
To: Board of Directors

From: Carol Mason, Commissioner/Chief Administrative Officer
Dean Rear, Acting General Manager, Financial Services/Chief Financial Officer

Date: October 18, 2019 Meeting Date: October 23, 2019

Subject: **2020 – 2024 Financial Plan – Metro Vancouver Districts and Housing Corporation**

RECOMMENDATION

That the Board endorse the 2020 Budget and 2020 -2024 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 November 1, 2019 Metro Vancouver Districts and Housing Corporation Board meetings for consideration.

PURPOSE

To present the 2020 Budget and 2020 - 2024 Financial Plan for the Metro Vancouver Districts and Housing Corporation for consideration.

BACKGROUND

The 2020 – 2024 Financial Plan 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) has been guided by the direction provided in the *Board Strategic Plan* and prepared in accordance with Board policy. The 2020 – 2024 Financial Plan is a continued step forward towards ensuring financial sustainability for the region. The details of the Financial Plan are included in Attachment 1.

During the month of October, the 2020 – 2024 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 2020 Budget and 2020 - 2024 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 23, 2019 Board Budget Workshop.

The 2020 Budget and 2020 – 2024 Financial Plans reflect consistency and alignment with the legislative authority of the individual Districts and functions and support the vision and mission as articulated in the *Board Strategic Plan* and corresponding Regional Management Plans. The plan is also in accordance with applicable Board policies. Upon Board endorsement of the overall Five Year Financial Plan, this document will guide the direction of future annual budgets and long-term financial plans as well as provide key information to member local governments on future capital projects, anticipated expenditures and funding projections.

This report is being brought forward to present the overall 2020 – 2024 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 November 1, 2019 for approval.

2020 BUDGET AND FIVE YEAR FINANCIAL PLAN

The budget for this cycle 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:

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

Annual Work Plans are developed for most Metro Vancouver functions. The 2020 Annual Work Plans for each functional area are included with the reports that were presented to individual standing committees.

The *Metro Vancouver Proposed 2020 - 2024 Financial Plan* (Attachment 1) provides the financial details of the 2020 Budget and 2020 - 2024 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.

FINANCIAL PLAN OVERVIEW

The completion of the 2020 Budget and the 2020 - 2024 Financial Plan is the culmination of a significant planning exercise with guidance 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

As proposed, the 2020 - 2024 Financial Plan has total operating expenditures for 2020 of \$890.1 million (prior projected: \$907.4 million) with projected capital expenditures of just over \$1,414.6 million as summarized in the tables below:

2020-2024 METRO VANCOUVER DISTRICTS OPERATING BUDGET						
\$ Millions	2019	2020	2021	2022	2023	2024
Revenues						
Water Sales	\$ 286.9	\$ 307.2	\$ 326.7	\$ 357.3	\$ 394.5	\$ 437.4
Liquid Waste Services Levy	255.8	274.2	306.8	347.6	386.5	416.3
Solid Waste Tipping Fees	98.4	105.8	112.5	117.8	125.9	130.9
Housing Rents	39.3	40.4	41.5	45.1	46.3	50.1
MVRD Requisitions	61.2	71.8	79.5	86.6	93.4	100.4
Other Revenue	69.5	72.1	84.5	99.8	112.3	127.8
Transfer from Reserves	25.3	18.6	16.0	13.4	12.4	9.7
Total Revenues	\$ 836.4	\$ 890.1	\$ 967.5	\$ 1,067.6	\$ 1,171.3	\$ 1,272.6
Expenditures						
Water Services	\$ 290.7	\$ 309.1	\$ 328.5	\$ 359.0	\$ 396.2	\$ 439.0
Liquid Waste Services	310.9	328.3	371.3	425.3	475.8	518.4
Solid Waste Services	107.2	114.1	122.3	127.8	136.1	141.4
MVHC	51.2	52.3	53.4	57.0	58.0	61.8
MVRD	76.4	86.3	92.0	98.5	105.2	112.0
Total Expenditures	\$ 836.4	\$ 890.1	\$ 967.5	\$ 1,067.6	\$ 1,171.3	\$ 1,272.6

2020-2024 METRO VANCOUVER DISTRICTS CAPITAL BUDGET						
\$ Millions	2019	2020	2021	2022	2023	2024
Water Services	\$ 231.4	\$ 397.5	\$ 449.7	\$ 496.5	\$ 522.7	\$ 540.8
Liquid Waste Services	564.9	883.4	759.9	529.5	617.8	634.1
Solid Waste Services	89.2	88.5	81.6	52.4	18.9	41.6
Housing Development	21.3	25.3	31.5	19.1	6.6	-
Regional Parks	15.9	19.9	23.9	29.4	32.2	37.3
Total Expenditures	\$ 922.7	\$ 1,414.6	\$ 1,346.6	\$ 1,126.9	\$ 1,198.2	\$ 1,253.8

Over the five years of the plan, most of the changes and increases in funding are associated with infrastructure investments in Water, Liquid Waste and Solid Waste, through changes to debt servicing and contributions to capital.

