,000	179,538,000		
Contribution to Capital from LWS Levy	700,713,000	76,355,000	82,174,000	90,131,000	115,359,000	131,644,000	495,663,000		
Reserve	58,314,000	8,350,000	12,900,000	9,400,000	5,600,000	5,000,000	41,250,000		
External Funding - Interagency	480,247,000	106,415,000	7,541,000	57,574,000	67,811,000	100,371,000	339,712,000		
Total	**$ 6,542,557,000**	**$ 780,452,000**	**$ 899,752,519**	**$ 1,080,848,000**	**$ 1,033,190,000**	**$ 833,757,961**	**4,628,000,480**		
SUMMARY BY DRIVER									
Growth	$ 3,226,941,000	$ 250,000,000	$ 339,536,000	$ 546,750,000	$ 574,148,000	$ 303,615,000	$ 2,014,049,000		
Maintenance	855,059,000	170,452,000	188,446,633	157,060,000	103,892,000	62,797,000	682,647,633		
Resilience	140,195,000	11,200,000	13,070,000	6,650,000	2,950,000	750,000	34,620,000		
Upgrade	2,231,562,000	342,850,000	340,309,550	345,950,000	299,900,000	378,270,000	1,707,279,550		
Opportunity	88,800,000	5,950,000	18,390,336	24,438,000	52,300,000	88,325,961	189,404,297		
Total	**$ 6,542,557,000**	**$ 780,452,000**	**$ 899,752,519**	**$ 1,080,848,000**	**$ 1,033,190,000**	**$ 833,757,961**	**$ 4,628,000,480**		

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
SOLID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Solid Waste Tipping Fees	$ 108,516,645	$ 112,909,870	4.0%	$ 118,375,791	4.8%	$ 124,657,561	5.3%	$ 131,471,016	5.5%	$ 138,384,365	5.3%
Energy Sales	6,239,530	6,401,758		6,568,204		6,738,977		6,914,190		7,093,959	
Other External Revenues	3,756,396	3,679,379		4,401,400		5,819,012		5,881,179		5,944,379	
TOTAL REVENUES	**$ 118,512,571**	**$ 122,991,007**	**3.8%**	**$ 129,345,395**	**5.2%**	**$ 137,215,550**	**6.1%**	**$ 144,266,385**	**5.1%**	**$ 151,422,703**	**5.0%**
EXPENDITURES											
Operating Programs:											
Solid Waste Operations											
Allocated Quality Control	$ 18,494	$ 17,582		$ 18,312		$ 18,646		$ 20,602		$ 18,076	
Ashcroft Ranch	724,267	862,263		533,011		494,383		555,888		472,829	
Engineers in Training	93,013	124,066		126,375		129,205		132,101		135,065	
Landfills	34,180,437	31,493,726		35,145,899		35,762,756		37,416,672		39,026,143	
Recycling and Waste Centre	37,423,463	39,877,587		39,117,078		40,627,531		41,713,351		42,740,182	
Waste to Energy Facility	24,350,996	24,897,642		25,103,689		26,078,034		26,387,765		26,864,771	
	96,790,670	97,272,866	0.5%	100,044,364	2.8%	103,110,555	3.1%	106,226,379	3.0%	109,257,066	2.9%
Solid Waste Planning											
Policy and Facility Development	700,979	624,289		620,057		658,236		671,723		685,526	
Zero Waste Implementation	2,182,351	2,308,441		2,336,838		2,051,079		1,662,814		1,695,455	
Programs and Public Involvement	803,627	764,836		776,089		789,728		633,681		647,960	
	3,686,957	3,697,566	0.3%	3,732,984	1.0%	3,499,043	(6.3%)	2,968,218	(15.2%)	3,028,941	2.0%
Administration and Department Support	649,291	656,133	1.1%	668,046	1.8%	676,155	1.2%	690,695	2.2%	706,798	2.3%
Environmental Regulation and Enforcement	934,630	1,418,683	51.8%	1,416,740	(0.1%)	1,332,718	(5.9%)	1,364,742	2.4%	1,397,370	2.4%
Allocation of Centralized Support Costs	4,740,158	5,042,360	6.4%	5,169,970	2.5%	5,394,621	4.3%	5,296,354	(1.8%)	5,041,927	(4.8%)
Total Operating Programs	106,801,706	108,087,608	1.2%	111,032,104	2.7%	114,013,092	2.7%	116,546,388	2.2%	119,432,102	2.5%
Allocation of Project Delivery Cost	327,502	439,579	34.2%	584,467	33.0%	609,797	4.3%	613,828	0.7%	615,146	0.2%
Debt Service	6,946,790	10,440,428	50.3%	16,592,377	58.9%	20,357,462	22.7%	23,086,608	13.4%	24,779,128	7.3%
Contribution to Capital	4,436,573	4,023,392	(9.3%)	1,136,447	(71.8%)	2,235,199	96.7%	4,019,561	79.8%	6,596,327	64.1%
TOTAL EXPENDITURES	**$ 118,512,571**	**$ 122,991,007**	**3.8%**	**$ 129,345,395**	**5.2%**	**$ 137,215,550**	**6.1%**	**$ 144,266,385**	**5.1%**	**$ 151,422,703**	**5.0%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
SOLID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Landfills									
Alternative Fuel and Recyclables Recovery Centre	$ -	$ -	$ -	$ -	$ 1,500,000	$ 20,000,000	$ 21,500,000	Feasibility Study	Opportunity
Coquitlam Landfill East Closure	-	-	400,000	3,500,000	1,100,000	-	5,000,000	Not started	Resilience
Coquitlam Landfill Gas Collection Upgrades	7,300,000	1,100,000	-	-	-	-	1,100,000	Construction	Maintenance
Coquitlam Landfill Lot 3 Development	5,000,000	50,000	-	-	-	-	50,000	Feasibility Study	Resilience
Coquitlam Landfill Pump Station Upgrade	1,600,000	1,000,000	-	-	-	-	1,000,000	Construction	Maintenance
Coquitlam Landfill: Leachate Collection System Grade Realignmen	200,000	200,000	800,000	-	-	-	1,000,000	Design	Resilience
Total Landfills	**$ 14,100,000**	**$ 2,350,000**	**$ 1,200,000**	**$ 3,500,000**	**$ 2,600,000**	**$ 20,000,000**	**$ 29,650,000**		
Recycling and Waste Centres									
Central Surrey Recycling and Waste Centre	$ 50,300,000	$ 8,000,000	$ -	$ -	$ -	$ -	$ 8,000,000	Construction	Growth
Langley Recycling Depot Development	250,000	250,000	3,000,000	2,250,000	-	-	5,500,000	Design	Upgrade
Maple Ridge Transfer Station Upgrades	2,000,000	200,000	1,800,000	-	-	-	2,000,000	Design	Maintenance
North Shore Recycling and Waste Centre Compactor Replacemen	-	-	-	-	2,500,000	-	2,500,000	Not started	Maintenance
North Surrey Recycling and Waste Centre Compactor Replacemer	-	-	2,500,000	-	-	-	2,500,000	Not started	Maintenance
North Surrey Recycling Depot Development	20,250,000	20,250,000	3,000,000	2,250,000	-	-	25,500,000	Design	Upgrade
United Boulevard Recycling and Waste Centre	77,600,000	200,000	-	-	-	-	200,000	Construction	Growth
Western Region Recycling and Waste Centre Replacement	-	-	-	-	-	5,000,000	5,000,000	Not started	Resilience
Total Recycling and Waste Centres	**$ 150,400,000**	**$ 28,900,000**	**$ 10,300,000**	**$ 4,500,000**	**$ 2,500,000**	**$ 5,000,000**	**$ 51,200,000**		
Waste To Energy Facilities									
Acid Gas Reduction	$ 2,000,000	$ -	$ -	$ 2,800,000	$ 7,750,000	$ 30,000,000	$ 40,550,000	Preliminary Design	Upgrade
Air System Piping Replacement	-	-	300,000	-	-	-	300,000	Not started	Maintenance
Biosolids Processing	1,750,000	2,250,000	8,000,000	8,000,000	3,700,000	-	21,950,000	Design	Resilience
Boiler and APC Roof Replacement	-	-	100,000	650,000	1,000,000	-	1,750,000	Not started	Maintenance
Bottom Ash Crane Replacement	1,500,000	900,000	500,000	-	-	-	1,400,000	Design	Maintenance
Bottom Ash Processing	6,800,000	450,000	-	-	-	-	450,000	Construction	Opportunity
Compressed Air System Replacement	3,000,000	1,400,000	1,500,000	-	-	-	2,900,000	Design	Maintenance
Electrical Transformers Replacement	5,000,000	200,000	4,500,000	300,000	-	-	5,000,000	Design	Maintenance
Fabric Filter Hopper and Pulse Header Refurbishment	2,250,000	650,000	1,500,000	-	-	-	2,150,000	Design	Maintenance
Feed Hopper/Chute	2,600,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Feedwater Pump Replacement	1,000,000	200,000	-	-	-	-	200,000	Design	Maintenance
Fire Suppression System	1,000,000	500,000	500,000	-	-	-	1,000,000	Design	Maintenance
Fly Ash Silo Refurbishment	1,000,000	100,000	500,000	400,000	-	-	1,000,000	Design	Maintenance
Generation Bank Replacement	-	-	100,000	5,900,000	3,000,000	-	9,000,000	Not started	Maintenance
Primary Economizer Replacement	7,000,000	3,800,000	3,000,000	-	-	-	6,800,000	Construction	Maintenance
Primary Superheaters Replacement	4,000,000	100,000	2,000,000	1,000,000	900,000	-	4,000,000	Design	Maintenance
Programmable Logic Controllers Replacement	2,000,000	500,000	500,000	500,000	500,000	-	2,000,000	Design	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
SOLID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Pug Mill Enclosure Ventilation System Replacement	1,000,000	500,000	500,000	-	-	-	1,000,000	Design	Maintenance
Refuse Crane	16,800,000	3,250,000	9,000,000	4,300,000	-	-	16,550,000	Construction	Maintenance
Refuse Pit Bunker Door Replacement	600,000	600,000	-	-	-	-	600,000	Design	Maintenance
Secondary Economizers Replacement	6,000,000	250,000	1,750,000	3,000,000	1,000,000	-	6,000,000	Design	Maintenance
Soot Blower Piping Replacement	-	-	300,000	-	-	-	300,000	Not started	Maintenance
Special Handle Waste Direct Feed System	-	-	2,500,000	2,500,000	-	-	5,000,000	Not started	Opportunity
Stack Refurbishment	-	-	350,000	-	-	-	350,000	Not started	Maintenance
WTE Facility District Heating	55,000,000	2,000,000	5,000,000	25,000,000	23,000,000	-	55,000,000	Design	Opportunity
Total Waste To Energy Facilities	**$ 120,300,000**	**$ 17,750,000**	**$ 42,400,000**	**$ 54,350,000**	**$ 40,850,000**	**$ 30,000,000**	**$ 185,350,000**		
Opportunity									
WTE Facility District Heating Opportunities	$ 2,310,000	$ 1,840,000	$ -	$ -	$ -	$ -	$ 1,840,000	Design	Opportunity
Total Opportunity	**$ 2,310,000**	**$ 1,840,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,840,000**		
TOTAL CAPITAL EXPENDITURES	**$ 287,110,000**	**$ 50,840,000**	**$ 53,900,000**	**$ 62,350,000**	**$ 45,950,000**	**$ 55,000,000**	**$ 268,040,000**		

CAPITAL FUNDING							
New External Borrowing	$ 193,342,000	$ 42,816,000	$ 36,877,000	$ 28,214,000	$ 17,015,000	$ 50,980,000	$ 175,902,000
Reserve	16,268,000	3,774,000	4,023,000	1,136,000	2,235,000	4,020,000	15,188,000
External Funding - Interagency	77,500,000	4,250,000	13,000,000	33,000,000	26,700,000	-	76,950,000
Total	**$ 287,110,000**	**$ 50,840,000**	**$ 53,900,000**	**$ 62,350,000**	**$ 45,950,000**	**$ 55,000,000**	**$ 268,040,000**

SUMMARY BY DRIVER							
Growth	$ 127,900,000	$ 8,200,000	$ -	$ -	$ -	$ -	$ 8,200,000
Maintenance	65,650,000	15,350,000	31,200,000	16,050,000	8,900,000	-	71,500,000
Resilience	6,950,000	2,500,000	9,200,000	11,500,000	4,800,000	5,000,000	33,000,000
Upgrade	22,500,000	20,500,000	6,000,000	7,300,000	7,750,000	30,000,000	71,550,000
Opportunity	64,110,000	4,290,000	7,500,000	27,500,000	24,500,000	20,000,000	83,790,000
Total	**$ 287,110,000**	**$ 50,840,000**	**$ 53,900,000**	**$ 62,350,000**	**$ 45,950,000**	**$ 55,000,000**	**$ 268,040,000**

METRO VANCOUVER HOUSING CORPORATION
HOUSING
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Housing Rents	$ 41,303,421	$ 42,110,363	2.0%	$ 42,910,062	1.9%	$ 46,572,836	8.5%	$ 49,231,139	5.7%	$ 57,651,998	17.1%
Housing Mortgage and Rental Subsidies	2,099,058	1,885,840		1,921,671		2,408,182		2,445,387		2,483,298	
Other External Revenues	801,468	884,490		899,466		915,291		930,264		946,095	
Financing Proceeds	-	5,820,000		10,730,000		13,580,000		8,500,000		8,000,000	
Transfer from Reserves	9,488,074	4,098,180		3,826,636		3,287,444		7,713,628		7,327,886	
TOTAL REVENUES	**$ 53,692,021**	**$ 54,798,873**	**2.1%**	**$ 60,287,835**	**10.0%**	**$ 66,763,753**	**10.7%**	**$ 68,820,418**	**3.1%**	**$ 76,409,277**	**11.0%**
EXPENDITURES											
Operating Programs:											
Property Operations	$ 19,715,819	$ 17,976,727		$ 18,135,553		$ 19,256,361		$ 20,243,059		$ 22,984,432	
Maintenance	912,592	1,108,815		1,130,223		1,155,877		1,182,107		1,208,926	
Housing Finance Operations	945,735	965,411		984,673		1,008,129		1,033,831		1,056,695	
Tenant Program and Services	412,897	585,086		594,605		607,343		620,375		633,705	
Site Administration	2,052,399	2,250,084		2,291,376		2,342,016		2,393,791		2,446,722	
Engineers in Training	11,627	15,508		15,797		16,151		16,513		16,883	
Administration and Department Support	1,407,505	1,479,635		1,509,470		1,543,832		1,578,972		1,613,992	
	25,458,574	24,381,266	(4.2%)	24,661,697	1.2%	25,929,709	5.1%	27,068,648	4.4%	29,961,355	10.7%
Communications Program	40,000	40,000	0.0%	40,000	0.0%	40,000	0.0%	40,000	0.0%	40,000	0.0%
Allocation of Centralized Support Costs	2,082,758	2,401,739	15.3%	2,185,410	(9.0%)	2,108,414	(3.5%)	2,038,626	(3.3%)	1,913,691	(6.1%)
Total Operating Programs	27,581,332	26,823,005	(2.7%)	26,887,107	0.2%	28,078,123	4.4%	29,147,274	3.8%	31,915,046	9.5%
Capital Maintenance	9,488,074	9,918,180	4.5%	14,556,636	46.8%	16,867,444	15.9%	16,213,628	(3.9%)	15,327,886	(5.5%)
Allocation of Project Delivery Cost	388,442	-	(100.0%)	933,341	0.0%	973,791	4.3%	980,228	0.7%	982,333	0.2%
Debt Service:											
Mortgage Payments	5,154,165	4,799,022	(6.9%)	4,599,645	(4.2%)	6,537,379	42.1%	7,719,073	18.1%	12,341,328	59.9%
Capital Maintenance Financing	-	678,428	0.0%	1,053,978	55.4%	2,572,483	140.0%	2,869,983	11.6%	4,615,127	60.8%
Contribution to Capital Replacement Reserve	1,720,546	1,859,270	8.1%	1,859,270	0.0%	1,992,506	7.2%	2,070,241	3.9%	2,375,040	14.7%
Contribution to Reserve	9,359,462	10,720,968	14.5%	10,397,858	(3.0%)	9,742,027	(6.3%)	9,819,991	0.8%	8,852,517	(9.9%)
TOTAL EXPENDITURES	**$ 53,692,021**	**$ 54,798,873**	**2.1%**	**$ 60,287,835**	**10.0%**	**$ 66,763,753**	**10.7%**	**$ 68,820,418**	**3.1%**	**$ 76,409,277**	**11.0%**

METRO VANCOUVER HOUSING CORPORATION
CAPITAL PORTFOLIO
HOUSING DEVELOPMENT
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDITURES									
Heather Place - Building B	$ 48,100,000	$ 2,400,000	$ 13,400,000	$ 18,000,000	$ 12,300,000	$ -	$ 46,100,000	Starting 2021 - Detailed Design	Expand/Re-develop
Kingston Gardens - Phase 1	44,600,000	25,000,000	11,600,000	-	-	-	36,600,000	Starting 2021 - Construction	Expand/Re-develop
Welcher Avenue	36,100,000	18,000,000	11,500,000	3,800,000	-	-	33,300,000	Starting 2021 - Construction	Expand/Re-develop
Eastburn Square (2021 Projects in Planning)	63,800,000	800,000	3,400,000	25,100,000	29,000,000	5,000,000	63,300,000	Planned	Expand/Re-develop
Malaspina (2021 Projects in Planning)	38,700,000	500,000	1,700,000	16,000,000	20,000,000	-	38,200,000	Planned	Expand/Re-develop
Pitt Meadows Town Centre (2021 Projects in Planning)	45,800,000	800,000	3,500,000	17,500,000	20,000,000	3,500,000	45,300,000	Planned	Expand/Member Partnerships
Southwynde - Burnaby (2021 Projects in Planning)	45,400,000	800,000	2,300,000	17,800,000	20,500,000	3,500,000	44,900,000	Planned	Expand/Member Partnerships
Projects in Planning	-	-	800,000	7,200,000	46,500,000	65,800,000	120,300,000	Planned	Expand/Re-develop and Member Partnerships
TOTAL CAPITAL EXPENDITURES	**$ 322,500,000**	**$ 48,300,000**	**$ 48,200,000**	**$ 105,400,000**	**$ 148,300,000**	**$ 77,800,000**	**$ 428,000,000**		
CAPITAL FUNDING									
Grants	$ 29,000,000	$ 17,535,892	$ 1,202,500	$ 7,770,054	$ 3,581,473	$ -	$ 30,089,919		
External Borrowing	224,500,000	25,464,108	32,106,415	86,629,946	121,063,471	48,577,277	313,841,217		
Reserve	69,000,000	5,300,000	14,891,085	11,000,000	23,655,056	29,222,723	84,068,864		
Total	**$ 322,500,000**	**$ 48,300,000**	**$ 48,200,000**	**$ 105,400,000**	**$ 148,300,000**	**$ 77,800,000**	**$ 428,000,000**		
SUMMARY BY DRIVER									
Expand/Re-develop	$ 231,300,000	$ 46,700,000	$ 42,050,000	$ 67,100,000	$ 95,800,000	$ 43,200,000	$ 294,850,000		
Expand/Member Partnerships	91,200,000	1,600,000	6,150,000	38,300,000	52,500,000	34,600,000	133,150,000		
Total	**$ 322,500,000**	**$ 48,300,000**	**$ 48,200,000**	**$ 105,400,000**	**$ 148,300,000**	**$ 77,800,000**	**$ 428,000,000**		

METRO VANCOUVER DISTRICTS
REGIONAL DISTRICT SUMMARY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 80,939,658	$ 89,868,576	11.0%	$ 101,830,420	13.3%	$ 107,887,056	5.9%	$ 111,024,874	2.9%	$ 115,315,783	3.9%
Compensation Services Revenue	484,531	503,691	4.0%	510,310	1.3%	520,172	1.9%	533,079	2.5%	538,446	1.0%
Collective Bargaining Services Revenue	900,427	934,437	3.8%	948,056	1.5%	964,568	1.7%	985,392	2.2%	997,791	1.3%
Electoral Area Requisition	389,401	400,973	3.0%	416,018	3.8%	420,991	1.2%	438,926	4.3%	447,422	1.9%
Regional Global Positioning System User Fees	288,091	287,366	(0.3%)	292,684	1.9%	298,846	2.1%	304,020	1.7%	309,373	1.8%
User Fees	2,622,708	2,607,314	(0.6%)	3,115,543	19.5%	3,463,731	11.2%	3,384,139	(2.3%)	3,476,042	2.7%
Non-Road Diesel Permit Fees	1,365,000	1,070,000	(21.6%)	1,070,000	0.0%	1,070,000	0.0%	1,070,000	0.0%	1,070,000	0.0%
Love Food Hate Waste	492,000	400,000	(18.7%)	375,000	(6.3%)	375,000	0.0%	375,000	0.0%	375,000	0.0%
Zero Waste Conference	325,000	337,000	3.7%	350,500	4.0%	366,200	4.5%	366,200	0.0%	366,200	0.0%
Other External Revenues	3,905,104	4,133,243	5.8%	3,873,712	(6.3%)	3,889,365	0.4%	3,938,855	1.3%	3,982,344	1.1%
Transfer from Sustainability Innovation Fund Reserves	2,243,273	864,000	(61.5%)	-	(100.0%)	-	N/A	-	N/A	-	0.0%
Transfer from Reserves	7,189,130	12,100,537	68.3%	8,577,530	(29.1%)	7,806,564	(9.0%)	8,278,577	6.0%	8,880,167	7.3%
TOTAL REVENUES	**$ 101,144,323**	**$ 113,507,137**	**12.2%**	**$ 121,359,773**	**6.9%**	**$ 127,062,493**	**4.7%**	**$ 130,699,062**	**2.9%**	**$ 135,758,568**	**3.9%**
EXPENDITURES											
Greater Vancouver Regional District											
Air Quality	$ 12,560,687	$ 12,498,252	(0.5%)	$ 12,840,167	2.7%	$ 12,873,244	0.3%	$ 13,054,849	1.4%	$ 13,761,638	5.4%
E911 Emergency Telephone Service	4,633,573	4,748,693	2.5%	4,866,654	2.5%	4,987,528	2.5%	5,111,386	2.5%	5,238,304	2.5%
Electoral Area Service	678,891	797,641	17.5%	687,686	(13.8%)	703,074	2.2%	694,009	(1.3%)	807,505	16.4%
General Government Administration	5,681,876	6,799,517	19.7%	6,939,384	2.1%	7,033,110	1.4%	7,139,823	1.5%	7,150,546	0.2%
General Government-Zero Waste Collaboration Initiatives	1,660,020	1,606,945	(3.2%)	1,591,377	(1.0%)	1,609,503	1.1%	1,609,240	0.0%	1,608,129	(0.1%)
Housing Planning and Policy	6,554,912	6,353,628	(3.1%)	8,248,312	29.8%	8,276,572	0.3%	8,296,943	0.2%	8,423,367	1.5%
Regional Emergency Management	228,945	233,731	2.1%	234,540	0.3%	236,381	0.8%	218,128	(7.7%)	213,230	(2.2%)
Regional Economic Prosperity	1,530,000	2,785,217	82.0%	3,351,233	20.3%	3,443,526	2.8%	3,488,095	1.3%	3,534,479	1.3%
Regional Employers Services	3,102,235	3,057,423	(1.4%)	3,022,613	(1.1%)	3,072,678	1.7%	3,127,170	1.8%	3,168,958	1.3%
Regional Global Positioning System	324,719	337,366	3.9%	343,684	1.9%	350,866	2.1%	357,080	1.8%	363,494	1.8%
Regional Parks	58,915,373	68,717,860	16.6%	73,920,687	7.6%	79,116,862	7.0%	82,097,601	3.8%	85,840,118	4.6%
Regional Planning	4,139,538	4,302,565	3.9%	4,415,797	2.6%	4,452,402	0.8%	4,588,700	3.1%	4,723,287	2.9%
Sasamat Fire Protection Service	1,133,554	1,268,299	11.9%	897,639	(29.2%)	906,747	1.0%	916,038	1.0%	925,513	1.0%
TOTAL EXPENDITURES	**$ 101,144,323**	**$ 113,507,137**	**12.2%**	**$ 121,359,773**	**6.9%**	**$ 127,062,493**	**4.7%**	**$ 130,699,062**	**2.9%**	**$ 135,758,568**	**3.9%**

METRO VANCOUVER REGIONAL DISTRICT
AIR QUALITY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 6,482,642	$ 7,392,266	14.0%	$ 8,747,776	18.3%	$ 8,834,220	1.0%	$ 9,108,949	3.1%	$ 9,737,345	6.9%
User Fees	1,715,000	1,715,000		2,240,000		2,567,451		2,468,027		2,540,000	
Non-Road Diesel Permit Fees	1,365,000	1,070,000		1,070,000		1,070,000		1,070,000		1,070,000	
Other External Revenues	635,378	439,986		445,391		401,573		407,873		414,293	
Transfer from Sustainability Innovation Fund Reserves	1,032,667	400,000		-		-		-		-	
Transfer from Reserves	1,330,000	1,481,000		337,000		-		-		-	
TOTAL REVENUES	**$ 12,560,687**	**$ 12,498,252**	**(0.5%)**	**$ 12,840,167**	**2.7%**	**$ 12,873,244**	**0.3%**	**$ 13,054,849**	**1.4%**	**$ 13,761,638**	**5.4%**
EXPENDITURES											
Operating Programs:											
Ambient Air Quality Monitoring	$ 2,227,265	$ 2,377,133		$ 2,367,128		$ 2,385,060		$ 2,334,044		$ 2,734,108	
Air Quality and Climate Change Policy	2,650,389	2,738,184		3,381,547		3,004,595		3,075,564		3,175,156	
Air Quality Bylaw and Regulation Development	1,284,572	1,294,649		1,287,245		1,293,837		1,322,228		1,347,838	
Engineers in Training	34,880	46,525		47,390		48,452		49,538		50,649	
Regional Sustainability Initiatives	1,032,667	400,000		-		-		-		-	
Administration and Department Support	580,973	541,721		553,045		567,378		580,391		593,879	
	7,810,746	7,398,212	(5.3%)	7,636,355	3.2%	7,299,322	(4.4%)	7,361,765	0.9%	7,901,630	7.3%
Communications Program	150,000	150,000	0.0%	150,000	0.0%	180,000	20.0%	180,000	0.0%	180,000	0.0%
Environmental Regulation and Enforcement	3,484,723	3,993,324		4,065,325		4,426,601		4,639,739		4,882,387	
Contribution to Non-Road Diesel Reserve	257,500	-		-		-		-		-	
	3,742,223	3,993,324	6.7%	4,065,325	1.8%	4,426,601	8.9%	4,639,739	4.8%	4,882,387	5.2%
Allocation of Centralized Support Costs	857,718	956,716	11.5%	988,487	3.3%	967,321	(2.1%)	873,345	(9.7%)	797,621	(8.7%)
TOTAL EXPENDITURES	**$ 12,560,687**	**$ 12,498,252**	**(0.5%)**	**$ 12,840,167**	**2.7%**	**$ 12,873,244**	**0.3%**	**$ 13,054,849**	**1.4%**	**$ 13,761,638**	**5.4%**

METRO VANCOUVER REGIONAL DISTRICT
E911 EMERGENCY TELEPHONE SERVICE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 4,555,802	$ 4,670,236	2.5%	$ 4,786,248	2.5%	$ 4,905,124	2.5%	$ 5,027,540	2.5%	$ 5,152,945	2.5%
Other External Revenues	77,771	78,457		80,406		82,404		83,846		85,359	
TOTAL REVENUES	**$ 4,633,573**	**$ 4,748,693**	**2.5%**	**$ 4,866,654**	**2.5%**	**$ 4,987,528**	**2.5%**	**$ 5,111,386**	**2.5%**	**$ 5,238,304**	**2.5%**
EXPENDITURES											
Operating Programs:											
Emergency Telephone Service	$ 4,542,719	$ 4,655,581		$ 4,771,229		$ 4,889,733		$ 5,011,163		$ 5,135,592	
Allocation of Centralized Support	90,854	93,112		95,425		97,795		100,223		102,712	
TOTAL EXPENDITURES	**$ 4,633,573**	**$ 4,748,693**	**2.5%**	**$ 4,866,654**	**2.5%**	**$ 4,987,528**	**2.5%**	**$ 5,111,386**	**2.5%**	**$ 5,238,304**	**2.5%**

METRO VANCOUVER REGIONAL DISTRICT
ELECTORAL AREA SERVICE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Electoral Area Requisition	$ 389,401	$ 400,973	3.0%	$ 416,018	3.8%	$ 420,991	1.2%	$ 438,926	4.3%	$ 447,422	1.9%
User Fees	10,000	11,000		11,000		12,000		12,000		12,000	
Other External Revenues	180,490	186,668		186,668		193,083		193,083		193,083	
Transfer from Reserves	99,000	199,000		74,000		77,000		50,000		155,000	
TOTAL REVENUES	**$ 678,891**	**$ 797,641**	**17.5%**	**$ 687,686**	**(13.8%)**	**$ 703,074**	**2.2%**	**$ 694,009**	**(1.3%)**	**$ 807,505**	**16.4%**
EXPENDITURES											
Operating Programs:											
Community Planning	$ 399,907	$ 410,791		$ 381,596		$ 404,621		$ 396,870		$ 419,214	
Building Inspections	16,341	18,049		18,411		18,854		19,307		19,770	
Local Government Election	-	122,566		-		-		-		124,676	
Fraser Valley Library Services	2,067	2,067		2,067		2,067		2,067		2,067	
Emergency Planning	18,000	18,000		20,000		20,000		20,000		20,000	
	436,315	571,473	31.0%	422,074	(26.1%)	445,542	5.6%	438,244	(1.6%)	585,727	33.7%
Contribution to Election Reserve	30,000	-		30,000		30,000		30,000		-	
Contribution to Reserve	180,490	186,668	3.4%	186,668	0.0%	193,083	3.4%	193,083	0.0%	193,083	0.0%
	210,490	186,668	(11.3%)	216,668	16.1%	223,083	3.0%	223,083	0.0%	193,083	(13.4%)
Allocation of Centralized Support	32,086	39,500	23.1%	48,944	23.9%	34,449	(29.6%)	32,682	(5.1%)	28,695	(12.2%)
TOTAL EXPENDITURES	**$ 678,891**	**$ 797,641**	**17.5%**	**$ 687,686**	**(13.8%)**	**$ 703,074**	**2.2%**	**$ 694,009**	**(1.3%)**	**$ 807,505**	**16.4%**

METRO VANCOUVER REGIONAL DISTRICT
GENERAL GOVERNMENT ADMINISTRATION
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 4,456,508	$ 5,671,266	27.3%	$ 5,808,696	2.4%	$ 5,879,939	1.2%	$ 6,004,122	2.1%	$ 6,012,267	0.1%
Other External Revenues	975,368	978,251		980,688		1,003,171		985,701		988,279	
Transfer from Reserves	250,000	150,000		150,000		150,000		150,000		150,000	
TOTAL REVENUES	**$ 5,681,876**	**$ 6,799,517**	**19.7%**	**$ 6,939,384**	**2.1%**	**$ 7,033,110**	**1.4%**	**$ 7,139,823**	**1.5%**	**$ 7,150,546**	**0.2%**
EXPENDITURES											
Operating Programs:											
Audit and Insurance	$ 69,295	$ 162,533		$ 165,326		$ 168,172		$ 171,073		$ 174,029	
Board Administrative Services	2,990,446	3,761,659		3,834,905		3,916,940		4,000,716		4,086,282	
External Contributions	455,000	455,000		455,000		455,000		455,000		455,000	
Leadership and Engagement	307,643	592,997		583,240		607,428		666,198		624,085	
Mosquito Control Contract	120,166	122,930		125,266		127,646		130,071		132,543	
Regional Culture	35,079	36,376		37,043		37,862		38,701		39,558	
Contribution to Sustainability Innovation Fund Reserve	347,000	347,000		347,000		347,000		347,000		347,000	
	4,324,629	5,478,495	26.7%	5,547,780	1.3%	5,660,048	2.0%	5,808,759	2.6%	5,858,497	0.9%
Communications Program	927,000	877,000	(5.4%)	877,000	0.0%	877,000	0.0%	877,000	0.0%	877,000	0.0%
Allocation of Centralized Support Costs	430,247	444,022	3.2%	514,604	15.9%	496,062	(3.6%)	454,064	(8.5%)	415,049	(8.6%)
TOTAL EXPENDITURES	**$ 5,681,876**	**$ 6,799,517**	**19.7%**	**$ 6,939,384**	**2.1%**	**$ 7,033,110**	**1.4%**	**$ 7,139,823**	**1.5%**	**$ 7,150,546**	**0.2%**

METRO VANCOUVER REGIONAL DISTRICT
GENERAL GOVERNMENT ZERO WASTE COLLABORATION INITIATIVES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 768,020	$ 769,945	0.3%	$ 765,877	(0.5%)	$ 768,303	0.3%	$ 768,040	0.0%	$ 766,929	(0.1%)
Other External Revenues	75,000	100,000		100,000		100,000		100,000		100,000	
Love Food Hate Waste	492,000	400,000		375,000		375,000		375,000		375,000	
Zero Waste Conference	325,000	337,000		350,500		366,200		366,200		366,200	
TOTAL REVENUES	**$ 1,660,020**	**$ 1,606,945**	**(3.2%)**	**$ 1,591,377**	**(1.0%)**	**$ 1,609,503**	**1.1%**	**$ 1,609,240**	**0.0%**	**$ 1,608,129**	**(0.1%)**
EXPENDITURES											
Operating Programs:											
National Zero Waste Council	$ 195,700	$ 220,700		$ 220,700		$ 220,700		$ 220,700		$ 220,700	
Love Food Hate Waste	492,000	400,000		375,000		375,000		375,000		375,000	
Zero Waste Conference	537,000	549,000		562,500		578,200		578,200		578,200	
	1,224,700	1,169,700	(4.5%)	1,158,200	(1.0%)	1,173,900	1.4%	1,173,900	0.0%	1,173,900	0.0%
Allocation of Centralized Support Costs	435,320	437,245	0.4%	433,177	(0.9%)	435,603	0.6%	435,340	(0.1%)	434,229	(0.3%)
TOTAL EXPENDITURES	**$ 1,660,020**	**$ 1,606,945**	**(3.2%)**	**$ 1,591,377**	**(1.0%)**	**$ 1,609,503**	**1.1%**	**$ 1,609,240**	**0.0%**	**$ 1,608,129**	**(0.1%)**

METRO VANCOUVER REGIONAL DISTRICT
HOUSING PLANNING & POLICY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 6,031,486	$ 6,253,628	3.7%	$ 8,248,312	31.9%	$ 8,276,572	0.3%	$ 8,296,943	0.2%	$ 8,423,367	1.5%
Transfer from Sustainability Innovation Fund Reserves	523,426	100,000		-		-		-		-	
TOTAL REVENUES	**$ 6,554,912**	**$ 6,353,628**	**(3.1%)**	**$ 8,248,312**	**29.8%**	**$ 8,276,572**	**0.3%**	**$ 8,296,943**	**0.2%**	**$ 8,423,367**	**1.5%**
EXPENDITURES											
Operating Programs:											
Housing Planning and Policy	$ 1,465,336	$ 1,241,092		$ 1,114,876		$ 1,158,537		$ 1,185,126		$ 1,319,130	
Contribution to Affordable Housing Re-development Reserve	1,000,000	1,000,000		1,000,000		1,000,000		1,000,000		1,000,000	
Contribution to Affordable Housing Development Reserve	4,000,000	4,000,000		6,000,000		6,000,000		6,000,000		6,000,000	
	6,465,336	6,241,092	(3.5%)	8,114,876	30.0%	8,158,537	0.5%	8,185,126	0.3%	8,319,130	1.6%
Communications Program	25,000	25,000	0.0%	25,000	0.0%	25,000	0.0%	25,000	0.0%	25,000	0.0%
Allocation of Centralized Support Costs	64,576	87,536	35.6%	108,436	23.9%	93,035	(14.2%)	86,817	(6.7%)	79,237	(8.7%)
TOTAL EXPENDITURES	**$ 6,554,912**	**$ 6,353,628**	**(3.1%)**	**$ 8,248,312**	**29.8%**	**$ 8,276,572**	**0.3%**	**$ 8,296,943**	**0.2%**	**$ 8,423,367**	**1.5%**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL EMERGENCY MANAGEMENT
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 173,000	$ 173,194	0.1%	$ 174,010	0.5%	$ 177,817	2.2%	$ 180,551	1.5%	$ 184,063	1.9%
Transfer from Reserves	55,945	60,537		60,530		58,564		37,577		29,167	
TOTAL REVENUES	**$ 228,945**	**$ 233,731**	**2.1%**	**$ 234,540**	**0.3%**	**$ 236,381**	**0.8%**	**$ 218,128**	**(7.7%)**	**$ 213,230**	**(2.2%)**
EXPENDITURES											
Operating Programs:											
Regional Emergency Management	$ 218,043	$ 222,601		$ 223,371		$ 225,125		$ 207,741		$ 203,076	
Allocation of Centralized Support	10,902	11,130		11,169		11,256		10,387		10,154	
TOTAL EXPENDITURES	**$ 228,945**	**$ 233,731**	**2.1%**	**$ 234,540**	**0.3%**	**$ 236,381**	**0.8%**	**$ 218,128**	**(7.7%)**	**$ 213,230**	**(2.2%)**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL ECONOMIC PROSPERITY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 1,530,000	$ 2,185,217	42.8%	$ 2,851,233	30.5%	$ 3,343,526	17.3%	$ 3,488,095	4.3%	$ 3,534,479	1.3%
Transfer from Reserves	-	600,000		500,000		100,000		-		-	
TOTAL REVENUES	**$ 1,530,000**	**$ 2,785,217**	**82.0%**	**$ 3,351,233**	**20.3%**	**$ 3,443,526**	**2.8%**	**$ 3,488,095**	**1.3%**	**$ 3,534,479**	**1.3%**
EXPENDITURES											
Operating Programs:											
Collaboration	$ 200,000	$ 463,003		$ 466,520		$ 471,519		$ 476,636		$ 481,867	
Regional Data Collection and Research	200,000	539,491		761,997		780,024		798,467		817,335	
Attracting Investment	700,000	1,190,477		1,430,734		1,461,580		1,493,138		1,525,428	
Leadership and Administration	400,000	456,449		465,070		475,399		485,964		496,770	
	$ 1,500,000	$ 2,649,420	76.6%	$ 3,124,321	17.9%	$ 3,188,522	2.1%	$ 3,254,205	2.1%	$ 3,321,400	2.1%
Allocation of Centralized Support	30,000	135,797	350.0%	226,912	67.1%	255,004	12.4%	233,890	(8.3%)	213,079	(8.9%)
TOTAL EXPENDITURES	**$ 1,530,000**	**$ 2,785,217**	**82.0%**	**$ 3,351,233**	**20.3%**	**$ 3,443,526**	**2.8%**	**$ 3,488,095**	**1.3%**	**$ 3,534,479**	**1.3%**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL EMPLOYERS SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 1,038,343	$ 1,109,664	6.9%	$ 1,125,002	1.4%	$ 1,140,703	1.4%	$ 1,153,352	1.1%	$ 1,171,027	1.5%
Compensation Services Revenue	484,531	503,691		510,310		520,172		533,079		538,446	
Collective Bargaining Services Revenue	900,427	934,437		948,056		964,568		985,392		997,791	
Other External Revenues	388,609	434,631		439,245		447,235		455,347		461,694	
Transfer from Reserves	290,325	75,000		-		-		-		-	
TOTAL REVENUES	**$ 3,102,235**	**$ 3,057,423**	**(1.4%)**	**$ 3,022,613**	**(1.1%)**	**$ 3,072,678**	**1.7%**	**$ 3,127,170**	**1.8%**	**$ 3,168,958**	**1.3%**
EXPENDITURES											
Operating Programs:											
Information and Advisory Services	$ 1,398,879	$ 1,279,160		$ 1,227,876		$ 1,258,790		$ 1,286,602		$ 1,315,077	
Compensation Services	520,080	543,566		555,674		567,689		585,015		595,155	
Collective Bargaining	936,478	976,191		999,347		1,019,062		1,046,822		1,067,632	
	2,855,437	2,798,917	(2.0%)	2,782,897	(0.6%)	2,845,541	2.3%	2,918,439	2.6%	2,977,864	2.0%
Allocation of Centralized Support	246,798	258,506	4.7%	239,716	(7.3%)	227,137	(5.2%)	208,731	(8.1%)	191,094	(8.4%)
TOTAL EXPENDITURES	**$ 3,102,235**	**$ 3,057,423**	**(1.4%)**	**$ 3,022,613**	**(1.1%)**	**$ 3,072,678**	**1.7%**	**$ 3,127,170**	**1.8%**	**$ 3,168,958**	**1.3%**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL GLOBAL POSITIONING SYSTEM
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Regional Global Positioning System User Fees	$ 288,091	$ 287,366	(0.3%)	$ 292,684	1.9%	$ 298,846	2.1%	$ 304,020	1.7%	$ 309,373	1.8%
Other External Revenues	36,628	50,000		51,000		52,020		53,060		54,121	
TOTAL REVENUES	**$ 324,719**	**$ 337,366**	**3.9%**	**$ 343,684**	**1.9%**	**$ 350,866**	**2.1%**	**$ 357,080**	**1.8%**	**$ 363,494**	**1.8%**
EXPENDITURES											
Operating Programs:											
Regional Global Positioning System	$ 292,184	$ 265,914		$ 271,603		$ 278,158		$ 284,872		$ 291,742	
Contribution to Reserve	11,444	45,000		49,307		50,540		51,804		53,099	
Allocation of Centralized Support	21,091	26,452		22,774		22,168		20,404		18,653	
TOTAL EXPENDITURES	**$ 324,719**	**$ 337,366**	**3.9%**	**$ 343,684**	**1.9%**	**$ 350,866**	**2.1%**	**$ 357,080**	**1.8%**	**$ 363,494**	**1.8%**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PARKS
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 51,869,535	$ 57,062,296	10.0%	$ 64,294,830	12.7%	$ 69,476,703	8.1%	$ 71,677,544	3.2%	$ 74,859,561	4.4%
User Fees	897,708	881,314		864,543		884,280		904,112		924,042	
Other External Revenues	1,525,860	1,855,250		1,580,314		1,599,879		1,649,945		1,675,515	
Transfer from Sustainability Innovation Fund Reserves	338,410	264,000		-		-		-		-	
Transfer from Reserves	4,283,860	8,655,000		7,181,000		7,156,000		7,866,000		8,381,000	
TOTAL REVENUES	**$ 58,915,373**	**$ 68,717,860**	**16.6%**	**$ 73,920,687**	**7.6%**	**$ 79,116,862**	**7.0%**	**$ 82,097,601**	**3.8%**	**$ 85,840,118**	**4.6%**
EXPENDITURES											
Operating Programs:											
Systems Planning, Design and Development Services											
Planning and Resource Management	$ 2,365,197	$ 2,660,418		$ 2,245,397		$ 2,320,760		$ 2,344,053		$ 2,392,517	
Design and Development	1,357,013	1,539,521		1,565,096		1,605,593		1,633,720		1,668,137	
Engineers in Training	11,627	15,508		15,797		16,151		16,513		16,883	
	3,733,837	4,215,447	12.9%	3,826,290	(9.2%)	3,942,504	3.0%	3,994,286	1.3%	4,077,537	2.1%
Systems Visitor and Operations Services											
Visitor Services	1,388,491	1,523,534		1,534,519		1,562,702		1,581,265		1,600,212	
Operations Services	1,810,639	1,802,557		1,805,232		1,838,849		1,873,297		1,907,321	
	3,199,130	3,326,091	4.0%	3,339,751	0.4%	3,401,551	1.9%	3,454,562	1.6%	3,507,533	1.5%
Central Area Services											
Operations and Maintenance	6,066,609	6,753,942		6,673,787		7,012,835		7,196,357		7,361,683	
Area Visitor Services	576,457	612,709		653,595		691,803		723,844		739,299	
Area Management and Administration	2,888,763	3,422,093		633,589		649,342		664,563		680,776	
Area Planning	156,801	161,774		164,334		168,657		171,874		175,166	
Burns Bog Ecological Conservancy Area	421,863	471,440		476,410		506,593		513,170		519,900	
Contribution to Reserve	23,000	223,000		223,000		223,000		223,000		223,000	
	10,133,493	11,644,958	14.9%	8,824,715	(24.2%)	9,252,230	4.8%	9,492,808	2.6%	9,699,824	2.2%
East Area Services											
Operations and Maintenance	4,435,927	4,846,934		5,034,757		5,157,126		5,352,906		5,472,127	
Area Visitor Services	557,073	635,817		644,463		657,562		670,965		706,727	
Area Management and Administration	673,451	626,506		637,689		653,354		668,362		683,723	
Area Planning	153,370	165,881		169,160		173,036		177,000		181,053	
	5,819,821	6,275,138	7.8%	6,486,069	3.4%	6,641,078	2.4%	6,869,233	3.4%	7,043,630	2.5%
West Area Services											
Operations and Maintenance	4,268,606	4,756,383		4,861,520		4,993,418		5,173,103		5,419,226	
Area Visitor Services	579,319	626,892		637,799		651,169		682,983		697,413	
Area Management and Administration	929,561	963,755		977,029		993,319		1,009,988		1,027,050	
Area Planning	152,592	157,565		160,125		163,269		166,486		169,778	
	5,930,078	6,504,595	9.7%	6,636,473	2.0%	6,801,175	2.5%	7,032,560	3.4%	7,313,467	4.0%
Administration and Department Support	1,398,761	1,451,781	3.8%	1,473,389	1.5%	1,528,171	3.7%	1,553,576	1.7%	1,579,534	1.7%
Communications Program	110,000	110,000	0.0%	110,000	0.0%	110,000	0.0%	110,000	0.0%	110,000	0.0%
Utility Voice Radio	84,060	82,520	(1.8%)	83,482	1.2%	85,760	2.7%	87,965	2.6%	89,747	2.0%
Quality Control Allocated	53,591	54,406	1.5%	54,422	0.0%	56,296	3.4%	57,648	2.4%	59,338	2.9%
Allocation of Centralized Support Costs	3,503,795	4,115,924	17.5%	4,279,744	4.0%	4,008,972	(6.3%)	3,744,601	(6.6%)	3,543,742	(5.4%)
Total Operating Programs	33,966,566	37,780,860	11.2%	35,114,335	(7.1%)	35,827,737	2.0%	36,397,239	1.6%	37,024,352	1.7%
Allocation of Project Delivery Cost	166,807	-	(100.0%)	179,352	0.0%	187,125	4.3%	188,362	0.7%	188,766	0.2%
Asset Maintenance	4,030,000	5,185,000	28.7%	7,125,000	37.4%	7,100,000	(0.4%)	7,810,000	10.0%	8,325,000	6.6%
Contribution to Capital Infrastructure Reserve	5,182,000	6,182,000	19.3%	7,932,000	28.3%	8,432,000	6.3%	10,132,000	20.2%	12,732,000	25.7%
Contribution to Parkland Acquisition and Development Reserve	15,570,000	19,570,000	25.7%	23,570,000	20.4%	27,570,000	17.0%	27,570,000	0.0%	27,570,000	0.0%
TOTAL EXPENDITURES	**$ 58,915,373**	**$ 68,717,860**	**16.6%**	**$ 73,920,687**	**7.6%**	**$ 79,116,862**	**7.0%**	**$ 82,097,601**	**3.8%**	**$ 85,840,118**	**4.6%**

METRO VANCOUVER REGIONAL DISTRICT
CAPITAL PORTFOLIO
REGIONAL PARKS
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Major Projects									
Grouse Mountain - Regional Park Trail and Amenity Improvements	$ 3,075,000	$ 725,000	$ 1,000,000	$ 1,000,000	$ -	$ -	$ 2,725,000	Construction	Capacity, Growth & Ecological Resilience
Widgeon Marsh - Regional Park Development	19,100,000	7,520,000	6,580,000	-	-	-	14,100,000	Construction	Capacity, Growth & Ecological Resilience
Campbell Valley - Management Plan Implementation	8,100,000	1,000,000	2,000,000	2,500,000	2,000,000	-	7,500,000	Construction	Capacity, Growth & Ecological Resilience
Belcarra - South Day Use Area	-	-	250,000	2,200,000	3,500,000	-	5,950,000	Planned	Capacity, Growth & Ecological Resilience
Codd Wetland - Park Development	-	-	-	900,000	2,500,000	4,500,000	7,900,000	Planned	Capacity, Growth & Ecological Resilience
West Creek Wetlands - Park Development	-	-	300,000	750,000	1,000,000	750,000	2,800,000	Planned	Capacity, Growth & Ecological Resilience
Burns Bog - Fire Restoration	-	-	-	-	-	500,000	500,000	Planned	Capacity, Growth & Ecological Resilience
Total Major Projects Program	**$ 30,275,000**	**$ 9,245,000**	**$ 10,130,000**	**$ 7,350,000**	**$ 9,000,000**	**$ 5,750,000**	**$ 41,475,000**		
Greenways									
Aldergrove - Rock'n Horse Trail Connector	$ 400,000	$ 400,000	$ -	$ -	$ -	$ -	$ 400,000	Planned	Connected Network
DNR/DSSG Management Plan Implementation	-	-	600,000	3,500,000	3,500,000	2,500,000	10,100,000	Planned	Connected Network
Boundry Bay - Perimeter Trail	-	-	150,000	1,500,000	-	-	1,650,000	Planned	Connected Network
Tynehead - Perimeter Trail	-	-	1,000,000	1,500,000	-	-	2,500,000	Planned	Connected Network
Other Greenways Upgrades	-	-	3,500,000	1,000,000	100,000	200,000	4,800,000	Planned	Connected Network
Total Greenways Program	**$ 400,000**	**$ 400,000**	**$ 5,250,000**	**$ 7,500,000**	**$ 3,600,000**	**$ 2,700,000**	**$ 19,450,000**		
Service Facilities									
Burnaby Lake - Service Yard Building Replacement	$ 1,000,000	$ 200,000	$ 50,000	$ 500,000	$ -	$ -	$ 750,000	Construction	Facility Replacement & Asset Management
Capilano - New Service Yard	943,000	150,000	-	-	-	-	150,000	Construction	Facility Replacement & Asset Management
Total Service Facilities Program	**$ 1,943,000**	**$ 350,000**	**$ 50,000**	**$ 500,000**	**$ -**	**$ -**	**$ 900,000**		
Park Development									
Crippen - Davies Orchard	$ 1,750,000	$ 1,000,000	$ 750,000	$ -	$ -	$ -	$ 1,750,000	Planned	Capacity, Growth & Ecological Resilience
Derby Reach - Full Service Washroom	2,014,000	1,560,000	-	-	-	-	1,560,000	Construction	Capacity, Growth & Ecological Resilience
Crippen - Dorman Point Acces and Amenities	500,000	500,000	-	-	-	-	500,000	Planned	Facility Replacement & Asset Management
Colony Farm - TMX Agreement Projects	1,000,000	100,000	300,000	300,000	300,000	-	1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - Admiralty Heights Trail Decomissioning	-	-	250,000	500,000	250,000		1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - White Pine Redevelopment & Improvements	-	-	-	-	150,000	1,600,000	1,750,000	Planned	Capacity, Growth & Ecological Resilience
Campbell Valley - Little River Loop Boardwalk	-	-	800,000	-	-	-	800,000	Planned	Facility Replacement & Asset Management
Pacific Spirit - Beach Access & Trail Improvments	-	-	50,000	100,000	500,000	1,000,000	1,650,000	Planned	Facility Replacement & Asset Management
Advanced Design Work for Future Projects	1,300,000	1,300,000	-	-	-	-	1,300,000	Planned	Capacity, Growth & Ecological Resilience
Park Amenities and Visitor Experience	4,500,000	750,000	750,000	1,000,000	1,000,000	1,000,000	4,500,000	Planned	Capacity, Growth & Ecological Resilience
Other Replacement, Restoration & Upgrade Projects	4,610,000	300,000	275,000	1,005,000	1,700,000	1,330,000	4,610,000	Planned	Facility Replacement & Asset Management
Total Park Development Program	**$ 15,674,000**	**$ 5,510,000**	**$ 3,175,000**	**$ 2,905,000**	**$ 3,900,000**	**$ 4,930,000**	**$ 20,420,000**		
Regional Parks Land Acquisition									
Regional Parks Land Acquisition	$ 15,750,000	$ 15,750,000	$ 15,000,000	$ 14,000,000	$ 12,500,000	$ 17,000,000	$ 74,250,000		Land Acquisition
Total Land Acquisition Program	**$ 15,750,000**	**$ 15,750,000**	**$ 15,000,000**	**$ 14,000,000**	**$ 12,500,000**	**$ 17,000,000**	**$ 74,250,000**		

METRO VANCOUVER REGIONAL DISTRICT
CAPITAL PORTFOLIO
REGIONAL PARKS
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
TOTAL CAPITAL EXPENDITURES	**$ 64,042,000**	**$ 31,255,000**	**$ 33,605,000**	**$ 32,255,000**	**$ 29,000,000**	**$ 30,380,000**	**$ 156,495,000**		
CAPITAL FUNDING									
Reserve	$ 57,352,060	$ 27,347,000	$ 32,491,780	$ 31,141,780	$ 28,700,000	$ 30,380,000	$ 150,060,560		
Grants	6,689,940	3,908,000	1,113,220	1,113,220	300,000		6,434,440		
Total	**$ 64,042,000**	**$ 31,255,000**	**$ 33,605,000**	**$ 32,255,000**	**$ 29,000,000**	**$ 30,380,000**	**$ 156,495,000**		
SUMMARY BY DRIVER									
Capacity, Growth & Ecological Resilience	$ 40,839,000	$ 13,955,000	$ 12,180,000	$ 9,150,000	$ 10,700,000	$ 8,350,000	$ 54,335,000		
Facility Replacement & Asset Management	7,053,000	1,150,000	1,175,000	1,605,000	2,200,000	2,330,000	8,460,000		
Connected Network	400,000	400,000	5,250,000	7,500,000	3,600,000	2,700,000	19,450,000		
Land Acquisition	15,750,000	15,750,000	15,000,000	14,000,000	12,500,000	17,000,000	74,250,000		
Total	**$ 64,042,000**	**$ 31,255,000**	**$ 33,605,000**	**$ 32,255,000**	**$ 29,000,000**	**$ 30,380,000**	**$ 156,495,000**		

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PLANNING
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 3,510,768	$ 3,922,565	11.7%	$ 4,140,797	5.6%	$ 4,187,402	1.1%	$ 4,413,700	5.4%	$ 4,558,287	3.3%
Transfer from Sustainability Innovation Fund Reserves	348,770	100,000		-		-		-		-	
Transfer from Reserves	280,000	280,000		275,000		265,000		175,000		165,000	
TOTAL REVENUES	**$ 4,139,538**	**$ 4,302,565**	**3.9%**	**$ 4,415,797**	**2.6%**	**$ 4,452,402**	**0.8%**	**$ 4,588,700**	**3.1%**	**$ 4,723,287**	**2.9%**
EXPENDITURES											
Operating Programs:											
Environment	$ 915,136	$ -		$ -		$ -		$ -		$ -	
Implementation Services	-	765,946		768,228		783,259		788,637		799,369	
Regional Land Use Policy	1,073,916	1,522,102		1,555,599		1,557,844		1,577,231		1,593,394	
Planning Analytics	774,503	797,335		941,627		951,183		1,074,329		1,184,669	
Regional Sustainability Initiatives	348,770	100,000		-		-		-		-	
Administration and Department Support	674,767	744,590		759,474		777,525		796,299		815,184	
	3,787,092	3,929,973	3.8%	4,024,928	2.4%	4,069,811	1.1%	4,236,496	4.1%	4,392,616	3.7%
Communications Program	60,000	50,000	(16.7%)	50,000	0.0%	50,000	0.0%	50,000	0.0%	50,000	0.0%
Allocation of Centralized Support Costs	292,446	322,592	10.3%	340,869	5.7%	332,591	(2.4%)	302,204	(9.1%)	280,671	(7.1%)
TOTAL EXPENDITURES	**$ 4,139,538**	**$ 4,302,565**	**3.9%**	**$ 4,415,797**	**2.6%**	**$ 4,452,402**	**0.8%**	**$ 4,588,700**	**3.1%**	**$ 4,723,287**	**2.9%**

METRO VANCOUVER REGIONAL DISTRICT
SASAMAT FIRE PROTECTION SERVICE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 523,554	$ 658,299	25.7%	$ 887,639	34.8%	$ 896,747	1.0%	$ 906,038	1.0%	$ 915,513	1.0%
Other External Revenues	10,000	10,000		10,000		10,000		10,000		10,000	
Transfer from Reserves	600,000	600,000		-		-		-		-	
TOTAL REVENUES	**$ 1,133,554**	**$ 1,268,299**	**11.9%**	**$ 897,639**	**(29.2%)**	**$ 906,747**	**1.0%**	**$ 916,038**	**1.0%**	**$ 925,513**	**1.0%**
EXPENDITURES											
Operating Programs:											
Sasamat Fire Protection Service	$ 249,140	$ 280,326		$ 415,770		$ 424,050		$ 432,496		$ 441,110	
Apparatus Acquisitions	600,000	$ 600,000		-		-		-		-	
Contribution to Capital Reserve	92,100	$ 92,100		92,100		92,100		92,100		92,100	
Contribution to Capital Facilities Reserve	167,400	267,840		348,192		348,192		348,192		348,192	
	$ 1,108,640	$ 1,240,266	11.9%	856,062	(31.0%)	864,342	1.0%	872,788	1.0%	881,402	1.0%
Allocation of Centralized Support Costs	24,914	28,033	12.5%	41,577	48.3%	42,405	2.0%	43,250	2.0%	44,111	2.0%
TOTAL EXPENDITURES	**$ 1,133,554**	**$ 1,268,299**	**11.9%**	**$ 897,639**	**(29.2%)**	**$ 906,747**	**1.0%**	**$ 916,038**	**1.0%**	**$ 925,513**	**1.0%**

METRO VANCOUVER DISTRICTS
CENTRALIZED SUPPORT PROGRAM SUMMARY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments (net)	$ 66,731,123	$ 75,049,520	12.5%	$ 76,916,190	2.5%	$ 79,510,676	3.4%	$ 81,636,524	2.7%	$ 84,182,941	3.1%
Allocated to Functional Departments - Fleet	12,266,934	12,616,934	2.9%	12,856,656	1.9%	13,100,932	1.9%	13,349,850	1.9%	13,603,497	1.9%
Other External Revenues	6,994,794	6,275,666		6,363,799		6,446,449		6,515,760		6,120,944	
Transfer from Capital	4,517,291	9,538,647		10,048,150		7,832,639		8,143,199		8,308,345	
Transfer from Reserves	5,563,300	7,510,874		7,136,713		7,080,928		6,873,139		7,102,024	
TOTAL REVENUES	**$ 96,073,442**	**$ 110,991,641**	**15.5%**	**$ 113,321,508**	**2.1%**	**$ 113,971,624**	**0.6%**	**$ 116,518,472**	**2.2%**	**$ 119,317,751**	**2.4%**
EXPENDITURES											
Corporate Services	59,968,526	67,221,167	12.1%	68,215,236	1.5%	67,784,414	(0.6%)	69,150,154	2.0%	70,877,175	2.5%
External Relations	9,800,747	13,292,160	35.6%	13,381,131	0.7%	13,786,593	3.0%	14,283,975	3.6%	14,557,118	1.9%
Financial Services	14,344,036	16,327,049	13.8%	16,925,045	3.7%	17,287,137	2.1%	17,659,675	2.2%	18,068,095	2.3%
Human Resources	6,652,497	7,438,681	11.8%	7,635,055	2.6%	7,784,102	2.0%	7,927,680	1.8%	8,146,765	2.8%
Indigenous Relations	583,698	1,383,577	140.0%	1,523,787	10.1%	1,561,761	2.5%	1,600,624	2.5%	1,640,212	2.5%
Legislative Services	4,723,938	5,329,007	12.8%	5,641,254	5.9%	5,767,617	2.2%	5,896,364	2.2%	6,028,386	2.2%
TOTAL EXPENDITURES	**$ 96,073,442**	**$ 110,991,641**	**15.5%**	**$ 113,321,508**	**2.1%**	**$ 113,971,624**	**0.6%**	**$ 116,518,472**	**2.2%**	**$ 119,317,751**	**2.4%**
ALLOCATED TO FUNCTIONAL DEPARTMENTS											
Water Services	$ 26,052,630	$ 28,824,858	10.6%	$ 28,281,238	(1.9%)	$ 28,363,072	0.3%	$ 28,677,338	1.1%	$ 28,882,147	0.7%
Liquid Waste Services	27,044,682	31,092,091	15.0%	32,262,255	3.8%	34,566,515	7.1%	37,178,682	7.6%	40,440,659	8.8%
Solid Waste Services	4,740,158	5,042,360	6.4%	5,169,970	2.5%	5,394,621	4.3%	5,296,354	(1.8%)	5,041,927	(4.8%)
Housing	2,082,758	2,401,739	15.3%	2,185,410	(9.0%)	2,108,414	(3.5%)	2,038,626	(3.3%)	1,913,691	(6.1%)
Air Quality	857,718	956,716	11.5%	988,487	3.3%	967,321	(2.1%)	873,345	(9.7%)	797,621	(8.7%)
E911 Emergency Telephone Service	90,854	93,112	2.5%	95,425	2.5%	97,795	2.5%	100,223	2.5%	102,712	2.5%
Electoral Area Service	32,086	39,500	23.1%	48,944	23.9%	34,449	(29.6%)	32,682	(5.1%)	28,695	(12.2%)
General Government Administration	430,247	444,022	3.2%	514,604	15.9%	496,062	(3.6%)	454,064	(8.5%)	415,049	(8.6%)
General Government-Zero Waste Collaboration Initiatives	435,320	437,245	0.4%	433,177	(0.9%)	435,603	0.6%	435,340	(0.1%)	434,229	(0.3%)
Housing Planning and Policy	64,576	87,536	35.6%	108,436	23.9%	93,035	(14.2%)	86,817	(6.7%)	79,237	(8.7%)
Project Delivery	770,148	731,907	(5.0%)	1,665,483	130.0%	2,054,256	23.3%	1,899,586	(7.5%)	1,745,470	(8.1%)
Regional Economic Prosperity	30,000	135,797	350.0%	226,912	67.1%	255,004	12.4%	233,890	(8.3%)	213,079	(8.9%)
Regional Emergency Management	10,902	11,130	2.1%	11,169	0.4%	11,256	0.8%	10,387	(7.7%)	10,154	(2.2%)
Regional Employers Services	246,798	258,506	4.7%	239,716	(7.3%)	227,137	(5.2%)	208,731	(8.1%)	191,094	(8.4%)
Regional Global Positioning System	21,091	26,452	25.4%	22,774	(13.9%)	22,168	(2.7%)	20,404	(8.0%)	18,653	(8.6%)
Regional Parks	3,503,795	4,115,924	17.5%	4,279,744	4.0%	4,008,972	(6.3%)	3,744,601	(6.6%)	3,543,742	(5.4%)
Regional Planning	292,446	322,592	10.3%	340,869	5.7%	332,591	(2.4%)	302,204	(9.1%)	280,671	(7.1%)
Sasamat Fire Protection Service	24,914	28,033	12.5%	41,577	48.3%	42,405	2.0%	43,250	2.0%	44,111	2.0%
	$ 66,731,123	**$ 75,049,520**	**12.5%**	**$ 76,916,190**	**2.5%**	**$ 79,510,676**	**3.4%**	**$ 81,636,524**	**2.7%**	**$ 84,182,941**	**3.1%**

METRO VANCOUVER DISTRICTS
CORPORATE SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 33,462,674	$ 38,393,140	14.7%	$ 39,342,344	2.5%	$ 41,111,199	4.5%	$ 42,312,560	2.9%	$ 44,010,660	4.0%
Allocated to Functional Departments - Fleet	12,266,934	12,616,934		12,856,656		13,100,932		13,349,850		13,603,497	
Other External Revenues	6,797,794	5,978,533		6,066,445		6,148,911		6,218,034		5,823,025	
Transfer from Capital	2,427,424	3,211,686		3,021,078		532,444		546,571		555,969	
Transfer from Reserves	5,013,700	7,020,874		6,928,713		6,890,928		6,723,139		6,884,024	
TOTAL REVENUES	**$ 59,968,526**	**$ 67,221,167**	**12.1%**	**$ 68,215,236**	**1.5%**	**$ 67,784,414**	**(0.6%)**	**$ 69,150,154**	**2.0%**	**$ 70,877,175**	**2.5%**
EXPENDITURES											
Operating Programs:											
Information Technology											
Technical Services	$ 7,191,307	$ 8,190,965		$ 8,329,184		$ 8,251,166		$ 8,479,522		$ 8,638,864	
Business Systems	6,106,844	7,410,919		7,867,297		7,984,102		8,094,992		8,261,172	
Digital Strategy and Project Management	5,964,682	7,978,193		8,098,714		7,246,434		7,897,630		8,553,910	
	19,262,833	23,580,077	22.4%	24,295,195	3.0%	23,481,702	(3.3%)	24,472,144	4.2%	25,453,946	4.0%
Corporate Projects and Facilities	6,628,586	6,722,244	1.4%	6,958,980	3.5%	7,206,994	3.6%	7,389,642	2.5%	7,638,354	3.4%
Corporate Safety	4,391,125	4,646,093	5.8%	4,711,620	1.4%	4,815,129	2.2%	4,927,202	2.3%	5,030,401	2.1%
Security and Emergency Management	1,554,192	1,817,899	17.0%	1,849,405	1.7%	1,746,471	(5.6%)	1,780,799	2.0%	1,812,297	1.8%
Fleet Services	12,266,934	14,545,073	18.6%	14,530,369	(0.1%)	14,741,860	1.5%	15,114,989	2.5%	15,453,196	2.2%
Administration and Department Support	731,289	933,714	27.7%	1,030,766	10.4%	1,053,357	2.2%	1,076,477	2.2%	1,100,080	2.2%
Total Operating Programs	44,834,959	52,245,100	16.5%	53,376,335	2.2%	53,045,513	(0.6%)	54,761,253	3.2%	56,488,274	3.2%
Debt Service	14,383,567	14,226,067	(1.1%)	13,638,901	(4.1%)	13,638,901	0.0%	13,638,901	0.0%	13,638,901	0.0%
Head Office Capital	750,000	750,000	0.0%	1,200,000	60.0%	1,100,000	(8.3%)	750,000	(31.8%)	750,000	0.0%
TOTAL EXPENDITURES	**$ 59,968,526**	**$ 67,221,167**	**12.1%**	**$ 68,215,236**	**1.5%**	**$ 67,784,414**	**(0.6%)**	**$ 69,150,154**	**2.0%**	**$ 70,877,175**	**2.5%**

METRO VANCOUVER DISTRICTS
EXTERNAL RELATIONS
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 9,356,118	$ 10,822,879	15.7%	$ 10,867,940	0.4%	$ 11,098,243	2.1%	$ 11,401,852	2.7%	$ 11,619,450	1.9%
Other External Revenues	-	100,000		100,000		100,000		100,000		100,000	
Transfer from Capital	444,629	2,369,281		2,413,191		2,588,350		2,782,123		2,837,668	
TOTAL REVENUES	**$ 9,800,747**	**$ 13,292,160**	**35.6%**	**$ 13,381,131**	**0.7%**	**$ 13,786,593**	**3.0%**	**$ 14,283,975**	**3.6%**	**$ 14,557,118**	**1.9%**
EXPENDITURES											
Operating Programs:											
Corporate Communications	$ 1,293,698	$ 1,318,416		$ 1,466,608		$ 1,497,714		$ 1,529,547		$ 1,562,124	
Media Relations and Issues Management	662,135	694,366		706,278		720,900		735,862		751,174	
Multi-Media Services	2,831,987	3,569,840		3,446,102		3,618,298		3,680,574		3,744,301	
Community Engagement	2,525,524	4,939,993		4,843,687		4,966,155		5,287,881		5,381,270	
Collaboration and Engagement	1,069,420	1,126,872		1,245,282		1,273,243		1,301,857		1,331,147	
Intergovernmental Relations	387,938	558,296		568,421		580,605		593,069		605,819	
Administration and Department Support	1,030,045	1,084,377		1,104,753		1,129,678		1,155,185		1,181,283	
TOTAL EXPENDITURES	**$ 9,800,747**	**$ 13,292,160**	**35.6%**	**$ 13,381,131**	**0.7%**	**$ 13,786,593**	**3.0%**	**$ 14,283,975**	**3.6%**	**$ 14,557,118**	**1.9%**

METRO VANCOUVER DISTRICTS
FINANCIAL SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 13,025,289	$ 13,409,177	2.9%	$ 13,748,186	2.5%	$ 14,056,891	2.2%	$ 14,374,792	2.3%	$ 14,727,291	2.5%
Other External Revenues	190,000	190,000		190,000		190,000		190,000		190,000	
Transfer from Capital	680,747	2,327,872		2,836,859		2,890,246		2,944,883		3,000,804	
Transfer from Reserves	448,000	400,000		150,000		150,000		150,000		150,000	
TOTAL REVENUES	**$ 14,344,036**	**$ 16,327,049**	**13.8%**	**$ 16,925,045**	**3.7%**	**$ 17,287,137**	**2.1%**	**$ 17,659,675**	**2.2%**	**$ 18,068,095**	**2.3%**
EXPENDITURES											
Operating Programs:											
Purchasing and Risk Management	$ 5,209,336	$ 5,790,227		$ 5,904,256		$ 6,029,432		$ 6,162,051		$ 6,313,426	
Financial Planning and Operations	5,902,083	6,574,250		6,812,277		6,960,817		7,110,322		7,274,869	
Property Services	2,331,550	2,879,970		3,208,667		3,276,139		3,345,168		3,415,786	
Administration and Department Support	901,067	1,082,602		999,845		1,020,749		1,042,134		1,064,014	
TOTAL EXPENDITURES	**$ 14,344,036**	**$ 16,327,049**	**13.8%**	**$ 16,925,045**	**3.7%**	**$ 17,287,137**	**2.1%**	**$ 17,659,675**	**2.2%**	**$ 18,068,095**	**2.3%**

METRO VANCOUVER DISTRICTS
HUMAN RESOURCES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 6,028,346	$ 6,630,112	10.0%	$ 6,845,800	3.3%	$ 6,995,838	2.2%	$ 7,159,607	2.3%	$ 7,295,280	1.9%
Transfer from Capital	546,151	$ 718,569	31.6%	$ 731,255		$ 748,264	2.3%	$ 768,073	2.6%	$ 783,485	2.0%
Transfer from Reserves	78,000	90,000	15.4%	58,000		40,000	(31.0%)	-	(100.0%)	68,000	0.0%
TOTAL REVENUES	**$ 6,652,497**	**$ 7,438,681**	**11.8%**	**$ 7,635,055**	**2.6%**	**$ 7,784,102**	**2.0%**	**$ 7,927,680**	**1.8%**	**$ 8,146,765**	**2.8%**
EXPENDITURES											
Operating Programs:											
Employee and Labour Relations	$ 1,589,853	$ 1,838,634		$ 1,853,662		$ 1,894,886		$ 1,936,508		$ 1,978,400	
Talent Management and Organization Development	2,967,149	3,242,006		3,230,930		3,319,062		3,358,265		3,439,502	
Systems and Processes	1,183,058	1,413,479		1,587,362		1,584,507		1,620,493		1,696,549	
Administration and Department Support	912,437	944,562		963,101		985,647		1,012,414		1,032,314	
TOTAL EXPENDITURES	**$ 6,652,497**	**$ 7,438,681**	**11.8%**	**$ 7,635,055**	**2.6%**	**$ 7,784,102**	**2.0%**	**$ 7,927,680**	**1.8%**	**$ 8,146,765**	**2.8%**

METRO VANCOUVER DISTRICTS
INDIGENOUS RELATIONS
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 583,698	$ 907,578	55.5%	$ 921,966	1.6%	$ 943,054	2.3%	$ 964,635	2.3%	$ 986,541	2.3%
Transfer from Capital	-	475,999	0.0%	601,821		618,707	2.8%	635,989	2.8%	653,671	2.8%
TOTAL REVENUES	**$ 583,698**	**$ 1,383,577**	**140.0%**	**$ 1,523,787**	**10.1%**	**$ 1,561,761**	**2.5%**	**$ 1,600,624**	**2.5%**	**$ 1,640,212**	**2.5%**
EXPENDITURES											
Operating Programs:											
Indigenous Relations	$ 583,698	$ 1,383,577		$ 1,523,787		$ 1,561,761		$ 1,600,624		$ 1,640,212	
TOTAL EXPENDITURES	**$ 583,698**	**$ 1,383,577**	**140.0%**	**$ 1,523,787**	**10.1%**	**$ 1,561,761**	**2.5%**	**$ 1,600,624**	**2.5%**	**$ 1,640,212**	**2.5%**

METRO VANCOUVER DISTRICTS
LEGISLATIVE SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 4,274,998	$ 4,886,634	14.3%	$ 5,189,954	6.2%	$ 5,305,451	2.2%	$ 5,423,078	2.2%	$ 5,543,719	2.2%
Other External Revenues	7,000	7,133		7,354		7,538		7,726		7,919	
Transfer from Capital	418,340	435,240		443,946		454,628		465,560		476,748	
Transfer from Reserves	23,600	-		-		-		-		-	
TOTAL REVENUES	**$ 4,723,938**	**$ 5,329,007**	**12.8%**	**$ 5,641,254**	**5.9%**	**$ 5,767,617**	**2.2%**	**$ 5,896,364**	**2.2%**	**$ 6,028,386**	**2.2%**
EXPENDITURES											
Operating Programs:											
Corporate Planning	$ 1,155,002	$ 1,169,569		$ 1,188,092		$ 1,210,826		$ 1,234,090		$ 1,257,896	
Legal Services	2,237,816	2,812,026		3,080,450		3,154,405		3,229,541		3,306,735	
Information Management	1,331,120	1,347,412		1,372,712		1,402,386		1,432,733		1,463,755	
TOTAL EXPENDITURES	**$ 4,723,938**	**$ 5,329,007**	**12.8%**	**$ 5,641,254**	**5.9%**	**$ 5,767,617**	**2.2%**	**$ 5,896,364**	**2.2%**	**$ 6,028,386**	**2.2%**

METRO VANCOUVER REGIONAL DISTRICT
PROJECT DELIVERY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Recover from Capital Programs	$ 10,840,173	$ 20,769,909	91.6%	$ 24,712,484	19.0%	$ 26,251,103	6.2%	$ 27,458,819	4.6%	$ 29,196,150	6.3%
Allocated to Functional Departments	8,854,730	12,103,365	36.7%	17,205,395		17,951,063		18,069,723		18,108,535	
TOTAL REVENUES	**$ 19,694,903**	**$ 32,873,274**	**66.9%**	**$ 41,917,879**	**27.5%**	**$ 44,202,166**	**5.4%**	**$ 45,528,542**	**3.0%**	**$ 47,304,685**	**3.9%**
EXPENDITURES											
Operating Programs:											
High Value, Risk and Consequence Projects											
Annacis WWTP Stage 5 Expansion	$ 1,239,116	$ 1,657,626		$ 1,760,890		$ 1,788,027		$ 1,815,584		$ 1,843,974	
Biosolids Dryer	-	17,200		698,526		714,948		731,954		749,249	
Coquitlam Water Supply Project	1,371,896	1,523,331		1,966,605		2,192,332		2,427,903		2,813,998	
Iona Island WWTP	1,850,691	2,675,342		3,608,930		4,031,537		4,290,940		4,909,361	
North Shore WWTP	1,815,803	1,649,883		1,682,722		1,722,920		1,762,934		1,805,088	
Northwest Langley WWTP	1,773,825	2,263,474		2,228,703		2,282,044		2,337,001		2,392,298	
Tunneling Project A	2,075,342	2,908,408		3,137,147		3,519,884		3,605,305		3,692,686	
	10,126,673	12,695,264	25.4%	15,083,523	18.8%	16,251,692	7.7%	16,971,621	4.4%	18,206,654	7.3%
Project Controls and Commercial	1,427,001	6,875,949	380.0%	7,923,121	15.2%	8,095,628	2.2%	8,269,976	2.2%	8,446,680	2.1%
Regulatory	-	1,198,696	0.0%	1,705,840	42.3%	1,903,783	11.6%	2,217,222	16.5%	2,542,816	14.7%
Project Management Office											
Integrated Asset Management	3,969,469	3,811,069		4,413,663		4,678,230		4,867,197		4,948,890	
Project and Portfolio Management	1,314,466	3,901,583		6,011,616		5,849,179		5,830,156		5,833,084	
Quality Management	-	1,584,482		2,765,827		2,977,825		3,039,060		3,101,712	
Administration and Department Support	1,475,170	984,987		1,299,245		1,320,519		1,341,093		1,364,366	
	6,759,105	10,282,121	52.1%	14,490,351	40.9%	14,825,753	2.3%	15,077,506	1.7%	15,248,052	1.1%
Administration and Department Support	611,976	1,089,337	78.0%	1,049,561	(3.7%)	1,071,054	2.0%	1,092,631	2.0%	1,115,013	2.0%
Allocation of Centralized Support Costs	770,148	731,907	(5.0%)	1,665,483	130.0%	2,054,256	23.3%	1,899,586	(7.5%)	1,745,470	(8.1%)
TOTAL EXPENDITURES	**$ 19,694,903**	**$ 32,873,274**	**66.9%**	**$ 41,917,879**	**27.5%**	**$ 44,202,166**	**5.4%**	**$ 45,528,542**	**3.0%**	**$ 47,304,685**	**3.9%**
ALLOCATED TO FUNCTIONAL DEPARTMENTS											
Water Services	$ 2,889,566	$ 4,073,330	41.0%	$ 5,415,922	33.0%	$ 5,650,644	4.3%	$ 5,687,996	0.7%	$ 5,700,215	0.2%
Liquid Waste Services	5,082,413	7,590,456	49.3%	10,092,313	33.0%	10,529,706	4.3%	10,599,309	0.7%	10,622,075	0.2%
Solid Waste Services	327,502	439,579	34.2%	584,467	33.0%	609,797	4.3%	613,828	0.7%	615,146	0.2%
Housing	388,442	-	(100.0%)	933,341	N/A	973,791	4.3%	980,228	0.7%	982,333	0.2%
Regional Parks	166,807	-	(100.0%)	179,352	N/A	187,125	4.3%	188,362	0.7%	188,766	0.2%
	$ 8,854,730	**$ 12,103,365**	**36.7%**	**$ 17,205,395**	**42.2%**	**$ 17,951,063**	**4.3%**	**$ 18,069,723**	**0.7%**	**$ 18,108,535**	**0.2%**

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Water Services	$ 20,308,376	$ 20,308,376	$ -	$ (3,400,000)	$ 372,168	$ 17,280,543	$ 17,626,154	$ 17,978,677	$ 18,338,251	$ 18,705,016
Liquid Waste Services	21,578,707	21,578,707	-	(3,331,000)	398,264	18,645,971	19,018,890	19,399,268	19,787,253	20,182,998
Solid Waste Services	19,293,542	19,293,542	-	-	385,871	19,679,413	20,073,002	20,474,462	20,883,951	21,301,630
Metro Vancouver Housing Corporation	2,577,597	2,577,597	-	-	51,552	2,629,149	2,681,732	2,735,366	2,790,074	2,845,875
Air Quality	580,436	580,436	-	-	11,609	592,045	603,886	615,964	628,283	640,849
E911 Emergency Telephone Service	226,062	226,062	-	-	4,521	230,583	235,194	239,898	244,696	249,590
Electoral Area Service	20,848	20,848	-	-	417	21,264	21,690	22,124	22,566	23,017
General Government Administration	276,645	276,645	-	-	5,533	282,178	287,822	293,578	299,450	305,439
General Government Zero Waste Collaboration Initiatives	83,996	83,996	-	-	1,680	85,676	87,389	89,137	90,920	92,738
Housing Planning and Policy	54,675	54,675	-	-	1,094	55,769	56,884	58,022	59,182	60,366
Regional Economic Prosperity	51,000	51,000	-	-	1,020	52,020	53,061	54,122	55,204	56,308
Regional Emergency Management	11,893	11,893	-	-	238	12,131	12,374	12,621	12,873	13,131
Regional Employers Services	158,228	158,228	-	-	3,165	161,393	164,620	167,913	171,271	174,697
Regional Global Positioning System	13,803	13,803	-	-	276	14,080	14,361	14,648	14,941	15,240
Regional Parks	2,829,915	2,829,915	-	(1,300,000)	43,598	1,573,514	1,604,984	1,637,084	1,669,825	1,703,222
Regional Planning	195,669	195,669	-	-	3,913	199,583	203,574	207,646	211,799	216,035
Sasamat Fire Protection Service	12,584	12,584	-	-	252	12,836	13,093	13,355	13,622	13,894
West Nile Virus	368,665	368,665			7,373	376,038	383,559	391,230	399,054	407,035
Total	**$ 68,642,642**	**$ 68,642,642**	**$ -**	**$ (8,031,000)**	**$ 1,292,543**	**$ 61,904,185**	**$ 63,142,269**	**$ 64,405,114**	**$ 65,693,216**	**$ 67,007,081**

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Liquid Waste Services										
Biosolids Inventory Reserve	$ 29,132,886	$ 29,132,886	13,443,321	(21,027,829)	$ 506,813	$ 22,055,190	$ 18,672,894	$ 17,121,958	$ 16,942,229	$ 16,758,907
Liquid Waste General Debt Reserve Fund	2,140,673	2,140,673	-	-	42,813	2,183,486	2,227,156	2,271,699	2,317,133	2,363,476
Lions Gate Contingency	1,502,328	1,502,328	-	-	30,047	1,532,375	1,563,022	1,594,283	1,626,169	1,658,692
Drainage General Reserve	5,949,571	5,949,571	-	(930,000)	109,691	5,129,263	4,696,548	4,053,179	3,396,943	3,333,581
Solid Waste Services										
Solid Waste General Reserve	18,719,880	18,719,880	-	-	374,398	19,094,277	19,476,163	19,865,686	20,263,000	20,668,260
Landfill Post Closure Reserve	11,399,522	11,399,522	-	-	227,990	11,627,512	11,860,063	12,097,264	12,339,209	12,585,993
Housing										
MVHC Capital Replacement Reserve	4,854,248	4,854,248	3,985,282	(3,839,530)	98,542	5,098,542	5,200,513	5,304,524	5,410,614	5,518,826
MVHC Capital Development Reserve	40,337,480	40,337,480	8,363,125	(5,300,000)	837,381	44,237,986	39,113,487	36,570,121	17,967,374	10,329,438
Air Quality										
Air Quality General Reserve	1,841,090	1,841,090	-	(1,481,000)	22,012	382,102	49,374	50,361	51,369	52,396
Non-Road Diesel Reserve					-	-	-	-	-	-
E911 Emergency Telephone Service										
E911 General Reserve	680,414	680,414	-	-	13,608	694,023	707,903	722,061	736,502	751,233
Electoral Area Service										
Electoral Area General Reserve	1,587,376	1,587,376	50,000	(139,000)	30,858	1,529,234	1,535,579	1,539,020	1,569,801	1,586,047
General Government Administration										
General Government General Reserve	9,839,513	9,839,513	-	-	196,790	10,036,303	10,237,029	10,441,770	10,650,605	10,863,617
General Government Zero Waste Collaboration Initiatives										
Zero Waste Collaboration Initiatives General Reserve	-									
Regional Economic Prosperity										
Regional Economic Prosperity General Reserve	1,379,573	1,379,573	-	(600,000)	21,591	801,165	312,188	217,432	221,781	226,216
Regional Emergency Management (REM)										
REM General Reserve	284,041	284,041	-	(60,537)	5,075	228,579	172,016	116,306	80,680	52,835
Regional Employers Services										
Regional Employers Service General Reserve	2,473,677	2,473,677	-	(75,000)	48,724	2,447,400	2,496,348	2,546,275	2,597,201	2,649,145
Regional Parks										
Regional Parks General Reserve	2,036,734	2,036,734	-	(1,945,000)	21,285	113,019	115,279	117,585	119,937	122,335
Regional Planning										
Regional Planning General Reserve	2,774,387	2,774,387	-	(280,000)	52,688	2,547,075	2,320,267	2,099,022	1,964,252	1,836,887
Centralized Support Reserve	15,663,421	15,663,421	750,000	(5,582,735)	264,941	11,095,627	6,658,410	3,771,678	1,768,532	185,554
Total	**$ 152,596,817**	**$ 152,596,817**	**$ 26,591,728**	**$ (41,260,631)**	**$ 2,905,247**	**$ 140,833,161**	**$ 127,414,239**	**$ 120,500,225**	**$ 100,023,330**	**$ 91,543,439**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Water Services										
Water Laboratory Equipment Reserve	$ 1,612,437	$ 1,612,437	$ -	$ (96,000)	$ 31,289	$ 1,547,726	$ 1,481,720	$ 1,414,395	$ 1,345,723	$ 1,275,677
Water Sustainability Innovation Fund Reserve	15,502,764	15,502,764	723,000	(900,000)	308,285	15,634,050	16,676,961	17,740,730	18,825,774	19,932,520
Liquid Waste Services										
Liquid Waste Laboratory Equipment Reserve	612,565	612,565	101,284	-	13,264	727,113	846,982	818,422	941,477	766,887
Liquid Waste Sustainability Innovation Fund Reserve	18,338,658	18,338,658	1,127,000	(3,497,001)	343,073	16,311,730	9,497,264	6,541,058	7,810,149	9,104,622
Electoral Area Service										
Community Works Reserve	713,988	713,988	136,668	-	15,646	866,302	1,021,663	1,186,610	1,354,856	1,526,467
Electoral Area Election Reserve	60,900	60,900	-	(60,000)	618	1,518	31,848	62,785	94,341	5,328
General Government Administration										
MVRD Sustainability Innovation Fund Reserve	11,564,620	11,564,620	347,000	(864,000)	226,122	11,273,742	11,849,687	12,437,151	13,036,364	13,647,561
Grants Reserve Fund	2,124,155	2,124,155	-	(150,000)	40,983	2,015,138	1,903,941	1,790,519	1,674,830	1,556,826
Housing										
MVHC Restricted Cap. Replacement Reserve	4,173,293	4,173,293	433,791	(460,610)	83,198	4,229,671	3,798,325	4,621,488	4,374,830	4,053,327
Housing Planning and Policy										
Affordable Housing Re-development Reserve	4,369,908	4,369,908	1,000,000	-	97,398	5,467,306	6,586,652	7,728,385	8,892,953	10,080,812
Affordable Housing Development Reserve	8,120,000	8,120,000	4,000,000	-	202,400	12,322,400	18,628,848	25,061,425	31,622,653	21,145,107
Regional Global Positioning System										
Regional Geospatial Reference System Reserve	1,185,697	1,185,697	45,000	-	24,164	1,254,861	1,329,758	1,407,399	1,487,869	1,571,256
Regional Parks										
Regional Parks Infrastructure Reserve	6,738,059	6,738,059	6,432,000	(10,865,750)	90,424	2,394,733	2,404,247	3,317,902	5,779,980	5,165,350
Regional Parkland Acquisition Reserve Fund	9,556,197	9,556,197		-	191,124	9,747,321	4,892,268	2,970,113	2,019,515	2,059,905
Regional Parkland Acquisition and Development Reserve Fund	6,338,942	6,338,942	19,570,000	(21,750,000)	104,979	4,263,920	1,389,899	478,397	558,665	3,165,538
Delta Airpark Reserve	175,785	175,785	23,000	-	3,746	202,531	229,812	257,638	286,021	314,971
Regional Parks Legacy Fund	2,694,275	2,694,275	-	(50,000)	53,385	2,697,660	2,695,053	2,692,395	2,689,682	2,686,916
Sasamat Fire Protection Service (SFPS)										
SFPS Capital Reserve Fund	1,042,507	1,042,507	92,100	(600,000)	15,771	550,378	654,406	760,516	868,747	979,143
SFPS Communications Capital Reserve Fund	59,152	59,152	-	-	1,183	60,335	61,542	62,773	64,028	65,309
SFPS Emergency Equipment Reserve Fund	24,063	24,063	-	-	481	24,544	25,035	25,536	26,047	26,568
SFPS Capital Facility Reserve	136,047	136,047	267,840	-	5,399	409,286	769,146	1,136,203	1,510,601	1,892,487
Corporate Self Insurance Reserve	1,229,381	1,229,381	-	-	24,588	1,253,969	1,279,048	1,304,629	1,330,722	1,357,336
Corporate Fleet Reserve	21,889,696	21,889,696	-	(1,928,139)	418,513	20,380,070	19,097,221	17,821,828	16,395,474	14,855,188
Total	**$ 118,263,088**	**$ 118,263,088**	**$ 34,298,683**	**$ (41,221,500)**	**$ 2,296,034**	**$ 113,636,305**	**$ 107,151,327**	**$ 111,638,296**	**$ 122,991,301**	**$ 117,235,100**

GVWD - WATER

The Water Services function comprises 18 member municipalities, one electoral area and one treaty First Nation within Metro Vancouver, serving a population of approximately 2.7 million. Drinking water is collected from within three protected mountain watersheds covering an area of approximately 60,000 hectares. The system itself comprises six mountain storage lakes, five dams, two major water treatment facilities, over 520 km of large diameter transmission mains, 27 storage reservoirs, 19 pump stations and 8 rechlorination stations. The system treats and distributes an average of 1.0 billion litres of water per day with summer time peak demands increasing to over 1.5 billion litres per day.