2020-2024 METRO VANCOUVER DISTRICTS TOTAL EXPENDITURES						
\$ Millions	2019	2020	2021	2022	2023	2024
Operations	\$ 482.2	\$ 498.0	\$ 516.6	\$ 529.2	\$ 547.1	\$ 547.8
Debt Service	135.8	135.0	175.0	237.7	294.9	357.7
Contribution to Capital	218.4	257.1	275.9	300.7	329.3	367.1
Total Expenditures	\$ 836.4	\$ 890.1	\$ 967.5	\$ 1,067.6	\$ 1,171.3	\$ 1,272.6

For 2020, the plan represents a \$33 increase to the cost of the average regional household (\$1.255 million assessed value) for a total cost of \$568. Over the five year period, the cost to the average regional household will increase an average of \$46. The cost to the average household is projected to increase from \$535 to \$768 over the next five years.

CONSISTENCY WITH THE 2019 -2023 FINANCIAL PLAN

For the purposes of providing predictability and stability for costs to our member municipalities, the financial plan was prepared to result in financial impacts that met or were better than what was

projected in the 2019 – 2023 Metro Vancouver Financial Plan for all four legal entities. In 2020 the impact on the average regional household is estimated to be \$8 less than the prior year projection for an average regional household cost of \$568 (Prior projection: \$576).

This change is driven by reductions in Water Services (-\$11) and Liquid Waste Services (-\$7) through adjustments to contribution to capital and direct application of DCC's to Liquid Waste growth projects, but is offset by increase reserve contributions for both Affordable Housing and Regional Parks in the Regional District (+\$8) and increased estimated household tonnage in Solid Waste Services (+\$2).

For the years 2021, 2022 and 2023 the household impact is estimated to be a total of \$34 less than the previous five year projection.

The total household impact compared to that projected in the previous financial plan is set out in the table below.

BY 2020 VS BY 2019 HOUSEHOLD IMPACT COMPARISON						
\$	2019	2020	2021	2022	2023	2024
Water Services						
Current Year Forecast	\$ 172	\$ 178	\$ 186	\$ 201	\$ 218	\$ 239
Prior Year Forecast	\$ 172	\$ 189	\$ 207	\$ 229	\$ 253	\$ -
Liquid Waste Services						
Current Year Forecast	\$ 250	\$ 264	\$ 290	\$ 322	\$ 352	\$ 372
Prior Year Forecast	\$ 250	\$ 271	\$ 298	\$ 328	\$ 343	\$ -
Solid Waste Services						
Current Year Forecast	\$ 58	\$ 62	\$ 65	\$ 68	\$ 70	\$ 73
Prior Year Forecast	\$ 58	\$ 60	\$ 62	\$ 64	\$ 67	\$ -
MVRD Services						
Current Year Forecast	\$ 55	\$ 64	\$ 69	\$ 74	\$ 79	\$ 84
Prior Year Forecast	\$ 55	\$ 56	\$ 58	\$ 59	\$ 60	\$ -
Total Household Impact						
Current Year Forecast	\$ 535	\$ 568	\$ 610	\$ 665	\$ 719	\$ 768
Prior Year Forecast	\$ 535	\$ 576	\$ 625	\$ 680	\$ 723	\$ -

FINANCIAL PLAN HIGHLIGHTS

GVWD - WATER

The GVWD comprises 18 member municipalities, one electoral area and one treaty First Nation within Metro Vancouver, serving a population of approximately 2.5 million. Drinking water is collected from 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 500 km of large diameter transmission mains, 26 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.

The GVWD 2020 – 2024 Financial Plan for the next five years is summarized below:

WATER SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Water Sales	\$286.9	\$307.2	\$326.7	\$357.3	\$394.5	\$437.4	
% Change		7.1%	6.4%	9.4%	10.4%	10.9%	8.8%
Total Expenditures	\$290.7	\$309.1	\$328.5	\$359.0	\$396.2	\$439.0	
% Change		6.4%	6.2%	9.3%	10.4%	10.8%	8.6%
Blended Water Rate (m3)	\$0.7395	\$0.7836	\$0.8315	\$0.9049	\$0.9949	\$1.0953	
% Change		6.0%	6.1%	8.8%	9.9%	10.1%	8.2%
Total Capital Expenditures	\$231.4	\$397.5	\$449.7	\$496.5	\$522.7	\$540.8	\$481.4
Household Impact (\$)	\$172	\$178	\$186	\$201	\$218	\$239	
% Change		3.0%	4.9%	7.7%	8.8%	9.3%	6.8%
Household Impact Change from Prior Cycle (\$)		(\$11)	(\$21)	(\$28)	(\$35)	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). It is proposed to increase by \$18.4 million in 2020 for a total budget of \$309.1 million (Attachment 1). This increase can essentially be attributed to contribution to capital, to support infrastructure investments required to meet service requirements, growth demands and resilience upgrades.

The 2020 operating budget includes the following 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.
- Secure water licence(s) for the additional water allocation from the Coquitlam source, as per the Coquitlam Water Use Plan, following execution of the new BC Hydro/GVWD Water Use Agreement
- 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 develop Asset Management Program for Water Services including Asset Assessment Plans and individual facility Asset Management Plans.
- Continue implementation of the Water Services Environmental Management System in addressing prioritized regulatory compliance and environmental risks.
- Complete fish stranding study downstream of Seymour Falls Dam in accordance with the approved Joint Water Use Plan.
- Complete Level 2 asset condition assessments for select water main marine crossings and critical line valve chambers in accordance with the Water Services Asset Management Plan.
- Develop an energy use dashboard for the Capilano Raw Water Pump Station to track and manage energy use and optimize operation.

- Conduct a screening level business case for the phased installation of in-line chlorine meters in the water transmission system.
- Coordinate interagency work for Pattullo Bridge Replacement project, Broadway Subway project and the Surrey/Langley Skytrain project.

In 2020, Water Services is proposing to add 5 new full-time staff positions. These include 2 Senior Project Engineers dedicated to completing key tasks supporting Water Services' Asset Management Program, 1 Utility System Operator II supporting field operations along with condition assessments of water transmission infrastructure assets as part of Water Services' Asset Management Program, 1 Engineering Technician II supporting environmental compliance reporting requirements, and 1 Senior Project Engineer supporting backup power related project works. As well, 1 Trades Foreman supporting ongoing maintenance work at the Seymour Capilano Filtration Plant is proposed to be added to the shared services provided by Liquid Waste.

Over the next five years, the Water Services budget is expected to increase an average of \$29.7 million or 8.6% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$26.8 million on average over the next five years leaving the operating programs which are increasing, on average, by \$2.9 million per year, roughly at the rate of inflation.

Capital Budget Highlights

The Water Services capital budget for 2020 is \$397.5 million (Attachment 2). The capital program is funded by a combination of long-term debt, contributions from the operating budget, and external (interagency) contributions.

Highlights of capital projects planned or ongoing for 2020 include the following:

- Commence Coquitlam Intake No. 2 Project Preliminary Design
- Continue design of Coquitlam Main No. 4
- Continue construction of Second Narrows Water Supply Tunnel
- Complete detailed design of Annacis Water Supply Tunnel and begin construction phase
- Complete construction of Mackay Creek Debris Flow Mitigation project
- Continue construction of Kennedy-Newton Main (Phase 1)
- Complete design of Annacis Main No. 5 (South)
- Complete construction of South Delta Main No. 1 Replacement (Phase 3)
- Commence construction of Capilano Raw Water Pump Station Backup Power
- Continue design of Capilano Main No. 5 (Stanley Park Section)
- Commence construction of Fleetwood Reservoir
- Complete construction of Jericho Reservoir
- Continue construction of Port Mann Main No. 2 (South)
- Continue construction of Whalley Main
- Commence construction of Douglas Road Main No. 2 (Still Creek Section)
- Complete construction of Central Park Main No. 2 (Phase 1) and
- Continue conceptual design of Cambie-Richmond Main No. 3 (Marine Crossing).

The capital expenditure budget for 2020 – 2024 totals \$2.41 billion, an average of \$481 million per year. The largest 10 projects (\$150 million and greater) make up approximately 57% of the capital

spending over the next five years. These ten projects also represent the majority of expenditures planned for the 2025 – 2029 period (67%). There are an additional 118 projects on the plan.

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. The following ten projects are the largest projects included in the five year plan:

- Coquitlam Intake No. 2, Tunnel and Treatment - \$2.3B
- Annacis Main No. 5 (Marine Crossing) - \$488M
- Second Narrows Crossing (Tunnel) - \$469M
- Cambie-Richmond Main No.3 (Marine Crossing) - \$405M
- Lulu Island-Delta Main No.2 (Marine Crossing) - \$370M
- Coquitlam Main No. 4 (Central Section) - \$297M
- Capilano Main No. 5 (South Shaft to Lost Lagoon) - \$249M
- Seymour Main No. 5 III (North) - \$237M
- Coquitlam Main No. 4 (South Section) - \$228M, and
- Kennedy-Newton Main - \$164M.

GVS&DD – LIQUID WASTE

The Liquid waste function of the GVS&DD comprises 17 member municipalities and one electoral area within Metro Vancouver, serving a population of approximately 2.5 million. The wastewater collection and treatment system consists of over 530 kilometers of trunk sewers, 33 pump stations and 5 treatment plants that convey and treat an average of 1.2 billion litres of wastewater per day. The urban drainage function comprises the Still Creek/Brunette, Port Moody/Coquitlam and UBC Drainage Areas.

The Liquid Waste 2020 – 2024 Financial Plan for the next five years is summarized below:

LIQUID WASTE SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Sewer Levy	\$255.8	\$274.2	\$306.8	\$347.6	\$386.5	\$416.3	
% Change		7.2%	11.9%	13.3%	11.2%	7.7%	10.3%
Total Expenditures	\$310.9	\$328.3	\$371.3	\$425.3	\$475.8	\$518.4	
% Change		5.6%	13.1%	14.6%	11.9%	9.0%	10.8%
Total Capital Expenditures	\$564.9	\$883.4	\$759.9	\$529.5	\$617.8	\$634.1	\$684.9
Household Impact (\$)	\$250	\$264	\$290	\$322	\$352	\$372	
% Change		5.6%	9.8%	11.3%	9.2%	5.8%	8.3%
Household Impact Change from Prior Cycle (\$)		(\$7)	(\$8)	(\$6)	\$9	N/A	