The GVWD 2022 – 2026 Financial Plan is summarized below:

WATER SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**5 Year Ave**
Water Sales	$316.3	$329.4	$349.7	$389.6	$435.5	$486.4	
% Change		4.1%	6.2%	11.4%	11.8%	11.7%	9.0%
Total Expenditures	$320.1	$335.4	$351.6	$391.6	$437.5	$488.3	
% Change		4.8%	4.8%	11.4%	11.7%	11.6%	8.9%
Blended Water Rate (m3)	$0.8110	$0.8444	$0.8958	$0.9912	$1.1072	$1.2345	
Blended Water Rate Change From Prior Cycle ($/m3)		($0.0090)	($0.0120)	$0.0028	$0.0122	N/A	
Total Capital Cash Flow	$431.3	$471.3	$513.6	$483.3	$450.6	$564.9	$496.7
Household Impact ($)	$171	$175	$183	$200	$221	$244	
% Change		2.3%	4.6%	9.3%	10.2%	10.3%	7.3%
Prior Cycle Household Impact Change (%)		3.4%	4.9%	7.6%	9.3%	N/A	

Operating Budget Highlights

The Water Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). In the previous budget cycle it was proposed that the budget would increase by $14.8 million to $334.9 million for 2022. It is now proposed to increase by $15.3 million in 2022 for a total budget of $335.4 million (Attachment 1). This increase can be attributed to net contribution to capital and debt servicing increases (close to $5.6 million or about 37% of Water Services total operating budget increase in 2022) supporting infrastructure investments required to maintain existing levels of service, accommodate growth demands, and improve system resilience along with increases in core ($5.7 million) operating and centralized support and other allocated resources ($4 million) supporting key operational requirements. To minimize the household impacts, excess operating reserves of $3.4 million are being applied in 2022.

The 2022 financial plan includes increased water sales revenues of approximately $13.0 million, based on higher summer rates ($1.0371/m^3) for June through September and the lower rate of $0.7119/m^3 applying for the rest of the year (equating to an overall average water rate of $0.8444/m^3

compared to 2021 forecast for 2022 of $0.8534/m^3). The differential rates are intended to incentivize conservation efforts in the region and reduce long term pressures on the Capital Budget.

The 2022 operating budget includes the following key actions:

- Continue collaboration with GVWD members to strengthen regional drinking water conservation and enforcement, reducing pressures on infrastructure development to support population growth;
- Establish baseline State of the Assets Report (SOAR) for Water System assets;
- Implement Building Information Modeling Phase I to enable collaborative 3D design and design conflicts management;
- Develop an Integrated Emergency Management / Response Practice for Water Services;
- Improve remote and mobile access to technical information including engineering drawings;
- Complete Phase 2 of the Next Generation Snow Pack Monitoring Sustainable Innovation Fund Project;
- Conduct bench, pilot plant, and full scale testing of various dry polymers to select chemicals for optimal treatment performance for new SCFP Dry Polymer System; and
- Coordinate interagency work for key projects such as the DFO Capilano River Salmon Hatchery, MOTI Broadway Subway, and Trans Mountain Expansion.

Highlights of contracts and consulting projects anticipated to be undertaken in 2022 to respond to work plan requirements within the operating budget include the following:

- Updates to Drinking Water Management Plan and development of Drinking Water Conservation App;
- Earthquake Early Warning Pilot applications development;
- Cleveland Dam East Abutment replacement piezometers;
- Cleveland Dam and Seymour Falls Dam earthquake monitoring instruments;
- Environmental Consulting related to planned and unplanned potable water releases;
- Development and implementation of an ISO 14001 compliant Environmental Management System in collaboration with Liquid Waste Services;
- Reservoir Limnology Program to monitor the chemical, physical and biological parameters of the Capilano, Seymour and Coquitlam source water supply;
- Tree assessments and site treatments associated with the Water Services Hazard Tree Program; and
- Specialized and emergency water sample analysis requiring external laboratory services.

Over the next 2 years (2022 through 2023), using the financial tools requested by the Board, the operating budget increases were limited to an average of $15.7 million or 4.8% per year. However, over the following 3 years (2024 through 2026), the budget increase rises to an average of $45.6 million or 11.6% per year, subject to further reviews and conservation efforts to reduce projected increases.

Capital Budget Highlights

The Water Services capital budget for 2022 approval is $2.7 billion (Attachment 2). The capital program is funded by a combination of long-term debt, contributions from the operating budget, external (interagency) contributions and projected, future development cost charges (DCCs) funding growth.

Capital program expenditures over the next five years are largely driven by system expansion to meet the needs of a growing population, upgrades to improve system resiliency, and maintenance of aging infrastructure. Highlights of capital projects planned or ongoing for 2022, as managed by the Water Services Department, include the following:

- Continue construction of Central Park Main No. 2 Phase 1;
- Continue construction of Douglas Road Main No. 2 (Still Creek Section);
- Continue construction of Capilano Raw Water Pump Station back-up power;
- Continue construction of Pebble Hill Reservoir Units 1 & 2 Seismic Upgrade;
- Continue detailed design of Seymour Main No. 5 North;
- Continue construction of Fleetwood Reservoir;
- Continue construction of Kennedy-Newton Main;
- Continue detailed design of Cape Horn Pump Station 3;
- Commence construction of Newton Pump Station No. 2;
- Design of Cleveland Dam Public Warning System and Enhancements; and
- Commence design of Rechlorination Station Upgrades.

The following eight projects are the largest projects included in the 5-year capital plan. These High Value, Risk and Consequence projects are managed by the Project Delivery Department and are at various stages of development and delivery for 2022:

- Commence Coquitlam Lake Water Supply permitting and regulatory phase;
- Complete Cambie-Richmond Water Supply Tunnel preliminary design;
- Commence construction of the Annacis Water Supply Tunnel;
- Continue construction of the Second Narrows Water Supply Tunnel;
- Continue Coquitlam Water Main (Central Section) detailed design;
- Commence Coquitlam Water Main (South Section) prebuild construction;
- Commence Haney Water Supply Tunnel conceptual design;
- Lulu Island-Delta Water Supply Tunnel (2023 commence design); and
- Complete Stanley Park Water Supply Tunnel detailed design.

The projected capital cash flow for 2022 - 2026 totals $2.5 billion, an average of $496.7 million per year. There are 142 projects on the five-year capital plan. The largest 9 projects make up approximately 66% of the capital spending over the next five years. These nine projects also represent 33% of the expenditures planned for the 2027-2031 period.

Estimated total project costs of all GVWD projects are included for Board Information in Schedule 1.

ALLOCATED PROGRAMS

The Centralized Support Program includes the following support services: Corporate Services, External Relations, Financial Services, Human Resources Indigenous Relations and Legislative Services. These departments support all activities within the Metro Vancouver Districts and the Housing Corporation and costs are allocated to the various Districts and functions according to the Board's *Corporate Allocation Policy*.

The Project Delivery Department was created to deliver the highest value, consequence and risk projects for Liquid Waste and Water Services (funded through Liquid Waste and Water capital budgets) as well as lead the creation and implementation of centers of expertise for project management, organizational quality management and asset management across Metro Vancouver (funded through allocation to Liquid Waste and Water Services operating budgets for 2022).

The projected allocation to the GVWD for Allocated Programs over the five years of the plan is summarized as follows:

ALLOCATED PROGRAMS FIVE YEAR FINANCIAL PLAN OVERVIEW						
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Allocated to Functions	$75.6	$87.2	$94.1	$97.5	$99.7	$102.3
% Change		15.3%	8.0%	3.5%	2.3%	2.6%
GVWD	$28.9	$32.9	$33.7	$34.0	$34.4	$34.6
% Change		13.7%	2.4%	0.9%	1.0%	0.6%

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES				
Water Mains				
Angus Drive Main	$	30,700,000	Construction	Growth
Annacis Main No. 2 - Queensborough Crossover Improvement		1,200,000	Construction	Maintenance
Annacis Main No. 2 and Barnston Island Main Online Chlorine and pH Analyzers		750,000	Construction	Upgrade
Annacis Main No. 3 Annieville Channel Crossing Scour Protection		850,000	Construction	Maintenance
Annacis Main No. 3 BHP Potash Facility Pipe Protection		600,000	Construction	Maintenance
Annacis Main No. 5 (North)		60,600,000	Construction	Growth
Annacis Main No. 5 (South)		56,900,000	Construction	Growth
Annacis Water Supply Tunnel		488,000,000	Construction	Growth
Boundary Road Main No. 2 & No. 3 Decommissioning		1,500,000	Construction	Maintenance
Burnaby Mountain Main No. 2		10,500,000	Not started	Maintenance
Cambie-Richmond Water Supply Tunnel		640,250,000	Design	Resilience
Central Park Main No. 2 (10th Ave to Westburnco)		28,350,000	Design	Maintenance
Central Park Main No. 2 (Patterson to 10th Ave)		91,900,000	Construction	Maintenance
Clayton Langley Main No. 2		16,900,000	Design	Resilience
Coquitlam Water Main		993,720,000	Multiple	Growth
Douglas Road Main No. 2 - Kincaid Section		12,300,000	Construction	Maintenance
Douglas Road Main No. 2 (Flow Meter 169) Replacement		1,000,000	Construction	Maintenance
Douglas Road Main No. 2 (Vancouver Heights Section)		21,486,000	Construction	Maintenance
Douglas Road Main No. 2 Still Creek		63,100,000	Construction	Maintenance
Douglas Road Main Protection		1,500,000	Construction	Maintenance
First Narrows Tunnel Isolation Chamber Improvements		5,200,000	Construction	Maintenance
Haney Main No. 4 (West Section)		115,150,000	Multiple	Growth
Haney Water Supply Tunnel		425,250,000	Definition	Resilience
Improvements to Capilano Mains No. 4 and 5		1,700,000	Construction	Maintenance
Kennedy Newton Main		122,300,000	Construction	Growth
Lulu Island - Delta Main - Scour Protection Phase 2		3,550,000	Construction	Maintenance

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Lulu-Delta Water Supply Tunnel	405,000,000	Not started	Maintenance
Maple Ridge Main West Lining Repairs	3,500,000	Construction	Maintenance
Newton Reservoir Connection	27,050,000	Not started	Growth
Online Chlorine Monitoring Stations	4,150,000	Not started	Upgrade
Port Mann Main No. 2 (South)	47,300,000	Multiple	Growth
Port Mann No. 1 South Section Decommissioning	850,000	Design	Maintenance
Port Moody Main No. 1 Christmas Way Relocation	2,350,000	Construction	Maintenance
Port Moody Main No. 3 Dewdney Trunk Rd Relocation	2,700,000	Construction	Maintenance
Port Moody Main No. 3 Scott Creek Section	12,000,000	Design	Maintenance
Queensborough Main Royal Avenue Relocation	7,500,000	Construction	Maintenance
Rehabilitation of AN2 on Queensborough Bridge	2,500,000	Construction	Maintenance
Relocation and Protection for MOTI Expansion Project Broadway	8,900,000	Construction	Maintenance
Relocation and Protection for MOTI George Massey Crossing Replacement	2,450,000	Design	Maintenance
Relocation and Protection for Translink Expansion Project Surrey Langley SkyTrain	6,600,000	Design	Maintenance
Sapperton Main No. 1 New Line Valve and Chamber	3,800,000	Construction	Upgrade
Sapperton Main No. 2 North Road Relocation and Protection	6,500,000	Construction	Maintenance
Scour Protection Assessments and Construction General	4,000,000	Construction	Resilience
Second Narrows Crossing 1 & 2 (Burrard Inlet Crossing Removal)	27,000,000	Design	Maintenance
Second Narrows Water Supply Tunnel	468,550,000	Construction	Resilience
Seymour Main No. 2 Joint Improvements	5,252,000	Construction	Resilience
Seymour Main No. 5 III (North)	236,900,000	Design	Resilience
South Delta Main No. 1 - 28 Ave to 34B Ave	22,650,000	Construction	Upgrade
South Delta Main No. 1 - Ferry Road Check Valve Replacement	600,000	Construction	Maintenance
South Delta Mains - 28 Ave Crossover	10,500,000	Construction	Upgrade
South Surrey Main No. 1 Nickomekl Dam Relocation	7,100,000	Construction	Maintenance
South Surrey Main No. 2	143,700,000	Design	Growth
South Surrey Main No. 2 Nickomekl Dam Prebuild	2,000,000	Construction	Growth
South Surrey Supply Main (Serpentine River) Bridge Support Modification	1,350,000	Construction	Maintenance
Stanley Park Water Supply Tunnel	340,000,000	Construction	Maintenance

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Tilbury Junction Chamber Valves Replacement with Actuators		5,600,000	Construction	Upgrade
Tilbury Main North Fraser Way Valve Addition		3,100,000	Construction	Maintenance
Water Chamber Improvements and Repairs		2,000,000	Construction	Maintenance
Water Meter Upgrades		22,400,000	Construction	Upgrade
Water Optimization - Flow Meters (Non-billing) Phase 1		16,500,000	Not started	Upgrade
Water Optimization - Flow Meters (Non-billing) Phase 2		19,500,000	Design	Upgrade
Water Optimization - Instrumentation		11,400,000	Design	Upgrade
Water Optimization Automation & Instrumentation		9,550,000	Construction	Upgrade
Whalley Kennedy Main No. 2		96,000,000	Not started	Growth
Whalley Main		31,800,000	Construction	Growth
Total Water Mains	**$**	**5,225,858,000**		
Pump Stations				
Barnston/Maple Ridge Pump Station - Back-up Power	$	20,600,000	Construction	Resilience
Burnaby Mountain Pump Station No. 2		21,000,000	Design	Maintenance
Cape Horn Pump Station No. 3		178,900,000	Design	Growth
Capilano Raw Water Pump Station - Back-up Power		42,000,000	Construction	Resilience
Capilano Raw Water Pump Station Bypass PRV Upgrades		1,700,000	Construction	Maintenance
Central Park WPS Starters Replacement		8,000,000	Construction	Maintenance
Grandview Pump Station Improvements		2,600,000	Construction	Resilience
Newton Pump Station No. 2		50,800,000	Construction	Growth
Pebble Hill Pump Station Seismic Upgrade		1,800,000	Not started	Resilience
Westburnco Pump Station - Back-up Power		23,500,000	Construction	Resilience
Westburnco Pump Station No. 2 VFD Replacements		2,550,000	Construction	Maintenance
Total Pump Stations	**$**	**353,450,000**		
Reservoirs				
Burnaby Mountain Tank No. 2		21,650,000	Design	Resilience
Burnaby Mountain Tank No. 3		21,400,000	Design	Resilience

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Cape Horn Reservoir Condition Assessment and Structural Repair	1,700,000	Not started	Maintenance
Capilano Energy Recovery Facility 66" PRV Replacement	7,000,000	Not started	Maintenance
Central Park Reservoir Structural Improvements	2,100,000	Not started	Maintenance
Clayton Reservoir	27,600,000	Construction	Resilience
Dechlorination for Reservoir Overflow and Underdrain Discharges	2,700,000	Construction	Maintenance
Fleetwood Reservoir	56,367,000	Construction	Growth
Grandview Reservoir Unit No. 2	26,000,000	Not started	Growth
Hellings Tank No. 2	43,911,000	Construction	Growth
Kersland Reservoir No. 1 Structural Improvements	6,250,000	Construction	Maintenance
Little Mountain Reservoir Roof Upgrades	3,450,000	Construction	Maintenance
Pebble Hill Reservoir No. 3 Seismic Upgrade	9,500,000	Design	Resilience
Pebble Hill Reservoir Seismic Upgrade	13,600,000	Construction	Resilience
Reservoir Isolation Valve Automation	6,450,000	Construction	Resilience
Reservoir Sampling Kiosks - Multi Location	1,300,000	Not started	Upgrade
Sunnyside Reservoir Units 1 and 2 Seismic Upgrade	19,300,000	Design	Resilience
Vancouver Heights System Resiliency Improvements	1,500,000	Design	Resilience
Whalley Reservoir Condition Assessment and Repairs	2,500,000	Construction	Maintenance
Total Reservoirs	**$ 274,278,000**		
Treatment Plants			
Coquitlam Intake Tower Seismic Upgrade	26,000,000	Design	Resilience
Coquitlam Lake Water Supply	3,915,730,000	Multiple	Growth
Critical Control Sites - Back-Up Power	1,800,000	Not started	Resilience
CWTP CO2 System Improvements	3,750,000	Not started	Maintenance
CWTP Mobile Disinfection System	2,750,000	Not started	Upgrade
CWTP Ozone Back-up Power	7,450,000	Not started	Resilience
CWTP Ozone Generation Upgrades for Units 2 & 3	7,000,000	Construction	Upgrade
CWTP Ozone Sidestream Pipe Heat Trace and Insulation	900,000	Construction	Maintenance
CWTP Ozone Sidestream Pump VFD Replacement	1,400,000	Construction	Maintenance

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CWTP Temporary Water Supply	2,000,000	Design	Maintenance
Online Chlorine and pH Analyzers	6,000,000	Not started	Upgrade
SCFP Additional Pre-Treatment	130,000,000	Not started	Upgrade
SCFP Centralized Compressed Air System	900,000	Construction	Maintenance
SCFP Clearwell Baffle Replacement	12,300,000	Not started	Maintenance
SCFP Clearwell Membrane Replacement	17,400,000	Not started	Maintenance
SCFP OMC Building Expansion	2,650,000	Design	Maintenance
SCFP Polymer System Upgrade	4,650,000	Construction	Maintenance
SCFP SCADA/ICS Controller Upgrade	1,400,000	Not started	Maintenance
Total Treatment Plants	**$ 4,144,080,000**		
Others			
Beach Yard Facility - Site Redevelopment	45,500,000	Not started	Maintenance
Burwell Alpine Reservoir Valve Improvements	650,000	Construction	Upgrade
Capilano Hydropower	156,250,000	Definition	Opportunity
Capilano Mid-Lake Debris Boom	750,000	Construction	Resilience
Capilano Reservoir and Seymour Reservoir Dam Safety Boom Replacement	3,700,000	Design	Maintenance
Capilano Reservoir Boat Wharf	850,000	Construction	Resilience
Capilano Watershed Bridge Replacements - Crown Creek and Capilano River	1,300,000	Not started	Maintenance
Capilano Watershed Security Gatehouse	3,350,000	Construction	Maintenance
CLD & SFD Fasteners Replacement & Coating Repairs	2,100,000	Construction	Maintenance
Cleveland Dam - Lower Outlet HBV Rehabilitation	4,900,000	Construction	Maintenance
Cleveland Dam Drumgate Seal Replacement	1,250,000	Design	Maintenance
Cleveland Dam East Abutment Additional GV Series Pump Wells	750,000	Construction	Upgrade
Cleveland Dam Lower Outlet Trashrack Replacement and Debris Removal	7,700,000	Not started	Maintenance
Cleveland Dam Power Resiliency Improvements	1,700,000	Construction	Resilience
Cleveland Dam Public Warning System and Enhancements	10,000,000	Construction	Maintenance
Cleveland Dam Seismic Stability Evaluation	800,000	Design	Resilience
Cleveland Dam Spillway Resurfacing	7,800,000	Not started	Maintenance

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Lower Seymour Conservation Reserve Learning Lodge Replacement		5,000,000	Construction	Upgrade
Newton Rechlorination Station No. 2		5,000,000	Not started	Maintenance
Pitt River Rechlorination Station Reconstruction		4,500,000	Not started	Maintenance
Rechlorination Station SHS Storage Tank Replacement		1,200,000	Construction	Maintenance
Rechlorination Station Upgrades		20,800,000	Design	Maintenance
Scour Protection - General		2,000,000	Construction	Maintenance
Seymour Falls Boat Wharf		800,000	Construction	Resilience
Seymour Falls Dam Public Warning System		10,000,000	Not started	Maintenance
Seymour Falls Dam Seismic Stability Assessment		1,800,000	Construction	Resilience
Seymour Lake Debris Boom		800,000	Construction	Resilience
Seymour Reservoir Mid-Lake Debris Boom		2,300,000	Construction	Resilience
South Fraser Works Yard		32,000,000	Design	Maintenance
Total Others	**$**	**335,550,000**		
TOTAL CAPITAL EXPENDITURES	**$**	**10,333,216,000**		

SUMMARY BY DRIVER		
Growth	$	6,486,928,000
Maintenance		1,356,136,000
Resilience		2,053,652,000
Upgrade		280,250,000
Opportunity		156,250,000
Total	**$**	**10,333,216,000**

GVS&DD – LIQUID WASTE

The Liquid Waste Services function is comprised of 19 member jurisdictions within Metro Vancouver, serving a population of approximately 2.7 million residents. The wastewater collection and treatment system consists of over 530 kilometers of trunk sewers, 33 pump stations, two storage tanks and 5 treatment plants that transport and treat an average of 1.2 billion litres of wastewater per day. The urban drainage function is comprised of the Still Creek/Brunette, Port Moody/Coquitlam and University Drainage Areas.

The Liquid Waste 2022 – 2026 Financial Plan for the next five years is summarized below:

LIQUID WASTE SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**5 Year Ave**
Sewer Levy	$288.2	$301.4	$355.0	$424.2	$513.4	$626.0	
% Change		4.6%	17.8%	19.5%	21.0%	21.9%	17.0%
Total Expenditures	$354.4	$391.2	$442.8	$524.3	$633.8	$739.8	
% Change		10.4%	13.2%	18.4%	20.9%	16.7%	15.9%
Total Capital Cash Flow	$934.5	$780.5	$899.8	$1,080.8	$1,033.2	$833.8	$925.6
Household Impact ($)	$273	$281	$324	$379	$452	$543	
% Change		2.7%	15.4%	16.9%	19.2%	20.1%	14.9%
Prior Cycle Household Impact Change (%)		9.0%	9.6%	10.1%	14.2%	N/A	

The Sewer Levy and household impact by sewerage areas (SA) are as follows:

$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**5 Year Ave**
Vancouver SA - Levy	$90.0	$94.6	$107.1	$128.3	$162.8	$191.7	16.5%
Household Impact ($)	$322	$333	$371	$437	$549	$641	15.0%
North Shore SA - Levy	$28.6	$30.0	$39.0	$48.8	$59.1	$64.3	18.0%
Household Impact ($)	$365	$378	$481	$592	$708	$761	16.2%
Lulu Island SA - Levy	$25.6	$26.9	$30.4	$37.6	$43.6	$48.1	13.6%
Household Impact ($)	$248	$256	$284	$344	$393	$429	11.7%
Fraser SA - Levy	$141.8	$148.0	$176.4	$207.3	$245.7	$319.6	18.0%
Household Impact ($)	$240	$245	$285	$327	$380	$485	15.4%
Drainage Areas – Levy (**)	$2.2	$1.9	$2.1	$2.2	$2.2	$2.3	1.0%

(**) Household impact is not calculated for drainage areas

Operating Budget Highlights

The Liquid Waste Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). It is proposed to increase by $36.8 million in 2022 for a total budget of $391.2 million (Attachment 1). This increase can essentially be attributed to increasing operating costs (close to $15.2 million) due to increasing operating requirements. A significant portion of the increase can be attributed to increased debt service costs of $25.3 million due to an accelerating capital program, offset slightly by a decrease in contributions to capital of $3.7 million, supporting infrastructure investments required to meet service requirements and growth demands.

The 2022 operating budget includes the following key actions:

- Collaboration with GVS&DD members on reduction of Inflow and Infiltration (I&I) of rainwater into separated sewers including the introduction of a wet weather pricing structure designed to incentivize action on I&I management and management of combined sewers.
- Develop and bring forward for Board consideration sewer heat recovery capital projects to support district energy systems in partnership with member municipalities to support Climate 2050 goals.
- Commencement of operation of the Iona Island WWTP Dewatering Facility and continue decommissioning the Iona Island WWTP sludge lagoons and complete the removal of biosolids stockpile and grit dump material.
- Support a coordinated regional initiative in estuary environmental management planning.
- Commencement of operation of the new Production Way Work Yard.
- Continue review and update of the *Integrated Liquid Waste and Resource Management Plan* in accordance with a provincially-approved review strategy.
- Complete the development of updated sewer system models.
- Update of servicing agreements and initiate the Rawn Report Amendment process associated with planned WWTP catchment changes.
- Increased focus on addressing Constituents of Environmental Concern (CEC) through source control initiatives including public awareness and behavior change programs and the GVS&DD Sewer Use Bylaw.
- Collaborate with the corporate Digital Strategies group to identify business process inefficiencies for maintenance and operations work groups and identify actions to increase work efficiency.
- Adapt to new work processes to address risks identified in new provincial legislation for engineering work, process safety initiative being developed in collaboration with WorkSafe BC and audit of high risk operating and maintenance procedures.
- Produce a baseline State of the Assets report for Liquid Waste system assets.
- Increase continuous improvement efforts in the delivery of projects in collaboration with the Project Management Office.
- Advance Emergency Management Mutual Aid agreement for the benefit of all member municipalities.

Highlights of contracts and consulting assignments anticipated to be undertaken in 2022 to respond to work plan requirements within the operating budget include the following:

- Biosolids hauling and beneficial use projects.

- Sewer modelling/analytics and data collection services directed at updating system models.
- Technical support and community engagement services for the review and update of the Liquid Waste Management Plan.
- Combined sewer separation and Inflow and Infiltration reduction studies and support.
- Source control studies and support primarily focused on strategies to address compounds of environmental concern.
- Projects funded from the Sustainability Innovation Fund including Advanced Resource Recovery from Sludge and Handheld Microbial DNA Monitor.
- Facilitation of a regional estuary management program.
- Monitoring programs for Iona Island WWTP and Strait of Georgia; Lions Gate WWTP and Burrard Inlet; Fraser River and the Fraser River WWTPs.
- Additional assignments that are regularly contracted for highly specialized functions, including: effluent toxicity testing, combined sewer overflow characterization and risk assessments, wastewater and biosolids characterization for CECs and toxics, development of environmental management system, maintenance hole monitoring and assessment.

Over the next five years, the Liquid Waste Services budget is expected to increase an average of $77.1 million or 15.9% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing $65.3 million on average over the next five years. The operating programs expenditures are increasing by $11.8 million per year on average, or slightly higher than the rate of inflation, to address core operating and facility commissioning requirements.

Capital Budget Highlights

The Liquid Waste Services capital budget for 2022 approval is $6.5 billion (Attachment 2). This amount includes all capital projects underway or planned in 2022. The capital program is funded by a combination of long-term debt, contributions from the operating budget, some external (interagency and senior level government grant) contributions and development cost charges (DCCs).

Highlights of capital projects planned or ongoing for 2022 include the following:

- Complete construction and commissioning of the Iona Island WWTP Sludge Dewatering facility;
- Complete construction of the First Narrows Pump Station;
- Initiate tunneled section of the Burnaby Lake North Interceptor - Winston Section;
- Continue construction of the Fraser River Crossing portion of the Northwest Langley WWTP Expansion projects;
- Commence construction of the Jervis and Chilco Pump Station Backup Power facilities;
- Commence construction of Gleneagles Pump Stations 4 and 5;
- Complete construction of the Crescent Beach Forcemain Replacement Project;
- Continue construction of the Annacis Island WWTP Outfall System;
- Complete the refurbishment of the third of four Trickling Filters at Annacis Island WWTP;
- Complete the conceptual design for the Iona Island WWTP and commence design for ground improvements and ecological projects.

The projected capital cash flow for 2022 - 2026 totals $4.6 billion, an average of $925.6 million per year. The largest ten projects ($50 million and greater) make up approximately 83% of the capital spending over the next five years. These ten projects also represent 30% of the expenditures planned for the 2027 – 2031 period. In addition to the ten projects, there are a further 130 projects on the plan.

Capital program increases over the next five years are largely driven by system expansion to meet the needs of a growing population, upgrades to improve wastewater discharge quality and meet regulations along with maintenance of aging infrastructure. The following capital projects, which are being managed by the Project Delivery Department, are the largest projects included in the five-year plan:

- North Shore WWTP Advanced Treatment Upgrade
- Northwest Langley WWTP Expansion
- Iona Island WWTP Advanced Treatment Upgrade
- Annacis Island WWTP Stage 5 Expansion and Outfall System (transitioning to Project Delivery in 2022)

Estimated total project costs of all GVS&DD liquid waste projects are included for Board Information on Schedule 1.

GVS&DD – SOLID WASTE

Solid Waste Services, within the Greater Vancouver Sewerage and Drainage District (GVS&DD), provides solid waste management planning, zero waste implementation, and recycling and waste centre and disposal facility operations.

Solid Waste Services works collaboratively with member municipalities to provide waste management services to the region's 2.7 million people. The system is comprised of recycling and waste centres and a waste-to-energy facility that handles approximately 900,000 metric tonnes of waste annually.

The Solid Waste 2022 – 2026 Financial Plan for the next five years is summarized below:

SOLID WASTE SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**5 Year Ave**
Tipping Fee Revenue	$108.5	$112.9	$118.4	$124.7	$131.5	$138.4	
% Change		4.0%	4.8%	5.3%	5.5%	5.3%	5.0%
Total Expenditures	$118.5	$123.0	$129.3	$137.2	$144.3	$151.4	
% Change		3.8%	5.2%	6.1%	5.1%	5.0%	5.0%
Total Capital Cash Flow	$96.3	$50.8	$53.9	$62.4	$46.0	$55.0	$53.6
Household Impact ($)	$60	$63	$65	$68	$71	$74	
% Change		4.3%	3.4%	3.7%	4.5%	$4.3%	4.0%

Prior Cycle Household Impact Change (%)		6.4%	3.3%	3.7%	4.5%	N/A
Tipping Fees:						
Up to 1 tonne	$151	$155	$162	$169	$176	$183
1 to 8 tonnes	$129	$133	$140	$147	$154	$161
Over 8 tonnes	$103	$107	$114	$121	$128	$135
Municipal	$117	$121	$128	$135	$142	$149

Operating Budget Highlights

The Solid Waste Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). It is proposed to increase by $4.5 million in 2022 for a total budget of $123.0 million (Attachment 1). This increase is primarily a result of start-up costs for new recycling and waste centres. Debt service increases, primarily associated with new recycling and waste centres, are partially offset by a reduction in the planned contribution to capital.

The 2022 operating budget includes the following key actions:

- Review and update of the region's solid waste management plan to advance zero waste and the circular economy;
- Continue to enhance customer service and monitoring including investigating continuous feedback mechanisms;
- Operation of the United Boulevard Recycling and Waste Centre;
- Operation of the Central Surrey Recycling and Waste Centre;
- Alternative fuel and recyclable recovery procurement;
- Asset management program, including data validation and program guideline development;
- Support programs for textiles, single-use items, seasonal wastes, food wastes, illegal dumping, and the Zero Waste Conference; and
- Support the National Zero Waste Council including work on implementing the Circular Economy and Zero Plastics Waste.

Highlights of contracts and consulting projects anticipated to be undertaken in 2022 to respond to work plan requirements within the operating budget include the following:

- Langley Recycling and Waste Centre recycling depot design
- Waste-to-Energy Facility district energy design
- Waste-to-Energy Facility Ambient Air Monitoring review
- Solid waste management plan engagement activities
- Residual garbage management options review
- Alternative fuel and recyclables recovery
- Ashcroft Ranch McLean Lake Dam spillway and ranch fencing replacement
- Waste composition analysis

Over the next five years, the Solid Waste Services budget is expected to increase an average of $6.6 million or 5.0% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing $4.0 million per year on average

over the next five years leaving the operating programs which are increasing, on average, by $2.6 million per year, roughly at the rate of inflation.

Capital Budget Highlights
The Solid Waste Services capital budget for 2022 approval is $287.1 million (Attachment 2). This amount includes all capital projects underway or planned in 2022. The capital program is funded by long-term debt and contribution to capital from the annual operating budget as available.

The projected capital cash flow for 2022 – 2026 totals $268.0 million, an average of $53.6 million per year. The largest six projects (each over $10 million) make up approximately 68% of the capital spending over the next five years. These six projects also represent 35% of the expenditures planned for the 2027 – 2031 period. There are 40 projects on the 5-year plan.

The capital program over the next five years is largely driven by the need to replace aging Waste-to-Energy Facility infrastructure and enhance recycling services at the recycling and waste centres. The addition of biosolids management at the Waste-to-Energy Facility and the alternative fuel and recyclables recovery project are expected to increase beneficial use of waste materials and reduce greenhouse gas emissions. Waste-to-Energy Facility acid gas reduction upgrades have been deferred consistent with the requirements of the amended Waste-to-Energy Facility Operational Certificate to allow additional ambient air monitoring to compare ambient concentrations to dispersion modelling results and ambient air quality objectives. Data collected to date show ambient concentrations of hydrogen chloride and sulfur dioxide are less than 5% of ambient air quality objectives, and well below modelling results. Work on the development of a new western region recycling and waste centre has been deferred to match current expectations with respect to timing for the construction of that facility.

The following key projects are included in the five-year plan:

- Alternative Fuel and Recyclables Recovery Centre
- North Surrey and Langley Recycling and Waste Centre Recycling Depots
- Waste-to-Energy Facility District Energy
- Waste-to-Energy Facility Biosolids Management
- Waste-to-Energy Facility Acid Gas Reduction

Estimated total project costs of all GVS&DD – Solid Waste projects are included for Board Information on Schedule 2.

ALLOCATED PROGRAMS
The Centralized Support Program includes the following support services: Corporate Services, External Relations, Financial Services, Human Resources Indigenous Relations and Legislative Services. These departments support all activities within the Metro Vancouver Districts and the Housing Corporation and costs are allocated to the various Districts and functions according to the Board's *Corporate Allocation Policy*.

The Project Delivery Department was created to deliver the highest value, consequence and risk projects for Liquid Waste and Water Services (funded through Liquid Waste and Water capital

budgets) as well as lead the creation and implementation of centers of expertise for project management, organizational quality management and asset management across Metro Vancouver (funded through allocation to Liquid Waste and Water Services operating budgets for 2022).

The projected allocation to the GVS&DD for both Liquid Waste Services and Solid Waste Services for Allocated Programs over the five years of the plan is summarized as follows:

ALLOCATED PROGRAMS FIVE YEAR FINANCIAL PLAN OVERVIEW						
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Allocated to Functions	$75.6	$87.2	$94.1	$97.5	$99.7	$102.3
% Change		15.3%	8.0%	3.5%	2.3%	2.6%
GVS&DD	$37.2	$44.2	$48.1	$51.1	$53.7	$56.7
% Change		18.7%	8.9%	6.2%	5.1%	5.6%

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES			
Collections			
8th Avenue Interceptor Air Treatment Facilities	$ 14,200,000	Definition	Upgrade
Albert Street Trunk Sewer	10,250,000	Construction	Growth
Big Bend Forcemain - Gate Replacement	2,680,000	Design	Maintenance
Burnaby Lake North Interceptor Cariboo Section	41,000,000	Not started	Growth
Burnaby Lake North Interceptor Winston Section	116,950,000	Construction	Growth
Burnaby South Slope Interceptor	22,700,000	Multiple	Growth
Cloverdale Pump Station Capacity Upgrade	36,400,000	Design	Growth
Cloverdale Trunk Sewer Capacity Upgrade	29,000,000	Design	Growth
Combined Sewer Overflow Sampling Station Enhancements	1,900,000	Construction	Maintenance
Glen Eagles Pump Stations Phase 2	5,000,000	Not started	Maintenance
Crescent Beach FM - Replacement	29,070,000	Construction	Maintenance
Eagle Creek (Lower Section) Channel Restoration	750,000	Construction	Resilience
Lozells Sanitary Trunk Golf Course Section	27,650,000	Not started	Growth
Manitoba Street Combined Trunk Sewer Separation	93,750,000	Not started	Upgrade
EMQC Chemistry Laboratory and Environmental Field Services	3,500,000	Construction	Upgrade
Fraser Sewerage Area Integrated Resource Recovery (IRR) Study	1,200,000	Design	Opportunity
Front Street Pressure Sewer Access Hatches Reinforcement	5,000,000	Construction	Maintenance
FSA Flow Metering Program	3,500,000	Multiple	Maintenance
FSA River Crossing Scour Protection Program - Phase 1	6,400,000	Construction	Maintenance
FSA Sewer Relocations and Protections	32,750,000	Multiple	Maintenance
FSA Statutory Right of Way Acquisitions Phase 1	35,100,000	Design	Maintenance
Gilbert/Brighouse Trunk Pressure Sewer	192,801,000	Multiple	Maintenance
Glen Eagles Forcemain Replacement	10,234,000	Multiple	Maintenance
Glen Eagles Pump Stations Phase 1	22,500,000	Construction	Maintenance
Glenbrook Combined Trunk Kingsway Sanitary Section	7,200,000	Construction	Growth
Harbour Pump Station Discharge Header Repair and Valve Replacements	2,500,000	Construction	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Harbour Pump Station Power Distribution Equipment Replacement	3,300,000	Design	Maintenance
Hastings-Cassiar Intake Connection	3,850,000	Construction	Growth
Highbury Interceptor Diversion Junction Chamber Wall Rehabilitation	6,000,000	Design	Maintenance
Highbury Interceptor North Arm Crossing - Upgrade of Siphons	12,500,000	Construction	Resilience
Jervis Pump Station 25kV Voltage Conversion	1,300,000	Construction	Maintenance
Kent Pump Station High Voltage Switchgear Replacement	2,000,000	Design	Maintenance
Surrey Central Valley Capacity Upgrade	60,800,000	Not started	Growth
Lake City Access and Parking Improvements	2,850,000	Construction	Maintenance
LSA Flow Metering Program	300,000	Construction	Maintenance
Marshend Pump Station	20,775,000	Multiple	Growth
New CSO Management Gates for New Westminster Interceptor	5,925,000	Construction	Upgrade
New West Interceptor - Annacis Section 2	45,000,000	Construction	Maintenance
New West Interceptor Grit Chamber	9,300,000	Construction	Maintenance
New Westminster Interceptor Repair Columbia St. Section	35,752,000	Construction	Maintenance
New Westminster Interceptor West Branch and Columbia Extension Rehabilitation	28,300,000	Design	Maintenance
North Road Trunk Sewer	11,675,000	Construction	Growth
North Road Trunk Sewer Phase 2	8,450,000	Construction	Growth
North Surrey Interceptor - Port Mann Section - Odour Control	7,500,000	Construction	Upgrade
North Surrey Interceptor Annieville Channel Crossing Scour Protection	4,350,000	Construction	Maintenance
North Surrey Interceptor Roebuck Section Rehabilitation - Phase 1	12,250,000	Design	Maintenance
NSA Flow Metering Program	900,000	Multiple	Maintenance
NSA Scour Protection Upgrades	2,250,000	Construction	Maintenance
NSI 104th Ave Extension	12,950,000	Construction	Growth
NSI Flow Management	94,500,000	Multiple	Upgrade
NSI Rehab or Replacement	46,450,000	Construction	Maintenance
Ocean Park Trunk Manholes Lining	1,200,000	Construction	Maintenance
Ocean Park Trunk Sewer - Air Management Facility	7,750,000	Design	Upgrade
Port Coquitlam Pump Station Refurbishment	52,100,000	Design	Maintenance
Port Moody Pump Station Capacity Upgrade	10,550,000	Design	Growth

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Port Moody South Interceptor Capacity Upgrade	3,450,000	Not started	Growth
Port Moody Storm Drain Rehabilitation	1,650,000	Design	Maintenance
Rosemary Heights Pressure Sewer Capacity Upgrade	10,750,000	Not started	Growth
Royal Ave PS Rehabilitation	8,238,000	Construction	Maintenance
Sapperton Pump Station	94,815,000	Multiple	Growth
Sapperton Pump Station Emergency Backup Power	5,000,000	Construction	Resilience
Sewer Heat Projects	35,400,000	Construction	Opportunity
South Surrey Interceptor Johnston Section	84,026,000	Construction	Growth
SSI - King George Section - Odor Control Facility (OCF) and Grit C	19,550,000	Construction	Growth
SSI Influent Control Chamber Repair and Replace Gates	1,285,000	Construction	Maintenance
SSI Sulfide Odour and Corrosion Control	9,200,000	Construction	Upgrade
Stoney Creek Sanitary Trunk	67,700,000	Design	Growth
Surrey Corrosion Control Facility Replacement	7,250,000	Construction	Maintenance
VSA Emergency Backup Power	24,310,000	Construction	Resilience
VSA Flow Metering Program	5,800,000	Multiple	Maintenance
VSA Grit Chamber Access Improvements	900,000	Construction	Maintenance
VSA Sewer Relocations and Protections	30,650,000	Multiple	Maintenance
Westridge FM Replacement	3,650,000	Construction	Maintenance
Westridge Pump Stations 1 & 2 Refurbishment	16,240,000	Multiple	Maintenance
White Rock Forcemain Rehabilitation	14,800,000	Design	Maintenance
Works Yard	32,000,000	Construction	Maintenance
Total Collections	**$ 1,741,476,000**		
Treatment Plants			
AIWWTP Ammonia Removal – Sidestream	$ 125,900,000	Design	Upgrade
AIWWTP Chemical Lab UPS System Replacement	600,000	Construction	Maintenance
AIWWTP Cogen Building Refurbishment	1,500,000	Construction	Maintenance
AIWWTP Cogeneration Backup Power	80,503,000	Multiple	Resilience

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
AIWWTP Electrical Distribution System Protection Control and Monitoring	2,650,000	Construction	Upgrade
AIWWTP Digester No. 5	250,000,000	Not started	Growth
AIWWTP Fibre Optic Infrastructure	1,500,000	Construction	Maintenance
AIWWTP Hydrothermal Processing Pilot	19,450,000	Construction	Opportunity
AIWWTP ICS Replacement Program	14,350,000	Construction	Maintenance
AIWWTP Influent System Remediation	82,500,000	Design	Maintenance
AIWWTP IPS Gates Replacements	700,000	Design	Maintenance
AIWWTP IPS Pump Building Roof Replacement Phase 2	830,000	Not started	Maintenance
AIWWTP Outfall Repair	1,800,000	Not started	Maintenance
AIWWTP Replacement of ICS Equipment	4,445,000	Multiple	Maintenance
AIWWTP Replacement of Protective Relays	3,308,000	Construction	Maintenance
AIWWTP Scheduled 64kV Potential & Current Transformer Replacements	800,000	Construction	Maintenance
AIWWTP Scum Pump Replacement	1,350,000	Not started	Maintenance
AIWWTP Secondary Clarifier Corrosion Repair	58,484,000	Multiple	Maintenance
AIWWTP Secondary Effluent Discharge Flowmeter Replacement	400,000	Construction	Maintenance
AIWWTP Spare Trickling Filter Pump & Motor Purchase	1,800,000	Construction	Maintenance
AIWWTP Stage 5 Expansion & Outfall System	1,191,500,000	Multiple	Growth
AIWWTP Station Battery Replacement	1,207,000	Multiple	Maintenance
AIWWTP Trickling Filter Media & Distributor Arms & Ducting Replacement	90,700,000	Construction	Maintenance
AIWWTP UPS Condition Monitoring System	550,000	Not started	Resilience
All WWTPs Power Quality Monitoring & Outage Alarming Network	2,870,000	Construction	Upgrade
Annacis Influent System Surge Control Refurbishment	22,000,000	Construction	Growth
Annacis MCC 80 051, 80 070, 80 071 Replacement	2,850,000	Construction	Maintenance
Biosolids Dryer	337,700,000	Design	Opportunity
Ferguson Road Paving Refurbishment	1,100,000	Construction	Upgrade
IIWWTP - Biogas Lines Relocation	5,780,000	Construction	Resilience
IIWWTP Biosolids Dewatering Facility	61,300,000	Construction	Upgrade
IIWWTP CEPT Winterization	750,000	Construction	Maintenance
IIWWTP ICS IPS Control Replacement	1,750,000	Construction	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
IIWWTP ICS Replacement Program	750,000	Construction	Maintenance
IIWWTP Influent Gate Refurbishment	1,350,000	Construction	Maintenance
IIWWTP IPS Drive Remediation	1,400,000	Construction	Maintenance
IIWWTP MCC/Power Distribution Assess/Replace - Phase 2	1,000,000	Construction	Maintenance
IIWWTP Outfall Refurbishment	325,000,000	Design	Maintenance
IIWWTP PA-Sed Tank & Gallery Wall Refurbishment	925,000	Construction	Maintenance
IIWWTP Replacement of CoGen Control System	2,500,000	Construction	Maintenance
IIWWTP Siphon Chamber Refurbishment	2,150,000	Construction	Maintenance
IIWWTP Sludge Lagoons Dewatering Facility	4,000,000	Construction	Upgrade
IIWWTP Solids Handling Refurbishment	65,400,000	Multiple	Maintenance
IIWWTP Standby Diesel Generators	5,000,000	Design	Resilience
Iona Island Control & Instrumentation Replacement 2011	2,750,000	Construction	Maintenance
Iona Secondary Wastewater Treatment	10,400,000,000	Definition	Upgrade
LIWWTP Admin Dewatering Building Roof Repair	800,000	Design	Maintenance
LIWWTP Biogas Clean-up Project	13,800,000	Construction	Opportunity
LIWWTP CCT Isolation Gates	2,050,000	Construction	Maintenance
LIWWTP Effluent Heat Recovery Project	10,000,000	Construction	Opportunity
LIWWTP Ground Fault Detection System Replacement	1,550,000	Construction	Maintenance
LIWWTP High Efficiency Boiler	1,300,000	Construction	Maintenance
LIWWTP ICS Replacement Program	6,750,000	Construction	Maintenance
LIWWTP PA-Sed Tank Refurbishment	4,115,000	Construction	Maintenance
LIWWTP Pilot Digestion Optimization Facility	2,850,000	Construction	Opportunity
LIWWTP Power Reliability	8,202,000	Construction	Resilience
LIWWTP SCL Refurbishment	34,000,000	Design	Maintenance
LIWWTP Trickling Filter Refurbishment	43,050,000	Design	Maintenance
NLWWTP Screw Pump Replacement	1,550,000	Construction	Maintenance
NLWWTP Standby Diesel Generator	1,000,000	Design	Resilience
North Shore WWTP Secondary Upgrade, Conveyance and Decommissioning	1,057,867,000	Construction	Upgrade
Northwest Langley Wastewater Treatment Program	1,629,700,000	Multiple	Growth

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
NWL WWTP 25 kV Substation Replacement	10,050,000	Construction	Maintenance
WWTPs Electrical System Studies & Upgrades	1,900,000	Design	Resilience
Total Treatment Plants	**$ 16,015,686,000**		
TOTAL CAPITAL EXPENDITURES	**$ 17,757,162,000**		

SUMMARY BY DRIVER	
Growth	$ 3,793,691,000
Maintenance	1,505,564,000
Resilience	145,495,000
Upgrade	11,892,012,000
Opportunity	420,400,000
Total	**$ 17,757,162,000**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
SOLID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES				
Landfills				
Alternative Fuel and Recyclables Recovery Centre	$	60,000,000	Feasibility Study	Opportunity
Coquitlam Landfill East Closure		5,000,000	Not started	Resilience
Coquitlam Landfill Gas Collection Upgrades		7,300,000	Construction	Maintenance
Coquitlam Landfill Lot 3 Development		5,000,000	Feasibility Study	Resilience
Coquitlam Landfill Pump Station Upgrade		1,600,000	Construction	Maintenance
Coquitlam Landfill: Leachate Collection System Grade Realignment		1,000,000	Design	Resilience
Total Landfills	**$**	**79,900,000**		
Recycling and Waste Centres				
Central Surrey Recycling and Waste Centre	$	50,300,000	Construction	Growth
Langley Recycling Depot Development		5,500,000	Design	Upgrade
Maple Ridge Transfer Station Upgrades		2,000,000	Design	Maintenance
North Shore Recycling and Waste Centre Compactor Replacement		2,500,000	Not started	Maintenance
North Surrey Recycling and Waste Centre Compactor Replacement		2,500,000	Not started	Maintenance
North Surrey Recycling Depot Development		25,500,000	Design	Upgrade
United Boulevard Recycling and Waste Centre		77,600,000	Construction	Growth
Western Region Recycling and Waste Centre Replacement		75,000,000	Not started	Resilience
Total Landfills	**$**	**240,900,000**		
Waste To Energy Facilities				
Acid Gas Reduction	$	41,000,000	Preliminary Design	Upgrade
Air System Piping Replacement		300,000	Not started	Maintenance
Biosolids Processing		22,500,000	Design	Resilience
Boiler and APC Roof Replacement		1,750,000	Not started	Maintenance
Bottom Ash Crane Replacement		1,500,000	Design	Maintenance
Bottom Ash Processing		6,800,000	Construction	Opportunity
Compressed Air System Replacement		3,000,000	Design	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
SOLID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Electrical Transformers Replacement	5,000,000	Design	Maintenance
Fabric Filter Hopper and Pulse Header Refurbishment	2,250,000	Design	Maintenance
Feed Hopper/Chute	2,600,000	Construction	Maintenance
Feedwater Pump Replacement	1,000,000	Design	Maintenance
Fire Suppression System	1,000,000	Design	Maintenance
Fly Ash Silo Refurbishment	1,000,000	Design	Maintenance
Generation Bank Replacement	9,000,000	Not started	Maintenance
Primary Economizer Replacement	7,000,000	Construction	Maintenance
Primary Superheaters Replacement	4,000,000	Design	Maintenance
Programmable Logic Controllers Replacement	2,000,000	Design	Maintenance
Pug Mill Enclosure Ventilation System Replacement	1,000,000	Design	Maintenance
Refuse Crane	16,800,000	Construction	Maintenance
Refuse Pit Bunker Door Replacement	600,000	Design	Maintenance
Secondary Economizers Replacement	6,000,000	Design	Maintenance
Soot Blower Piping Replacement	300,000	Not started	Maintenance
Special Handle Waste Direct Feed System	5,000,000	Not started	Opportunity
Stack Refurbishment	350,000	Not started	Maintenance
WTE Facility District Heating	55,000,000	Design	Opportunity
Total Waste To Energy Facilities	**$ 196,750,000**		
Opportunity			
WTE Facility District Heating Opportunities	$ 2,310,000	Design	Opportunity
Total Opportunity	**$ 2,310,000**		
TOTAL CAPITAL EXPENDITURES	**$ 519,860,000**		

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
SOLID WASTE SERVICES
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
SUMMARY BY DRIVER				
Growth	$	127,900,000		
Maintenance		82,350,000		
Resilience		108,500,000		
Upgrade		72,000,000		
Opportunity		129,110,000		
Total	**$**	**519,860,000**		

MVHC – HOUSING

The MVHC is a not-for-profit entity with the Metro Vancouver Regional District as its sole shareholder. MVHC operates 49 housing sites that provide 3,400 units of affordable rental housing for low to moderate income households across the region. MVHC's operations and maintenance is primarily financed through the collection of tenant rents and supplemented by BC Housing operating subsidies for eight of the 49 sites. Operations maintains MVHC assets, manages tenants and builds communities within the housing portfolio and surrounding neighborhoods. The Planning, Development and Finance teams manage the strategic redevelopment of existing sites and partnerships with member jurisdictions, provincial and federal government to develop additional affordable homes across the Region.

The MVHC 2022 – 2026 Financial Plan for the next five years is summarized below:

MVHC FIVE YEAR FINANCIAL PLAN OVERVIEW							
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**5 Year Ave**
Housing Rents	$41.3	$42.1	$42.9	$46.6	$49.2	$57.7	
% Change		2.0%	1.9%	8.5%	5.7%	17.1%	7.06%
Total Expenditures	$53.7	$54.8	$60.3	$66.8	$68.8	$76.4	
% Change		2.0%	10.0%	10.8%	3.0%	11.1%	7.4%
Maintenance and Replacement	$9.5	$9.9	$14.5	$16.9	$16.2	$15.3	$13.7
Housing Development	$14.8	$48.3	$48.2	$105.4	$148.3	$77.8	

Operating Budget Highlights

The MVHC 2022 operating budget is proposed to increase by $1.1 million for a total budget of $54.8 million (Attachment 1). This increase is primarily due to the increased rental revenue and operating subsidies to meet service requirements and growth demands.

The 2022 operating budget includes the following key actions:

- Continue implementation of the Metro Vancouver Housing 10-Year Plan and Asset Management Plan;
- Ongoing construction on Kelly Court (Vancouver) and Evergreen Downs (Delta) building envelope renewals and energy improvements;
- Finalize design, obtain permits, and start construction on Strathearn Court (Vancouver) building envelope renewals and energy improvements;
- The Pembina Reframed initiative will be completing the exploration labs and will be starting detailed design for Deep Retrofits at Manor House (North Vancouver), Crown Manor (New Westminster), and Le Chateau (Coquitlam);

- Continue to develop and implement innovative tenant programs such as community gardens, free food programs, decorative wraps contests, complimentary spring flowers programs, murals and communications projects;
- Continue to support tenants that need to be relocated due to redevelopment;
- Develop and begin implementation of a new internal and external work order system;
- Gradually return to 'new normal' through the reopening of head office and area offices to the public and to our tenants and increase face-to-face interactions as guidelines allow;
- Review payment plans, discounted rents, and delinquencies for current tenants;
- Use the COVID-19 Safe Restart Funds to construct MVH amenity space that will be used as a place to run a free food program for vulnerable tenants and also as a gathering place for community events and other tenant programs;
- Progress construction of Kingston Gardens Phase 1 (Surrey) and Welcher Avenue (Port Coquitlam);
- Finalize detailed design for Heather Place Building B (Vancouver);
- Schematic design and development approvals for: Civic Centre (Pitt Meadows), Malaspina Phase 1 (Coquitlam), Eastburn Square (Burnaby) and Southwynde (Burnaby);
- Work with BC Housing and CMHC to secure funding partnerships for redevelopment projects;
- Update the Housing website;
- Enhance the online housing application process for tenants;
- Continue to build brand awareness with key industry stakeholders and residents of the region; and
- Work to build a better understanding the opinions and community needs of MVHC through focus group and public opinion research where needed.

Over the next five years, the MVHC annual budget is expected to increase an average of $4.5 million or 7.4% per year, primarily due to the expansion of the housing portfolio as more units come on line.

Capital Budget Highlights

The MVHC capital budget for 2022 approval is $322.5 million (Attachment 2). The capital program is funded by mortgage financing, reserve funding, and grants from external agencies. The capital projects planned and ongoing for 2022 are the redevelopment of Heather Place - Building B (Vancouver), Kingston Gardens - Phase I (Surrey), and Welcher Avenue (Port Coquitlam) as well as planning for Eastburn Square (Burnaby), Malaspina (Coquitlam), Pitt Meadows Town Centre and Southwynde (Burnaby).

The projected capital cash flow for 2022 - 2026 totals $428.0 million with Kingston Gardens - Phase I (Surrey) and Welcher Avenue (Port Coquitlam) estimated to be completed in 2023 and 2024, respectively. Heather Place - Building B (Vancouver) and Malaspina – Phase 1 (Coquitlam) are estimated to be completed in 2025. Eastburn Square (Burnaby), Pitt Meadows Town Centre and Southwynde (Burnaby) are estimated to be completed in 2026. The 2022-2026 capital plan also includes projects that are currently in the planning phase and have not yet been endorsed by the Housing Committee or Board.

Estimated total project costs of all MVHC projects are included in Schedule 1.

ALLOCATED PROGRAMS

The Centralized Support Program includes the following support services: Corporate Services, External Relations, Financial Services, Human Resources Indigenous Relations and Legislative Services. These departments support all activities within the Metro Vancouver Districts and the Housing Corporation and costs are allocated to the various Districts and functions according to the Board's *Corporate Allocation Policy*.

The Project Delivery Department was created to deliver the highest value, consequence and risk projects for Liquid Waste and Water Services (funded through Liquid Waste and Water capital budgets) as well as lead the creation and implementation of centers of expertise for project management, organizational quality management and asset management across Metro Vancouver (funded through allocation to Liquid Waste and Water Services operating budgets for 2022).

The projected allocation to the MVHC for Allocated Programs over the five years of the plan is summarized as follows:

CENTRALIZED SUPPORT PROGRAM FIVE YEAR FINANCIAL PLAN OVERVIEW						
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Allocated to Functions	$75.6	$87.2	$94.1	$97.5	$99.7	$102.3
% Change		15.3%	8.0%	3.5%	2.3%	2.6%
MVHC	$2.5	$2.4	$3.1	$3.1	$3.0	$2.9
% Change		(2.8%)	29.9%	(1.2%)	(2.1%)	(4.1%)

METRO VANCOUVER HOUSING CORPORATION
CAPITAL PORTFOLIO
HOUSING DEVELOPMENT
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDITURES			
Heather Place - Building B	$ 48,100,000	Starting 2021 - Detailed Design	Expand/Re-develop
Kingston Gardens - Phase 1	44,600,000	Starting 2021 - Construction	Expand/Re-develop
Welcher Avenue	36,100,000	Starting 2021 - Construction	Expand/Re-develop
Eastburn Square (2021 Projects in Planning)	63,800,000	Planned	Expand/Re-develop
Malaspina (2021 Projects in Planning)	38,700,000	Planned	Expand/Re-develop
Pitt Meadows Town Centre (2021 Projects in Planning)	45,800,000	Planned	Expand/Member Partnerships
Southwynde - Burnaby (2021 Projects in Planning)	45,400,000	Planned	Expand/Member Partnerships
Projects in Planning	143,300,000	Planned	Expand/Re-develop and Member Partnerships
TOTAL CAPITAL EXPENDITURES	**$ 465,800,000**		

SUMMARY BY DRIVER	
Expand/Re-develop	$ 314,450,000
Expand/Member Partnerships	151,350,000
Total	**$ 465,800,000**

MVRD – REGIONAL DISTRICT

The MVRD budget and financial plan presented includes thirteen regional district functions of which eleven services are apportioned to all MVRD members through the tax requisition and two services which are apportioned to either a single jurisdiction (Electoral Area A) or to two municipalities (Belcarra and Anmore – Sasamat Fire Protection Service). The MVRD functions are also funded through a variety of other sources including permit revenues and user fees. The thirteen regional district functions are as follows:

Air Quality
E911 Emergency Telephone Service
Electoral Area Service
General Government Administration
General Government Zero Waste Collaboration Initiatives
Housing Planning and Policy
Regional Economic Prosperity
Regional Emergency Management
Regional Employer Services
Regional Global Positioning System
Regional Parks
Regional Planning
Sasamat Fire Protection Service

The MVRD 2022 – 2026 Financial Plan for the next five years is summarized below:

REGIONAL DISTRICT SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**5 Year Ave**
Tax requisition	$80.9	$89.9	$101.8	$107.9	$111.0	$115.3	
% Change		11.0%	13.3%	5.9%	2.9%	3.9%	7.4%
Total Expenditures	$101.1	$113.5	$121.4	$127.1	$130.7	$135.8	
% Change		12.2%	6.9%	4.7%	2.9%	3.9%	6.1%
Total Capital Cash Flow	$19.0	$31.3	$33.6	$32.3	$29.0	$30.4	$31.3
Household Impact ($)	$70	$76	$85	$88	$89	$91	
% Change		9.0%	11.0%	3.8%	1.5%	2.5%	5.6%
Prior Cycle Household Impact Change (%)		4.9%	5.2%	4.4%	1.8%	N/A	

Operating Budget Highlights

In 2022, total expenditures for the Regional District Service Areas are proposed to increase $12.4 million for total expenditures of $113.5 million. The increase is primarily due to the following:

- increase in the contribution to the parkland acquisition reserve of $4.0M and $1.0M in parks capital infrastructure reserve
- adjustment for resources necessary to support the capital program as well as labour inflationary adjustments
- Investment in Regional Economic Prosperity to support the region's economic recovery efforts as a result of the COVID-19 pandemic

The 2022 Regional District Service Area operating budgets includes the following key actions:

- Continued recovery of Regional Parks revenue streams: filming, public programming and facility rentals.
- Participation in the Metro Vancouver activation at the Pacific National Exhibition (PNE) including provision of outreach nature based programming for visitors to the exhibit.
- Continued implementation of *Public Programming Strategy* (2020) including adoption of cost recovery model and program pricing philosophy as well as completion of a marketing plan.
- Continue to consider additional opportunities for pay parking to help manage parking demand.
- Administer the local government election in Electoral Area A
- Continue to implement the *Climate 2050 Strategy* and the issue area roadmaps;
- Implement the next regional air quality and greenhouse gas management plan, the *Clean Air Plan*, adopted by the Board in September 2021;
- Complete *Metro 2050*
- Conduct Urban Centres and FTDAs Policy Research
- Implement customer relationship management (CRM) system for strategic investment attraction across the region
- Develop strategic investment protocols in conjunction with member jurisdictions
- Initiate concept planning and viability studies for a new housing site identified through MVH's Expression of Interest Round 2 (to be issued in Fall/Winter of 2021)
- Continue to pursue portfolio funding partnerships with provincial and federal governments, and other funding opportunities as they arise

Over the five-year plan, the projected expenditures for Regional District services collectively is projecting to increase from $113.5 million in 2022 to $135.8 million in 2026, an average increase of $6.9 million. Over the five-year plan, the cost to the average regional household, for all Regional District Service is increasing $21 to a cost of $91 representing an average increase of $4 per year.

Capital Budget Highlights

The Regional Parks capital budget for 2022 approval is $64.0M (Attachment 2). The capital program is funded primarily by reserve funds. The Regional Parks capital program includes major park development and land acquisition.

Highlights of capital projects planned or ongoing in 2022 include the following:

- Widgeon Marsh Park Development *(multiyear, $19.1M*)
- *Campbell Valley Management Plan* Implementation *(multiyear, $8.1M)*
- Grouse Mountain Trail and Amenity Improvements *(multiyear, $3.5M*)
- Derby Reach Washroom Building *(multiyear, $2.0M*)
- Burnaby Lake Service Yard Building *(multiyear, $1M)*
- Capilano River Service Yard *(multiyear, $2.0M)*
- IWWTP - Iona Beach Regional Park (Liquid Waste Services lead, integrated team)
- System-wide Asset Management/Minor Capital Implementation
- Ongoing Land Acquisition

The projected capital cash flows for 2022 - 2026 totals to $156.5M and is largely driven by new regional park developments, land acquisition and required infrastructure replacements. These include:

- Construction and opening of Widgeon Marsh Regional Park
- Construction of Crippen Regional Park-Davies Orchard Day Use Area and Dorman Point
- Construction of the Belcarra Regional Park South Picnic Area
- Campbell Valley Regional Park Trail and open space improvements
- Implementation of Investing in Canada Grant (Grouse Mountain Regional Park)
- Implementation of the Regional Greenways 2050 strategy including the Delta South Surrey Greenway and Burnaby Lake Greenway improvements
- Development of Burns Bog Ecological Conservancy Area - Delta Nature Reserve
- Trail developments at Aldergrove, Tynehead, Campbell Valley and Pacific Spirit Regional Parks
- Land acquisition in support of *Regional Parks Land Acquisition 2050*

Estimated total project costs for all MVRD – Regional Parks projects are included for Board Information on Schedule 1.

ALLOCATED PROGRAMS

The Centralized Support Program includes the following support services: Corporate Services, External Relations, Financial Services, Human Resources Indigenous Relations and Legislative Services. These departments support all activities within the Metro Vancouver Districts and the Housing Corporation and costs are allocated to the various Districts and functions according to the Board's *Corporate Allocation Policy*.

The Project Delivery Department was created to deliver the highest value, consequence and risk projects for Liquid Waste and Water Services (funded through Liquid Waste and Water capital budgets) as well as lead the creation and implementation of centers of expertise for project management, organizational quality management and asset management across Metro Vancouver (funded through allocation to Liquid Waste and Water Services operating budgets for 2022).

The projected allocation to the MVRD for Allocated Programs over the five years of the plan is summarized as follows:

ALLOCATED PROGRAMS FIVE YEAR FINANCIAL PLAN OVERVIEW						
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Allocated to Functions	$75.6	$87.2	$94.1	$97.5	$99.7	$102.3
% Change		15.3%	8.0%	3.5%	2.3%	2.6%
MVRD	$7.0	$7.7	$9.2	$9.3	$8.6	$8.1
% Change		10.2%	19.6%	0.7%	(6.8%)	(6.3%)

METRO VANCOUVER REGIONAL DISTRICT
CAPITAL PORTFOLIO
REGIONAL PARKS
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES				
Major Projects				
Grouse Mountain - Regional Park Trail and Amenity Improvements	$	3,075,000	Construction	Capacity, Growth & Ecological Resilience
Widgeon Marsh - Regional Park Development		19,100,000	Construction	Capacity, Growth & Ecological Resilience
Campbell Valley - Management Plan Implementation		8,100,000	Construction	Capacity, Growth & Ecological Resilience
Belcarra - South Day Use Area		5,950,000	Planned	Capacity, Growth & Ecological Resilience
Codd Wetland - Park Development		9,900,000	Planned	Capacity, Growth & Ecological Resilience
West Creek Wetlands - Park Development		2,800,000	Planned	Capacity, Growth & Ecological Resilience
Burns Bog - Fire Restoration		4,500,000	Planned	Capacity, Growth & Ecological Resilience
Total Major Projects Program	**$**	**53,425,000**		
Greenways				
Aldergrove - Rock'n Horse Trail Connector	$	400,000	Planned	Connected Network
DNR/DSSG Management Plan Implementation		10,100,000	Planned	Connected Network
Boundry Bay - Perimeter Trail		1,650,000	Planned	Connected Network
Tynehead - Perimeter Trail		2,500,000	Planned	Connected Network
Other Greenways Upgrades		4,800,000	Planned	Connected Network
Total Greenways Program	**$**	**19,450,000**		
Service Facilities				
Burnaby Lake - Service Yard Building Replacement	$	1,000,000	Construction	Facility Replacement & Asset Management
Capilano - New Service Yard		943,000	Construction	Facility Replacement & Asset Management
Total Service Facilities Program	**$**	**1,943,000**		
Park Development				
Crippen - Davies Orchard	$	1,750,000	Planned	Capacity, Growth & Ecological Resilience
Derby Reach - Full Service Washroom		2,014,000	Construction	Capacity, Growth & Ecological Resilience

METRO VANCOUVER REGIONAL DISTRICT
CAPITAL PORTFOLIO
REGIONAL PARKS
ESTIMATED TOTAL PROJECT COST

	ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
Crippen - Dorman Point Acces and Amenities	500,000	Planned	Facility Replacement & Asset Management
Colony Farm - TMX Agreement Projects	1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - Admiralty Heights Trail Decomissioning	1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - White Pine Redevelopment & Improvements	1,750,000	Planned	Capacity, Growth & Ecological Resilience
Campbell Valley - Little River Loop Boardwalk	800,000	Planned	Facility Replacement & Asset Management
Pacific Spirit - Beach Access & Trail Improvments	1,650,000	Planned	Facility Replacement & Asset Management
Advanced Design Work for Future Projects	1,300,000	Planned	Capacity, Growth & Ecological Resilience
Park Amenities and Visitor Experience	4,500,000	Planned	Capacity, Growth & Ecological Resilience
Other Replacement, Restoration & Upgrade Projects	4,610,000	Planned	Facility Replacement & Asset Management
Total Park Development Program	**$ 20,874,000**		
Regional Parks Land Acquisition			
Regional Parks Land Acquisition	$ 15,750,000		Land Acquisition
Total Land Acquisition Program	**$ 15,750,000**		
TOTAL CAPITAL EXPENDITURES	**$ 111,442,000**		

SUMMARY BY DRIVER	
Capacity, Growth & Ecological Resilience	$ 66,739,000
Facility Replacement & Asset Management	9,503,000
Connected Network	19,450,000
Land Acquisition	15,750,000
Total	**$ 111,442,000**

ATTACHMENT 6

Overview of 2022 Metro Vancouver Budget

Board Priorities

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Actions to provide short term relief for households due to the pandemic/ economic environment:

- Utilization of reserves
- Capital plan deferrals
- Demand side management
- Reduce pay-as-you-go for capital
- Continuous improvement

2022 Household Impact is $595

2022 Budget at a Glance

- Total combined expenditures planned for 2022 – $2.4 billion
  - $1.017 for operating
  - $1.38 for capital
- Household Impact $595 for all regional services; $21 increase over 2021 (previously projected at $612 for 2022)
- 3.5% Household Impact increase; about half of what was previously projected for 2022

WHERE THE MONEY COMES FROM

WHERE THE MONEY GOES

73% of our funding and activities are for our utilities

Metro Vancouver provides essential services key to the prosperity, resilience and livability of the region:

- Water, liquid waste, solid waste, affordable housing, regional parks, air quality and regional planning,
- We build large scale multi-year regional infrastructure projects,
- Just under half (45%) of the operating budget is spent on infrastructure investment.

KEY REGIONAL PROJECTS UNDERWAY

Kingston Gardens

Surrey Recycling & Drop Off

North Shore WWTP

Second Narrows Water Tunnel

Annacis Expansion

Widgeon Marsh Regional Park

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Climate Action Committee

From: Neal Carley, General Manager, Parks and Environment
Roger Quan, Director, Air Quality and Climate Change

Date: October 8, 2021 Meeting Date: October 15, 2021

Subject: **2022 - 2026 Financial Plan – Air Quality**

RECOMMENDATION
That the Climate Action Committee endorse the 2022 - 2026 Financial Plan for Air Quality as presented in the report dated October 8, 2021, titled "2022 - 2026 Financial Plan – Air Quality", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY
The 2022 - 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region in 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

The Air Quality operating budget for 2022 is proposed to be $12.5 million, a decrease of 0.5% from 2021. While operating expenditures have decreased, the tax requisition is increasing by 14.0%, to offset reduced revenues from regulatory fees, as regulatory action drives improvements in emissions. The regulatory fee system is under review, with proposed amendments for Board consideration to occur within 2021. With Board approval, the fee changes will be expected to be in effect by 2023.

Implementation of the *Clean Air Plan* and *Climate 2050* roadmaps continues to be a key priority, which is also resulting in climate action projects being budgeted across the organization. The Sustainability Innovation Funds will also supplement climate action projects, as will leveraging and collaboration with external partners. Additional priorities include the development of new and amended air quality regulations. Staff will pursue air quality improvement and health and environmental protection through promoting compliance with permits and air quality bylaws.

PURPOSE
To present the 2022 - 2026 Financial Plan for Air Quality for consideration by the Committee.

BACKGROUND
Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Air Quality function and presents the 2022 annual budget and the updated five-year plan for the years 2022 to 2026 for committee consideration.

AIR QUALITY SERVICE

The Air Quality function within the Metro Vancouver Regional District (MVRD) provides services to all 22 members and encompasses the management of air quality within the region, under authority delegated from the Provincial government within the *Environmental Management Act*. Air Quality services provided are presented in two areas:

- Air Quality and Climate Change, including the development and implementation of climate action and air quality plans and policies, bylaws and regulations, and supporting activities such as the operation of a network of air quality monitoring stations located throughout the airshed, environmental assessment, and communications and outreach;
- Air Quality Regulation and Enforcement, including the issuance and administration of air quality permits, and promotion of compliance with and enforcement of Metro Vancouver air quality bylaws.

The provision of Air Quality services is guided by direction in the *Board Strategic Plan*, and the *Climate 2050 Strategic Framework* and *Clean Air Plan*, both adopted by the Board; specifically:

Board Strategic Plan:

- Guide climate change policy and action for the Metro Vancouver region for the next 30 years with Metro Vancouver's Climate 2050 strategy.
- Improve air quality by mitigating threats to public health and the environment.
- Strengthen awareness among and engagement with the public, members, other orders of government, and other stakeholders in the implementation of Climate 2050, and foster regional coordination to help implement effective adaptation measures and achieve the long-term targets in reducing greenhouse gas emissions.

Climate 2050 Strategic Framework:

- Ensuring our infrastructure, ecosystems, and communities are resilient to the impacts of climate change.
- Pursuing a carbon neutral region by 2050.

Clean Air Plan, Regional 2030 Targets:

- Reduce regional greenhouse gas (GHG) emissions by 45% from 2010 levels.
- Air quality in the region is continually improving, protecting human health and the environment, by ensuring that:
    - Ambient air quality meets or is better than the ambient air quality objectives and standards that are regularly updated by Metro Vancouver, the BC Government and the Government of Canada; and
    - The amount of time that visual air quality is classified as "excellent" is increasing.

Metro Vancouver also recognizes the history of Indigenous Peoples and aims to build meaningful and enduring relationships with First Nations. As part of our work, Air Quality is committed to engaging First Nation communities through information sharing, engagement and ongoing communication.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plan for Air Quality is presented in this report. Within the air quality work plans, performance indicators have been developed and are being tracked. These include:

- Net corporate GHG emissions annually (tonnes of carbon dioxide equivalent, CO_2e);
- Regional GHG emissions annually (tonnes of CO_2e per capita);
- Days with air quality advisories in place due to emission sources located within the airshed;
- Reliability of air quality monitoring network (% of annual hours with monitoring data available for priority pollutants);
- Promote the reduction of emissions of harmful particulate matter from non-road diesel engines (cumulative number of engines retired, prohibited, moved out of region or out of use since the program began);
- Promote compliance with authorizations (total number of permits and approvals); and
- Response to complaints (number of complaints).

The trend in these performance measures supports the Board direction to reduce greenhouse gas emissions in the region, to meet a 45% reduction target by 2030 and achieve carbon neutrality by 2050. They also support the Board direction for Metro Vancouver to show leadership by achieving carbon neutrality as an organization, through improvements to energy efficiency, utilization of waste streams to generate heat and/or energy, the use of low-carbon fuels, and identification of new carbon capture and offset projects. On the air quality side, programs are focused on continuous improvement and will need to respond to new challenges such as wildfire events, extreme weather, and reducing emissions that are harmful to human health.

CONTINUOUS IMPROVEMENT

Air Quality continues to explore, evaluate and implement continuous improvement opportunities. The 2022 continuous improvement opportunities include the following:

- Continuing to update Climate 2050 roadmaps on a regular basis. The roadmaps are intended to be dynamic and to evolve with new science, developing technologies, and public opinion;
- Expansion of Metro Vancouver's portfolio of carbon credit projects and emission reductions, to maintain corporate carbon neutral status;
- Development of new and amended regulations, to drive continuous improvement in air quality, innovation in climate action, and cost recovery from regulated sources;
- Implementation of the recommendations from a third party review of the air quality monitoring network, resulting in improvements and efficiencies in the collection of air quality data and dissemination to the public;
- Continue to improve air quality regulatory data systems to automate administrative tasks by enforcement staff and accommodate new and amended bylaws;
- Develop procedures for virtual inspections; and
- Develop procedures and guidance for the issuance of administrative penalties.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that presents program highlights for the next five years.

The 2022 - 2026 Air Quality Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for Air Quality presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2022 - 2026 are included in Attachment 3.

Operating Budget Highlights

The Air Quality 2022 operating budget is proposed to decrease by $62,435 for a total budget of $12,498,252 (Attachment 1). This decrease is primarily due to a reduction in consulting funds for studies and projects funded by the Sustainability Innovation Fund (SIF). Additional projects to be considered for SIF funding will be brought forward to the Climate Action Committee as part of the annual application process, and it is expected that numerous projects in all three SIF areas will have a climate action theme. The overall decrease is partially offset by inflationary factors such as increments for salaries and benefits. It should also be noted that, with the development of the Climate 2050 roadmaps, additional climate action projects are funded in other areas, including the utilities, regional parks, and housing, and that the funds in the Air Quality operating budget are used to leverage additional funding for projects with external partners.

The 2022 operating budget includes the following key actions:

- Continue to implement the *Climate 2050 Strategy* and the issue area roadmaps;
- Implement the next regional air quality and greenhouse gas management plan, the *Clean Air Plan*, adopted by the Board in September 2021;
- Develop new air quality bylaws, regulations and standards, towards goals for protection of human health and environment, continuous improvement in air quality, and cost recovery from regulated sources, for Board adoption;
- Implementation of new and amended bylaws, for further reductions in harmful emissions from non-road diesel engines and residential wood burning;
- Enhance the odour management framework based on consultation feedback, increased community outreach, and technical capacity-building through partnerships with industry and other levels of government;
- Improve public understanding of air quality and climate change, including outreach and progress reporting on *Climate 2050*, the *Clean Air Plan*, and the preparation of the annual Caring for the Air report; and

- Develop additional air quality monitoring and emissions assessment capabilities to provide the evidence basis and performance measurement for the air quality program, and provide air quality advisory services.

Over the next five years, expenditures are increasing by $1,200,951, or an average of 1.9% per year.

Communications Program
The 2022 Air Quality Communications Program of $150,000 is focused on outreach, communication and engagement on Climate 2050, Clean Air Plan, and air quality bylaws and regulations.