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

\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Vancouver SA - Levy	\$79.6	\$85.5	\$92.6	\$99.8	\$106.5	\$111.4	7.0%
Household Impact (\$)	\$293	\$310	\$331	\$353	\$371	\$384	5.6%
North Shore SA - Levy	\$23.0	\$26.0	\$29.2	\$34.5	\$39.1	\$44.6	14.1%
Household Impact (\$)	\$304	\$340	\$376	\$440	\$493	\$558	12.9%
Lulu Island SA - Levy	\$21.5	\$24.7	\$28.1	\$32.2	\$35.8	\$38.7	12.6%
Household Impact (\$)	\$214	\$239	\$269	\$300	\$329	\$347	10.2%
Fraser SA - Levy	\$129.5	\$135.9	\$154.8	\$179.0	\$203.0	\$219.4	11.2%
Household Impact (\$)	\$226	\$234	\$260	\$294	\$326	\$344	8.8%
Drainage Areas – Levy (**)	\$2.2	\$2.1	\$2.1	\$2.1	\$2.1	\$2.2	0.0%

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

In 2019, an amendment to the *Cost Apportionment* Bylaw allowed for the direct application of DCCs for growth capital expenditure. For each sewerage area, the direct application of DCCs has resulted in savings in debt service costs through reduced projected borrowing. This contributes directly to the primary objectives of the *Financial Management Policy* by reducing overall debt servicing both currently and in the future. Capacity has also been created to allow additional contribution to capital over the next five years which reduce long term borrowing within individual sewerage 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 \$17.4 million in 2020 for a total budget of \$328.3 million (Attachment 1). This increase can essentially be attributed to increasing operating costs, debt service and contribution to capital. A significant portion of the increase can be attributed to increased contributions to capital of \$8.2 million to support infrastructure investments required to meet service requirements and growth demands and increased debt service costs of \$2.9 million due to accelerating capital program.

The 2020 operating budget includes the following key actions:

- Complete the Project Definition Report for the Iona Island Wastewater Treatment Plant Secondary and advanced treatment options upgrade, including development of the indicative design for the new plant.
- Initiate review of the *Integrated Liquid Waste and Resource Management Plan* for 2021 update.
- Continue to decommission the Iona Island Wastewater Treatment Plant biosolids stockpile. Acceleration of the grit dump decommissioning, increased disposal volumes due to weed seed contamination and delays in the decommissioning of the sludge lagoons are driving cost increases for 2020.
- Continue development of Asset Management program in alignment with the Board *Asset Management for Liquid Waste Policy*, including O&M asset condition assessment plans, facility level risk assessments and asset management plans. This work will include developing

strategies and implementing pilot work on technologies for full pipe condition inspections/assessments.

- Update the Biosolids Management Plan Framework, identifying an action plan to manage future increases in biosolids generation resulting from growth and the treatment plant upgrades.
- Complete Maintenance Service Enhancement Initiatives to review maintenance practices, efficiency, transparency/accuracy of data and level of customer service with the intent to optimize resources, procedures and practices.
- Continue Source Control regulatory initiatives including a review of the Food Sector Grease Interceptor Bylaw and the Sewer Use Bylaw (with respect to the trucked liquid waste sector) Identification and pursuit of unauthorized discharges will reduce system maintenance and treatment costs and reduce risks to workers, biosolids quality and the environment.

In 2020, Liquid Waste Services is proposing to add 7 new full-time staff positions. These include 2 Project Engineers dedicated to required engineering support at North Shore and Northwest Langley wastewater treatment plants, 1 Clerk Stenographer III providing required administrative support for large infrastructure projects such as the North Shore wastewater plant upgrade, 1 Project Engineer dedicated to complete key tasks supporting Liquid Waste Service's Asset Management Program, 1 Engineering Technician I to provide technical resources supporting numerous asset management and condition asset programs, 1 Project Engineer providing mechanical engineering technical support for select utilities assets as well as technical maintenance related start-up and commissioning services for new assets and 1 Senior Project Engineer in Wastewater Engineering providing operational engineering technical support for all phases of wastewater capital projects underway including project definition, detailed design, construction and start-up and commissioning.

As well, 1 Trades Foreman supporting ongoing maintenance work at Seymour Capilano Filtration Plant for Water Services is proposed to be added to the shared services provided by Liquid Waste Services Operations and Maintenance.

Over the next five years, the Liquid Waste Services budget is expected to increase an average of \$41.5 million or 10.8% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$36.2 million on average over the next five years. The operating programs are increasing, on average, by \$5.3 million per year, roughly at the rate of inflation.

Capital Budget Highlights

The Liquid Waste Services capital budget for 2020 is \$883.4 million (Attachment 2). The capital program is funded by long-term debt, contributions from the operating budget, and external (interagency and senior level government grant) contributions.

Highlights of capital projects planned or ongoing for 2020 include the following:

- Remove all preload from North Shore Wastewater Treatment Plant site, complete 90% of excavation and commence foundation pouring;
- Substantially complete construction of 5 primary sedimentation tanks, 2 solids contact tanks and 6 secondary clarifiers for the Annacis Island WWTP Stage 5 expansion;
- Complete construction of 2 vertical launch/receiving shafts and commence tunneling of chlorine contact tank effluent section for the Annacis Island WWTP Outfall project;

- Substantially complete the Sapperton Pump Station;
- Complete the Northwest Langley Wastewater Treatment Plant Phase 2 ground improvements;
- Start construction of the open cut and tunneled sections of the Burnaby Lake North Interceptor – Winston section;
- Achieve total completion of the two South Surrey Interceptor Odour Control Facilities (King George and Highway 10);
- Start construction of the last section of the twinning of the South Surrey Interceptor; and
- Complete the Hastings Sanitary Trunk Sewer, North Road Trunk Sewer (Phase 1), Albert Street Sanitary Trunk Sewer (Phase 1) and Highbury Interceptor Air Management Facility.

The capital expenditure budget for 2020 - 2024 totals \$3.42 billion, an average of \$685 million per year. The largest 5 projects (\$175 million and greater) make up 60% of the capital spending over the next 5 years. These five projects also represent the majority of the expenditures planned for the following 10 years (61%). In addition, 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 are the largest projects included in the five year plan:

- North Shore Wastewater Treatment Plant Secondary - \$882M;
- Annacis Stage 5 Expansion - \$686M;
- Annacis Outfall System - \$378M;
- Northwest Langley Wastewater Plant Stage 1 - \$889M; and
- Iona Secondary Treatment Indicative Design and Ground Improvements - \$335M from 2020 to 2024.

GVS&DD – SOLID WASTE

The Solid Waste function comprises 17 member municipalities and one electoral area within Metro Vancouver, serving a population of approximately 2.5 million under the Greater Vancouver Sewerage and Drainage District. Metro Vancouver services provided to the region include regional solid waste planning, facilities for waste transfer, waste-to-energy and disposal and the regional coordination of public recycling services and education.

The Solid Waste 2020 – 2024 Financial Plan for the next five years is summarized below:

SOLID WASTE SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Tipping Fee Revenue	\$98.4	\$105.8	\$112.5	\$117.8	\$125.9	\$130.9	
% Change		7.6%	6.3%	4.7%	6.9%	4.0%	5.9%
Total Expenditures	\$107.2	\$114.1	\$122.3	\$127.8	\$136.1	\$141.4	
% Change		6.5%	7.2%	4.5%	6.6%	3.8%	5.7%
Total Capital Expenditures	\$89.2	\$88.5	\$81.6	\$52.4	\$18.9	\$41.6	\$56.6

\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Household Impact (\$)	\$58	\$62	\$65	\$68	\$70	\$73	
% Change		6.6%	5.3%	3.7%	3.5%	4.1%	4.6%
Household Impact Change from Prior Cycle (\$)		\$2	\$3	\$4	\$3	N/A	
Tipping Fees:							
Up to 1 tonne	\$142	\$147	\$154	\$161	\$168	\$175	
1 to 9 tonnes	\$120	\$125	\$132	\$139	\$146	\$153	
Over 9 tonnes	\$90	\$99	\$106	\$113	\$120	\$127	
Municipal	\$108	\$113	\$120	\$127	\$134	\$141	

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 \$6.9 million in 2020 for a total budget of \$114.1 million (Attachment 1). This increase can essentially be attributed to increasing transfer station and Waste-to-Energy Facility operating costs based on volume, additional resources in support of the work to update the *Integrated Solid Waste and Resource Management Plan* beginning in 2020 (through 2022) along with debt service and contribution to capital. With respect to contributions to capital, there was an increase of \$1.7 million to support infrastructure investments required to meet service requirements and growth demands and an increase of debt service costs of \$2.3 million due to the capital program primarily related to transfer station development work.

The 2020 operating budget includes the following key actions:

- Implementation of the Asset Management Program, including facility condition assessments;
- Complete Waste-to-Energy Facility biosolids processing preliminary design and district energy preliminary design and business case;
- Bottom ash beneficial use procurement;
- Autoscale software replacement plan;
- Initiate review of the *Integrated Solid Waste and Resource Management Plan*;
- Evaluate the transfer station network and potential improvements;
- Monitor implementation of the Disposal Ban Program;
- Evaluate the feasibility of an alternative fuel and recyclable recovery facility;
- Support programs for textiles, single-use items, seasonal wastes, food wastes, illegal dumping, and the Zero Waste Conference;
- Support the National Zero Waste Council including work on implementing the Circular Economy and Zero Plastics Waste;
- Support national solid waste benchmarking and applied waste research;
- Update regional waste composition monitoring;
- Track and manage waste flows;
- Update transfer stations customer service survey;
- Complete replacement Coquitlam Transfer Station construction and prepare for operations;
- Continue Surrey Recycling and Waste Drop-Off Facility development including beginning construction; and
- Inform, educate and engage the public in decision making on applicable solid waste initiatives.

Highlights of contracts and consulting projects anticipated to be undertaken in 2020 to respond to work plan requirements within the operating budget include the following:

- Transfer station scale projects, customer survey, asset condition assessments (\$504,000);
- Waste-to-Energy Facility projects (\$675,000);
- *Integrated Solid Waste and Resource Management Plan* review and update (\$1,000,000); and
- Ashcroft Ranch McLean Lake Dam spillway (\$150,000).