Reserve Funds
The financial plan for Air Quality includes the utilization of reserves to annually fund one-time initiatives. This is consistent with the *Operating, Statutory and Discretionary Reserves Policy*. The 2022 - 2026 Projected Reserves for Air Quality are included in Attachment 4.

APPROVAL PROCESS
The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.

- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES
1. That the Climate Action Committee endorse the 2022 - 2026 Financial Plan for Air Quality as presented in the report dated October 8, 2021, titled "2022 - 2026 Financial Plan – Air Quality", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Climate Action Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for Air Quality and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS
If the MVRD Board endorses the 2022 - 2026 Financial Plan for Air Quality, as presented under Alternative 1, in 2022 the Air Quality requisition will increase by $909,624 (14.0%) for a total requisition of $7,392,266. The requisition increase is related to a reduction in regulatory fee revenues – as emissions are reduced, fee revenues decline. After completion of the review of the system of regulatory fees in 2021, staff will propose amendments to the regulatory fee bylaw for Board consideration. With Board approval, the fee changes will be expected to be in effect by 2023.

Over the term of the five-year plan, the annual Air Quality requisition is projected to increase by an average of $650,941 per year (8.7%) to provide the required revenue to offset projected

expenditures. It is anticipated that the cost to the average regional household over the next five years for the Air Quality function will rise from just under $6 in 2021 to just over $7 in 2026.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2022 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The Air Quality 2022 Budget and Five-Year Financial Plan was prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Air Quality.

The presentation of this year's five-year financial plan for Air Quality provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for residents while keeping pace with our critical requirements.

Staff recommends endorsing the 2022 - 2026 Financial Plan and Annual Work Plan for Air Quality as presented under alternative one.

Attachments:

1. 2022 - 2026 Financial Plan – Air Quality
2. 2022 Work Plans
   a. Air Quality
   b. Environmental Regulation and Enforcement – Air Quality
3. 2022 - 2026 "What's Happening"
4. 2022 - 2026 Projected Reserves – Air Quality

METRO VANCOUVER REGIONAL DISTRICT
AIR QUALITY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 6,482,642	$ 7,392,266	14.0%	$ 8,747,776	18.3%	$ 8,834,220	1.0%	$ 9,108,949	3.1%	$ 9,737,345	6.9%
User Fees	1,715,000	1,715,000		2,240,000		2,567,451		2,468,027		2,540,000	
Non-Road Diesel Permit Fees	1,365,000	1,070,000		1,070,000		1,070,000		1,070,000		1,070,000	
Other External Revenues	635,378	439,986		445,391		401,573		407,873		414,293	
Transfer from Sustainability Innovation Fund Reserves	1,032,667	400,000		-		-		-		-	
Transfer from Reserves	1,330,000	1,481,000		337,000		-		-		-	
TOTAL REVENUES	**$ 12,560,687**	**$ 12,498,252**	**(0.5%)**	**$ 12,840,167**	**2.7%**	**$ 12,873,244**	**0.3%**	**$ 13,054,849**	**1.4%**	**$ 13,761,638**	**5.4%**
EXPENDITURES											
Operating Programs:											
Ambient Air Quality Monitoring	$ 2,227,265	$ 2,377,133		$ 2,367,128		$ 2,385,060		$ 2,334,044		$ 2,734,108	
Air Quality and Climate Change Policy	2,650,389	2,738,184		3,381,547		3,004,595		3,075,564		3,175,156	
Air Quality Bylaw and Regulation Development	1,284,572	1,294,649		1,287,245		1,293,837		1,322,228		1,347,838	
Engineers in Training	34,880	46,525		47,390		48,452		49,538		50,649	
Regional Sustainability Initiatives	1,032,667	400,000		-		-		-		-	
Administration and Department Support	580,973	541,721		553,045		567,378		580,391		593,879	
	7,810,746	7,398,212	(5.3%)	7,636,355	3.2%	7,299,322	(4.4%)	7,361,765	0.9%	7,901,630	7.3%
Communications Program	150,000	150,000	0.0%	150,000	0.0%	180,000	20.0%	180,000	0.0%	180,000	0.0%
Environmental Regulation and Enforcement	3,484,723	3,993,324		4,065,325		4,426,601		4,639,739		4,882,387	
Contribution to Non-Road Diesel Reserve	257,500	-		-		-		-		-	
	3,742,223	3,993,324	6.7%	4,065,325	1.8%	4,426,601	8.9%	4,639,739	4.8%	4,882,387	5.2%
Allocation of Centralized Support Costs	857,718	956,716	11.5%	988,487	3.3%	967,321	(2.1%)	873,345	(9.7%)	797,621	(8.7%)
TOTAL EXPENDITURES	**$ 12,560,687**	**$ 12,498,252**	**(0.5%)**	**$ 12,840,167**	**2.7%**	**$ 12,873,244**	**0.3%**	**$ 13,054,849**	**1.4%**	**$ 13,761,638**	**5.4%**

AIR QUALITY

Description of services

Air Quality is a Metro Vancouver Regional District function established under the *Environmental Management Act* with the responsibility for managing air quality and developing and implementing climate actions for the region. The service is guided by the development of management plans that recognize the strong connections between air quality, health and climate change, and that integrate actions, whenever possible, to reduce both air contaminants and greenhouse gases across the region.

This work plan addresses the air quality and climate change policy and planning area, which includes development of management plans and emission reduction actions using an evidence-based approach, relying on the regional network of air quality monitoring stations and other indicators to measure performance and identify priority areas for action. Reduction efforts involve both regulatory initiatives, such as air quality bylaws and regulations, and non-regulatory approaches.

Environmental Regulation and Enforcement is an integrated part of the Air Quality function with its responsibility to manage the discharge of air contaminants under Metro Vancouver Regional District air quality bylaws, through the issuance of permits, orders and licenses, and promotion of compliance.

Strategic directions and high level goals supported

Continue to promote a regional approach on climate action to all Metro Vancouver functions, including both mitigation and adaptation, through Climate 2050.

Guide climate change policy and action for the Metro Vancouver region for the next 30 years with Metro Vancouver's Climate 2050 strategy.

- Develop and advocate for actions fundamental to meeting regional greenhouse gas emission targets for 2030 and 2050 and ensuring our region is resilient to the impacts of climate change.
- Undertake corporate climate action to maintain carbon neutrality as an organization, that supports regional climate change mitigation and adaptation goals and targets and demonstrates leadership.

Improve air quality by mitigating threats to public health and the environment.

- Improve understanding of air quality issues in the region by expanding air monitoring capacity.
- Continue to identify air contaminants in the region, identify priorities and pursue effective actions to reduce pollutants.
- Explore solutions for mitigating health impacts of diminished air quality due to wildfires.

Strengthen awareness among and engagement with the public, members, other orders of government, and other stakeholders in the implementation of Climate 2050, and foster regional coordination to help implement effective adaptation measures and achieve the long-term targets in reducing greenhouse gas emissions.

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Net corporate greenhouse gas emissions (tonnes of carbon dioxide equivalent, CO2e)	1997: 13,900 2015: 0 (100% carbon neutral) 2016: 3,321 (60% carbon neutral)	2019, 2020: 0 (100% carbon neutral)	0 (100% carbon neutral)
Regional greenhouse gas emissions (tonnes of CO2e per capita)	2010: 6.3 2015: 5.8 2018: 5.6	2020: 5.4	4.2 (aligned with Climate 2050 targets)
Days with air quality advisories in place due to emission sources located within the airshed	2018: 7 2020: 2	2021: 5	0
Reliability of air quality monitoring network (% of annual hours with monitoring data available for priority pollutants)	2019: 98%	2020: 97%	> 95%

2022 key actions

- Continue to implement the Climate 2050 Strategy including:
  - roadmaps for climate action in ten issue areas approved by the Board, including transportation, buildings and industry;
  - implementation of additional energy and greenhouse gas reduction offset projects that will maintain Metro Vancouver's corporate carbon neutrality;
  - advancement of corporate policies related to energy and climate change; and
  - partnerships and collaboration with member jurisdictions, academia and others on climate action.
- Utilize the Sustainability Innovation Funds to advance development of new and innovative climate actions, including new policies, renewable energy, carbon capture and storage, and engagement and outreach.
- Implementation of the next regional air quality and greenhouse gas management plan, the Clean Air Plan.
- Develop new air quality bylaws, regulations and standards, towards goals for protection of human health and environment and continuous improvement in air quality, for Board adoption, including:
  - consultation on new emission regulation bylaws for prioritized sources;
  - user fees from permits and regulations to recover costs of developing regulations, monitoring compliance, and enforcement, while ensuring that fees provide incentives to reduce emissions and impacts;
  - amendments to the non-road diesel engine emission regulation, addressing additional engines and utilizing partnerships with other levels of government; and
  - new ambient air quality standards.
- Enhance the odour management framework based on consultation feedback, increased community outreach, and technical capacity-building through partnerships with industry and other levels of government.
- Improve public understanding of air quality and climate change, including outreach and progress reporting on Climate 2050, the Clean Air Plan, and the preparation of the annual Caring for the Air report.
- Develop additional air quality monitoring and emissions assessment capabilities to provide the evidence basis and performance measurement for the air quality program, and provide air quality advisory services.

metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

ENVIRONMENTAL REGULATION AND ENFORCEMENT

AIR QUALITY

Description of services

The Air Quality Regulation and the Non Road Diesel Engine Regulation Programs enable economic activity while advancing Metro Vancouver's air quality goals through the issuance of site-specific authorizations and promoting compliance with those authorizations and Metro Vancouver air quality bylaws. Bylaws include regulations to control emissions from non-road diesel engines, gas & wood fired boilers, gas stations and gasoline storage facilities, automotive re-finishing facilities, concrete facilities and residential indoor wood burning.The Air Quality Regulatory Program also manages a 24-hour public complaint service that annually handles approximately 3,000 complaints, mostly about odours, smoke and dust.

Strategic directions and high level goals supported

The Air Quality Regulatory Programs support Metro Vancouver's 2019-2022 Board Strategic Plan and the Integrated Air Quality and Greenhouse Gas Management Plan:

- Improving air quality by mitigating threats to public health and the environment
- Identifying air contaminants in the region and pursuing effective actions to reduce pollutants
- Issuing authorizations that limit the discharge of air contaminants
- Promoting compliance with air quality authorizations and regulations

Performance indicators

Air Quality Indicator	Historical and/or industry benchmark (2020)	Current performance (2021 YTD – Aug 10)	2022 performance objective
Respond to complaints – number of complaints	3000	1860	3000
Promote the reduction of non-road diesel engine particulate matter – cumulative number of engines retired, prohibited, moved out of region or out of use since program began	1527	1992	2350
Promote compliance with authorizations - Total number of permits and approvals	150	152	155

2022 key actions

Air Quality

- Defend permit decisions under appeal
- Bring unauthorized facilities into compliance with the Air Quality Management Bylaw
- Promote continuous improvement and reduction in PM, NOx and VOC emissions by large emitters
- Develop procedures required for issuance of administrative penalties
- Enforce Tier 0 and Tier 1 non-road diesel engine prohibitions
- Increase awareness of non-road diesel engine retirement rebates
- Promote awareness of and compliance with Residential Indoor Wood Burning Emission Regulation Bylaw 1303, 2020
- Support consultation on amendments to Non-Road Diesel Engine Emission Regulation and Air Quality Management Fees Bylaw
- Support development of bylaw regulating emissions from open-air burning of vegetative debris

Air Quality

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by the Air Quality function over the next 5 years.

Initiative	Description	Theme
2022		
Climate 2050	Complete initial Climate 2050 roadmaps and proceed with implementation. First round of annual reporting on performance towards targets.	Environmental Sustainability
Clean Air Plan	Implementation of the Clean Air Plan, adopted by the Board in September 2021.	Environmental Sustainability
Bylaws and Regulations	Implementation of new and amended air quality regulations, including: • updated regulatory fee bylaw to recover costs from regulated sources; • enhanced non-road diesel engine regulation to address Tier 2 engines and higher; • compliance promotion on residential wood burning bylaw; Ongoing development of new and amended regulations: • new regulations for open air burning of vegetative debris, cannabis production and processing.	Regulatory and Legislative Environment Financial Sustainability
Environmental Monitoring and Indicators	Act on recommendations of air quality monitoring network review completed in 2021. Complete and report out on next regional air emissions inventory, for 2020, to track sources of emissions and trends.	System Stewardship
Sustainability Innovation Fund	Fund applications for climate action projects in regional district portfolio as well as liquid waste and water.	Environmental Sustainability
2023		
Climate 2050	Ongoing implementation of projects and actions based on Climate 2050 roadmaps, with reporting on performance and sharing of best practices.	Environmental Sustainability
Bylaws and Regulations	Ongoing development of new and amended air quality regulations. Continuous improvement through enhanced ambient air quality objectives.	Regulatory and Legislative Environment
Sustainability Innovation Fund	Fund applications for climate action projects in regional district portfolio as well as liquid waste and water.	Environmental Sustainability
2024		
Climate 2050	Ongoing implementation of projects and actions based on Climate 2050 roadmaps, with reporting on performance and sharing of best practices.	Environmental Sustainability
Bylaws and Regulations	Ongoing development of new and amended air	Regulatory and

	quality regulations.	Legislative Environment
Sustainability Innovation Fund	Fund applications for climate action and air quality projects	Environmental Sustainability
2025		
Climate 2050	Ongoing implementation of projects and actions based on Climate 2050 roadmaps, with reporting on performance and sharing of best practices.	Environmental Sustainability
Clean Air Plan	Mid-point progress report on Clean Air Plan	Environmental Sustainability
Bylaws and Regulations	Ongoing development of new and amended air quality regulations. Review of ambient air quality objectives	Regulatory and Legislative Environment
Sustainability Innovation Fund	Fund applications for climate action projects in regional district portfolio as well as liquid waste and water.	Environmental Sustainability
2026		
Climate 2050	Ongoing implementation of projects and actions based on Climate 2050 roadmaps, with reporting on performance and sharing of best practices.	Environmental Sustainability
Bylaws and Regulations	Ongoing development of new and amended air quality regulations.	Regulatory and Legislative Environment
Sustainability Innovation Fund	Fund applications for climate action projects in regional district portfolio as well as liquid waste and water.	Environmental Sustainability

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - AIR QUALITY

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Air Quality	$ 580,436	$ 580,436	$ -	$ -	$ 11,609	$ 592,045	$ 603,886	$ 615,964	$ 628,283	$ 640,849

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Air Quality General Reserve	$ 1,841,090	$ 1,841,090	$ -	$ (1,481,000)	$ 22,012	$ 382,102	$ 49,374	$ 50,361	$ 51,369	$ 52,396

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Electoral Area Committee

From: Heather McNell, General Manager, Regional Planning and Housing Services

Date: September 30, 2021 Meeting Date: October 7, 2021

Subject: **2022 - 2026 Financial Plan – Electoral Area Service**

RECOMMENDATION

That the Electoral Area Committee endorse the 2022 - 2026 Financial Plan for the Electoral Area Service as presented in the report dated September 30, 2021, titled "2022 - 2026 Financial Plan – Electoral Area Service", and forward it to the Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY

The 2022 - 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region for 2022.

The Electoral Area Service provides local government administration, planning, building inspection and emergency services to residents of Electoral Area A. The 2022 Work Plan focuses on completion of ongoing initiatives such as the zoning bylaw review and bringing forward recommendations from 2021 studies.

The 2022 - 2026 Financial Plan for the Electoral Area continues to reduce long-term reliance on reserve funds to smooth the tax requisition rate and reflects the local government election costs in 2022 and 2026. Over the next five years, operating programs are increasing by $128,614, or an average of 4.2% per year. Excluding local government election expenditures, operating programs are increasing by $3,938, or an average of 0.1% per year.

PURPOSE

To present the 2022 - 2026 Financial Plan for the Electoral Area Service for consideration by the Committee.

BACKGROUND

Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Electoral Area Service and presents the 2022 annual budget and the updated five-year plan for the years 2022 to 2026 for committee consideration.

ELECTORAL AREA SERVICE

The Electoral Area Service comprises Electoral Area A, the unincorporated area within Metro Vancouver, and provides local government planning, building inspection and emergency services to residents of Electoral Area A.

The Electoral Area A Service initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan*, specifically:

- Support the efforts of members in developing complete, livable and healthy communities.
- Enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders.
- Build resilience in communities to prepare for and adapt to changing physical and environmental conditions.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plan for Electoral Area Service is presented in this report. Within the Electoral Area Work Plan, two performance indicators have been developed and are being tracked. These include:

- Number of public meetings and engagement events; and
- Number of visits to the Electoral Area website.

The trend in these performance measures suggests the number of public meetings and engagement events are higher in years when new planning initiatives requiring public consultation are undertaken (e.g. official community plan, zoning bylaw review). Since 2015, Electoral Area website visits have remained above 10,000 hits per year and are expected to remain steady in coming years.

CONTINUOUS IMPROVEMENT

Improvement initiatives include:

- *Barge Cleanup Events (2022/2024/2026):* Assist water access residents in recycling large, hard to manage items (appliances, furniture, Styrofoam, mattresses, batteries, etc.) and reduce the risk of contamination of the natural environment from improper disposal of waste (i.e. dumping or burning). Based on the ongoing need and strong resident support for repeating these cleanup events in Pitt Lake, Howe Sound, and Indian Arm, they have been included as future events in the five-year work plan
- *Community Works Fund Projects (2022-2026):* Engage with Electoral Area A communities to identify and implement projects to benefit local residents
- *Bylaw and policy updates and legal reviews (2022-2026):* Results in updated and improved clarity of regulations and policies, and better alignment between fees and service costs.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The 2022 - 2026 Electoral Area Service Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for the Electoral Area Service presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2022 - 2026 are included in Attachment 3.

Operating Budget Highlights

The Electoral Area Service 2022 operating budget is proposed to increase by $118,750 for a total budget of $797,641 (Attachment 1). This increase is largely attributable to election-related costs for the 2022 local government election.

The 2022 operating budget includes the following key actions:

- Administer the local government election in Electoral Area A
- Undertake and report on the barge clean-up event for Bowyer and Passage Islands
- Receive and consider next steps related to the geotechnical study of the rural and remote portions of Electoral Area A
- Consider Community Works Fund projects identified by UBC/UNA and UEL communities
- Continue to administer the building, zoning, official community plan, and unsightly premise and nuisance bylaws
- Communicate with Electoral Area residents through the Electoral Area Bulletin and Electoral Area Director's Update
- Engage the UBC/UEL communities on liquor license and retail cannabis referrals
- Continue to offer staff support to Electoral Area Board Director
- Facilitate emergency management education for residents

Over the next five years, operating programs are increasing by $128,614, or an average of 4.2% per year. Excluding local government election expenditures, operating programs are increasing by $3,938, or an average of 0.1% per year.

Reserve Funds
Electoral Area receives two annual grants from the Province. These amounts, $136,668 from the Community Works Fund and a Regional District grant of $50,000 are received and contributed to a reserve pending plans for future use. In non-election years, $30,000 is contributed annually to an election reserve. Every four years, this election reserve is to be used to fund the Electoral Area local government election.

The financial plan for Electoral Area has utilized transfers from the Electoral Area General Reserve to offset and smooth some of the changes in expenditures over the five-year plan as well as utilizing reserves to annually fund one-time initiatives. This is consistent with the *Operating, Statutory and Discretionary Reserves Policy*.

The 2022 - 2026 Projected Reserves for Electoral Area is included in Attachment 4.

APPROVAL PROCESS
The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.
- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES
1. That the Electoral Area Committee endorse the 2022 - 2026 Financial Plan for the Electoral Area Service as presented in the report dated September 30, 2021, titled "2022 - 2026 Financial Plan – Electoral Area Service", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Electoral Area Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for the Electoral Area Service and forward the amended Financial Plan to the Finance and Intergovernment Committee on October 13, 2021 and to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS
If the MVRD Board endorses the 2022 - 2026 Financial Plan for the Electoral Area Service, as presented under Alternative 1, in 2022 the Electoral Area requisition will increase by $11,572 (3.0%) for a total requisition of $400,973. The increase in the Electoral Area requisition represents a $2 increase in the cost to the average Electoral Area household to $61.

Over the term of the five-year plan, the annual Electoral Area requisition is projected to increase by an average of $11,604 per year (2.8%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average Electoral Area household over the next

five years for electoral area services will rise from $59 in 2021 to $68 in 2026 representing an average annual increase of $2 (2.8%).

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2021 Budget and Five-year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The Electoral Area Service 2022 Budget and Five-year Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Electoral Area Services.

The presentation of this year's five-year financial plan for Electoral Area provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for residents while keeping pace with our critical requirements.

Staff recommends endorsing the 2022 - 2026 Financial Plan and Annual Work Plan for Electoral Area A Service as presented under alternative one.

Attachments *(48005122)*

1. 2022 - 2026 Financial Plan
2. 2022 Work Plan
3. 2022 - 2026 "What's Happening"
4. 2022 - 2026 Projected Reserves – Electoral Area Service

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METRO VANCOUVER REGIONAL DISTRICT
ELECTORAL AREA SERVICE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Electoral Area Requisition	$ 389,401	$ 400,973	3.0%	$ 416,018	3.8%	$ 420,991	1.2%	$ 438,926	4.3%	$ 447,422	1.9%
User Fees	10,000	11,000		11,000		12,000		12,000		12,000	
Other External Revenues	180,490	186,668		186,668		193,083		193,083		193,083	
Transfer from Reserves	99,000	199,000		74,000		77,000		50,000		155,000	
TOTAL REVENUES	**$ 678,891**	**$ 797,641**	**17.5%**	**$ 687,686**	**(13.8%)**	**$ 703,074**	**2.2%**	**$ 694,009**	**(1.3%)**	**$ 807,505**	**16.4%**
EXPENDITURES											
Operating Programs:											
Community Planning	$ 399,907	$ 410,791		$ 381,596		$ 404,621		$ 396,870		$ 419,214	
Building Inspections	16,341	18,049		18,411		18,854		19,307		19,770	
Local Government Election	-	122,566		-		-		-		124,676	
Fraser Valley Library Services	2,067	2,067		2,067		2,067		2,067		2,067	
Emergency Planning	18,000	18,000		20,000		20,000		20,000		20,000	
	436,315	571,473	31.0%	422,074	(26.1%)	445,542	5.6%	438,244	(1.6%)	585,727	33.7%
Contribution to Election Reserve	30,000	-		30,000		30,000		30,000		-	
Contribution to Reserve	180,490	186,668	3.4%	186,668	0.0%	193,083	3.4%	193,083	0.0%	193,083	0.0%
	210,490	186,668	(11.3%)	216,668	16.1%	223,083	3.0%	223,083	0.0%	193,083	(13.4%)
Allocation of Centralized Support	32,086	39,500	23.1%	48,944	23.9%	34,449	(29.6%)	32,682	(5.1%)	28,695	(12.2%)
TOTAL EXPENDITURES	**$ 678,891**	**$ 797,641**	**17.5%**	**$ 687,686**	**(13.8%)**	**$ 703,074**	**2.2%**	**$ 694,009**	**(1.3%)**	**$ 807,505**	**16.4%**

48005122

ELECTORAL AREA SERVICES

Description of services

Electoral Area Services of the Metro Vancouver Regional District (MVRD) provides local government services to Electoral Area A including emergency planning and response services for the entire area of Electoral Area A, including Point Grey. Building inspection and land use planning are provided to the noncontiguous unincorporated areas of the MVRD, excluding Point Grey. Electoral Area A is an unincorporated area comprising 818 km2 of land area, stretching from Point Grey and Howe Sound in the west, to Pitt Lake in the east, and includes Barnston Island and the northern part of Indian Arm.

The local government services provided to Electoral Area A includes emergency planning and response services for the entire area of Electoral Area A, including Point Grey. Building inspection and land use planning are provided to the mainland areas outside of Point Grey only.

Strategic directions and high level goals supported

2019-2022 Board Strategic Plan

- Support the efforts of members in developing complete, livable and healthy communities.
- Enhance relationships between Metro Vancouver and other orders of government, First Nations,
- adjacent regional districts, and key stakeholders.
- Build resilience in communities to prepare for and adapt to changing physical and environmental conditions.

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Number of public meetings and engagement events	2018: 8 2019: 9 2020: 9	Projected 2021: 10	8
Number of visits to the Electoral Area A Website	2018: 16,092 2019: 14,596 2020: 12,606	Projected 2021: 14,000	14,000

2022 key actions

- Administer the local government election in Electoral Area A
- Undertake and report on the barge clean-up event for Bowyer and Passage Islands
- Receive and consider next steps related to the geotechnical study of the rural and remote portions of Electoral Area A
- Consider Community Works Fund projects identified by UBC/UNA and UEL communities
- Continue to administer the building, zoning, official community plan, and unsightly premise and nuisance bylaws
- Communicate with Electoral Area residents through the Electoral Area A Bulletin and Electoral Area A Director's Update
- Engage the UBC/UEL communities on liquor license and retail cannabis referrals
- Continue to offer staff support to Electoral Area Board Director
- Facilitate emergency management education for residents

Electoral Area Services

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Electoral Area Services over the next 5 years.

Initiative	Description	Theme
2022		
Local Government Election	Administer local government election in Electoral Area A	System Stewardship
Howe Sound Fire Service Study	Work with adjacent municipalities and Howe Sound communities to consider next steps regarding a fire service area.	Regional Growth System Stewardship
Geotechnical Study	Tailor building permit-related requirements based on geotechnical hazards of local area and type of proposed development	Regulatory and Legislative Environment
Bylaw Reviews	Complete Zoning & Building Bylaw reviews	Regulatory and Legislative Environment
Community Works Fund	Consider priority projects in UBC/UEL for funding through the Community Works Fund	Regional Growth Financial Sustainability
Clean-up event	Barge cleanup event in Howe Sound	Environmental Sustainability
2023		
Emergency preparedness	Support resident-preparedness for fires & earthquake (hands-on training, equipment)	Regional Growth System Stewardship
2024		
Clean-up event	Barge cleanup event in Indian Arm	Environmental Sustainability
2025		
Emergency preparedness	Support resident-preparedness for fires & earthquake (hands-on training, equipment)	Regional Growth System Stewardship
2026		
Local Government Election	Administer local government election in Electoral Area A	System Stewardship
Clean-up event	Barge cleanup event in Pitt lake	Environmental Sustainability

ATTACHMENT 4

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - ELECTORAL AREA

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Electoral Area Service	**$ 20,848**	**$ 20,848**	**$ -**	**$ -**	**$ 417**	**$ 21,264**	**$ 21,690**	**$ 22,124**	**$ 22,566**	**$ 23,017**

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Electoral Area General Reserve	**$ 1,587,376**	**$ 1,587,376**	**$ 50,000**	**$ (139,000)**	**$ 30,858**	**$ 1,529,234**	**$ 1,535,579**	**$ 1,539,020**	**$ 1,569,801**	**$ 1,586,047**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Electoral Area Service										
Community Works Reserve	$ 713,988	$ 713,988	$ 136,668	$ -	$ 15,646	$ 866,302	$ 1,021,663	$ 1,186,610	$ 1,354,856	$ 1,526,467
Electoral Area Election Reserve	60,900	60,900	-	(60,000)	618	1,518	31,848	62,785	94,341	5,328
Total	**$ 774,888**	**$ 774,888**	**$ 136,668**	**$ (60,000)**	**$ 16,264**	**$ 867,820**	**$ 1,053,511**	**$ 1,249,395**	**$ 1,449,197**	**$ 1,531,795**

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Finance and Intergovernment Committee

From: Jerry Dobrovolny, Commissioner/Chief Administrative Officer
Dean Rear, General Manager, Financial Services/Chief Financial Officer

Date: October 6, 2021 Meeting Date: October 13, 2021

Subject: **2022 - 2026 Financial Plan – Regional District Service Areas**

RECOMMENDATION
That the Finance and Intergovernment Committee endorse the 2022 - 2026 Financial Plan for the Regional District Service Areas as presented in the report dated October 6, 2021, titled "2022 - 2026 Financial Plan – Regional District Service Areas", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY
The 2022 - 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region in 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

In 2022, the requisitions for the Regional District service areas outlined in this report will increase by $2.2 million and comprise part of the overall Metro Vancouver Regional District (MVRD) requisition, which is projected to be $89.9 million in 2022. This overall requisition represents a $6 increase (9.0%) to the average regional household for an annual cost of $76.

These MVRD impacts are included in the overall Household Impact increase of 3.5% ($21) for all Metro Vancouver services for 2022.

PURPOSE
To present the 2022 - 2026 Financial Plan for Regional District Service Areas of E911 Emergency Telephone Service, General Government Administration, General Government Zero Waste Collaboration Initiatives, Regional Emergency Management, Regional Economic Prosperity, Regional Employers Services, Regional Global Positioning System (Regional GPS), and Sasamat Fire Protection Service for consideration by the Finance and Intergovernment Committee.

BACKGROUND
Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Regional District Service Areas and presents the 2022 provisional annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

REGIONAL DISTRICT SERVICE AREAS

Regional District services within the MVRD represent functions that include either all 21 member municipalities, the Tsawwassen First Nation and Electoral Area A as participants, or alternatively include a portion of the MVRD members as participants in the service.

These service areas include the following functions:

- E911 Emergency Telephone Service;
- General Government Administration;
- General Government Zero Waste Collaboration Initiatives;
- Regional Emergency Management;
- Regional Economic Prosperity;
- Regional Employers Services;
- Regional Global Positioning System; and,
- Sasamat Fire Protection Service.

The financial plans for the Regional District Service Areas contribute to the overall projected MVRD Financial Plan and are combined with plans for the MVRD statutory functions of Air Quality, Housing Planning and Policy, Regional Parks, and Regional Planning. 2022 - 2026 Financial Plans for those functions have been presented separately to their respective Standing Committees, along with a presentation to the Electoral Area Standing Committee of the Electoral Area Service Financial Plan.

The regional district functions highlighted in this report are guided by direction provided in the *Board Strategic Plan*, specifically:

- Continue to engage with members on processes and initiatives that contribute to an effective and well-functioning organization;
- Build resilience in communities to prepare for and adapt to changing physical and environmental conditions;
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers; and,
- Enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Regional District Service Area Work Plans for E911 Emergency Telephone Service, General Government Administration (Board and Legislative Services), General Government Zero Waste Collaboration Initiatives, Regional Emergency Management, Regional Economic Prosperity, Regional Employers Services, Regional GPS, and Sasamat Fire Protection Service are presented in this report. Within these Work Plans, 17 performance indicators have been developed and are being tracked. These include:

E911 Emergency Telephone Service

- Number of days per year where E-Comm failed to meet 95% of calls within 5 seconds.

Regional Employers Services

- Annual number of attendees at RES educational offerings
- Total number of collective agreements serviced by RES

General Government Administration (Board Administrative Services)

- Percentage of Board and Committee minutes produced without correction
- Number of Freedom of Information access requests delivered on time

General Government Zero Waste Collaboration Initiatives

- Number of attendees at the Zero Waste Conference
- Number of members in the National Zero Waste Council (NZWC)

Regional Emergency Management

- Conduct one region wide emergency exercise per year

Regional Global Positioning System

- Percent of service uptime – Post-mission data availability

Regional Economic Prosperity

- Number of unique visitors to the Invest Vancouver website
- Number of partnerships developed and sustained to further investment attraction goals and support key industry clusters

CONTINUOUS IMPROVEMENT

Some of the continuous improvement initiatives for Regional District Service Area which have been identified for 2022 include:

- Next generation 9-1-1 system;
- Expansion and further development of RES learning series, including new compensation course;
- Better access to strategic data and predictive analytics to improve informed decision making across the region, to fully inform policy makers and member jurisdictions, and to support strategic investment attraction; and,
- Streamlining Love Food Hate Waste Canada campaign.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability;
- Environmental Sustainability;

- System Stewardship;
- Regulatory and Legislative Environment; and,
- Regional Growth.

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The overall Regional District Summary for 2022 - 2026 are included as Attachment 1 and the 2022 - 2026 Financial Plans for the Regional District Service Areas presented in this report are included as Attachment 2. The 2022 Annual Work Plans for the Regional District Service Areas presented in this report are included in Attachment 3, and the summary of the Regional District Service Areas program highlights, 2022 - 2026 "What's Happening", is included under Attachment 4.

Regional District Summary

The Regional District Summary presented in Attachment 1 includes all thirteen regional district functions of which 11 services are apportioned to all MVRD members through the tax requisition and two services which are apportioned to either a single jurisdiction (Electoral Area A) or to two municipalities (Belcarra and Anmore – Sasamat Fire Protection Service). The MVRD functions are also funded through a variety of other sources including permit revenues and user fees. The thirteen regional district functions are as follows:

Air Quality
E911 Emergency Telephone Service
Electoral Area Service
General Government Administration
General Government Zero Waste Collaboration Initiatives
Housing Planning and Policy
Regional Emergency Management
Regional Economic Prosperity
Regional Employers Services
Regional Global Positioning System
Regional Parks
Regional Planning
Sasamat Fire Protection Service

The full MVRD 2022 - 2026 Financial Plan for the next five years is summarized below:

REGIONAL DISTRICT SERVICES FIVE-YEAR FINANCIAL PLAN OVERVIEW							
$ Millions	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**5 Year Ave**
Tax requisition	$80.9	$89.9	$101.8	$107.9	$111.0	$115.3	
% Change		11.0%	13.3%	5.9%	2.9%	3.9%	7.4%
Total Expenditures	$101.1	$113.5	$121.4	$127.1	$130.7	$135.8	
% Change		12.2%	6.9%	4.7%	2.9%	3.9%	6.1%
Total Capital Cash Flow	$19.0	$31.3	$33.6	$32.3	$29.0	$30.4	$31.3
Household Impact ($)	$70	$76	$85	$88	$89	$91	
% Change		9.0%	11.0%	3.8%	1.5%	2.5%	5.6%

The Regional District Service Areas, along with the statutory functions of Air Quality, Housing Planning and Policy, Regional Parks, and Regional Planning, form the MVRD which is primarily funded through tax requisitions. To support the Regional District for the years 2022 - 2026, MVRD tax requisitions are increasing $34.4 million over the five-year period, from $89.9 million in 2022 to $115.3 million, representing an average annual increase of $6.9 million. The majority of this change is driven by an increase to the Regional Parks function park acquisition reserve to support the expansion of new parks and greenways within the region and the full implementation of the new Regional Economic Prosperity function which will be fully phased in by 2023.

Operating Budget Highlights

In 2022, total expenditures for the Regional District Service Areas not presented separately to other standing committees are proposed to increase $2.5 million for total expenditures of $20.8 million (Attachment 2).

Over the five-year plan, the projected expenditures for Regional District Service Areas are as follows:

Regional District Service Area	Total Expenditures 2022 - 2026 $ Millions	Average Annual Expenditures $ Millions	Average Annual Increase (Decrease)
911 Emergency Telephone Service	$ 25.0	$ 4.99	2.5%
General Government Administration	$ 35.1	$ 7.01	5.0%
General Government Zero Waste Collaboration Initiatives	$ 8.0	$1.61	(0.6%)
Regional Emergency Management	$ 1.1	$ 0.23	(1.3%)
Regional Economic Prosperity	$ 16.6	$ 3.32	21.5%
Regional Employers Services	$ 15.4	$ 3.09	0.5%
Regional Global Positioning System	$ 1.8	$ 0.35	2.3%
Sasamat Fire Protection Service (*)	$ 4.3	$ 0.86	12.5%

(*) Adjusted for one-time equipment purchases funded from reserves

With the Regional District Service Areas noted above, the primary focus is one of stewardship in maintaining an established level of service. The Sasamat Fire Protection Service includes a carried forward project for the replacement of an apparatus with a one-time expenditure of $600,000 funded through reserves and an increase in the annual provision for a Capital Facility Reserve.

Reserve Funds

Reserve usage within the Regional District Service Areas include one-time equipment purchases or upgrades, as well as one-time initiatives which are delivered through contract services in accordance with the Board approved *Operating, Statutory and Discretionary Reserves Policy.* In 2022, $1.5 million in reserve funding has been applied in these Regional District Service Areas.

The 2022 - 2026 Projected Reserves for the Regional District Service Areas are included in Attachment 5.

APPROVAL PROCESS

The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration. The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented for consideration to the Finance and Intergovernment Committee on October 14, 2021 and at the Metro Vancouver Board Budget Workshop on October 20, 2021.

- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES

1. That the Finance and Intergovernment Committee endorse the 2022 - 2026 Financial Plan for the Regional District Service Areas as presented in the report dated October 6, 2021, titled "2022 - 2026 Financial Plan – Regional District Service Areas", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Finance and Intergovernment Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for the Regional District Service Areas and forward to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2022 - 2026 Financial Plan for the Regional District Service Areas, as presented under Alternative 1, in 2022 the requisitions for the service areas outlined in this report will increase by $2.2 million comprising part of the overall MVRD requisition. The Regional District Service Area requisitions form part of the overall MVRD tax requisition which is projected to be $89.9 million in 2022, representing a $6 increase (9.0%) to the average regional household for an annual cost of $76 after taking into account regional population growth.

Over the term of the five-year plan, the annual requisitions for the Regional District Service Areas outlined in this report are projected to increase by an average of $938,399 per year. It is anticipated that the cost to the average regional household over the next five years for all MVRD services, including these Regional District Service Areas, will rise from $76 in 2022 to $91 in 2026 representing an average annual increase of $4.

Under Alternative 2, the Committee may wish to consider recommending amendments to the five-year financial plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The 2022 - 2026 Financial Plans for the Centralized Support Program have been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan.* It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for the Regional District Service Areas of E911 Emergency Telephone Service, General Government Administration, General Government Zero Waste Collaboration Initiatives, Regional Emergency

Management, Regional Economic Prosperity, Regional Employers Services, Regional GPS, and Sasamat Fire Protection Service.

The presentation of this year's five-year financial plans for the Regional District Service Areas provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed planning related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical requirements.

Staff recommend endorsing the 2022 - 2026 Financial Plans for Regional District Service Areas as presented under alternative one.

Attachments:

1. 2022 - 2026 Financial Plans - Regional District Summary
2. 2022 - 2026 Financial Plans
   - E911 Emergency Telephone Service
   - General Government Administration
   - General Government Zero Waste Collaboration Initiatives
   - Regional Emergency Management
   - Regional Economic Prosperity
   - Regional Employers Services
   - Regional Global Positioning System
   - Sasamat Fire Protection Service
3. 2022 Work Plans
4. 2022 - 2026 "What's Happening"
5. 2022 - 2026 Projected Reserves – Regional District

METRO VANCOUVER DISTRICTS
REGIONAL DISTRICT SUMMARY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 80,939,658	$ 89,868,576	11.0%	$ 101,830,420	13.3%	$ 107,887,056	5.9%	$ 111,024,874	2.9%	$ 115,315,783	3.9%
Compensation Services Revenue	484,531	503,691	4.0%	510,310	1.3%	520,172	1.9%	533,079	2.5%	538,446	1.0%
Collective Bargaining Services Revenue	900,427	934,437	3.8%	948,056	1.5%	964,568	1.7%	985,392	2.2%	997,791	1.3%
Electoral Area Requisition	389,401	400,973	3.0%	416,018	3.8%	420,991	1.2%	438,926	4.3%	447,422	1.9%
Regional Global Positioning System User Fees	288,091	287,366	(0.3%)	292,684	1.9%	298,846	2.1%	304,020	1.7%	309,373	1.8%
User Fees	2,622,708	2,607,314	(0.6%)	3,115,543	19.5%	3,463,731	11.2%	3,384,139	(2.3%)	3,476,042	2.7%
Non-Road Diesel Permit Fees	1,365,000	1,070,000	(21.6%)	1,070,000	0.0%	1,070,000	0.0%	1,070,000	0.0%	1,070,000	0.0%
Love Food Hate Waste	492,000	400,000	(18.7%)	375,000	(6.3%)	375,000	0.0%	375,000	0.0%	375,000	0.0%
Zero Waste Conference	325,000	337,000	3.7%	350,500	4.0%	366,200	4.5%	366,200	0.0%	366,200	0.0%
Other External Revenues	3,905,104	4,133,243	5.8%	3,873,712	(6.3%)	3,889,365	0.4%	3,938,855	1.3%	3,982,344	1.1%
Transfer from Sustainability Innovation Fund Reserves	2,243,273	864,000	(61.5%)	-	(100.0%)	-	N/A	-	N/A	-	0.0%
Transfer from Reserves	7,189,130	12,100,537	68.3%	8,577,530	(29.1%)	7,806,564	(9.0%)	8,278,577	6.0%	8,880,167	7.3%
TOTAL REVENUES	**$ 101,144,323**	**$ 113,507,137**	**12.2%**	**$ 121,359,773**	**6.9%**	**$ 127,062,493**	**4.7%**	**$ 130,699,062**	**2.9%**	**$ 135,758,568**	**3.9%**
EXPENDITURES											
Greater Vancouver Regional District											
Air Quality	$ 12,560,687	$ 12,498,252	(0.5%)	$ 12,840,167	2.7%	$ 12,873,244	0.3%	$ 13,054,849	1.4%	$ 13,761,638	5.4%
E911 Emergency Telephone Service	4,633,573	4,748,693	2.5%	4,866,654	2.5%	4,987,528	2.5%	5,111,386	2.5%	5,238,304	2.5%
Electoral Area Service	678,891	797,641	17.5%	687,686	(13.8%)	703,074	2.2%	694,009	(1.3%)	807,505	16.4%
General Government Administration	5,681,876	6,799,517	19.7%	6,939,384	2.1%	7,033,110	1.4%	7,139,823	1.5%	7,150,546	0.2%
General Government-Zero Waste Collaboration Initiatives	1,660,020	1,606,945	(3.2%)	1,591,377	(1.0%)	1,609,503	1.1%	1,609,240	0.0%	1,608,129	(0.1%)
Housing Planning and Policy	6,554,912	6,353,628	(3.1%)	8,248,312	29.8%	8,276,572	0.3%	8,296,943	0.2%	8,423,367	1.5%
Regional Economic Prosperity	1,530,000	2,785,217	82.0%	3,351,233	20.3%	3,443,526	2.8%	3,488,095	1.3%	3,534,479	1.3%
Regional Employers Services	3,102,235	3,057,423	(1.4%)	3,022,613	(1.1%)	3,072,678	1.7%	3,127,170	1.8%	3,168,958	1.3%
Regional Emergency Management	228,945	233,731	2.1%	234,540	0.3%	236,381	0.8%	218,128	(7.7%)	213,230	(2.2%)
Regional Global Positioning System	324,719	337,366	3.9%	343,684	1.9%	350,866	2.1%	357,080	1.8%	363,494	1.8%
Regional Parks	58,915,373	68,717,860	16.6%	73,920,687	7.6%	79,116,862	7.0%	82,097,601	3.8%	85,840,118	4.6%
Regional Planning	4,139,538	4,302,565	3.9%	4,415,797	2.6%	4,452,402	0.8%	4,588,700	3.1%	4,723,287	2.9%
Sasamat Fire Protection Service	1,133,554	1,268,299	11.9%	897,639	(29.2%)	906,747	1.0%	916,038	1.0%	925,513	1.0%
TOTAL EXPENDITURES	**$ 101,144,323**	**$ 113,507,137**	**12.2%**	**$ 121,359,773**	**6.9%**	**$ 127,062,493**	**4.7%**	**$ 130,699,062**	**2.9%**	**$ 135,758,568**	**3.9%**

METRO VANCOUVER REGIONAL DISTRICT
E911 EMERGENCY TELEPHONE SERVICE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 4,555,802	$ 4,670,236	2.5%	$ 4,786,248	2.5%	$ 4,905,124	2.5%	$ 5,027,540	2.5%	$ 5,152,945	2.5%
Other External Revenues	77,771	78,457		80,406		82,404		83,846		85,359	
TOTAL REVENUES	**$ 4,633,573**	**$ 4,748,693**	**2.5%**	**$ 4,866,654**	**2.5%**	**$ 4,987,528**	**2.5%**	**$ 5,111,386**	**2.5%**	**$ 5,238,304**	**2.5%**
EXPENDITURES											
Operating Programs:											
Emergency Telephone Service	$ 4,542,719	$ 4,655,581		$ 4,771,229		$ 4,889,733		$ 5,011,163		$ 5,135,592	
Allocation of Centralized Support	90,854	93,112		95,425		97,795		100,223		102,712	
TOTAL EXPENDITURES	**$ 4,633,573**	**$ 4,748,693**	**2.5%**	**$ 4,866,654**	**2.5%**	**$ 4,987,528**	**2.5%**	**$ 5,111,386**	**2.5%**	**$ 5,238,304**	**2.5%**

METRO VANCOUVER REGIONAL DISTRICT
GENERAL GOVERNMENT ADMINISTRATION
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 4,456,508	$ 5,671,266	27.3%	$ 5,808,696	2.4%	$ 5,879,939	1.2%	$ 6,004,122	2.1%	$ 6,012,267	0.1%
Other External Revenues	975,368	978,251		980,688		1,003,171		985,701		988,279	
Transfer from Reserves	250,000	150,000		150,000		150,000		150,000		150,000	
TOTAL REVENUES	**$ 5,681,876**	**$ 6,799,517**	**19.7%**	**$ 6,939,384**	**2.1%**	**$ 7,033,110**	**1.4%**	**$ 7,139,823**	**1.5%**	**$ 7,150,546**	**0.2%**
EXPENDITURES											
Operating Programs:											
Audit and Insurance	$ 69,295	$ 162,533		$ 165,326		$ 168,172		$ 171,073		$ 174,029	
Board Administrative Services	2,990,446	3,761,659		3,834,905		3,916,940		4,000,716		4,086,282	
External Contributions	455,000	455,000		455,000		455,000		455,000		455,000	
Leadership and Engagement	307,643	592,997		583,240		607,428		666,198		624,085	
Mosquito Control Contract	120,166	122,930		125,266		127,646		130,071		132,543	
Regional Culture	35,079	36,376		37,043		37,862		38,701		39,558	
Contribution to Sustainability Innovation Fund Reserve	347,000	347,000		347,000		347,000		347,000		347,000	
	4,324,629	5,478,495	26.7%	5,547,780	1.3%	5,660,048	2.0%	5,808,759	2.6%	5,858,497	0.9%
Communications Program	927,000	877,000	(5.4%)	877,000	0.0%	877,000	0.0%	877,000	0.0%	877,000	0.0%
Allocation of Centralized Support Costs	430,247	444,022	3.2%	514,604	15.9%	496,062	(3.6%)	454,064	(8.5%)	415,049	(8.6%)
TOTAL EXPENDITURES	**$ 5,681,876**	**$ 6,799,517**	**19.7%**	**$ 6,939,384**	**2.1%**	**$ 7,033,110**	**1.4%**	**$ 7,139,823**	**1.5%**	**$ 7,150,546**	**0.2%**

METRO VANCOUVER REGIONAL DISTRICT
GENERAL GOVERNMENT ZERO WASTE COLLABORATION INITIATIVES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 768,020	$ 769,945	0.3%	$ 765,877	(0.5%)	$ 768,303	0.3%	$ 768,040	0.0%	$ 766,929	(0.1%)
Other External Revenues	75,000	100,000		100,000		100,000		100,000		100,000	
Love Food Hate Waste	492,000	400,000		375,000		375,000		375,000		375,000	
Zero Waste Conference	325,000	337,000		350,500		366,200		366,200		366,200	
TOTAL REVENUES	**$ 1,660,020**	**$ 1,606,945**	**(3.2%)**	**$ 1,591,377**	**(1.0%)**	**$ 1,609,503**	**1.1%**	**$ 1,609,240**	**0.0%**	**$ 1,608,129**	**(0.1%)**
EXPENDITURES											
Operating Programs:											
National Zero Waste Council	$ 195,700	$ 220,700		$ 220,700		$ 220,700		$ 220,700		$ 220,700	
Love Food Hate Waste	492,000	400,000		375,000		375,000		375,000		375,000	
Zero Waste Conference	537,000	549,000		562,500		578,200		578,200		578,200	
	1,224,700	1,169,700	(4.5%)	1,158,200	(1.0%)	1,173,900	1.4%	1,173,900	0.0%	1,173,900	0.0%
Allocation of Centralized Support Costs	435,320	437,245	0.4%	433,177	(0.9%)	435,603	0.6%	435,340	(0.1%)	434,229	(0.3%)
TOTAL EXPENDITURES	**$ 1,660,020**	**$ 1,606,945**	**(3.2%)**	**$ 1,591,377**	**(1.0%)**	**$ 1,609,503**	**1.1%**	**$ 1,609,240**	**0.0%**	**$ 1,608,129**	**(0.1%)**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL EMERGENCY MANAGEMENT
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 173,000	$ 173,194	0.1%	$ 174,010	0.5%	$ 177,817	2.2%	$ 180,551	1.5%	$ 184,063	1.9%
Transfer from Reserves	55,945	60,537		60,530		58,564		37,577		29,167	
TOTAL REVENUES	**$ 228,945**	**$ 233,731**	**2.1%**	**$ 234,540**	**0.3%**	**$ 236,381**	**0.8%**	**$ 218,128**	**(7.7%)**	**$ 213,230**	**(2.2%)**
EXPENDITURES											
Operating Programs:											
Regional Emergency Management	$ 218,043	$ 222,601		$ 223,371		$ 225,125		$ 207,741		$ 203,076	
Allocation of Centralized Support	10,902	11,130		11,169		11,256		10,387		10,154	
TOTAL EXPENDITURES	**$ 228,945**	**$ 233,731**	**2.1%**	**$ 234,540**	**0.3%**	**$ 236,381**	**0.8%**	**$ 218,128**	**(7.7%)**	**$ 213,230**	**(2.2%)**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL ECONOMIC PROSPERITY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 1,530,000	$ 2,185,217	42.8%	$ 2,851,233	30.5%	$ 3,343,526	17.3%	$ 3,488,095	4.3%	$ 3,534,479	1.3%
Transfer from Reserves	-	600,000		500,000		100,000		-		-	
TOTAL REVENUES	**$ 1,530,000**	**$ 2,785,217**	**82.0%**	**$ 3,351,233**	**20.3%**	**$ 3,443,526**	**2.8%**	**$ 3,488,095**	**1.3%**	**$ 3,534,479**	**1.3%**
EXPENDITURES											
Operating Programs:											
Collaboration	$ 200,000	$ 463,003		$ 466,520		$ 471,519		$ 476,636		$ 481,867	
Regional Data Collection and Research	200,000	539,491		761,997		780,024		798,467		817,335	
Attracting Investment	700,000	1,190,477		1,430,734		1,461,580		1,493,138		1,525,428	
Leadership and Administration	400,000	456,449		465,070		475,399		485,964		496,770	
	$ 1,500,000	$ 2,649,420	76.6%	$ 3,124,321	17.9%	$ 3,188,522	2.1%	$ 3,254,205	2.1%	$ 3,321,400	2.1%
Allocation of Centralized Support	30,000	135,797	350.0%	226,912	67.1%	255,004	12.4%	233,890	(8.3%)	213,079	(8.9%)
TOTAL EXPENDITURES	**$ 1,530,000**	**$ 2,785,217**	**82.0%**	**$ 3,351,233**	**20.3%**	**$ 3,443,526**	**2.8%**	**$ 3,488,095**	**1.3%**	**$ 3,534,479**	**1.3%**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL EMPLOYERS SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 1,038,343	$ 1,109,664	6.9%	$ 1,125,002	1.4%	$ 1,140,703	1.4%	$ 1,153,352	1.1%	$ 1,171,027	1.5%
Compensation Services Revenue	484,531	503,691		510,310		520,172		533,079		538,446	
Collective Bargaining Services Revenue	900,427	934,437		948,056		964,568		985,392		997,791	
Other External Revenues	388,609	434,631		439,245		447,235		455,347		461,694	
Transfer from Reserves	290,325	75,000		-		-		-		-	
TOTAL REVENUES	**$ 3,102,235**	**$ 3,057,423**	**(1.4%)**	**$ 3,022,613**	**(1.1%)**	**$ 3,072,678**	**1.7%**	**$ 3,127,170**	**1.8%**	**$ 3,168,958**	**1.3%**
EXPENDITURES											
Operating Programs:											
Information and Advisory Services	$ 1,398,879	$ 1,279,160		$ 1,227,876		$ 1,258,790		$ 1,286,602		$ 1,315,077	
Compensation Services	520,080	543,566		555,674		567,689		585,015		595,155	
Collective Bargaining	936,478	976,191		999,347		1,019,062		1,046,822		1,067,632	
	2,855,437	2,798,917	(2.0%)	2,782,897	(0.6%)	2,845,541	2.3%	2,918,439	2.6%	2,977,864	2.0%
Allocation of Centralized Support	246,798	258,506	4.7%	239,716	(7.3%)	227,137	(5.2%)	208,731	(8.1%)	191,094	(8.4%)
TOTAL EXPENDITURES	**$ 3,102,235**	**$ 3,057,423**	**(1.4%)**	**$ 3,022,613**	**(1.1%)**	**$ 3,072,678**	**1.7%**	**$ 3,127,170**	**1.8%**	**$ 3,168,958**	**1.3%**

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL GLOBAL POSITIONING SYSTEM
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Regional Global Positioning System User Fees	$ 288,091	$ 287,366	(0.3%)	$ 292,684	1.9%	$ 298,846	2.1%	$ 304,020	1.7%	$ 309,373	1.8%
Other External Revenues	36,628	50,000		51,000		52,020		53,060		54,121	
TOTAL REVENUES	**$ 324,719**	**$ 337,366**	**3.9%**	**$ 343,684**	**1.9%**	**$ 350,866**	**2.1%**	**$ 357,080**	**1.8%**	**$ 363,494**	**1.8%**
EXPENDITURES											
Operating Programs:											
Regional Global Positioning System	$ 292,184	$ 265,914		$ 271,603		$ 278,158		$ 284,872		$ 291,742	
Contribution to Reserve	11,444	45,000		49,307		50,540		51,804		53,099	
Allocation of Centralized Support	21,091	26,452		22,774		22,168		20,404		18,653	
TOTAL EXPENDITURES	**$ 324,719**	**$ 337,366**	**3.9%**	**$ 343,684**	**1.9%**	**$ 350,866**	**2.1%**	**$ 357,080**	**1.8%**	**$ 363,494**	**1.8%**

METRO VANCOUVER REGIONAL DISTRICT
SASAMAT FIRE PROTECTION SERVICE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 523,554	$ 658,299	25.7%	$ 887,639	34.8%	$ 896,747	1.0%	$ 906,038	1.0%	$ 915,513	1.0%
Other External Revenues	10,000	10,000		10,000		10,000		10,000		10,000	
Transfer from Reserves	600,000	600,000		-		-		-		-	
TOTAL REVENUES	**$ 1,133,554**	**$ 1,268,299**	**11.9%**	**$ 897,639**	**(29.2%)**	**$ 906,747**	**1.0%**	**$ 916,038**	**1.0%**	**$ 925,513**	**1.0%**
EXPENDITURES											
Operating Programs:											
Sasamat Fire Protection Service	$ 249,140	$ 280,326		$ 415,770		$ 424,050		$ 432,496		$ 441,110	
Apparatus Acquisitions	600,000	$ 600,000		-		-		-		-	
Contribution to Capital Reserve	92,100	$ 92,100		92,100		92,100		92,100		92,100	
Contribution to Capital Facilities Reserve	167,400	267,840		348,192		348,192		348,192		348,192	
	$ 1,108,640	$ 1,240,266	11.9%	856,062	(31.0%)	864,342	1.0%	872,788	1.0%	881,402	1.0%
Allocation of Centralized Support Costs	24,914	28,033	12.5%	41,577	48.3%	42,405	2.0%	43,250	2.0%	44,111	2.0%
TOTAL EXPENDITURES	**$ 1,133,554**	**$ 1,268,299**	**11.9%**	**$ 897,639**	**(29.2%)**	**$ 906,747**	**1.0%**	**$ 916,038**	**1.0%**	**$ 925,513**	**1.0%**

911 EMERGENCY TELEPHONE SERVICE

Description of services

9-1-1 Emergency Telephone Service is a Metro Vancouver Regional District function established to provide 9-1-1 emergency telephone service within the Metro Vancouver service area. All 9-1-1 calls placed within the region are answered at the Regional Control Centre which is operated for Metro Vancouver, under contract, by E-Comm. 'Regional' call-takers at E-Comm screen the calls for services required, then confirm the municipality and transfer the calls to the appropriate emergency agency. 9-1-1 service is also provided on contract to the Resort Community of Whistler and to the Sunshine Coast Regional District.

Strategic directions and high level goals supported

9-1-1 Emergency Telephone Service supports the Board Strategic Plan's direction to strengthen the Regional Federation by providing region wide support Emergency call answer services for Metro Vancouver.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Number of days per year where The 9-1-1 service failed to meet 95% of calls within 5 seconds standard	2017: 0 2018: 0 2019: 0 2020: 0	2021: 9	2022: 0

2022 Key Actions

- Continue to provide 9-1-1 emergency telephone service to all callers in Metro Vancouver.
- Begin review of new 9-1-1 emergency telephone service provision for 2023 forward.
- Begin planning for transition to NextGen 911 which will involve a migration of the current 9-1-1 to a full digital network that will enable the 9-1-1 via text and video and will add new location functions to the 9-1-1 system.

GENERAL GOVERNMENT ADMINISTRATION

Description of services

Board Administrative Services is the largest component of the General Government Administration function of the Metro Vancouver Regional District. This service carries out: the statutory responsibilities for corporate administration under the *Local Government Act*; agenda/meeting management; elections and other voting; compliance with the provisions of the *Freedom of Information and Protection of Privacy Act*; board and committee remuneration; bylaw management; correspondence control; and policy management.

Strategic directions and high level goals supported

In support of the *Board Strategic Plan's* strategic direction to strengthen the *Regional Federation* (contributing to an effective and well-functioning organization) by providing legislative services, the following goals are supported:

- Perform the duties and functions associated with the Corporate Administration provisions in the *Local Government Act*, including those related to the boards and committees, as well as other statutory obligations.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Percentage of Board and Committee minutes produced without correction	5-year average: 99% correct	2021 YTD (July): 99% correct	2022: 100% correct
Percentage of regular Board meeting agendas published one week prior to meeting	5-year average: 100% on time	2021 YTD (July): 100% on time	2022: 100% on time
Number of Freedom of Information access requests delivered on time	5-year average: 67 requests/annual average with 79% on time.	2021 YTD (July) 39 requests with 72% on time.	2022 100% on time

2022 key actions

- Administer the general local election for the office of MVRD's Electoral Area A Director.
- Streamline boardroom technology and processes for the conduct of electronic board and committee meetings.
- Digitize old board and committee agendas, reports and minutes to make them accessible.
- Streamline agenda management processes, and publishing on website.
- Introduce improvements to overall bylaw management.

GENERAL GOVERNMENT – ZERO WASTE COLLABORATION INITIATIVES

Description of Services

Zero Waste Collaboration Initiatives advances the zero waste objectives of Metro Vancouver with a focus on waste prevention and the transition to a circular economy. Progress on waste prevention at the regional level involves national and even global cross-sectoral collaboration – driving innovation in the design, production and use of goods in support of a circular economy, learning about best practices in policy development and aligning with important initiatives of global leaders, stimulating and supporting innovation in product design and packaging, and initiating behaviour change throughout the supply chain and among consumers. Metro Vancouver's interest in the transition to a circular economy is related to advancing waste prevention and the opportunities to reduce greenhouse gas emissions.

Zero Waste Collaboration Initiatives include:

- National Zero Waste Council,
- Love Food Hate Waste Canada; and
- Annual Zero Waste Conference.

Strategic Directions and High Level Goals Supported

- Advanced initiatives aligned with a transformation to a circular economy
- Encourage innovation in the delivery of Metro Vancouver services that will contribute to the region's resilience and prosperity through clean technology and circular economy solutions
- Expand actions that will reduce the amount of litter and waste that members manage
    - Work with members, the provincial government, and the federal government on strategies to reduce single-use items and other consumer products
- Continue to develop programs and related communication campaigns that increase diversion rates of materials that can be reused, repurposed or recycled
- Utilize the potential of the National Zero Waste Council and the annual Zero Waste Conference to promote the importance of waste prevention and the value of transitioning to a circular economy
- Facilitate cross-sector collaboration to design waste out of products and packaging and to harmonize policies across Canadian jurisdictions that will both reduce waste and create economies of scale in remanufacturing opportunities
- Continue to expand public education and behavior change campaigns consistent with the objectives of zero waste

Performance Indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Number of attendees at the Zero Waste Conference	2020: 501 attendees* 2019: 530 attendees 2018: 501 attendees 2017: 452 attendees 2016: 495 attendees	Projected for 2021: 600 attendees*	20% increase
Number of partnerships developed to expand the Love Food Hate Waste campaign	2020: 11 partnerships 2019: 9 partnerships	2021: 12 partnerships	1 new partnerships
Number of members in the National Zero Waste Council	2020: 150 members 2019: 147 members 2018: 132 members 2017: 109 members 2016: 82 members	Projected for 2021: 175 members	14% increase
Number of events organized by the National Zero Waste Council that enable knowledge sharing (workshops, webinars, forums)	2020: 8 events 2019: 8 events 2018: 8 events 2017: 16 events 2016: 16 events	Projected for 2021: 10 events	2 events

due to COVID19, the zero waste conference was held virtually for year 2020 and will be for 2021.

2022 Key Actions

- Ensure the work of the National Zero Waste Council supports and enhances the zero waste objectives of Metro Vancouver
- Continue to grow the scope and influence of the National Zero Waste Council by leveraging the ability to convene key stakeholders to work on emerging issues related to construction and demolition waste and the transition to a circular economy
- Continue to implement "A Food Loss and Waste Strategy for Canada" through initiatives reducing waste throughout the food supply chain and from households
- Continue to support a cohort of local governments across Canada interested in advancing circularity through the Circular Cities and Regions Initiative
- Contribute to the work of the Canada Plastics Pact and Circular Economy Leadership Canada as co-founders of these national initiatives / strategies

- Continue to build awareness of the economic benefits of waste prevention through the seminal report released by the Council - *Waste Prevention: The Environmental and Economic Benefits for Canada*
- Host a two-day 2022 Zero Waste Conference and continue to build its well-earned reputation as a program that demonstrates Metro Vancouver's leadership while inspiring and challenging participants to create a future without waste

REGIONAL EMERGENCY MANAGEMENT

Description of services

Regional Emergency Management is a Metro Vancouver Regional District function established to provide emergency management to the region. This service is delivered in partnership with the Province of BC through the Integrated Partnership for Regional Emergency Management (IPREM).

The service was established through Bylaw 1079, 2008 and provided for the creation of IPREM that would engage Provincial and local government officials in a joint endeavour to coordinate a seamless multi-level emergency management system for the Metro Vancouver area. The service does not replace municipal emergency planning, but assists where these plans impact neighbouring local governments or the region as a whole. IPREM is working with representatives from all levels of government, partners and the private sector determining regional emergency management planning priorities.

IPREM has identified the following strategies as part of their 2021 Business Plan in an effort to create a disaster resilient region noting the strategic direction for IPREM will be reviewed and approved by December 17, 2021:

- Continue to identify, assess and prioritize current and emerging regional emergency management planning needs;
- Coordinate the establishment and revisions of regional emergency management plans, programs and processes to address priority planning needs;
- Support and promote processes and procedures for strengthening emergency management personnel within the region;
- Continue to validate IPREM's regional plans, programs, processes, and assure integration with other plans in the region;
- Engage stakeholders and Indigenous peoples in relevant opportunities that enhance the region's emergency preparedness;
- Continue to improve IPREM's internal processes, capacity, capabilities, and governance;
- Align IPREM resources to meet strategic goals and objectives; and
- Continue to strengthen partnerships and Indigenous relationships with IPREM activities.

Strategic directions and high level goals supported

Regional Emergency Management supports the *Board Strategic Plan's* direction to strengthen the Regional Federation by providing region-wide Emergency Management planning services for Metro Vancouver. This function provides a planning bridge between all of the member municipalities and other critical infrastructure providers to help deliver emergency response in a coordinated and mutually supportive manner. This is provided via an equal partnership with the Province of British Columbia.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Conduct one Region Wide Emergency Exercise per year	1	0	1 (planned)

2022 Key Actions

- Integrate new strategic plan into current planning, reviewing project priorities.
- Create a Regional Concept of Operations video and host to the IPREM website.
- Continue the provision of water plan (joint project with REAC water subcommittee).
- Support the implementation of recommendations from After Action Reports and prioritize.
- Exercise program to support Exercise Coastal Response 2022 (potential for upwards of two Region Wide Emergency Exercises).
- Reclassification on one staff position from a coordinator to a Senior Project Manager.

REGIONAL ECONOMIC PROSPERITY SERVICE

Description of services

Metro Vancouver's Regional Economic Prosperity Service is the region's economic development service with the mission of collaborating to advance economic opportunity, more broadly shared prosperity, improved quality of life, and environmental sustainability for all the communities and residents in Canada's Pacific Gateway.

Collaborating with a cross-section of regional leaders from industry, First Nations, labour, government, non-profit organizations, and education, the Regional Economic Prosperity Service exists to foster greater regional collaboration on economic development issues of significance, to advise leaders on sound economic policy and strategy, to brand the region and its key industries to a global audience, and to attract strategic investment into the region.

Strategic directions and high level goals supported

Board Strategic Plan

- Promote a regional approach to advancing economic prosperity that complements and amplifies the economic development work of members.
- Encourage innovation in the delivery of Metro Vancouver services that will contribute to the region's resilience and prosperity through clean technology and circular economy solutions.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Increase in unique visitors to the REPS website	N/A	3000 unique visits	4500 unique visits (50% increase)
Number of partnerships developed and sustained to further investment attraction goals and support key industry clusters	N/A	2 partnerships	5 partnerships

2022 key actions

- Implement customer relationship management (CRM) system for strategic investment attraction across the region
- Develop strategic investment protocols in conjunction with member jurisdictions
- Establish a regional strategic investment retention program
- Identify and execute collaboration and event opportunities for the purposes of attracting strategic investment

- Undertake applied economic research and policy analysis to build the capacity in and provide support for key industry clusters in the region
- Lead quantitative and qualitative research to inform economic development decision-making that can further enhance strategic investment in the region
- Develop, launch and refine the branding, marketing and strategic communications for the service

REGIONAL EMPLOYERS SERVICES

Description of services

Regional Employers Services (RES) provides a range of human resource, labour relations and workforce strategy services to support of Metro Vancouver's member jurisdictions under the authority of the Metro Vancouver Regional District Labour Relations function. As part of Metro Vancouver's regional services, RES provides a forum for local government employers to connect, share information and collaborate on issues of regional significance. RES also provides specialized support services to subscribing member jurisdictions in the areas of compensation and collective bargaining.

Three integrated RES service groups provide complete support to member jurisdictions in the following areas:

- Information & Advisory Services: provides in-depth research, advice and support for human resources, labour relations and workforce needs to all member jurisdictions, as well as provides a forum for members to pursue matters of regional significance.
- Collective Bargaining: provides strategic, responsive guidance and expertise on collective bargaining for all subscribing member jurisdictions and other fee for service clients.
- Compensation Services: provides advice related to job analysis, organizational design, and dispute resolution to subscribing member jurisdictions and other fee-for-service clients.

Strategic directions and high level goals supported

Regional Employers Services supports the *Board Strategic Plan's* direction to strengthen the *Regional Federation* by providing a range of human resource, labour relations, compensation and collective bargaining services to support of Metro Vancouver's member jurisdictions. This includes providing a forum for local government employers to connect, share information and collaborate on issues of regional significance with a specific focus on such issues in local government.

Performance Indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Annual number of attendees at RES educational offerings	**Average: 324** 2018: 340 2019: 394 2020: 240	2021 YTD May: 26* Objective: 200 *Numbers Low due to COVID-19	324
Total number of page visits to RES website and myRES portal	**Average: 38,692** 2018: 35,931 2019: 37,055 2020: 43,090	2021 YTD May 31: 22,362 Objective: 45,000	45,000

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Collective agreements serviced	2014 – 47 2017 - 49 2020 - 50	YTD: 50 Objective: 50	50

2022 key actions

- Continue to build out the information for member jurisdictions on the COVID-19 web page.
- Complete the data validation of the Sector Labour Market Partnership (SLMP) project with respect to research regarding current labour market conditions and changes to labour market conditions resulting from the pandemic.
- Continue to add resources to the Diversity and Inclusion webpage.
- Continue to explore enhancements to reporting functionality to the Workforce Data Centre on myRES.
- Launch and refine Careers Landing Page (you-belonghere.ca)
- Continue with preparation and bargaining for renewals of collective agreements for Inside/Outside, Fire and Police collective agreements.
- Provide coordination and information for upcoming round of bargaining.
- Consolidate and deliver regional events and outreach through virtual seminars, roundtables and online learning initiatives.
- Deliver new offering in RES Learning Series: “COMP 201”

REGIONAL GLOBAL POSITIONING SYSTEM

Description of services

Regional Global Positioning System is a Metro Vancouver Regional District function established to provide an accurate and consistent engineering survey standard in the Metro Vancouver region. Through a High Precision Network (HPN) of approximately 350 survey control monuments, five (5) Active Control Points (ACPs), and a real-time broadcast service of Global Navigation Satellite Systems (GNSS) data, local government and private users (the latter for a fee) are able to efficiently locate and layout various infrastructure and related works, such as water and sewer lines, reservoirs, roadways, trails, rights-of-way, bathymetric surveys, and topography. By pooling resources, local governments are able to reduce their individual costs for maintaining a high-accuracy geospatial reference system while also ensuring consistent survey standards are maintained in the region.

Strategic directions and high level goals supported

Board Strategic Plan

- Maintain Metro Vancouver's world-class water system that provides clean, safe drinking water and ensure its capacity to meet future needs.
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.
- Continue to engage with members on processes and initiatives that contribute to an effective and well-functioning organization.
- Enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts and key stakeholders.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance (2021)	2022 Performance Objective
Percent of service uptime (business hours, 8am – 4pm, M-F): • Real-time service to mobile surveyors	MV 3-year average (2018-2020): 99% 2018 99% 2019 99% 2020 99%	99%	99%
Percent of service uptime (24 x 7, 365 days / year): Post-mission data availability through Provincial portal	MV 3-year average (2018-2020): 98% 2018 95% 2019 99% 2020 99%	99%	99%

2022 key actions

- With local government partners, complete the development of, and begin implementation of, the action plan for the long term (10-15 years) maintenance and enhancement of the High Precision Network (HPN) of control monuments and the Active Control Point (ACP) system, in accordance with the 2019-2023 GPS Program Strategic Plan.
- With local government partners, look for opportunities for further innovation and continuous improvement to enhance the utility of the HPN and ACPs for geo-spatial referencing applications

SASAMAT FIRE PROTECTION SERVICE

Description of services

Sasamat Fire Protection Service is a Metro Vancouver Regional District (MVRD) function established to provide fire protection service to the Villages of Anmore and Belcarra. The service has two fire halls and five trucks staffed by approximately 40 trained volunteers. In addition to providing emergency response services, Sasamat Fire Protection Service also provides fire inspection services to the Village of Anmore and issues burning permits for both municipalities. In 2020, Sasamat Fire Protection Service responded to approximately 88 calls for service with this volume expected to increase as development continues in the service area.

Strategic directions and high level goals supported

The MVRD Board supports the function of fire protection with respect to Anmore and Belcarra, as conferred by authority provided through Supplementary *Letters Patent*.

Daily fire operations and long term planning for the fire service is the responsibility of a Board of Trustees which is comprised of members from both Villages and one member assigned by the MVRD Board.

MVRD supports the fire service with providing administration services, safety training, insurance, facilities maintenance, and vehicle maintenance.

2022 Sasamat Volunteer Fire Department Board of Trustees Key Actions

- Commence review of requirements and preparation of job description for possible full-time Fire Chief in 2023.
- Commission new Sasamat Volunteer Fire Department Fire Truck, procured in 2021.
- Continue to provide safety training such as respiratory fit testing and audiometric testing. Review and update Operational Guidelines.

Regional District Service Area

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by the Regional District Service Area over the next 5 years.

Service Area	Initiative	Description	Theme
2022 - 2026			
E911 Emergency Telephone Service	System Upgrade	Implement Next Gen 911 system with E-Comm	System Stewardship
Regional Emergency Management	Emergency Preparedness	Conduct regional exercises that focus on theme of "decision making", involving local governments, the Province and regional stakeholders	System Stewardship
Regional Economic Prosperity Service	Customer Relationship Management (CRM) System	Implementation of CRM system for efficient management of strategic investment attraction across the region	System Stewardship
Regional Economic Prosperity Service	Data Analytics and Industry Intelligence	Inform strategic investment decisions with cutting-edge data analytics and comprehensive industry intelligence	Financial Sustainability
Regional Employers Services	Collective Bargaining	Complete integration of new subscribers. Revisit bargaining plans. Commence and coordinate collective bargaining for the upcoming round of collective bargaining across all occupational groups.	Regional Growth & Financial Sustainability
Regional Employers Services	Regional Coordination	Consolidate and deliver regional events, making use of best practice for delivery including virtual platforms. Establish additional subject specific pages to support information sharing and distribution for member jurisdictions. Develop regional policy templates and tools to support member jurisdictions with emerging issues such as remote work.	System Stewardship

Regional Employers Services	Regional Workforce Strategy Initiative (RWSI)	Complete next phase of Sector Labour Market Partnership (SLMP) research to identify shifts in labour market trends and conditions since COVID-19. Maintain diversity and inclusion resources, strategies, templates, and tools to support member jurisdictions with diversity and inclusion initiatives in employment.	System Stewardship
Regional Employers Services	Compensation	Complete the integration of a new subscribers and respond to increased demand for job evaluation reviews as a result of the rapid shifts in service delivery and the nature of work.	Regional Growth & Financial Sustainability
Regional Employers Services	Regional Workforce Strategy Initiative	Publish SLMP addendum reporting on shifts in labour market trends since COVID-19.	System Stewardship
Regional Global Positioning System	Regional GPS 5-year (2019-2023) Strategic Plan	Begin implementation of, the action plan for the long term (10-15 years) maintenance and enhancement of the High Precision Network (HPN) of control monuments and the Active Control Point (ACP) system, in accordance with the 2019-2023 GPS Program Strategic Plan.	System Stewardship
Sasamat Fire Protection Service	Equipment Refresh	Receive and outfit new fire truck Begin plans to purchase a new fire truck after 2025	System Stewardship
Sasamat Fire Protection Service	Compensation	Convert volunteer fire chief to a full-time position	System Stewardship
Zero Waste Collaboration Initiatives	Love Food Hate Waste Canada Campaign	For the next three years, the National Zero Waste Council will continue to organize, manage and deliver *Love Food Hate Waste Canada.*	Environmental Sustainability
Zero Waste Collaboration Initiatives	Zero Waste Conference	The annual Zero Waste Conference, hosted by Metro Vancouver and the National Zero Waste Council, has been organized to support the first two goals of the *Integrated Solid Waste and Resource Management Plan* related to waste prevention.	Environmental Sustainability Regulated & Legislative Environment

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - E911 EMERGENCY TELEPHONE SERVICE

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
E911 Emergency Telephone Service	$ 226,062	$ 226,062	$ -	$ -	$ 4,521	$ 230,583	$ 235,194	$ 239,898	$ 244,696	$ 249,590

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
E911 General Reserve	$ 680,414	$ 680,414	$ -	$ -	$ 13,608	$ 694,023	$ 707,903	$ 722,061	$ 736,502	$ 751,233

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - GENERAL GOVERNMENT ADMINISTRATION

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
General Government Administration	**$ 276,645**	**$ 276,645**	**$ -**	**$ -**	**$ 5,533**	**$ 282,178**	**$ 287,822**	**$ 293,578**	**$ 299,450**	**$ 305,439**

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
General Government General Reserve	**$ 9,839,513**	**$ 9,839,513**	**$ -**	**$ -**	**$ 196,790**	**$ 10,036,303**	**$ 10,237,029**	**$ 10,441,770**	**$ 10,650,605**	**$ 10,863,617**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
General Government Administration										
MVRD Sustainability Innovation Fund Reserve	$ 11,564,620	$ 11,564,620	$ 347,000	$ (864,000)	$ 226,122	$ 11,273,742	$ 11,849,687	$ 12,437,151	$ 13,036,364	$ 13,647,561
Grants Reserve Fund	2,124,155	2,124,155	-	(150,000)	40,983	2,015,138	1,903,941	1,790,519	1,674,830	1,556,826
Total	**$ 13,688,775**	**$ 13,688,775**	**$ 347,000**	**$ (1,014,000)**	**$ 267,105**	**$ 13,288,880**	**$ 13,753,628**	**$ 14,227,670**	**$ 14,711,194**	**$ 15,204,387**

METRO VANCOUVER DISTRICTS

2022-2026 PROJECTED RESERVES - GENERAL GOVERNMENT ZERO WASTE COLLABORATION INITIATIVES

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
General Government Zero Waste Collaboration Initiatives	$ 83,996	$ 83,996	$ -	$ -	$ 1,680	$ 85,676	$ 87,389	$ 89,137	$ 90,920	$ 92,738

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - REGIONAL ECONOMIC PROSPERITY

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Economic Prosperity	$ 51,000	$ 51,000	$ -	$ -	$ 1,020	$ 52,020	$ 53,061	$ 54,122	$ 55,204	$ 56,308

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Economic Prosperity General Reserve	$ 1,379,573	$ 1,379,573	$ -	$ (600,000)	$ 21,591	$ 801,165	$ 312,188	$ 217,432	$ 221,781	$ 226,216

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - REGIONAL EMERGENCY MANAGEMENT

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Emergency Management	$ 11,893	$ 11,893	$ -	$ -	$ 238	$ 12,131	$ 12,374	$ 12,621	$ 12,873	$ 13,131

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
REM General Reserve	$ 284,041	$ 284,041	$ -	$ (60,537.0)	$ 5,075	$ 228,579	$ 172,016	$ 116,306	$ 80,680	$ 52,835

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - REGIONAL EMPLOYERS SERVICES

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Employers Services	$ 158,228	$ 158,228	$ -	$ -	$ 3,165	$ 161,393	$ 164,620	$ 167,913	$ 171,271	$ 174,697

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Employers Service General Reserve	$ 2,473,677	$ 2,473,677	$ -	$ (75,000)	$ 48,724	$ 2,447,400	$ 2,496,348	$ 2,546,275	$ 2,597,201	$ 2,649,145

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - REGIONAL GLOBAL POSITIONING SYSTEM

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Global Positioning System	$ 13,803	$ 13,803	$ -	$ -	$ 276	$ 14,080	$ 14,361	$ 14,648	$ 14,941	$ 15,240

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Geospatial Reference System Reserve	$ 1,185,697	$ 1,185,697	$ 45,000	$ -	$ 24,164	$ 1,254,861	$ 1,329,758	$ 1,407,399	$ 1,487,869	$ 1,571,256

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - SASAMAT FIRE PROTECTION SERVICE

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Sasamat Fire Protection Service	**$ 12,584**	**$ 12,584**	**$ -**	**$ -**	**$ 252**	**$ 12,836**	**$ 13,093**	**$ 13,355**	**$ 13,622**	**$ 13,894**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Sasamat Fire Protection Service (SFPS)										
SFPS Capital Reserve Fund	$ 1,042,507	$ 1,042,507	$ 92,100	$ (600,000)	$ 15,771	$ 550,378	$ 654,406	$ 760,516	$ 868,747	$ 979,143
SFPS Communications Capital Reserve Fund	59,152	59,152	-	-	1,183	60,335	61,542	62,773	64,028	65,309
SFPS Emergency Equipment Reserve Fund	24,063	24,063	-	-	481	24,544	25,035	25,536	26,047	26,568
SFPS Capital Facility Reserve	136,047	136,047	267,840	-	5,399	409,286	769,146	1,136,203	1,510,601	1,892,487
Total	**$ 1,261,769**	**$ 1,261,769**	**$ 359,940**	**$ (600,000)**	**$ 22,835**	**$ 1,044,544**	**$ 1,510,129**	**$ 1,985,027**	**$ 2,469,422**	**$ 2,963,506**

metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Finance and Intergovernment Committee

From: Jerry Dobrovolny, Commissioner/Chief Administrative Officer
Dean Rear, General Manager, Financial Services/Chief Financial Officer

Date: October 6, 2021 Meeting Date: October 13, 2021

Subject: **2022 - 2026 Financial Plan – Allocated Programs**

RECOMMENDATION

That the Finance and Intergovernment Committee endorse the 2022 - 2026 Financial Plan for the Allocated Programs as presented in the report dated October 6, 2021, titled "2022 - 2026 Financial Plan – Allocated Programs", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY

The 2022 – 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region in 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

The Centralized Support Programs support all business activities for the four Metro Vancouver legal entities. Expenditures are proposed to increase $14.9 million for a total of $111.0 million with the allocation to the Metro Vancouver functions, net of other recoveries and reserve applications, increasing $8.3 million (12.5%). In recognizing the impact of the growing capital program on the provision of support services, a portion of the Centralized Support Program costs will be allocated to the capital projects that use the services in 2022.

The Project Delivery program supports Metro Vancouver functions with capital and infrastructure responsibilities including asset management. Total expenditures for 2022 are estimated at $32.8 million with $20.8 million to be charged directly to manage $7.4B of the planned capital projects over the next five years. The balance is allocated to Water Services, Liquid Waste Services, and Solid Waste Services for 2022.

As the expenditures are allocated to the functions, they are inclusive in the overall financial impacts, of which is a 3.5% ($21) overall increase in the Household Impact for 2022.

PURPOSE

To present the 2022 - 2026 Financial Plans for the allocated programs - Centralized Support - including Corporate Services, External Relations, Financial Services, Human Resources, Indigenous Relations

and Legislative Services, as well as Project Delivery for consideration by the Finance and Intergovernment Committee.

BACKGROUND

Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on Allocated Programs and presents the 2022 annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

ALLOCATED PROGRAMS

Centralized Support

Centralized Support Program services support all business activities for the four Metro Vancouver legal entities. These budgets are allocated across the organization and supported by the revenue sources of each function in accordance with the Board *Corporate Allocation Policy* which provides the basis for allocating the Centralized Support Program Services budgets to the benefitting Metro Vancouver service in an equitable, consistent and transparent manner.

The Centralized Support Programs are comprised of the following service areas:

- Corporate Services
- External Relations
- Financial Services
- Human Resources
- Indigenous Relations
- Legislative Services

The Centralized Support Program services are guided by the *Board Strategic Plan* with a primary focus on the following strategic directions:

- Continue to engage with members on processes and initiatives that contribute to an effective and well-functioning organization;
- Build resilience in communities to prepare for and adapt to changing physical and environmental conditions;
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers; and
- Enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders.

As the Centralized Support Program service areas support all business activities of Metro Vancouver entities and functions, the Corporate Support Program therefore supports the pursuit of all goals and objectives of those functions.