There are no new full-time staff positions proposed for 2020. The Solid Waste Services organization chart is included as Attachment 6.

Over the next five years, the Solid Waste Services budget is expected to increase an average of \$6.8 million or 5.7% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$5.0 million on average over the next five years leaving the operating programs which are increasing, on average, by \$1.8 million per year, roughly at the rate of inflation.

Capital Budget Highlights

The proposed Solid Waste Services capital budget for 2020 is \$88.5 million (Attachment 2). The capital program is funded by long-term debt and contribution to capital from the annual operating budget as available.

Highlights of capital projects planned or ongoing for 2020 include the following:

- Coquitlam Transfer Station replacement and Coquitlam Landfill Closure;
- Surrey Recycling and Waste Drop-off Facility; and
- Refuse crane at the Waste-to-Energy Facility.

The capital expenditure budget for 2020 - 2024 totals \$282.9 million, an average of \$56.6 million per year. The largest five projects (each over \$10 million) make up approximately 74% of the capital spending over the next five years, with an additional 25 projects on the plan making up the balance.

The capital program over the next five years is largely driven by the need to replace aging transfer stations and increase transfer station capacity through addition and expansion. Upgrades to the existing Waste-to-Energy Facility will ensure it continues to meet regulatory requirements and the addition of biosolids management at the Waste-to-Energy Facility and the Alternative Fuel and Recyclables Recovery project is expected to increase beneficial use of waste within the region. The following five key projects are the largest on the five year plan:

- Alternative Fuel and Recyclables Recovery Centre - \$60.0M
- Coquitlam Transfer Station replacement - \$77.6M
- Surrey Recycling and Waste Drop-off Facility - \$62.3M
- Waste-to-Energy Facility Acid Gas Reduction - \$41.0M
- Waste-to-Energy Facility Biosolids Processing - \$20.5M

The proposed budgets for the Coquitlam Transfer Station replacement and Surrey Recycling and Waste Drop-Off have increased by \$7.4 and \$8.0 million respectively due to increased building and

subdivision costs along with site specific issues related to developing the transfer station on a closed landfill for the Coquitlam Transfer Station, and updated costs estimates with the completion of detailed design for Surrey Recycling and Waste Drop-Off. Contingencies for both projects have been replenished with the proposed budget increases.

Business cases for the development of the Alternative Fuel and Recyclables Recovery Centre and biosolids management at the Waste-to-Energy Facility will be provided to the Zero Waste Committee and Board for consideration and specific approval of the projects.

MVHC – HOUSING

The MVHC owns and operates 49 housing sites that provide 3,400 units of affordable rental housing for low to moderate income households across the region. MVHC maintains existing assets, redevelops housing complexes, manages tenants and builds communities within the housing portfolio and surrounding neighborhoods. The Housing Corporation is supported by revenues generated from unit rentals and does not form part of the overall MVRD tax requisition.

The MVHC 2020 – 2024 Financial Plan for the next five years is summarized below:

MVHC FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Housing Rents	\$39.3	\$40.4	\$41.5	\$45.1	\$46.3	\$50.1	
% Change		2.8%	2.9%	8.6%	2.7%	8.0%	5.0%
Total Expenditures	\$51.2	\$52.3	\$53.4	\$57.0	\$58.0	\$61.8	
% Change		2.0%	2.3%	6.7%	1.7%	6.5%	3.8%
Capital Replacement	\$10.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0
Housing Development	\$21.3	\$25.3	\$31.5	\$19.1	\$6.6	\$ -	

Operating Budget Highlights

MVHC 2020 operating budget is proposed to increase by \$1,020,291 for a total budget of \$52,289,752 (Attachment 1). This increase is primarily due to the increase rental revenue and operating subsidies to meet service requirements and growth demands.

The 2020 operating budget includes the following key actions:

- Rent-up and normalization of operations at Heather Place Building A
- Begin the implementation of the Metro Vancouver Housing 10-Year Plan actions
- Begin the implementation of the Redevelopment Plan and Asset Management Plan
- Begin construction on Kelly Court and Strathearn Court building envelope renewals and energy improvements
- Create new standardized signage for housing sites
- Enhance the online housing application process for tenants

There is one new full-time Community Development Coordinator position proposed for 2020 to support the Tenant Associations as well as enhancing tenant programs.

Over the next five years, the MVHC budget is expected to increase an average of \$2.1 million or 3.8% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing on average \$1.2 million over the next five years and the operating programs and asset maintenance and replacement are increasing, on average, by \$928,388 or 2.6% per year, in line with inflation.

Capital Budget Highlights

The MVHC capital budget for 2020 is \$25.3 million (Attachment 2). The capital program is funded by mortgage financing, reserve funding, and contributions from external agencies. The capital projects planned and ongoing for 2020 are the redevelopment of Heather Place - Building A and B, Kingston Gardens - Phase I and Welcher Avenue. The capital expenditure budget for 2020 - 2024 totals \$82.5 million with Heather Place – Building A slated for completion in 2020 and Kingston Gardens - Phase I and Welcher Avenue are estimated to be completed in 2021. Heather Place – Building B is estimated to be completed in 2023.

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:

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

The MVRD 2020 – 2024 Financial Plan for the next five years is summarized below:

REGIONAL DISTRICT SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Tax requisition	\$61.2	\$71.8	\$79.5	\$86.6	\$93.4	\$100.4	
% Change		17.3%	10.7%	9.0%	7.9%	7.5%	10.5%
Total Expenditures	\$76.4	\$86.3	\$92.0	\$98.5	\$105.2	\$112.0	
% Change		12.9%	6.6%	7.1%	6.8%	6.6%	8.0%
Total Capital Expenditures	\$15.9	\$19.9	\$23.9	\$29.4	\$32.2	\$37.3	\$28.5
Household Impact (\$)	\$55	\$64	\$69	\$74	\$79	\$84	
% Change		15.5%	9.0%	7.3%	6.3%	6.0%	8.8%
Household Impact Change from Prior Cycle (\$)		\$8	\$11	\$15	\$19	N/A	

Operating Budget Highlights

In 2020, total expenditures for the Regional District Service Areas are proposed to increase \$9.8 million for total expenditures of \$86.3 million (Attachment 1). The increase is primarily due to the following:

- An additional annual provision to a reserve of \$4 million for the development of affordable housing.
- An increase in the annual provision to the Parkland Acquisition Reserve Fund of \$4 million for the acquisition of new park land
- The planned increase in the budget for Regional Economic Prosperity totaling \$535,500.

The 2020 Regional District Service Area operating budgets includes the following key actions:

- Complete the Regional Greenways Plan
- Complete the Regional Parks Asset Management Plan
- Undertake an analysis of the Park Partnership Program
- Open the Sheep Paddocks Trail at Colony Farm Regional Park
- Seek Board adoption the Campbell Valley Regional Park Management Plan Update
- Continue to implement the *Climate 2050 Strategy*;
- Complete development of the next regional air quality management plan, the *Clean Air Plan*;
- 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.
- Update *Metro 2040* – Phase I Completion - Policy reviews and draft policy actions
- Complete the Urban Centres and FTDA's, Industrial and Mixed Employment, Agricultural, Environment, Transportation, Housing, and Climate Change Policy Review
- Completion of the 2020 Regional Industrial Land Inventory
- Frequent Transit Corridor Study
- Access to Homeownership Opportunities and development of Housing Agreement Templates
- Advance a Transit Oriented Affordable Housing Fund; update the Housing and Transportation Cost Burden analysis
- Climate Change Impacts on Invasive Species
- Urban forestry – Best Practices
- Complete pre-planning and concept development for select housing sites
- Build awareness and support for the Metro Vancouver Housing 10-year Plan
- Finalize and start the implementation of the Redevelopment Plan to support the increase in MVHC affordable housing units
- Support Metro Vancouver Regional Planning policies related to housing in the 2050 Regional Growth Strategy

Over the next five years, the key driver for the Regional District is the annual increase in the Regional Parks budget for the contribution to the Regional Parks Land Acquisition Reserve in 2020 to 2024. The impact of this increase on the Regional District budget and the Household impact is illustrated in the table below which compares the prior year projections for Household Impact with that for the current year:

REGIONAL DISTRICT HOUSEHOLD IMPACTS						
\$	2019	2020	2021	2022	2023	2024
MVRD Household Impact – Existing Services	\$55	\$56	\$57	\$58	\$59	\$60
Impact - Affordable Housing Development Reserve	\$-	\$4	\$4	\$4	\$4	\$4
Impact - Regional Parkland Acquisition Reserve	\$-	\$4	\$8	\$12	\$16	\$20
Total Proposed MVRD Household Impact	\$55	\$64	\$69	\$74	\$79	\$84
Prior Cycle MVRD Household Impact	\$55	\$56	\$58	\$59	\$60	\$-
\$ Change in Household Impact from Prior Cycle	\$-	\$8	\$11	\$15	\$19	\$-

There are two new full-time staff positions proposed for 2020 from the Regional District:

- A Policy Coordinator in Regional Planning to coordinate Metro Vancouver comments, and ensure a consistent approach when addressing external agency projects that have impacts on Metro Vancouver assets, operation, interests and legislated responsibilities (external agencies such as Translink, Port of Vancouver, Ministry of Transportation and Infrastructure).
- A Legislative Services Analyst in General Government Administration intended to manage the legislative requirements under the Freedom of Information and Protection of Privacy Act. The position is in response to FOI requests increasing in both number and complexity as well as privacy requirements becoming more stringent.

Over the five year plan, the projected expenditures for Regional District services collectively is projecting to increase from \$76.4 million in 2019 to \$112.0 million in 2024, an average increase of \$7.1 million. Over the five year plan, the cost to the average regional household, for all Regional District Service is increasing \$28 to a cost of \$84 representing an average increase of \$6 per year.

Capital Budget Highlights

For Regional District Services, only the Regional Parks has a capital program, which has a capital budget for 2020 is \$19.9 million (Attachment 2). The capital program is funded by reserve funds.