Project Delivery
The Project Delivery Department was created to deliver the highest value, consequence and risk projects for Liquid Waste and Water Services (funded through Liquid Waste and Water capital budgets) as well as lead the creation and implementation of centers of expertise for project management, organizational quality management and asset management across Metro Vancouver (funded through allocation to Liquid Waste and Water Services operating budgets for 2022). This support relates especially to improvement areas identified in the independent review completed in 2020 by KPMG. Senior staff leading these activities were hired in Q2 of 2021.

WORK PLAN PERFORMANCE INDICATORS
High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. Work plans for both the Centralized Support Program and the Project Delivery Program are presented in this report.

Centralized Support
28 performance indicators have been developed and are being tracked. These include:

- Metrotower III Energy Star Rating (overall building efficiency);
- Certificate of Recognition (COR) safety program audit score;
- Average hours per employee of Safety Training;
- Number of website page visits;
- Number of followers on Metro Vancouver Twitter and Facebook;
- Debt service costs / total revenue;
- Number of external applicants;
- Percentage of workforce receiving training; and,
- Number of participants in MetroFit Health and Wellness Programs.

Project Delivery
8 performance indicators have been developed and are being tracked. These include:

- Documented Asset Management Plans;
- Internal Quality Audits Performed; and,
- Cost Estimating Framework deployment to Project Delivery Projects.

CONTINUOUS IMPROVEMENT
Centralized Support
Some of the continuous improvement initiatives for Centralized Support which have been identified for 2022 include:

- Explore and develop MetroFleet Climate Action Plan;
- Enhancement of new employee safety onboarding - training, documentation and follow-up;
- Further develop and implement partnerships with colleges and universities to bring utility training to local institutions and implement an Internationally Trained Engineers Program;

- Coordinate region-wide or sub-regional Multi-Assessment (Blanket) Archaeological Permits;
- Automation of key financial processes;
- Organize Metro Vancouver staff Lunch + Learn sessions on legal topics of relevance; and,
- Implement new learning management system and/or training for employees to improve compliance with corporate records management policies.

Further, Centralized Support services support the organization and focus on processes, systems and procedures which enhance the business activities of all Metro Vancouver service areas. Some of those enhancements include the following:

- Implement and integrate a detailed Project Management software solution and Service Request software;
- Automate creation of Financial Statements and other reporting;
- Revise existing Corporate Safety Management System Standards;
- Continued implementation of the Utility Asset Management System;
- Further develop and implement a strategy to embed Diversity and Inclusion initiatives into all relevant MV programs; and,
- Implementation of a Talent Management System and Learning Management System.

Project Delivery
The impetus of the Project Delivery Program is largely for the purpose of continuous improvement, focusing on best practices in project management, asset management and project controls. Specific continuous improvement initiatives for Project Delivery for 2022 include:

- Development of the Project Management Framework;
- Increased in-house Project Management and Field Quality Control / Assurance; and,
- Continue existing best practices in Asset Management and develop a Corporate-wide Asset Management Strategy utilizing those best practices.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN
The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability;
- Environmental Sustainability;
- System Stewardship;
- Regulatory and Legislative Environment; and,
- Regional Growth.

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Also, a “What’s Happening” summary has been provided that highlights the program highlights for the next five years.

The 2022-2026 Financial Plans for the Allocated Program service areas are included as Attachment 1. The 2022 Annual Work Plans for the Centralized Support Program service areas presented in this

report are included in Attachment 2, and the "What's Happening" highlights for the years 2022 – 2026 are included in Attachment 3.

Operating Budget Highlights

Centralized Support

In 2022, the Centralized Support Program expenditures are increasing $14.9 million for total expenditures of $111.0 million (Attachment 1). This increase is primarily due to an adjustment for resources necessary to support the growing capital program.

The Centralized Support Program costs are adjusted for external recoveries, funding from the capital program and reserve applications, and allocated to the functional departments. The direct allocation of Centralized Support Program costs is increasing by $8.3 million (12.5%). This increase is impacted by reduced estimates for third-party revenue and partially offset by reserve funding for projects meeting the criteria for funding in accordance with the *Operating, Statutory and Discretionary Reserves Policy.*

Over the next five years of the plan, the total expenditures of the Centralized Support Programs are projected to be largely inflationary, increasing on average 4.6%. Also for 2022, in recognizing the impact of the magnitude of the capital program on the provision of support services, a portion of the Centralized Support Program costs will be allocated to the capital projects that use the services. For 2022, this is projected to be $9.5 million.

Project Delivery

Project Delivery has been created with a transfer of resources from other Metro Vancouver areas and provided with additional resources to meet program requirements. Total expenditures for 2022 are estimated at $32.8 million with $20.8 million to be charged directly to manage $7.4B of the planned capital projects over the next five years. The balance is allocated to Water Services, Liquid Waste Services, and Solid Waste Services for 2022.

Over the next five years of the plan, as the Project Delivery Program is fully developed, total expenditures are projected to increase to approximately $47 million in 2026 as the capital program increases over the same time frame. A significant portion continues to be allocated directly to the major capital projects being managed by the group.

Reserve Funds

Reserve usage through the Centralized Support Programs include one-time expenditures for head office renovations and improvements, equipment purchases, as well as one-time initiatives which are delivered through contract services in accordance with the Board approved *Operating, Statutory and Discretionary Reserves Policy.*

In 2022, $7.5 million in reserve funding will be applied in the Centralized Support Programs. The 2022 - 2026 Projected Reserves for the Centralized Support Programs are included in Attachment 4.

APPROVAL PROCESS

The proposed 2022 - 2026 Financial Plans and Annual Work Plans are presented for consideration and endorsement before being forwarded to the Board for consideration. The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented at the Metro Vancouver Board Budget Workshop on October 20, 2021.

- The Board will consider adoption of the 2021 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021

ALTERNATIVES

1. That the Finance and Intergovernment Committee endorse the 2022 - 2026 Financial Plan for the Allocated Programs as presented in the report dated October 6, 2021, titled "2022 - 2026 Financial Plan – Allocated Programs", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Finance and Intergovernment Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for the Allocated Programs and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2022 - 2026 Financial Plan for the Allocated Programs, as presented under Alternative 1, in 2022 total expenditures for the Centralized Support Programs are proposed to increase $14.9 million for total expenditures of $111.0 million with the allocation to the Metro Vancouver entities and functions, net of other recoveries and reserve applications, increasing $8.3 million (12.5%). For Project Delivery, total expenditures for 2022 are estimated at $32.8 million with $20.8 million to be charged directly to capital projects and the balance allocated to Water Services, Liquid Waste Services, and Solid Waste Services for 2022.

As the expenditures are allocated to the functions, they are inclusive in the overall financial impacts, of which is a 3.5% ($21) overall increase in the Household Impact for 2022.

Under Alternative 2, the Committee may wish to consider recommending amendments to the five-year financial plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the overall financial plan as Allocated Program costs are apportioned to all Metro Vancouver entities and functions.

SUMMARY / CONCLUSION

The 2022 - 2026 Financial Plans for the Allocated Programs have been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan.* It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for the Centralized Support Programs - comprised of Corporate Services, External Relations, Financial Services, Human Resources, Indigenous Relations and Legislative Services – and the Project Delivery program.

The presentation of this year's five-year financial plans for the Allocated Programs provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed planning related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical requirements.

Staff recommend endorsing the 2022 - 2026 Financial Plans for the Allocated Programs as presented under alternative one.

Attachments:

1. 2022 - 2026 Financial Plans
    - Centralized Support Programs Summary
    - Corporate Services
    - External Relations
    - Financial Services
    - Human Resources
    - Indigenous Relations
    - Legislative Services
    - Project Delivery
2. 2022 Work Plans
3. 2022 - 2026 "What's Happening"
4. 2022 - 2026 Projected Reserves – Centralized Support Programs

Attachment 1

METRO VANCOUVER DISTRICTS
CENTRALIZED SUPPORT PROGRAM SUMMARY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments (net)	$ 66,731,123	$ 75,049,520	12.5%	$ 76,916,190	2.5%	$ 79,510,676	3.4%	$ 81,636,524	2.7%	$ 84,182,941	3.1%
Allocated to Functional Departments - Fleet	12,266,934	12,616,934	2.9%	12,856,656	1.9%	13,100,932	1.9%	13,349,850	1.9%	13,603,497	1.9%
Other External Revenues	6,994,794	6,275,666		6,363,799		6,446,449		6,515,760		6,120,944	
Transfer from Capital	4,517,291	9,538,647		10,048,150		7,832,639		8,143,199		8,308,345	
Transfer from Reserves	5,563,300	7,510,874		7,136,713		7,080,928		6,873,139		7,102,024	
TOTAL REVENUES	**$ 96,073,442**	**$ 110,991,641**	**15.5%**	**$ 113,321,508**	**2.1%**	**$ 113,971,624**	**0.6%**	**$ 116,518,472**	**2.2%**	**$ 119,317,751**	**2.4%**
EXPENDITURES											
Corporate Services	59,968,526	67,221,167	12.1%	68,215,236	1.5%	67,784,414	(0.6%)	69,150,154	2.0%	70,877,175	2.5%
External Relations	9,800,747	13,292,160	35.6%	13,381,131	0.7%	13,786,593	3.0%	14,283,975	3.6%	14,557,118	1.9%
Financial Services	14,344,036	16,327,049	13.8%	16,925,045	3.7%	17,287,137	2.1%	17,659,675	2.2%	18,068,095	2.3%
Human Resources	6,652,497	7,438,681	11.8%	7,635,055	2.6%	7,784,102	2.0%	7,927,680	1.8%	8,146,765	2.8%
Indigenous Relations	583,698	1,383,577	140.0%	1,523,787	10.1%	1,561,761	2.5%	1,600,624	2.5%	1,640,212	2.5%
Legislative Services	4,723,938	5,329,007	12.8%	5,641,254	5.9%	5,767,617	2.2%	5,896,364	2.2%	6,028,386	2.2%
TOTAL EXPENDITURES	**$ 96,073,442**	**$ 110,991,641**	**15.5%**	**$ 113,321,508**	**2.1%**	**$ 113,971,624**	**0.6%**	**$ 116,518,472**	**2.2%**	**$ 119,317,751**	**2.4%**
ALLOCATED TO FUNCTIONAL DEPARTMENTS											
Water Services	$ 26,052,630	$ 28,824,858	10.6%	$ 28,281,238	(1.9%)	$ 28,363,072	0.3%	$ 28,677,338	1.1%	$ 28,882,147	0.7%
Liquid Waste Services	27,044,682	31,092,091	15.0%	32,262,255	3.8%	34,566,515	7.1%	37,178,682	7.6%	40,440,659	8.8%
Solid Waste Services	4,740,158	5,042,360	6.4%	5,169,970	2.5%	5,394,621	4.3%	5,296,354	(1.8%)	5,041,927	(4.8%)
Housing	2,082,758	2,401,739	15.3%	2,185,410	(9.0%)	2,108,414	(3.5%)	2,038,626	(3.3%)	1,913,691	(6.1%)
Air Quality	857,718	956,716	11.5%	988,487	3.3%	967,321	(2.1%)	873,345	(9.7%)	797,621	(8.7%)
E911 Emergency Telephone Service	90,854	93,112	2.5%	95,425	2.5%	97,795	2.5%	100,223	2.5%	102,712	2.5%
Electoral Area Service	32,086	39,500	23.1%	48,944	23.9%	34,449	(29.6%)	32,682	(5.1%)	28,695	(12.2%)
General Government Administration	430,247	444,022	3.2%	514,604	15.9%	496,062	(3.6%)	454,064	(8.5%)	415,049	(8.6%)
General Government-Zero Waste Collaboration Initiatives	435,320	437,245	0.4%	433,177	(0.9%)	435,603	0.6%	435,340	(0.1%)	434,229	(0.3%)
Housing Planning and Policy	64,576	87,536	35.6%	108,436	23.9%	93,035	(14.2%)	86,817	(6.7%)	79,237	(8.7%)
Project Delivery	770,148	731,907	(5.0%)	1,665,483	130.0%	2,054,256	23.3%	1,899,586	(7.5%)	1,745,470	(8.1%)
Regional Economic Prosperity	30,000	135,797	350.0%	226,912	67.1%	255,004	12.4%	233,890	(8.3%)	213,079	(8.9%)
Regional Emergency Management	10,902	11,130	2.1%	11,169	0.4%	11,256	0.8%	10,387	(7.7%)	10,154	(2.2%)
Regional Employers Services	246,798	258,506	4.7%	239,716	(7.3%)	227,137	(5.2%)	208,731	(8.1%)	191,094	(8.4%)
Regional Global Positioning System	21,091	26,452	25.4%	22,774	(13.9%)	22,168	(2.7%)	20,404	(8.0%)	18,653	(8.6%)
Regional Parks	3,503,795	4,115,924	17.5%	4,279,744	4.0%	4,008,972	(6.3%)	3,744,601	(6.6%)	3,543,742	(5.4%)
Regional Planning	292,446	322,592	10.3%	340,869	5.7%	332,591	(2.4%)	302,204	(9.1%)	280,671	(7.1%)
Sasamat Fire Protection Service	24,914	28,033	12.5%	41,577	48.3%	42,405	2.0%	43,250	2.0%	44,111	2.0%
	$ 66,731,123	**$ 75,049,520**	**12.5%**	**$ 76,916,190**	**2.5%**	**$ 79,510,676**	**3.4%**	**$ 81,636,524**	**2.7%**	**$ 84,182,941**	**3.1%**

METRO VANCOUVER DISTRICTS
CORPORATE SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 33,462,674	$ 38,393,140	14.7%	$ 39,342,344	2.5%	$ 41,111,199	4.5%	$ 42,312,560	2.9%	$ 44,010,660	4.0%
Allocated to Functional Departments - Fleet	12,266,934	12,616,934		12,856,656		13,100,932		13,349,850		13,603,497	
Other External Revenues	6,797,794	5,978,533		6,066,445		6,148,911		6,218,034		5,823,025	
Transfer from Capital	2,427,424	3,211,686		3,021,078		532,444		546,571		555,969	
Transfer from Reserves	5,013,700	7,020,874		6,928,713		6,890,928		6,723,139		6,884,024	
TOTAL REVENUES	**$ 59,968,526**	**$ 67,221,167**	**12.1%**	**$ 68,215,236**	**1.5%**	**$ 67,784,414**	**(0.6%)**	**$ 69,150,154**	**2.0%**	**$ 70,877,175**	**2.5%**
EXPENDITURES											
Operating Programs:											
Information Technology											
Technical Services	$ 7,191,307	$ 8,190,965		$ 8,329,184		$ 8,251,166		$ 8,479,522		$ 8,638,864	
Business Systems	6,106,844	7,410,919		7,867,297		7,984,102		8,094,992		8,261,172	
Digital Strategy and Project Management	5,964,682	7,978,193		8,098,714		7,246,434		7,897,630		8,553,910	
	19,262,833	23,580,077	22.4%	24,295,195	3.0%	23,481,702	(3.3%)	24,472,144	4.2%	25,453,946	4.0%
Corporate Projects and Facilities	6,628,586	6,722,244	1.4%	6,958,980	3.5%	7,206,994	3.6%	7,389,642	2.5%	7,638,354	3.4%
Corporate Safety	4,391,125	4,646,093	5.8%	4,711,620	1.4%	4,815,129	2.2%	4,927,202	2.3%	5,030,401	2.1%
Security and Emergency Management	1,554,192	1,817,899	17.0%	1,849,405	1.7%	1,746,471	(5.6%)	1,780,799	2.0%	1,812,297	1.8%
Fleet Services	12,266,934	14,545,073	18.6%	14,530,369	(0.1%)	14,741,860	1.5%	15,114,989	2.5%	15,453,196	2.2%
Administration and Department Support	731,289	933,714	27.7%	1,030,766	10.4%	1,053,357	2.2%	1,076,477	2.2%	1,100,080	2.2%
Total Operating Programs	44,834,959	52,245,100	16.5%	53,376,335	2.2%	53,045,513	(0.6%)	54,761,253	3.2%	56,488,274	3.2%
Debt Service	14,383,567	14,226,067	(1.1%)	13,638,901	(4.1%)	13,638,901	0.0%	13,638,901	0.0%	13,638,901	0.0%
Head Office Capital	750,000	750,000	0.0%	1,200,000	60.0%	1,100,000	(8.3%)	750,000	(31.8%)	750,000	0.0%
TOTAL EXPENDITURES	**$ 59,968,526**	**$ 67,221,167**	**12.1%**	**$ 68,215,236**	**1.5%**	**$ 67,784,414**	**(0.6%)**	**$ 69,150,154**	**2.0%**	**$ 70,877,175**	**2.5%**

METRO VANCOUVER DISTRICTS
EXTERNAL RELATIONS
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 9,356,118	$ 10,822,879	15.7%	$ 10,867,940	0.4%	$ 11,098,243	2.1%	$ 11,401,852	2.7%	$ 11,619,450	1.9%
Other External Revenues	-	100,000		100,000		100,000		100,000		100,000	
Transfer from Capital	444,629	2,369,281		2,413,191		2,588,350		2,782,123		2,837,668	
TOTAL REVENUES	**$ 9,800,747**	**$ 13,292,160**	**35.6%**	**$ 13,381,131**	**0.7%**	**$ 13,786,593**	**3.0%**	**$ 14,283,975**	**3.6%**	**$ 14,557,118**	**1.9%**
EXPENDITURES											
Operating Programs:											
Corporate Communications	$ 1,293,698	$ 1,318,416		$ 1,466,608		$ 1,497,714		$ 1,529,547		$ 1,562,124	
Media Relations and Issues Government	662,135	694,366		706,278		720,900		735,862		751,174	
Multi-Media Services	2,831,987	3,569,840		3,446,102		3,618,298		3,680,574		3,744,301	
Community Engagement	2,525,524	4,939,993		4,843,687		4,966,155		5,287,881		5,381,270	
Collaboration and Engagement	1,069,420	1,126,872		1,245,282		1,273,243		1,301,857		1,331,147	
Intergovernmental Relations	387,938	558,296		568,421		580,605		593,069		605,819	
Administration and Department Support	1,030,045	1,084,377		1,104,753		1,129,678		1,155,185		1,181,283	
TOTAL EXPENDITURES	**$ 9,800,747**	**$ 13,292,160**	**35.6%**	**$ 13,381,131**	**0.7%**	**$ 13,786,593**	**3.0%**	**$ 14,283,975**	**3.6%**	**$ 14,557,118**	**1.9%**

METRO VANCOUVER DISTRICTS
FINANCIAL SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 13,025,289	$ 13,409,177	2.9%	$ 13,748,186	2.5%	$ 14,056,891	2.2%	$ 14,374,792	2.3%	$ 14,727,291	2.5%
Other External Revenues	190,000	190,000		190,000		190,000		190,000		190,000	
Transfer from Capital	680,747	2,327,872		2,836,859		2,890,246		2,944,883		3,000,804	
Transfer from Reserves	448,000	400,000		150,000		150,000		150,000		150,000	
TOTAL REVENUES	**$ 14,344,036**	**$ 16,327,049**	**13.8%**	**$ 16,925,045**	**3.7%**	**$ 17,287,137**	**2.1%**	**$ 17,659,675**	**2.2%**	**$ 18,068,095**	**2.3%**
EXPENDITURES											
Operating Programs:											
Purchasing and Risk Management	$ 5,209,336	$ 5,790,227		$ 5,904,256		$ 6,029,432		$ 6,162,051		$ 6,313,426	
Financial Planning and Operations	5,902,083	6,574,250		6,812,277		6,960,817		7,110,322		7,274,869	
Property Services	2,331,550	2,879,970		3,208,667		3,276,139		3,345,168		3,415,786	
Administration and Department Support	901,067	1,082,602		999,845		1,020,749		1,042,134		1,064,014	
TOTAL EXPENDITURES	**$ 14,344,036**	**$ 16,327,049**	**13.8%**	**$ 16,925,045**	**3.7%**	**$ 17,287,137**	**2.1%**	**$ 17,659,675**	**2.2%**	**$ 18,068,095**	**2.3%**

METRO VANCOUVER DISTRICTS
HUMAN RESOURCES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 6,028,346	$ 6,630,112	10.0%	$ 6,845,800	3.3%	$ 6,995,838	2.2%	$ 7,159,607	2.3%	$ 7,295,280	1.9%
Transfer from Capital	546,151	718,569	31.6%	731,255		748,264	2.3%	768,073	2.6%	783,485	2.0%
Transfer from Reserves	78,000	90,000	15.4%	58,000		40,000	(31.0%)	-	(100.0%)	68,000	0.0%
TOTAL REVENUES	**$ 6,652,497**	**$ 7,438,681**	**11.8%**	**$ 7,635,055**	**2.6%**	**$ 7,784,102**	**2.0%**	**$ 7,927,680**	**1.8%**	**$ 8,146,765**	**2.8%**
EXPENDITURES											
Operating Programs:											
Employee and Labour Relations	$ 1,589,853	$ 1,838,634		$ 1,853,662		$ 1,894,886		$ 1,936,508		$ 1,978,400	
Talent Management and Organization Development	2,967,149	3,242,006		3,230,930		3,319,062		3,358,265		3,439,502	
Systems and Processes	1,183,058	1,413,479		1,587,362		1,584,507		1,620,493		1,696,549	
Administration and Department Support	912,437	944,562		963,101		985,647		1,012,414		1,032,314	
TOTAL EXPENDITURES	**$ 6,652,497**	**$ 7,438,681**	**11.8%**	**$ 7,635,055**	**2.6%**	**$ 7,784,102**	**2.0%**	**$ 7,927,680**	**1.8%**	**$ 8,146,765**	**2.8%**

METRO VANCOUVER DISTRICTS
INDIGENOUS RELATIONS
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 583,698	$ 907,578	55.5%	$ 921,966	1.6%	$ 943,054	2.3%	$ 964,635	2.3%	$ 986,541	2.3%
Transfer from Capital	-	475,999	0.0%	601,821		618,707	2.8%	635,989	2.8%	653,671	2.8%
TOTAL REVENUES	**$ 583,698**	**$ 1,383,577**	**140.0%**	**$ 1,523,787**	**10.1%**	**$ 1,561,761**	**2.5%**	**$ 1,600,624**	**2.5%**	**$ 1,640,212**	**2.5%**
EXPENDITURES											
Operating Programs:											
Indigenous Relations	$ 583,698	$ 1,383,577		$ 1,523,787		$ 1,561,761		$ 1,600,624		$ 1,640,212	
TOTAL EXPENDITURES	**$ 583,698**	**$ 1,383,577**	**140.0%**	**$ 1,523,787**	**10.1%**	**$ 1,561,761**	**2.5%**	**$ 1,600,624**	**2.5%**	**$ 1,640,212**	**2.5%**

METRO VANCOUVER DISTRICTS
LEGISLATIVE SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 4,274,998	$ 4,886,634	14.3%	$ 5,189,954	6.2%	$ 5,305,451	2.2%	$ 5,423,078	2.2%	$ 5,543,719	2.2%
Other External Revenues	7,000	7,133		7,354		7,538		7,726		7,919	
Transfer from Capital	418,340	435,240		443,946		454,628		465,560		476,748	
Transfer from Reserves	23,600	-		-		-		-		-	
TOTAL REVENUES	**$ 4,723,938**	**$ 5,329,007**	**12.8%**	**$ 5,641,254**	**5.9%**	**$ 5,767,617**	**2.2%**	**$ 5,896,364**	**2.2%**	**$ 6,028,386**	**2.2%**
EXPENDITURES											
Operating Programs:											
Corporate Planning	$ 1,155,002	$ 1,169,569		$ 1,188,092		$ 1,210,826		$ 1,234,090		$ 1,257,896	
Legal Services	2,237,816	2,812,026		3,080,450		3,154,405		3,229,541		3,306,735	
Information Management	1,331,120	1,347,412		1,372,712		1,402,386		1,432,733		1,463,755	
TOTAL EXPENDITURES	**$ 4,723,938**	**$ 5,329,007**	**12.8%**	**$ 5,641,254**	**5.9%**	**$ 5,767,617**	**2.2%**	**$ 5,896,364**	**2.2%**	**$ 6,028,386**	**2.2%**

METRO VANCOUVER REGIONAL DISTRICT
PROJECT DELIVERY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Recover from Capital Programs	$ 10,840,173	$ 20,769,909	91.6%	$ 24,712,484	19.0%	$ 26,251,103	6.2%	$ 27,458,819	4.6%	$ 29,196,150	6.3%
Allocated to Functional Departments	8,854,730	12,103,365	36.7%	17,205,395		17,951,063		18,069,723		18,108,535	
TOTAL REVENUES	**$ 19,694,903**	**$ 32,873,274**	**66.9%**	**$ 41,917,879**	**27.5%**	**$ 44,202,166**	**5.4%**	**$ 45,528,542**	**3.0%**	**$ 47,304,685**	**3.9%**
EXPENDITURES											
Operating Programs:											
High Value, Risk and Consequence Projects											
Annacis WWTP Stage 5 Expansion	$ 1,239,116	$ 1,657,626		$ 1,760,890		$ 1,788,027		$ 1,815,584		$ 1,843,974	
Biosolids Dryer	-	17,200		698,526		714,948		731,954		749,249	
Coquitlam Water Supply Project	1,371,896	1,523,331		1,966,605		2,192,332		2,427,903		2,813,998	
Iona Island WWTP	1,850,691	2,675,342		3,608,930		4,031,537		4,290,940		4,909,361	
North Shore WWTP	1,815,803	1,649,883		1,682,722		1,722,920		1,762,934		1,805,088	
Northwest Langley WWTP	1,773,825	2,263,474		2,228,703		2,282,044		2,337,001		2,392,298	
Tunneling Project A	2,075,342	2,908,408		3,137,147		3,519,884		3,605,305		3,692,686	
	10,126,673	12,695,264	25.4%	15,083,523	18.8%	16,251,692	7.7%	16,971,621	4.4%	18,206,654	7.3%
Project Controls and Commercial	1,427,001	6,875,949	380.0%	7,923,121	15.2%	8,095,628	2.2%	8,269,976	2.2%	8,446,680	2.1%
Regulatory	-	1,198,696	0.0%	1,705,840	42.3%	1,903,783	11.6%	2,217,222	16.5%	2,542,816	14.7%
Project Management Office											
Integrated Asset Management	3,969,469	3,811,069		4,413,663		4,678,230		4,867,197		4,948,890	
Project and Portfolio Management	1,314,466	3,901,583		6,011,616		5,849,179		5,830,156		5,833,084	
Quality Management	-	1,584,482		2,765,827		2,977,825		3,039,060		3,101,712	
Administration and Department Support	1,475,170	984,987		1,299,245		1,320,519		1,341,093		1,364,366	
	6,759,105	10,282,121	52.1%	14,490,351	40.9%	14,825,753	2.3%	15,077,506	1.7%	15,248,052	1.1%
Administration and Department Support	611,976	1,089,337	78.0%	1,049,561	(3.7%)	1,071,054	2.0%	1,092,631	2.0%	1,115,013	2.0%
Allocation of Centralized Support Costs	770,148	731,907	(5.0%)	1,665,483	130.0%	2,054,256	23.3%	1,899,586	(7.5%)	1,745,470	(8.1%)
TOTAL EXPENDITURES	**$ 19,694,903**	**$ 32,873,274**	**66.9%**	**$ 41,917,879**	**27.5%**	**$ 44,202,166**	**5.4%**	**$ 45,528,542**	**3.0%**	**$ 47,304,685**	**3.9%**
ALLOCATED TO FUNCTIONAL DEPARTMENTS											
Water Services	$ 2,889,566	$ 4,073,330	41.0%	$ 5,415,922	33.0%	$ 5,650,644	4.3%	$ 5,687,996	0.7%	$ 5,700,215	0.2%
Liquid Waste Services	5,082,413	7,590,456	49.3%	10,092,313	33.0%	10,529,706	4.3%	10,599,309	0.7%	10,622,075	0.2%
Solid Waste Services	327,502	439,579	34.2%	584,467	33.0%	609,797	4.3%	613,828	0.7%	615,146	0.2%
Housing	388,442	-	(100.0%)	933,341	N/A	973,791	4.3%	980,228	0.7%	982,333	0.2%
Regional Parks	166,807	-	(100.0%)	179,352	N/A	187,125	4.3%	188,362	0.7%	188,766	0.2%
	$ 8,854,730	**$ 12,103,365**	**36.7%**	**$ 17,205,395**	**42.2%**	**$ 17,951,063**	**4.3%**	**$ 18,069,723**	**0.7%**	**$ 18,108,535**	**0.2%**

INFORMATION TECHNOLOGY

Description of services
Information Technology is centralized service providing support to all business activities of Metro Vancouver's entities. This service includes management and operations of the Corporate Data Center, the network environment, cyber-security and management of digital asset. The team is also responsible for the management and technical oversight of software programs required to provide core service to the region.

Strategic directions and high level goals supported
Information Technology supports the *Board Strategic Plan's* direction to strengthen the *Regional Federation* by providing organization-wide support services for both Metro Vancouver the region and organization. This includes delivering Information Technology Planning, Systems and Infrastructure.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Information technology (IT) expenditures (operating) as a percent of total corporate expenditures	Gartner Group: 2021 Benchmark for Local Government: 3.5% 2020: 1.9	2021 projected: 2.8%	3.5%
IT staff as % of staff supported	Gartner Group: 2021 Benchmark for Local Government: 4.0% 2020: 3.69	2021 projected: 3.7%	3.8%

2022 Key Actions

- Implement a new system to integrate, training (including safety, technical and HR), the employee lifecycle, performance reviews and talent management through an Integrated Talent Management System.
- Supporting new working alone system.
- Create and leverage a GIS portal that will allow public and private access to data.
- Support Metro Vancouver's regulatory work by enhancing software systems.
- Improve enterprise system and data integration through the design and implementation of a unified corporate data and enterprise system architecture.
- Continue the expansion and use of the MetroLytics Corporate Reporting system across enterprise systems.
- Support PDE in the implementation of an enterprise asset and work (EAM) management system.
- Develop an integration platform to enable improved data integration between systems.
- Configure enterprise systems for use on mobile systems and access in the field.
- Implement a corporate scheduling system to assist with work order creation and timesheet maintenance.
- Implement an eDiscovery tool to improve searching and access to corporate documents.
- Implement and integrate a detailed Project Management software solution and Service Request software.

- Continue development of the IT Project Management Office and align processes with the corporate PMO within PDE.
- Leveraging tablets and other mobility tools for field staff.
- Implement corporate reporting and system integration tools.
- Begin implementation of the Utility Asset Management system.
- Continue the migration to Metro Vancouver private cloud including GIS, SharePoint and Asset Management.
- Add mobile functionality for systems migrated to Metro Cloud.
- Improve working from home tools and processes.

CORPORATE PROJECTS & FACILITIES

Description of services

Corporate Projects and Facilities is a service providing support to all business activities of Metro Vancouver's entities. This includes the management of Metro Tower III, management of tenants and the maintenance of the building.

Strategic directions and high level goals supported

Corporate Projects and Facilities supports the *Board Strategic Plan's* direction to strengthen the *Regional Federation* by providing organization-wide support services for Metro Vancouver the organization. This includes support of the Corporate Head Office facility.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Building Operations MTIII Energy Star rating (overall building efficiency: electricity, water & gas – minimum 90% to meet Leed Platinum Building status).	2020 92%	2021 YTD 87%	>=90%

2022 Key Actions

- Implement new corporate facilities plan with office standards to support potential remote working model.
- Plan and implement building restack to accommodate growth.
- Further enhance board and committee rooms to accommodate virtual/in-person meetings.

CORPORATE SAFETY

Description of services

Corporate Safety is responsible for the strategic direction and management oversight of Metro Vancouver's workplace health and safety program. This includes overseeing the delivery of Metro Vancouver's health and safety training and development, safety prevention efforts, safety investigations, OHS regulatory compliance, acting as the health and safety resource for Metro Vancouver's business units, providing guidance and direction in the areas of safety management systems, providing industrial hygiene, ergonomics, risk assessment, and WorksafeBC claims management.

Strategic directions and high level goals supported

Corporate Safety supports the *Board Strategic Plan's* direction to strengthen the *Regional Federation* by providing organization-wide support services for Metro Vancouver. This includes delivering safety programs and support through ongoing safety guidance and training, continuous improvement of the Safety Management System, and promotion of a strong safety culture in an effort to reduce injury and illness in the workplace.

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Certificate of Recognition (COR) audit score	MV 3-year average (2018-20): 90.6**%** 2020: 91% 2019: 90% 2018: 91%	2021 Audit commences	>90% (80% is pass)
Average hours per employee of safety training (TFR & FTR)	MV 3-year average (2018-20): 12.2 2020: 9.2 2019: 15.1 2018: 12.3	YTD: 3.3	> 10
Percentage of workforce receiving safety training (FTR)	MV 3-year average (2018-20): 64**%** 2020: 90 % 2019: 55% 2018: 46%	YTD: 28%	>40%
Time-loss incidents	MV 3-year average (2018-20): 32.3 2020: 32 2019: 29 2018: 36	YTD: 7	0

2022 Key Actions

Improve Safety Management System Documentation

- Contractor management: continue with initiative regarding safety documentation review for pre-qualification.
- Improve access to current hazmat inventories (asbestos and lead) through the new Hazmat 360 software tool.
- Revise existing key Corporate Safety Management Systems Standards.

Prevention Initiatives for Workers and Supervisors

- Enhancement of new employee safety onboarding – training, documentation and follow-up.
- Expand supervisory development training in the area of safety.
- Implement new working alone software and technology (to be purchased in 2021).
- Motor Vehicle Incident Reduction Initiative.
- Expand the offerings of Corporate Safety refresher training courses.
- Confined Space Entry and related Alternative Measures Improvements.

Promote Safe Work Culture

- Engage WSBC for MV COR safety audit and implement appropriate improvements based on audit.
- MV internal stakeholder engagement through increased and formalized field safety inspections and audits.

SECURITY AND EMERGENCY MANAGEMENT

Description of services

Security and Emergency Management is a centralized service providing leadership, strategic planning and support to Metro Vancouver. The Security Program provides Corporate level security services for Metro Vancouver. The Emergency Management Program provides threat identification, risk assessments, vulnerability analyses, policies, plans and procedures to ensure the preparedness and business recovery of all Metro Vancouver facilities and staff in response to major emergencies. This also includes identification of the Security and Emergency Management regulatory training required for disaster prevention, mitigation and recovery from emergencies or disasters.

Security and Emergency Management is also responsible for providing oversight to 9-1-1 Emergency Telephone Service, Regional Emergency Management and the Sasamat Fire Protection Service.

Strategic directions and high level goals supported

Security and Emergency Management supports the *Board Strategic Plan's* direction to strengthen the *Regional Federation* by providing organization-wide support services for Metro Vancouver. This includes delivering Regional, Corporate and Electoral Area A emergency management and Corporate security.

Performance indicators

Security and Emergency Management have historically not provided performance indicators.

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Activation of an annual mock emergency exercise	1	0	1 (planned)

2022 Key Actions

- Continue to review and revise Security and Emergency Management service delivery.
- Continue to conduct site security assessments.

METROFLEET

Description of services
MetroFleet is a centralized service that provides lifecycle management of fleet assets and fleet support to all Metro Vancouver entities. The responsibilities of MetroFleet include fleet lifecycle asset management, regulatory compliance, development and implementation of green fleet initiatives, procurement and disposal, leasing and rentals, maintenance, warranty recovery, insurance and fuel management, and vehicle charge out rate allocation

Strategic directions and high level goals supported
MetroFleet supports the *Board Strategic Plan's* strategic direction to strengthen the *Regional Federation* by providing organization-wide support services as well as to take leadership on *Air Quality and Climate Change*. This includes ensuring staff and leaders have the resources and assets they require in order to deliver on goals, while looking for opportunities to reduce our impact on the environment in accordance with the Board Strategic Plan.

Board Strategic Plan – Regional Federation

Strengthening Our Livable Region

- Continue to promote regional approach on climate action to all Metro Vancouver functions, including both mitigation and adaptation, through Climate 2050.

Ensuring Financial Sustainability

- Develop and implement a financial framework that serves as the foundation for affordable service provision.

Air Quality and Climate Change

- Include actions that will facilitate the transition to clean, renewable sources of fuel in transportation and in energy provision.
- Expand opportunities for greater use if zero-emission vehicles in the corporate fleet.
- Ensure that Metro Vancouver asset management policies incorporate climate change adaptation actions.

Performance indicators

Indicator	Historical performance*	Current Performance	2022 Performance Objective
Vehicle/Equipment Capital Purchases	$1.0M to $4.2M	$1.0M	$5.5M
Number of new commissioned units	N/A	30 units	55 to 70 units

*2017 to 2020 actuals

2022 Key Actions

Improve Business Intelligence

- Stabilize and optimize data capture and flow from newly implemented Fleet Asset Management System.
- Explore integration with other database systems to improve and analyze data.

Explore Environmentally Sustainable Initiatives

- Explore and develop reporting and tracking tools for energy utilization, and greenhouse gas emission data.
- Explore and develop Fleet Climate Action Plan.

EXTERNAL RELATIONS

Description of services

External Relations is a centralized support service that provides support to all business activities of the Metro Vancouver entities. This support includes intergovernment relations, media relations, issues management, strategic communications, community engagement, brand management, multi-media asset development, website development and management, and development of communication campaigns to support key corporate areas (such as water conservation and waste reduction).

In addition to communications and engagement initiatives, the External Relations department leads and administers various initiatives under the General Government function, including Zero Waste collaboration initiatives (National Zero Waste Council, Zero Waste Conference, Circular Economy), the Leadership and Engagement International Program, and Regional Culture.

The support and leadership provided by External Relations is guided by four key objectives:

- Increase public awareness, understanding and alignment with Metro Vancouver services and policies;
- Enhance communication, engagement and collaboration with member jurisdictions;
- Develop and implement engagement strategies for infrastructure projects and regional policy and planning initiatives; and
- Engage other orders of government and their agencies in support of regional priorities.

Strategic directions and high level goals supported

Fostering collaboration and engagement

- Enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts and key stakeholders on a range of initiatives that will ensure a livable, prosperous and resilient region
- Improve public and media understanding of the role of local government
- Continue to build effective working relationships with key stakeholders
- Facilitate collaboration among member jurisdictions to create efficiencies and improve alignment between local government policies and actions with those of Metro Vancouver
- Exercise Metro Vancouver's role as convenor to bring government (local and other orders of government), businesses and their associations, community, and academic experts together to share ideas and solutions on regional priorities and initiatives

Increasing public awareness, understanding and alignment with Metro Vancouver services and policies

- Research, develop and implement social marketing and behavior change campaigns to meet resource management objectives related to waste management and achieving zero waste, water conservation, and liquid waste management and source control.

- Engage and connect with residents and stakeholders to support the development of long-term management plans, including Metro 2050, Climate 2050, Regional Parks Plan, Integrated Liquid Waste Management Plan, Solid Waste Management Plan, and Drinking Water Conservation Plan.
- Support the acceleration of actions to address climate change through education and engagement with the public on the science of climate change, its implications on the Metro Vancouver region, and the scope of actions required to reduce greenhouse gas emissions and adapt to the changes already triggered by climate change.
- Develop and implement communication and engagement strategies to foster understanding and facilitate input from stakeholders and residents on Metro Vancouver policies and plans across all service areas to advance resilience of built and natural infrastructure and to improve our institutional capacity to manage shocks and stresses.
- Advance initiatives aligned with a transformation to a circular economy;
    - Encourage innovation in the delivery of Metro Vancouver services that will contribute to the region's resilience and prosperity through clean technology and circular economy solutions;
    - Work with members, the provincial government, and the federal government on strategies to reduce single-use items and other consumer products
    - Utilize the potential of the National Zero Waste Council and the annual Zero Waste Conference to promote the importance of waste prevention and the value of transitioning to a circular economy;
    - Facilitate cross-sector collaboration to design waste out of products and packaging and to harmonize policies across Canadian jurisdictions that will both reduce waste and create economies of scale in remanufacturing opportunities

Intergovernment Relations

- Pursue partnership funding for investments in critical infrastructure projects with regional benefit;
- Continue to work with provincial and federal governments to access programs that will generate new affordable housing and support upgrading existing rental units to be more energy efficient;
- Work with the provincial government and key stakeholders to expand the products included in extended producer responsibility (EPR) programs;
- Engage with provincial and federal governments and First Nations on specific actions to reduce greenhouse gas emissions and adapt to climate change;
- Pursue partnerships with other orders of government to fund innovative projects that will generate clean, renewable sources of energy from Metro Vancouver utilities.
- Maintain and create venues for sharing information on funding applications and the consideration of regional priorities

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Number of website page visits Metro Vancouver website	2020: 4,806,026 2019: 4,361,143 2018: 4,145,216	Projected for 2021: 5,289,466 *(10.06 % increase)* July 2021: 2,644,733	5,553,950 *(5% increase)*
Number of video views (YouTube, Facebook, Metro Vancouver website – Vimeo)	2020: 6,388,400 2019: 4,153,800 2018: 3,970,419	Projected for 2021: 7,265,556 *(13.7 % increase)* July 2021: 4,238,241	7,635,556 (5% increase)
Number of mailing lists subscribers – 26 lists (2018), 32 lists (2019), 43 lists (2020), 32 lists (2021 – due to consolidation)	2020: 49,882 2019: 46,507 2018: 46,420	July 2021: 53,039 *(6.32% increase)*	55,700 (5% increase)
Number of Metro Vancouver followers on Twitter	2020: 34,162 2019: 31,234 2018: 30,000	July 2021: 34,500 *(1% increase)*	36,250 (5% increase)
Number of Metro Vancouver followers on Facebook	2020: 39,370 2019: 30,687 2018: 18,329	July 2021: 47,031 *(19.4% increase)*	49,400 (5% increase)

2022 Key Actions

- Engage with the public, business communities and other orders of government on Metro Vancouver strategic priorities through proactive media engagement, social media presence, and the delivery of the Chair Update and Metro Vancouver Update newsletters
- Implement and continue to refine Metro Vancouver's intergovernment relations strategy to ensure effective relationships with federal/provincial/local government and other stakeholders in support of Metro Vancouver priorities and interagency issues
- Increase awareness of the urgent need for water conservation and the quality and source of Metro Vancouver water, including lawn watering regulations and through communications activities such as the We Love Water, Water Wagon and Grow Green campaigns)
- Educate and build awareness and behavior change around liquid waste management through regional campaigns focused on source control and contaminants of emerging concern (including Unflushables, Wipe It Green Bin It, and Microfibres) and continue strategic communications around biosolids
- Champion waste reduction and prevention through zero waste communications and behavior change campaigns (including Create Memories Not Garbage, Superhabits (single-use items); Waste in its Place (illegal dumping), Think Thrice (textiles), More than Meets the Eyes (electronics recycling), Food Isn't Garbage, Love Food Hate Waste);
- Provide leadership and secretariat to National Zero Waste Council, 2022 Zero Waste Conference, Love Food Hate Waste Canada

- Develop and deliver communications and engagement strategies in support of service area priorities and programs, including project delivery, liquid waste, water, solid waste, climate change, air quality, regional parks, housing. Key engagement prioritizes over 2022 include Climate 2050, Metro 2050, Regional Parks Plan, Liquid Waste Management Plan, Solid Waste Management Plan, Drinking Water Conservation Plan, and exploration of DCCs to fund growth-driven regional water infrastructure.
- Develop and deliver communications and engagement strategies in support of Metro Vancouver's infrastructure projects, including major projects like the North Shore Wastewater Treatment Plant, Langley Wastewater Treatment Plant, Coquitlam Water Main, Coquitlam Intake Number 2, Stanley Park Water Tunnel, and Iona Island Wastewater Treatment Plant
- Support the delivery of existing plans through communications and ongoing engagement, such as the 10-Year Housing Plan, Clean Air Plan, Metro 2040
- Deliver and enhance K-12 program activities in alignment with Metro Vancouver priorities and initiatives
- Produce and distribute video content and programming (the Sustainable Region, Metro Vancouver Close Up, Metro Moments, Chat with the Chair, etc.) and distribute to community television stations
- Support launch, branding and communication / marketing of Invest Vancouver
- Leadership to the Metro Vancouver brand (website, design, signage, sub-branding, etc.)
- Host regional Council of Councils on key Metro Vancouver priorities
- Host Metro Vancouver presence at the 2022 Pacific National Exhibition

FINANCIAL SERVICES

Description of services

Financial Services is responsible for providing support services pertaining to accounting, payroll, financial planning, cash and debt management, procurement, risk management, inventory control, real estate acquisition, disposal and management, as well as process reviews which assists departments in achieving their capital and operational objectives. In addition, the department has a fiduciary/stewardship role regarding developing and maintaining appropriate financial policies, processes and procedures to ensure the overall financial sustainability of the Metro Vancouver Districts and Housing Corporation, safeguarding of the corporation's assets and compliance with ongoing finance-related statutory requirements and corporate policies.

Strategic directions and high level goals supported

Use value for service to guide Metro Vancouver operations and service provisions.

- Develop fiscal policy using equity and affordability criteria.
- Ensure that opportunities for increased efficiencies are evaluated and implemented

Financial Goals:

- Ensure the long-term financial sustainability of the Metro Vancouver Districts and Housing Corporation.
- Safeguard/steward the corporation's assets.
- Provide and enhance service to both internal and external customers.
- Provide support to Metro Vancouver operations in achieving their management plan goals.

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Current ratio (current assets / current liabilities)	Historical average for BC municipalities 3.8 to 1	2020 Year End: 2.8 to 1	Minimum 3.8 to 1
Debt service costs / total revenue	Province of BC threshold 25%	Projected 2021: 18.1%	<20%
Operating Surplus Ratio (operating surplus as a % of own source revenues)	0 - 15%	Projected 2021: 2.3%	<5%

2022 key actions

Financial Planning and Operations

- Automation projects leveraging a financial reporting system to create efficiencies in the processes and reporting that require significant manual intervention.
- Build processes to obtain the GFOA budget award, in addition to the annual report award package submitted in 2021.
- Continue to enhance modelling capacity to support the increasing needs of the Project Delivery, and Utility areas.
- Review Financial policy suite across Metro Vancouver, looking to better align policies with the evolving needs of an increasing capital program and associated costs.
- Complete KPI work started in 2021, including measuring identified KPI's and reporting on these to CPC, establishing a baseline for monitoring and management.
- Work with partners in Capital Planning and Utilities to continue to evolve Questica Capital to support the total project budget approach to Board approval.
- Continue to align service levels across the various client support departments.
- Provide resourcing and expertise to Corporate Services on the Enterprise Asset Management (EAM) project, and Metrolytics project.

Purchasing and Risk Management

- Finalize the implementation and improvements stemming from the Procurement Review with a focus on Category Management and responding to the challenges of the capital program.
- Continue legal review and updates of all bid/contract templates.
- Continue the overall review of inventory/stores focusing on functionality and process improvements.
- Develop effective KPI's for measuring and reporting to CPC, establishing a baseline for future monitoring and management.
- Build upon the pilot program for Materials Resource Planning (MRP) started at Iona by expanding the data collection to include Annacis WWTP and Seymour Capilano Treatment Plant.
- Continue the Enterprise Risk Management review initiated in Q3 of 2021.
- Undertake a review of Corporate Insurance coverage.
- Complete the Contract / Vendor management tool through *Bids&Tenders*.
- Identify opportunities for strategic sourcing.

Properties

- Review processes necessary for GVWD/GVS&DD to provide consent to third parties in order to perform proximal works near its infrastructure or use of rights of way held by GVWD/GVS&DD.
- Train staff and implement anticipated changes to the Procurement and Real Property Contracting Authority (Board Policy).
- Develop effective KPI's for measuring and reporting to CPC, establishing a baseline for future monitoring and management.
- Train staff and implement new contract templates from the Legal Forms Renewal Project.
- Monitor staff competency in utilizing the new Property Interests Information System.
- Develop a corporate-wide plan for strategic property acquisitions.

HUMAN RESOURCES

Description of services

Human Resources is a corporate service providing support to all business activities of Metro Vancouver's entities. The support provided through Human Resources is two-fold: it develops and delivers programs that support both Metro Vancouver's high level goals; and it works with client departments to effectively manage, attract, develop and retain capacity in the achievement of their goals and objectives. There are three components within HR that deliver day-to-day services to support the operations of the organization, along with strategic initiatives to address emerging trends, and business opportunities: Talent Management and Organization Development, Employee and Labour Relations, and HR Systems, Benefits & Metrics.

Strategic directions and high level goals supported

Human Resources supports the *Board Strategic Plan's* direction to strengthen the *Regional Federation* by providing organization-wide support services for Metro Vancouver. This includes ensuring staff and leaders have the talent, resources, knowledge and skills, they require in order to deliver on goals in accordance with the Board Strategic Plan.

Performance indicators

Indicator	Historical and/or industry benchmark	Current Performance	2022 Performance Objective
Number of External Applicants[1]	**MV 3-year average (2018-20): 6,450** 2020: 7,008 2019: 5,976 2018: 6,366	2021 YTD: 5,150 Objective: 4,500	6,500
Percentage of workforce receiving training (FTR, excludes safety training)	**MV 3-year average (2018-20): 69%** 2020: 65% 2019: 68% 2018: 75%	2021 YTD: 49% Objective 60%	65%
Participation in MetroFit Health and Wellness Programs[2]	**MV 3-year average (2018-20): 2,126** 2020: 1,992 2019: 1,851 2018: 2,536	2021 YTD: 1,262 Objective: 2,500	2,000

[1] One applicant may apply for multiple vacancies over the course of a year. Formerly referenced as "unique" job applicants.
[2] Employees are able to participate/register for multiple programs.

2022 Key Actions

- Further implement a strategy to embed Diversity and Inclusion initiatives into all relevant MV programs.
- Continue partnership with colleges/universities to create a talent pipeline and continue to formalize a Water and Wastewater Operator Certification/Diploma program in partnership with BCIT and EOCP.
- Implement new Talent Management and Learning Management Systems.
- Prepare for and commence Collective Bargaining.
- Continue enhancing return to work supports and accommodations.
- Creation of a formalized People Plan for the organization.

LEGAL SERVICES AND INDIGENOUS RELATIONS

Indigenous Relations

2022 WORK PLAN

Description of services

Indigenous Relations provides information, advice and support to Metro Vancouver on First Nations' interests and issues, and analyzes how such First Nations' interests and issues may affect corporate programs, processes and projects. Indigenous Relations also responds to pan-municipal First Nation issues and represents and supports Metro Vancouver local government interests at treaty negotiation tables as well as at provincial and federal venues.

Strategic directions and high level goals supported

Board Strategic Plan, 2019-2022:

Fostering Collaboration and Engagement

- Enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders.
  - 4.2 Strengthen relationships with First Nations by exploring new pathways to reconciliation, such as increased engagement, dialogue, and collaboration between Metro Vancouver and First Nations in the region.

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Number of local government interests represented at treaty table meetings.	MV 4-year average (2017-2020) 6	Projected 2021: 10	12
Number of special Indigenous Relations events hosted by Metro Vancouver (e.g. Community to Community Forums, workshops, lunch and learns)	MV 4-year average (2017-2020) 3	Projected 2021: 4	5
Number of bilateral meetings between Metro Vancouver and the nine area First Nations with lands	MV 4-year average (2017-2020) 30	Projected 2021: 75	100
Total requests for information or advice related to First Nations and/or Indigenous Relations	MV 4-year average (2017-2020) 1,350	Projected 2021: 3,600	5,000

2022 key actions

- Support ongoing First Nation engagement efforts (including agreements) on capital and construction projects such as North West Langley Wastewater Treatment Plant upgrade, Iona Island Wastewater Treatment Plant upgrade, Coquitlam Lake Water Supply project, Coquitlam Main Water project, and Widgeon Marsh Regional Park development.
- Develop an archaeological management approach for Metro Vancouver including: the creation of a strategic policy; the provision of education as well as Chance Find and cultural awareness training sessions; the conduct of project reviews for archaeological potential; collaboration with First Nations and local governments; and increased internal capacity.
- Host a Regional Gathering involving members of the Indigenous Relations Committee, MVRD Board, and respective First Nation Chiefs and Councils from the 10 First Nation communities in the region.
- Host an annual event (e.g. workshop) involving staff of First Nations and local governments on a topical issue in local government/Indigenous relations.
- Host and/or participate in reconciliation activities (e.g. National Indigenous Peoples Day on June 21 and Orange Shirt Day on September 30).
- Participate in active treaty table meetings in the region as part of the provincial negotiating team.
- Provide training sessions for Metro Vancouver staff on corporate policy related to sharing information and engagement with First Nations on construction projects, as well as the Board's procurement policy that includes economic opportunities for First Nations and more use of their services (e.g. archaeological) on Metro Vancouver projects.
- Respond to the increasing number of internal requests: including the provision of advice on information sharing and engagement with First Nations; the identification of First Nation economic and procurement opportunities; as well as the coordination of, and participation in, meetings with First Nations involving staff from across the Metro Vancouver organization.
- Complete the video series of the 10 First Nations in the region.
- Complete an annual review/update of Metro Vancouver's *Guide to Indigenous Nations.*

PROJECT DELIVERY
Operating Budget (PMO)

Description of services
Metro Vancouver provides critical services to the Metro Vancouver region through all four of its legal entities. The Majority of these services rely on the existence and functionality of capital infrastructure assets to perform adequately. The Project Delivery Department is responsible delivering the highest value, consequence and risk projects for Water and Liquid Waste Services (funded through Liquid Waste and Water capital budgets) as well as leading the creation, evolution, development and implementation of centers of expertise for project management, organizational quality management and asset management across Metro Vancouver (allocated through operating budgets as centralized support).

- **Project and Portfolio Management** – A centralized Project Management group is a net new function within Metro Vancouver with mandate and deliverables requested by the Board and Committees, following recommendations identified by the independent review by KPMG, completed in 2020. The mandate includes the development and implementation of a corporate project management framework, designing and delivering PMO related training and development, and expert advisory services, to support Metro Vancouver's >$7B five-year capital plan. The mandate also includes supporting development, implementation and oversight of related IT systems to enable data-driven decision making. The team will continue the centralized function of managing capital planning activities for Liquid Waste, Solid Waste, Water, and Project Delivery departments and identify and implement improvements to processes focusing on creating consistency in capital planning and portfolio decision support.

- **Quality Management** – A centralized organizational quality management team is a net new function within Metro Vancouver responsible for developing and implementing a corporate Quality Management Program to comply with the Province of BC's new Professional Governance Act and new requirements for regulation of firms that are engaged in the practice of professional engineering and geoscience, including reporting regularly to the CAO and GMs on progress towards compliance, audit-readiness and liability exposure. The team actively collaborates with local governments and other peer organizations in BC (e.g. BCHydro, Translink, Ministry of Transportation and Infrastructure, City of Vancouver) and throughout North America to enable best practices, continuous improvement and benchmarking.

- **Integrated Asset Management** – With one of the largest and most complex asset portfolios in Canada, Metro Vancouver has been progressing its asset management practices for over ten years with support and guidance from industry experts and comparable large utilities across the globe to enable best practice day-to-day asset management and long term capital investment decision making. This work was recently centralized to better enable the advancement of this work consistent with corporate asset management policies and the guidance provided in the independent review by KPMG in 2020.

Working alongside staff across all MV departments, the Project Management Office will report regularly to senior staff and executive management as well as MV Boards and Committees on progress, especially as related to improvement areas identified in the independent review completed by KPMG in 2020.

Noting that senior staff for PMO were hired in Q2 of 2021, work plan and deliverables for 2022 will likely evolve as teams are put in place and further consultation with other departments can be completed.

Strategic directions and high level goals supported

Board Strategic Plan

- Ensure the long-term financial sustainability of the Metro Vancouver Districts and Housing Corporation.
- Safeguard/steward the corporation's assets.
    - Integrated Asset Management's focus is to ensure the infrastructure and its continued investment are maintained and implemented efficiently to minimize rate payer's burden.
- Provide and enhance service to both internal and external customers.
- Provide support to Metro Vancouver operations in achieving their management plan goals.
- Ensure value for money in providing asset management knowledge and standards for engineering services and capital delivery.
    - Develop and define infrastructure capital planning using best practice asset management principles
    - Implement and refine project prioritization criteria to optimize organizational infrastructure funding allocation
    - Develop best practice asset management programs and policies

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance (as at July, 2021)	2022 performance objective
Asset inventory documented*	New	WS: 60% LWS: 60%	WS: 70% LWS: 70%
Documented asset assessment plans*	New	WS: 20% LWS: 50%	WS: 50% LWS: 70%
Stage Gate Reviews	New	Not started	100% of HVRC Projects
QMS Training Delivered	New	Not started	90% of MV's EGBC Professional Registrants, EITs and GITs attend the courses
Internal Quality Audits Performed	New	Not started	7 Audits Completed
Conformance to PGA and QMS Requirements from internal audits (~10% of projects sampled)	New	Not started	≥ 80%

*Housing, Parks and Solid Waste Services Asset Management metrics to be developed as part of the Corporate Asset Management Strategy.

2022 key actions

Project & Portfolio Management

Project Management and Specialty Advisory Services

- Project Management Practice Maturity Assessment- focus will be to identify a baseline of organizational strengths and areas of improvement in project management practices and develop a clear and concise roadmap for practices, processes, people and systems to reach desired maturity level for the organization.
- Initiate development of corporate Project Management Framework which will include methodologies, business processes, standards, tools, templates – formal development and roll-out of industry best practices in project management disciplines. Focus will be on assisting projects to improve and standardize project management planning, execution and monitoring and reporting practices.
- Stage Gate Framework – formal development and roll-out of robust, well-documented framework that will aid projects in producing quality inputs, reviews, criteria and outputs to enable transparent, well-informed, standardized and efficient decision making on projects.
- Project Classification Methodology – focus will be on development of practical criteria to enable standardized methodology for classifying capital infrastructure projects and adapting project oversight accordingly.
- External Expert Advisory Panel – Sustain panel of independent body of experts that will provide impartial expert advice and recommendations on issues identified on capital projects delivered by Project Delivery department
- Specialized Project Advisory Services – retain specialized expert advisory services in partnership with Infrastructure BC to enable improved planning and delivery of capital projects.

Capital Planning

- Capital infrastructure planning across Water Services, Liquid Waste Services, Solid Waste and Project Delivery department – focus is to provide centralized coordination and facilitation services for capital planning to deliver timely and accurate capital budget and plan for the organization
- Budget planning process for Minor Capital projects - focus is to assist projects by providing centralized coordination and facilitation of budget planning service
- 1-year, 5-year, 10-year and 30-year capital expenditure projections – focus is to coordinate, facilitate and deliver multi-year capital expenditure plans in collaboration with LWS, WS, SW, Housing and Parks.

Project Management Capacity Building and Technical Knowledge Management

- Documentation and transfer of MV-specific technical knowledge on our water and liquid waste infrastructure – both existing and new.
- Project Management Framework training program - creation and deployment of an organization-wide training program that will increase awareness, capacity, skill levels and maturity of project management practices across the organization; the program will include a mix of in-class and on-line training sessions, e-Learning modules, infographics, print materials, open houses and regular e-communication on the subject matter
- Asset Management Framework training program - creation and deployment of an organization-wide training program that will increase awareness, capacity, skill levels and maturity of asset management practices across the organization;
- Sustainable Infrastructure & Buildings Design Guide training program - creation and deployment of an organization-wide training program that will increase awareness, capacity, skill levels and maturity of sustainable infrastructure and building practices across the organization

Project & Portfolio Management Technology Planning

- Portfolio and project management system(s) Phase 1 – support Corporate Services - IT led initiative to identify needs, document business requirements, processes, and assist initial efforts to implement new tools/system(s) across the organization
- Operator Suite Learning Management System – focus will be to further develop and roll-out enhanced learning management system that houses, manages and delivers eLearning modules, technical knowledge management materials and training courses for the organization
- Questica Capital system – focus will be on further maintenance and refinement initiatives to further enhance capabilities and functionalities of the capital planning system. This will be done in close collaboration with Finance and Corporate Services -IT
- Metrolytics Capital Data Management project – Focus will be to replace use of Excel based reporting tools for Capital Planning process by building and configuring a tool that can provide automated set of reports, dashboards and supporting documentation in a timely and standardized fashion. This will be executed in close collaboration with the Corporate Services – IT

Quality Management (QM)

Organizational Quality Management

- A Quality Management System will be initiated that is compliant with the Professional Governance Act (PGA) and EGBC requirements
- Quality Management Intranet Site developed for communication and training purposes
- Establish annual Internal Quality Audit Program and a pool of Trained Quality Auditors established
    - (Note: Initial focus will be on PGA compliance. Eventually, the scope of the audit will be expanded to include Project Management Framework and QMS conformance.)
- First Internal Quality Audit on PGA Compliance completed and findings addressed

Engineering Standards

- Maintenance and Updating of Engineering Standards
- Coordination/Chair of Standards Technical Review Committee (TRC)
- Coordination/Chair Standards Steering Committee (TRC) Support
- Participate in standards technical working groups

Utility Performance Management & Benchmarking

- Balanced Scorecard
    - Providing support to LWS in continued development and administration
    - Investigate and support development of Water Services balanced scorecard tools and processes, where appropriate
- WERF/LIFT Program
    - Continue to lead MV's engagement in collaborating with close to 20 utilities in North America and Europe on utility business process improvements
- Benchmarking, including the facilitation of:
    - American Water Works Association (AWWA) utility data benchmarking – North American utilities focus
    - Water Services Association of Australia (WSAA) business process benchmarking – international focus

Integrated Asset Management

Asset Management Strategies and Services

- Development of a Corporate Asset Management Strategy and implementation plan.
- Lead the development of State of the Assets reports for Water and Liquid Waste.
- Development of 20 asset assessment plans (including over 100 assessment programs) for remaining liquid waste and water asset classes (Over 2022-26).
- Implementation of 15 asset risk assessment frameworks for liquid waste and water assets (Over 2022-2026).
- Development of 20 asset management plans (facility level) for water and liquid waste assets (Over 2022-2026).
- Provision of asset management expert advisory services, knowledge transfer and support across Metro Vancouver.

Asset Management Systems

- Development and implementation of business processes and initiatives to improve the coverage, quality, integrity, and confidence in, key asset data attributes for water and liquid waste assets to enable data driven decision making. Specifically:
    - Identification, review and validation of field-verified asset data for LWS and WS assets.
    - Implementation of corporate asset hierarchy to enter asset data for LWS and WS.
    - Implementation of and training on Metro Asset Tool (MAT) to adequately identify, collect and store asset data from infrastructure projects.
    - Improve contract specifications to ensure accurate and complete asset data are specified that can be collected by the Metro Asset Tool (MAT).
    - Development, implementation and maintenance of other asset management enabling technologies/systems/tools such as linear asset risk assessment tool (in GIS), linear asset replacement cost model (in GIS), etc.
- Continue to provide daily oversight, management, technical expertise, and continuous improvement to ensure uninterrupted availability of the InforEAM asset and work management system to utilities O&M staff and others.
- Participation in IT's Digital Strategy initiative to improve the and better integrate the various enterprise systems to effectively support various inter-related business functions, such as HR, purchasing, asset and work management.

PROJECT DELIVERY
Project Controls

Description of Services

Metro Vancouver provides critical services to the Metro Vancouver region through all four of its legal entities. The majority of these services rely on the existence and functionality of infrastructure assets to perform adequately. To deliver project excellence consistently, Metro Vancouver needs to have:

1) Best in Class standardized procedures to establish expectations
2) Knowledgeable and skilled workforce to effectively implement them

The Project Controls Division of Project Delivery is a new center of expertise created within the Project Delivery department in Q2 2021 (date of first hire).

Drawing from experience and industry best practices, the Project Controls Division within Project Delivery will help support the delivery of competitive and predictable planning and execution of all its major projects in the following areas of expertise:

- Cost Estimating
- Planning and Scheduling
- Cost and Schedule Control
- Risk Management
- Project Benchmarking

Working alongside project managers within Project Delivery, the Project Controls Division will implement the Project Controls Procedures to deliver technical excellence on projects, ensuring alignment of contractors' practices with Metro Vancouver's best practices.

Strategic Directions and High Level Goals Supported

Ensure value for money for Metro Vancouver by:

- Applying the Cost Estimating Framework as well as other Project Controls best practices.
- Ensuring long-term financial sustainability for Metro Vancouver by creating a robust and transparent process in developing risk-adjusted project cost estimates and schedules.
- Enabling confident and effective decision-making, by providing timely and high quality cost, schedule, and risk data.
- Realizing significant cost savings through the reduction of external consulting services relating to specialized areas of expertise.
- Building Metro Vancouver's capability through training and coaching of staff on Project Controls best practices, and helping apply these to major projects.
- Encouraging and facilitating continuous improvement through data capture and advanced analytics of project information

Performance Indicators

Indicator	Historical and/or industry benchmark	Current performance (as at July, 2021)	2022 performance objective
Cost Estimating Framework deployment to HVRC Projects	New Measure	N/A	100%
Pilot project on Project Controls digitalization	New Measure	N/A	100%

2022 Key Actions

Technical Excellence:

- Formal roll-out of best practice procedures for all the Project Controls disciplines – Cost Estimating, Planning & Scheduling, Cost & Schedule Control, Risk Management, and Benchmarking.
    - Cost Estimating – focus will be to assist HVRC Projects with development of robust, realistic and well documented cost estimates. This includes a transparent development of contingency and risk reserves, to reach a P80 level of funding.
    - Project Planning & Scheduling – focus will be to ensure integration of project stakeholders and that proper logic, interdependencies, durations, resources and constraints are incorporated.
    - Cost and Schedule Control – focus will be on clear establishment of cost and schedule baselines, stringent management of project changes, formal contingency drawdown process, and accurate forecasting of cost and schedule to project completion.
    - Risk Management – focus will be on active and continuous risk and opportunities management, to help the HVRC Projects successfully manage project delivery and protect / enhance project value.

Continuous improvement:

- Internal project benchmarking – Initiate the development of an internal cost and schedule benchmarking database, to assess HVRC Project performance against past MV projects of similar scope. Build database of useful cost and schedule metrics to assist in the Cost Estimating and Planning & Scheduling processes.
- External benchmarking – drive top-quartile performance on HVRC Projects by applying independent, high grade verification that major project costs and schedules are realistic when benchmarked against similar external projects of similar scope.

Direct Project Support:

- Direct participation on key PDE programs - NW Langley, Iona and Coquitlam Lake Water Supply, in order to effectively implement Project Controls best practices. This will ensure accountability and predictability of the project cost and schedule.

Knowledge Transfer and Internal Capability Development:

- Knowledge Transfer - Engage and coach PDE staff on Project Controls best practices by conducting in person and online training programs.
- Internal Capability Development – Implement career progression model for Project Controls, to help provide transparency of opportunities for advancement to MV employees. Build Project Controls capability within Project Delivery by cross-training individuals in various Project Controls disciplines and ensuring key project positions are staffed with MV employees.

Digitalization:

- Participate in investigating digitalization offerings that will integrate Project Controls, Finance, Procurement, and PMO, to enable better decision making of HVRC Projects through advanced analytics.

Centralized Support Program

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by the Centralized Support Program over the next 5 years.

Initiative	Description	Theme
2022 - 2026		
CORPORATE SERVICES		
Asset Management System Implementation	Purchase and install Asset Management software to enhance organization data capacity and planning support for the Utility areas and Project Delivery.	System Stewardship
Project Management System Implementation	Purchase and install Corporate Project Management system to enhance the levels of consistency in project management approach across the organization.	System Stewardship
Weigh Scale System Implementation	Replace Solid Waste Weigh Scale system to enhance customer service and improve operational efficiencies.	System Stewardship
Cyber Resilience	Cybersecurity enhancements	System Stewardship
Technology and Communication	Continue implementation of Analytics and Corporate Dashboard system to enhance corporate data driven decision making.	System Stewardship
MetroFleet	Establish fleet standardization contract to streamline and better optimize procurement, commissioning, maintenance and operating functions.	Financial Sustainability
MetroFleet	Commission standardized fleet to streamline and better optimize procurement, commissioning, maintenance and operating functions.	Financial Sustainability
Corporate Facilities	Review Electric Vehicle charging stations demand at HO and implement solutions where required and practical.	Environmental Sustainability
Strategic Planning	Refresh IPREM Strategic Plan	Financial Sustainability
Corporate Safety	Complete a comprehensive corporate safety audit, identifying key actions to improve safety across the organization.	System Stewardship

EXTERNAL RELATIONS		
Community and Stakeholder Engagement and Collaboration	Effective leadership of community engagement for LWS, WS and PDE capital projects and management plans; significant stakeholder engagement to ensure meaningful development of Metro 2050 and Climate 2050; leadership and secretariat to National Zero Waste Council and Zero Waste Conference; support to Invest Vancouver	System Stewardship Regulatory and Legislative Environment Regional Growth Environmental Sustainability Financial Sustainability
Intergovernment Relations	Build and maintain effective relationships with federal, provincial and local governments and other stakeholders in support of Metro Vancouver priorities and interagency issues, in particular the Iona Island Wastewater Treatment Program	System Stewardship Regulatory and Legislative Environmental Sustainability Financial Sustainability
Behaviour Change Campaigns and Communications Planning	Campaigns and education/awareness building efforts in support of water conservation, zero waste, source control, and air quality/climate change. Critical research, focus group testing and developing and implementing communications strategies across all departments. Convene and build relationships with member jurisdictions so they can successfully engage and collaborate on regional campaigns and priorities. K-12 schools program in support of MV priorities and BC curriculum.	Environmental Sustainability System Stewardship
Media Relations and Issues Management	Proactive media engagement and social media presence engaging public, business communities and government on Metro Vancouver strategic priorities.	Environmental Sustainability System Stewardship

EXTERNAL RELATIONS (continued)		
Brand Development & Awareness	Creation and distribution of video and community television shows about Metro Vancouver operations, issues, and policy and distribution of Metro Moments on cable specialty channels. Enhancements in web environment and usability, ensuring on-line integration with in-person events and engagements, technical and design support for major events and conferences. PNE Activation.	System Stewardship Regulatory and Legislative Regional Growth Environmental Sustainability Financial Sustainability
FINANCIAL SERVICES		
Development Cost Charges (DCC)	Continue with WS and LWS DCC program for GVWD and update rates for GVSDD in line with the planned consultation approaches..	Financial Sustainability
Automation of Key Financial Processes and Reports	Look to create efficiencies and staff time to respond to emerging issues by reducing manual processing time where practice by strategic investment in processes.	Financial Sustainability
Decision Support and Automation	Increase modelling capacity to enhance financial analysis, projection and organizational decision support.	Financial Sustainability
Purchasing Enhancement	Further enhancements to contract management for the purposes of tracking vendor performance. Initiated first stage in Material Requirement Planning. The identification of component parts and inventory control to support Facility O&M staff.	System Stewardship
HUMAN RESOURCES		
Diversity, Equity and Inclusion	Further implement a comprehensive, organization-wide Diversity, Equity and Inclusion Strategy	Regulatory and Legislative
Labour Relations, Return to Work/Accommodations	Review and deliver enhanced Labour Relations, Return to Work/Accommodation and Performance Management training to Exempt Supervisors	Regulatory and Legislative
Training and Development	Continue partnerships with colleges/universities to create a talent pipeline and continue to formalize a Water and Wastewater Operator Certificate/Diploma program in partnership with BCIT and EOCP	System Stewardship

HUMAN RESOURCES (continued)		
Technology and Communications	Implement new software to support Talent and Learning Management; delivery of new training programs to support diversity and staff development	System Stewardship
Talent Management	Create a formalized People Plan for the organization to support talent pipelines and staff growth and development, as well as Operating and Capital plans.	System Stewardship
Talent Management	Revitalize Succession Planning practices for leaders	System Stewardship
INDIGENOUS RELATIONS		
A Metro Vancouver-First Nations Regional Gathering	A forum to be co-hosted by the MVRD Board with 10 First Nation communities' elected leaders in the region; the first such meeting of its kind in the Metro Vancouver region	Environmental Sustainability
First Nations Engagement	Undertake a review of Metro Vancouver's engagement approach with First Nations	Regulatory and Legislative Environment
Climate 2050	Support First Nation engagement and participation in the implementation of the Climate 2050 issue area roadmaps	Environmental Sustainability
Sensitive Ecosystem Inventory	Support First Nation engagement in the 5-year update of the sensitive ecosystem inventory for the region	Environmental Sustainability
Climate 2050	First Nations engagement and participation in the implementation of the Climate 2050 issue area roadmaps.	Environmental Sustainability
Capital and Construction Projects	Support ongoing First Nation engagement efforts on Metro Vancouver capital and construction projects	Regional Growth
Reconciliation	Foster First Nation involvement in regional governance	Environmental Sustainability
Liquid Waste Management Plan	Support First Nation engagement and participation in the plan update	Environmental Sustainability
Solid Waste Management Plan	Support First Nation engagement and participation in the plan update	Environmental Sustainability
Project Data Portal	Preparatory work for the creation of a web-based portal for the purposes of sharing data with First Nations	Regional Growth

INDIGENOUS RELATIONS (continued)		
Archaeological Management	Develop an approach and policy for Metro Vancouver, including staff training, project reviews and collaboration with First Nations	Regulatory and Legislative Environment
A Community to Community Forum or Regional Gathering	A forum to be co-hosted by Metro Vancouver Indigenous Relations Committee with one First Nation (i.e. a Community to Community Forum) or the MVRD Board with 10 First Nation communities' elected leaders in the region (i.e. a Regional Gathering)	Environmental Sustainability
Capital and Construction Projects	Support ongoing First Nation engagement efforts on Metro Vancouver capital and construction projects	Environmental Sustainability
Project Data Portal	Development of a system for sharing project information and engaging with First Nation	Environmental Sustainability
PROJECT DELIVERY		
Corporate Asset Management Strategy	Engage industry experts to develop a Corporate Asset Management Strategy and Implementation Plan. With one of the largest and most complex asset portfolios in Canada, Metro Vancouver has been progressing its asset management practices for over ten years with support and guidance from industry experts and comparable large utilities across the globe to enable best practice day-to-day asset management and long term capital investment decision making. This work was recently centralized to better enable the advancement of this work consistent with corporate asset management policies and the guidance provided in the independent review by KPMG in 2020.	System Stewardship Financial Sustainability
Project Management Framework	Collaborative, corporate initiative led by the PPM division with assistance from the external consultants to support the development, implementation and delivery of standard project management methodologies, processes, templates and tools to be used on capital construction projects in Metro Vancouver. Focus will be on assisting projects to improve and standardize project management planning, execution, monitoring and reporting practices	Financial Sustainability

PROJECT DELIVERY (continued)		
Stage Gate Framework	Collaborative initiative to lead development and roll-out of formal, robust, well-documented framework that will aid projects in producing quality inputs, reviews, criteria and outputs to enable transparent, well-informed, standardized and efficient decision making on projects.	Financial Sustainability

Attachment 4

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - CENTRALIZED SUPPORT SERVICES

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Centralized Support Reserve	**$ 15,663,421**	**$ 15,663,421**	**$ 750,000**	**$ (5,582,735)**	**$ 264,941**	**$ 11,095,627**	**$ 6,658,410**	**$ 3,771,678**	**$ 1,768,532**	**$ 185,554**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Corporate Self Insurance Reserve	$ 1,229,381	$ 1,229,381	$ -	$ -	$ 24,588	$ 1,253,969	$ 1,279,048	$ 1,304,629	$ 1,330,722	$ 1,357,336
Corporate Fleet Reserve	21,889,696	21,889,696	-	(1,928,139)	418,513	20,380,070	19,097,221	17,821,828	16,395,474	14,855,188
Total	**$ 23,119,078**	**$ 23,119,078**	**$ -**	**$ (1,928,139)**	**$ 443,100**	**$ 21,634,039**	**$ 20,376,269**	**$ 19,126,458**	**$ 17,726,196**	**$ 16,212,524**

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Housing Committee

From: Heather McNell, General Manager, Regional Planning and Housing Services

Date: September 29, 2021 Meeting Date: October 6, 2021

Subject: **2022 - 2026 Financial Plan – Housing Planning and Policy**

RECOMMENDATION
That the Housing Committee endorse the 2022 - 2026 Financial Plan for Housing Planning and Policy as presented in the report dated September 29, 2021, titled "2022 - 2026 Financial Plan – Housing Planning and Policy", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY
The 2022 – 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region for 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

The Housing Planning and Policy function supports the development and operation of Metro Vancouver Housing Corporation affordable housing projects and implementation of the *Metro Vancouver Housing 10-Year Plan*. This function also supports and convenes member jurisdictions around housing issues and supports regional housing priorities through the provision of planning and policy resources and information, best practices research, and advocacy. Over the next five years, operating programs are increasing by $1,868,455 or an average of 5.7% per year. The increase is due to an additional $2.0M for the Contribution to Affordable Housing Development Reserve beginning in 2023.

PURPOSE
To present the 2022 – 2026 Financial Plan for the Housing Planning and Policy function for consideration by the Committee.

BACKGROUND
Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021, a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles

that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Housing Planning and Policy Service and presents the 2022 provisional annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

HOUSING PLANNING AND POLICY PROGRAM

The Housing Planning and Policy function contributes to processes and decisions related to regional housing planning and research, supporting the development of affordable housing projects through implementation of the *Metro Vancouver Housing 10-Year Plan* and *Metro 2050*, coordinating the Regional Planning Advisory Committee – Housing Subcommittee and secure vacant lands owned by local governments for new affordable housing.

The Housing Planning and Policy Service initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan* and *Metro Vancouver Housing 10-Year Plan*, specifically:

- Implementation of the Metro Vancouver 10-Year Housing Plan to support affordable housing and engaged communities in the region
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of Metro Vancouver Housing Corporation
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers
- Support healthy engaged communities, preserve existing housing to maintain affordability and grow strategically through redevelopment and new developments

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plan for Housing Planning and Policy is presented in this report. Within the Housing Planning and Policy Work Plan, three performance indicators have been developed and are being tracked. These include:

- New Development - Southwynde (Burnaby) - 60% of design completed;
- New Development - Civic Centre Site (Pitt Meadows) - 75% of design completed; and
- New Expression of Interest site - 10% of design completed

The performance objective measures the percentage of design completed (through Building Permit) once project concepts have been approved by the MVHC Committee and Board. Projects in construction stages are listed in the MVHC Annual Work Plan report.

CONTINUOUS IMPROVEMENT

Housing Planning and Policy supports and guides MVHC with policy and strategic planning. Recent notable projects include the *Metro Vancouver Housing Tenant Relocation Strategy* that outlines Metro Vancouver Housing's approach to support tenants through relocation (while meeting and exceeding the requirements of provincial legislation and local government policies) as it seeks to expand affordable rental housing through strategic redevelopment of its housing sites.

Further improvement initiatives include:

- Leveraging MVHC investment to deliver more housing and/or deeper affordability for new affordable housing developments across the region by seeking a commitment to portfolio-level funding from provincial and federal governments (for a package of development projects);
- Enhancing the sustainability, livability, cost effectiveness, and efficiency of proposed development projects by conducting feasibility studies and research to assess opportunities to advance sustainability and/or efficiency in MVHC developments (i.e. NetZero studies, modular housing studies);
- Ensuring affordable housing supports those who need it most and supports greater financial sustainability and certainty for new development projects without reliance on external funding or ongoing operating subsidies by developing new policies/procedures to introduce income testing for new Low End of Market tenants, and support new affordability baseline (with fixed affordability set at 70% of HILS); and
- Supporting family-oriented amenities in new affordable housing developments by updating the MVHC mandate to support the development of integrated childcare facilities in new housing developments.

2022 BUDGET AND 2022 – 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The 2022 – 2026 Housing Planning and Policy Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for Housing Planning and Policy presented in this report is included in Attachment 2, and the "What's Happening" highlights for the years 2022 – 2026 are included in Attachment 3.

Operating Budget Highlights

The Housing Planning and Policy 2022 operating budget is proposed to decrease by $201,284 for a total budget of $6.4 million (Attachment 1). This decrease is primarily due to a reduction in projects

funded by the Sustainability Innovation Fund and partially offset by the additional resources required to meet increased housing targets.

The 2022 operating budget includes the following key actions:

- Initiate concept planning and viability studies for a new housing site identified through MVH's Expression of Interest Round 2 (to be issued in Fall/Winter of 2021)
- Continue to pursue portfolio funding partnerships with provincial and federal governments, and other funding opportunities as they arise
- Continue to pursue partnership opportunities with public, private and other housing stakeholders
- Best practice research to support MVHC development standards
- Develop new policies and procedures to support periodic income testing for low end of market tenants and new baseline affordability options
- Explore the business case for a property management policy for inclusionary housing opportunities
- Support the implementation of the Metro Vancouver Housing Redevelopment Plan to advance the redevelopment of select redevelopment sites
- Support Metro Vancouver Regional Planning policies related to housing for Metro 2050, the update to the Regional Growth Strategy
- Support the Regional Planning Advisory Committee – Housing Subcommittee to convene members around regional housing issues and support with best practice research and advocacy
- Update existing MVHC leases with municipal members

Over the next five years, operating programs increase by $1,868,455 or an average of 5.7% per year.

Communications Program
The 2022 Housing Planning and Policy Communications Program of $25,000 is focused on outreach to build better understanding and awareness of the Housing Planning and Policy function in the region and to engage existing tenants to collect and analyze demographic and user experience data to guide development and operational planning. There will be emphasis on further branding work including multimedia support, focus groups and public opinion research where needed.

Reserve Funds
The 2022 – 2026 Financial Plan for Housing Planning and Policy includes a $1.0 million annual contribution to support the re-development of existing housing sites through the affordable housing re-development reserve and a $4.0 million annual contribution to the affordable housing development reserve to support the development of MVHC affordable housing on member jurisdiction or regional lands. Reserve usage is in accordance with the *Operating, Statutory and Discretionary Reserves Policy*.

The financial plan for Housing Planning and Policy does not have any proposed applications of reserve funding. The 2022 – 2026 Projected Reserves for Housing Planning and Policy is included in Attachment 4.

APPROVAL PROCESS

The proposed 2022 – 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration. The next steps of the process are:

- The 2022 – 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.
- The Board will consider adoption of the 2021 Budget and endorsement of the 2022 – 2026 Financial Plan on October 29, 2021.

ALTERNATIVES

1. That the Housing Committee endorse the 2022 – 2026 Financial Plan for Housing Planning and Policy as presented in the report dated September 29, 2021, titled "2022 – 2026 Financial Plan – Housing Planning and Policy", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Housing Committee make recommendations and endorse an amended 2022 – 2026 Financial Plan for the Housing Planning and Policy Service and forward the amended Financial Plan to the to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2022 – 2026 Financial Plan for the Housing Planning and Policy Service, as presented under Alternative 1, in 2022 the Housing Planning and Policy requisition will increase by $222,142 (3.7%) for a total requisition of $6.3 million. Of this total, $5 million per year from the property tax requisition is allocated to advancing the planning and design of capital redevelopment projects and for new sites in partnership with member jurisdictions.

Over the term of the five-year plan, the annual Housing Planning and Policy requisition is projected to increase by an average of $478,376 per year (7.5%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years for the Housing Planning and Policy function will stay at the current 2021 amount of $5 per household in 2022, then increase to $7 through to 2026.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2021 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The Housing Planning and Policy function 2022 Budget and Five-Year Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Housing Planning and Policy.