Highlights of capital projects planned or ongoing in 2020 include the following:

- Complete advanced design of Widgeon Marsh Regional Park
- Develop new service yard facilities at Capilano, Crippen, and Pacific Spirit Regional Parks
- Continued implementation of Grouse Mountain Regional Park Management Plan with upgrades to the BCMC and Grouse Grind Trails
- Pursue land acquisitions in support of *Regional Parks Land Acquisition 2050*
- Capital maintenance projects

The capital expenditure budget for 2020 - 2024 totals \$142.7 million 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
- Construction of the Belcarra South Picnic Area
- Development of Burns Bog Ecological Conservancy Area - Delta Nature Reserve

- Trail developments at Aldergrove, Tynehead, Campbell Valley and Pacific Spirit Regional Parks
- Pursue land acquisitions in support of *Regional Parks Land Acquisition 2050*
- Capital maintenance projects

CENTRALIZED SUPPORT PROGRAM

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 2020 – 2024 Financial Plan for the Centralized Support Program for the next five years is summarized below:

CENTRALIZED SUPPORT PROGRAM FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2019	2020	2021	2022	2023	2024	5 Year Ave
Allocated to Functions	\$ 59.9	\$ 61.5	\$ 63.2	\$ 64.5	\$ 64.9	\$ 67.1	
% Change		2.6%	2.8%	2.0%	0.6%	3.4%	2.3%
Corporate Services	\$ 42.4	\$ 43.1	\$ 42.8	\$ 43.2	\$ 40.5	\$ 42.3	
External Relations	6.1	6.0	6.1	6.2	6.4	6.5	
Financial Services	12.1	13.0	13.3	13.4	13.7	13.9	
Human Resources	8.6	9.5	9.5	9.7	9.9	10.1	
Indigenous Relations	0.6	0.6	0.6	0.6	0.6	0.6	
Legislative Services	4.1	4.1	4.2	4.3	4.4	4.5	
	\$ 73.9	\$ 76.3	\$ 76.5	\$ 77.4	\$ 75.5	\$ 77.9	
% Change		3.2%	0.3%	1.2%	(2.5%)	3.1%	1.1%

Operating Budget Highlights

In 2020, the Centralized Support Program expenditures are increasing \$2.37 million for total expenditures of \$76.3 million (Attachment 1). The allocation of Centralized Support Program costs, the true impact on the revenue requirements of the plan, is the total expenditures adjusted for external recoveries and reserve applications. In 2020, the allocation of centralized support program costs is increasing by \$1.56 million (2.6%). This increase is largely inflationary, but is also impacted by reduced estimates for third-party lease returns at head office and partially offset by increased reserve funding for projects meeting the criteria for funding in accordance with the *Operating, Statutory and Discretionary Reserves Policy*.

Financial Services is proposing the addition of one Financial Systems Analyst to provide additional client support for the Unit 4 financial management system and the Questica financial planning system.

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:

- Upgrade the Financial Planning System including an enhanced capital planning module
- Implementation of the Digital Strategy setting out a coordinated direction for IT corporately.
- Completion of the initial Metro Vancouver 30 Year Financial Plan
- Reviewing and revising Corporate Safety Management System Standards
- Continue the development of asset management programs building on the Board approved policies
- Review and update job classifications and generate job descriptions for the Teamsters positions
- Implementation of a Talent Management System and Learning Management System

Over the five years of the plan, the Centralized Support Program expenditures are increasing from \$73.4 million in 2019 to \$77.9 million in 2024, an average increase of \$796,000 per year.

ALTERNATIVES

1. That the Board endorse the 2020 Budget and 2020 -2024 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 November 1, 2019 Metro Vancouver Districts and Housing Corporation Board meetings for consideration.
2. That the Board make recommendations to amend the 2020 Budget and 2020 -2024 Financial Plan for the Metro Vancouver Districts and Housing Corporation, as presented, and endorse the 2020 Budget and 2020 -2024 Financial Plan for the Metro Vancouver Districts and Housing Corporation as amended.

FINANCIAL IMPLICATIONS

If the Board endorses the 2020 Budget and 2020 – 2024 Financial Plan for the Metro Vancouver Districts and Housing Corporation as presented under alternative one, the cost to the average regional household (\$1.255 million assessed value) will increase by \$33 in 2020 for a total impact of \$568 for all Metro Vancouver services. Over the next five years of the financial plan, the cost to the average regional household will increase from \$535 in 2019 to \$768 in 2024, an average annual increase of \$46.

Under alternative two, 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 2020 Budget and 2020 – 2024 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 2020 Budget and 2020 - 2024 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 23, 2019 Board Budget Workshop.

Within this report, the 2020 Budget and 2020 – 2024 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 growing demands of the Metro Vancouver region over the coming years. For 2020, the plan represents a \$33 increase to the cost of the average regional household (\$1.255 million assessed value) for a total cost of \$568. Over the five year period, the cost to the average regional household will increase an average of \$46. Household impact is also presented by sub-region (using GVS&DD sewer areas as sub-regions) to assist member local governments in anticipating the financial impact of Metro Vancouver services to their individual communities. The cost to the average household is projected to increase from \$535 to \$768 over the next five years.

With Board endorsement, the *2020 – 2024 Metro Vancouver Financial Plan* will form part of a 30 Year Financial Plan, currently under development, to ensure a sustainable financial foundation in the years ahead.

Staff recommend endorsing the 2020 Budget and 2020 – 2024 Financial Plan as presented under alternative one.

Attachments:

1. Proposed 2020 – 2024 Financial Plan