The presentation of this year's five-year financial plan for Housing Planning and Policy provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related

initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain sustainable while keeping pace with our critical requirements.

Staff recommends endorsing the 2022 – 2026 Financial Plan and Annual Work Plan for Housing Planning and Policy as presented under alternative one.

Attachments:

1. 2022 – 2026 Financial Plan
2. 2022 Work Plan
3. 2022 – 2026 "What's Happening"
4. 2022 – 2026 Projected Reserves – Housing Planning and Policy Service

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ATTACHMENT 1

METRO VANCOUVER REGIONAL DISTRICT
HOUSING PLANNING & POLICY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 6,031,486	$ 6,253,628	3.7%	$ 8,248,312	31.9%	$ 8,276,572	0.3%	$ 8,296,943	0.2%	$ 8,423,367	1.5%
Transfer from Sustainability Innovation Fund Reserves	523,426	100,000		-		-		-		-	
TOTAL REVENUES	**$ 6,554,912**	**$ 6,353,628**	**(3.1%)**	**$ 8,248,312**	**29.8%**	**$ 8,276,572**	**0.3%**	**$ 8,296,943**	**0.2%**	**$ 8,423,367**	**1.5%**
EXPENDITURES											
Operating Programs:											
Housing Planning and Policy	$ 1,465,336	$ 1,241,092		$ 1,114,876		$ 1,158,537		$ 1,185,126		$ 1,319,130	
Contribution to Affordable Housing Re-development Reserve	1,000,000	1,000,000		1,000,000		1,000,000		1,000,000		1,000,000	
Contribution to Affordable Housing Development Reserve	4,000,000	4,000,000		6,000,000		6,000,000		6,000,000		6,000,000	
	6,465,336	6,241,092	(3.5%)	8,114,876	30.0%	8,158,537	0.5%	8,185,126	0.3%	8,319,130	1.6%
Communications Program	25,000	25,000	0.0%	25,000	0.0%	25,000	0.0%	25,000	0.0%	25,000	0.0%
Allocation of Centralized Support Costs	64,576	87,536	35.6%	108,436	23.9%	93,035	(14.2%)	86,817	(6.7%)	79,237	(8.7%)
TOTAL EXPENDITURES	**$ 6,554,912**	**$ 6,353,628**	**(3.1%)**	**$ 8,248,312**	**29.8%**	**$ 8,276,572**	**0.3%**	**$ 8,296,943**	**0.2%**	**$ 8,423,367**	**1.5%**

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

HOUSING PLANNING & POLICY

Description of services

The Housing Planning & Policy function supports the development and operation of Metro Vancouver Housing Corporation affordable housing projects and implementation of the *Metro Vancouver Housing 10-Year Plan*. This includes identification and planning of new and existing housing sites, supporting development projects through design and approvals, strategic planning and policy development for MVHC, and best practice research to support processes and decisions related to housing development and operations. This function also supports and convenes member jurisdictions around affordable housing issues and supports regional housing priorities through the provision of planning and policy resources and information, best practices research, and advocacy.

The Housing Planning & Policy group has the following functions:

- Lead the planning and analysis of properties to assess redevelopment potential.
- Work with member municipalities to identify land for the development of affordable housing.
- Oversee initial site studies and assessment and confirm project viability
- Lead concept planning for new development projects
- Support MVHC affordable housing development projects including leading coordination of development approval processes, agreements, and community engagement
- Support MVHC Operations on development projects including planning for tenant relocation, tenant engagement, communications, and rent-up
- Research and integrate best practices to support development design decisions and standards
- Support or lead funding applications for MVHC development projects including project-specific funding calls and broader portfolio funding discussions with provincial and federal governments
- Develop both Corporate and Board policies for Metro Vancouver Housing to ensure housing operations and development align and support the Board Strategic Plan, the Metro Vancouver Housing 10-Year Plan, *Metro 2040*, and the *Residential Tenancy Act*.
- Monitor a 10-year housing strategy to implement goals around operations, maintenance, growth, and partnerships and meet strategic targets.
- Coordinate the Regional Planning Advisory Committee – Housing Subcommittee
- Provide support, planning and policy resources, best practice research and advocacy for regional housing priorities.

Strategic directions and high level goals supported

- Support the implementation of the Metro Vancouver Housing 10-Year Plan.
- Review, update and develop policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future residents.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of Metro Vancouver Housing.

- Convene municipal staff and stakeholders to share ideas on affordable housing.
- Facilitate partnerships with member municipalities and other stakeholders to expand affordable rental housing within the region.
- Pursue funding and program opportunities with other orders of government.
- Implement the Metro Vancouver Housing Redevelopment Plan to advance the redevelopment of MVHC housing sites.
- Support the development of housing related policy for Metro 2050, the comprehensive update to the Regional Growth Strategy.

Performance indicators

Indicator (% of design completed)	Historical and/or industry benchmark (2020)	Current performance (2021)	2022 performance objective
Southwynde (Burnaby) – New development	0%	20%	60%
Civic Centre Site (Pitt Meadows) - New development	0%	30%	75%
New Expression of Interest site	0%	n/a	10%

**The performance objective measures the percentage of design completed (through Building Permit) once project concepts have been approved by the MVHC Committee and Board. Projects in construction stages are listed in the MVHC Annual Work Plan report.*

2022 Key actions

Policy & Planning

- Support the implementation of the Metro Vancouver Housing 10-Year Plan
    - Initiate concept planning and viability studies for a new housing site identified through MVH's Expression of Interest Round 2 (to be issued in Fall/Winter of 2021)
    - Continue to pursue portfolio funding partnerships with provincial and federal governments, and other funding opportunities as they arise
    - Continue to pursue partnership opportunities with public, private and other housing stakeholders
    - Best practice research to support MVHC development standards
    - Develop new policy to support periodic income testing for low end of market tenants
    - Update tenant policies to support new baseline affordability option
    - Create a tenancy management policy and information package for inclusionary housing opportunities
    - Update the MVHC mandate to facilitate the development of integrated childcare facilities in new developments
- Support the implementation of the Metro Vancouver Housing Redevelopment Plan to advance the redevelopment of select redevelopment sites.
    - Continue to support planning for 7 active redevelopment projects
    - Continue further study of sites identified for potential development partnerships

    - Coordinate requirements for funding programs
- Support Metro Vancouver Regional Planning policies related to housing for Metro 2050, the update to the Regional Growth Strategy
- Support the Regional Planning Advisory Committee – Housing Subcommittee to convene members around regional housing issues and support with best practice research and advocacy
- Update existing MVHC leases with municipal members
- Support the update of MVHC's mandate to allow greater flexibility for integrated childcare facilities

<u>Communications Program</u>

- Work to build a better understanding and awareness of MVHC among key stakeholders through further branding work including multimedia support where needed.
- Engage existing tenants to collect and analyze demographic and user experience data to guide development and operational planning.
- Update housing website to include plain language summaries of tenant policies to be more user friendly and easy to understand and navigate.

Housing Planning and Policy

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Housing Planning and Policy over the next 5 years.

Initiative	Description	Theme
2022		
10-Year Plan Implementation	Continue to implement the Metro Vancouver Housing 10-Year Plan	Regional growth, financial & environmental sustainability
Implement redevelopment and new development projects	Continue to support the development approval processes and design of redevelopment projects including: Heather Place B, Kingston Gardens, Welcher Avenue, Eastburn Square, 119B Ave – Pitt Meadows, Southwynde Ave – Burnaby, and Malaspina Village – Phase 1	Regional growth
Progress Expression of Interest for Member Lands	Select one to two new development projects from MVH's second call for member lands to build new affordable housing; complete feasibility studies and concept planning	Regional growth
Concept development of pipeline projects in planning	Continue the concept development and refinement of projects in the planning phase	Regional growth
Strategic planning and policy for MVHC	Develop new policies and procedures to support periodic income testing for low end of market tenants and new baseline affordability options	Financial sustainability
Support flexibility for integrated childcare facilities in affordable housing	Update the MVHC mandate to allow greater flexibility for the development of integrated childcare facilities in new MVHC developments	Regulatory and Legislative Environment
Seek funding support for development projects	Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability	Regional growth, financial & environmental sustainability
Expand housing portfolio through development partnerships	Actively work with housing stakeholders, including funders, private developers, and non-profits, to identify opportunities for development partnerships on specific sites	Regional growth
Expand housing portfolio through management partnerships	Explore the business case for a property management service to increase MVH's portfolio through taking on the management of units obtained through inclusionary housing policies	Regional growth
Support regional planning and policy on housing-related issues	Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders	Regional capacity building
Support regional housing policy in Metro 2050	Support the implementation of housing related policy for Metro 2050, the comprehensive update to the Regional Growth Strategy.	Regional planning

Updates existing MVHC leases	Support the renewal of existing MVHC leases with member jurisdictions	Regulatory and Legislative environment
2023		
10-Year Plan Implementation	Continue to implement the Metro Vancouver Housing 10-Year Plan	Regional growth, financial & environmental sustainability
Implement redevelopment and new development projects	Continue to support progress redevelopment and new development projects	Regional growth
Implement Redevelopment Plan	Confirm next round of redevelopment priority projects; pursue funding opportunities and initiate design processes, tenant relocation, and development approvals	Regional growth
Seek funding support for development projects	Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability	Regional growth, financial & environmental sustainability
Strategic planning and policy for MVHC	Continue to develop new policies and procedures to support operational, financial efficiency and industry best practices	Financial & environmental sustainability
Expand housing portfolio through partnerships	Actively pursue partnerships with development partnerships on specific sites	Regional growth
Support regional planning and policy on housing-related issues	Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders	Regional capacity building
2024		
10-Year Plan Implementation	Continue to implement the Metro Vancouver Housing 10-Year Plan	Regional growth, financial & environmental sustainability
Implement redevelopment and new development projects	Continue to progress redevelopment and new development projects	Regional growth
Seek funding support for development projects	Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability	Regional growth, financial & environmental sustainability
Strategic planning and policy for MVHC	Continue to develop new policies and procedures to support operational, financial efficiency and industry best practices	Financial & environmental sustainability
Expand housing portfolio through partnerships	Actively pursue partnerships with development partnerships on specific sites	Regional growth
Support regional planning and policy on housing-related issues	Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders	Regional capacity building
2025		

10-Year Plan Implementation	Continue to implement the Metro Vancouver Housing 10-Year Plan	Regional growth, financial & environmental sustainability
Implement redevelopment and new development projects	Continue to progress redevelopment and new development projects	Regional growth
Seek funding support for development projects	Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability	Regional growth, financial & environmental sustainability
Strategic planning and policy for MVHC	Continue to develop new policies and procedures to support operational, financial efficiency and industry best practices	Financial & environmental sustainability
Expand housing portfolio through partnerships	Actively pursue partnerships with development partnerships on specific sites	Regional growth
Support regional planning and policy on housing-related issues	Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders	Regional capacity building
2026		
10-Year Plan Implementation	Continue to implement the Metro Vancouver Housing 10-Year Plan	Regional growth, financial & environmental sustainability
Implement redevelopment and new development projects	Continue to progress redevelopment and new development projects	Regional growth
Expression of interest	Issue a third expression of interest for member partnerships to continue the development of affordable rental homes	Regional Growth
Seek funding support for development projects	Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability	Regional growth, financial & environmental sustainability
Strategic planning and policy for MVHC	Continue to develop new policies and procedures to support operational, financial efficiency and industry best practices	Financial & environmental sustainability
Expand housing portfolio through partnerships	Actively pursue partnerships with development partnerships on specific sites	Regional growth
Support regional planning and policy on housing-related issues	Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders	Regional capacity building

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - HOUSING PLANNING AND POLICY

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Housing Planning and Policy	**$ 54,675**	**$ 54,675**	**$ -**	**$ -**	**$ 1,094**	**$ 55,769**	**$ 56,884**	**$ 58,022**	**$ 59,182**	**$ 60,366**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Housing Planning and Policy										
Affordable Housing Re-development Reserve	$ 4,369,908	$ 4,369,908	$ 1,000,000	$ -	$ 97,398	$ 5,467,306	$ 6,586,652	$ 7,728,385	$ 8,892,953	$ 10,080,812
Affordable Housing Development Reserve	8,120,000	8,120,000	4,000,000	-	202,400	12,322,400	18,628,848	25,061,425	31,622,653	21,145,107
Total	**$ 12,489,908**	**$ 12,489,908**	**$ 5,000,000**	**$ -**	**$ 299,798**	**$ 17,789,706**	**$ 25,215,500**	**$ 32,789,810**	**$ 40,515,606**	**$ 31,225,918**

metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Housing Committee

From: Heather McNell, General Manager, Regional Planning and Housing Services

Date: September 29, 2021 Meeting Date: October 6, 2021

Subject: **2022 - 2026 Financial Plan – Metro Vancouver Housing Corporation (MVHC)**

RECOMMENDATION

That the Housing Committee endorse the 2022 - 2026 Financial Plan for the Metro Vancouver Housing Corporation as presented in the report dated September 29, 2021, titled "2022 - 2026 Financial Plan – Metro Vancouver Housing Corporation", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY

The 2022 - 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region. The Metro Vancouver Housing Corporation (MVHC) is funded primarily through rental revenues, and does not have an impact on the overall MVRD tax requisition; this focus has been maintained while preparing and reviewing budgets.

MVHC's 5-year financial plan supports its goals of supporting healthy engaged communities, preserving existing housing to maintain affordability and improve energy efficiency, growing strategically through redevelopment and new developments and partnering to expand affordable rental housing across the region. Over the next five years, the MVHC annual budget is expected to increase an average of $4.5 million or 7.4% per year, primarily due to the expansion of the portfolio.

PURPOSE

To present the 2022 - 2026 Financial Plan for the Metro Vancouver Housing Corporation (MVHC) for consideration by the Committee.

BACKGROUND

Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Metro Vancouver Housing Corporation Service and presents the 2022 provisional annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

METRO VANCOUVER HOUSING CORPORATION

The MVHC is a not-for-profit entity with the Metro Vancouver Regional District as its sole shareholder. MVHC operates 49 housing sites that provide 3,400 units of affordable rental housing for low to moderate income households across the region. MVHC's operations and maintenance is primarily financed through the collection of tenant rents and supplemented by BC Housing operating subsidies for eight of the 49 sites. Operations maintains MVHC assets, manages tenants and builds communities within the housing portfolio and surrounding neighborhoods. The Planning, Development and Finance teams manage the strategic redevelopment of existing sites and partnerships with member jurisdictions, provincial and federal government to develop additional affordable homes across the Region.

MVHC initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan* and *Metro Vancouver Housing 10-Year Plan*, specifically:

- ***Providing*** safe, inclusive, diverse and affordable homes in communities throughout the region;
- ***Preserving*** the existing portfolio through capital maintenance to support affordability and improve sustainability and accessibility; and
- ***Expanding*** Metro Vancouver Housing's portfolio through redevelopment and partnerships with member jurisdictions and other levels of government.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plan for MVHC is presented in this report. Within the MVHC Work Plan, twelve performance indicators have been developed and are being tracked. These include:

- Percentage of total units rented to subsidized tenants
- Vacancy percentage (based on number of available units)
- MVHC communities with tenant associations
- Reduction of GHG emissions
- Redevelopment projects including Kingston Gardens (Surrey), Welcher Avenue (Port Coquitlam), Heather Place – Building B (Vancouver), Eastburn Square (Burnaby) and Malaspina Village (Phase I) (Coquitlam)
- Rehabilitation projects including Strathearn Court (Vancouver), Evergreen Downs (Delta) and Kelly Court (Vancouver)

The trends in these performance measures suggest that MVHC will continue to provide one third of the tenant portfolio with subsidized tenants, maintain a low vacancy rate (0.2%), uphold its management of 32 tenant associations and continue the decrease in GHG emissions from MVHC operations. The redevelopment at five sites demonstrates the trend of increasing the amount of affordable rental homes in MVHC's portfolio.

CONTINUOUS IMPROVEMENT

MVHC has been reviewing and updating its policies and procedures. Notable policy updates include the *Tenant Selection Policy* that ensures the corporation is providing housing that prioritizes very low to moderate income residents who have less opportunities to rent in the private market.

Following the completion of Heather Place Building A, a 'lessons learned' review was completed to provide information to increase effectiveness and efficiency, and design considerations in future projects.

Further improvement initiatives include:

- Expanding through redevelopment and partnerships;
- Accelerating the delivery of large capital rehabilitation projects through the financing of these projects;
- Participating in the Pembina Reframed Initiative to undertake comprehensive whole-building retrofits to improve tenant comfort, well-being and safety, extend the life of the asset, reduce operational costs, improve energy efficiency, and reduce GHG emissions (3 sites);
- Installing high efficiency mechanical equipment and make thermal improvements to building structures;
- Continuing projects approved through the Sustainability Innovation Fund:
    - Building Resilience: Exploring the Potential of Renewable Energy Building Infrastructure
    - Net-Zero Feasibility Study for Welcher Avenue Affordable Housing Development
    - Step Code Implementation Impacts for Building Envelope Rehabilitation of Existing Buildings;
- Continuing to explore and incorporate mobile technology into day-to-day field operations; and
- Creating and implementing a strategy to reduce illegal waste dumping to reduce operational costs.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The 2022 - 2026 MVHC Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for the MVHC presented in this report is included in Attachment 3 and the "What's Happening" highlights for the years 2022 - 2026 are included in Attachment 4.

Operating Budget Highlights

The MVHC 2022 operating budget is proposed to increase by $1.1 million for a total budget of $54.8 million (Attachment 1). This increase is primarily due to the increased rental revenue and operating subsidies to meet service requirements and growth demands.

The 2022 operating budget includes the following key actions:

- Continue implementation of the Metro Vancouver Housing 10-Year Plan and Asset Management Plan;
- Ongoing construction on Kelly Court (Vancouver) and Evergreen Downs (Delta) building envelope renewals and energy improvements;
- Finalize design, obtain permits, and start construction on Strathearn Court (Vancouver) building envelope renewals and energy improvements;
- The Pembina Reframed initiative will be completing the exploration labs and will be starting detailed design for Deep Retrofits at Manor House (North Vancouver), Crown Manor (New Westminster), and Le Chateau (Coquitlam);
- Continue to develop and implement innovative tenant programs such as community gardens, free food programs, decorative wraps contests, complimentary spring flowers programs, murals and communications projects;
- Continue to support tenants that need to be relocated due to redevelopment;
- Develop and begin implementation of a new internal and external work order system;
- Gradually return to 'new normal' through the reopening of head office and area offices to the public and to our tenants and increase face-to-face interactions as guidelines allow;
- Review payment plans, discounted rents, and delinquencies for current tenants;
- Use the COVID-19 Safe Restart Funds to construct MVH amenity space that will be used as a place to run a free food program for vulnerable tenants and also as a gathering place for community events and other tenant programs;
- Progress construction of Kingston Gardens Phase 1 (Surrey) and Welcher Avenue (Port Coquitlam);
- Finalize detailed design for Heather Place Building B (Vancouver);
- Schematic design and development approvals for: Civic Centre (Pitt Meadows), Malaspina Phase 1 (Coquitlam), Eastburn Square (Burnaby) and Southwynde (Burnaby);
- Work with BC Housing and CMHC to secure funding partnerships for redevelopment projects;
- Update the Housing website;
- Enhance the online housing application process for tenants;
- Continue to build brand awareness with key industry stakeholders and residents of the region; and
- Work to build a better understanding the opinions and community needs of MVHC through focus group and public opinion research where needed.

Over the next five years, the MVHC annual budget is expected to increase an average of $4.5 million or 7.4% per year, primarily due to the expansion of the housing portfolio as more units come on line.

Communications Program
The 2021 MVHC Communications Program of $40,000 is focused on video and graphic documentation of new and existing MVHC sites for partnership engagement and public opinion research through focus groups on Metro Vancouver's role in housing and branding opportunities.

Capital Budget Highlights
The MVHC capital budget for 2022 approval is $322.5 million (Attachment 2). The capital program is funded by mortgage financing, reserve funding, and grants from external agencies. The capital projects planned and ongoing for 2022 are the redevelopment of Heather Place - Building B (Vancouver), Kingston Gardens - Phase I (Surrey), and Welcher Avenue (Port Coquitlam) as well as planning for Eastburn Square (Burnaby), Malaspina (Coquitlam), Pitt Meadows Town Centre and Southwynde (Burnaby).

The projected capital cash flow for 2022 - 2026 totals $428.0 million with Kingston Gardens - Phase I (Surrey) and Welcher Avenue (Port Coquitlam) estimated to be completed in 2023 and 2024, respectively. Heather Place - Building B (Vancouver) and Malaspina – Phase 1 (Coquitlam) are estimated to be completed in 2025. Eastburn Square (Burnaby), Pitt Meadows Town Centre and Southwynde (Burnaby) are estimated to be completed in 2026. The 2022-2026 capital plan also includes projects that are currently in the planning phase and have not yet been endorsed by the Housing Committee or Board.

Reserve Funds
The application of reserve funding in MVHC is in accordance with the *Operating, Statutory and Discretionary Reserves Policy* and is primarily made through its Capital Development and Capital Replacement Reserves. In 2022, the financial plan includes $4.1 million in reserve usage for significant asset maintenance and replacement, of which $3.8 million is from the Capital Replacement Reserve and the remaining $0.3 million is from the Restricted Capital Replacement Reserve. The 2022 - 2026 Projected Reserves for MVHC is included in Attachment 5.

APPROVAL PROCESS
The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.
The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021; and
- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES
1. That the Housing Committee endorse the 2022 - 2026 Financial Plan for the Metro Vancouver Housing Corporation as presented in the report dated September 29, 2020, titled "2022 - 2026 Financial Plan – Metro Vancouver Housing Corporation", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Housing Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for the MVHC and forward the amended Financial Plan to the to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS

MVHC operations are funded primarily through rental revenues and do not have an impact on the overall MVRD tax requisition. If the MVRD Board endorses the 2022 - 2026 Financial Plan for the MVHC, as presented under Alternative 1, in 2022 the rental revenues are expected to generate a surplus from operations ranging from $10.7 million in 2022 to $8.9 million in 2026. The financial plan includes three redevelopment projects: Kingston Gardens – Phase 1 (Surrey) which started in 2019, Heather Place – Building B (Vancouver) which started in 2020, and Welcher Avenue (Port Coquitlam) which started in 2020, as well as estimates for several future projects currently in the planning stages. These projects will be funded through a combination of reserves, grants, partnerships and mortgage financing.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2022 Budget and Five-year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any amendments to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The MVHC 2022 Budget and Five-year Financial Plan was prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for MVHC.

The presentation of the 2022 budget and five-year financial plan for MVHC provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for MVHC investments that will be required to maintain our assets and to respond to our region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans.

Staff recommends endorsing the 2022 - 2026 Financial Plan and Annual Work Plan for MVHC as presented under alternative one.

Attachments:

1. 2022 - 2026 Financial Plan
2. 2022 - 2026 Capital Portfolio – Housing Development
3. 2022 Work Plan
4. 2022 - 2026 "What's Happening"
5. 2022 - 2026 Projected Reserves – Metro Vancouver Housing Corporation

ATTACHMENT 1

METRO VANCOUVER HOUSING CORPORATION
HOUSING
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Housing Rents	$ 41,303,421	$ 42,110,363	2.0%	$ 42,910,062	1.9%	$ 46,572,836	8.5%	$ 49,231,139	5.7%	$ 57,651,998	17.1%
Housing Mortgage and Rental Subsidies	2,099,058	1,885,840		1,921,671		2,408,182		2,445,387		2,483,298	
Other External Revenues	801,468	884,490		899,466		915,291		930,264		946,095	
Financing Proceeds	-	5,820,000		10,730,000		13,580,000		8,500,000		8,000,000	
Transfer from Reserves	9,488,074	4,098,180		3,826,636		3,287,444		7,713,628		7,327,886	
TOTAL REVENUES	**$ 53,692,021**	**$ 54,798,873**	**2.1%**	**$ 60,287,835**	**10.0%**	**$ 66,763,753**	**10.7%**	**$ 68,820,418**	**3.1%**	**$ 76,409,277**	**11.0%**
EXPENDITURES											
Operating Programs:											
Property Operations	$ 19,715,819	$ 17,976,727		$ 18,135,553		$ 19,256,361		$ 20,243,059		$ 22,984,432	
Maintenance	912,592	1,108,815		1,130,223		1,155,877		1,182,107		1,208,926	
Housing Finance Operations	945,735	965,411		984,673		1,008,129		1,033,831		1,056,695	
Tenant Program and Services	412,897	585,086		594,605		607,343		620,375		633,705	
Site Administration	2,052,399	2,250,084		2,291,376		2,342,016		2,393,791		2,446,722	
Engineers in Training	11,627	15,508		15,797		16,151		16,513		16,883	
Administration and Department Support	1,407,505	1,479,635		1,509,470		1,543,832		1,578,972		1,613,992	
	25,458,574	24,381,266	(4.2%)	24,661,697	1.2%	25,929,709	5.1%	27,068,648	4.4%	29,961,355	10.7%
Communications Program	40,000	40,000	0.0%	40,000	0.0%	40,000	0.0%	40,000	0.0%	40,000	0.0%
Allocation of Centralized Support Costs	2,082,758	2,401,739	15.3%	2,185,410	(9.0%)	2,108,414	(3.5%)	2,038,626	(3.3%)	1,913,691	(6.1%)
Total Operating Programs	27,581,332	26,823,005	(2.7%)	26,887,107	0.2%	28,078,123	4.4%	29,147,274	3.8%	31,915,046	9.5%
Capital Maintenance	9,488,074	9,918,180	4.5%	14,556,636	46.8%	16,867,444	15.9%	16,213,628	(3.9%)	15,327,886	(5.5%)
Allocation of Project Delivery Cost	388,442	-	(100.0%)	933,341	0.0%	973,791	4.3%	980,228	0.7%	982,333	0.2%
Debt Service:											
Mortgage Payments	5,154,165	4,799,022	(6.9%)	4,599,645	(4.2%)	6,537,379	42.1%	7,719,073	18.1%	12,341,328	59.9%
Capital Maintenance Financing	-	678,428	0.0%	1,053,978	55.4%	2,572,483	140.0%	2,869,983	11.6%	4,615,127	60.8%
Contribution to Capital Replacement Reserve	1,720,546	1,859,270	8.1%	1,859,270	0.0%	1,992,506	7.2%	2,070,241	3.9%	2,375,040	14.7%
Contribution to Reserve	9,359,462	10,720,968	14.5%	10,397,858	(3.0%)	9,742,027	(6.3%)	9,819,991	0.8%	8,852,517	(9.9%)
TOTAL EXPENDITURES	**$ 53,692,021**	**$ 54,798,873**	**2.1%**	**$ 60,287,835**	**10.0%**	**$ 66,763,753**	**10.7%**	**$ 68,820,418**	**3.1%**	**$ 76,409,277**	**11.0%**

METRO VANCOUVER HOUSING CORPORATION
CAPITAL PORTFOLIO
HOUSING DEVELOPMENT
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	2022 CAPITAL BUDGET	ACTUALS ESTIMATED TO DEC 31 2021	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDITURES										
Heather Place - Building B	$ 48,100,000	$ 2,000,000	$ 2,400,000	$ 13,400,000	$ 18,000,000	$ 12,300,000	$ -	$ 46,100,000	Starting 2021 - Detailed Design	Expand/Re-develop
Kingston Gardens - Phase 1	44,600,000	8,000,000	25,000,000	11,600,000	-	-	-	36,600,000	Starting 2021 - Construction	Expand/Re-develop
Welcher Avenue	36,100,000	2,800,000	18,000,000	11,500,000	3,800,000	-	-	33,300,000	Starting 2021 - Construction	Expand/Re-develop
Eastburn Square (2021 Projects in Planning)	63,800,000	500,000	800,000	3,400,000	25,100,000	29,000,000	5,000,000	63,300,000	Planned	Expand/Re-develop
Malaspina (2021 Projects in Planning)	38,700,000	500,000	500,000	1,700,000	16,000,000	20,000,000	-	38,200,000	Planned	Expand/Re-develop
Pitt Meadows Town Centre (2021 Projects in Planning)	45,800,000	500,000	800,000	3,500,000	17,500,000	20,000,000	3,500,000	45,300,000	Planned	Expand/Member Partnerships
Southwynde - Burnaby (2021 Projects in Planning)	45,400,000	500,000	800,000	2,300,000	17,800,000	20,500,000	3,500,000	44,900,000	Planned	Expand/Member Partnerships
Projects in Planning	-	-	-	800,000	7,200,000	46,500,000	65,800,000	120,300,000	Planned	Expand/Re-develop and Member Partnerships
TOTAL CAPITAL EXPENDITURES	**$ 322,500,000**	**$ 14,800,000**	**$ 48,300,000**	**$ 48,200,000**	**$ 105,400,000**	**$ 148,300,000**	**$ 77,800,000**	**$ 428,000,000**		
CAPITAL FUNDING										
Grants	$ 29,000,000	$ 2,500,000	$ 17,535,892	$ 1,202,500	$ 7,770,054	$ 3,581,473	$ -	$ 30,089,919		
External Borrowing	224,500,000	1,500,000	25,464,108	32,106,415	86,629,946	121,063,471	48,577,277	313,841,217		
Reserve	69,000,000	10,800,000	5,300,000	14,891,085	11,000,000	23,655,056	29,222,723	84,068,864		
Total	**$ 322,500,000**	**$ 14,800,000**	**$ 48,300,000**	**$ 48,200,000**	**$ 105,400,000**	**$ 148,300,000**	**$ 77,800,000**	**$ 428,000,000**		
SUMMARY BY DRIVER										
Expand/Re-develop	$ 231,300,000	$ 13,800,000	$ 46,700,000	$ 42,050,000	$ 67,100,000	$ 95,800,000	$ 43,200,000	$ 294,850,000		
Expand/Member Partnerships	91,200,000	1,000,000	1,600,000	6,150,000	38,300,000	52,500,000	34,600,000	133,150,000		
Total	**$ 322,500,000**	**$ 14,800,000**	**$ 48,300,000**	**$ 48,200,000**	**$ 105,400,000**	**$ 148,300,000**	**$ 77,800,000**	**$ 428,000,000**		

METRO VANCOUVER HOUSING CORPORATION
CAPITAL PORTFOLIO
HOUSING DEVELOPMENT
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDITURES				
Heather Place - Building B	$	48,100,000	Starting 2021 - Detailed Design	Expand/Re-develop
Kingston Gardens - Phase 1		44,600,000	Starting 2021 - Construction	Expand/Re-develop
Welcher Avenue		36,100,000	Starting 2021 - Construction	Expand/Re-develop
Eastburn Square (2021 Projects in Planning)		63,800,000	Planned	Expand/Re-develop
Malaspina (2021 Projects in Planning)		38,700,000	Planned	Expand/Re-develop
Pitt Meadows Town Centre (2021 Projects in Planning)		45,800,000	Planned	Expand/Member Partnerships
Southwynde - Burnaby (2021 Projects in Planning)		45,400,000	Planned	Expand/Member Partnerships
Projects in Planning		143,300,000	Planned	Expand/Re-develop and Member Partnerships
TOTAL CAPITAL EXPENDITURES	**$**	**465,800,000**		

CAPITAL FUNDING		
Grants	$	32,589,919
External Borrowing		328,341,216
Reserve		104,868,865
Total	**$**	**465,800,000**

SUMMARY BY DRIVER		
Expand/Re-develop	$	314,450,000
Expand/Member Partnerships		151,350,000
Total	**$**	**465,800,000**

METRO VANCOUVER HOUSING CORPORATION

Description of Services

Metro Vancouver Housing Corporation (MVHC) is a not-for-profit entity with the Metro Vancouver Regional District as its sole shareholder. MVHC operates 49 housing sites that provide 3,400 units of affordable rental housing for low to moderate income households across the region. MVHC is primarily financed through the collection of tenant rents. Operations maintains MVHC assets, manages tenants and builds communities within the housing portfolio and surrounding neighborhoods.

Strategic Directions and High Level Goals Supported

- Provide safe, affordable rental homes to individuals and families across the region
- Implement the Metro Vancouver Housing 10-Year Plan - Provide, preserve and expand affordable housing in the region
- Continue to implement innovative tenant programs to engage healthy, livable communities
- Continue the implementation of the MVH Redevelopment and Asset Management plans. These plans:
    - Identify a pipeline of housing developments and building rehabilitations that are prioritized to create new units and maintain existing affordable rental homes
    - Identify areas for environmental and energy sustainability improvements
    - Create an agreed standard of service and delivery for core building infrastructure

Performance Indicators

Indicator	Historical and/or industry benchmark (2020)	Current performance (2021)	2022 performance objective
Total units rented to subsidized tenants	33% (3 Year average)	33% (2020)	33%
Vacancy percentage (based on number of units)	0.2% (3 Year Average)	0.2% (2020)	0.2%
MVHC communities with tenant associations	63% (3 Year Average, 31 sites)	65% (2021, 32 sites)	65% (2022, 32 sites)
Reduce GHG emissions	10.2 grams CO^2 Emissions per square metre (2010 baseline)	7.71 grams CO^2 Emissions per square metre (2020)	7.45 grams CO^2 Emissions per square metre
Kingston Gardens Redevelopment	95% (design)	5% (construction)	75% (construction)
Welcher Avenue Redevelopment	50% (design)	5% (construction)	70% (construction)
Heather Place B Redevelopment	0%	100% (DP Amendment) 25% (design)	95% (design)
Eastburn Square Redevelopment	0%	10% (design)	60% (design)

Indicator	Historical and/or industry benchmark (2020)	Current performance (2021)	2022 performance objective
Malaspina Village (Phase 1) Redevelopment	0%	100% (Consultant RFP/Contract)	100% (OCP Application Submission) 75% (Rezoning Package) 50% (Design)
Strathearn Court Rehabilitation Project	60% (Design	100% (Design) 30% (Permitting	5% (Construction)
Evergreen Downs Rehabilitation Project	90% (Design	40% (Construction)	100% (Construction)
Kelly Court Rehabilitation Project	100% (Design) 30% (Permitting)	10% (Construction	80% (Construction)

**The performance objective measures for municipal partnership projects are included in the Housing Planning and Policy Annual Work Plan Report.*

2022 Key Actions – Metro Vancouver Housing

Operations & Maintenance

- Continue to implement the Metro Vancouver Housing 10-year Plan and Asset Management Plan
- Ongoing construction on Kelly Court and Evergreen Downs building envelope renewals and energy improvements
- Finalize design, obtain permits, and start construction on Strathearn Court building envelope renewals and energy improvements
- The Pembina Reframed initiative will be completing the exploration labs and will be starting detailed design for Deep Retrofits at Manor House (North Vancouver), Crown Manor (New Westminster), and Le Chateau (Coquitlam)
- Continue to develop and implement innovative tenant programs such as community gardens, free food programs, decorative wraps contests, complimentary spring flowers programs, murals and communications projects
- Continue to support tenants that need to be relocated due to redevelopment
- Develop and begin implementation of a new internal and external work order system

COVID Response

- Gradually return to 'new normal' through the reopening of head office and area offices to the public and to our tenants and increase face-to-face interactions
- Review payment plans, discounted rents, delinquencies for current tenants
- Use the COVID -19 Safe Restart Funds to construct MVH amenity space that will be used as a place to run a free food program for vulnerable tenants and also as a gathering place for community events and other tenant programs

New and Re-Development

- Progress construction of Kingston Gardens Phase 1, Surrey
- Progress construction of Welcher Avenue, Port Coquitlam
- Finalize detailed design for Heather Place Building B, Vancouver
- Schematic design and development approvals for: Civic Centre – Pitt Meadows, Malaspina Phase 1 - Coquitlam, Eastburn Square – Burnaby and Southwynde - Burnaby
- Work with BC Housing and CMHC to secure funding partnerships for redevelopment projects

Communications

- Update the Housing website
- Enhance the online housing application process for tenants
- Continue to build brand awareness with key industry stakeholders and residents of the region
- Work to build a better understanding the opinions and community needs of MVHC through focus group and public opinion research where needed

Metro Vancouver Housing Corporation

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by the MVHC over the next 5 years.

Initiative	Description	Theme
2022		
Metro Vancouver Housing 10 year Plan	Continue the exploration and implementation of actions identified in the 10-year plan	Regional growth, financial sustainability & environmental sustainability
Kingston Gardens – Phase 1 Redevelopment	Continue construction phase of project	Regional Growth
Welcher Avenue Redevelopment	Continue construction phase of project	Regional Growth
Heather Place B Redevelopment	Finalize the design phase of project and permitting. Complete tendering process of contractor	Regional Growth
Eastburn Square Redevelopment	Continue planning and begin detailed design	Regional Growth
Malaspina Village – Phase 1 Redevelopment	Continue planning and begin detailed design	Regional Growth
New development projects (through Partnerships)	Detailed design of two projects	Regional Growth
Strathearn Court Rehabilitation Project	Begin construction phase	System stewardship
Evergreen Downs Rehabilitation Project	Complete construction phase	System stewardship
Kelly Court Rehabilitation Project	Progress through construction phase	System stewardship
Process development	Review and refine preventative maintenance procedures	System stewardship
2023		
Metro Vancouver Housing 10 year Plan	Continue the exploration and implementation of actions identified in the 10-year plan	Regional growth, financial sustainability & environmental sustainability
Kingston Gardens – Phase 1 Redevelopment	Complete construction and begin rent-up	Regional Growth
Welcher Avenue Redevelopment	Continue to progress through construction	Regional Growth
Heather Place B Redevelopment	Begin construction phase	Regional Growth
Eastburn Square Redevelopment	Finalize design and tender	Regional Growth
Malaspina Village – Phase 1 Redevelopment	Finalize design and tender	Regional Growth
New development projects (through Partnerships)	Finalize design of projects and tender	Regional Growth

Strathearn Court Rehabilitation Project	Complete construction phase	System stewardship
Kelly Court Rehabilitation Project	Complete construction phase	System stewardship
Building rehabilitation projects	Continue construction of initiated projects and the development of design in newly initiated projects	System stewardship
2024		
Metro Vancouver Housing 10 year Plan	Continue the exploration and implementation of actions identified in the 10-year plan	Regional growth, financial sustainability & environmental sustainability
Welcher Avenue Redevelopment	Complete construction and begin rent-up	Regional Growth
Heather Place B Redevelopment	Continue to progress through construction	Regional Growth
Eastburn Square Redevelopment	Begin construction phase	Regional Growth
Malaspina Village – Phase 1 Redevelopment	Begin construction phase	Regional Growth
New development projects (through Partnerships)	Begin construction at Town Centre, Pitt Meadows and Southwynde, Burnaby.	Regional Growth
Building rehabilitation projects	Continue construction of initiated projects and the development of design in newly initiated projects	System stewardship
2025		
Metro Vancouver Housing 10 year Plan	Complete a review of the 10-year plan and assessment of achievements to date. Monitor immerging trends and changes to the affordable housing sector	Regional growth, financial sustainability & environmental sustainability
Heather Place B Redevelopment	Complete construction and begin rent-up	Regional Growth
Eastburn Square Redevelopment	Continue to progress through construction	Regional Growth
Malaspina Village – Phase 1 Redevelopment	Continue to progress through construction	Regional Growth
New development projects (through Partnerships)	Continue construction at Town Centre, Pitt Meadows and Southwynde, Burnaby.	Regional Growth
Building rehabilitation projects	Continue construction of initiated projects and the development of design in newly initiated projects	System stewardship
2026		
Metro Vancouver Housing 10 year Plan	Complete a review of the 10-year plan and assessment of achievements to date. Monitor immerging trends and changes to the affordable housing sector	Regional growth, financial sustainability & environmental sustainability
Eastburn Square Redevelopment	Complete construction and begin rent-up	Regional Growth

Malaspina Village – Phase 1 Redevelopment	Complete construction and begin rent-up	Regional Growth
New development projects (through Partnerships)	Complete construction of Town Centre, Pitt Meadows and Southwynde, Burnaby.	Regional Growth
Building rehabilitation projects	Continue construction of initiated projects and the development of design in newly initiated projects	System stewardship

ATTACHMENT 5

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - METRO VANCOUVER HOUSING CORPORATION

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Metro Vancouver Housing Corporation	**$ 2,577,597**	**$ 2,577,597**	**$ -**	**$ -**	**$ 51,552**	**$ 2,629,149**	**$ 2,681,732**	**$ 2,735,366**	**$ 2,790,074**	**$ 2,845,875**

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Housing										
MVHC Capital Replacement Reserve	$ 4,854,248	$ 4,854,248	$ 3,985,282	$ (3,839,530)	$ 98,542	$ 5,098,542	$ 5,200,513	$ 5,304,524	$ 5,410,614	$ 5,518,826
MVHC Capital Development Reserve	40,337,480	40,337,480	8,363,125	(5,300,000)	837,381	44,237,986	39,113,487	36,570,121	17,967,374	10,329,438
Total	**$ 45,191,729**	**$ 45,191,729**	**$ 12,348,407**	**$ (9,139,530)**	**$ 935,923**	**$ 49,336,529**	**$ 44,314,000**	**$ 41,874,644**	**$ 23,377,988**	**$ 15,848,265**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
MVHC Restricted Cap. Replacement Reserve	**$ 4,173,293**	**$ 4,173,293**	**$ 433,791**	**$ (460,610)**	**$ 83,198**	**$ 4,229,671**	**$ 3,798,325**	**$ 4,621,488**	**$ 4,374,830**	**$ 4,053,327**

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Indigenous Relations Committee

From: Jessica Beverley, General Manager, Legal Services and Indigenous Relations

Date: September 30, 2021 Meeting Date: October 7, 2021

Subject: **2022 - 2026 Financial Plan – Indigenous Relations**

RECOMMENDATION

That the Indigenous Relations Committee endorse the 2022 - 2026 Financial Plan for Indigenous Relations as presented in the report dated September 30, 2021, titled "2022 - 2026 Financial Plan – Indigenous Relations", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY

The 2022 - 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region for 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

Indigenous Relations staff support Metro Vancouver's continuing efforts to strengthen relationships with local First Nations, respond to pan-municipal First Nation issues, represent regional and local government interests at active treaty tables, and contribute valuable work towards Reconciliation. There are significantly increased expectations that Metro Vancouver is taking concrete actions towards Reconciliation with First Nations. This translates to increased workload within the program, as is demonstrated by the Indigenous Relations performance indicators.

As a result of the increased workload within the program, the Indigenous Relations operating budget is proposed to increase from $583,698 in 2021 to $1,383,577 in 2022, by a total of $799,879. Over the five years, the operating program is increasing by an annual average of $211,303, or 31.5% per year.

PURPOSE

To present the 2022 - 2026 Financial Plan for Indigenous Relations for consideration by the Committee.

BACKGROUND

Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on Metro Vancouver's Indigenous Relations program and presents the 2022 provisional annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

INDIGENOUS RELATIONS PROGRAM

The Indigenous Relations program provides information, advice, and support to Metro Vancouver entities on First Nations' interests and issues, and analyzes how such First Nations' interests and issues may affect Metro Vancouver's programs, processes and projects. In 2020, Indigenous Relations staff responded to 2,300 requests; the current trend for 2021 is 3,600 requests. Indigenous Relations supports two committees: Indigenous Relations Committee and a municipal staff advisory committee, the Municipal Technical Advisory Committee on Indigenous Relations. The Indigenous Relations program also responds to pan-municipal First Nation issues and represents and supports Metro Vancouver local government interests at active treaty negotiation tables in the region as well as on provincial and federal issues.

Indigenous Relations supports the strategic directions and high-level goals of the Board's updated Strategic Plan, 2019-2022 as it relates to Fostering Collaboration and Engagement. Specifically, enhancing relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders.

4.2 Strengthen relationships with First Nations by exploring new pathways to reconciliation, such as increased engagement, dialogue, and collaboration between Metro Vancouver and First Nations in the region.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plan for Indigenous Relations is presented in this report. Within the Indigenous Relations Work Plan, five performance indicators have been developed and are being tracked. These include:

- Number of local government interests represented at treaty table meetings
- Number of special Indigenous Relations events hosted by Metro Vancouver (e.g. Community to Community Forums, workshops, lunch and learns)
- Number of bilateral meetings between Metro Vancouver and the nine area First Nations with lands within the region
- Total requests for information or advice related to First Nations and/or Indigenous Relations

The upward trend in these performance measures (see Attachment 2) reflects the increased expectation that Metro Vancouver is taking concrete actions towards Reconciliation with First Nations.

CONTINUOUS IMPROVEMENT
Successful continuous improvement initiatives in 2021 include:

- coordination of region-wide or sub-regional Multi-Assessment archaeological permits. Indigenous Relations staff continue to advise on Multi-Assessment archaeological permits to maximize efficiencies, including reduced costs and wait times on Crown permit applications.

- creation of web-based and video-based modules for staff training purposes (e.g. archaeological Chance Find Protocols). Over 150 staff have, so far, received online training on Chance Find Protocols. Indigenous Relations staff will be working with the External Relations Department in 2022 to create video-based archaeological training modules for project managers, work crews and contractors.

- the identification and implementation of software to assist with tracking requests with the aim of a more efficient tracking of performance indicators. Indigenous Relations staff is continuing to test various possible software in order to assist with the tracking of requests and performance indicators.

Key work for 2022 includes:
- Co-hosting with an area First Nation a Regional Gathering of elected leaders from the 10 local First Nations in the region, the Board of Directors and the Indigenous Relations Committee;
- Facilitating First Nation involvement in regional governance;
- Undertaking more bilateral engagement and negotiation with each of the First Nations within the region;
- Reviewing Metro Vancouver's policy on First Nations engagement;
- Developing an archaeological management approach and policy for Metro Vancouver;
- Developing Metro Vancouver's program for the 2022 National Day for Truth and Reconciliation; and
- Preparatory work for the creation of a web-based portal for the purposes of sharing data with First Nations.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN
The five-year financial plan for this cycle has been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The 2022 - 2026 Indigenous Relations Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for Indigenous Relations presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2022 - 2026 are included in Attachment 3.

Operating Budget Highlights

The Indigenous Relations operating budget is proposed to increase by $799,879 for a total budget of $1,383,577 in 2022 (Attachment 1). This increase is a direct result of increasing demands and expectations placed upon Metro Vancouver as well as recognized need to increasingly involve First Nations in the regional district's plans, projects and initiatives.

The 2022 operating budget includes the following key actions:

- Bilateral engagement and negotiations with First Nations within the region.
- Support ongoing First Nation engagement efforts (including agreements) on capital and construction projects such as North West Langley Wastewater Treatment Plant upgrade, Iona Island Wastewater Treatment Plant upgrade, Coquitlam Lake Water Supply project, Coquitlam Main Water project, and Widgeon Marsh Regional Park development.
- Develop an archaeological management approach for Metro Vancouver including: the creation of a strategic policy; the provision of education as well as Chance Find and cultural awareness training sessions; the conduct of project reviews for archaeological potential; collaboration with First Nations and local governments; and increased internal capacity.
- Host a Regional Gathering involving members of the Indigenous Relations Committee, MVRD Board, and respective First Nation Chiefs and Councils from the 10 First Nation communities in the region.
- Host an annual event (e.g. workshop) involving staff of First Nations and local governments on a topical issue in local government/Indigenous relations.
- Host and/or participate in reconciliation activities (e.g. National Indigenous Peoples Day on June 21 and National Day for Truth and Reconciliation on September 30).
- Participate in active treaty table meetings in the region as part of the provincial negotiating team.
- Provide training sessions for Metro Vancouver staff on corporate policy related to sharing information and engagement with First Nations on construction projects, as well as the Board's procurement policy that includes economic opportunities for First Nations and more use of their services (e.g. archaeological) on Metro Vancouver projects.
- Respond to the increasing number of internal requests: including the provision of advice on information sharing and engagement with First Nations; the identification of First Nation economic and procurement opportunities; as well as the coordination of, and participation in, meetings with First Nations involving staff from across the Metro Vancouver organization.
- Complete the video series of the 10 First Nations in the region.
- Complete an annual review/update of Metro Vancouver's *Guide to Indigenous Nations.*

Over the five years, the operating program is increasing by a total of $1,056,514, which represents an annual average of $211,303 or 31.5% per year.

APPROVAL PROCESS

The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.
The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented at the Metro Vancouver Board Budget Workshop on October 20, 2021.
- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES

1. That the Indigenous Relations Committee endorse the 2022 - 2026 Financial Plan for Indigenous Relations as presented in the report dated September 30, 2021, titled "2022 - 2026 Financial Plan – Indigenous Relations", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Indigenous Relations Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for Indigenous Relations, and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2022 Budget and Five-year Financial Plan for Indigenous Relations, as presented under Alternative 1, the Program will be funded through the allocation of centralized support services. The 2022 - 2026 Financial Plan, if endorsed, will increase by $1,056,514, or an average of $211,303 (31.5%) per year. Indigenous Relations supports all Metro Vancouver entities and functions and its costs are allocated to those entities and functions through the centralized support allocation in accordance with the *Corporate Allocation Policy*.

Under Alternative 2, the Committee may wish to consider recommending amendments to the five-year financial plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The 2022 Budget and Five-year Financial Plan for Indigenous Relations has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan* and supports the goals of Metro Vancouver's four legal entities. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Indigenous Relations.

The presentation of this year's Five-Year Financial Plan for Indigenous Relations provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed program initiatives and the financial impact of these projects, over the next five years. The Financial Plan illustrates how Metro Vancouver proposes to pay for the Indigenous Relations program while

addressing an increasing workload. Metro Vancouver's Financial Plan is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical requirements.

Indigenous Relations supports all Metro Vancouver entities and functions and the associated costs are allocated to those entities and functions as part of Centralized Support Services allocation in accordance with the *Corporate Allocation Policy*.

Staff recommend endorsing the 2022 - 2026 Financial Plan for Indigenous Relations as presented under alternative one.

Attachments:
1. 2022 - 2026 Financial Plan
2. 2022 Work Plan
3. 2022 - 2026 "What's Happening"

Attachment 1

METRO VANCOUVER DISTRICTS
INDIGENOUS RELATIONS
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Allocated to Functional Departments	$ 583,698	$ 907,578	55.5%	$ 921,966	1.6%	$ 943,054	2.3%	$ 964,635	2.3%	$ 986,541	2.3%
Transfer from Capital	-	475,999	0.0%	601,821		618,707	2.8%	635,989	2.8%	653,671	2.8%
TOTAL REVENUES	**$ 583,698**	**$ 1,383,577**	**140.0%**	**$ 1,523,787**	**10.1%**	**$ 1,561,761**	**2.5%**	**$ 1,600,624**	**2.5%**	**$ 1,640,212**	**2.5%**
EXPENDITURES											
Operating Programs:											
Indigenous Relations	$ 583,698	$ 1,383,577		$ 1,523,787		$ 1,561,761		$ 1,600,624		$ 1,640,212	
TOTAL EXPENDITURES	**$ 583,698**	**$ 1,383,577**	**140.0%**	**$ 1,523,787**	**10.1%**	**$ 1,561,761**	**2.5%**	**$ 1,600,624**	**2.5%**	**$ 1,640,212**	**2.5%**

LEGAL SERVICES AND INDIGENOUS RELATIONS

Indigenous Relations

2022 WORK PLAN

Description of services

Indigenous Relations provides information, advice and support to Metro Vancouver on First Nations' interests and issues, and analyzes how such First Nations' interests and issues may affect corporate programs, processes and projects. Indigenous Relations also responds to pan-municipal First Nation issues and represents and supports Metro Vancouver local government interests at treaty negotiation tables as well as at provincial and federal venues.

Strategic directions and high level goals supported

Board Strategic Plan, 2019-2022:

Fostering Collaboration and Engagement

- Enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders.
  - 4.2 Strengthen relationships with First Nations by exploring new pathways to reconciliation, such as increased engagement, dialogue, and collaboration between Metro Vancouver and First Nations in the region.

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Number of local government interests represented at treaty table meetings.	MV 4-year average (2017-2020) 6	Projected 2021: 10	12
Number of special Indigenous Relations events hosted by Metro Vancouver (e.g. Community to Community Forums, workshops, lunch and learns)	MV 4-year average (2017-2020) 3	Projected 2021: 4	5
Number of bilateral meetings between Metro Vancouver and the nine area First Nations with lands	MV 4-year average (2017-2020) 30	Projected 2021: 75	100
Total requests for information or advice related to First Nations and/or Indigenous Relations	MV 4-year average (2017-2020) 1,350	Projected 2021: 3,600	5,000

2022 key actions

- Support ongoing First Nation engagement efforts (including agreements) on capital and construction projects such as North West Langley Wastewater Treatment Plant upgrade, Iona Island Wastewater Treatment Plant upgrade, Coquitlam Lake Water Supply project, Coquitlam Main Water project, and Widgeon Marsh Regional Park development.
- Develop an archaeological management approach for Metro Vancouver including: the creation of a strategic policy; the provision of education as well as Chance Find and cultural awareness training sessions; the conduct of project reviews for archaeological potential; collaboration with First Nations and local governments; and increased internal capacity.
- Host a Regional Gathering involving members of the Indigenous Relations Committee, MVRD Board, and respective First Nation Chiefs and Councils from the 10 First Nation communities in the region.
- Host an annual event (e.g. workshop) involving staff of First Nations and local governments on a topical issue in local government/Indigenous relations.
- Host and/or participate in reconciliation activities (e.g. National Indigenous Peoples Day on June 21 and Orange Shirt Day on September 30).
- Participate in active treaty table meetings in the region as part of the provincial negotiating team.
- Provide training sessions for Metro Vancouver staff on corporate policy related to sharing information and engagement with First Nations on construction projects, as well as the Board's procurement policy that includes economic opportunities for First Nations and more use of their services (e.g. archaeological) on Metro Vancouver projects.
- Respond to the increasing number of internal requests: including the provision of advice on information sharing and engagement with First Nations; the identification of First Nation economic and procurement opportunities; as well as the coordination of, and participation in, meetings with First Nations involving staff from across the Metro Vancouver organization.
- Complete the video series of the 10 First Nations in the region.
- Complete an annual review/update of Metro Vancouver's *Guide to Indigenous Nations.*

Indigenous Relations

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Indigenous Relations over the next 5 years.

Initiative	Description	Theme
2022		
A Metro Vancouver-First Nations Regional Gathering	A forum to be co-hosted by the MVRD Board with 10 First Nation communities' elected leaders in the region; the first such meeting of its kind in the Metro Vancouver region	Environmental Sustainability
First Nations Engagement	Undertake a review of Metro Vancouver's engagement approach with First Nations	Regulatory and Legislative Environment
Climate 2050	Support First Nation engagement and participation in the implementation of the Climate 2050 issue area roadmaps	Environmental Sustainability
Sensitive Ecosystem Inventory	Support First Nation engagement in the 5-year update of the sensitive ecosystem inventory for the region	Environmental Sustainability
Capital and Construction Projects	Support ongoing First Nation engagement efforts on Metro Vancouver capital and construction projects	Regional Growth
Reconciliation	Foster First Nation involvement in regional governance	Environmental Sustainability
Liquid Waste Management Plan	Support First Nation engagement and participation in the plan update	Environmental Sustainability
Solid Waste Management Plan	Support First Nation engagement and participation in the plan update	Environmental Sustainability
Project Data Portal	Preparatory work for the creation of a web-based portal for the purposes of sharing data with First Nations	Regional Growth
Archaeological Management	Develop an approach and policy for Metro Vancouver, including staff training, project reviews and collaboration with First Nations	Regulatory and Legislative Environment
2023-2026		
A Community to Community Forum or Regional Gathering	A forum to be co-hosted by Metro Vancouver Indigenous Relations Committee with one First Nation (i.e. a Community to Community Forum) or the MVRD Board with 10 First Nation communities' elected leaders in the region (i.e. a Regional Gathering)	Environmental Sustainability
Capital and Construction Projects	Support ongoing First Nation engagement efforts on Metro Vancouver capital and construction projects	Environmental Sustainability
Project Data Portal	Development of a system for sharing project information and engaging with First Nation	Environmental Sustainability

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Liquid Waste Committee

From: Peter Navratil, General Manager, Liquid Waste Services

Date: October 7, 2021 Meeting Date: October 14, 2021

Subject: **2022 - 2026 Financial Plan – Liquid Waste Services**

RECOMMENDATION

That the Liquid Waste Committee:

a) endorse the 2022 - 2026 Financial Plan for Liquid Waste Services as presented in the report dated October 7, 2021, titled "2022 - 2026 Financial Plan – Liquid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration; and
b) endorse amendments to the Cost Apportionment Bylaw to enable the division of the GVS&DD levy into separate dry and wet weather components and issue a separate requisition for each component.

EXECUTIVE SUMMARY

The 2022 – 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region for 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

In 2022, the Liquid Waste Services operating budget is proposed to increase by $36.8 million (10.4%) for a total of $391.2 million. A significant portion of this increase is related to capital expenditures which will be partially funded by External Interagency sources and DCC Reserves. This will result in a levy increase of $13.2 million (4.6%), which represents an $8 increase (2.7%) for a total of $281 in the cost to the average regional household after growth is accounted for (which compares to a previous forecast for 2022 of $298). Efforts to reduce expenditures along with the application of excess operating reserves of approximately $3.3 million have resulted in a reduction in the overall Sewer levy of $18.5 million from last year's projection. For longer term cost containment, amendments to the Cost Apportionment Bylaw are recommended, to enable the introduction of wet weather performance to establish incentives for municipal action on Inflow & Infiltration management.

PURPOSE

To present the 2022 - 2026 Financial Plan for Liquid Waste Services for consideration by the Committee.

BACKGROUND

Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, the current 2021 - 2025 Financial Plan, the implications of the COVID-19 pandemic, the tools that can be used to make budget adjustments, and a proposed approach for the 2022 - 2026 Financial Plan.

Staff proposed leveraging the supported tools to create a short-term action plan that would lessen the upward pressure on household impact for 1-3 years. A short-term action plan would enable strategic goals and objectives to be maintained. If larger or more long-term adjustments are desired, a re-evaluation of long-term plans such as the *Metro Vancouver Housing Plan*, *Climate 2050*, or the *Liquid Waste Management Plan* would be required. Since an annual budget is approved, this approach will allow for adjustments to be made each year as conditions change based on market changes and other factors. The use of the tools will aim to avoid making severe changes that cannot be easily corrected in the short-term. Overall, the short-term action plan approach was supported.

This report focuses on the Liquid Waste Services function and presents the 2022 annual budget and the updated five-year plan for the years 2022 to 2026 for committee consideration.

LIQUID WASTE SERVICES

The Liquid Waste Services function is comprised of 19 member jurisdictions within Metro Vancouver, serving a population of approximately 2.7 million residents. The wastewater collection and treatment system consists of over 530 kilometers of trunk sewers, 33 pump stations, two storage tanks and 5 treatment plants that transport and treat an average of 1.2 billion litres of wastewater per day. The urban drainage function is comprised of the Still Creek/Brunette, Port Moody/Coquitlam and University Drainage Areas.

Liquid Waste Services initiatives planned over the next five years are guided by direction provided in the *2019-2022 Board Strategic Plan*, and the 2010 *Integrated Liquid Waste and Resource Management Plan*, specifically:

Board Strategic Plan:

- Enhance the management of the liquid waste system with a commitment to innovative approaches to protect the health of the public and the environment.
- Ensure the long-term resilience of the regional sewerage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the regional liquid waste system protects public health and the environment, now and into the future.

Integrated Liquid Waste and Resource Management Plan:

- Protect public health and the environment
- Use liquid waste as a resource
- Effective, affordable and collaborative management

Metro Vancouver also recognizes the history of Indigenous Peoples and aims to build meaningful and enduring relationships with First Nations. As part of its work, Liquid Waste Services is committed to engaging First Nation communities through information sharing, engagement and ongoing communication.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plans for Liquid Waste Services are presented in this report. Within the Liquid Waste Services Work Plans, 23 performance indicators have been developed and are being tracked. These include:

- Operating cost per million litres collected and treated;
- Compliance with treatment plant Operational Certificates;
- Annual combined sewage overflow (CSO) volume;
- Annual number of wet-weather related sanitary sewer overflows (SSO);
- Percentage of assets not meeting capacity or regulation within 10 years;
- Percent of biosolids beneficially used;
- Energy use in the collection and treatment of liquid waste per million litres processed;
- Percentage of digester gas used at the Wastewater Treatment Plants (WWTP); and
- Number of days swimming advisories posted by Health Authorities.

The trend in these performance measures indicates that the regional Liquid Waste system treatment plants have performed well in complying with existing treatment plant operational certificates, although the North Shore Sewerage Area has been out of compliance with Federal regulations since January 1, 2021 and will remain so until the North Shore WWTP commences secondary treatment of wastewater flows from the North Shore municipalities. Wet weather sanitary sewer overflows continue to occur, primarily as a result of excessive inflow and infiltration into the system through municipal systems and private laterals. Progress on key projects must continue to ensure that needed infrastructure is delivered to comply with regulatory requirements, meet demands resulting from growth and to allow progress on climate change mitigation actions.

CONTINUOUS IMPROVEMENT

Several continuous improvement initiatives have resulted in the following achievements:

- In-sourcing foam injection pipe repair technology. Projected savings of $100,000 per year.
- Increased use of reclaimed water for processes at the Iona Island WWTP's Screening and Grit Management Facility. Projected savings of $200,000 per year through reduced potable water purchases.
- Maintenance optimization in the wastewater treatment plants. Savings of $130,000 per year.
- Review and optimization of sewer flushing program. Cost avoidance of $175,000 per year.
- In-house development of Effluent mixing models. Net reduction in costs of $150,000 per year as a result of reduced reliance on consulting services for modelling work.

For 2022 the following activities will continue, resulting in future improvements:

- Effluent Heat Recovery at Lulu Island WWTP, resulting in higher volume of digester gas available for conversion to Renewable Natural Gas. Projected $415,000 per year increase of revenue and additional regional GHG reductions of 1,000 tonnes per year.

- Design optimization will result in the elimination of one pump station on the Gleneagles system, resulting in reduced operating costs of $150,000 per year.
- Introduction of wet weather cost allocation to create incentives for municipal action on Inflow and Infiltration into municipal sewers.
- Amalgamation of marine and freshwater environmental monitoring programs and bringing some monitoring program components in-house.
- Ongoing review of operations and maintenance work practices.
- Ongoing exploration of markets for alternate biosolids beneficial use opportunities.
- Energy efficiencies through the optimization of treatment process and pump stations operating strategies, implementation of new technologies and optimization of maintenance practices.
- Identification and development of additional opportunities for green biomethane generation.
- Identification and development of sewer heat and effluent heat recovery opportunities in collaboration with member jurisdictions.
- Development of advanced solids handling processes focused on increased biogas generation.
- Development of advanced technologies to increase options for wastewater solids beneficial use and increased resource recovery.
- Continued development and implementation of an ISO 14001 compliant environmental management system.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Attached are the 2022 - 2026 Liquid Waste Services Financial Plan Operating Budget Summary (Attachment 1) and the 2022 - 2026 Liquid Waste Services Capital Budget Summary (Attachment 2).

Each Metro Vancouver function has Annual Work Plans that include strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years. The 2022 Annual Work Plans for the Liquid Waste Services budget presented in this report are included in Attachment 3 and the "What's Happening" highlights for Liquid Waste Services for the years 2022 – 2026 are included in Attachment 4.

Operating Budget Highlights

The Liquid Waste Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). It is proposed to increase by $36.8 million in 2022 for a total budget of $391.2 million (Attachment 1). This increase can essentially be attributed to increasing operating costs (close to $15.2 million) due to increasing operating requirements. A significant portion of the increase can be attributed to

increased debt service costs of $25.3 million due to an accelerating capital program, offset slightly by a decrease in contributions to capital of $3.7 million, supporting infrastructure investments required to meet service requirements and growth demands.

The 2022 operating budget includes the following key actions:

- Collaboration with GVS&DD members on reduction of Inflow and Infiltration (I&I) of rainwater into separated sewers including the introduction of a wet weather pricing structure designed to incentivize action on I&I management and management of combined sewers.
- Develop and bring forward for Board consideration sewer heat recovery capital projects to support district energy systems in partnership with member municipalities to support Climate 2050 goals.
- Commencement of operation of the Iona Island WWTP Dewatering Facility and continue decommissioning the Iona Island WWTP sludge lagoons and complete the removal of biosolids stockpile and grit dump material.
- Support a coordinated regional initiative in estuary environmental management planning.
- Commencement of operation of the new Production Way Work Yard.
- Continue review and update of the *Integrated Liquid Waste and Resource Management Plan* in accordance with a provincially-approved review strategy.
- Complete the development of updated sewer system models.
- Update of servicing agreements and initiate the Rawn Report Amendment process associated with planned WWTP catchment changes.
- Increased focus on addressing Constituents of Environmental Concern (CEC) through source control initiatives including public awareness and behavior change programs and the GVS&DD Sewer Use Bylaw.
- Collaborate with the corporate Digital Strategies group to identify business process inefficiencies for maintenance and operations work groups and identify actions to increase work efficiency.
- Adapt to new work processes to address risks identified in new provincial legislation for engineering work, process safety initiative being developed in collaboration with WorkSafe BC and audit of high risk operating and maintenance procedures.
- Produce a baseline State of the Assets report for Liquid Waste system assets.
- Increase continuous improvement efforts in the delivery of projects in collaboration with the Project Management Office.
- Advance Emergency Management Mutual Aid agreement for the benefit of all member municipalities.

Highlights of contracts and consulting assignments anticipated to be undertaken in 2022 to respond to work plan requirements within the operating budget include the following:

- Biosolids hauling and beneficial use projects.
- Sewer modelling/analytics and data collection services directed at updating system models.
- Technical support and community engagement services for the review and update of the Liquid Waste Management Plan.
- Combined sewer separation and Inflow and Infiltration reduction studies and support.
- Source control studies and support primarily focused on strategies to address compounds of environmental concern.
- Projects funded from the Sustainability Innovation Fund including Advanced Resource

Recovery from Sludge and Handheld Microbial DNA Monitor.
- Facilitation of a regional estuary management program.
- Monitoring programs for Iona Island WWTP and Strait of Georgia; Lions Gate WWTP and Burrard Inlet; Fraser River and the Fraser River WWTPs.
- Additional assignments that are regularly contracted for highly specialized functions, including: effluent toxicity testing, combined sewer overflow characterization and risk assessments, wastewater and biosolids characterization for CECs and toxics, development of environmental management system, maintenance hole monitoring and assessment.

Over the next five years, the Liquid Waste Services budget is expected to increase an average of $77.1 million or 15.9% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing $65.3 million on average over the next five years. The operating programs expenditures are increasing by $11.8 million per year on average, or slightly higher than the rate of inflation, to address core operating and facility commissioning requirements.

Capital Budget Highlights
The Liquid Waste Services capital budget for 2022 approval is $6.5 billion (Attachment 2). This amount includes all capital projects underway or planned in 2022. The capital program is funded by a combination of long-term debt, contributions from the operating budget, some external (interagency and senior level government grant) contributions and development cost charges (DCCs).

Highlights of capital projects planned or ongoing for 2022 include the following:
- Complete construction and commissioning of the Iona Island WWTP Sludge Dewatering facility;
- Complete construction of the First Narrows Pump Station;
- Initiate tunneled section of the Burnaby Lake North Interceptor - Winston Section;
- Continue construction of the Fraser River Crossing portion of the Northwest Langley WWTP Expansion projects;
- Commence construction of the Jervis and Chilco Pump Station Backup Power facilities;
- Commence construction of Gleneagles Pump Stations 4 and 5;
- Complete construction of the Crescent Beach Forcemain Replacement Project;
- Continue construction of the Annacis Island WWTP Outfall System;
- Complete the refurbishment of the third of four Trickling Filters at Annacis Island WWTP;
- Complete the conceptual design for the Iona Island WWTP and commence design for ground improvements and ecological projects.

The projected capital cash flow for 2022 - 2026 totals $4.6 billion, an average of $925.6 million per year. The largest ten projects ($50 million and greater) make up approximately 83% of the capital spending over the next five years. These ten projects also represent 30% of the expenditures planned for the 2027 – 2031 period. In addition to the ten projects, there are a further 130 projects on the plan.

Capital program increases over the next five years are largely driven by system expansion to meet the needs of a growing population, upgrades to improve wastewater discharge quality and meet regulations along with maintenance of aging infrastructure. The following capital projects, which are

being managed by the Project Delivery Department, are the largest projects included in the five-year plan:

- North Shore WWTP Advanced Treatment Upgrade
- Northwest Langley WWTP Expansion
- Iona Island WWTP Advanced Treatment Upgrade
- Annacis Island WWTP Stage 5 Expansion and Outfall System (transitioning to Project Delivery in 2022)

Reserve Funds

The application of reserve funding in Liquid Waste Services is primarily made through the Operating Reserve, Biosolids Inventory Reserve, the Sustainability Innovation Fund Reserve, Drainage Area General Reserve and the Laboratory Equipment Reserve. In 2022, the financial plan includes $3.33 million from operating reserves for rate stabilization, a $7.58 million net application from the Biosolids Inventory Reserve for removal of the stockpile at the Iona Island Wastewater Treatment Plant and $130,000 for several Drainage Area initiatives. In addition, a total of close to $0.95 million is planned to be used from the Liquid Waste Sustainability Innovation Fund for several Board approved sustainability initiatives during 2022 (plus another $1.14 million of funding in 2023-2024 period for Board approved sustainability initiative projects.)

In addition to the operating budget reserve applications noted above, approximately $14.4 million will be applied from the Liquid Waste Sustainability Innovation Fund Reserve over the period 2021 - 2024 to offset funding requirements for a Hydrothermal Processing demonstration scale project at the Annacis Island Wastewater Treatment Plant along with a project to increase efficiency of biogas production.

The 2022 – 2026 Projected Reserves for Liquid Waste Services is included in Attachment 5.

Wet Weather Cost Allocation

To address the increasing challenge of managing I&I of rainwater into the regional sewer systems and to ensure that costs for services are equitably allocated, a shift towards wet weather pricing for liquid waste collection, transportation and treatment is recommended. The current cost apportionment process divides the cost for services between members solely on the basis of dry weather flow. The introduction of an apportionment that also reflects wet weather flow, improves the fairness of the distribution of costs and provides incentive for municipal action to address I&I.

Details of the method of apportionment will be defined in 2022 in coordination with the GVS&DD members. At this time, changes to the Cost Apportionment By-law is recommended to allow the GVS&DD levy to be split into a dry weather component and a wet weather component. This will allow a staged transition from the current dry weather apportionment to a wet weather based model. The change will not result in increased revenue for the GVS&DD, but will reward municipalities that better manage wet weather flows into the regional system. Extensive consultation with the Regional Engineers Advisory Committee (REAC) Liquid Waste Sub-Committee, REAC and the Regional Administrators Advisory Committee will occur in 2022 to confirm the overall cost apportionment methodology. Enabling the Cost Apportionment By-law is the first important step.

APPROVAL PROCESS
The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.
- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES

1. That the Liquid Waste Committee:
   a) endorse the 2022 - 2026 Financial Plan for Liquid Waste Services as presented in the report dated October 7, 2021, titled "2022 - 2026 Financial Plan – Liquid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration; and
   b) endorse amendments to the Cost Apportionment Bylaw to enable the division of the GVS&DD levy into separate dry and wet weather components and issue a separate requisition for each component.

2. That the Liquid Waste Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for Liquid Waste Services and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS
If the GVS&DD Board approves the 2022 Budget and endorses the 2022 - 2026 Financial Plan for Liquid Waste Services, as presented under Alternative 1, in 2022 the revenue from the annual levy for the system will increase by $13.2 million (4.6%) to $301.4 million which will generate the majority of the $391.2 million in total revenue required to offset total expenditures. The increase in the levy represents an $8 increase in the cost to the average regional household to $281 (2021 forecast for 2022: $298.)

Over the term of the five-year Financial Plan, the Liquid Waste Services annual levy is projected to increase by an average of $67.5 million per year to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years will rise from $281 in 2022 to $543 in 2026 representing an average annual increase of $54.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2022 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the Liquid Waste Services Financial Plan.

SUMMARY / CONCLUSION
The Liquid Waste Services 2022 Budget and Five-Year Financial Plan was prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Liquid Waste Services.

The presentation of the 2022 Budget and Five-Year Financial Plan for Liquid Waste Services provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for Liquid Waste investments that will be required to maintain our assets and to respond to our region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical infrastructure requirements.

Staff recommend endorsing the 2022 - 2026 Financial Plan and Annual Work Plans for Liquid Waste Services as presented under Alternative 1, which includes direction to introduce changes to allow the staged introduction of wet weather costing into the apportionment of the levy.

Attachments:
1. 2022 - 2026 Liquid Waste Services Financial Plan
2. 2022 - 2026 Liquid Waste Services Capital Budget Summary
3. 2022 Liquid Waste Services Work Plans
4. 2022 - 2026 "What's Happening"
5. 2022 - 2026 Projected Reserves – Liquid Waste Services

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ATTACHMENT 1

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 288,225,540	$ 301,424,687	4.6%	$ 354,996,628	17.8%	$ 424,243,103	19.5%	$ 513,355,412	21.0%	$ 625,975,409	21.9%
User Fees	2,562,238	3,370,229		4,300,637		5,230,547		6,161,956		6,278,447	
Transfer from DCC Reserves	43,145,119	60,751,328		65,014,135		78,051,107		99,223,872		91,952,659	
BOD/TSS Industrial Charges	11,756,424	12,262,636		12,495,626		12,733,043		12,974,971		13,221,495	
Other External Revenues	1,400,000	1,414,821		1,426,909		1,438,999		1,451,091		1,463,185	
Transfer from Sustainability Innovation Fund Reserves	2,206,676	947,001		697,001		442,001		-		-	
Transfer from Reserves	5,109,789	11,045,508		3,915,545		2,185,340		646,998		946,997	
TOTAL REVENUES	**$ 354,405,786**	**$ 391,216,210**	**10.4%**	**$ 442,846,481**	**13.2%**	**$ 524,324,140**	**18.4%**	**$ 633,814,300**	**20.9%**	**$ 739,838,192**	**16.7%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 1,127,000	$ 1,127,000		$ 1,127,000		$ 1,127,000		$ 1,127,000		$ 1,127,000	
Utility Analysis and Infrastructure	3,233,331	2,977,326		3,478,875		4,129,706		4,532,735		4,636,901	
Utility Policy and Planning	3,063,269	3,563,541		3,909,584		4,072,069		3,941,132		4,010,604	
Wastewater Research and Innovation	3,031,617	2,161,469		1,933,555		1,869,651		1,459,182		1,495,155	
	10,455,217	9,829,336	(6.0%)	10,449,014	6.3%	11,198,426	7.2%	11,060,049	(1.2%)	11,269,660	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	489,001	492,843		492,921		493,012		493,111		510,703	
Dispatch	137,689	145,550		148,436		151,851		155,345		158,805	
Energy Management	285,649	210,568		273,267		285,992		294,751		303,334	
Engineers in Training	499,947	666,857		679,264		694,478		710,042		725,975	
Management Systems Utility Services	989,560	1,013,613		1,021,553		1,031,400		1,041,372		1,061,258	
Records Management	115,862	123,383		125,839		128,810		131,851		134,960	
Utility Voice Radio	162,808	159,823		161,687		166,099		170,368		173,821	
	2,680,516	2,812,637	4.9%	2,902,967	3.2%	2,951,642	1.7%	2,996,840	1.5%	3,068,856	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	12,290,197	12,823,691		13,769,028		14,212,147		14,700,077		15,389,067	
Source Compliance Monitoring	410,963	419,306		419,984		429,657		439,541		598,349	
Contribution to Reserve	101,285	101,284		104,284		104,951		105,630		108,495	
	12,802,445	13,344,281	4.2%	14,293,296	7.1%	14,746,755	3.2%	15,245,248	3.4%	16,095,911	5.6%
Project Delivery											
Minor Capital Projects	8,915,484	9,225,154		9,508,436		9,707,735		9,927,346		10,088,180	
	8,915,484	9,225,154	3.5%	9,508,436	3.1%	9,707,735	2.1%	9,927,346	2.3%	10,088,180	1.6%
Operations and Maintenance											
Lake City Operations	955,508	966,184		978,113		1,000,613		1,023,633		1,045,320	
Liquid Waste Residuals	33,291,360	34,406,220		30,736,502		31,661,052		32,648,752		33,637,561	
Maintenance	31,165,529	32,496,440		34,653,292		36,216,137		37,423,787		40,590,797	
SCADA Control Systems	1,065,995	1,097,380		1,113,832		1,154,795		1,180,307		1,203,845	
Urban Drainage	1,157,299	1,263,704		1,292,675		1,326,264		1,374,402		1,430,033	
Wastewater Collection	15,896,966	16,800,336		17,205,107		17,611,590		18,371,413		19,535,286	
Wastewater Treatment	45,473,059	49,626,692		54,187,765		58,271,004		60,390,427		64,871,578	
	129,005,716	136,656,956	5.9%	140,167,286	2.6%	147,241,455	5.0%	152,412,721	3.5%	162,314,420	6.5%
Administration and Department Support	2,156,200	2,674,487	24.0%	2,709,336	1.3%	2,762,325	2.0%	2,840,662	2.8%	2,892,858	1.8%
Communications Program	450,000	475,001	5.6%	475,001	0.0%	480,000	1.1%	490,000	2.1%	500,000	2.0%
Environmental Regulation and Enforcement	2,041,164	2,169,508	6.3%	2,235,376	3.0%	2,287,842	2.3%	2,341,912	2.4%	2,396,896	2.3%
Allocation of Centralized Support Costs	27,044,682	31,092,091	15.0%	32,262,255	3.8%	34,566,515	7.1%	37,178,681	7.6%	40,440,659	8.8%
Total Operating Programs	195,551,424	208,279,451	6.5%	215,002,967	3.2%	225,942,695	5.1%	234,493,459	3.8%	249,067,440	6.2%
Allocation of Project Delivery Cost	5,082,413	7,590,456	49.3%	10,092,313	33.0%	10,529,706	4.3%	10,599,309	0.7%	10,622,075	0.2%
Debt Service	73,703,813	98,990,808	34.3%	135,577,497	37.0%	197,720,347	45.8%	273,362,275	38.3%	348,504,796	27.5%
Contribution to Capital	80,068,136	76,355,495	(4.6%)	82,173,704	7.6%	90,131,392	9.7%	115,359,257	28.0%	131,643,881	14.1%
TOTAL EXPENDITURES	**$ 354,405,786**	**$ 391,216,210**	**10.4%**	**$ 442,846,481**	**13.2%**	**$ 524,324,140**	**18.4%**	**$ 633,814,300**	**20.9%**	**$ 739,838,192**	**16.7%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
VANCOUVER SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 90,044,826	$ 94,622,596	5.1%	$ 107,124,159	13.2%	$ 128,245,948	19.7%	$ 162,786,879	26.9%	$ 191,711,312	17.8%
User Fees	652,388	914,177		1,187,010		1,459,593		1,732,490		1,764,534	
Transfer from DCC Reserves	5,094,257	6,320,559		7,324,049		7,238,665		7,239,251		7,174,705	
BOD/TSS Industrial Charges	3,148,010	3,135,617		3,195,194		3,255,903		3,317,765		3,380,803	
Other External Revenues	154,282	154,282		154,282		154,282		154,282		154,282	
Transfer from Sustainability Innovation Fund Reserves	845,377	358,250		263,675		167,209		-		-	
Transfer from Reserves	5,029,789	8,293,508		3,785,545		1,960,711		516,998		627,739	
TOTAL REVENUES	**$ 104,968,929**	**$ 113,798,989**	**8.4%**	**$ 123,033,914**	**8.1%**	**$ 142,482,311**	**15.8%**	**$ 175,747,665**	**23.3%**	**$ 204,813,375**	**16.5%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 431,754	$ 426,344		$ 426,344		$ 426,344		$ 426,344		$ 426,344	
Utility Analysis and Infrastructure	1,213,810	1,097,950		1,223,548		1,468,214		1,619,100		1,656,890	
Utility Policy and Planning	1,146,347	1,320,993		1,451,776		1,513,090		1,463,398		1,489,518	
Wastewater Research and Innovation	1,161,412	817,684		731,464		707,289		552,009		565,617	
	3,953,323	3,662,971	(7.3%)	3,833,132	4.6%	4,114,937	7.4%	4,060,851	(1.3%)	4,138,369	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	194,622	186,443		186,472		186,507		186,544		193,199	
Department Technical Training	-										
Dispatch	41,173	42,945		43,797		44,804		45,835		46,856	
Energy Management	85,417	62,129		80,630		84,385		86,969		89,502	
Engineers in Training	191,526	252,274		256,967		262,723		268,611		274,638	
Management Systems Utility Services	295,908	299,117		301,460		304,366		307,309		313,177	
Records Management	34,646	36,404		37,129		38,006		38,903		39,820	
Utility Voice Radio	58,456	57,383		58,054		59,638		61,171		62,411	
	901,748	936,695	3.9%	964,509	3.0%	980,429	1.7%	995,342	1.5%	1,019,603	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	4,529,371	4,679,095		5,036,956		5,197,163		5,379,378		5,630,811	
Source Compliance Monitoring	163,563	158,623		158,880		162,539		166,278		226,355	
Contribution to Reserve	37,327	37,388		38,496		38,742		38,992		40,050	
	4,730,261	4,875,106	3.1%	5,234,332	7.4%	5,398,444	3.1%	5,584,648	3.4%	5,897,216	5.6%
Project Delivery											
Minor Capital Projects	2,869,331	3,625,573		3,744,094		3,822,118		3,906,741		3,966,721	
	2,869,331	3,625,573	26.4%	3,744,094	3.3%	3,822,118	2.1%	3,906,741	2.2%	3,966,721	1.5%
Operations and Maintenance											
Lake City Operations	366,055	365,508		370,020		378,533		387,241		395,445	
Liquid Waste Residuals	19,784,445	19,977,101		17,990,162		18,362,311		18,620,296		19,430,769	
Maintenance	8,157,588	8,842,743		9,239,101		9,559,248		9,850,145		10,278,115	
SCADA Control Systems	293,653	315,205		319,931		331,696		339,023		345,785	
Wastewater Collection	4,208,255	4,004,729		4,141,669		4,163,889		4,341,629		4,635,253	
Wastewater Treatment	12,958,525	14,465,043		15,334,853		15,884,691		16,233,732		16,740,580	
	45,768,521	47,970,329	4.8%	47,395,736	(1.2%)	48,680,368	2.7%	49,772,066	2.2%	51,825,947	4.1%
Administration and Department Support	644,768	789,241	22.4%	799,525	1.3%	815,162	2.0%	838,279	2.8%	853,682	1.8%
Communications Program	172,395	179,693	4.2%	179,693	0.0%	181,584	1.1%	185,367	2.1%	189,150	2.0%
Environmental Regulation and Enforcement	363,123	382,701	5.4%	394,320	3.0%	403,575	2.3%	413,113	2.4%	422,812	2.3%
Allocation of Centralized Support Costs	8,137,092	9,205,419	13.1%	9,387,267	2.0%	9,603,164	2.3%	10,132,473	5.5%	11,263,759	11.2%
Total Operating Programs	67,540,562	71,627,728	6.1%	71,932,608	0.4%	73,999,781	2.9%	75,888,880	2.6%	79,577,259	4.9%
Allocation of Project Delivery Cost	1,211,306	2,015,337	66.4%	2,679,604	33.0%	2,795,736	4.3%	2,814,216	0.7%	2,820,261	0.2%
Debt Service	9,186,351	10,969,678	19.4%	19,685,918	79.5%	34,855,795	77.1%	52,415,989	50.4%	69,734,705	33.0%
Contribution to Capital	27,030,710	29,186,246	8.0%	28,735,784	(1.5%)	30,830,999	7.3%	44,628,580	44.8%	52,681,150	18.0%
TOTAL EXPENDITURES	**$ 104,968,929**	**$ 113,798,989**	**8.4%**	**$ 123,033,914**	**8.1%**	**$ 142,482,311**	**15.8%**	**$ 175,747,665**	**23.3%**	**$ 204,813,375**	**16.5%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
NORTH SHORE SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 28,616,123	$ 30,045,674	5.0%	$ 38,952,335	29.6%	$ 48,813,747	25.3%	$ 59,141,748	21.2%	$ 64,319,205	8.8%
User Fees	71,039	62,515		63,654		64,816		66,001		67,210	
Transfer from DCC Reserves	1,748,354	2,256,693		2,343,337		2,063,417		2,083,514		2,107,118	
BOD/TSS Industrial Charges	861,405	907,707		924,953		942,527		960,435		978,683	
Other External Revenues	14,872	18,693		18,781		18,871		18,963		19,057	
Transfer from Sustainability Innovation Fund Reserves	149,171	65,817		48,442		30,719		-		-	
Transfer from Reserves	-	915,000		-		11,253		-		22,506	
TOTAL REVENUES	**$ 31,460,964**	**$ 34,272,099**	**8.9%**	**$ 42,351,502**	**23.6%**	**$ 51,945,350**	**22.7%**	**$ 62,270,661**	**19.9%**	**$ 67,513,779**	**8.4%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 76,185	$ 78,327		$ 78,327		$ 78,327		$ 78,327		$ 78,327	
Utility Analysis and Infrastructure	214,183	201,712		224,786		269,735		297,456		304,398	
Utility Policy and Planning	202,279	242,688		266,715		277,980		268,851		273,649	
Wastewater Research and Innovation	204,937	150,222		134,382		129,941		101,413		103,913	
	697,584	672,949	(3.5%)	704,210	4.6%	755,983	7.4%	746,047	(1.3%)	760,287	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	32,421	34,253		34,258		34,264		34,271		35,494	
Dispatch	12,017	12,968		13,224		13,529		13,841		14,149	
Energy Management	24,929	18,762		24,348		25,482		26,262		27,027	
Engineers in Training	33,799	46,354		47,217		48,274		49,356		50,464	
Management Systems Utility Services	86,359	90,313		91,020		91,898		92,786		94,558	
Records Management	10,112	10,993		11,212		11,476		11,747		12,024	
Utility Voice Radio	15,497	15,213		15,390		15,810		16,216		16,545	
	215,134	228,856	6.4%	236,669	3.4%	240,733	1.7%	244,479	1.6%	250,261	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	925,963	984,044		1,049,652		1,084,527		1,119,706		1,172,576	
Source Compliance Monitoring	27,247	29,142		29,189		29,861		30,548		41,585	
Contribution to Reserve	7,631	7,598		7,823		7,873		7,924		8,139	
	960,841	1,020,784	6.2%	1,086,664	6.5%	1,122,261	3.3%	1,158,178	3.2%	1,222,300	5.5%
Project Delivery											
Minor Capital Projects	545,939	114,978		117,422		120,273		124,191		125,431	
	545,939	114,978	(78.9%)	117,422	2.1%	120,273	2.4%	124,191	3.3%	125,431	1.0%
Operations and Maintenance											
Lake City Operations	64,593	67,150		67,979		69,543		71,143		72,650	
Liquid Waste Residuals	849,489	949,148		1,550,283		1,856,060		1,938,054		1,933,365	
Maintenance	3,281,647	3,505,038		4,426,764		4,598,134		4,738,424		4,945,435	
SCADA Control Systems	152,669	153,686		155,989		161,726		165,299		168,596	
Wastewater Collection	2,552,254	2,775,013		2,823,247		2,963,165		3,065,770		3,238,559	
Wastewater Treatment	6,221,673	6,519,751		6,989,377		8,639,819		11,073,159		11,394,136	
	13,122,325	13,969,786	6.5%	16,013,639	14.6%	18,288,447	14.2%	21,051,849	15.1%	21,752,741	3.3%
Administration and Department Support	188,171	238,297	26.6%	241,402	1.3%	246,123	2.0%	253,103	2.8%	257,754	1.8%
Communications Program	30,420	33,013	8.5%	33,013	0.0%	33,360	1.1%	34,055	2.1%	34,750	2.0%
Environmental Regulation and Enforcement	119,816	118,238	(1.3%)	121,828	3.0%	124,687	2.3%	127,634	2.4%	130,631	2.3%
Allocation of Centralized Support Costs	2,352,724	2,751,915	17.0%	2,829,191	2.8%	3,323,195	17.5%	3,681,409	10.8%	3,961,554	7.6%
Total Operating Programs	18,232,954	19,148,816	5.0%	21,384,038	11.7%	24,255,062	13.4%	27,420,945	13.1%	28,495,709	3.9%
Allocation of Project Delivery Cost	643,067	662,773	3.1%	881,226	33.0%	919,418	4.3%	925,495	0.7%	927,483	0.2%
Debt Service	4,913,012	5,689,202	15.8%	12,782,355	120.0%	19,530,862	52.8%	25,098,120	28.5%	28,229,918	12.5%
Contribution to Capital	7,671,931	8,771,308	14.3%	7,303,883	(16.7%)	7,240,008	(0.9%)	8,826,101	21.9%	9,860,669	11.7%
TOTAL EXPENDITURES	**$ 31,460,964**	**$ 34,272,099**	**8.9%**	**$ 42,351,502**	**23.6%**	**$ 51,945,350**	**22.7%**	**$ 62,270,661**	**19.9%**	**$ 67,513,779**	**8.4%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
LULU ISLAND WEST SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 25,620,747	$ 26,919,245	5.1%	$ 30,416,699	13.0%	$ 37,618,578	23.7%	$ 43,590,946	15.9%	$ 48,088,300	10.3%
User Fees	136,691	150,695		153,597		156,557		159,576		162,656	
Transfer from DCC Reserves	1,630,909	2,391,566		2,455,209		2,414,964		2,426,447		2,438,066	
BOD/TSS Industrial Charges	755,482	918,747		936,203		953,991		972,117		990,587	
Other External Revenues	655,268	666,268		678,268		690,268		702,268		714,268	
Transfer from Sustainability Innovation Fund Reserves	153,143	66,101		48,651		30,852		-		-	
Transfer from Reserves	-	1,000,000		-		10,967		-		21,933	
TOTAL REVENUES	**$ 28,952,240**	**$ 32,112,622**	**10.9%**	**$ 34,688,627**	**8.0%**	**$ 41,876,177**	**20.7%**	**$ 47,851,354**	**14.3%**	**$ 52,415,810**	**9.5%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 78,214	$ 78,665		$ 78,665		$ 78,665		$ 78,665		$ 78,665	
Utility Analysis and Infrastructure	219,886	202,582		225,756		270,900		298,740		305,712	
Utility Policy and Planning	207,665	243,736		267,867		279,180		270,011		274,830	
Wastewater Research and Innovation	210,394	150,871		134,962		130,502		101,851		104,362	
	716,159	675,854	(5.6%)	707,250	4.6%	759,247	7.4%	749,267	(1.3%)	763,569	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	34,426	34,400		34,406		34,412		34,419		35,647	
Dispatch	11,538	11,882		12,118		12,397		12,682		12,964	
Energy Management	23,933	17,191		22,310		23,348		24,064		24,764	
Engineers in Training	34,694	46,540		47,406		48,468		49,554		50,666	
Management Systems Utility Services	82,915	82,711		83,359		84,162		84,976		86,599	
Records Management	9,709	10,073		10,273		10,516		10,764		11,018	
Utility Voice Radio	13,639	13,389		13,545		13,914		14,272		14,561	
	210,854	216,186	2.5%	223,417	3.3%	227,217	1.7%	230,731	1.5%	236,219	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	900,489	942,577		1,008,547		1,041,624		1,076,330		1,126,975	
Source Compliance Monitoring	28,932	29,268		29,315		29,990		30,680		41,765	
Contribution to Reserve	7,421	7,405		7,624		7,673		7,723		7,932	
	936,842	979,250	4.5%	1,045,486	6.8%	1,079,287	3.2%	1,114,733	3.3%	1,176,672	5.6%
Project Delivery											
Minor Capital Projects	1,147,833	1,739,157		1,778,062		1,814,097		1,852,343		1,881,167	
	1,147,833	1,739,157	51.5%	1,778,062	2.2%	1,814,097	2.0%	1,852,343	2.1%	1,881,167	1.6%
Operations and Maintenance											
Lake City Operations	66,312	67,439		68,272		69,840		71,448		72,962	
Liquid Waste Residuals	1,736,066	1,826,052		1,548,123		1,594,632		1,674,661		1,693,655	
Maintenance	2,702,049	2,732,955		2,826,651		3,067,169		3,147,426		3,212,106	
SCADA Control Systems	31,880	31,358		31,827		32,999		33,727		34,400	
Wastewater Collection	641,766	532,955		541,726		562,411		582,102		644,561	
Wastewater Treatment	5,410,890	5,915,085		6,035,802		6,384,882		6,517,367		6,776,524	
	10,588,963	11,105,844	4.9%	11,052,401	(0.5%)	11,711,933	6.0%	12,026,731	2.7%	12,434,208	3.4%
Administration and Department Support	180,668	218,238	20.8%	221,082	1.3%	225,406	2.0%	231,798	2.8%	236,057	1.8%
Communications Program	31,230	33,155	6.2%	33,155	0.0%	33,504	1.1%	34,202	2.1%	34,900	2.0%
Environmental Regulation and Enforcement	190,849	217,168	13.8%	223,761	3.0%	229,013	2.3%	234,425	2.4%	239,929	2.3%
Allocation of Centralized Support Costs	2,260,778	2,550,425	12.8%	2,665,491	4.5%	2,721,959	2.1%	2,995,104	10.0%	3,067,870	2.4%
Total Operating Programs	16,264,176	17,735,277	9.0%	17,950,105	1.2%	18,801,663	4.7%	19,469,334	3.6%	20,070,591	3.1%
Allocation of Project Delivery Cost	275,720	426,312	54.6%	566,826	33.0%	591,392	4.3%	595,301	0.7%	596,580	0.2%
Debt Service	5,110,522	6,268,165	22.7%	9,407,161	50.1%	14,678,024	56.0%	17,403,179	18.6%	20,331,494	16.8%
Contribution to Capital	7,301,822	7,682,868	5.2%	6,764,535	(12.0%)	7,805,098	15.4%	10,383,540	33.0%	11,417,145	10.0%
TOTAL EXPENDITURES	**$ 28,952,240**	**$ 32,112,622**	**10.9%**	**$ 34,688,627**	**8.0%**	**$ 41,876,177**	**20.7%**	**$ 47,851,354**	**14.3%**	**$ 52,415,810**	**9.5%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
FRASER SEWERAGE AREA

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 141,736,027	$ 147,917,479	4.4%	$ 176,395,242	19.3%	$ 207,394,914	17.6%	$ 245,613,080	18.4%	$ 319,569,236	30.1%
User Fees	1,702,120	2,242,842		2,896,376		3,549,581		4,203,889		4,284,047	
Transfer from DCC Reserves	34,671,599	49,782,510		52,891,540		66,334,061		87,474,660		80,232,770	
BOD/TSS Industrial Charges	6,991,527	7,300,565		7,439,276		7,580,622		7,724,654		7,871,422	
Other External Revenues	575,578	575,578		575,578		575,578		575,578		575,578	
Transfer from Sustainability Innovation Fund Reserves	1,058,985	456,833		336,233		213,221		-		-	
Transfer from Reserves	-	707,000		-		72,410		-		144,819	
TOTAL REVENUES	**$ 186,735,836**	**$ 208,982,807**	**11.9%**	**$ 240,534,245**	**15.1%**	**$ 285,720,387**	**18.8%**	**$ 345,591,861**	**21.0%**	**$ 412,677,872**	**19.4%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Fund Reserve	$ 540,847	$ 543,664		$ 543,664		$ 543,664		$ 543,664		$ 543,664	
Utility Analysis and Infrastructure	1,520,510	1,400,082		1,560,242		1,872,234		2,064,641		2,112,830	
Utility Policy and Planning	1,436,002	1,684,502		1,851,274		1,929,459		1,866,094		1,899,401	
Wastewater Research and Innovation	1,454,874	1,042,692		932,747		901,919		703,909		721,263	
	4,952,233	4,670,940	(5.7%)	4,887,927	4.6%	5,247,276	7.4%	5,178,308	(1.3%)	5,277,158	1.9%
Support Services and Strategic Initiatives											
Annacis Research Centre	227,532	237,747		237,785		237,829		237,877		246,363	
Dispatch	71,880	76,846		78,370		80,173		82,018		83,845	
Energy Management	149,125	111,168		144,269		150,987		155,611		160,142	
Engineers in Training	239,928	321,689		327,674		335,013		342,521		350,207	
Management Systems Utility Services	516,610	535,187		539,380		544,580		549,845		560,344	
Records Management	60,485	65,143		66,440		68,008		69,614		71,256	
Utility Voice Radio	75,216	73,838		74,698		76,737		78,709		80,304	
	1,340,776	1,421,618	6.0%	1,468,616	3.3%	1,493,327	1.7%	1,516,195	1.5%	1,552,461	2.4%
Environmental Management and Quality Control											
Environmental Management and Quality Control	5,934,374	6,217,975		6,673,873		6,888,834		7,124,663		7,458,705	
Source Compliance Monitoring	191,221	202,273		202,600		207,267		212,035		288,644	
Contribution to Reserve	48,906	48,893		50,341		50,663		50,991		52,374	
	6,174,501	6,469,141	4.8%	6,926,814	7.1%	7,146,764	3.2%	7,387,689	3.4%	7,799,723	5.6%
Project Delivery											
Minor Capital Projects	3,872,930	3,520,446		3,639,583		3,717,616		3,806,001		3,872,268	
	3,872,930	3,520,446	(9.1%)	3,639,583	3.4%	3,717,616	2.1%	3,806,001	2.4%	3,872,268	1.7%
Operations and Maintenance											
Lake City Operations	458,548	466,087		471,842		482,697		493,801		504,263	
Liquid Waste Residuals	10,921,360	11,653,919		9,647,934		9,848,049		10,415,741		10,579,772	
Maintenance	16,858,101	17,256,083		17,985,249		18,807,607		19,496,945		21,953,374	
SCADA Control Systems	566,287	576,324		584,967		606,479		619,879		632,239	
Wastewater Collection	8,375,543	9,487,639		9,698,465		9,922,125		10,381,912		11,016,913	
Wastewater Treatment	20,881,971	22,726,813		25,827,733		27,361,612		26,566,169		29,960,338	
	58,061,810	62,166,865	7.1%	64,216,190	3.3%	67,028,569	4.4%	67,974,447	1.4%	74,646,899	9.8%
Administration and Department Support	1,125,667	1,412,129	25.4%	1,430,530	1.3%	1,458,507	2.0%	1,499,869	2.8%	1,527,429	1.8%
Communications Program	215,955	229,140	6.1%	229,140	0.0%	231,552	1.1%	236,376	2.1%	241,200	2.0%
Environmental Regulation and Enforcement	1,367,376	1,451,401	6.1%	1,495,467	3.0%	1,530,567	2.3%	1,566,740	2.4%	1,603,524	2.3%
Allocation of Centralized Support Costs	14,114,667	16,380,193	16.1%	17,208,990	5.1%	18,737,557	8.9%	20,201,413	7.8%	21,991,371	8.9%
Total Operating Programs	91,225,915	97,721,873	7.1%	101,503,257	3.9%	106,591,735	5.0%	109,367,038	2.6%	118,512,033	8.4%
Allocation of Project Delivery Cost	2,952,320	4,482,098	51.8%	5,959,423	33.0%	6,217,699	4.3%	6,258,800	0.7%	6,272,243	0.2%
Debt Service	54,493,928	76,063,763	39.6%	93,702,063	23.2%	128,655,666	37.3%	178,444,987	38.7%	230,208,679	29.0%
Contribution to Capital	38,063,673	30,715,073	(19.3%)	39,369,502	28.2%	44,255,287	12.4%	51,521,036	16.4%	57,684,917	12.0%
TOTAL EXPENDITURES	**$ 186,735,836**	**$ 208,982,807**	**11.9%**	**$ 240,534,245**	**15.1%**	**$ 285,720,387**	**18.8%**	**$ 345,591,861**	**21.0%**	**$ 412,677,872**	**19.4%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
LIQUID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN
DRAINAGE

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Liquid Waste Services Levy	$ 2,207,817	$ 1,919,693	(13.1%)	$ 2,108,193	9.8%	$ 2,169,916	2.9%	$ 2,222,759	2.4%	$ 2,287,356	2.9%
Transfer from Reserves	80,000	130,000		130,000		130,000		130,000		130,000	
TOTAL REVENUES	**$ 2,287,817**	**$ 2,049,693**	**(10.4%)**	**$ 2,238,193**	**9.2%**	**$ 2,299,916**	**2.8%**	**$ 2,352,759**	**2.3%**	**$ 2,417,356**	**2.7%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Utility Analysis and Infrastructure	$ 64,942	$ 75,000		$ 244,543		$ 248,623		$ 252,798		$ 257,071	
Utility Policy and Planning	70,976	71,622		71,952		72,360		72,778		73,206	
	135,918	146,622	7.9%	316,495	120.0%	320,983	1.4%	325,576	1.4%	330,277	1.4%
Support Services and Strategic Initiatives											
Dispatch	1,081	909		927		948		969		991	
Energy Management	2,245	1,318		1,710		1,790		1,845		1,899	
Management Systems Utility Services	7,768	6,285		6,334		6,394		6,456		6,580	
Records Management	910	770		785		804		823		842	
	12,004	9,282	(22.7%)	9,756	5.1%	9,936	1.8%	10,093	1.6%	10,312	2.2%
Project Delivery											
Minor Capital Projects	479,451	225,000		229,275		233,631		238,070		242,593	
	479,451	225,000	(53.1%)	229,275	1.9%	233,631	1.9%	238,070	1.9%	242,593	1.9%
Operations and Maintenance											
Maintenance	166,144	159,621		175,527		183,979		190,847		201,767	
SCADA Control Systems	21,506	20,807		21,118		21,895		22,379		22,825	
Urban Drainage	1,157,299	1,263,704		1,292,675		1,326,264		1,374,402		1,430,033	
Wastewater Collection	119,148	-		-		-		-		-	
	1,464,097	1,444,132	(1.4%)	1,489,320	3.1%	1,532,138	2.9%	1,587,628	3.6%	1,654,625	4.2%
Administration and Department Support	16,926	16,582	(2.0%)	16,797	1.3%	17,127	2.0%	17,613	2.8%	17,936	1.8%
Allocation of Centralized Support Costs	179,421	204,139	13.8%	171,316	(16.1%)	180,640	5.4%	168,282	(6.8%)	156,105	(7.2%)
Total Operating Programs	2,287,817	2,045,757	(10.6%)	2,232,959	9.2%	2,294,455	2.8%	2,347,262	2.3%	2,411,848	2.8%
Allocation of Project Delivery Cost	-	3,936	100.0%	5,234	33.0%	5,461	4.3%	5,497	0.7%	5,508	0.2%
TOTAL EXPENDITURES	**$ 2,287,817**	**$ 2,049,693**	**(10.4%)**	**$ 2,238,193**	**9.2%**	**$ 2,299,916**	**2.8%**	**$ 2,352,759**	**2.3%**	**$ 2,417,356**	**2.7%**

ATTACHMENT 2

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Collections									
8th Avenue Interceptor Air Treatment Facilities	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000	$ 500,000	Definition	Upgrade
Albert Street Trunk Sewer	10,250,000	255,000	-	-	-	-	255,000	Construction	Growth
Big Bend Forcemain - Gate Replacement	180,000	-	-	600,000	650,000	650,000	1,900,000	Design	Maintenance
Burnaby Lake North Interceptor Cariboo Section	-	-	100,000	600,000	1,700,000	11,200,000	13,600,000	Not started	Growth
Burnaby Lake North Interceptor Winston Section	116,950,000	20,050,000	59,300,000	12,000,000	-	-	91,350,000	Construction	Growth
Burnaby South Slope Interceptor	500,000	50,000	200,000	750,000	650,000	3,500,000	5,150,000	Multiple	Growth
Cloverdale Pump Station Capacity Upgrade	700,000	350,000	900,000	900,000	900,000	15,000,000	18,050,000	Design	Growth
Cloverdale Trunk Sewer Capacity Upgrade	1,200,000	100,000	200,000	1,050,000	1,150,000	950,000	3,450,000	Design	Growth
Combined Sewer Overflow Sampling Station Enhancements	1,900,000	450,000	350,000	250,000	-	-	1,050,000	Construction	Maintenance
Glen Eagles Pump Stations Phase 2	-	-	-	5,000,000	-	-	5,000,000	Not started	Maintenance
Crescent Beach FM - Replacement	26,820,000	15,000,000	4,550,000	-	-	-	19,550,000	Construction	Maintenance
Eagle Creek (Lower Section) Channel Restoration	750,000	750,000	-	-	-	-	750,000	Construction	Resilience
Lozells Sanitary Trunk Golf Course Section	-	-	-	-	50,000	400,000	450,000	Not started	Growth
Manitoba Street Combined Trunk Sewer Separation	-	-	-	-	-	100,000	100,000	Not started	Upgrade
EMQC Chemistry Laboratory and Environmental Field Services	3,500,000	2,000,000	1,000,000	500,000	-	-	3,500,000	Construction	Upgrade
Fraser Sewerage Area Integrated Resource Recovery (IRR) Study	1,200,000	100,000	500,000	438,000	-	-	1,038,000	Design	Opportunity
Front Street Pressure Sewer Access Hatches Reinforcement	5,000,000	3,500,000	1,500,000	-	-	-	5,000,000	Construction	Maintenance
FSA Flow Metering Program	3,500,000	600,000	300,000	500,000	450,000	-	1,850,000	Multiple	Maintenance
FSA River Crossing Scour Protection Program - Phase 1	4,200,000	830,000	3,330,000	1,550,000	630,000	-	6,340,000	Construction	Maintenance
FSA Sewer Relocations and Protections	32,750,000	16,300,000	5,250,000	-	-	-	21,550,000	Multiple	Maintenance
FSA Statutory Right of Way Acquisitions Phase 1	35,100,000	9,000,000	9,000,000	8,100,000	-	-	26,100,000	Design	Maintenance
Gilbert/Brighouse Trunk Pressure Sewer	169,601,000	10,150,000	60,200,000	10,150,000	600,000	2,400,000	83,500,000	Multiple	Maintenance
Glen Eagles Forcemain Replacement	10,234,000	600,000	4,000,000	2,250,000	-	-	6,850,000	Multiple	Maintenance
Glen Eagles Pump Stations Phase 1	22,500,000	4,150,000	7,201,000	7,000,000	2,400,000	-	20,751,000	Construction	Maintenance
Glenbrook Combined Trunk Kingsway Sanitary Section	7,200,000	100,000	4,900,000	1,500,000	-	-	6,500,000	Construction	Growth
Harbour Pump Station Discharge Header Repair and Valve Replacements	2,500,000	1,000,000	1,400,000	-	-	-	2,400,000	Construction	Maintenance
Harbour Pump Station Power Distribution Equipment Replacement	1,600,000	300,000	2,200,000	400,000	-	-	2,900,000	Design	Maintenance
Hastings-Cassiar Intake Connection	2,350,000	2,450,000	1,050,000	-	-	-	3,500,000	Construction	Growth
Highbury Interceptor Diversion Junction Chamber Wall Rehabilitation	500,000	250,000	5,500,000	-	-	-	5,750,000	Design	Maintenance
Highbury Interceptor North Arm Crossing - Upgrade of Siphons	12,500,000	500,000	-	-	-	-	500,000	Construction	Resilience
Jervis Pump Station 25kV Voltage Conversion	1,300,000	750,000	300,000	-	-	-	1,050,000	Construction	Maintenance
Kent Pump Station High Voltage Switchgear Replacement	1,150,000	650,000	1,000,000	350,000	-	-	2,000,000	Design	Maintenance
Surrey Central Valley Capacity Upgrade	-	-	-	-	-	150,000	150,000	Not started	Growth
Lake City Access and Parking Improvements	2,850,000	2,710,000	100,000	-	-	-	2,810,000	Construction	Maintenance
LSA Flow Metering Program	300,000	50,000	50,000	50,000	-	-	150,000	Construction	Maintenance
Marshend Pump Station	10,125,000	1,875,000	2,300,000	10,800,000	3,700,000	-	18,675,000	Multiple	Growth
New CSO Management Gates for New Westminster Interceptor	5,925,000	300,000	2,300,000	1,200,000	-	-	3,800,000	Construction	Upgrade
New West Interceptor - Annacis Section 2	45,000,000	4,800,000	8,350,000	5,700,000	6,600,000	6,600,000	32,050,000	Construction	Maintenance
New West Interceptor Grit Chamber	9,300,000	1,000,000	3,800,000	4,000,000	-	-	8,800,000	Construction	Maintenance
New Westminster Interceptor Repair Columbia St. Section	35,752,000	12,500,000	1,450,000	50,000	-	-	14,000,000	Construction	Maintenance
New Westminster Interceptor West Branch and Columbia Extension Rehabilitation	1,900,000	750,000	2,300,000	13,850,000	7,200,000	4,200,000	28,300,000	Design	Maintenance
North Road Trunk Sewer	11,675,000	300,000	3,500,000	1,200,000	-	-	5,000,000	Construction	Growth
North Road Trunk Sewer Phase 2	8,450,000	1,020,000	4,000,000	2,500,000	-	-	7,520,000	Construction	Growth
North Surrey Interceptor - Port Mann Section - Odour Control	7,500,000	500,000	1,150,000	4,500,000	1,000,000	-	7,150,000	Construction	Upgrade
North Surrey Interceptor Annieville Channel Crossing Scour Protection	4,350,000	2,378,000	1,082,000	-	-	-	3,460,000	Construction	Maintenance
North Surrey Interceptor Roebuck Section Rehabilitation - Phase 1	2,750,000	1,048,000	803,000	4,450,000	4,157,000	847,000	11,305,000	Design	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
NSA Flow Metering Program	900,000	100,000	150,000	100,000	50,000	-	400,000	Multiple	Maintenance
NSA Scour Protection Upgrades	2,250,000	1,250,000	1,000,000	-	-	-	2,250,000	Construction	Maintenance
NSI 104th Ave Extension	12,950,000	-	-	6,500,000	1,500,000	-	8,000,000	Construction	Growth
NSI Flow Management	11,500,000	2,650,000	2,450,000	20,000,000	30,000,000	30,000,000	85,100,000	Multiple	Upgrade
NSI Rehab or Replacement	16,450,000	2,000,000	4,400,000	13,000,000	11,500,000	5,000,000	35,900,000	Construction	Maintenance
Ocean Park Trunk Manholes Lining	1,200,000	1,050,000	150,000	-	-	-	1,200,000	Construction	Maintenance
Ocean Park Trunk Sewer - Air Management Facility	2,750,000	1,750,000	500,000	2,500,000	2,500,000	-	7,250,000	Design	Upgrade
Port Coquitlam Pump Station Refurbishment	2,300,000	1,300,000	1,100,000	11,600,000	22,300,000	14,800,000	51,100,000	Design	Maintenance
Port Moody Pump Station Capacity Upgrade	2,300,000	800,000	550,000	4,950,000	3,100,000	-	9,400,000	Design	Growth
Port Moody South Interceptor Capacity Upgrade	-	-	150,000	350,000	1,000,000	1,000,000	2,500,000	Not started	Growth
Port Moody Storm Drain Rehabilitation	200,000	50,000	400,000	600,000	600,000	-	1,650,000	Design	Maintenance
Rosemary Heights Pressure Sewer Capacity Upgrade	-	-	150,000	300,000	400,000	650,000	1,500,000	Not started	Growth
Royal Ave PS Rehabilitation	8,238,000	3,100,000	2,700,000	400,000	-	-	6,200,000	Construction	Maintenance
Sapperton Pump Station	94,815,000	1,000,000	950,000	-	-	-	1,950,000	Multiple	Growth
Sapperton Pump Station Emergency Backup Power	5,000,000	1,500,000	3,000,000	500,000	-	-	5,000,000	Construction	Resilience
Sewer Heat Projects	18,800,000	1,300,000	2,700,000	5,200,000	7,800,000	9,000,000	26,000,000	Construction	Opportunity
South Surrey Interceptor Johnston Section	84,026,000	1,800,000	10,500,000	13,000,000	7,000,000	-	32,300,000	Construction	Growth
SSI - King George Section - Odor Control Facility (OCF) and Grit C	19,550,000	1,700,000	500,000	-	-	-	2,200,000	Construction	Growth
SSI Influent Control Chamber Repair and Replace Gates	1,285,000	700,000	440,000	-	-	-	1,140,000	Construction	Maintenance
SSI Sulfide Odour and Corrosion Control	9,200,000	7,800,000	100,000	-	-	-	7,900,000	Construction	Upgrade
Stoney Creek Sanitary Trunk	700,000	350,000	450,000	1,500,000	1,500,000	3,900,000	7,700,000	Design	Growth
Surrey Corrosion Control Facility Replacement	7,250,000	3,051,000	2,901,000	-	-	-	5,952,000	Construction	Maintenance
VSA Emergency Backup Power	24,310,000	1,000,000	5,000,000	4,000,000	1,250,000	-	11,250,000	Construction	Resilience
VSA Flow Metering Program	5,800,000	600,000	600,000	1,000,000	1,000,000	1,000,000	4,200,000	Multiple	Maintenance
VSA Grit Chamber Access Improvements	900,000	900,000	-	-	-	-	900,000	Construction	Maintenance
VSA Sewer Relocations and Protections	30,650,000	20,250,000	4,300,000	-	-	-	24,550,000	Multiple	Maintenance
Westridge FM Replacement	3,650,000	2,550,000	-	-	-	-	2,550,000	Construction	Maintenance
Westridge Pump Stations 1 & 2 Refurbishment	5,790,000	4,420,000	5,400,000	5,000,000	450,000	-	15,270,000	Multiple	Maintenance
White Rock Forcemain Rehabilitation	1,200,000	500,000	600,000	10,300,000	3,300,000	-	14,700,000	Design	Maintenance
Works Yard	32,000,000	4,400,000	900,000	-	-	-	5,300,000	Construction	Maintenance
Total Collections	**$ 1,028,276,000**	**$ 187,337,000**	**$ 257,457,000**	**$ 202,988,000**	**$ 127,087,000**	**$ 111,847,000**	**$ 886,716,000**		
Treatment Plants									
AIWWTP Ammonia Removal – Sidestream	$ 900,000	$ 150,000	$ -	$ -	$ -	$ -	$ 150,000	Design	Upgrade
AIWWTP Chemical Lab UPS System Replacement	600,000	200,000	-	-	-	-	200,000	Construction	Maintenance
AIWWTP Cogen Building Refurbishment	1,500,000	600,000	800,000	-	-	-	1,400,000	Construction	Maintenance
AIWWTP Cogeneration Backup Power	80,503,000	2,650,000	770,000	-	-	-	3,420,000	Multiple	Resilience
AIWWTP Electrical Distribution System Protection Control and Monitoring	2,650,000	650,000	500,000	400,000	-	-	1,550,000	Construction	Upgrade
AIWWTP Digester No. 5	-	-	300,000	2,500,000	2,800,000	5,500,000	11,100,000	Not started	Growth
AIWWTP Fibre Optic Infrastructure	1,500,000	400,000	-	-	-	-	400,000	Construction	Maintenance
AIWWTP Hydrothermal Processing Pilot	19,450,000	2,550,000	7,500,000	3,800,000	2,500,000	1,925,961	18,275,961	Construction	Opportunity
AIWWTP ICS Replacement Program	14,350,000	500,000	1,500,000	2,500,000	2,500,000	2,500,000	9,500,000	Construction	Maintenance
AIWWTP Influent System Remediation	2,400,000	500,000	1,850,000	14,500,000	20,700,000	1,000,000	38,550,000	Design	Maintenance
AIWWTP IPS Gates Replacements	100,000	100,000	200,000	400,000	-	-	700,000	Design	Maintenance
AIWWTP IPS Pump Building Roof Replacement Phase 2	-	-	-	100,000	500,000	200,000	800,000	Not started	Maintenance
AIWWTP Outfall Repair	-	-	800,000	750,000	-	-	1,550,000	Not started	Maintenance
AIWWTP Replacement of ICS Equipment	4,445,000	150,000	-	-	-	-	150,000	Multiple	Maintenance
AIWWTP Replacement of Protective Relays	3,308,000	150,000	200,000	600,000	-	-	950,000	Construction	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
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	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
AIWWTP Scheduled 64kV Potential & Current Transformer Replacements	800,000	150,000	250,000	250,000	-	-	650,000	Construction	Maintenance
AIWWTP Scum Pump Replacement	-	-	-	200,000	150,000	500,000	850,000	Not started	Maintenance
AIWWTP Secondary Clarifier Corrosion Repair	58,484,000	1,050,000	1,950,000	3,200,000	1,535,000	1,100,000	8,835,000	Multiple	Maintenance
AIWWTP Secondary Effluent Discharge Flowmeter Replacement	400,000	200,000	100,000	-	-	-	300,000	Construction	Maintenance
AIWWTP Spare Trickling Filter Pump & Motor Purchase	1,950,000	1,080,000	90,000	-	-	-	1,170,000	Construction	Maintenance
AIWWTP Stage 5 Expansion & Outfall System	1,191,500,000	62,800,000	62,486,000	91,000,000	108,000,000	111,165,000	435,451,000	Multiple	Growth
AIWWTP Station Battery Replacement	1,207,000	100,000	100,000	-	-	-	200,000	Multiple	Maintenance
AIWWTP Trickling Filter Media & Distributor Arms & Ducting Replacement	90,700,000	20,800,000	18,050,000	16,400,000	-	-	55,250,000	Construction	Maintenance
AIWWTP UPS Condition Monitoring System	-	-	400,000	150,000	-	-	550,000	Not started	Resilience
All WWTPs Power Quality Monitoring & Outage Alarming Network	2,870,000	100,000	-	-	-	-	100,000	Construction	Upgrade
Annacis Influent System Surge Control Refurbishment	22,000,000	4,400,000	4,400,000	1,000,000	8,398,000	-	18,198,000	Construction	Growth
Annacis MCC 80 051, 80 070, 80 071 Replacement	2,850,000	200,000	-	-	-	-	200,000	Construction	Maintenance
Biosolids Dryer	22,700,000	500,000	2,500,000	11,000,000	40,000,000	76,500,000	130,500,000	Design	Opportunity
Ferguson Road Paving Refurbishment	1,100,000	1,100,000	-	-	-	-	1,100,000	Construction	Upgrade
IIWWTP - Biogas Lines Relocation	5,780,000	600,000	-	-	-	-	600,000	Construction	Resilience
IIWWTP Biosolids Dewatering Facility	61,300,000	620,000	1,050,000	-	-	-	1,670,000	Construction	Upgrade
IIWWTP CEPT Winterization	750,000	750,000	-	-	-	-	750,000	Construction	Maintenance
IIWWTP ICS IPS Control Replacement	1,750,000	900,000	150,000	-	-	-	1,050,000	Construction	Maintenance
IIWWTP ICS Replacement Program	750,000	100,000	200,000	200,000	200,000	-	700,000	Construction	Maintenance
IIWWTP Influent Gate Refurbishment	1,350,000	300,000	350,000	-	-	-	650,000	Construction	Maintenance
IIWWTP IPS Drive Remediation	1,400,000	400,000	550,000	200,000	-	-	1,150,000	Construction	Maintenance
IIWWTP MCC/Power Distribution Assess/Replace - Phase 2	1,000,000	50,000	300,000	-	-	-	350,000	Construction	Maintenance
IIWWTP Outfall Refurbishment	20,000,000	500,000	1,500,000	2,000,000	3,000,000	3,000,000	10,000,000	Design	Maintenance
IIWWTP PA-Sed Tank & Gallery Wall Refurbishment	750,000	50,000	100,000	150,000	140,000	-	440,000	Construction	Maintenance
IIWWTP Replacement of CoGen Control System	2,500,000	150,000	300,000	-	-	-	450,000	Construction	Maintenance
IIWWTP Siphon Chamber Refurbishment	2,150,000	60,000	800,000	960,000	330,000	-	2,150,000	Construction	Maintenance
IIWWTP Sludge Lagoons Dewatering Facility	4,000,000	700,000	319,550	-	-	-	1,019,550	Construction	Upgrade
IIWWTP Solids Handling Refurbishment	65,400,000	1,245,000	1,400,000	500,000	500,000	2,500,000	6,145,000	Multiple	Maintenance
IIWWTP Standby Diesel Generators	2,000,000	650,000	1,050,000	1,300,000	1,300,000	500,000	4,800,000	Design	Resilience
Iona Island Control & Instrumentation Replacement 2011	2,750,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Iona Secondary Wastewater Treatment - Phase 1	1,060,000,000	57,500,000	198,500,000	219,500,000	249,000,000	294,000,000	1,018,500,000	Definition	Upgrade
LIWWTP Admin Dewatering Building Roof Repair	100,000	10,000	90,000	700,000	-	-	800,000	Design	Maintenance
LIWWTP Biogas Clean-up Project	13,800,000	500,000	1,800,000	-	-	-	2,300,000	Construction	Opportunity
LIWWTP CCT Isolation Gates	2,050,000	150,000	900,000	-	-	-	1,050,000	Construction	Maintenance
LIWWTP Effluent Heat Recovery Project	10,000,000	100,000	3,000,000	4,000,000	2,000,000	900,000	10,000,000	Construction	Opportunity
LIWWTP Ground Fault Detection System Replacement	1,550,000	400,000	900,000	250,000	-	-	1,550,000	Construction	Maintenance
LIWWTP High Efficiency Boiler	1,300,000	70,000	509,633	300,000	300,000	-	1,179,633	Construction	Maintenance
LIWWTP ICS Replacement Program	6,750,000	2,000,000	1,500,000	1,100,000	350,000	-	4,950,000	Construction	Maintenance
LIWWTP PA-Sed Tank Refurbishment	4,115,000	1,000,000	1,000,000	1,000,000	400,000	-	3,400,000	Construction	Maintenance
LIWWTP Pilot Digestion Optimization Facility	2,850,000	900,000	390,336	-	-	-	1,290,336	Construction	Opportunity
LIWWTP Power Reliability	8,202,000	3,000,000	2,000,000	-	-	-	5,000,000	Construction	Resilience
LIWWTP SCL Refurbishment	850,000	100,000	1,250,000	1,600,000	900,000	4,000,000	7,850,000	Design	Maintenance
LIWWTP Trickling Filter Refurbishment	500,000	500,000	1,000,000	2,000,000	10,500,000	12,500,000	26,500,000	Design	Maintenance
NLWWTP Screw Pump Replacement	1,550,000	100,000	300,000	-	-	-	400,000	Construction	Maintenance
NLWWTP Standby Diesel Generator	400,000	200,000	400,000	400,000	-	-	1,000,000	Design	Resilience
North Shore WWTP Secondary Upgrade, Conveyance and Decommissioning	1,057,867,000	267,030,000	132,440,000	97,350,000	17,400,000	53,670,000	567,890,000	Construction	Upgrade
Northwest Langley Wastewater Treatment Program	1,629,700,000	150,600,000	182,650,000	394,350,000	432,300,000	150,200,000	1,310,100,000	Multiple	Growth
NWL WWTP 25 kV Substation Replacement	10,050,000	350,000	400,000	950,000	-	-	1,700,000	Construction	Maintenance
WWTPs Electrical System Studies & Upgrades	750,000	350,000	450,000	300,000	400,000	250,000	1,750,000	Design	Resilience

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
LIQUID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Total Treatment Plants	**$ 5,514,281,000**	**$ 593,115,000**	**$ 642,295,519**	**$ 877,860,000**	**$ 906,103,000**	**$ 721,910,961**	**$ 3,741,284,480**		
TOTAL CAPITAL EXPENDITURES	**$ 6,542,557,000**	**$ 780,452,000**	**$ 899,752,519**	**$ 1,080,848,000**	**$ 1,033,190,000**	**$ 833,757,961**	**$ 4,628,000,480**		
CAPITAL FUNDING									
New External Borrowing funded by Levy	$ 4,122,492,000	$ 493,249,000	$ 497,908,519	$ 496,296,000	$ 833,073,000	$ 595,593,961	$ 2,916,120,480		
New Borrowing funded by DCC	926,980,000	53,754,000	234,961,000	367,002,000	-	-	655,717,000		
DCCs	253,811,000	42,329,000	64,268,000	60,445,000	11,347,000	1,149,000	179,538,000		
Contribution to Capital from LWS Levy	700,713,000	76,355,000	82,174,000	90,131,000	115,359,000	131,644,000	495,663,000		
Reserve	58,314,000	8,350,000	12,900,000	9,400,000	5,600,000	5,000,000	41,250,000		
External Funding - Interagency	480,247,000	106,415,000	7,541,000	57,574,000	67,811,000	100,371,000	339,712,000		
Total	**$ 6,542,557,000**	**$ 780,452,000**	**$ 899,752,519**	**$ 1,080,848,000**	**$ 1,033,190,000**	**$ 833,757,961**	**4,628,000,480**		
SUMMARY BY DRIVER									
Growth	$ 3,226,941,000	$ 250,000,000	$ 339,536,000	$ 546,750,000	$ 574,148,000	$ 303,615,000	$ 2,014,049,000		
Maintenance	855,059,000	170,452,000	188,446,633	157,060,000	103,892,000	62,797,000	682,647,633		
Resilience	140,195,000	11,200,000	13,070,000	6,650,000	2,950,000	750,000	34,620,000		
Upgrade	2,231,562,000	342,850,000	340,309,550	345,950,000	299,900,000	378,270,000	1,707,279,550		
Opportunity	88,800,000	5,950,000	18,390,336	24,438,000	52,300,000	88,325,961	189,404,297		
Total	**$ 6,542,557,000**	**$ 780,452,000**	**$ 899,752,519**	**$ 1,080,848,000**	**$ 1,033,190,000**	**$ 833,757,961**	**$ 4,628,000,480**		

metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

LIQUID WASTE SERVICES
Policy, Planning and Analysis

Description of services
Liquid Waste Services provide wastewater collection and treatment services through the Liquid Waste function under the Greater Vancouver Sewerage & Drainage District (GVS&DD). The Policy, Planning and Analysis Division provides utility planning, policy and resiliency management to comply with provincial and federal legislation, including development of management plans and progress reporting; strategic planning of utility infrastructure that meets long-term resiliency and climate change requirements; and policy development for regional infrastructure. In addition, it provides source control strategies that protect receiving environments, ensure health and safety and protect infrastructure; maintain liquid waste regulatory bylaws; expand public awareness and education; and develops strategic actions for emerging contaminants. The division also undertakes utility infrastructure analysis to service growth planning with municipalities, facilities modeling, scenario analysis, scope development for capital projects, and facility analysis and planning. It also provides innovation management including technology evaluations, resource recovery assessments, innovative business modelling and enhancing value via Sustainability Innovation Fund projects.

Strategic directions and high level goals supported
Board Strategic Plan:
- Enhance the management of the liquid waste system with a commitment to innovative approaches to protect the health of the public and the environment.
- Ensure the long-term resilience of the regional sewage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the regional liquid waste system protects public health and the environment, now and into the future.

Integrated Liquid Waste and Resource Management Plan:
- Goal 1 - Protect public health and the environment
- Goal 2 - Use liquid waste as a resource
- Goal 3 - Effective, affordable and collaborative management

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Annual number of wet-weather related sanitary sewer overflow (SSO) events from Metro Vancouver sewers	MV 3-year average: 41 2020: 40 2019: 29 2018: 53	10	0

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Annual CSO Volume (ML)	MV 3-year average: 33,400 2020: 36,900 2019: 22,100 2018: 41,300	20,000	33,400
Percentage of Assets not Meeting Capacity or Regulation within 10 Years	MV 3-year average: 28% 2020: 34% 2019: 25% 2018: 25%	34%	33%

2022 Key actions

- Continue to progress on a comprehensive review and update of the Integrated Liquid Waste and Resource Management Plan in accordance with the provincially-approved review strategy.
- Develop regional financial projections for remaining sewer separation requirements in coordination with the Cities of Burnaby, New Westminster and Vancouver to eliminate combined sewer overflows.
- Complete a policy for Board consideration addressing a wet weather pricing framework.
- Develop a Compounds of Environmental Concern (CEC) management strategy to pursue source control as a primary line of defense.
- Initiate a comprehensive review and update of the Sewer Use Bylaw, with a focus on fee structures and bylaw limits in 2022.
- Complete the High-Efficiency Aeration and Genomics Approach to Digestion Optimization Sustainability Innovation Fund (SIF) projects; initiate the Biorock Capture of CO2 for Infrastructure Protection SIF project.
- Coordinate with member jurisdictions to implement Still Creek Brunette River Drainage Area Flood Management Strategy.

LIQUID WASTE SERVICES
Engineering, Design and Construction

Description of services
Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Engineering, Design and Construction (EDC) Division is responsible for the delivery of the core major and minor capital projects, including trunk sewers, pump stations, SSO storage and wastewater treatment facilities identified in the GVS&DD long range plan and minor operating projects.

Strategic directions and high level goals supported
Board Strategic Plan
- Enhance the management of the liquid waste system with a commitment to innovative approaches to protect the health of the public and the environment.
- Ensure the long-term resilience of the regional sewage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government including First Nations, and key stakeholders on a range of initiatives that will ensure that the regional liquid waste system protects public health and the environment, now and into the future.

Integrated Liquid Waste and Resource Management Plan
- Goal 1 - Protect public health and the environment
- Goal 2 - Use liquid waste as a resource
- Goal 3 - Effective, affordable and collaborative management

Performance indicators [1]

Indicator	Historical and/or industry Benchmark	Current performance	2022 Performance objective
Percent of Capital Program Expenditures Achieved (Projects >$90M) (4 PROJECTS – $44M)	3-year average: 79% 2020: 62% 2019: 82% 2018: 93%	35%	95%
Percent of Capital Program Expenditures Achieved (Projects $20M - $90M) (23 PROJECTS – $125M)	3-year average: 79% 2020: 73% 2019: 64% 2018: 100%	63%	90%
Percent of Capital Program Expenditures Achieved (Projects $5M - $20M (36 Projects – $56M)	3-year average: 39% 2020: 36% 2019: 41% 2018: 40%	54%	75%

Indicator	Historical and/or industry Benchmark	Current performance	2022 Performance objective
Percent of Capital Program Expenditures Achieved Projects < $5M (55 Projects – $31M)	3-year average: 39% 2020: 36% 2019: 41% 2018: 40%	62%	75%
Percent of Minor Capital Program Expenditures	3-year average: 63% 2020: 72% 2019: 58% 2018: 59%	70%	90%

[1] The Performance Indicators include projects being completed by other LWS divisions, such as utility relocates and Industrial Control System upgrades, but excluded projects being completed by the Project Delivery department

2022 Key Actions

- In conjunction with the PMO (as appropriate), improve, develop and / or implement division wide project management improvements, targeting the following areas: cost estimating framework; risk management; schedule development and adherence; scope control; change control.
- Building off the success of the Annacis projects, develop a Project Portfolio Coordination Process for the LIWWTP suite of construction projects, including program support, technical review, project controls, and construction coordination
- Fully implement changes to the MCR delivery program – namely rolling project assignments, scoping and definition of future projects, and a dedicated project coordination team
- Initiate approximately 24 new capital projects with a projected value of $310M
- Substantially complete the following construction projects: New Westminster Interceptor - Columbia Section Rehabilitation; Albert Street Trunk Sewer - Phase 2; Crescent Beach Forcemain; Iona Island WWTP Biosolids Dewatering Facility; Hastings Cassiar Intake Connection; Lulu Island WWTP Power Reliability - Phase 1; Lulu Island WWTP Pilot Digestion Optimization Facility.
- Initiate construction activities of the following projects: Scour Protection of the Fraser River crossings of the Maple Ridge Forcemain and Annacis Main No.3 / NSI South Crossing; Scour Protection of the North Vancouver Interceptor Crossing of the Seymour River and Hollyburn Interceptor of the Capilano River; Burnaby Lake North Interceptor - Winston Section Phase 2 (Trenchless); Gilbert Trunk Sewer No. 2 - South and Central Sections; Surrey Ferrous Chloride Dosing System; Glen Eagles Force Main - Phase 2; Glen Eagles Pump Station #4 and #5; North Road Trunk Sewer Phase 2 and BNSF Railway Crossing; South Surrey Interceptor (Delta Section) Air Management Facility; Royal Avenue Pump Station Upgrade; Chilco Pump Station Temporary Emergency Backup Power System; Annacis Island WWTP Trickling Filter #2 Refurbishment.

LIQUID WASTE SERVICES

Operations and Maintenance - Wastewater Collections and Drainage

Description of Services

Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Wastewater Collection and Drainage Division is responsible for managing the operations and maintenance of the sewer collection network and providing maintenance services to Greater Vancouver Water District (GVWD) as a shared service provider. This includes day-to-day management of the infrastructure assets and supporting infrastructure. This business area is also responsible for managing the operations and maintenance of Urban Drainage areas including the Still Creek/Brunette, Port Moody/Coquitlam and UBC Drainage areas.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Enhance the management of the liquid waste system with a commitment to innovative approaches to protect the health of the public and the environment.
- Ensure the long-term resilience of the regional sewage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the regional liquid waste system protects public health and the environment, now and into the future.

Integrated Liquid Waste and Resource Management Plan

- Goal 1 - Protect public health and the environment
- Goal 2 - Use liquid waste as a resource
- Goal 3 - Effective, affordable and collaborative management

Performance Indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Number of reported events of sanitary sewer overflows (SSOs): non-weather related	MV 3-year average: 17.3 2019:11 2018: 24 2017: 17	26	0
Number of odour complaints received	MV 3-year average: 16 2019: 14 2018: 12 2017: 21	16	10

2022 Key Actions

- Complete Electrical Safety Program Review of work practices, systems, and training in accordance with applicable regulations and industry standards.
- Commence review of lockout and isolation procedures for operation and maintenance work tasks.
- Formalize the Maintenance Program including predictive and preventative maintenance and defining scope and service levels for reliability centered maintenance.
- Prepare Production Way Operations Center to enable relocation.
- Develop a construction team capable of mid-sized civil capital construction work.
- Review operating strategy, operations and maintenance practices for Cariboo Dam.
- Plan comprehensive emergency response exercise focused on system outages.
- Progress asset condition and performance work by inspecting and condition rating:
    - 15% of pump station inventory
    - 5% of sewer system inventory
    - 3.5% of the manhole inventory
- Extend access to MV flow monitoring data for external municipal partners.

LIQUID WASTE SERVICES

Operations & Maintenance - Wastewater Treatment & Residuals Management

Description of Services

Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Wastewater Treatment & Residuals Management division is responsible for managing the operations and maintenance of the five regional wastewater treatment plants (WWTPs). This includes long-range facility planning and day-to-day management of the infrastructure assets and supporting infrastructure with the objective of complying with provincial and federal regulations and recovering as much resources from the wastewater as economically feasible. This business area is also responsible for the beneficial use of biosolids and other residuals produced.

Strategic Directions and High Level Goals Supported

Board Strategic Plan

- Enhance the management of the liquid waste system with a commitment to innovative approaches to protect the health of the public and the environment.
- Ensure the long-term resilience of the regional sewage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the regional liquid waste system protects public health and the environment, now and into the future.

Integrated Liquid Waste and Resource Management Plan

- Goal 1 - Protect public health and the environment
- Goal 2 - Use liquid waste as a resource
- Goal 3 - Effective, affordable and collaborative management

Performance Indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Volume treated per year (ML)	MV 3-year average: 449,710 2020: 459,118 2019: 434,465 2018: 455,545	436,400	470,600
Percent of digester gas used at the Wastewater Treatment Plants	MV 3-year average: 55% 2020: 61% 2019: 52% 2018: 51%	54%	60%

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Compliance with treatment plant Operational Certificates (%)	MV 3-year average: 99.89% 2020: 99.83% 2019: 99.91% 2018: 99.94%	99.99%	100%
Percent of biosolids beneficially used	MV 3-year average: 97.8% 2020: 99.5% 2019: 96.1% 2018: 97.9%	99%	97%
Percentage of Biosolids beneficially used in Metro Vancouver Region	MV 3-year average: 16.4% 2020: 17.6% 2019: 13.5% 2018: 18.1%	15%	13%

2022 Key Actions

- Review and update critical operations, maintenance and safety documents related to plant process, operating and maintenance procedures for the wastewater treatment plants.
- Implement and integrate Project Management Guidelines that pertain to wastewater treatment operations and maintenance work processes.
- Fully implement the new Project Management reporting system for the plant's controls systems together with the preparation of associated documentation required.
- Work in close coordination with the WWT Safety Representative, Supervisory Staff and Planners to establish processes that ensures continued compliance with regulatory agency requirements for high risk maintenance activities.
- Continue optimization of the renewable natural gas system at Lulu Island WWTP.
- Test and commission the primary effluent reuse water reclamation system at Iona Island WWTP.
- Complete removal of land-dried biosolids stockpile and grit dump and begin operation of the lagoon dewatering facility at Iona Island WWTP, in preparation for the new plant construction.
- Support procurement of a regional biosolids drying facility.

LIQUID WASTE SERVICES
Environmental Management & Quality Control

Description of services
This business area is responsible for management of environmental programs and initiatives for GVS&DD, analytical services for liquid waste, water and solid waste regulatory, quality control, source control and process control purposes, and federal and provincial regulatory reporting of environmental and wastewater quality and treatment. The work includes environmental investigations, laboratory analyses, modeling, forecasting, simulations, monitoring, risk assessments, support for management of stormwater and urban drainage, development of an Environmental Management System for Liquid Waste Services, implementation of selected source control programs, and liaison with senior governments, academia and environmental stakeholders.

Strategic directions and high level goals supported
Board Strategic Plan:
- Enhance the management of the liquid waste system with a commitment to innovative approaches to protect the health of the public and the environment.
- Ensure the long-term resilience of the regional sewage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the regional liquid waste system protects public health and the environment, now and into the future.

Integrated Liquid Waste and Resource Management Plan:
- Goal 1 - Protect public health and the environment
- Goal 2 - Use liquid waste as a resource
- Goal 3 - Effective, affordable and collaborative management

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Number of days between May 1st and September 30th swimming advisories posted by the Health Authorities (combined totals for all beaches in region)	MV 3-year average: 45 2020: 42 2019: 39 2018: 53	26[1]	28

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Fraser River water quality index[2]	MV 3-year average: 86 2019: 88 2018: 88 2017: 81	77	77
Burrard Inlet water quality index	MV 3-year average: 88 2018: 87 2017: 90 2016: 87	82	82
Sturgeon Bank water quality index	MV 3-year average: 92 2018: 92 2017: 92 2016: 92	96	96

[1] As of September 21, 2021

[2] Water Quality Index (WQI) ranking of water quality: Excellent (WQI value 95-100), Good (80-94), Fair (65-79), Marginal (45-64), Poor (0-44)

2022 Key actions

- Produce the 2021 GVS&DD Environmental Management & Quality Control Annual Report.
- Complete and submit 2021 National Pollution Release Inventory (NPRI) and Greenhouse Gas (GHG) Reports to Environment Canada and the BC Ministry of Environment, respectively.
- Continue the collaborative work on advancing the use of wastewater based epidemiology for the protection of public health.
- Initiate addressing recommendations from the Major Water Body Environmental Program Reviews for Fraser River, Burrard Inlet and Strait of Georgia.
- Perform monitoring of environmental quality of sediments in the Fraser River in the vicinity of the Lulu Island Wastewater Treatment Plant (WWTP) outfall.
- Complete a review of sanitary sewer overflows (SSOs) that took place between 2017 and 2021 using a rapid risk-ranking tool.
- Continue the development of the Environmental Management System (EMS) for the Liquid Waste Utility and prepare a handbook for the management of solid and hazardous waste at the Liquid Waste Services field sites.
- Validate the replacement instruments for the analysis of Biochemical Oxygen Demand at Annacis Island WWTP lab.
- Perform the analyses of drinking water sources for determination of microcystins using Liquid Chromatography Mass Spectrometry (LCMSMS).
- Increase the efficiency and safety of the drinking water testing for determination of Halo Acetic Acid (HAA) by transferring to the Liquid Chromatography methodology.
- Initiate in-house testing of wastewater for the selected Perfluoroalkyl and Polyfluoroalkyl (PFAS) substances.
- Develop the analytical method for testing of UV Transmittance at the future North Shore WWTP.

LIQUID WASTE SERVICES
Support Services and Strategic Initiatives

Description of services
Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Support Services and Strategic Initiatives division is responsible for the following Liquid Waste Services functions: business and financial planning and management; capital budget planning; asset management; performance management; energy management and the Annacis Research Centre.

Strategic directions and high level goals supported
Board Strategic Plan
- Enhance the management of the liquid waste system with a commitment to innovative approaches to protect the health of the public and the environment.
- Ensure the long-term resilience of the regional sewage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the regional liquid waste system protects public health and the environment, now and into the future.

Integrated Liquid Waste and Resource Management Plan
- Goal 1 - Protect public health and the environment
- Goal 2 - Use liquid waste as a resource
- Goal 3 - Effective, affordable and collaborative management

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Operating cost per million litres collected and treated ($/ML)	MV 3-year average: $375 2020: $395 2019: $381 2018: $349	$446	$480
Net energy use in the collection and treatment of liquid waste (GJ/ML)	MV 3-year average: 1.13 2020: 1.05 2019: 1.18 2018: 1.15	1.13	1.13
Net Greenhouse gas emissions from energy and direct emissions (Kg GHG/ML)	MV 3-year average: 18.1 2020: 16.2 2019: 19.4 2018: 18.7	18.1	16.0

Indicator	Historical and/or industry benchmark	Current performance	2022 Performance objective
Energy Savings Realized (kWh/y)	MV 3-year average: 418,870 2020: 137,861 2019: 511,343 2018: 607,407	100,000	590,000

2021 Key actions

- Establish 5-year energy targets at the facility level (WWTPs, Pump Stations) for all LWS facilities and Commence regular facility level energy reporting to monitor progress toward meeting targets.
- Complete investigation of models for a single sewerage area for the Liquid Waste Services and recommend a proposed model and strategy for implementation.
- Implement formal Risk Management Assessment processes for Liquid Waste Services as a component of our continuous improvement actions.
- Complete the assessment of biogas recovery at Annacis Island WWTP, develop agreements with energy utility for the sale of Renewable Natural Gas and initiate a capital project to generate Renewable Natural Gas at the plant.
- Promote and pursue partnerships with municipalities, utilities and the property development community to implement opportunities for resource recovery from liquid waste with emphasis on projects that achieve regional greenhouse gas emissions reductions.
- Development Business model for public involvement / education goals for North Shore WWTP.
- Update Hazard, Risk and Vulnerability Assessment for LWS, integrated with Enterprise Risk Management processes and update emergency management plans.

PROJECT DELIVERY
Liquid Waste Projects

Description of services
The Liquid Waste Projects function within Project Delivery provides support to Liquid Waste by achieving excellence in the delivery of the organization's largest and most complex capital projects.

Working alongside owner departments, Project Delivery brings together best practice skills and resources from multiple disciplines and departments while ensuring projects are adequately resourced and have high level of engagement with both internal and external stakeholders. This support has allowed for Liquid Waste Services to focus resources and planning on service provision and ensure that the highest value, risk and consequence projects are given improved oversight.

Strategic directions and high level goals supported
Support the goals of the Liquid Waste Department in the delivery of liquid waste services through the projects delivered:
- Support the management of Metro Vancouver's liquid waste systems.
- Support the long-term resilience goals of the regional sewerage and drainage system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning.
- Strengthen awareness and engagement with the public, GVS&DD members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the projects delivered meet the regional liquid waste goals of protecting public health and the environment.

Ensure value for money in providing major infrastructure delivery services:
- Achieve excellence in the delivery of high-value, high-risk and complex capital projects.
- Implement project controls and robust monitoring on Metro Vancouver's most complex infrastructure projects.
- Ensure complex project risks are adequately identified, quantified and mitigated.

Performance indicators
(based on percentage of overall project expenditure, as a proxy for project progress)

Indicator	Historical benchmark (2020)	Current performance (as at July, 2021)	2022 performance objective
North Shore WWTP & Conveyance			
• Treatment Plan Construction	17%	36%	TBD
• Conveyance Construction	35%	72%	85%
Northwest Langley WWTP Projects			
• Treatment Plant	4%	9%	10%
• Forcemain & River Crossing	6%	6%	70%
• Pump Station & SSO Tank	14%	40%	70%
• Outfall	1%	1%	3%

Indicator	Historical benchmark (2020)	Current performance (as at July, 2021)	2022 performance objective
Iona Island WWTP Upgrade			
• Project Definition Report	75%	90%	Complete
• Design	Not Started	Not Started	10%
• Construction	Not Started	Not Started	<1%

2022 key actions

North Shore WWTP Project

- Continue project management staff resourcing
- Continue monitoring of WWTP Design-Build contract for both cost and schedule
- Achieve Acceptance for Conveyance Pump Station, (Final Works for Conveyance piping deferred to 2023 to align with WWTP)

Northwest Langley WWTP Projects

- Continued construction of ground improvements on the WWTP site, new pump station and sanitary sewage overflow tank in Maple Ridge and new dual forcemain river crossing underneath the Fraser River
- Completion of risk, schedule and cost review of the first stage of the Northwest Langley wastewater treatment plant upgrade
- Outfall location finalization in consultation with First Nations and regulatory stakeholders

Iona Island WWTP Project

- Complete Project Definition Report addressing identified cost and other challenges
- Procure a Program Management Consultant to support the Metro Vancouver delivery team
- Geotechnical and environmental investigations, including remediation where required
- Technical studies for ecological restoration projects
- Design of a temporary wharf for materials transportation to accelerate the schedule and mitigate traffic impacts
- Design and construction for access road upgrades in partnership with YVR
- Continue addressing land tenure issues and critical permitting requirements
- Procurement of design consultants for the WWTP upgrades

Continue development of an agreement with Musqueam Indian Band for ongoing collaboration and engagement throughout the projects, as well as future economic development opportunities

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Liquid Waste Services over the next 5 years.

Initiative	Description	Theme
2022		
Iona Island WWTP	Finalize project definition, commence design of Phase 1 work including ground improvements and ecological projects, award of Program Management Consultant, commencement of WWT pilot studies, commence procurement of detailed design consultant.	Regulatory and Legislative / Environmental Sustainability
Iona Island WWTP Biosolids Dewatering Facility	Commence mechanical dewatering of digester sludge to allow the completion of decommissioning of the existing sludge lagoons and sludge drying beds.	Regulatory and Legislative / Environmental Sustainability
Iona Island WWTP Biosolids Stockpile Removal	Completion of the removal of the land dried biosolids stockpile and grit stockpile.	Regulatory and Legislative Environment
Development Cost Charge Review	Update the GVS&DD Development Cost Charges to reflect system growth projections.	Financial Sustainability
Wet Weather Management	Work with members to develop a policy framework for a regionally revenue-neutral sewer levy split into dry and wet weather components. To provide incentives in mitigating I&I and separating sewers.	Environmental Sustainability / Financial Sustainability
Sewer Heat Recovery	Bring forward for Board consideration sewer heat recovery capital projects to supply district energy systems with low GHG energy to support Climate 2050 goals.	Environmental Sustainability
Reclaimed Water Policy	Create a policy, pricing structure and other tools needed to enable the distribution of reclaimed water for suitable uses within the region.	Environmental Sustainability
Estuary Management Programs	Establishment of a Task Force to Consider a Holistic Model of Collaborative Environmental Management for the Burrard Inlet, Fraser River Estuary and Boundary Bay and Implementation of the Estuary Management Program Initiatives (2023-2026)	Environmental Sustainability
Energy and GHG Emissions Targeting and Reporting	Establish and implement a formal target-setting process and supporting reporting for each WWTP, Collections, and the utility as a whole.	Environmental Sustainability / Financial Sustainability
2023		
Annacis Island WWTP Hydrothermal Processing Demonstration Facility	Commencement of operation of the HTP facility and initial production of biocrude oil at demonstration scale.	Environmental Sustainability
Burnaby Lake North Interceptor	Completion of construction of the Burnaby Lake North Interceptor – Winston Road Section.	Regional Growth

Initiative	Description	Theme
Integrated Liquid Waste and Resource Management Plan	Submission of the updated Integrated Liquid Waste and Resource Management Plan to the Province.	Regulatory and Legislative Environment
Iona Island WWTP	Commence detailed design of WWTP and commence enabling projects, site preparation and remediation projects	Regulatory and Legislative Environment
Northwest Langley WWTP	Completion of ground improvements for the WWTP. Completion of construction of the Golden Ears Pump Station, the forcemain river crossing and the Sanitary Sewage Overflow Storage Facility. Commence construction of the WWTP	Regional Growth / Environmental Sustainability
Annacis Island WWTP Trickling Filters	Completion of replacement of media, distributor arms and foul air ducting.	System Stewardship
Iona Island WWTP Resource Recovery	Develop a business model for an effluent loop from Iona Island WWTP, providing heat and reclaimed water to nearby users	Environmental Sustainability
2024		
Gilbert Trunk Sewer	Completion of the twinning of the Gilbert Trunk Sewer to improve system reliability and resiliency.	System Stewardship
North Shore WWTP	Completion of construction conveyance piping 300mm forcemain from the First Narrows Pump Station to the new Treatment Plant	Regulatory and Legislative Environment
Iona Island WWTP	Commence construction of WWTP ground improvement works	Regulatory and Legislative Environment
South Surrey Interceptor	Completion of Construction of the South Surrey Interceptor – Johnson Road Section, the last part of the system to be twinned.	Regional Growth
Northwest Langley WWTP	Commence construction of new outfall	Regional Growth
2025		
North Surrey Interceptor Odour Control	Completion of construction of odor control system.	System Stewardship
Liquid Waste Services Comprehensive Long-Range Plan	Complete Comprehensive Regional Liquid Waste System Plan, identifying a strategy for long-term infrastructure needs that aligns with the approved Liquid Waste Management Plan.	Environmental Sustainability
2026		
Port Coquitlam Pump Station	Completion of replacement of the pump station to meet current safety and seismic regulations.	System Stewardship
Cloverdale Pump Station	Completion of construction project to expand the capacity of the pump station.	Regional Growth
Iona Island WWTP	Completion of detailed design of WWTP, completion of ground improvements and Phase 1 ecological projects.	Regulatory and Legislative Environment
Iona Island WWTP Biosolids Stockpile Removal	Completion of the removal of all biosolids sludge lagoons in preparation for the construction of the secondary treatment plant.	Regulatory and Legislative Environment
Annacis Island WWTP Outfall	Completion of construction of the outfall system.	Regional Growth

ATTACHMENT 5

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - LIQUID WASTE

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Liquid Waste Services	**$ 21,578,707**	**$ 21,578,707**	**$ -**	**$ (3,331,000)**	**$ 398,264**	**$ 18,645,971**	**$ 19,018,890**	**$ 19,399,268**	**$ 19,787,253**	**$ 20,182,998**

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Liquid Waste Services										
Biosolids Inventory Reserve	$ 29,132,886	$ 29,132,886	13,443,321	(21,027,829)	$ 506,813	$ 22,055,190	$ 18,672,894	$ 17,121,958	$ 16,942,229	$ 16,758,907
Liquid Waste General Debt Reserve Fund	2,140,673	2,140,673	-	-	42,813	2,183,486	2,227,156	2,271,699	2,317,133	2,363,476
Lions Gate Contingency	1,502,328	1,502,328	-	-	30,047	1,532,375	1,563,022	1,594,283	1,626,169	1,658,692
Drainage General Reserve	5,949,571	5,949,571	-	(930,000)	109,691	5,129,263	4,696,548	4,053,179	3,396,943	3,333,581
Total	**$ 38,725,458**	**$ 38,725,458**	**$ 13,443,321**	**$ (21,957,829)**	**$ 689,364**	**$ 30,900,315**	**$ 27,159,620**	**$ 25,041,119**	**$ 24,282,474**	**$ 24,114,656**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Liquid Waste Services										
Liquid Waste Laboratory Equipment Reserve	$ 612,565	$ 612,565	$ 101,284	$ -	$ 13,264	$ 727,113	$ 846,982	$ 818,422	$ 941,477	$ 766,887
Liquid Waste Sustainability Innovation Fund Reserve	18,338,658	18,338,658	1,127,000	(3,497,001)	343,073	16,311,730	9,497,264	6,541,058	7,810,149	9,104,622
Total	**$ 18,951,223**	**$ 18,951,223**	**$ 1,228,284**	**$ (3,497,001)**	**$ 356,337**	**$ 17,038,843**	**$ 10,344,246**	**$ 7,359,480**	**$ 8,751,626**	**$ 9,871,509**

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Regional Economic Prosperity Management Board

From: David Flaks, President
Jacquie Griffiths, Executive Vice President
Regional Economic Prosperity Service

Date: August 25, 2021 Meeting Date: September 1, 2021

Subject: **2022 - 2026 Financial Plan – Regional Economic Prosperity Service**

RECOMMENDATION

That the Regional Economic Prosperity Management Board support the provisional 2022 - 2026 Financial Plan for Regional Economic Prosperity Service as presented in the report dated August 25, 2021, titled "2022 - 2026 Financial Plan – Regional Economic Prosperity Service", and forward it to the Finance and Intergovernment Committee on October 13, 2021 for consideration.

EXECUTIVE SUMMARY

The 2022 – 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2022 Metro Vancouver Board Budget Workshop.

The Regional Economic Prosperity Service (REPS) has developed a brand identity; identified and activated the four strategic economic development priorities for the region in a fast-changing economy; operationalized the three functional areas, as articulated in the Business Plan and earmarked seven priority export-oriented industries to target in both capacity building work and investment attraction efforts. Having advanced this work sooner than anticipated, the REPS team is now focused on fully scaling the function, increasing attention to include investment retention and addressing gaps in the region as identified by regional leaders and partners such as the need for enhanced data and predictive analytics. Having expedited the deliverables in the original business plan, the budget for 2022 reflects the funding and work that was previously projected for the 2023 financial plan based on a more conservative roll out.

The Regional Economic Prosperity operating budget is proposed to increase from $1.53 million in 2021 to $2.64 million for 2022. While this service is to be funded from the Metro Vancouver Regional District Requisition, reserves from prior years' surpluses have been used to smooth the impact as the service moves to full capacity. As the table below illustrates, the budget related to the work plan has been advanced due to the progress made in activating the service in 2021.

($ millions)	2019	2020	2021	2022	2023	2024	2025	2026
Surplus (applied)	$0.34	$0.79	-	($0.60)	($0.50)	($0.10)	N/A	N/A
2021-2025 Approved Financial Plan	-	-	$1.53	$2.04	$2.55	$2.55	$2.55	N/A
2022-2026 Proposed Financial Plan	-	-	-	$2.64	$3.19	$3.28	$3.33	$3.38

The household impact specific to the Regional Economic Prosperity Service is increasing from $1 to $2 for 2022.

PURPOSE

To present the provisional 2022 - 2026 Financial Plan for Regional Economic Prosperity for consideration by the Regional Economic Prosperity Management Board.

BACKGROUND

Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Regional Economic Prosperity Service and presents the 2022 provisional annual budget and the updated five-year plan for the years 2022 to 2026 for Regional Economic Prosperity Management Board consideration.

REGIONAL ECONOMIC PROSPERITY SERVICE

Metro Vancouver's Regional Economic Prosperity Service (REPS) is the region's economic development service with the mission of collaborating to advance economic opportunity, more broadly shared prosperity, improved quality of life, and environmental sustainability for all the communities and residents in Canada's Pacific Gateway.

As a regional district function, REPS supports the Board Strategic Plan direction to promote a regional approach to advancing economic prosperity that complements and amplifies the economic development work of members.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plan for Regional Economic Prosperity is presented in this report. Within the Regional Economic Prosperity Work Plan, two performance indicators have been developed and are being tracked. These include:

- Increase in annual number of unique visitors to the REPS website
- Increase in number of partnerships developed and sustained to further investment attraction goals and support key industry clusters

As these are new indicators, trends will be assessed as the service develops.

CONTINUOUS IMPROVEMENT

For 2022, the continuous improvement opportunities will include:

- Implementation of a CRM System to ensure effective and efficient relationship management across the region.
- Better access to strategic data and predictive analytics via data source expansion to improve

informed decision making across the region, to fully inform policy makers and member jurisdictions, and to support strategic investment attraction.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The 2022 - 2026 Regional Economic Prosperity Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for Regional Economic Prosperity presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2022 - 2026 are included in Attachment 3.

Operating Budget Highlights

The Regional Economic Prosperity 2022 operating budget is proposed to increase by $1.11 million for a total budget of $2.64 million (Attachment 1). This increase is primarily due to setting up the staff support and building out the infrastructure for the new service which results in increased anticipated expenditures, such as for a Customer Relationship Management System and data platforms that will allow the service to be effective.

In a short amount time, the Regional Economic Prosperity Service (REPS) has developed a brand identity; identified and activated the four strategic economic development priorities for the region in a fast-changing economy; operationalized the three functional areas, as articulated in the Business Plan and earmarked seven priority export-oriented industries to target in both capacity building work and investment attraction efforts. Having advanced this work sooner than anticipated, the REPS team is now focused on fully scaling the function, increasing attention to include investment retention and addressing gaps in the region as identified by regional leaders and partners such as the need for enhanced data and predictive analytics. Having expedited the deliverables in the original business plan, the budget for 2022 reflects the funding and work that was previously projected for the 2023 financial plan based on a more conservative roll out.

The 2022 operating budget includes the following key actions:

- Implement customer relationship management (CRM) system for strategic investment attraction across the region
- Develop strategic investment protocols in conjunction with member jurisdictions

- Establish a regional strategic investment retention program
- Identify and execute collaboration and event opportunities for the purposes of attracting strategic investment
- Undertake applied economic research and policy analysis to build the capacity in and provide support for key industry clusters in the region
- Lead quantitative and qualitative research to inform economic development decision-making that can further enhance strategic investment in the region
- Develop, launch and refine the branding, marketing and strategic communications for the service

Over the next five years, expenditures are increasing on average by $369,000, or an average of 19.8% per year. In addition to those noted above, key projects through 2026 include:

- Facilitation of strategic investment and expansion into the region
- Execution of globally focused, industry-centric events and programs with deal-makers and market-makers to the region
- Fostering of regional economic development collaboration to position our communities and people to prosper
- Undertaking of applied economic research and policy analysis to build the capacity in and provide support for key industry clusters in the region
- Use of cutting-edge data analytics and comprehensive market intelligence to inform strategic investment

Reserve Funds
The financial plan for Regional Economic Prosperity includes the utilization of reserves to help smooth the financial impact as the service moves to full capacity.

The 2022 - 2026 Projected Reserves for Regional Economic Prosperity are included in Attachment 4.

APPROVAL PROCESS
The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and support before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented for consideration to the Finance and Intergovernment Committee on October 13, 2021 and at the Metro Vancouver Board Budget Workshop on October 20, 2021.

- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES

1. That the Regional Economic Prosperity Management Board support the provisional 2022 - 2026 Financial Plan for Regional Economic Prosperity as presented in the report dated August 25, 2021, titled "2022 - 2026 Financial Plan – Regional Economic Prosperity", and forward it to the Finance and Intergovernment Committee on October 13, 2021 for consideration.

2. That the Regional Economic Prosperity Management Board make recommendations to amend the 2022 – 2026 provisional Financial Plan for Regional Economic Prosperity and forward the amended Financial Plan to the Finance and Intergovernment Committee on October 13, 2021 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2022 - 2026 Financial Plan for Regional Economic Prosperity, as presented under Alternative 1, in 2022 the Regional Economic Prosperity requisition will increase by $512,000 (33.5%) for a total requisition of $2.04 million.

Over the term of the five-year plan, the annual Regional Economic Prosperity requisition is projected to increase by an average of $369,000 per year (17.9%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years for the Regional Economic Prosperity Service will rise from just under $1 in 2021 to just under $3 in 2026.

Under Alternative 2, the Management Board may wish to consider recommending amendments to the 2022 provisional Budget and Five-Year Financial Plan for consideration at Finance and Intergovernment Committee. Any changes to the plan may have an impact on the overall MVRD Financial Plan.

CONCLUSION

The Regional Economic Prosperity 2022 Budget and Five-Year Financial Plan was prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Regional Economic Prosperity.

The presentation of this year's five-year financial plan for Regional Economic Prosperity provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for residents while keeping pace with our critical requirements.

Staff recommends supporting the 2022 – 2026 provisional Financial Plan and Annual Work Plan for Regional Economic Prosperity as presented under alternative one.

Attachments:

1. 2022 - 2026 Financial Plan – Regional Economic Prosperity
2. 2022 Work Plan
3. 2022 - 2026 “What’s Happening”
4. 2022 - 2026 Projected Reserves – Regional Economic Prosperity

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL ECONOMIC PROSPERITY
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2020 ACTUAL	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES												
Metro Vancouver Regional District Requisitions	$ 1,020,000	$ 1,530,000	$ 2,041,975	33.5%	$ 2,686,418	31.6%	$ 3,181,992	18.4%	$ 3,328,894	4.6%	$ 3,377,119	1.4%
Transfer from Reserves	-	-	600,000	-	500,000	(16.7%)	100,000	(80.0%)	-	(100.0%)	-	-
TOTAL REVENUES	**$ 1,020,000**	**$ 1,530,000**	**$ 2,641,975**	**72.7%**	**$ 3,186,418**	**20.6%**	**$ 3,281,992**	**3.0%**	**$ 3,328,894**	**1.4%**	**$ 3,377,119**	**1.4%**
EXPENDITURES												
Operating Programs:												
Collaboration	$ -	$ 200,000	$ 643,936		$ 651,191		$ 660,777		$ 670,587		$ 680,623	
Regional Data Collection and Research	74,930	200,000	539,491		761,997		780,024		798,467		817,335	
Attracting Investment	-	700,000	506,028		735,334		752,737		770,543		788,756	
Leadership and Administration	131,224	400,000	817,545		833,379		852,564		872,188		892,266	
	206,154	1,500,000	2,507,000	67.1%	2,981,901	18.9%	3,046,102	2.2%	3,111,785	2.2%	3,178,980	2.2%
Allocation of Centralized Support	20,000	30,000	134,975	350.0%	204,517	51.5%	235,890	15.3%	217,109	(8.0%)	198,139	(8.7%)
TOTAL EXPENDITURES	**$ 226,154**	**$ 1,530,000**	**$ 2,641,975**	**72.7%**	**$ 3,186,418**	**20.6%**	**$ 3,281,992**	**3.0%**	**$ 3,328,894**	**1.4%**	**$ 3,377,119**	**1.4%**

REGIONAL ECONOMIC PROSPERITY SERVICE

Description of services

Metro Vancouver's Regional Economic Prosperity Service is the region's economic development service with the mission of collaborating to advance economic opportunity, more broadly shared prosperity, improved quality of life, and environmental sustainability for all the communities and residents in Canada's Pacific Gateway.

Collaborating with a cross-section of regional leaders from industry, First Nations, labour, government, non-profit organizations, and education, the Regional Economic Prosperity Service exists to foster greater regional collaboration on economic development issues of significance, to advise leaders on sound economic policy and strategy, to brand the region and its key industries to a global audience, and to attract strategic investment into the region.

Strategic directions and high level goals supported

Board Strategic Plan

- Promote a regional approach to advancing economic prosperity that complements and amplifies the economic development work of members.
- Encourage innovation in the delivery of Metro Vancouver services that will contribute to the region's resilience and prosperity through clean technology and circular economy solutions.

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Increase in unique visitors to the REPS website	N/A	3000 unique visits	4500 unique visits (50% increase)
Number of partnerships developed and sustained to further investment attraction goals and support key industry clusters	N/A	2 partnerships	5 partnerships

2022 key actions

- Implement customer relationship management (CRM) system for strategic investment attraction across the region
- Develop strategic investment protocols in conjunction with member jurisdictions
- Establish a regional strategic investment retention program
- Identify and execute collaboration and event opportunities for the purposes of attracting strategic investment

- Undertake applied economic research and policy analysis to build the capacity in and provide support for key industry clusters in the region
- Lead quantitative and qualitative research to inform economic development decision-making that can further enhance strategic investment in the region
- Develop, launch and refine the branding, marketing and strategic communications for the service

Regional Economic Prosperity Service

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Regional Economic Prosperity over the next 5 years.

Initiative	Description	Theme
2022		
Customer Relationship Management (CRM) System	Implementation of CRM system for efficient management of strategic investment attraction across the region	System Stewardship
Regional Promotion	Promote and showcase the industry advantages and business opportunities the region has to offer to the world	Regional Growth
Data Analytics and Industry Intelligence	Inform strategic investment decisions with cutting-edge data analytics and comprehensive industry intelligence	Financial Sustainability
Applied Economic Research and Policy Analysis	Undertake applied economic research and policy analysis to build the capacity in and provide support for key industry clusters in the region	Financial Sustainability
2023-2026		
Strategic Investment Events	Execution of global industry-centric events and programs with deal-makers and market-makers to the region	Financial Sustainability
Foster Regional Collaboration	Foster regional economic development collaboration to position our communities and people to prosper	Regional Growth
Strategic Investment Attraction	Facilitation of business investment and expansion into the region	Financial Sustainability
Data Analytics and Industry Intelligence	Inform strategic investment decisions with cutting-edge data analytics and comprehensive industry intelligence	Financial Sustainability
Applied Economic Research and Policy Analysis	Undertake applied economic research and policy analysis to build the capacity in and provide support for key industry clusters in the region	Financial Sustainability

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Economic Prosperity	20,680	20,680	-	-	414	21,093	21,515	21,946	22,384	22,832

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Economic Prosperity										
Regional Economic Prosperity General Reserve	1,319,545	1,319,545	-	(600,000)	20,391	739,936	249,735	153,730	156,804	159,940

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Regional Parks Committee

From: Neal Carley, General Manager, Parks and Environment
Mike Redpath, Director, Regional Parks

Date: October 6, 2021 Meeting Date: October 13, 2021

Subject: **2022 - 2026 Financial Plan – Regional Parks**

RECOMMENDATION
That the Regional Parks Committee endorse the 2022 - 2026 Financial Plan for Regional Parks as presented in the report dated October 6, 2021, titled "2022 - 2026 Financial Plan – Regional Parks", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY
The 2022 – 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region in 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

Over the next five years, the Regional Parks budget is expected to increase an average of $5,384,949 or 7.9% per year. This is a result of pressures for new service levels, land acquisition and accelerated park and greenway development.

Before 2020, Regional Parks visitation was growing at roughly 4% year, or roughly twice the rate of regional population growth. In 2020, Regional Parks saw 16.5 million visits – an increase of 38% from 2019, when there were 11.9 million visits. High levels of visitation have continued through 2021. Parks are essential to support community resilience, are vital to the physical and mental health and well-being of residents and play a key role in regional climate action.

PURPOSE
To present the 2022 - 2026 Financial Plan for Regional Parks for consideration by the Committee.

BACKGROUND
Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021, a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Regional Parks Service and presents the 2022 provisional annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

REGIONAL PARKS SERVICE

Regional Parks contribute to a livable region by conserving natural assets and connecting to nature. Regional Parks manages 13,743 ha of land for 23 regional parks, 5 regional greenways, 2 Regional Park reserves and 2 ecological conservation areas through:

- Stewardship of the Regional Parks' ecosystems and natural areas
- Safe and secure parks and facilities to connect people with nature
- Park maintenance and bylaw enforcement/regulation
- Park system visitation, programs and services
- Indigenous cooperation, consultation and engagement
- Public education, interpretation, events and cultural engagement
- Park planning and management of built and natural assets
- Capital construction and asset management
- Acquisition of new park land to complete existing parks and create new parks

Regional Parks' initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan*, and *Regional Parks Plan*, specifically:

Board Strategic Plan:

- Provide opportunities for residents and visitors to explore and enjoy a diversity of natural spaces, from beaches to mountains, from bogs to lakes, in the region.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of regional parks.
- Build a system of regional parks that are resilient to the impacts of climate change, land use change, and growing visitation.
- Facilitate a Regional Greenway System that connects natural areas and promotes access to them.

Regional Parks Plan:

- Goal 1 - Protect important natural areas to contribute to the regional livability and enhance connections.
- Goal 2 - Within the context of natural area protection, provide opportunities for people to connect with, enjoy, be active and learn about the environment.

Metro Vancouver also recognizes the history of Indigenous Peoples and aims to build meaningful and enduring relationships with First Nations. As part of our work, Regional Parks is committed to engaging First Nation communities through information sharing, engagement and ongoing communication.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year and to assist in long-term planning. The 2022 Work Plan for Regional Parks is presented in this report. Within the Regional Parks Work Plan, four performance indicators have been developed and are being tracked. These include:

- Annual number of visits to Regional Parks
- Annual number of participants in Regional Park public programming
- Annual number of volunteer hours through stewardship, partnership and visitor services programs
- Total hectares of Regional Park lands

The trends in these performance measures suggests that Regional Parks will continue to have an increase in the annual number of visits to Regional Parks, and will see a reduction in the annual number of participants in Regional Parks programming and number of volunteer hours due to the COVID-19 pandemic. Modest increases in the amount of sensitive ecosystems located within regional parks are expected.

CONTINUOUS IMPROVEMENT

Regional Parks continues to explore, evaluate and implement continuous improvement opportunities. The 2022 continuous improvement opportunities include the following:

- Implementation of pay parking as part of a parking visitor management strategy for Belcarra and Lynn Headwaters Regional Parks. Revenues from the parking program will offset parking and traffic and/or transit infrastructure to improve the visitor experience.
- Continued implementation with the *Tsleil-Waututh Nation Cultural Planning and Cooperation Agreement*. Development of new agreements with additional First Nations in 2021/2022.
- Positioning capital projects for funding from other levels of government and partnering with local municipalities and others.
- Creation of the First Nations Guardians Program with the Tsleil-Waututh Nation at Belcarra Regional Park. Guardian Programs have shown to result in tangible increases in biodiversity from a rise in habitat monitoring, awareness, and conservation that fish and wildlife depend on. Investments in Guardian Watchmen programs enable First Nations to hire and train community members, safeguard Traditional Territories.
- The development of a methodology and decision making framework for establishing Regional Parks program pricing. Consideration will be specifically given to regional-wide benefits and equity. The creation of a cost recovery and subsidy allocation philosophy and policy is a key component to maintaining financial control, equitably pricing offerings, and helping to identify core services including programs and facilities.
- Promotion of Peatland Recovery in areas affected by wildfire in Burns Bog Ecological Conservancy Area. This project will contribute to restoring desired ecological conditions on 37 ha of peatland affected by wildfire. Research will contribute to knowledge on peatland function and potential for long-term carbon benefits. The results will guide future management of other similarly affected peatlands across the region.

- Continuation of the eDNA study. Phase 2 of the study will examine 6 new parks for at least 10 species. A new primer is also under development for Fairy shrimp. A primer is what provides the clue to if a species has ever occupied the study area. The study allows for the potential identification of the presence of animals that are otherwise difficult to detect or capture, and reduces the need to handle wildlife. If a species-at-risk is identified it can help staff best manage areas to reduce negative impacts to wildlife.
- Efficiency improvements in procurement of capital works and establishment of integrated project delivery team for project delivery

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The 2022 - 2026 Regional Parks Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for the Regional Parks function presented in this report is included in Attachment 3 and the "What's Happening" highlights for the years 2022 – 2026 are included in Attachment 4.

Operating Budget Highlights

The Regional Parks 2022 operating budget is proposed to increase by $9,802,487 for a total budget of $68,717,860 (Attachment 1). This is a result of pressures for new service levels, land acquisition and accelerated park and greenway development.

The 2022 operating budget includes the following key actions:

- Continued recovery of Regional Parks revenue streams: filming, public programming and facility rentals.
- Participation in the Metro Vancouver activation at the Pacific National Exhibition (PNE) including provision of outreach nature based programming for visitors to the exhibit.
- Continued implementation of *Public Programming Strategy* (2020) including adoption of cost recovery model and program pricing philosophy as well as completion of a marketing plan.
- Continue to consider additional opportunities for pay parking to help manage parking demand.
- Continue the implementation of measures to support visitor demand management strategies for the Regional Park system.
- Enhance working relationships with First Nations.
- Alignment of the five-year capital budget with the recommendations of the Asset Management Plan and Buildings Strategy and begin implementation.

- Pursue the acquisition of new lands for Regional Parks and greenways in support of the *Regional Parks Land Acquisition 2050* strategy.
- Completion and commencement of implementation of the Community Relationships Strategy.
- Continued implementation of *Tsleil-Waututh Nation Cultural Planning and Cooperation Agreement* and engagement for Belcarra Regional Park.
- Advancement of the development of cultural planning and cooperative agreements with Katzie and Kwikwetlem First Nation.
- Initiation of Phase 1 park development at Widgeon Marsh Regional Park.
- Investigation of the feasibility of an indigenous framework to be included in the *Regional Parks Plan*.
- Renewal of the Burnaby Lake Regional Park lease with the City of Burnaby.
- Continued implementation of the Grouse Mountain Trail and Amenity Improvement Project, funded by the Investing in Canada Infrastructure Grant Program.
- Initiation of Phase 1 of the *Campbell Valley Management Plan* Implementation Project.

Over the next five years, the Regional Parks budget is expected to increase an average of $5,384,949 or 7.9% per year. Adjusting for the additional increases in the contribution to the Regional Parks Land Acquisition and Development Reserve in 2022 to 2026, the average increase per year is 4.7%.

Capital Budget Highlights
The Regional Parks capital budget for 2022 approval is $64.0M (Attachment 2). The capital program is funded primarily by reserve funds. The Regional Parks capital program includes major park development and land acquisition.

Highlights of capital projects planned or ongoing in 2022 include the following:

1. Widgeon Marsh Park Development *(multiyear, $19.1M*)
2. *Campbell Valley Management Plan* Implementation *(multiyear, $8.1M)*
3. Grouse Mountain Trail and Amenity Improvements *(multiyear, $3.5M*)
4. Derby Reach Washroom Building *(multiyear, $2.0M*)
5. Burnaby Lake Service Yard Building *(multiyear, $1M)*
6. Capilano River Service Yard *(multiyear, $2.0M)*
7. IWWTP - Iona Beach Regional Park (Liquid Waste Services lead, integrated team)
8. System-wide Asset Management/Minor Capital Implementation
9. Ongoing Land Acquisition

The projected capital cash flows for 2022 - 2026 totals to $156.5M and is largely driven by new regional park developments, land acquisition and required infrastructure replacements. These include:

- Construction and opening of Widgeon Marsh Regional Park
- Construction of Crippen Regional Park-Davies Orchard Day Use Area and Dorman Point
- Construction of the Belcarra Regional Park South Picnic Area
- Campbell Valley Regional Park Trail and open space improvements
- Implementation of Investing in Canada Grant (Grouse Mountain Regional Park)

- Implementation of the Regional Greenways 2050 strategy including the Delta South Surrey Greenway and Burnaby Lake Greenway improvements
- Development of Burns Bog Ecological Conservancy Area - Delta Nature Reserve
- Trail developments at Aldergrove, Tynehead, Campbell Valley and Pacific Spirit Regional Parks
- Land acquisition in support of *Regional Parks Land Acquisition 2050*

Reserve Funds
The application of reserve funding in Regional Parks includes several operating initiatives which are delivered through consulting or contract services as well as capital maintenance. In 2022, $264,000 of operating initiatives, $2.3 M of litigation costs/legal fees and $5.2M of asset maintenance costs are funded from reserves, which is in accordance with the Board *Operating, Statutory and Discretionary Reserves Policy*. The capital program for Regional Parks is funded primarily from reserves. In 2022, $27.3M in reserve funding will be applied for capital development projects and land acquisition. The 2022 - 2026 projected reserves for Regional Parks is included in Attachment 5.

APPROVAL PROCESS
The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:
- The 2022 – 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.
- The Board will consider adoption of the 2022 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES
1. That the Regional Parks Committee endorse the 2022 - 2026 Financial Plan for Regional Parks as presented in the report "2022 - 2026 Financial Plan – Regional Parks" dated October 6, 2021 and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Regional Parks Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for the Regional Parks function and forward the amended Financial Plan to the to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS
If the MVRD Board endorses the 2022 - 2026 Financial Plan for Regional Parks, as presented under Alternative 1, in 2022 the Regional Parks requisition will increase by $5,192,761 (10.0%) for a total requisition of $57,062,296.

Over the term of the five-year plan, the annual Regional Parks requisition is projected to increase by an average of $4,598,005 per year (7.7%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household for the Regional Parks function will rise from $49 in 2022 to just over $59 in 2026.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2022 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The Regional Parks 2022 Budget and five-year financial plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Regional Parks.

The presentation of this year's five-year financial plan for Regional Parks provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain sustainable for residents while keeping pace with our critical requirements.

Staff recommends endorsing the 2022 - 2026 Financial Plan and Annual Work Plan for Regional Parks as presented under Alternative 1.

Attachments *(48129163)*

1. 2022 - 2026 Financial Plan
2. 2022 - 2026 Capital Portfolio – Regional Parks
3. 2022 Work Plan
4. 2022 - 2026 "What's Happening"
5. 2022 - 2026 Projected Reserves – Regional Parks

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METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PARKS
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 51,869,535	$ 57,062,296	10.0%	$ 64,294,830	12.7%	$ 69,476,703	8.1%	$ 71,677,544	3.2%	$ 74,859,561	4.4%
User Fees	897,708	881,314		864,543		884,280		904,112		924,042	
Other External Revenues	1,525,860	1,855,250		1,580,314		1,599,879		1,649,945		1,675,515	
Transfer from Sustainability Innovation Fund Reserves	338,410	264,000		-		-		-		-	
Transfer from Reserves	4,283,860	8,655,000		7,181,000		7,156,000		7,866,000		8,381,000	
TOTAL REVENUES	**$ 58,915,373**	**$ 68,717,860**	**16.6%**	**$ 73,920,687**	**7.6%**	**$ 79,116,862**	**7.0%**	**$ 82,097,601**	**3.8%**	**$ 85,840,118**	**4.6%**
EXPENDITURES											
Operating Programs:											
Systems Planning, Design and Development Services											
Planning and Resource Management	$ 2,365,197	$ 2,660,418		$ 2,245,397		$ 2,320,760		$ 2,344,053		$ 2,392,517	
Design and Development	1,357,013	1,539,521		1,565,096		1,605,593		1,633,720		1,668,137	
Engineers in Training	11,627	15,508		15,797		16,151		16,513		16,883	
	3,733,837	4,215,447	12.9%	3,826,290	(9.2%)	3,942,504	3.0%	3,994,286	1.3%	4,077,537	2.1%
Systems Visitor and Operations Services											
Visitor Services	1,388,491	1,523,534		1,534,519		1,562,702		1,581,265		1,600,212	
Operations Services	1,810,639	1,802,557		1,805,232		1,838,849		1,873,297		1,907,321	
	3,199,130	3,326,091	4.0%	3,339,751	0.4%	3,401,551	1.9%	3,454,562	1.6%	3,507,533	1.5%
Central Area Services											
Operations and Maintenance	6,066,609	6,753,942		6,673,787		7,012,835		7,196,357		7,361,683	
Area Visitor Services	576,457	612,709		653,595		691,803		723,844		739,299	
Area Management and Administration	2,888,763	3,422,093		633,589		649,342		664,563		680,776	
Area Planning	156,801	161,774		164,334		168,657		171,874		175,166	
Burns Bog Ecological Conservancy Area	421,863	471,440		476,410		506,593		513,170		519,900	
Contribution to Reserve	23,000	223,000		223,000		223,000		223,000		223,000	
	10,133,493	11,644,958	14.9%	8,824,715	(24.2%)	9,252,230	4.8%	9,492,808	2.6%	9,699,824	2.2%
East Area Services											
Operations and Maintenance	4,435,927	4,846,934		5,034,757		5,157,126		5,352,906		5,472,127	
Area Visitor Services	557,073	635,817		644,463		657,562		670,965		706,727	
Area Management and Administration	673,451	626,506		637,689		653,354		668,362		683,723	
Area Planning	153,370	165,881		169,160		173,036		177,000		181,053	
	5,819,821	6,275,138	7.8%	6,486,069	3.4%	6,641,078	2.4%	6,869,233	3.4%	7,043,630	2.5%
West Area Services											
Operations and Maintenance	4,268,606	4,756,383		4,861,520		4,993,418		5,173,103		5,419,226	
Area Visitor Services	579,319	626,892		637,799		651,169		682,983		697,413	
Area Management and Administration	929,561	963,755		977,029		993,319		1,009,988		1,027,050	
Area Planning	152,592	157,565		160,125		163,269		166,486		169,778	
	5,930,078	6,504,595	9.7%	6,636,473	2.0%	6,801,175	2.5%	7,032,560	3.4%	7,313,467	4.0%
Administration and Department Support	1,398,761	1,451,781	3.8%	1,473,389	1.5%	1,528,171	3.7%	1,553,576	1.7%	1,579,534	1.7%
Communications Program	110,000	110,000	0.0%	110,000	0.0%	110,000	0.0%	110,000	0.0%	110,000	0.0%
Utility Voice Radio	84,060	82,520	(1.8%)	83,482	1.2%	85,760	2.7%	87,965	2.6%	89,747	2.0%
Quality Control Allocated	53,591	54,406	1.5%	54,422	0.0%	56,296	3.4%	57,648	2.4%	59,338	2.9%
Allocation of Centralized Support Costs	3,503,795	4,115,924	17.5%	4,279,744	4.0%	4,008,972	(6.3%)	3,744,601	(6.6%)	3,543,742	(5.4%)
Total Operating Programs	33,966,566	37,780,860	11.2%	35,114,335	(7.1%)	35,827,737	2.0%	36,397,239	1.6%	37,024,352	1.7%
Allocation of Project Delivery Cost	166,807	-	(100.0%)	179,352	0.0%	187,125	4.3%	188,362	0.7%	188,766	0.2%
Asset Maintenance	4,030,000	5,185,000	28.7%	7,125,000	37.4%	7,100,000	(0.4%)	7,810,000	10.0%	8,325,000	6.6%
Contribution to Capital Infrastructure Reserve	5,182,000	6,182,000	19.3%	7,932,000	28.3%	8,432,000	6.3%	10,132,000	20.2%	12,732,000	25.7%
Contribution to Parkland Acquisition and Development Reserve	15,570,000	19,570,000	25.7%	23,570,000	20.4%	27,570,000	17.0%	27,570,000	0.0%	27,570,000	0.0%
TOTAL EXPENDITURES	**$ 58,915,373**	**$ 68,717,860**	**16.6%**	**$ 73,920,687**	**7.6%**	**$ 79,116,862**	**7.0%**	**$ 82,097,601**	**3.8%**	**$ 85,840,118**	**4.6%**

METRO VANCOUVER REGIONAL DISTRICT
CAPITAL PORTFOLIO
REGIONAL PARKS
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	2022 CAPITAL BUDGET	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Major Projects									
Grouse Mountain - Regional Park Trail and Amenity Improvements	$ 3,075,000	$ 725,000	$ 1,000,000	$ 1,000,000	$ -	$ -	$ 2,725,000	Construction	Capacity, Growth & Ecological Resilience
Widgeon Marsh - Regional Park Development	19,100,000	7,520,000	6,580,000	-	-	-	14,100,000	Construction	Capacity, Growth & Ecological Resilience
Campbell Valley - Management Plan Implementation	8,100,000	1,000,000	2,000,000	2,500,000	2,000,000	-	7,500,000	Construction	Capacity, Growth & Ecological Resilience
Belcarra - South Day Use Area	-	-	250,000	2,200,000	3,500,000	-	5,950,000	Planned	Capacity, Growth & Ecological Resilience
Codd Wetland - Park Development	-	-	-	900,000	2,500,000	4,500,000	7,900,000	Planned	Capacity, Growth & Ecological Resilience
West Creek Wetlands - Park Development	-	-	300,000	750,000	1,000,000	750,000	2,800,000	Planned	Capacity, Growth & Ecological Resilience
Burns Bog - Fire Restoration	-	-	-	-	-	500,000	500,000	Planned	Capacity, Growth & Ecological Resilience
Total Major Projects Program	**$ 30,275,000**	**$ 9,245,000**	**$ 10,130,000**	**$ 7,350,000**	**$ 9,000,000**	**$ 5,750,000**	**$ 41,475,000**		
Greenways									
Aldergrove - Rock'n Horse Trail Connector	$ 400,000	$ 400,000	$ -	$ -	$ -	$ -	$ 400,000	Planned	Connected Network
DNR/DSSG Management Plan Implementation	-	-	600,000	3,500,000	3,500,000	2,500,000	10,100,000	Planned	Connected Network
Boundry Bay - Perimeter Trail	-	-	150,000	1,500,000	-	-	1,650,000	Planned	Connected Network
Tynehead - Perimeter Trail	-	-	1,000,000	1,500,000	-	-	2,500,000	Planned	Connected Network
Other Greenways Upgrades	-	-	3,500,000	1,000,000	100,000	200,000	4,800,000	Planned	Connected Network
Total Greenways Program	**$ 400,000**	**$ 400,000**	**$ 5,250,000**	**$ 7,500,000**	**$ 3,600,000**	**$ 2,700,000**	**$ 19,450,000**		
Service Facilities									
Burnaby Lake - Service Yard Building Replacement	$ 1,000,000	$ 200,000	$ 50,000	$ 500,000	$ -	$ -	$ 750,000	Construction	Facility Replacement & Asset Management
Capilano - New Service Yard	943,000	150,000	-	-	-	-	150,000	Construction	Facility Replacement & Asset Management
Total Service Facilities Program	**$ 1,943,000**	**$ 350,000**	**$ 50,000**	**$ 500,000**	**$ -**	**$ -**	**$ 900,000**		
Park Development									
Crippen - Davies Orchard	$ 1,750,000	$ 1,000,000	$ 750,000	$ -	$ -	$ -	$ 1,750,000	Planned	Capacity, Growth & Ecological Resilience
Derby Reach - Full Service Washroom	2,014,000	1,560,000	-	-	-	-	1,560,000	Construction	Capacity, Growth & Ecological Resilience
Crippen - Dorman Point Acces and Amenities	500,000	500,000	-	-	-	-	500,000	Planned	Facility Replacement & Asset Management
Colony Farm - TMX Agreement Projects	1,000,000	100,000	300,000	300,000	300,000	-	1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - Admiralty Heights Trail Decomissioning	-	-	250,000	500,000	250,000		1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - White Pine Redevelopment & Improvements	-	-	-	-	150,000	1,600,000	1,750,000	Planned	Capacity, Growth & Ecological Resilience
Campbell Valley - Little River Loop Boardwalk	-	-	800,000	-	-	-	800,000	Planned	Facility Replacement & Asset Management
Pacific Spirit - Beach Access & Trail Improvments	-	-	50,000	100,000	500,000	1,000,000	1,650,000	Planned	Facility Replacement & Asset Management
Advanced Design Work for Future Projects	1,300,000	1,300,000	-	-	-	-	1,300,000	Planned	Capacity, Growth & Ecological Resilience
Park Amenities and Visitor Experience	4,500,000	750,000	750,000	1,000,000	1,000,000	1,000,000	4,500,000	Planned	Capacity, Growth & Ecological Resilience
Other Replacement, Restoration & Upgrade Projects	4,610,000	300,000	275,000	1,005,000	1,700,000	1,330,000	4,610,000	Planned	Facility Replacement & Asset Management
Total Park Development Program	**$ 15,674,000**	**$ 5,510,000**	**$ 3,175,000**	**$ 2,905,000**	**$ 3,900,000**	**$ 4,930,000**	**$ 20,420,000**		

Regional Parks Land Acquisition								
Regional Parks Land Acquisition	$ 15,750,000	$ 15,750,000	$ 15,000,000	$ 14,000,000	$ 12,500,000	$ 17,000,000	$ 74,250,000	Land Acquisition
Total Land Acquisition Program	**$ 15,750,000**	**$ 15,750,000**	**$ 15,000,000**	**$ 14,000,000**	**$ 12,500,000**	**$ 17,000,000**	**$ 74,250,000**	
TOTAL CAPITAL EXPENDITURES	**$ 64,042,000**	**$ 31,255,000**	**$ 33,605,000**	**$ 32,255,000**	**$ 29,000,000**	**$ 30,380,000**	**$ 156,495,000**	

CAPITAL FUNDING							
Reserve	$ 57,352,060	$ 27,347,000	$ 32,491,780	$ 31,141,780	$ 28,700,000	$ 30,380,000	$ 150,060,560
Grants	6,689,940	3,908,000	1,113,220	1,113,220	300,000		6,434,440
Total	**$ 64,042,000**	**$ 31,255,000**	**$ 33,605,000**	**$ 32,255,000**	**$ 29,000,000**	**$ 30,380,000**	**$ 156,495,000**

SUMMARY BY DRIVER							
Capacity, Growth & Ecological Resilience	$ 40,839,000	$ 13,955,000	$ 12,180,000	$ 9,150,000	$ 10,700,000	$ 8,350,000	$ 54,335,000
Facility Replacement & Asset Management	7,053,000	1,150,000	1,175,000	1,605,000	2,200,000	2,330,000	8,460,000
Connected Network	400,000	400,000	5,250,000	7,500,000	3,600,000	2,700,000	19,450,000
Land Acquisition	15,750,000	15,750,000	15,000,000	14,000,000	12,500,000	17,000,000	74,250,000
Total	**$ 64,042,000**	**$ 31,255,000**	**$ 33,605,000**	**$ 32,255,000**	**$ 29,000,000**	**$ 30,380,000**	**$ 156,495,000**

METRO VANCOUVER REGIONAL DISTRICT
CAPITAL PORTFOLIO
REGIONAL PARKS
ESTIMATED TOTAL PROJECT COST

		ESTIMATED TOTAL PROJECT COST	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES				
Major Projects				
Grouse Mountain - Regional Park Trail and Amenity Improvements	$	3,075,000	Construction	Capacity, Growth & Ecological Resilience
Widgeon Marsh - Regional Park Development		19,100,000	Construction	Capacity, Growth & Ecological Resilience
Campbell Valley - Management Plan Implementation		8,100,000	Construction	Capacity, Growth & Ecological Resilience
Belcarra - South Day Use Area		5,950,000	Planned	Capacity, Growth & Ecological Resilience
Codd Wetland - Park Development		9,900,000	Planned	Capacity, Growth & Ecological Resilience
West Creek Wetlands - Park Development		2,800,000	Planned	Capacity, Growth & Ecological Resilience
Burns Bog - Fire Restoration		4,500,000	Planned	Capacity, Growth & Ecological Resilience
Total Major Projects Program	**$**	**53,425,000**		
Greenways				
Aldergrove - Rock'n Horse Trail Connector	$	400,000	Planned	Connected Network
DNR/DSSG Management Plan Implementation		10,100,000	Planned	Connected Network
Boundry Bay - Perimeter Trail		1,650,000	Planned	Connected Network
Tynehead - Perimeter Trail		2,500,000	Planned	Connected Network
Other Greenways Upgrades		4,800,000	Planned	Connected Network
Total Greenways Program	**$**	**19,450,000**		
Service Facilities				
Burnaby Lake - Service Yard Building Replacement	$	1,000,000	Construction	Facility Replacement & Asset Management
Capilano - New Service Yard		943,000	Construction	Facility Replacement & Asset Management
Total Service Facilities Program	**$**	**1,943,000**		
Park Development				
Crippen - Davies Orchard	$	1,750,000	Planned	Capacity, Growth & Ecological Resilience
Derby Reach - Full Service Washroom		2,014,000	Construction	Capacity, Growth & Ecological Resilience

Crippen - Dorman Point Acces and Amenities	500,000	Planned	Facility Replacement & Asset Management
Colony Farm - TMX Agreement Projects	1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - Admiralty Heights Trail Decomissioning	1,000,000	Planned	Capacity, Growth & Ecological Resilience
Belcarra - White Pine Redevelopment & Improvements	1,750,000	Planned	Capacity, Growth & Ecological Resilience
Campbell Valley - Little River Loop Boardwalk	800,000	Planned	Facility Replacement & Asset Management
Pacific Spirit - Beach Access & Trail Improvments	1,650,000	Planned	Facility Replacement & Asset Management
Advanced Design Work for Future Projects	1,300,000	Planned	Capacity, Growth & Ecological Resilience
Park Amenities and Visitor Experience	4,500,000	Planned	Capacity, Growth & Ecological Resilience
Other Replacement, Restoration & Upgrade Projects	4,610,000	Planned	Facility Replacement & Asset Management
Total Park Development Program	**$ 20,874,000**		
Regional Parks Land Acquisition			
Regional Parks Land Acquisition	$ 15,750,000		Land Acquisition
Total Land Acquisition Program	**$ 15,750,000**		
TOTAL CAPITAL EXPENDITURES	**$ 111,442,000**		

CAPITAL FUNDING	
Reserve	$ 104,752,060
Grants	6,689,940
Total	**$ 111,442,000**

SUMMARY BY DRIVER	
Capacity, Growth & Ecological Resilience	$ 66,739,000
Facility Replacement & Asset Management	9,503,000
Connected Network	19,450,000
Land Acquisition	15,750,000
Total	**$ 111,442,000**

REGIONAL PARKS

Description of Services

The Regional Parks service is a function of Metro Vancouver that exists to protect a range of diverse natural landscapes and habitats and to connect residents with nature. The Service operates 23 regional parks, 2 ecological conservancy areas, 2 Regional Park reserves and 5 regional greenways. Protecting over 13,743 hectares of natural lands throughout the region, with 16.5 million visits in 2020, Regional Parks provides planning, operations, development, property acquisition, natural resource management, park maintenance, capital construction, bylaw enforcement, public relations, community stewardship, visitor services, nature education, interpretive programs and events.

Strategic directions and Board Strategic Plan goals supported:

- Provide opportunities for residents and visitors to explore and enjoy a diversity of natural spaces, from beaches to mountains, from bogs to lakes, in the region.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of regional parks.
- Build a system of regional parks that are resilient to the impacts of climate change, land use change, and growing visitation.
- Facilitate a Regional Greenway System that connects natural areas and promotes access to them.

Performance indicators

Indicators reflect an assumption that the restrictions due to the COVID-19 pandemic will substantially remain in place for 2022.

Indicator	Historical and/or Industry Benchmark	2020 Performance	2022 performance objective
Annual number of visits to Regional Parks	3-year average: 13,390,000 2020: 16,497,000 2019: 11,935,000 2018: 11,738,000	16,497,000	15,000,000
Annual number of participants in Regional Park public programming	3-year average: 42,708 2020: 5,629 2019: 61,876 2018: 60,619	5,629	50,000

Indicator	Historical and/or Industry Benchmark	2020 Performance	2022 performance objective
Annual number of volunteer hours through stewardship, partnership and visitor services programs	3-year average: 13,613 2020: 8,237 2019: 22,026 2018: 25,938	8,237	15,000
Total hectares of Regional Parks land	2020: 13,743 ha 2019: 13,632 ha 2018: 13,557 ha	13,743 ha	13,850 ha

2022 Key Actions

Advancing Our Mission to "Protect & Connect"

- Continued COVID-19 response/recovery and leadership to member municipalities.
- Continued recovery of Regional Parks revenue streams: filming, public programming and facility rentals.
- Re-introduce Regional Parks events commencing with Night Quest in March.
- Continued implementation of *Public Programming Strategy* (2020) including adoption of cost recovery model and program pricing philosophy as well as completion of a marketing plan.
- Continue to consider additional opportunities for pay parking to help manage parking demand.
- Complete investigation of a paid parking reservation system as part of visitor demand management strategy for Boundary Bay Regional Park, and implement if recommended.
- Enhance working relationships with First Nations.
- Align the five-year capital budget with the recommendations of the Asset Management Plan and *Buildings Strategy* and begin implementation.
- Pursue the acquisition of new lands for regional parks and greenways in support of the *Regional Parks Land Acquisition 2050* strategy.
- Complete and commence implementation of the Community Relationships Strategy.
- Continue implementation of *Tsleil-Waututh Nation Cultural Planning and Cooperation agreement* and engagement for Belcarra Regional Park.
- Advance the development of cultural planning and cooperative agreements with local first nations.
- Initiate Phase 1 park development at Widgeon Marsh Regional Park.
- Investigate development of an indigenous framework as an action in the update of the Regional Parks Plan.
- Renew the Burnaby Lake Regional Park lease with the City of Burnaby.
- Continue implementation of the Grouse Mountain Trail and Amenity Improvement Project, funded by the Investing in Canada Infrastructure Grant Program.
- Initiate Phase 1 of the Campbell Valley Management Plan Implementation Project.
- Complete construction of the Derby Reach Full Service Washroom Facility.
- Support corporate initiatives including Regional Growth Strategy, Iona Beach Regional Park planning with the wastewater treatment plan, Climate 2050, PNE and new tree management policy and arboricultural procedures.

- Initiate advanced design for park development projects including Belcarra South Day Use Area, admiralty Heights Trail Decommissioning, and Campbell Valley Little River Loop Boardwalk and Dorman Point.
- Continued implementation of the Regional Greenways Plan 2050. Initiate advanced design for greenway projects including the Delta Nature Reserve / Delta South Surrey Greenway, Glencarin to Avalon Central Valley Greenway Connection, Aldergrove South Slopes Greenway and Boundary Park Perimeter Trail.
- Complete update to the Regional Parks Plan.
- Continue preparation of a Regional Parks Development Cost Charge Program.
- Begin implementation of the Regional Park Asset Management Plan.
- Complete implementation of Davies Orchard Revitalization Project – Phase 1, funded by Community Economic Recovery Infrastructure Program.
- Develop and test a methodology for capturing Regional Parks natural assets.
- Procurement of contracted film liaison services.
- Begin implementation of the *Regional Parks Building Strategy*.
- Update the Terrestrial Ecosystem Mapping and Wildfire Risk Mapping.
- Complete the park management plan for the Delta Nature Reserve and Delta South Surrey Greenway.
- Complete year two of three-year pilot project to develop a real-time parking lot/stall monitoring platform for select regional park(s) as a Sustainability Innovation Fund (SIF) project.
- Implement new corporate Hazard Tree Inventory Management System in Regional Parks guided by new corporate policy and procedures for managing hazard trees on Metro Vancouver lands.
- Develop public policy to address electric personal transportation in Regional Parks (e-bikes and other forms of electric mobility).
- Increase Park Ranger response, efficiency and effectiveness by centralizing the function and deploying enforcement resources based on priority and seasonal trends.
- Support on-going litigation.
- Continued identification of opportunities to collaborate with the Pacific Parklands Foundation.

Regional Parks

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Regional Parks over the next 5 years.

Initiative	Description	Theme
2022		
Capital Development Program	• Widgeon Marsh new park development • Construction of full service washrooms at the Derby Reach day use area • *Campbell Valley Management Plan* Implementation • Grouse Mountain Regional Park Grant Implementation (Grouse Grind) • Delta Nature Reserve and Delta/South Surrey Greenway Design Initiation	System Stewardship/ Regional Growth/ Environmental Sustainability
Land Acquisition	• Pursue park land acquisition opportunities in support of *Regional Parks Land Acquisition 2050* strategies	Regional Growth
Outreach and Engagement	• Completion of the Regional Parks Plan 2050 • Covid19 Pandemic Response • Continued engagement with local First Nations on Regional Parks initiatives • Implementation of system-wide initiatives to enhance natural areas and connect with local communities	System Stewardship
2023		
Capital Development Program	• Phase 1 Construction of Delta South Surrey Greenway and Delta Nature Reserve • Grouse Mountain Regional Park Grant Implementation • Completion and opening of Widgeon Marsh Regional Park. • *Delta Nature Reserve/South Surrey Greenway Management Plan* Implementation • Campbell Valley Regional Park Management Plan Implementation	System Stewardship Regional Growth
Land Acquisition	• Pursue park land acquisition opportunities in support of *Regional Parks Land Acquisition 2050* strategies	Regional Growth

Outreach and Engagement	• Regional Parks Plan 2050 Implementation • Explore opportunities for working with local First Nations on Regional Parks initiatives • Implementation of system-wide initiatives to enhance natural areas and connect with local communities	System Stewardship
2024		
Capital Development Program	• Phase 1 Construction of Davies Orchard Precinct at Crippen Regional Park. • Phase 1 Construction of Belcarra South at Belcarra Regional Park • Grouse Mountain Regional Park Grant Implementation • *Delta Nature Reserve/South Surrey Greenway Management Plan* Implementation • *Campbell Valley Regional Park Management Plan* Implementation	System Stewardship Regional Growth
Land Acquisition	• Pursue park land acquisition opportunities in support of *Regional Parks Land Acquisition 2050* strategies	Regional Growth
Outreach and Engagement	• Explore opportunities for working with local First Nations on Regional Parks initiatives • Implementation of system-wide initiatives to enhance natural areas and connect with local communities	System Stewardship
2025		
Capital Development Program	• Campbell Valley Nature Centre Design • Belcarra South Park Development • Crippen Regional Park- Davies Orchard Development • Supporting Iona Beach Regional Park redevelopment as part of Iona waste Water Treatment Plant construction • Codd Wetland Regional Park Design • Pacific Spirit Regional Park Beach Access Improvements	System Stewardship Regional Growth
Land Acquisition	• Pursue park land acquisition opportunities in support of Regional Parks Land Acquisition 2050 strategies	Regional Growth
Outreach and Engagement	• Explore opportunities for working with local First Nations on Regional Parks initiatives • Implementation of system-wide initiatives to enhance natural areas and connect with local communities	System Stewardship

2026		
Capital Development Program	• Major asset management replacement and deferred capital maintenance initiative implementation • Pacific Spirit Beach and Trail Improvements • Belcarra/White Pine and Admiralty Heights Improvements • Park Amenity and Visitor Experience Improvements	System Stewardship Regional Growth
Land Acquisition	• Pursue park land acquisition opportunities in support of Regional Parks Land Acquisition 2050 strategies.	Regional Growth
Outreach and Engagement	• Explore opportunities for working with local First Nations on Regional Parks initiatives • Implementation of system-wide initiatives to enhance natural areas and connect with local communities	System Stewardship

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - REGIONAL PARKS

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Parks	**$ 2,829,915**	**$ 2,829,915**	**$ -**	**$ (1,300,000)**	**$ 43,598**	**$ 1,573,514**	**$ 1,604,984**	**$ 1,637,084**	**$ 1,669,825**	**$ 1,703,222**

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Parks General Reserve	**$ 2,036,734**	**$ 2,036,734**	**$ -**	**$ (1,945,000)**	**$ 21,285**	**$ 113,019**	**$ 115,279**	**$ 117,585**	**$ 119,937**	**$ 122,335**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Parks										
Regional Parks Infrastructure Reserve	$ 6,738,059	$ 6,738,059	$ 6,432,000	$ (10,865,750)	$ 90,424	$ 2,394,733	$ 2,404,247	$ 3,317,902	$ 5,779,980	$ 5,165,350
Regional Parkland Acquisition Reserve Fund	9,556,197	9,556,197	-	-	191,124	9,747,321	4,892,268	2,970,113	2,019,515	2,059,905
Regional Parkland Acquisition and Development Reserve Fund	6,338,942	6,338,942	19,570,000	(21,750,000)	104,979	4,263,920	1,389,899	478,397	558,665	3,165,538
Delta Airpark Reserve	175,785	175,785	23,000	-	3,746	202,531	229,812	257,638	286,021	314,971
Regional Parks Legacy Fund	2,694,275	2,694,275	-	(50,000)	53,385	2,697,660	2,695,053	2,692,395	2,689,682	2,686,916
Total	**$ 25,503,258**	**$ 25,503,258**	**$ 26,025,000**	**$ (32,665,750)**	**$ 443,658**	**$ 19,306,166**	**$ 11,611,279**	**$ 9,716,444**	**$ 11,333,863**	**$ 13,392,681**

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Regional Planning Committee

From: Heather McNell, General Manager, Regional Planning and Housing Services

Date: October 1, 2021 Meeting Date: October 8, 2021

Subject: **2022 - 2026 Financial Plan – Regional Planning**

RECOMMENDATION
That the Regional Planning Committee endorse the 2022 - 2026 Financial Plan for Regional Planning as presented in the report dated October 1, 2021, titled "2022 - 2026 Financial Plan – Regional Planning", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY
The 2022 - 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region for 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

Regional Planning supports planning throughout the region including for utilities, member jurisdictions, TransLink and other regional agencies through the provision of projections and data, policy research, convening stakeholders on issues of regional interest, providing a planning resource and leadership and innovation. The group provides a long range, cross-boundary, interdisciplinary perspective and the main function is developing, administering, monitoring and stewarding *Metro 2040*, the regional federation's regional growth strategy.

The 2022 - 2026 Financial Plan for Regional Planning reflects an increase in Land Use Policy projects and work relating to *Metro 2050* while continuing to reduce long-term reliance on reserve funds to smooth the tax requisition rate. Over the next five years, operating programs are to increase by $583,749, or an average of 2.7% per year.

PURPOSE
To present the 2022 - 2026 Financial Plan for Regional Planning for consideration by the Committee.

BACKGROUND
Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, and a proposed approach for the 2022 - 2026 Financial Plan.

This report focuses on the Regional Planning Service and presents the 2022 provisional annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

REGIONAL PLANNING SERVICE

Regional Planning services within the Metro Vancouver Regional District (MVRD) represent functions that include 22 members and provides policy research, projections, and data in support of a prosperous, resilient and livable region. The primary responsibility is to develop, administer, implement and monitor *Metro Vancouver 2040: Shaping our Future* (Metro 2040), the regional growth strategy. There are three programs within the Regional Planning Division: Regional Land Use Policy, Planning Analytics and Implementation Services.

The Regional Planning initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan*, specifically:

- Undertake a comprehensive update to *Metro 2040 to* prioritize climate action, align with the update to the Regional Transportation Strategy and extend the timeframe to 2050.
- Continue to develop and implement effective and adaptive tools and processes for achieving the goals in the regional growth strategy;
- Continue to support the efforts of members in developing complete, livable and healthy communities;
- Guide the development of policies, plans, tools and creative solutions for managing competing demands on land in the region; and
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of land use planning at the regional scale and the objectives of the regional growth strategy.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plan for Regional Planning is presented in this report. Within the Regional Planning Work Plan, five performance indicators have been developed and are being tracked. These include:

- Percentage of residential growth occurring within the Urban Containment Boundary (UCB);
- Percentage of new dwelling units located within Urban Centres;
- Number of hectares of land with the *Metro 2040* Agricultural Designation;
- Number of hectares of land with the *Metro 2040* Industrial Designation; and
- Number of hectares of land with the *Metro 2040* Mixed Employment Designation.

The trend in these performance measures suggests that the region is on target with regards to meeting the goals laid out in the regional growth strategy. *Metro 2040* sets a target to contain 98% of growth within the Urban Containment Boundary. Since the strategy's adoption in 2011, this target has been met. *Metro 2040* also strives to direct 40% of dwelling unit growth and 50% of employment

growth to a network of 26 Urban Centres. Between the strategy's adoption and 2016, 39% of dwelling unit growth occurred in Urban Centres. Data will be updated following the release of the 2021 Census.

CONTINUOUS IMPROVEMENT

The comprehensive update to *Metro 2040* is a significant opportunity to improve the plan, building on its strengths. The update is being undertaken to:

- better integrate significant drivers of change that have risen in importance in the region, namely social equity, resilience and climate change impacts, rapid changes in technology / automation, and equity;
- improve the integration of land use and transportation planning as TransLink is concurrently updating the Regional Transportation Strategy; and
- implement policy improvements identified through a series of policy reviews.

Based on this work, improvements will continue as Regional Planning undertakes projects related to developing a new Growth Management and Investment Model and a Land Use Inventory/Land Budget; both activities will support land use and transportation decisions within the Region.

Further improvement initiatives include:

- Developing a new Regional Growth Management and Investment Model with an aim to improved population, housing, employment and land use projections, more accurate municipal distribution by traffic zone, and improved ability to model the land use implications of significant infrastructure investments and policy portfolios. It will provide an improved platform for integrating with the Regional Travel Model and utility modelling through Mike Urban model.
- Undertaking a Regional Land Use Inventory, in partnership with the Province. This inventory will assist in providing knowledge surrounding land use capacities for each designation with the Regional Growth Strategy. These capacities will ensure a more robust model and provide improved analytics for decision making.
- Creating an Implementation Services group, which will be focused on services related to implementation including: member jurisdiction liaisons, processing proposed regional growth strategy amendments and regional context statements, developing implementation guidelines and coordinating Metro Vancouver comments on large capital projects in the region that have impacts on Metro Vancouver interests and assets.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Regional Planning is also guided by direction provided in *Metro 2040*, specifically to support the goals, strategies and policy actions in the plan to:

- Goal 1 - Create a compact urban area
- Goal 2 - Support a sustainable economy
- Goal 3 - Protect the environment and respond to climate change impacts
- Goal 4 - Develop complete communities
- Goal 5 - Support sustainable transportation choices

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years.

The 2022 - 2026 Regional Planning Financial Plan is included as Attachment 1. The 2021 Annual Work Plan for Regional Planning presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2022 - 2026 are included in Attachment 3.

Operating Budget Highlights
The Regional Planning 2022 operating budget is proposed to increase by $163,027 for a total budget of $4,302,565. This increase is primarily due to an increase in Regional Land Use Policy projects, required advertising for *Metro 2050*'s public hearing and additional resources to support the development regional growth strategy policy related to economic development. The increase is partially offset by a reduction in consulting funds for studies and research funded by the Sustainability Innovation Fund.

The 2022 operating budget includes the following key actions:

- Complete *Metro 2050*
- Conduct Urban Centres and FTDAs Policy Research
- Implement the Regional Industrial Land Strategy
- Conduct a Regional Land Use Assessment (Land Budget)
- Participate in policy research in health and social equity
- Update the Housing + Transportation Cost Burden Study
- Support Province in the Fraser Valley Integrated Transportation and Development Plan
- Support TransLink on works related to transit infrastructure investment/expansion

Over the next five years, expenditures are increasing by a total of $583,749, or an average of 2.7% per year.

Communications Program
The 2022 Regional Planning Communications Program of $50,000 is framed around the following initiatives:

- Multimedia support for the development of *Metro 2050*, Transit Oriented Affordable Housing Study, and implementation of the Regional Industrial Lands Strategy
- Engagement activities on *Metro 2050* including venues, catering, speakers, etc.
- Engagement and/or public opinion support/media for *Metro 2050* communications and Regional Planning initiatives.

Reserve Funds
The financial plan for Regional Planning includes the utilization of reserves to annually fund one-time initiatives. This is consistent with the *Operating, Statutory and Discretionary Reserves Policy*. The 2022 - 2026 Projected Reserves for Regional Planning are included in Attachment 4.

APPROVAL PROCESS
The proposed 2022 - 2026 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.
- The Board will consider adoption of the 2021 Budget and endorsement of the 2022 - 2026 Financial Plan on October 29, 2021.

ALTERNATIVES

1. That the Regional Planning Committee endorse the 2022 - 2026 Financial Plan for Regional Planning as presented in the report dated October 1, 2021, titled "2022 - 2026 Financial Plan - Regional Planning", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

2. That the Regional Planning Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for Regional Planning and forward the amended Financial Plan to the Finance and Intergovernment Committee on October 13, 2021 and to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS
If the MVRD Board endorses the 2022 - 2026 Financial Plan for Regional Planning, as presented under Alternative 1, in 2022 the Regional Planning requisition will increase by $411,797 (11.7%) for a total requisition of $3,922,565.

Over the term of the five-year plan, the annual Regional Planning requisition is projected to increase by an average of $209,504 per year (5.4%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years for the Regional Planning function will rise from $3 in 2022 to slightly over $4 in 2026.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2022 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION
The Regional Planning 2022 Budget and Five-Year Financial Plan has been prepared following direction received at the April 8, 2021 Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan.* It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Regional Planning.

The presentation of this year's five-year financial plan for Regional Planning provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for residents while keeping pace with our critical requirements.

Staff recommends endorsing the 2022 - 2026 Financial Plan and Annual Work Plan for Regional Planning as presented under Alternative one.

Attachments *(47996522)*
1. 2022 - 2026 Financial Plan
2. 2022 Work Plan
3. 2022 - 2026 "What's Happening"
4. 2022 - 2026 Projected Reserves – Regional Planning

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ATTACHMENT 1

METRO VANCOUVER REGIONAL DISTRICT
REGIONAL PLANNING
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Metro Vancouver Regional District Requisitions	$ 3,510,768	$ 3,922,565	11.7%	$ 4,140,797	5.6%	$ 4,187,402	1.1%	$ 4,413,700	5.4%	$ 4,558,287	3.3%
Transfer from Sustainability Innovation Fund Reserves	348,770	100,000		-		-		-		-	
Transfer from Reserves	280,000	280,000		275,000		265,000		175,000		165,000	
TOTAL REVENUES	**$ 4,139,538**	**$ 4,302,565**	**3.9%**	**$ 4,415,797**	**2.6%**	**$ 4,452,402**	**0.8%**	**$ 4,588,700**	**3.1%**	**$ 4,723,287**	**2.9%**
EXPENDITURES											
Operating Programs:											
Environment	$ 915,136	$ -		$ -		$ -		$ -		$ -	
Implementation Services	-	765,946		768,228		783,259		788,637		799,369	
Regional Land Use Policy	1,073,916	1,522,102		1,555,599		1,557,844		1,577,231		1,593,394	
Planning Analytics	774,503	797,335		941,627		951,183		1,074,329		1,184,669	
Regional Sustainability Initiatives	348,770	100,000		-		-		-		-	
Administration and Department Support	674,767	744,590		759,474		777,525		796,299		815,184	
	3,787,092	3,929,973	3.8%	4,024,928	2.4%	4,069,811	1.1%	4,236,496	4.1%	4,392,616	3.7%
Communications Program	60,000	50,000	(16.7%)	50,000	0.0%	50,000	0.0%	50,000	0.0%	50,000	0.0%
Allocation of Centralized Support Costs	292,446	322,592	10.3%	340,869	5.7%	332,591	(2.4%)	302,204	(9.1%)	280,671	(7.1%)
TOTAL EXPENDITURES	**$ 4,139,538**	**$ 4,302,565**	**3.9%**	**$ 4,415,797**	**2.6%**	**$ 4,452,402**	**0.8%**	**$ 4,588,700**	**3.1%**	**$ 4,723,287**	**2.9%**

47996522

REGIONAL PLANNING

Description of services

Regional Planning is a Metro Vancouver Regional District function established to provide data, policy research, convene on issues of regional interest, and support local planning in support of a prosperous, resilient and livable region. The primary responsibility is to develop, administer, implement and monitor *Metro Vancouver 2040: Shaping our Future (Metro 2040),* the regional growth strategy. There are three programs within the Regional Planning Division: Regional Land Use Policy, Implementation Services and Planning Analytics.

Regional Land Use Policy

Regional Land Use Policy is primarily responsible for developing policy for the regional growth strategy, providing policy interpretation and support for implementation services (local level interactions and amendments) and undertaking applied policy research, and development of best practices in collaboration with member jurisdictions, the Province, TransLink and other agencies. There are a number of portfolios within this group including: complete communities; industrial and employment lands; structuring growth – centres and corridors, providing affordable and diverse housing near transit, protecting the environment and agriculture

Planning Analytics

Planning Analytics collects and analyzes data for Regional Planning as well as other regional functions including utilities and transportation planning. Primary roles include the provision of population, dwelling unit and employment projections, *Metro 2040* performance monitoring, and the completion of numerous regional inventories.

Implementation Services

Implementation Services prepares, maintains and assists with implementing regional growth strategy Implementation Guidelines. It has the core function of maintaining strong relationships with member jurisdictions, First Nations, the Province, TransLink and other community organizations as it relates to Regional Planning activities. This group also leads the administration of the regional growth strategy including proposed amendments and regional context statements and coordinates corporation wide responses to environmental assessments and other large capital projects that impact Metro Vancouver interests and assets.

Strategic directions and high level goals supported

Board Strategic Plan

- Continue to develop and implement effective and adaptive tools and processes for achieving the goals in *Metro 2040* along with the update to Metro 2050;
- Continue to support the efforts of members in developing equitable, complete, livable and resilient communities;
- Develop policies, plans, tools and creative solutions for managing competing demands on land in the region;
- Advocate the merits of integrating regional land use and transportation planning; and
- Support integration of the regional growth strategy with other long range planning activities within the region.

Metro Vancouver 2040: Shaping our Future

- Goal 1 - Create a compact urban area
- Goal 2 - Support a sustainable economy
- Goal 3 - Protect the environment and respond to climate change impacts
- Goal 4 - Develop complete communities
- Goal 5 - Support sustainable transportation choices

Goals

- Update Metro 2040 (Metro 2050) to ensure policies support responsible regional growth, an improved environment and financial sustainability for both the organization and the region.
- Ensure regional planning policies are prepared and monitored with a focus towards a system of equity, fairness, access and affordability.
- Build modelling and data systems to support regional planning activities and policy creation/monitoring.
- Ensure an equitable and resilient region through responsible growth and financial sustainability
- Protect agricultural lands and the environment
- Build strong connections with neighbouring regional districts and other regional agencies to support infrastructure investment for responsible growth.

Performance indicators

Indicator	**Historical and/or industry**	**Current Performance**	**2021 Performance Objective**
Percentage of residential growth occurring within the Urban Containment Boundary (UCB)	2011 baseline: 97% 2014 review: 98% 2015 review: 99%	98%	98%
Percentage of new dwelling units located within Urban Centres	2011 target 40% of growth to Centres 2011 baseline: 26% located in Centres	39% of growth to Centres; 28% located in Centres	40%
Number of hectares of land with a Metro 2040 Agricultural Designation	2011 baseline: 55,313	55,200	No net loss
Number of hectares of land with a Metro 2040 Industrial Designation	2011 baseline: 10,195	10,160	No net loss
Number of hectares of land with a Metro 2040 Mixed Employment Designation	2011 baseline: 3,415	3,395	No net loss

2022 key actions

Regional Land Use Policy

- Complete Metro 2050
- Urban Centres and FTDA Policy Research
- Regional Industrial Lands Strategy Implementation
- Regional Land Use Assessment (Land Budget)
- Applied policy research in health and social equity
- Climate and environment research
- Update the Housing and Transportation Cost Burden Study
- Ecosystem Services from Agricultural Land
- Frequent Transit Development Area – Transit Corridor Study
- Support Province in the Fraser Valley Integrated Transportation and Development Plan
- Support TransLink on works related to transit infrastructure investment/expansion

Implementation Services

- Metro 2050 Implementation Guidelines
- Municipal Liaison Service Strategic Review
- Coordinate comments on major infrastructure projects in the region and impacts on Metro Vancouver interests and assets

Planning Analytics

- Land Use Model Preparation
- Data/Projections Validation
- Social and Community Data Model
- Sensitive Ecosystem Inventory
- Regional Data Book

Regional Planning

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Regional Planning over the next 5 years.

Initiative	Description	Theme
2022		
Comprehensive update to Metro 2040	Metro 2050 approved and collaboration with member jurisdictions on implementation.	Regional Growth
Sensitive Ecosystem Inventory	Complete the six-year update to this critical regional resource.	Environmental Sustainability
Growth Management and Investment Model	Land Use Component. To improve population, dwelling unit, employment and land use projections and municipal distribution, and improve the ability to model land use implications of infrastructure investments and policy portfolios.	Regional Growth and Financial Sustainability
Regional Land Use Assessment	Begin a Regional Land Use Assessment as part of the implementation of the Regional Growth and Industrial Lands strategies.	Regional Growth
Regional Industrial Lands Strategy Implementation	Prepare recommended overlays and buffers to support the implementation of the Regional Industrial Lands Strategy.	Regional Growth
Housing and Transportation Cost Burden Study	Complete a five-year update to this critical study on transportation and housing costs for a more complete picture of affordability. In 2015, region-wide, homeowners with mortgages paid 40% of their pre-tax income for H+T while renters paid 49%.	Regional Growth
Equity in Regional Planning	Enhance equity mapping from initial phase of work and explore opportunities for equity outcomes in green spaces and improved mental health in the built environment.	Regional Growth
Agricultural Land Use Inventory	The Inventory identifies changes in land use and land cover in agricultural areas. This project generally undertaken every 5 years.	Regional Growth
Regional Parking Study	Analyze regional parking utilization rates within different urban forms	Regional Growth
2023		
Growth Management and Investment Model	Phase 2 – Integrate the Demographics Component to support updated population, dwelling unit, employment and land use projections.	Regional Growth and Financial Sustainability
Metro 2050 Implementation Tools	Begin Preparing Implementation Guidelines and data tools to assist member jurisdictions	Regional Growth
Regional Land Use Assessment	Complete a Regional Land Use Assessment	Regional Growth
Community and Social Data Model	Undertake phase 2 of the model to build assumption on how people choose the neighbourhoods and places that they live in.	Regional Growth

Census Bulletins	Prepare bulletins outlining information/data from the most recent census	Regional Growth
Office In Centres Inventory	Analysis of available office supply within urban centres and associated trends – this project is updated every 5 years.	Regional Growth
2024		
Regional Employment Survey	Complete survey work to understand current trends and land use	Regional Growth
Frequent Transit Corridor Study	Undertake a land use and transportation study for a frequent transit corridor in the region to support member jurisdiction initiatives related to planning and transportation.	Regional Growth
Metro 2050 Implementation Tools	Prepare Implementation Guidelines and data tools to assist member jurisdictions	Regional Growth
2025		
Regional Industrial Lands Inventory	Complete the 5th Regional Inventory of Industrial Lands in the region.	Regional Growth
Growth Management and Investment Model	Develop data tool and calibrate information. Large component of this phase will include survey and demographic work.	Regional Growth
Urban Forestry Implementation Tools	Undertake further work related to zoning tools and urban forest support	Regional Growth
Ecosystem Protection and Connectivity	Further work that supports the Regional Green Infrastructure Network and the Sensitive Ecosystem Inventory	Regional Growth
2026		
Frequent Transit Corridor Study	Undertake a land use and transportation study for a frequent transit corridor in the region to support member jurisdictions and TransLink.	Regional Growth
Growth Management and Investment Model	Develop data tool and calibrate information. Begin to prepare scenario modelling for the region.	Regional Growth

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - REGIONAL PLANNING

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Planning	$ 195,669	$ 195,669	$ -	$ -	$ 3,913	$ 199,583	$ 203,574	$ 207,646	$ 211,799	$ 216,035

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Regional Planning General Reserve	$ 2,774,387	$ 2,774,387	$ -	$ (280,000)	$ 52,688	$ 2,547,075	$ 2,320,267	$ 2,099,022	$ 1,964,252	$ 1,836,887

metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

[1]To: Water Committee

From: Marilyn Towill, General Manager, Water Services

Date: October 7, 2021 Meeting Date: October 14, 2021

Subject: **2022 - 2026 Financial Plan – Water Services**

RECOMMENDATION
That the Water Committee endorse the 2022 - 2026 Financial Plan for Water Services as presented in the report dated October 7, 2021, titled "2022 - 2026 Financial Plan – Water Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY
The 2022 - 2026 Metro Vancouver Financial Plan has been prepared following direction received from the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

In 2022, the average water rate will increase by 4.1% to $0.8444 per cubic metre (/m^3) (2021 forecast for 2022: $0.8534/m^3). This represents a $4 (2.3%) increase in the cost to the average regional household to $175 (2021 forecast for 2022: $177).

Metro Vancouver, through the GVWD, continues to provide a reliable source of uninterrupted, clean, safe drinking water to support the growing region and its economic prosperity. Growing demand for drinking water, system resilience, and infrastructure maintenance are met through robust, proactive capital and operating programs supported by long term planning and monitoring.

PURPOSE
To present the 2022 - 2026 Financial Plan for Water Services for consideration by the Committee.

BACKGROUND
Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 - 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, the current 2021 - 2025 Financial Plan, the

implications of the COVID-19 pandemic, the tools that can be used to make budget adjustments, and a proposed approach for the 2022 - 2026 Financial Plan.

Staff proposed to continue leveraging the supported tools to create a short-term action plan that would, beginning in 2021, lessen the upward pressure on household impact for 1-3 years. A short-term action plan would enable strategic goals and objectives to be maintained. If larger or more long-term adjustments are desired, a re-evaluation of long-term plans such as the *Metro Vancouver Housing Plan*, *Climate 2050*, or the *Liquid Waste Management Plan* would be required. Since an annual budget is approved, this approach will allow for adjustments to be made each year as conditions change based on market changes and other factors. The use of the tools will aim to avoid making severe changes that cannot be easily corrected in the short-term. Overall, the short-term action plan approach was supported.

This report focuses on Water Services and presents the 2022 annual budget and the updated five-year plan for the years 2022 to 2026 for committee consideration.

WATER SERVICES PROGRAM

The Water Services function comprises 18 member municipalities, one electoral area and one treaty First Nation within Metro Vancouver, serving a population of approximately 2.7 million. Drinking water is collected from within three protected mountain watersheds covering an area of approximately 60,000 hectares. The system itself comprises six mountain storage lakes, five dams, two major water treatment facilities, over 520 km of large diameter transmission mains, 27 storage reservoirs, 19 pump stations and 8 rechlorination stations. The system treats and distributes an average of 1.0 billion litres of water per day with summer time peak demands increasing to over 1.5 billion litres per day.

Water Services initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan* and in the *2011 Drinking Water Management Plan*, specifically:

Board Strategic Plan:

- Maintain Metro Vancouver's world-class water system that provides safe, clean drinking water and ensure its capacity to meet future needs;
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions;
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers; and
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.

Drinking Water Management Plan:

- Provide clean, safe drinking water;
- Ensure the sustainable use of water resources; and
- Ensure the efficient supply of water.

Metro Vancouver also recognizes the history of Indigenous Peoples and aims to build meaningful and enduring relationships with First Nations. As part of its work, Water Services is committed to engaging First Nation communities through information sharing, engagement and ongoing communication.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plans for Water Services are presented in this report. Within the Water Services Work Plans, 23 performance indicators have been developed and are being tracked. These include:

• Per capita water use;
• Progress on major and minor capital projects;
• Volume of water treated and delivered;
• Energy use per unit volume of water treated;
• Compliance with treatment operating permit criteria;
• Water transmission system leak repairs;
• Water samples collected and analyzed;
• Number of major interagency projects coordinated; and
• Smolt capture in the Capilano Watershed.

The region's population continues to grow and the total water demand will only increase in the future, and the anticipated impacts of climate change will put pressure on the regional water supply. The region expects to see an additional influx of one million people over the next 30 years and careful planning is required to meet increased demands on drinking water supplies and infrastructure. Metro Vancouver is taking a two-pronged approach to planning for the future: the first is to continue promoting water conservation through various plans and campaigns to reduce growth in demand for drinking water. The second is ensuring adequate water supply and appropriate infrastructure are in place to meet future drinking water demands. Large scale projects take many years to plan, design and construct, including effective engagement with First Nations, municipal, provincial and federal governments, and other stakeholders, so a long term approach is needed to ensure regional infrastructure is in place before it is needed.

Significant progress continues to be made on implementation of the Water Services capital plan, keeping pace with growth, improving system resiliency, and maintaining/upgrading aging infrastructure. Treated water quality and compliance with operating permit criteria continues to be excellent as Water Services is realizing the benefits of having state-of-the-art facilities with robust water treatment processes operated by highly-skilled and certified operations staff.

CONTINUOUS IMPROVEMENT

Water Services continues to explore, evaluate and implement continuous improvement opportunities. The department identified numerous opportunities in 2021 and has made progress on many of them including:

- Reduction in leak repairs and environmental management with commissioning of new South Delta Main #1;
- Pilot system implemented for Earthquake Early Warning;
- Updating the laboratory information management system (completion in early 2022); and
- Ozone optimization at Coquitlam Water Treatment Plant, generating cost savings.

For 2022, some opportunities for continuous improvement have been carried forward from 2021 and new ones have been added including:

- Increasing in-house Project Management and Field Quality Control / Assurance, reducing reliance on external consultants and reducing costs;
- Moving pipe storage from U.S. facility to GVS&DD space near Coquitlam Landfill to reduce costs;
- Continuing watershed protection improvements, including camera monitoring, fencing enhancements and staff presence;
- Increasing and optimizing monitoring to improve SCFP Filter Performance; and
- Coordinating the provincial audit of the microbiological testing laboratory methods and systems by the Enhanced Water Quality Assurance Group to ensure best practices are maintained.

2022 BUDGET AND 2022 - 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability;
- Environmental Sustainability;
- System Stewardship;
- Regulatory and Legislative Environment; and
- Regional Growth.

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program activities for the next five years.

The 2022 - 2026 Water Services Financial Plan is included as Attachment 1. The 2022 Annual Work Plans for Water Services presented in this report are included in Attachment 3 and the "What's Happening" highlights for the years 2022 - 2026 are included in Attachment 4.

Operating Budget Highlights

The Water Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). In the previous budget cycle it was proposed that the budget would increase by $14.8 million to $334.9 million for 2022. It is now proposed to increase by $15.3 million in 2022 for a total budget of $335.4 million (Attachment 1). This increase can be attributed to net contribution to capital and debt servicing increases (close to $5.6 million or about 37% of Water Services total operating budget increase in 2022) supporting infrastructure investments required to maintain existing levels of service, accommodate growth demands, and improve system resilience along with increases in core ($5.7 million) operating and centralized support and other allocated resources ($4 million) supporting key operational requirements. To minimize the household impacts, excess operating reserves of $3.4 million are being applied in 2022.

The 2022 financial plan includes increased water sales revenues of approximately $13.0 million, based on higher summer rates ($1.0371/m^3) for June through September and the lower rate of $0.7119/m^3 applying for the rest of the year (equating to an overall average water rate of $0.8444/m^3 compared to 2021 forecast for 2022 of $0.8534/m^3). The differential rates are intended to incentivize conservation efforts in the region and reduce long term pressures on the Capital Budget.

The 2022 operating budget includes the following key actions:

- Continue collaboration with GVWD members to strengthen regional drinking water conservation and enforcement, reducing pressures on infrastructure development to support population growth;
- Establish baseline State of the Assets Report (SOAR) for Water System assets;
- Implement Building Information Modeling Phase I to enable collaborative 3D design and design conflicts management;
- Develop an Integrated Emergency Management / Response Practice for Water Services;
- Improve remote and mobile access to technical information including engineering drawings;
- Complete Phase 2 of the Next Generation Snow Pack Monitoring Sustainable Innovation Fund Project;
- Conduct bench, pilot plant, and full scale testing of various dry polymers to select chemicals for optimal treatment performance for new SCFP Dry Polymer System; and
- Coordinate interagency work for key projects such as the DFO Capilano River Salmon Hatchery, MOTI Broadway Subway, and Trans Mountain Expansion.

Highlights of contracts and consulting projects anticipated to be undertaken in 2022 to respond to work plan requirements within the operating budget include the following:

- Updates to Drinking Water Management Plan and development of Drinking Water Conservation App;
- Earthquake Early Warning Pilot applications development;
- Cleveland Dam East Abutment replacement piezometers;
- Cleveland Dam and Seymour Falls Dam earthquake monitoring instruments;
- Environmental Consulting related to planned and unplanned potable water releases;
- Development and implementation of an ISO 14001 compliant Environmental Management System in collaboration with Liquid Waste Services;
- Reservoir Limnology Program to monitor the chemical, physical and biological parameters of the Capilano, Seymour and Coquitlam source water supply;
- Tree assessments and site treatments associated with the Water Services Hazard Tree Program; and
- Specialized and emergency water sample analysis requiring external laboratory services.

Over the next 2 years (2022 through 2023), using the financial tools requested by the Board, the operating budget increases were limited to an average of $15.7 million or 4.8% per year. However, over the following 3 years (2024 through 2026), the budget increase rises to an average of $45.6 million or 11.6% per year, subject to further reviews and conservation efforts to reduce projected increases.

Capital Budget Highlights

The Water Services capital budget for 2022 approval is $2.7 billion (Attachment 2). The capital program is funded by a combination of long-term debt, contributions from the operating budget, external (interagency) contributions and projected, future development cost charges (DCCs) funding growth.

Capital program expenditures over the next five years are largely driven by system expansion to meet the needs of a growing population, upgrades to improve system resiliency, and maintenance of aging infrastructure. Highlights of capital projects planned or ongoing for 2022, as managed by the Water Services Department, include the following:

- Continue construction of Central Park Main No. 2 Phase 1;

- Continue construction of Douglas Road Main No. 2 (Still Creek Section);
- Continue construction of Capilano Raw Water Pump Station back-up power;
- Continue construction of Pebble Hill Reservoir Units 1 & 2 Seismic Upgrade;
- Continue detailed design of Seymour Main No. 5 North;
- Continue construction of Fleetwood Reservoir;
- Continue construction of Kennedy-Newton Main;
- Continue detailed design of Cape Horn Pump Station 3;
- Commence construction of Newton Pump Station No. 2;
- Design of Cleveland Dam Public Warning System and Enhancements; and
- Commence design of Rechlorination Station Upgrades.

The following eight projects are the largest projects included in the 5-year capital plan. These High Value, Risk and Consequence projects are managed by the Project Delivery Department and are at various stages of development and delivery for 2022:

- Commence Coquitlam Lake Water Supply permitting and regulatory phase;
- Complete Cambie-Richmond Water Supply Tunnel preliminary design;
- Commence construction of the Annacis Water Supply Tunnel;
- Continue construction of the Second Narrows Water Supply Tunnel;
- Continue Coquitlam Water Main (Central Section) detailed design;
- Commence Coquitlam Water Main (South Section) prebuild construction;
- Commence Haney Water Supply Tunnel conceptual design;
- Lulu Island-Delta Water Supply Tunnel (2023 commence design); and
- Complete Stanley Park Water Supply Tunnel detailed design.

The projected capital cash flow for 2022 - 2026 totals $2.5 billion, an average of $496.7 million per year. There are 142 projects on the five-year capital plan. The largest 9 projects make up approximately 66% of the capital spending over the next five years. These nine projects also represent 33% of the expenditures planned for the 2027-2031 period.

Reserve Funds

The application of reserve funding in Water Services comes from the Operating, Sustainability Innovation Fund and the Laboratory Equipment reserves. In 2022, the financial plan includes $3.4 million from operating reserves for rate stabilization, $900,000 in funding from the Water Sustainability Innovation Fund for several sustainability initiatives and $96,000 from the Laboratory Equipment Reserve for equipment purchases. The 2022 - 2026 Projected Reserves for Water Services is included in Attachment 5.

APPROVAL PROCESS

The proposed 2022 - 2026 Financial Plan and Annual Work Plans are presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2022 - 2026 Financial Plan and Annual Work Plans for Water Services will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.
- The Greater Vancouver Water District Board will consider adoption of the 2021 Budget and endorsement of the 2022 - 2026 Financial Plan on October 30, 2021.

ALTERNATIVES

1. That the Water Committee endorse the 2022 - 2026 Financial Plan for Water Services as presented in the report dated October 7, 2021, titled "2022 - 2026 Financial Plan – Water Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.
2. That the Water Committee make recommendations and endorse an amended 2022 - 2026 Financial Plan for Water Services and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS

If the Greater Vancouver Water District Board approves the 2022 Budget and endorses the Five-Year Financial Plan for Water Services, as presented under Alternative 1, in 2022, with the increase applied 100% to the Water Rate for June to September, the projected Water Rates would be \$1.0371/m^3 for June through September and remain at \$0.7119/m^3 for January through May and October through December (average water rate of \$0.8444/m^3 compared to 2021 forecast for 2022 of \$0.8534/m^3). Revenue from the sale of water is projected to increase by \$13.0 million (4.1%) to \$329.4 million which will generate the majority of the \$335.4 million in total revenue required to offset projected expenditures. The increase in the average water rate represents a \$4 increase in the cost to the average regional household to \$175 (2021 forecast for 2022: \$177). The application of the proposed increase to the peak water rate does not have bearing on the budget or financial plan.

Over the term of the five-year plan, the water rate is projected to increase by an average of \$0.0847/m^3 with water sales increasing by an average of \$34.0 million per year to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years will rise from \$175 in 2022 to \$244 in 2026 representing an average annual increase of \$15. Future budgets will be adjusted based on the success of conservation efforts across the region.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2022 Budget and Five-Year Financial Plan for Water Services for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the Water Services Financial Plan.

CONCLUSION

The 2022 Budget and Five-Year Financial Plan for Water Services have been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan* and to support the 2011 *Drinking Water Management Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Water Services.

The presentation of the 2022 budget and five-year financial plan for Water Services provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for Water investments, notwithstanding additional successes in regional water conservation efforts, that will be required to maintain our assets and to respond to our region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical infrastructure requirements.

Staff recommend endorsing the 2022 - 2026 Budget and Five-Year Financial Plan and Annual Work Plans for Water Services as presented under Alternative 1.

Attachments:

1. 2022 - 2026 Water Services Financial Plan (48054090)
2. 2022 - 2026 Capital Programs - Water Services (48043563)
3. 2022 Water Services Work Plans (46550846; 46552469; 44946640; 46543771; 46547494; 46550760; 48132094)
4. 2022 - 2026 "What's Happening" (47970595)
5. 2022 - 2026 Projected Reserves – Water (48056092)

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GREATER VANCOUVER WATER DISTRICT
WATER SERVICES
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

ATTACHMENT 1

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Water Sales	$ 316,341,192	$ 329,365,517	4.1%	$ 349,671,026	6.2%	$ 389,568,205	11.4%	$ 435,512,851	11.8%	$ 486,439,366	11.7%
Other External Revenues	1,674,556	1,657,055		1,878,418		1,946,961		1,860,997		1,760,250	
Transfer from Sustainability Innovation Fund Reserves	2,006,934	900,000		-		-		-		-	
Transfer from Reserves	96,000	3,496,000		96,000		96,000		96,000		96,000	
TOTAL REVENUES	**$ 320,118,682**	**$ 335,418,572**	**4.8%**	**$ 351,645,444**	**4.8%**	**$ 391,611,166**	**11.4%**	**$ 437,469,848**	**11.7%**	**$ 488,295,616**	**11.6%**
EXPENDITURES											
Operating Programs:											
Policy Planning and Analysis											
Contribution to Sustainability Innovation Reserve	$ 723,000	$ 723,000		$ 723,000		$ 723,000		$ 723,000		$ 723,000	
Research and Innovation	588,600	588,445		589,580		602,319		626,435		632,230	
Utility Modeling and Data Analytics	1,626,994	2,101,727		2,113,657		2,179,661		2,229,587		2,278,452	
Utility Policy and Planning	1,357,556	1,601,001		1,509,808		1,523,153		1,560,467		1,595,395	
	4,296,150	5,014,173	16.7%	4,936,045	(1.6%)	5,028,133	1.9%	5,139,489	2.2%	5,229,077	1.7%
Engineering and Construction											
Minor Capital Projects	8,542,892	9,416,652		9,795,046		10,193,664		10,615,180		10,872,264	
Infrastructure Operations Support	1,462,536	2,025,714		2,053,668		2,137,784		2,174,998		2,232,360	
Dispatch	129,772	131,424		134,031		137,114		140,269		143,392	
	10,135,200	11,573,790	14.2%	11,982,745	3.5%	12,468,562	4.1%	12,930,447	3.7%	13,248,016	2.5%
Shared and Support Services											
Engineers in Training	325,547	434,233		442,311		452,219		462,354		472,728	
Business & Shared Services Support	751,910	732,088		746,253		763,465		781,078		799,094	
Shared & Utility Services	-	656,000		159,520		163,907		168,303		172,802	
Minor Capital Projects	812,108	1,016,387		1,057,229		1,100,253		1,145,750		1,173,498	
Records Management	109,200	111,408		113,626		116,308		119,054		121,863	
	1,998,765	2,950,116	47.6%	2,518,939	(14.6%)	2,596,152	3.1%	2,676,539	3.1%	2,739,985	2.4%
Watershed and Environmental Management											
Watershed and Environmental Management	12,644,885	12,855,271		12,645,688		12,921,311		13,177,550		13,734,765	
	12,644,885	12,855,271	1.7%	12,645,688	(1.6%)	12,921,311	2.2%	13,177,550	2.0%	13,734,765	4.2%
Operations and Maintenance											
Drinking Water Residuals	1,002,120	1,108,925		1,132,417		1,158,811		1,185,934		1,213,811	
Lake City Operations	955,508	966,185		978,113		1,000,616		1,023,633		1,045,321	
Maintenance	9,173,510	9,263,780		10,004,767		10,608,148		10,964,987		11,628,872	
SCADA Control Systems	5,487,404	5,873,474		5,970,169		6,160,652		6,376,736		6,600,226	
Secondary Disinfection	1,438,767	1,225,831		1,277,907		1,351,678		1,430,400		1,640,091	
Seymour Capilano Filtration Plant	9,621,163	9,712,427		9,925,006		10,194,044		10,471,911		10,893,383	
Coquitlam Water Treatment Plant	6,580,751	6,584,655		6,727,731		7,012,601		7,303,176		7,501,952	
Energy Management	122,421	210,569		273,267		285,992		294,752		303,334	
Utility Voice Radio	124,754	122,467		123,894		127,275		130,547		133,193	
Water Supply	19,278,229	21,016,987		20,144,464		21,046,997		21,644,617		22,438,646	
	53,784,627	56,085,300	4.3%	56,557,735	0.8%	58,946,814	4.2%	60,826,693	3.2%	63,398,829	4.2%
Interagency Projects and Quality Control											
Drinking Water Quality Control	2,866,332	2,879,943		2,898,162		2,965,429		3,067,980		3,204,930	
Interagency Projects	552,535	562,330		562,524		769,688		786,922		831,616	
	3,418,867	3,442,273	0.7%	3,460,686	0.5%	3,735,117	7.9%	3,854,902	3.2%	4,036,546	4.7%
Administration and Department Support	2,158,078	2,207,260	2.3%	2,314,202	4.8%	2,369,363	2.4%	2,425,822	2.4%	2,482,762	2.3%
Communications Program	440,000	448,360	1.9%	456,879	1.9%	465,560	1.9%	474,406	1.9%	483,420	1.9%
Allocation of Centralized Support Costs	26,052,630	28,824,858	10.6%	28,281,238	(1.9%)	28,363,072	0.3%	28,677,338	1.1%	28,882,147	0.7%
Total Operating Programs	114,929,202	123,401,401	7.4%	123,154,157	(0.2%)	126,894,084	3.0%	130,183,186	2.6%	134,235,547	3.1%
Allocation of Project Delivery Cost	2,889,566	4,073,330	41.0%	5,415,922	33.0%	5,650,644	4.3%	5,687,996	0.7%	5,700,215	0.2%
Debt Service	71,324,155	84,174,697	18.0%	94,759,076	12.6%	118,622,866	25.2%	137,751,307	16.1%	156,267,438	13.4%
Contribution to Capital	130,975,759	123,769,144	(5.5%)	128,316,289	3.7%	140,443,572	9.5%	163,847,359	16.7%	192,092,416	17.2%
TOTAL EXPENDITURES	**$ 320,118,682**	**$ 335,418,572**	**4.8%**	**$ 351,645,444**	**4.8%**	**$ 391,611,166**	**11.4%**	**$ 437,469,848**	**11.7%**	**$ 488,295,616**	**11.6%**
Blended Water Rate ($/m3)	$ 0.8110	$ 0.8444	4.1%	$ 0.8958	6.1%	$ 0.9912	10.6%	$ 1.1072	11.7%	$ 1.2345	11.5%

ATTACHMENT 2

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
WATER SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Water Mains									
Angus Drive Main	$ 30,700,000	$ 50,000	$ -	$ -	$ -	$ -	$ 50,000	Construction	Growth
Annacis Main No. 2 - Queensborough Crossover Improvement	900,000	500,000	-	-	-	-	500,000	Construction	Maintenance
Annacis Main No. 2 and Barnston Island Main Online Chlorine and pH Analyzers	750,000	450,000	300,000	-	-	-	750,000	Construction	Upgrade
Annacis Main No. 3 Annieville Channel Crossing Scour Protection	850,000	500,000	-	-	-	-	500,000	Construction	Maintenance
Annacis Main No. 3 BHP Potash Facility Pipe Protection	600,000	300,000	-	-	-	-	300,000	Construction	Maintenance
Annacis Main No. 5 (North)	60,600,000	1,600,000	16,500,000	15,000,000	5,500,000	20,000,000	58,600,000	Construction	Growth
Annacis Main No. 5 (South)	11,100,000	1,100,000	1,000,000	14,000,000	14,000,000	16,800,000	46,900,000	Construction	Growth
Annacis Water Supply Tunnel	488,000,000	66,000,000	70,000,000	80,000,000	70,000,000	65,000,000	351,000,000	Construction	Growth
Boundary Road Main No. 2 & No. 3 Decommissioning	1,500,000	750,000	-	-	-	-	750,000	Construction	Maintenance
Burnaby Mountain Main No. 2	-	-	300,000	1,600,000	400,000	-	2,300,000	Not started	Maintenance
Cambie-Richmond Water Supply Tunnel	55,250,000	18,200,000	2,000,000	8,000,000	8,500,000	3,500,000	40,200,000	Design	Resilience
Central Park Main No. 2 (10th Ave to Westburnco)	2,750,000	900,000	1,200,000	5,500,000	6,000,000	8,000,000	21,600,000	Design	Maintenance
Central Park Main No. 2 (Patterson to 10th Ave)	91,900,000	19,700,000	17,500,000	13,000,000	-	-	50,200,000	Construction	Maintenance
Clayton Langley Main No. 2	700,000	400,000	600,000	700,000	200,000	3,000,000	4,900,000	Design	Resilience
Coquitlam Water Main	118,220,000	31,500,000	65,600,000	76,300,000	90,400,000	157,000,000	420,800,000	Multiple	Growth
Douglas Road Main No. 2 - Kincaid Section	12,300,000	1,000,000	1,000,000	500,000	-	-	2,500,000	Construction	Maintenance
Douglas Road Main No. 2 (Flow Meter 169) Replacement	1,000,000	500,000	500,000	-	-	-	1,000,000	Construction	Maintenance
Douglas Road Main No. 2 (Vancouver Heights Section)	21,486,000	300,000	-	-	-	-	300,000	Construction	Maintenance
Douglas Road Main No. 2 Still Creek	63,100,000	14,600,000	16,000,000	13,500,000	6,000,000	-	50,100,000	Construction	Maintenance
Douglas Road Main Protection	1,500,000	550,000	500,000	400,000	-	-	1,450,000	Construction	Maintenance
First Narrows Tunnel Isolation Chamber Improvements	7,000,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Haney Main No. 4 (West Section)	1,900,000	400,000	350,000	-	-	-	750,000	Multiple	Growth
Haney Water Supply Tunnel	25,250,000	5,000,000	15,000,000	5,000,000	5,000,000	10,000,000	40,000,000	Definition	Resilience
Improvements to Capilano Mains No. 4 and 5	1,700,000	1,000,000	550,000	-	-	-	1,550,000	Construction	Maintenance
Kennedy Newton Main	122,300,000	23,850,000	13,000,000	9,500,000	-	-	46,350,000	Construction	Growth
Lulu Island - Delta Main - Scour Protection Phase 2	3,550,000	2,650,000	800,000	-	-	-	3,450,000	Construction	Maintenance
Lulu-Delta Water Supply Tunnel	-	-	4,000,000	5,500,000	7,500,000	8,000,000	25,000,000	Not started	Maintenance
Maple Ridge Main West Lining Repairs	3,500,000	-	500,000	1,500,000	1,300,000	-	3,300,000	Construction	Maintenance
Newton Reservoir Connection	-	-	450,000	1,100,000	4,500,000	-	6,050,000	Not started	Growth
Online Chlorine Monitoring Stations	-	-	-	-	450,000	1,000,000	1,450,000	Not started	Upgrade
Port Mann Main No. 2 (South)	36,800,000	500,000	-	-	-	-	500,000	Multiple	Growth
Port Mann No. 1 South Section Decommissioning	200,000	100,000	750,000	-	-	-	850,000	Design	Maintenance
Port Moody Main No. 1 Christmas Way Relocation	2,350,000	1,900,000	400,000	-	-	-	2,300,000	Construction	Maintenance
Port Moody Main No. 3 Dewdney Trunk Rd Relocation	2,700,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Port Moody Main No. 3 Scott Creek Section	1,000,000	550,000	1,000,000	2,500,000	2,000,000	2,000,000	8,050,000	Design	Maintenance
Queensborough Main Royal Avenue Relocation	7,500,000	2,300,000	2,200,000	700,000	-	-	5,200,000	Construction	Maintenance
Rehabilitation of AN2 on Queensborough Bridge	2,500,000	1,700,000	-	-	-	-	1,700,000	Construction	Maintenance
Relocation and Protection for MOTI Expansion Project Broadway	8,900,000	650,000	500,000	1,500,000	1,500,000	3,500,000	7,650,000	Construction	Maintenance
Relocation and Protection for MOTI George Massey Crossing Replacement	450,000	25,000	25,000	-	-	700,000	750,000	Design	Maintenance
Relocation and Protection for Translink Expansion Project Surrey Langley SkyTrain	600,000	25,000	-	1,100,000	2,200,000	2,200,000	5,525,000	Design	Maintenance
Sapperton Main No. 1 New Line Valve and Chamber	3,800,000	1,100,000	1,500,000	-	-	-	2,600,000	Construction	Upgrade
Sapperton Main No. 2 North Road Relocation and Protection	6,500,000	4,550,000	1,600,000	-	-	-	6,150,000	Construction	Maintenance
Scour Protection Assessments and Construction General	4,000,000	1,300,000	-	150,000	1,000,000	-	2,450,000	Construction	Resilience
Second Narrows Crossing 1 & 2 (Burrard Inlet Crossing Removal)	2,000,000	500,000	1,000,000	500,000	1,000,000	12,000,000	15,000,000	Design	Maintenance
Second Narrows Water Supply Tunnel	468,550,000	75,000,000	70,000,000	30,000,000	20,600,000	-	195,600,000	Construction	Resilience
Seymour Main No. 2 Joint Improvements	3,252,000	750,000	1,000,000	-	1,000,000	1,000,000	3,750,000	Construction	Resilience
Seymour Main No. 5 III (North)	8,000,000	250,000	-	-	-	100,000	350,000	Design	Resilience
South Delta Main No. 1 - 28 Ave to 34B Ave	22,650,000	100,000	-	-	-	-	100,000	Construction	Upgrade

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
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	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
South Delta Main No. 1 - Ferry Road Check Valve Replacement	600,000	500,000	-	-	-	-	500,000	Construction	Maintenance
South Delta Mains - 28 Ave Crossover	10,500,000	50,000	-	-	-	-	50,000	Construction	Upgrade
South Surrey Main No. 1 Nickomekl Dam Relocation	7,100,000	1,700,000	3,000,000	2,100,000	-	-	6,800,000	Construction	Maintenance
South Surrey Main No. 2	2,000,000	1,100,000	500,000	500,000	1,000,000	3,500,000	6,600,000	Design	Growth
South Surrey Main No. 2 Nickomekl Dam Prebuild	2,000,000	500,000	1,000,000	500,000	-	-	2,000,000	Construction	Growth
South Surrey Supply Main (Serpentine River) Bridge Support Modification	1,350,000	950,000	-	-	-	-	950,000	Construction	Maintenance
Stanley Park Water Supply Tunnel	340,000,000	38,900,000	50,000,000	70,000,000	50,000,000	55,000,000	263,900,000	Construction	Maintenance
Tilbury Junction Chamber Valves Replacement with Actuators	5,600,000	300,000	-	-	-	-	300,000	Construction	Upgrade
Tilbury Main North Fraser Way Valve Addition	3,100,000	800,000	1,400,000	450,000	-	-	2,650,000	Construction	Maintenance
Water Chamber Improvements and Repairs	2,000,000	1,000,000	-	-	-	-	1,000,000	Construction	Maintenance
Water Meter Upgrades	22,400,000	2,700,000	3,950,000	3,500,000	3,500,000	3,600,000	17,250,000	Construction	Upgrade
Water Optimization - Flow Meters (Non-billing) Phase 1	-	-	1,500,000	2,000,000	3,000,000	4,000,000	10,500,000	Not started	Upgrade
Water Optimization - Flow Meters (Non-billing) Phase 2	3,000,000	250,000	1,500,000	750,000	2,000,000	3,000,000	7,500,000	Design	Upgrade
Water Optimization - Instrumentation	1,500,000	750,000	2,100,000	2,500,000	2,500,000	2,500,000	10,350,000	Design	Upgrade
Water Optimization Automation & Instrumentation	9,550,000	850,000	900,000	-	-	-	1,750,000	Construction	Upgrade
Whalley Kennedy Main No. 2	-	-	1,000,000	1,300,000	1,300,000	2,000,000	5,600,000	Not started	Growth
Whalley Main	31,800,000	150,000	-	-	-	-	150,000	Construction	Growth
Total Water Mains	**$ 2,152,658,000**	**$ 333,800,000**	**$ 374,475,000**	**$ 371,150,000**	**$ 312,350,000**	**$ 387,400,000**	**$ 1,779,175,000**		
Pump Stations									
Barnston/Maple Ridge Pump Station - Back-up Power	$ 14,000,000	$ 8,700,000	$ 4,500,000	$ 600,000	$ 2,000,000	$ 2,700,000	$ 18,500,000	Construction	Resilience
Burnaby Mountain Pump Station No. 2	1,300,000	100,000	900,000	1,100,000	700,000	9,000,000	11,800,000	Design	Maintenance
Cape Horn Pump Station No. 3	6,800,000	1,500,000	2,250,000	4,500,000	22,000,000	59,000,000	89,250,000	Design	Growth
Capilano Raw Water Pump Station - Back-up Power	42,000,000	13,050,000	13,000,000	1,000,000	-	-	27,050,000	Construction	Resilience
Capilano Raw Water Pump Station Bypass PRV Upgrades	1,700,000	700,000	500,000	200,000	-	-	1,400,000	Construction	Maintenance
Central Park WPS Starters Replacement	8,000,000	4,500,000	1,550,000	-	-	-	6,050,000	Construction	Maintenance
Grandview Pump Station Improvements	2,600,000	1,550,000	100,000	-	-	-	1,650,000	Construction	Resilience
Newton Pump Station No. 2	50,500,000	5,400,000	20,400,000	13,500,000	5,000,000	-	44,300,000	Construction	Growth
Pebble Hill Pump Station Seismic Upgrade	-	-	-	150,000	650,000	1,000,000	1,800,000	Not started	Resilience
Westburnco Pump Station - Back-up Power	23,500,000	1,900,000	2,950,000	5,500,000	4,500,000	7,000,000	21,850,000	Construction	Resilience
Westburnco Pump Station No. 2 VFD Replacements	2,550,000	1,650,000	300,000	-	-	-	1,950,000	Construction	Maintenance
Total Pump Stations	**$ 152,950,000**	**$ 39,050,000**	**$ 46,450,000**	**$ 26,550,000**	**$ 34,850,000**	**$ 78,700,000**	**$ 225,600,000**		
Reservoirs									
Burnaby Mountain Tank No. 2	$ 3,350,000	$ 1,249,000	$ 1,700,000	$ 7,000,000	$ 7,000,000	$ 4,000,000	$ 20,949,000	Design	Resilience
Burnaby Mountain Tank No. 3	3,400,000	800,000	1,700,000	500,000	7,000,000	7,000,000	17,000,000	Design	Resilience
Cape Horn Reservoir Condition Assessment and Structural Repair	-	-	250,000	250,000	1,200,000	-	1,700,000	Not started	Maintenance
Capilano Energy Recovery Facility 66" PRV Replacement	-	-	-	1,500,000	-	3,500,000	5,000,000	Not started	Maintenance
Central Park Reservoir Structural Improvements	-	-	-	300,000	200,000	1,100,000	1,600,000	Not started	Maintenance
Clayton Reservoir	27,600,000	550,000	-	-	-	-	550,000	Construction	Resilience
Dechlorination for Reservoir Overflow and Underdrain Discharges	2,700,000	1,050,000	1,000,000	300,000	-	-	2,350,000	Construction	Maintenance
Fleetwood Reservoir	56,367,000	23,000,000	15,350,000	2,150,000	-	-	40,500,000	Construction	Growth
Grandview Reservoir Unit No. 2	-	-	-	400,000	800,000	1,400,000	2,600,000	Not started	Growth
Hellings Tank No. 2	43,911,000	4,500,000	6,000,000	11,500,000	9,800,000	5,700,000	37,500,000	Construction	Growth
Kersland Reservoir No. 1 Structural Improvements	6,250,000	4,000,000	-	-	-	-	4,000,000	Construction	Maintenance
Little Mountain Reservoir Roof Upgrades	3,450,000	150,000	-	-	-	-	150,000	Construction	Maintenance
Pebble Hill Reservoir No. 3 Seismic Upgrade	500,000	50,000	25,000	-	5,000,000	4,000,000	9,075,000	Design	Resilience
Pebble Hill Reservoir Seismic Upgrade	13,600,000	5,545,000	2,500,000	-	-	-	8,045,000	Construction	Resilience
Reservoir Isolation Valve Automation	6,450,000	500,000	1,000,000	1,000,000	1,250,000	1,150,000	4,900,000	Construction	Resilience
Reservoir Sampling Kiosks - Multi Location	-	-	500,000	500,000	300,000	-	1,300,000	Not started	Upgrade
Sunnyside Reservoir Units 1 and 2 Seismic Upgrade	9,100,000	60,000	3,000,000	7,200,000	-	-	10,260,000	Design	Resilience

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	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Vancouver Heights System Resiliency Improvements	500,000	150,000	500,000	500,000	-	-	1,150,000	Design	Resilience
Whalley Reservoir Condition Assessment and Repairs	2,500,000	2,400,000	100,000	-	-	-	2,500,000	Construction	Maintenance
Total Reservoirs	**$ 179,678,000**	**$ 44,004,000**	**$ 33,625,000**	**$ 33,100,000**	**$ 32,550,000**	**$ 27,850,000**	**$ 171,129,000**		
Treatment Plants									
Coquitlam Intake Tower Seismic Upgrade	$ 2,000,000	$ 400,000	$ -	$ 5,000,000	$ 14,000,000	$ 5,000,000	$ 24,400,000	Design	Resilience
Coquitlam Lake Water Supply	160,730,000	14,000,000	33,000,000	30,000,000	39,000,000	45,000,000	161,000,000	Multiple	Growth
Critical Control Sites - Back-Up Power	-	-	-	200,000	300,000	400,000	900,000	Not started	Resilience
CWTP CO2 System Improvements	-	-	500,000	1,750,000	1,500,000	-	3,750,000	Not started	Maintenance
CWTP Mobile Disinfection System	-	-	750,000	2,000,000	-	-	2,750,000	Not started	Upgrade
CWTP Ozone Back-up Power	-	-	500,000	1,450,000	4,000,000	1,500,000	7,450,000	Not started	Resilience
CWTP Ozone Generation Upgrades for Units 2 & 3	7,000,000	2,050,000	100,000	-	-	-	2,150,000	Construction	Upgrade
CWTP Ozone Sidestream Pipe Heat Trace and Insulation	900,000	200,000	-	-	-	-	200,000	Construction	Maintenance
CWTP Ozone Sidestream Pump VFD Replacement	1,400,000	850,000	250,000	-	-	-	1,100,000	Construction	Maintenance
CWTP Temporary Water Supply	500,000	500,000	1,250,000	250,000	-	-	2,000,000	Design	Maintenance
Online Chlorine and pH Analyzers	-	-	600,000	1,200,000	1,200,000	1,500,000	4,500,000	Not started	Upgrade
SCFP Additional Pre-Treatment	-	-	-	-	-	1,000,000	1,000,000	Not started	Upgrade
SCFP Centralized Compressed Air System	900,000	575,000	150,000	-	-	-	725,000	Construction	Maintenance
SCFP Clearwell Baffle Replacement	-	-	450,000	1,300,000	250,000	-	2,000,000	Not started	Maintenance
SCFP Clearwell Membrane Replacement	-	-	200,000	1,200,000	-	5,500,000	6,900,000	Not started	Maintenance
SCFP OMC Building Expansion	150,000	50,000	50,000	350,000	1,600,000	500,000	2,550,000	Design	Maintenance
SCFP Polymer System Upgrade	4,650,000	3,400,000	500,000	-	-	-	3,900,000	Construction	Maintenance
SCFP SCADA/ICS Controller Upgrade	-	-	700,000	700,000	-	-	1,400,000	Not started	Maintenance
Total Treatment Plants	**$ 178,230,000**	**$ 22,025,000**	**$ 39,000,000**	**$ 45,400,000**	**$ 61,850,000**	**$ 60,400,000**	**$ 228,675,000**		
Others									
Beach Yard Facility - Site Redevelopment	-	$ -	$ -	$ -	$ 500,000	$ 1,000,000	$ 1,500,000	Not started	Maintenance
Burwell Alpine Reservoir Valve Improvements	$ 650,000	100,000	-	-	-	-	100,000	Construction	Upgrade
Capilano Hydropower	4,250,000	1,000,000	1,750,000	-	-	-	2,750,000	Definition	Opportunity
Capilano Mid-Lake Debris Boom	750,000	50,000	-	-	-	-	50,000	Construction	Resilience
Capilano Reservoir and Seymour Reservoir Dam Safety Boom Replacement	200,000	200,000	3,000,000	500,000	-	-	3,700,000	Design	Maintenance
Capilano Reservoir Boat Wharf	850,000	50,000	-	-	-	-	50,000	Construction	Resilience
Capilano Watershed Bridge Replacements - Crown Creek and Capilano River	-	-	-	-	-	95,000	95,000	Not started	Maintenance
Capilano Watershed Security Gatehouse	3,350,000	1,450,000	1,150,000	-	-	-	2,600,000	Construction	Maintenance
CLD & SFD Fasteners Replacement & Coating Repairs	2,100,000	350,000	600,000	-	-	-	950,000	Construction	Maintenance
Cleveland Dam - Lower Outlet HBV Rehabilitation	4,900,000	200,000	1,200,000	-	-	-	1,400,000	Construction	Maintenance
Cleveland Dam Drumgate Seal Replacement	250,000	-	-	500,000	500,000	-	1,000,000	Design	Maintenance
Cleveland Dam East Abutment Additional GV Series Pump Wells	750,000	50,000	-	-	-	-	50,000	Construction	Upgrade
Cleveland Dam Lower Outlet Trashrack Replacement and Debris Removal	-	-	-	-	-	500,000	500,000	Not started	Maintenance
Cleveland Dam Power Resiliency Improvements	1,700,000	1,389,000	-	-	-	-	1,389,000	Construction	Resilience
Cleveland Dam Public Warning System and Enhancements	10,000,000	3,000,000	7,000,000	-	-	-	10,000,000	Construction	Maintenance
Cleveland Dam Seismic Stability Evaluation	800,000	600,000	-	-	-	-	600,000	Design	Resilience
Cleveland Dam Spillway Resurfacing	-	-	-	-	-	400,000	400,000	Not started	Maintenance
Lower Seymour Conservation Reserve Learning Lodge Replacement	5,000,000	1,900,000	100,000	-	-	-	2,000,000	Construction	Upgrade
Newton Rechlorination Station No. 2	-	-	400,000	600,000	1,500,000	1,500,000	4,000,000	Not started	Maintenance
Pitt River Rechlorination Station Reconstruction	-	-	-	-	500,000	1,000,000	1,500,000	Not started	Maintenance
Rechlorination Station SHS Storage Tank Replacement	1,200,000	250,000	-	-	-	-	250,000	Construction	Maintenance
Rechlorination Station Upgrades	1,300,000	600,000	1,500,000	1,500,000	1,000,000	6,000,000	10,600,000	Design	Maintenance
Scour Protection - General	2,000,000	55,000	-	-	-	-	55,000	Construction	Maintenance
Seymour Falls Boat Wharf	800,000	50,000	-	-	-	-	50,000	Construction	Resilience
Seymour Falls Dam Public Warning System	-	-	1,000,000	4,000,000	5,000,000	-	10,000,000	Not started	Maintenance

GREATER VANCOUVER WATER DISTRICT
CAPITAL PORTFOLIO
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	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Seymour Falls Dam Seismic Stability Assessment	1,800,000	1,000,000	800,000	-	-	-	1,800,000	Construction	Resilience
Seymour Lake Debris Boom	800,000	50,000	-	-	-	-	50,000	Construction	Resilience
Seymour Reservoir Mid-Lake Debris Boom	2,300,000	50,000	-	-	-	-	50,000	Construction	Resilience
South Fraser Works Yard	32,000,000	20,000,000	1,500,000	-	-	-	21,500,000	Design	Maintenance
Total Others	**$ 77,750,000**	**$ 32,394,000**	**$ 20,000,000**	**$ 7,100,000**	**$ 9,000,000**	**$ 10,495,000**	**$ 78,989,000**		
TOTAL CAPITAL EXPENDITURES	**$ 2,741,266,000**	**$ 471,273,000**	**$ 513,550,000**	**$ 483,300,000**	**$ 450,600,000**	**$ 564,845,000**	**$ 2,483,568,000**		
CAPITAL FUNDING									
New External Borrowing	$ 1,804,866,000	$ 332,133,000	$ 373,790,000	$ 309,100,000	$ 261,420,000	$ 343,945,000	$ 1,620,388,000		
DCCs	46,080,000	-	-	24,010,000	16,370,000	16,170,000	56,550,000		
Contribution to Capital	826,130,000	123,770,000	128,320,000	140,440,000	163,850,000	192,090,000	748,470,000		
Reserve	27,590,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000		
External Funding - Interagency	36,600,000	10,370,000	6,440,000	4,750,000	3,960,000	7,640,000	33,160,000		
Total	**$ 2,741,266,000**	**$ 471,273,000**	**$ 513,550,000**	**$ 483,300,000**	**$ 450,600,000**	**$ 564,845,000**	**2,483,568,000**		
SUMMARY BY DRIVER									
Growth	$ 1,223,728,000	$ 175,150,000	$ 246,400,000	$ 260,250,000	$ 263,300,000	$ 375,400,000	$ 1,320,500,000		
Maintenance	696,736,000	145,830,000	130,725,000	136,650,000	92,350,000	121,495,000	627,050,000		
Resilience	723,402,000	138,643,000	120,875,000	73,950,000	82,000,000	51,350,000	466,818,000		
Upgrade	93,150,000	10,650,000	13,800,000	12,450,000	12,950,000	16,600,000	66,450,000		
Opportunity	4,250,000	1,000,000	1,750,000	-	-	-	2,750,000		
Total	**$ 2,741,266,000**	**$ 471,273,000**	**$ 513,550,000**	**$ 483,300,000**	**$ 450,600,000**	**$ 564,845,000**	**$ 2,483,568,000**		

Water Services
Watershed & Environment

Description of Services

Water Services provides safe drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Watershed & Environment Division protects and maintains 60,000 hectares of GVWD watershed lands and associated infrastructure surrounding the three primary source reservoirs of Capilano, Seymour and Coquitlam. The division also oversees the Environmental Management System and various environmental programs and initiatives for the Water Services utility. Technical and field staff in this area undertake a breadth of work ranging from collection of reservoir and potable water samples, fisheries management, environmental protection and updating and watershed management activities including security, road and infrastructure maintenance, fire protection and public education on the Region's water supply.

Strategic Directions and High Level Goals Supported

Board Strategic Plan

- Maintain Metro Vancouver's world-class water system that provides clean, safe drinking water and ensure its capacity to meet future needs.
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.

Drinking Water Management Plan

- Goal 1 - Provide clean, safe drinking water
- Goal 2 - Ensure the sustainable use of water resources

Performance Indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Annual number participants in watershed tours and K-12 school programs conducted within the LSCR, watersheds and virtually.	MV 3-year average (2018-2020): 5,760 2018: 5,378 2019: 5,904 2020: 3802	2021 YTD (June): 4255 Objective 3,000	6,000
Number of water samples collected from source reservoirs and the distribution system.	MV 3-year average (2018-2020): 22,848 2018: 21,906 2019: 22,283 2020: 20,576	2021 YTD (May): 6,716 Objective 22,500	22,500
Smolt capture in the Capilano Watershed. *2020 program cancelled due to COVID	MV 3-year average (2017-2019)*: 18,143 2017: 18,727 2018: 16,460 2019: 19,242	2021 YTD (June): 43,293 Objective: 25,000	25,000
Re-establish fish access through road network infrastructure (culverts, bridges) into critical fish habitat.	72% (BC Forest Practices Board study)	2021 YTD (June): 94% Objective: 95%	95%

2022 Key Actions

- Continue year 4 of 5 in the development and implementation of the Water Services Environmental Management System to address prioritized regulatory compliance and environmental risks.
- Complete construction of a multi-purpose building (staff/public) in the Lower Seymour Conservation Reserve.
- Commence construction of Capilano Watershed Protection Field Office in conjunction with the Capilano Raw Water Pump Station Back-up Power project.
- Complete Phase 2 of the Next Generation Snow Pack Monitoring Sustainable Innovation Fund Project.
- Complete Natural Capital / Asset scoping assessment for the Water Supply Lands.
- Complete design of replacement dam safety booms for Capilano and Seymour.
- Complete update of Watershed (Crown Land) Management Plan.

WATER SERVICES
Policy, Planning and Analysis

Description of services

Water Services provides safe drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Policy, Planning and Analysis division provides policy development and coordination; infrastructure analysis and planning; implementation of the Drinking Water Management Plan (DWMP); lead regional water conservation efforts; implementation of key components of the Joint Water Use Plan (JWUP) for the Capilano and Seymour Watersheds; supports the water metering network; ensure QA/QC on water billing and issues monthly bills; and leads the implementation of projects identified in the Water Supply Outlook 2120.

Strategic directions and high level goals supported

Board Strategic Plan

- Maintain Metro Vancouver's world-class water system that provides clean, safe drinking water and ensure its capacity to meet future needs.
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.

Drinking Water Management Plan

- Goal 1 - Provide clean, safe drinking water
- Goal 2 - Ensure the sustainable use of water resources
- Goal 3 - Ensure the efficient supply of water

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Peak day per capita water use (litres)	MV 3-year average (2017 - 2019): 620 2017: 620 2018: 664 2019: 577 2020: 609+	2021 Objective: 593	583*
Average day per capita water use (litres)	MV 3-year average (2017-2019): 432 2017: 439 2018: 433 2019: 424 2020: 411+	2021 Objective: 408	402*

- +2020 was not included in the analysis as water consumption might have been impacted by the pandemic
- * Based on a 5-year trend

2022 key actions

- Continue to collaborate with GVWD members to implement the new Region-wide Guide for Enforcement of Metro Vancouver's Drinking Water Conservation Plan.
- Complete updates to Drinking Water Conservation Plan to incorporate lawn watering bans during drought years.
- Continue to look for ways to reduce regional water consumption to potentially defer growth related projects.
- Continue development of a Facility Master Plan that aligns with Metro Vancouver's Water Supply Outlook 2120.
- Continue development of an updated Drinking Water Management Plan.
- Continue to implement the Joint Water Use Plan for the Capilano and Seymour Watersheds, including coordination of monitoring and reporting to the regulatory agencies.
- Complete analysis on the impacts of the changing industrial landscape in the Region and the impacts on the water system demands.
- Continue with the Meter Replacement Program.
- Complete project on the potential presence of microplastics in Metro Vancouver watersheds.

WATER SERVICES
Engineering and Construction

Description of services
Water Services provides safe drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Engineering and Construction division provides delivery of all core water infrastructure projects, including water mains, reservoirs, pump stations and water treatment facilities and also provides shared construction and dispatch services.

Strategic directions and high level goals supported
Board Strategic Plan
- Maintain Metro Vancouver's world-class water system that provides clean, safe drinking water and ensure its capacity to meet future needs.
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.

Drinking Water Management Plan
- Goal 1 - Provide clean, safe drinking water
- Goal 2 - Ensure the sustainable use of water resources
- Goal 3 - Ensure the efficient supply of water

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Percent of GVWD Capital Program Expenditures Achieved:	3 yr average (2018 – 2020): 68% 2018: 35% 2019: 105% 2020: 63%	(as of end of April 2021) YTD: 18% Objective: 85%	(2022) 85%
Percent of Minor Capital Program Expenditures Achieved:	3 yr average (2018 – 2020): 87% 2018: 87% 2019: 116% 2020: 57%	(as of May 2021) YTD: 35% Objective: 95%	(2022) 95%

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Percent of project complete:			
Kennedy-Newton Main (Phase 2) – Construction	n/a	60%	100%
Annacis Main No. 5 (North) – Design	n/a	20%	100%
Capilano Raw Water Pump Station Backup Power – Construction	n/a	5%	35%
Fleetwood Reservoir – Construction	n/a	0%	50%
Pebble Hill Reservoir Seismic upgrade Units 1 & 2 - Construction	n/a	0%	55%
Central Park Main No. 2 (Phase 1) – Construction	n/a	60%	100%
Douglas Road Main No. 2 (Still Creek Section) – Construction	n/a	0%	65%
Cape Horn Pump Station No. 3 – Design	n/a	10%	40%

2022 Key Actions

- Continue construction of Kennedy-Newton Main (Phase 2).
- Complete design of Annacis Main No. 5 (North).
- Continue construction of Capilano Raw Water Pump Station Backup Power.
- Commence construction of Fleetwood Reservoir.
- Commence construction of Pebble Hill Reservoir Seismic Upgrade Units 1 & 2.
- Complete construction of Central Park Main No. 2 (Phase 1).
- Commence construction of Douglas Road Main No. 2 (Still Creek).
- Continue design of Cape Horn Pump Station No. 3.

WATER SERVICES
Operations and Maintenance

Description of services
Water Services delivers clean, safe drinking water to the Metro Vancouver region through the Greater Vancouver Water District.

The Operations and Maintenance (O&M) division provides management of the source water reservoirs and dams, treatment of source water, operation and control of the water transmission system, secondary disinfection of treated water and maintenance of all water treatment and transmission infrastructure and associated supporting infrastructure (works yards, communications systems, and control systems).

The nature of O&M's work involves close collaboration with other Water Services divisions to ensure the safe, efficient and cost effective operation of the water system. In addition, the O&M teams provide support from design through commissioning for major and minor capital projects.

Strategic directions and high level goals supported
Board Strategic Plan
- Maintain Metro Vancouver's world-class water system that provides clean, safe drinking water and ensure its capacity to meet future needs.
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.

Drinking Water Management Plan
- Goal 1 – Provide clean, safe drinking water
- Goal 2 – Ensure the sustainable use of water resources
- Goal 3 – Ensure the efficient supply of water

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Annual volume of drinking water treated, delivered (in million litres)	MV 3-year average (2018-20): 383,978 2018: 389,800 2019: 383,400 2020: 378,734	2021 YTD Mar: 81,356 Objective: 389,000	389,000
Energy use in the treatment and delivery of drinking water (amount of gigajoules (GJ) used per ML of water)	MV 3-year average (2018-20): 0.49 2018: 0.49 2019:0.53 2020: 0.44	Rolling Average Mar/20 - Feb/21 0.46 Objective: 0.55	0.50
Compliance with treatment operating permit criteria	MV 3-year average (2018-20): 100% 2018: 100% 2019: 100% 2020: 100%	2021 YTD Mar: 100% Objective: 100%	100%
Number of leak repairs in water transmission system piping per 100 kilometers of pipe[1]	MV 3-year average (2018-20): 3.21 2018: 3.30 2019: 4.08 2020: 2.25	2021 YTD Mar: 0.75 Objective: < 3.1	< 3.1
Number of remote monitoring and control points to ensure system resiliency	MV 3-year average (2018-20): 30,806 2018: 30,349 2019: 30,687 2020: 31,382	2021 YTD March: 31,480 Objective: 31,800	32,300

Note 1: AWWA Partnership for Safe Water Distribution System Optimization Program goal: 9 breaks/100 km/year

2022 Key Actions

- Maintenance Construction Scheduler Improvements – application improvements to add functionality that identifies risks and mitigation measures
- Water Services Energy Management Program – identify major power usage for treatment and transmission, for energy savings and potential BC Hydro grant funding
- Enhancement of Transmission Procedures and Work Processes – develop detailed work procedures and incorporate into comprehensive records database
- Improvements to Transmission Utility Regional Emergency Response – Integrating the new South Fraser Works Yard with additional resources and expanded standby response
- SCFP Dry Polymer System Optimization – conduct bench, pilot plant, and full scale testing of various dry polymers to select chemicals for optimal treatment performance

WATER SERVICES
Interagency Projects and Quality Control

Description of services
Water Services provides clean, safe drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Interagency Projects and Quality Control division provides the coordination of major interagency projects impacting Metro Vancouver's water utility infrastructure. The Division is responsible for ensuring federal guidelines and provincial regulatory standards for the region's drinking water are met and liaising with local health authorities for Water Services. Quality Control is performed by technical and scientific staff undertaking a breadth of activities including field support, laboratory analysis of drinking water for Metro Vancouver and member jurisdictions, as well as system water quality data review, ensuring compliance with quality control standards for the region's drinking water.

Strategic directions and high level goals supported
Board Strategic Plan
- Maintain Metro Vancouver's world-class water system that provides clean, safe drinking water and ensure its capacity to meet future needs.
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.

Drinking Water Management Plan
- Goal 1 - Provide clean, safe drinking water
- Goal 2 - Ensure the sustainable use of water resources
- Goal 3 - Ensure the efficient supply of water

Performance indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Number of water tests completed on samples collected from the source reservoirs, water treatment plants and distribution system	MV 3-year average (2018-2020): 161,316 2020: 161,564 2019: 161,465 2018: 160,919	2021 YTD May 20: 63,711 Projected 2021: 162,000	162,000
Number of major interagency projects coordinated	2020: 12 2019: 10 2018: 10 2017: 10	YTD: 12 Projected 2021: 12	12

2022 key actions

- Coordinate interagency work for key projects such as the DFO Capilano River Salmon Hatchery, MOTI Broadway Subway, and Trans Mountain Expansion.
- Conduct a provincial laboratory accreditation Enhanced Water Quality Assurance (EWQA) audit required for the continued operation of the microbiology laboratory.
- Perform an internal audit of the Quality Management System for Drinking Water (QMSDW) and issue formal audit report and conduct management review.
- Continue to support the corrosion control program by monitoring/testing of pH and alkalinity levels throughout the region.
- Continue to install improved in-system reservoir sampling equipment at high priority reservoir sites.
- Install online chlorine analyzers on Annacis Main No.2 and Barnston Island Main to assess real-time water quality.

WATER SERVICES
Shared and Support Services

Description of Services
Water Services provides safe drinking water to the Metro Vancouver region through the Greater Vancouver Water District. Shared and Support Services (SSS) provides: Survey, Inspection and Drafting Services to WS, LWS and PDE departments through its Shared Utility Services (SUS) Division; oversees shared WS Maintenance services as provided by LWS to WS; provides Administrative Support services to WS; operates the Regional GPS program; and provides oversight and coordination to WS on business planning, financial management, capital planning, safety and emergency planning/response, asset management, performance management and continuous improvement, and utility benchmarking, in collaboration with Finance, PDE and Corporate Safety and Emergency Management.

Strategic Directions and High Level Goals Supported
Board Strategic Plan
- Maintain Metro Vancouver's world-class water system that provides clean, safe drinking water and ensure its capacity to meet future needs.
- Ensure the long-term resilience of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will ensure the delivery of clean, safe drinking water, now and into the future.

Drinking Water Management Plan
- Goal 1 - Provide clean, safe drinking water
- Goal 2 - Ensure the sustainable use of water resources
- Goal 3 - Ensure the efficient supply of water

Performance Indicators

Indicator	Historical and/or Industry Benchmark	Current Performance	2022 Performance Objective
Percent of GVWD Capital Program Expenditures Achieved:	3 yr average (2018 – 2020): 68% 2018: 35% 2019: 105% 2020: 63%	(as of June 2021) YTD: 18% Objective: 85%	(2022) 85%
Percent of Minor Capital Program Expenditures Achieved:	3 yr average (2018 – 2020): 87% 2018: 87% 2019: 116% 2020: 57%	(as of June 2021) YTD: 35% Objective: 95%	(2022) 95%

2022 Key Actions

- Introduce Lean processes, work methods and tools based on DMAIC principles (Define- Measure-Analyze-Improve-Control)
- Create pilot areas to showcase Lean practices and share knowledge
- Introduce Lean methods to business planning and budgeting process by identifying what is critical to Capital and Operating, defining the criticality and determining measurement and data gathering.
- Develop Capital Projects and Minor Capital (MCR) projects tracking tools, including creating live dash boards for performance monitoring.
- In collaboration with PDE department, establish baseline State of the Assets Report (SOAR)
- Establish guidelines for different levels of condition inspections and assessment priorities
- Complete priority condition assessments and collaborate with the PDE and IT departments on the Integrated Asset Management strategy, including the replacement of the Enterprise Asset Management (EAM) system
- Complete the implementation of Building Information Modeling (BIM) Phase I, enabling greater utility of collaborative 3D design and design conflicts management. Prepare business case for BIM Phase 2 of 3 approvals for 2023-24 implementation.
- Pilot at least two applications of the earthquake early warning system within the Water Supply system.
- Develop and Implement an Integrated Emergency Management / Response Practice for Water Services
- Improve field, mobile access to engineering drawings and tablet use for construction quality assurance inspections
- Implement engineering drawings digital workflows and dashboard for status reporting of drawings lifecycle status

PROJECT DELIVERY
Water Projects

Description of services
The Water Projects function within Project Delivery provides support to Water Services by achieving excellence in the delivery of the organization's largest and most complex capital projects.

Working alongside owner departments, Project Delivery brings together best practice skills and resources from multiple disciplines and departments while ensuring projects are adequately resourced and have high level of engagement with both internal and external stakeholders. This helps ensure the successful completion of the highest value, risk, and consequence projects for the regional water utility.

Strategic directions and high level goals supported
Support the goals of the Water Services Department in the delivery of world class water services through the projects delivered:
- Support the management of Metro Vancouver's world-class water system.
- Support the long-term resilience goals of the regional drinking water system to withstand natural hazards, climate change and other significant disruptions.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning.
- Strengthen awareness and engagement with the public, GVWD members, other orders of government, and key stakeholders on a range of initiatives that will ensure that the projects delivered meet the regional water goals of protecting public health and the environment.

Ensure value for money in providing major infrastructure delivery services:
- Achieve excellence in the delivery of high-value, high-risk and complex capital projects.
- Implement project controls and robust monitoring on Metro Vancouver's most complex infrastructure projects.
- Ensure complex project risks are adequately identified, quantified and mitigated.

Performance indicators

(based on percentage of overall project expenditure, as a proxy for project progress)

Indicator	Historical benchmark (2020)	Current performance (as at July, 2021)	2022 performance objective
Coquitlam Water Supply Projects			
• Coquitlam Lake Water Supply (Coquitlam Intake No. 2) Project Definition	75%	95%	Complete
• Coquitlam Water Main (Coquitlam Main No. 4) South Section Detailed Design	30%	60%	100%
Second Narrows Water Supply Tunnel			
• Construction	40%	50%	70%

Indicator	Historical benchmark (2020)	Current performance (as at July, 2021)	2022 performance objective
Annacis Water Supply Tunnel			
• Detailed Design	75%	90%	Complete
• Construction	Not started	1%	15%
Cambie Richmond Water Supply Tunnel			
• Conceptual Design	15%	50%	Complete
• Preliminary Design	Not Started	Not Started	60%
Stanley Park Water Supply Tunnel			
• Detailed Design	50%	80%	Complete
• Construction	Not Started	Not Started	2%

2022 key actions

Coquitlam Lake Water Supply (Coquitlam Intake No. 2)

- Commence Permitting and Regulatory Phase
- Commence Phase 2 site investigation work in the Watershed and treatment plant site
- Continue stakeholder and First Nations engagement
- Participate in City of Coquitlam's Upper Pipeline Road Overview planning exercise

Coquitlam Water Main (Coquitlam Main No. 4)

- Commence construction of the first section of the project (South Section) on Pipeline Road between Robson Drive and Guildford Way
- Procurement of long delivery items including steel pipe and large diameter valves for the South Section construction;
- Undertake Preliminary Design of the City Centre Tunnel Section to determine the locations of the entry and exit shafts; and
- Continue Detailed Design of the Central and Cape Horn Sections

Tunneling Projects

- Complete project management staff resourcing and establishment of Tunnel Group B
- Continue construction of the Second Narrows Water Supply Tunnel
    - Commencement of pipe installation and valve chamber construction
- Commence construction of the Annacis Water Supply Tunnel
    - Entry shaft excavation for TBM
- Commence conceptual design for Haney Water Supply Tunnel
    - Prepare RFP for conceptual design
- Commence construction for Stanley Park Water Supply Tunnel
    - Construction procurement early to late 2022
    - Start of construction late 2022, including preparation of work sites, and construction of by-passes
- Commence preliminary design for Cambie-Richmond Water Supply Tunnel
    - Prepare RFP for preliminary design
- Review of feasibility study for Lulu-Delta Water Supply Tunnel

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Water Services over the next five years. Includes water-related projects delivered through the Project Delivery Department.

Initiative	Description	Theme
2022		
Dam Safety Review for Seymour Falls Dam	Complete the next Dam Safety Review for Seymour Falls Dam in accordance with the provincial Dam Safety Regulations which require Dam Safety Reviews at 7-year intervals for extreme consequence dams.	Regulatory and Legislative Environment
Corrosion Control Monitoring	Monitoring of the pH and alkalinity adjustments to help reduce corrosion in premise plumbing systems.	Regulatory and Legislative Environment
Coquitlam Water Treatment Plant Control System Upgrade	Programming and design to upgrade the controls at the Coquitlam Water Treatment Plant Ozone Generation, Corrosion Control, and Chlorination facilities.	System Stewardship
Transmission System Online Chlorine Analyzers Additions	Installation of additional online chlorine analyzers within the transmission system to provide real time chlorine residual data.	System Stewardship
Drinking Water Conservation Plan Update	Update the Drinking Water Conservation Plan to promote further conservation of seasonal water demand.	Regional growth and System Stewardship
Water system predictive analysis tool introduction	Incorporate predictive analysis for short term forecasting and transparent performance tracking.	System Stewardship
New Watershed Center - Construction	Complete construction of a new multi-use public educational and office building in the Lower Seymour Conservation Reserve	System Stewardship & Environmental Sustainability
Enhanced Water Quality Assurance Audit	Conduct a provincial laboratory accreditation audit required for continued operation of the microbiology laboratory	Regulatory and Legislative Environment
Capilano Raw Water PS Backup Power Facility - Construction	Construction of the Capilano Raw Water PS Backup Power Facility, providing backup power to 4 x 2,000 HP pumps during power outages.	System Stewardship
Newton Pump Station No. 2 - Construction	Construction of the Newton Pump Station No. 2, required to meet growing water demand in the City of Surrey. Will replace the existing Newton Pump Station and include full back-up power redundancy and new connections to the existing Newton Reservoir.	Regional Growth

Hellings Tank No. 2 - Construction	Commence construction of the new Hellings Tank No. 2, a 11.4 ML reservoir that will provide in system storage to meet the growing demands for drinking water in Delta.	Regional Growth
Building Information Modeling (BIM) Phase I implementation	Standards, protocols and training implemented for 3D design processes for Utilities, in collaboration with WS, LWS, PDE PMO and Corporate Digital Strategy	System Stewardship & Environmental Sustainability
Pilot Earthquake Early Warning applications	With SCFP, CWTP and LCOC network of sensors, begin experimenting with water supply applications for staff safety and saving water / infrastructure, emulating large earthquake	System Stewardship & Environmental Sustainability
Stanley Park Water Supply Tunnel – Construction	Commence Construction of the 1.4 km long water supply tunnel under Stanley Park	System Stewardship
Annacis Water Supply Tunnel - Construction	Commence Construction of a 2.3 km long water supply tunnel under the Fraser River	System Stewardship
Coquitlam Water Main South Section – Construction	Commence Construction of the section on Pipeline Road from Robson Drive to Guildford Way	Regional Growth
2023		
Coquitlam Water Treatment Plant Control System Upgrade	Completion and commissioning of the Control System upgrade for Ozone Generation and Corrosion Control and Chlorination at the Coquitlam Water Treatment Plant.	System Stewardship
Dam Safety Review for Cleveland Dam	Complete the next Dam Safety Review for Cleveland Dam in accordance with the provincial Dam Safety Regulations which require Dam Safety Reviews at 7-year intervals for extreme consequence dams.	Regulatory and Legislative Environment
'Smart Water Network' concept	Proceed with digital transformation of the Water Utility and establish a digital foundation to enable enhanced data management and accessibility.	System Stewardship
BC Hydro Coquitlam Water Use Plan Update	Participate in BC Hydro's review and update of the Coquitlam Water Use Plan	Environmental Sustainability
Barnston/Maple Ridge PS Backup Power - Design	Complete design of Barnston/Maple Ridge PS Backup Power, as part of ongoing program to provide backup power for key infrastructure to address power outages and major storm events.	System Stewardship
Fleetwood Reservoir - Construction	Complete construction of Fleetwood Reservoir, a 13.6 ML Reservoir, and 1.1 km feeder main that will increase water supply to meet growing demand in the City of Surrey.	Regional Growth

Cape Horn Pump Station No. 3 - Construction	Commence construction of Cape Horn Pump Station No. 3, required to meet growing water demand south of the Fraser River. The new pump station will be located at the existing pump station site and will include full back-up power redundancy.	Regional Growth
2024		
CWTP Ozone Backup Power - Construction	Ongoing program to provide backup power for key infrastructure so it will operate during power outages and major storm events.	System Stewardship
North Shore Works Yard - Planning	Plan for redevelopment of Beach Yard Works Yard, after Second Narrows Water Supply Tunnel project completion.	System Stewardship
Environmental Management System	Complete ISO 14001 certification process for the water utilities Environmental Management System.	Environmental Sustainability & Regulatory and Legislative Environment
Douglas Road Main No. 2 (Still Creek Section) - Construction	Complete Douglas Road Main No. 2 (Still Creek Section), the last remaining 2.5km section (1.5m diameter steel pipe) to be installed for the overall Douglas Road Main No.2 watermain project.	System Stewardship
Kennedy-Newton Main - Construction	Complete construction of the Kennedy-Newton Main, required to convey water from the Kennedy Reservoir to the Newton Reservoir in the City of Surrey. The project consists of 9 km of 1.8 m diameter steel watermain.	Regional Growth
Coquitlam Water Main Central Section – Construction	Commence Construction of the northern section of Coquitlam Water Main.	Regional Growth
Coquitlam Water Main Cape Horn Section – Construction	Commence Construction of the southernmost section of Coquitlam Water Main.	Regional Growth
Dam Safety Review for Rice Lake Dams	Carry out scheduled dam safety review for Rice Lake Dams	Regulatory and Legislative Environment
2025		
Newton Pump Station No. 2 - Construction	Complete construction of the replacement Newton Pump Station No. 2, required to meet growing water demand in the City of Surrey.	Regional Growth
Dam Safety Review for Alpine Lake Dams	Carry out next dam safety reviews for Palisade, Burwell and Loch Lomond Dams	Regulatory and Legislative Environment
Lulu-Delta Tunnel – Preliminary Design	Complete preliminary design of new water supply tunnel under the Fraser River.	System Stewardship

Haney Water Supply Tunnel – Preliminary Design	Commence preliminary design of new water tunnel under the Pitt River.	System Stewardship
Coquitlam Water Main Tunnel Section – Construction	Commence Construction of the tunnel portion of Coquitlam Water Main from Guildford Way to Dewdney Trunk Road	Regional Growth
2026		
Annacis Main No. 5 (North) - Construction	Complete construction of Annacis Main No. 5 (North), required to convey water from the existing system within the City of Burnaby to the north shaft of the Annacis Water Supply Tunnel in the City of New Westminster. The project consists of 2.5 km of 1.8 m diameter steel watermain.	Regional Growth
Central Park Main No. 2 - Construction	Complete Construction of Central Park Main No. 2, required to replace the existing Central Park Main in the City of Burnaby which has been in service since 1931 and is nearing the end of its service life. The proposed 7.0 km-long CPM2 will enhance system reliability and provide increased capacity to meet future water demands.	System Stewardship
Next Generation SCADA - Planning	Planning for the next generation SCADA. The existing SCADA System went online in 2007/2008. With technology and cyber-security rapidly evolving, there is a need to migrate to the best-in-class technology.	System Stewardship
Annacis Water Supply Tunnel – Construction	Complete Construction of the Annacis Water Supply Tunnel	Regional Growth

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - WATER

ATTACHMENT 5

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Water Services	**$ 20,308,376**	**$ 20,308,376**	**$ -**	**$ (3,400,000)**	**$ 372,168**	**$ 17,280,543**	**$ 17,626,154**	**$ 17,978,677**	**$ 18,338,251**	**$ 18,705,016**

STATUTORY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Water Services										
Water Laboratory Equipment Reserve	**$ 1,612,437**	**$ 1,612,437**	**$ -**	**$ (96,000)**	**$ 31,289**	**$ 1,547,726**	**$ 1,481,720**	**$ 1,414,395**	**$ 1,345,723**	**$ 1,275,677**
Water Sustainability Innovation Fund Reserve	15,502,764	15,502,764	723,000	(900,000)	308,285	15,634,050	16,676,961	17,740,730	18,825,774	19,932,520
Total	**$ 17,115,201**	**$ 17,115,201**	**$ 723,000**	**$ (996,000)**	**$ 339,574**	**$ 17,181,775**	**$ 18,158,681**	**$ 19,155,125**	**$ 20,171,497**	**$ 21,208,197**

metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

To: Zero Waste Committee

From: Paul Henderson, General Manager, Solid Waste Services

Date: October 7, 2021 Meeting Date: October 15, 2021

Subject: **2022 – 2026 Financial Plan – Solid Waste Services**

RECOMMENDATION
That the Zero Waste Committee endorse the 2022 – 2026 Financial Plan for Solid Waste Services as presented in the report dated October 7, 2021, titled "2022 – 2026 Financial Plan – Solid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

EXECUTIVE SUMMARY
The 2022 – 2026 Metro Vancouver Financial Plan has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while using key financial tools to minimize the impact on the ratepayers of the region for 2022. The increase in Metro Vancouver's overall consolidated household impact for 2022 is projected to be 3.5%, down from the 6.4% projected for 2022 in the prior financial planning cycle.

2022 Tipping fees increase $4 per tonne, the same per tonne increase as the prior budget cycle projection. Per household cost is $63 per household, up $3 from 2021. Key budget drivers for 2022 include new debt and operating costs associated with the completion of United Boulevard and Central Surrey recycling and waste centres.

Priorities for the Solid Waste function include the solid waste management plan update as well as continued progress towards zero waste and a circular economy, greenhouse gas emission reduction, and customer service enhancement and monitoring.

PURPOSE
To present the 2022 – 2026 Financial Plan for Solid Waste Services for consideration by the Committee.

BACKGROUND
Metro Vancouver's annual budget process includes the development of detailed annual budgets and the updating of five-year financial plans for each of the four Metro Vancouver legal entities (Metro Vancouver Regional District, Metro Vancouver Housing Corporation, Greater Vancouver Water District and Greater Vancouver Sewerage and Drainage District).

On April 8, 2021, a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2022 – 2026 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization, the current 2021 – 2025 Financial Plan,

the implications of the COVID-19 pandemic, the tools that can be used to make budget adjustments, and a proposed approach for the 2022 – 2026 Financial Plan.

Staff proposed leveraging the supported tools to create a short-term action plan that would lessen the upward pressure on household impact for 1-3 years. A short-term action plan would enable strategic goals and objectives to be maintained. If larger or more long-term adjustments are desired, a re-evaluation of long-term plans such as the *Metro Vancouver Housing Plan*, *Climate 2050*, or the *Liquid Waste Management Plan* would be required. Since an annual budget is approved, this approach will allow for adjustments to be made each year as conditions change based on market changes and other factors. The use of the tools will aim to avoid making severe changes that cannot be easily corrected in the short term. Overall, the short-term action plan approach was supported.

This report focuses on Solid Waste Services and presents the 2022 annual budget and the updated five-year plan for the years 2022 to 2026 for Committee consideration.

SOLID WASTE SERVICES PROGRAM

Solid Waste Services, within the Greater Vancouver Sewerage and Drainage District (GVS&DD), provides solid waste management planning, zero waste implementation, and recycling and waste centre and disposal facility operations.

Solid Waste Services works collaboratively with member municipalities to provide waste management services to the region's 2.7 million people. The system is comprised of recycling and waste centres and a waste-to-energy facility that handles approximately 900,000 metric tonnes of waste annually.

Solid Waste Services initiatives planned over the next five years are guided by direction provided in the *2019 – 2022 Board Strategic Plan*, and the *Integrated Solid Waste and Resource Management Plan*, specifically:

Board Strategic Plan:

- Reduce waste, increase recycling and increase recovery of materials and energy from remaining waste. Dispose of residuals in a cost effective and environmentally sustainable manner.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives that will reduce waste generated in the region.

Integrated Solid Waste and Resource Management Plan:

- Goal 1 - Minimize waste generation
- Goal 2 - Maximize reuse, recycling & material recovery
- Goal 3 - Recover energy from waste stream after material recovery
- Goal 4 - Dispose of all waste in landfill after recycling & energy recovery

WORK PLAN PERFORMANCE INDICATORS

High-level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2022 Work Plans for Solid Waste Services are presented in this report. Within the Solid Waste Services Work Plans, four performance indicators have been developed and are being tracked. These include:

- Annual solid waste flows in Metro Vancouver system (tonnes);
- Availability of the Waste-to-Energy Facility and recycling and waste centres (percent);
- Recycling rate (percent of solid waste diverted from final disposal); and
- Waste disposed per capita (tonnes/capita).

The trend in these performance measures show a slight increase in waste quantities projected for 2021 compared to 2020 but down slightly from 2019. Metro Vancouver's recycling and waste centres and Waste-to-Energy Facility have high customer availability (>99%). Waste diversion rates have been trending upwards and are currently at 63%. Waste disposed per capita is currently at 0.45 tonnes, compared to the Canadian average of 0.69 tonnes.

CONTINUOUS IMPROVEMENT

Solid Waste Services regularly implements continuous improvement initiatives. Some recent initiatives include:

- Encorp Return-It Express & GO beverage container drop-off and B.C. Used Oil Management Association used oil and antifreeze collection at North Shore Recycling and Waste Centre;
- Recycling depot funding strategy; and
- Organics management contracts.

New or continuing continuous improvement initiatives for 2022 include:

- Bottom ash beneficial use pilot testing;
- Weighscale system software replacement;
- Regional harmonization of municipal single-use bylaws;
- Waste-to-Energy Facility biosolids management; and
- Waste-to-Energy Facility district energy.

2022 BUDGET AND 2022 – 2026 FINANCIAL PLAN

The five-year financial plans for this cycle have been updated to address five central themes identified by the Metro Vancouver Board in its Strategic Plan to guide the development of plans and budgets. The five themes are as follows:

- Financial Sustainability
- Environmental Sustainability
- System Stewardship
- Regulatory and Legislative Environment
- Regional Growth

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program activities for the next five years.

The 2022 – 2026 Solid Waste Services Financial Plan is included as Attachment 1. The 2022 Annual Work Plan for Solid Waste Services presented in this report is included in Attachment 3 and the "What's Happening" highlights for the years 2022 – 2026 are included in Attachment 4.

Operating Budget Highlights

The Solid Waste Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). It is proposed to increase by $4.5 million in 2022 for a total budget of $123.0 million (Attachment 1). This increase is primarily a result of start-up costs for new recycling and waste centres. Debt service increases, primarily associated with new recycling and waste centres, are partially offset by a reduction in the planned contribution to capital.

The 2022 operating budget includes the following key actions:

- Review and update of the region's solid waste management plan to advance zero waste and the circular economy;
- Continue to enhance customer service and monitoring including investigating continuous feedback mechanisms;
- Operation of the United Boulevard Recycling and Waste Centre;
- Operation of the Central Surrey Recycling and Waste Centre;
- Alternative fuel and recyclable recovery procurement;
- Asset management program, including data validation and program guideline development;
- Support programs for textiles, single-use items, seasonal wastes, food wastes, illegal dumping, and the Zero Waste Conference; and
- Support the National Zero Waste Council including work on implementing the Circular Economy and Zero Plastics Waste.

Highlights of contracts and consulting projects anticipated to be undertaken in 2022 to respond to work plan requirements within the operating budget include the following:

- Langley Recycling and Waste Centre recycling depot design
- Waste-to-Energy Facility district energy design
- Waste-to-Energy Facility Ambient Air Monitoring review
- Solid waste management plan engagement activities
- Residual garbage management options review
- Alternative fuel and recyclables recovery
- Ashcroft Ranch McLean Lake Dam spillway and ranch fencing replacement
- Waste composition analysis

Over the next five years, the Solid Waste Services budget is expected to increase an average of $6.6 million or 5.0% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing $4.0 million per year on average

over the next five years leaving the operating programs which are increasing, on average, by $2.6 million per year, roughly at the rate of inflation.

Capital Budget Highlights
The Solid Waste Services capital budget for 2022 approval is $287.1 million (Attachment 2). This amount includes all capital projects underway or planned in 2022. The capital program is funded by long-term debt and contribution to capital from the annual operating budget as available.

The projected capital cash flow for 2022 – 2026 totals $268.0 million, an average of $53.6 million per year. The largest six projects (each over $10 million) make up approximately 68% of the capital spending over the next five years. These six projects also represent 35% of the expenditures planned for the 2027 – 2031 period. There are 40 projects on the 5-year plan.

The capital program over the next five years is largely driven by the need to replace aging Waste-to-Energy Facility infrastructure and enhance recycling services at the recycling and waste centres. The addition of biosolids management at the Waste-to-Energy Facility and the alternative fuel and recyclables recovery project are expected to increase beneficial use of waste materials and reduce greenhouse gas emissions. Waste-to-Energy Facility acid gas reduction upgrades have been deferred consistent with the requirements of the amended Waste-to-Energy Facility Operational Certificate to allow additional ambient air monitoring to compare ambient concentrations to dispersion modelling results and ambient air quality objectives. Data collected to date show ambient concentrations of hydrogen chloride and sulfur dioxide are less than 5% of ambient air quality objectives, and well below modelling results. Work on the development of a new western region recycling and waste centre has been deferred to match current expectations with respect to timing for the construction of that facility.

The following key projects are included in the five-year plan:

- Alternative Fuel and Recyclables Recovery Centre
- North Surrey and Langley Recycling and Waste Centre Recycling Depots
- Waste-to-Energy Facility District Energy
- Waste-to-Energy Facility Biosolids Management
- Waste-to-Energy Facility Acid Gas Reduction

2022 – 2026 Tipping Fee Projections
The following table shows the tipping fee projections based on the required revenue to offset expected expenditures. Tipping fees for 2022 and 2023 are increasing by $4 and $7 per tonne respectively. Requirements for 2023 and beyond will be reviewed during future budget processes with the goal of reducing tipping fee increases where possible.

Projected Tipping Fees for Municipal Solid Waste ($/tonne)	2021	2022	2023	2024	2025	2026
Municipal Tipping Fee	**$117**	**$121**	**$128**	**$135**	**$142**	**$149**
Small Vehicles (0-1t)	**$151**	**$155**	**$162**	**$169**	**$176**	**$183**

Medium Vehicles (1-8t)	**$129**	**$133**	**$140**	**$147**	**$154**	**$161**
Large Vehicles (>8t)	**$103**	**$107**	**$114**	**$121**	**$128**	**$135**

The Solid Waste Services tipping fee projections are identical with those forecast in the prior budget cycle.

Waste Flows
With tipping fees being the primary revenue source for the Solid Waste function, waste flow projections are the key driver for annual budget projections. 2020 total system waste flows were approximately 860,000 tonnes. Projections for 2021 are currently estimated at approximately 940,000 tonnes, slightly higher than 2019 actuals. The increase in tonnage in 2021 is due in part to recovering waste flow subsequent to the impacts of COVID-19 as well as disposal of construction and demolition facility residuals at the Vancouver Landfill, material not typically delivered to the regional system. The waste flow for 2022 is budgeted at 890,000 tonnes.

Reserve Funds
There are no proposed applications of reserve funding in the 2022 – 2026 Financial Plan.

The 2022 – 2026 Projected Reserves for Solid Waste Services is included in Attachment 5.

APPROVAL PROCESS
The proposed 2022 – 2026 Financial Plan and Annual Work Plans for Solid Waste Services are presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2022 – 2026 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2021.

- The Greater Vancouver Sewerage and Drainage District Board will consider adoption of the 2021 Budget and endorsement of the 2022 – 2026 Financial Plan on October 29, 2021.

ALTERNATIVES
1. That the Zero Waste Committee endorse the 2022 – 2026 Financial Plan for Solid Waste Services as presented in the report dated October 7, 2020, titled "2022 – 2026 Financial Plan – Solid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.
2. That the Zero Waste Committee make recommendations and endorse an amended 2022 – 2026 Financial Plan for Solid Waste Services and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2021 for consideration.

FINANCIAL IMPLICATIONS
If the Greater Vancouver Sewerage and Drainage District Board approves the 2022 Budget and endorses the Five-Year Financial Plan for Solid Waste Services, as presented under Alternative 1, in

2022 the revenue from the tipping fees for the system will increase by $4.4 million (4.0%) to $112.9 million which will generate the majority of the $123.0 million in total revenue required to offset projected expenditures. This represents a $3 or 4.3% increase in the cost to the average regional household to $63 (2021 $60).

Over the term of the five-year plan, the annual tipping fee revenue is projected to increase by an average of $6.0 million per year to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years will rise from $63 in 2022 to $74 in 2026 representing an average annual increase of approximately $3 per household.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2022 Budget and Five-Year Financial Plan for Solid Waste Services for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the Solid Waste Services Financial Plan.

SUMMARY / CONCLUSION

The 2022 Budget and Five-Year Financial Plan for Solid Waste Services has been prepared following direction received at the April 8, 2021 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan* and support the *Integrated Solid Waste and Resource Management Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2022 to 2026 for Solid Waste Services.

The presentation of the 2022 Budget and Five-Year Financial Plan for Solid Waste Services provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for Solid Waste Services investments that will be required to maintain our assets and to respond to our region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical infrastructure requirements.

Staff recommend endorsing the 2022 – 2026 Budget and Five-Year Financial Plan and Annual Work Plans for Solid Waste Services as presented under Alternative 1.

Attachments *(Orbit: 48386942)*:

1. 2022 – 2026 Solid Waste Financial Plan
2. 2022 – 2026 Capital Programs and Project Total – Solid Waste Services
3. 2022 Solid Waste Work Plans
4. 2022 – 2026 "What's Happening"
5. 2022 – 2026 Projected Reserves – Solid Waste

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GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
SOLID WASTE
2022 BUDGET REVIEW
2022-2026 FINANCIAL PLAN

	2021 BUDGET	2022 BUDGET	% CHANGE	2023 FORECAST	% CHANGE	2024 FORECAST	% CHANGE	2025 FORECAST	% CHANGE	2026 FORECAST	% CHANGE
REVENUES											
Solid Waste Tipping Fees	$ 108,516,645	$ 112,909,870	4.0%	$ 118,375,791	4.8%	$ 124,657,561	5.3%	$ 131,471,016	5.5%	$ 138,384,365	5.3%
Energy Sales	6,239,530	6,401,758		6,568,204		6,738,977		6,914,190		7,093,959	
Other External Revenues	3,756,396	3,679,379		4,401,400		5,819,012		5,881,179		5,944,379	
TOTAL REVENUES	**$ 118,512,571**	**$ 122,991,007**	**3.8%**	**$ 129,345,395**	**5.2%**	**$ 137,215,550**	**6.1%**	**$ 144,266,385**	**5.1%**	**$ 151,422,703**	**5.0%**
EXPENDITURES											
Operating Programs:											
Solid Waste Operations											
Allocated Quality Control	$ 18,494	$ 17,582		$ 18,312		$ 18,646		$ 20,602		$ 18,076	
Ashcroft Ranch	724,267	862,263		533,011		494,383		555,888		472,829	
Engineers in Training	93,013	124,066		126,375		129,205		132,101		135,065	
Landfills	34,180,437	31,493,726		35,145,899		35,762,756		37,416,672		39,026,143	
Recycling and Waste Centre	37,423,463	39,877,587		39,117,078		40,627,531		41,713,351		42,740,182	
Waste to Energy Facility	24,350,996	24,897,642		25,103,689		26,078,034		26,387,765		26,864,771	
	96,790,670	97,272,866	0.5%	100,044,364	2.8%	103,110,555	3.1%	106,226,379	3.0%	109,257,066	2.9%
Solid Waste Planning											
Policy and Facility Development	700,979	624,289		620,057		658,236		671,723		685,526	
Zero Waste Implementation	2,182,351	2,308,441		2,336,838		2,051,079		1,662,814		1,695,455	
Programs and Public Involvement	803,627	764,836		776,089		789,728		633,681		647,960	
	3,686,957	3,697,566	0.3%	3,732,984	1.0%	3,499,043	(6.3%)	2,968,218	(15.2%)	3,028,941	2.0%
Administration and Department Support	649,291	656,133	1.1%	668,046	1.8%	676,155	1.2%	690,695	2.2%	706,798	2.3%
Environmental Regulation and Enforcement	934,630	1,418,683	51.8%	1,416,740	(0.1%)	1,332,718	(5.9%)	1,364,742	2.4%	1,397,370	2.4%
Allocation of Centralized Support Costs	4,740,158	5,042,360	6.4%	5,169,970	2.5%	5,394,621	4.3%	5,296,354	(1.8%)	5,041,927	(4.8%)
Total Operating Programs	106,801,706	108,087,608	1.2%	111,032,104	2.7%	114,013,092	2.7%	116,546,388	2.2%	119,432,102	2.5%
Allocation of Project Delivery Cost	327,502	439,579	34.2%	584,467	33.0%	609,797	4.3%	613,828	0.7%	615,146	0.2%
Debt Service	6,946,790	10,440,428	50.3%	16,592,377	58.9%	20,357,462	22.7%	23,086,608	13.4%	24,779,128	7.3%
Contribution to Capital	4,436,573	4,023,392	(9.3%)	1,136,447	(71.8%)	2,235,199	96.7%	4,019,561	79.8%	6,596,327	64.1%
TOTAL EXPENDITURES	**$ 118,512,571**	**$ 122,991,007**	**3.8%**	**$ 129,345,395**	**5.2%**	**$ 137,215,550**	**6.1%**	**$ 144,266,385**	**5.1%**	**$ 151,422,703**	**5.0%**

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
SOLID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
CAPITAL EXPENDUTURES									
Landfills									
Alternative Fuel and Recyclables Recovery Centre	$ -	$ -	$ -	$ -	$ 1,500,000	$ 20,000,000	$ 21,500,000	Feasibility Study	Opportunity
Coquitlam Landfill East Closure	-	-	400,000	3,500,000	1,100,000	-	5,000,000	Not started	Resilience
Coquitlam Landfill Gas Collection Upgrades	7,300,000	1,100,000	-	-	-	-	1,100,000	Construction	Maintenance
Coquitlam Landfill Lot 3 Development	5,000,000	50,000	-	-	-	-	50,000	Feasibility Study	Resilience
Coquitlam Landfill Pump Station Upgrade	1,600,000	1,000,000	-	-	-	-	1,000,000	Construction	Maintenance
Coquitlam Landfill: Leachate Collection System Grade Realignmen	200,000	200,000	800,000	-	-	-	1,000,000	Design	Resilience
Total Landfills	**$ 14,100,000**	**$ 2,350,000**	**$ 1,200,000**	**$ 3,500,000**	**$ 2,600,000**	**$ 20,000,000**	**$ 29,650,000**		
Recycling and Waste Centres									
Central Surrey Recycling and Waste Centre	$ 50,300,000	$ 8,000,000	$ -	$ -	$ -	$ -	$ 8,000,000	Construction	Growth
Langley Recycling Depot Development	250,000	250,000	3,000,000	2,250,000	-	-	5,500,000	Design	Upgrade
Maple Ridge Transfer Station Upgrades	2,000,000	200,000	1,800,000	-	-	-	2,000,000	Design	Maintenance
North Shore Recycling and Waste Centre Compactor Replacemen	-	-	-	-	2,500,000	-	2,500,000	Not started	Maintenance
North Surrey Recycling and Waste Centre Compactor Replacemer	-	-	2,500,000	-	-	-	2,500,000	Not started	Maintenance
North Surrey Recycling Depot Development	20,250,000	20,250,000	3,000,000	2,250,000	-	-	25,500,000	Design	Upgrade
United Boulevard Recycling and Waste Centre	77,600,000	200,000	-	-	-	-	200,000	Construction	Growth
Western Region Recycling and Waste Centre Replacement	-	-	-	-	-	5,000,000	5,000,000	Not started	Resilience
Total Recycling and Waste Centres	**$ 150,400,000**	**$ 28,900,000**	**$ 10,300,000**	**$ 4,500,000**	**$ 2,500,000**	**$ 5,000,000**	**$ 51,200,000**		
Waste To Energy Facilities									
Acid Gas Reduction	$ 2,000,000	$ -	$ -	$ 2,800,000	$ 7,750,000	$ 30,000,000	$ 40,550,000	Preliminary Design	Upgrade
Air System Piping Replacement	-	-	300,000	-	-	-	300,000	Not started	Maintenance
Biosolids Processing	1,750,000	2,250,000	8,000,000	8,000,000	3,700,000	-	21,950,000	Design	Resilience
Boiler and APC Roof Replacement	-	-	100,000	650,000	1,000,000	-	1,750,000	Not started	Maintenance
Bottom Ash Crane Replacement	1,500,000	900,000	500,000	-	-	-	1,400,000	Design	Maintenance
Bottom Ash Processing	6,800,000	450,000	-	-	-	-	450,000	Construction	Opportunity
Compressed Air System Replacement	3,000,000	1,400,000	1,500,000	-	-	-	2,900,000	Design	Maintenance
Electrical Transformers Replacement	5,000,000	200,000	4,500,000	300,000	-	-	5,000,000	Design	Maintenance
Fabric Filter Hopper and Pulse Header Refurbishment	2,250,000	650,000	1,500,000	-	-	-	2,150,000	Design	Maintenance
Feed Hopper/Chute	2,600,000	100,000	-	-	-	-	100,000	Construction	Maintenance
Feedwater Pump Replacement	1,000,000	200,000	-	-	-	-	200,000	Design	Maintenance
Fire Suppression System	1,000,000	500,000	500,000	-	-	-	1,000,000	Design	Maintenance
Fly Ash Silo Refurbishment	1,000,000	100,000	500,000	400,000	-	-	1,000,000	Design	Maintenance
Generation Bank Replacement	-	-	100,000	5,900,000	3,000,000	-	9,000,000	Not started	Maintenance
Primary Economizer Replacement	7,000,000	3,800,000	3,000,000	-	-	-	6,800,000	Construction	Maintenance
Primary Superheaters Replacement	4,000,000	100,000	2,000,000	1,000,000	900,000	-	4,000,000	Design	Maintenance
Programmable Logic Controllers Replacement	2,000,000	500,000	500,000	500,000	500,000	-	2,000,000	Design	Maintenance

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CAPITAL PORTFOLIO
SOLID WASTE SERVICES
2022 CAPITAL BUDGET AND 2022-2026 CAPITAL PLAN

	CAPITAL BUDGET FOR APPROVAL	2022 CAPITAL CASH FLOW	2023 CAPITAL CASH FLOW	2024 CAPITAL CASH FLOW	2025 CAPITAL CASH FLOW	2026 CAPITAL CASH FLOW	2022 TO 2026 TOTAL CAPITAL CASH FLOW	ACTIVE PHASE	PRIMARY DRIVER
Pug Mill Enclosure Ventilation System Replacement	1,000,000	500,000	500,000	-	-	-	1,000,000	Design	Maintenance
Refuse Crane	16,800,000	3,250,000	9,000,000	4,300,000	-	-	16,550,000	Construction	Maintenance
Refuse Pit Bunker Door Replacement	600,000	600,000	-	-	-	-	600,000	Design	Maintenance
Secondary Economizers Replacement	6,000,000	250,000	1,750,000	3,000,000	1,000,000	-	6,000,000	Design	Maintenance
Soot Blower Piping Replacement	-	-	300,000	-	-	-	300,000	Not started	Maintenance
Special Handle Waste Direct Feed System	-	-	2,500,000	2,500,000	-	-	5,000,000	Not started	Opportunity
Stack Refurbishment	-	-	350,000	-	-	-	350,000	Not started	Maintenance
WTE Facility District Heating	55,000,000	2,000,000	5,000,000	25,000,000	23,000,000	-	55,000,000	Design	Opportunity
Total Waste To Energy Facilities	**$ 120,300,000**	**$ 17,750,000**	**$ 42,400,000**	**$ 54,350,000**	**$ 40,850,000**	**$ 30,000,000**	**$ 185,350,000**		
Opportunity									
WTE Facility District Heating Opportunities	$ 2,310,000	$ 1,840,000	$ -	$ -	$ -	$ -	$ 1,840,000	Design	Opportunity
Total Opportunity	**$ 2,310,000**	**$ 1,840,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,840,000**		
TOTAL CAPITAL EXPENDITURES	**$ 287,110,000**	**$ 50,840,000**	**$ 53,900,000**	**$ 62,350,000**	**$ 45,950,000**	**$ 55,000,000**	**$ 268,040,000**		

CAPITAL FUNDING							
New External Borrowing	$ 193,342,000	$ 42,816,000	$ 36,877,000	$ 28,214,000	$ 17,015,000	$ 50,980,000	$ 175,902,000
Reserve	16,268,000	3,774,000	4,023,000	1,136,000	2,235,000	4,020,000	15,188,000
External Funding - Interagency	77,500,000	4,250,000	13,000,000	33,000,000	26,700,000	-	76,950,000
Total	**$ 287,110,000**	**$ 50,840,000**	**$ 53,900,000**	**$ 62,350,000**	**$ 45,950,000**	**$ 55,000,000**	**$ 268,040,000**

SUMMARY BY DRIVER							
Growth	$ 127,900,000	$ 8,200,000	$ -	$ -	$ -	$ -	$ 8,200,000
Maintenance	65,650,000	15,350,000	31,200,000	16,050,000	8,900,000	-	71,500,000
Resilience	6,950,000	2,500,000	9,200,000	11,500,000	4,800,000	5,000,000	33,000,000
Upgrade	22,500,000	20,500,000	6,000,000	7,300,000	7,750,000	30,000,000	71,550,000
Opportunity	64,110,000	4,290,000	7,500,000	27,500,000	24,500,000	20,000,000	83,790,000
Total	**$ 287,110,000**	**$ 50,840,000**	**$ 53,900,000**	**$ 62,350,000**	**$ 45,950,000**	**$ 55,000,000**	**$ 268,040,000**

SOLID WASTE SERVICES
Solid Waste Operations

Description of services
Solid Waste Services provides waste reduction and recycling planning and solid waste disposal services to the region under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). Solid Waste Operations is responsible for operating an integrated solid waste management system with service delivery focused on achieving Metro Vancouver's zero waste objectives through reliable, cost-effective, safe and environmentally sound operations. The regional solid waste system is a user-pay model, primarily funded through tipping fees.

Metro Vancouver facilities include the North Shore, Coquitlam, Surrey, Maple Ridge, and Langley recycling and waste centres, and Waste-to-Energy Facility. These facilities are managed through several large contracts. Metro Vancouver also manages the closed Matsqui Transfer Station, the closed Coquitlam Landfill, and the Ashcroft Ranch.

Strategic directions and high level goals supported
Board Strategic Plan
- Continue to expand and enhance the disposal ban program
- Continue to expand recycling options at regional recycling and waste centres
- Assess the viability of implementing district heating at the Waste-to-Energy Facility

Integrated Solid Waste and Resource Management Plan
- Goal 1 - Minimize waste generation
- Goal 2 - Maximize reuse, recycling & material recovery
- Goal 3 - Recover energy from waste stream after material recovery
- Goal 4 - Dispose of all waste in landfill after recycling & energy recovery

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Annual solid waste flows in Metro Vancouver system (tonnes)	2020: 854,000 2019: 921,000 2018: 918,000	projected: 890,000	890,000
Processing Availability of the Waste-to-Energy Facility	2020: 91.6% 2019: 93.1% 2018: 90.4%	projected: 93%	93%
Customer availability for the Waste-to-Energy Facility	2020: 99%	projected: 99%	99%
Customer availability for the recycling and waste centres	2020: 99.9% 2018: 99.9% 2019: 99.9%	projected: 99.9%	99.9%

2022 key actions

General

- Asset management program development, including policy development
- Enhancement of new weigh scale software including new features for improved customer service
- Work with Properties Division on surplus land disposition Matsqui Transfer Station

Recycling and Waste Centres

- United Boulevard Recycling and Waste Centre first full year of operation
- Central Surrey Recycling and Waste Centre commissioning and start of operation
- Recycling depots at Surrey and Langley Transfer stations design
- Initiating procurement for alternative fuel and recyclables recovery facility pilot targeting small vehicle waste
- North Shore organics yard upgrades
- Tipping floor repairs at North Shore and North Surrey
- North Surrey administration building refurbishment

Waste-to-Energy Facility

- Complete feed hopper/feed chute and feedwater pump replacement projects
- Advance refuse crane, bottom ash crane, fabric filter hopper, compressed air, and primary economizer upgrade and replacement projects
- Initiate design for secondary economizer, fly ash silo, programmable logic controllers, pug mill enclosure ventilation system, and electrical transformer upgrade and replacement projects
- Initiate construction of biosolids processing system
- District energy system detailed design
- Bottom ash beneficial use pilot testing
- Continue 2-year study on Waste-to-Energy Facility ambient air monitoring

Landfills

- Mitigating impacts to environmental infrastructure at Coquitlam Landfill due to the Kinder Morgan Trans Mountain Pipeline Expansion project
- Ongoing environmental operations at Coquitlam Landfill (leachate and landfill gas), leachate, landfill gas and groundwater monitoring and reporting for environmental compliance
- Complete procurement process for a new contingency disposal contract
- Complete procurement process for a new five-year contract for groundwater monitoring and reporting and approval-in-principle reporting

Ashcroft Ranch

- McLean Lake Dam spillway upgrades
- Fencing replacement

SOLID WASTE SERVICES

Solid Waste Planning and Public Involvement

Description of services

Solid Waste Services provides waste reduction and recycling planning and solid waste disposal services to the region under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). Solid Waste Planning and Public Involvement is responsible for:

- Technical and audience research and Indigenous and public engagement to develop an updated regional solid waste management plan;
- Regional waste reduction and recycling initiatives in the *Integrated Solid Waste and Resource Management Plan*, including bans, bylaws, regional policies and recycling services, etc.;
- Regional infrastructure planning and development to fulfill future needs for waste recycling, transfer and disposal; and,
- engagement on other solid waste initiatives.

In addition, to support Metro Vancouver's commitment to protect the environment and conserve resources, Environmental Regulation and Enforcement negotiates and issues permits, orders and licenses and then promotes compliance and enforces solid waste bylaws. According to a user-pay principle, these regulatory costs are recovered through fees.

Strategic directions and high level goals supported

Board Strategic Plan

- Expand actions that will reduce the amount of litter and waste that Metro Vancouver members manage, including strategies to reduce single-use items
- Continue to provide technical support to communication campaigns that increase diversion through source reduction, reuse, repurposing or recycling
- Research opportunities to ensure sufficient capacity in the regional recycling and waste diversion system, including assessing opportunities for organics and wood
- Identify future disposal alternatives with full life cycle, cost and greenhouse gas analyses

Integrated Solid Waste and Resource Management Plan

- Goal 1 - Minimize waste generation
- Goal 2 - Maximize reuse, recycling & material recovery
- Goal 3 - Recover energy from waste stream after material recovery
- Goal 4 - Dispose of all waste in landfill after recycling & energy recovery

Performance indicators

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Recycling rate (percent of solid waste diverted from final disposal)	Canadian average*: 27.6% Metro Vancouver historical: 2018: 64% 2017: 63%	63%	65% (Aspirational goal of 80%)

Indicator	Historical and/or industry benchmark	Current performance	2022 performance objective
Waste disposed per capita (tonnes)	Canadian average*: 0.69 Metro Vancouver historical: 2019: 0.48 2018: 0.48 2017: 0.49	0.45	0.45

**Most recent figures (2018) derived from Statistics Canada disposal & diversion tonnages*

2022 key actions

- Regional solid waste system assessment study
- Circular Economy/3Rs best practices study
- Indigenous and public engagement for review and update of the solid waste management plan
- Single-use items reduction strategy
- Disposal Ban Program implementation monitoring
- Textiles, single-use items, seasonal waste, food waste, illegal dumping, and the Zero Waste Conference support
- National Zero Waste Council including work on implementing the Circular Economy and Zero Plastics Waste support
- National Solid Waste Benchmarking Initiative and applied waste research
- Regional waste composition monitoring
- Solid waste initiatives engagement
- Regional Food Recovery Network
- Regional Reuse Repair event

Solid Waste Services

2022 to 2026 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Solid Waste Services over the next five years.

Initiative	Description	Theme
2022		
Weighscale software replacement	Autoscale software replacement installation	System Stewardship
Asset management planning	Asset management program implementation and plan development	System Stewardship
Biosolids utilization at the Waste-to-Energy Facility	Detailed design/ commence construction of biosolids utilization system at the Waste-to-Energy Facility	Opportunities for Innovation and Enhanced Service
Recycling and Waste Centre system evaluation	Evaluate the recycling and waste centre network and potential improvements	Addressing Regional Growth
Central Surrey Recycling and Waste Centre Operation	Central Surrey Recycling and Waste Centre operations	Addressing Regional Growth
District energy system at the Waste-to-Energy Facility	District energy system detailed design	Environmental Protection and Climate Action
Solid waste management plan review	Review and update of the region's solid waste management plan	Environmental Protection and Climate Action
Zero waste initiatives	Research on further waste prevention and diversion initiatives, such as new policies, incentives, business models and regulatory measures, to move toward a circular economy	Environmental Protection and Climate Action
Bottom ash beneficial use	Beneficial use of bottom ash procurement	Environmental Protection and Climate Action
Alternative fuel and recyclables recovery	Alternative fuel and recyclables project procurement process	Environmental Protection and Climate Action
United Boulevard Recycling and Waste Centre Operation	United Boulevard Recycling and Waste Centre operations	Addressing Regional Growth
North Surrey Recycling Depot expansion	North Surrey Recycling and Waste Centre Recycling Depot land purchase	Environmental Protection and Climate Action
Langley Recycling Depot expansion	Langley Recycling and Waste Centre Recycling Depot design	Environmental Protection and Climate Action
Capital replacements at the Waste-to-Energy	Continue capital replacements and upgrades, including primary and secondary economizers,	System Stewardship

Facility	generation bank, and bottom ash crane	
Solid waste management plan review	Continue review and update of the region's solid waste management plan	Environmental Protection and Climate Action
Zero waste initiatives	Continued research and development of further waste prevention and diversion initiatives, such as new policies, incentives, business models and regulatory measures, to move toward a circular economy	Environmental Protection and Climate Action
2023		
Capital replacements at the Waste-to-Energy Facility	Continue capital replacements and upgrades, including secondary economizers, generation bank, lime and carbon silos	System Stewardship
Solid waste management plan review	Continue review and update of the region's solid waste management plan	Environmental Protection and Climate Action
Zero waste initiatives	Continued research and development of further waste prevention and diversion initiatives, such as new policies, incentives, business models and regulatory measures, to move toward a circular economy	Environmental Protection and Climate Action
Coquitlam Landfill closure	Close eastern area of landfill	System Stewardship
Recycling and Waste Centre expanded recycling	Recycling depot construction at the Langley and North Surrey facilities	Environmental Protection and Climate Action
North Surrey compactor replacement	Replace North Surrey Recycling and Waste Centre compactor	System Stewardship
2024		
Capital replacements at the Waste-to-Energy Facility	Continue capital replacements and upgrades, including stack refurbishment and the initiation of design for the acid gas reduction system (2 years)	System Stewardship
Solid waste management plan review	Complete review and update of the region's solid waste management plan	Environmental Protection and Climate Action
Zero waste initiatives	Begin to implement and monitor the new waste prevention and diversion initiatives in the new solid waste management plan	Environmental Protection and Climate Action
Alternative fuel and recyclables recovery	Alternative fuel and recyclables recovery facility development	Environmental Protection and Climate Action
Recycling and Waste Centre expanded	New recycling depots operating at the Langley and North Surrey facilities	Environmental Protection and Climate Action

recycling		
2025		
Capital replacements at the Waste-to Energy Facility	Continue capital replacements and upgrades, including boiler grate and feed table supports replacement project	System Stewardship
Zero waste initiatives	Implement and monitor the new waste prevention and diversion initiatives in the new solid waste management plan	Environmental Protection and Climate Action
North Shore compactor replacement	Replace North Shore Recycling and Waste Centre compactor	System Stewardship
Waste-to-Energy Facility operating contract	Procurement for the Waste-to-Energy Facility operating and maintenance contract	System Stewardship
Alternative Fuel and Recyclables Recovery Centre design	Begin design of the full scale Alternative Fuel and Recyclables Recovery Centre	Environmental Protection and Climate Action
2026		
Alternative Fuel and Recyclables Recovery Centre Construction	Begin construction of the full scale Alternative Fuel and Recyclables Recovery Centre	Environmental Protection and Climate Action
Western region recycling and waste centre replacement	Begin design for the western region recycling and waste centre replacement	Addressing Regional Growth
Capital replacements at the Waste-to Energy Facility	Continue capital replacements and upgrades and begin construction of the acid gas reduction system	System Stewardship
Zero waste initiatives	Continue to implement and monitor the new waste prevention and diversion initiatives in the new solid waste management plan	Environmental Protection and Climate Action

METRO VANCOUVER DISTRICTS
2022-2026 PROJECTED RESERVES - SOLID WASTE

OPERATING RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Solid Waste Services	**$ 19,293,542**	**$ 19,293,542**	**$ -**	**$ -**	**$ 385,871**	**$ 19,679,413**	**$ 20,073,002**	**$ 20,474,462**	**$ 20,883,951**	**$ 21,301,630**

DISCRETIONARY RESERVES

	2021 ENDING BALANCE	2022 OPENING BALANCE	CONTRIBUTION	WITHDRAWALS	INTEREST	2022 ENDING BALANCE	2023 ENDING BALANCE	2024 ENDING BALANCE	2025 ENDING BALANCE	2026 ENDING BALANCE
Solid Waste Services										
Solid Waste General Reserve	$ 18,719,880	$ 18,719,880	$ -	$ -	$ 374,398	$ 19,094,277	$ 19,476,163	$ 19,865,686	$ 20,263,000	$ 20,668,260
Landfill Post Closure Reserve	11,399,522	11,399,522	-	-	227,990	11,627,512	11,860,063	12,097,264	12,339,209	12,585,993
Total	**$ 30,119,402**	**$ 30,119,402**	**$ -**	**$ -**	**$ 602,388**	**$ 30,721,790**	**$ 31,336,226**	**$ 31,962,950**	**$ 32,602,209**	**$ 33,254,253**

We want to hear from you

Metro Vancouver 2022 Board Budget Workshop and Public Consultation

Join us

Wednesday, October 20, 2021 at 9 am livestreamed online from Metro Vancouver, 28th Floor Boardroom, 4730 Kingsway, Burnaby, BC *(strict health protocols apply for those attending in person)*.

The 2022 Budget and Five Year Financial Plan includes both operating and capital expenditures for the four entities that make up Metro Vancouver: the Metro Vancouver Regional District, the Greater Vancouver Water District, the Greater Vancouver Sewerage and Drainage District, and the Metro Vancouver Housing Corporation.

Visit the livestream online at www.metrovancouver.org to view Metro Vancouver's 2022 – 2026 Financial Plan and supporting information.

Comments can be sent to icentre@metrovancouver.org or via mail to:
Financial Services, Metro Vancouver
26th FL, 4730 Kingsway, Burnaby, BC V5H 0C6