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To: MVRD, MVHC, GVS&DD, & GVWD Board of Directors

From: Carol Mason, Commissioner / Chief Administrative Officer  
Phil Trotzuk, Chief Financial Officer

Date: November 19, 2018 Meeting Date: November 30, 2018

Subject: **2019-2023 Financial Plan – Metro Vancouver Districts and Housing Corporation**

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At its November 16, 2018 inaugural meeting, the MVRD Board received a notice of motion regarding the 2019 budget for Metro Vancouver Districts and operations. In accordance with the Board Procedure Bylaw, a notice of motion shall be added to the agenda of the special board meeting scheduled for that purpose.

A Special Joint Board meeting has been scheduled to present the information on the 2019 Budget and 2019-2023 Financial Plan for the Metro Vancouver Districts and Housing Corporation. This information was previously presented at a Board Budget Workshop held on October 17, 2018 and followed the individual consideration of budgets at designated Standing Committee meetings held early in October. The final 2019 Budget and Financial Plan, approved by the Metro Vancouver Boards, on October 26, 2018, included two adjustments as follows:

- \$100,000 increase, to be funded from reserves, in the Air Quality function expenditures for costs associated with Metro Vancouver's participation in the reconsideration process of the Trans Mountain Expansion Project.
- \$30,000 decrease in the 2019 Electoral Area A function contribution to reserve for the 2022 Electoral Area local government election.

Attached to this report for information is the October 17, 2018 Board report summarizing the 2019 Budget and Five Year 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) as well as an overview of position requests. Also attached as reference documents is the complete list of standing committee reports which provide greater detail on the 2019 to 2023 financial plan for individual function areas.

Attachments:

1. 2019-2023 Financial Plan – Metro Vancouver Districts and Housing Corporation, dated October 9, 2018.
2. Proposed 2019 Metro Vancouver Position Requests, dated October 8, 2018.



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To: Board of Directors

From: Carol Mason, Commissioner/Chief Administrative Officer  
Phil Trotsuk, Chief Financial Officer

Date: October 9, 2018 Meeting Date: October 17, 2018

Subject: **2019 – 2023 Financial Plan – Metro Vancouver Districts and Housing Corporation**

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### **RECOMMENDATION**

That the Board endorse the 2019 Budget and 2019 -2023 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 26, 2018 Metro Vancouver Districts and Housing Corporation Board meetings for consideration.

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### **PURPOSE**

To present the 2019 Budget and 2019 - 2023 Financial Plan for the Metro Vancouver Districts and Housing Corporation for consideration.

### **BACKGROUND**

The 2019 – 2023 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 2019 – 2023 Financial Plan represents a key 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 2019 – 2023 Financial Plans for Metro Vancouver’s four legal entities were presented to the following nine Board Standing Committees for the individual functions that fall under the oversight of those Committees:

- Aboriginal Relations\*
- Climate Action
- Electoral Area
- Finance and Intergovernment
- Housing
- Regional Parks
- Regional Planning
- Utilities
- Zero Waste

\*Quorum was not attained for this meeting

The Metro Vancouver Standing Committees were presented with individual reports covering the 2019 Budget and 2019 - 2023 Financial Plans for each function including program highlights and financial plan highlights ([see Reference](#)). 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 reviewed and endorsed their individual

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financial plans and provided comments and direction where appropriate for consideration by the Board at the October 17, 2018 Board Budget Workshop.

The 2019 Budget and 2018 – 2023 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 2019 – 2023 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 26, 2016 for approval.

### **2019 BUDGET AND FIVE YEAR FINANCIAL PLAN**

The budget for this cycle and the five year financial plans are built upon four themes that guide the development of Metro Vancouver’s long term plans and budgets:

- Addressing Regional Growth
- System Stewardship
- Environmental Protection and Climate Action
- Opportunities for Innovation and Enhanced Services

Annual Work Plans are developed for most Metro Vancouver functions. The 2019 Annual Work Plans for each functional area are included with the reports that were presented to individual standing committees.

The *2019 -2023 Metro Vancouver Financial Plan* (Attachment 1) provides the financial details of the 2019 Budget and 2019 – 2023 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 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 2019 – 2023 Financial Plan for the next five years is summarized below:

<b>WATER SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW</b>							
<b>\$ Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>5 Year Ave</b>
Water Sales	\$269.8	\$286.9	\$321.1	\$357.7	\$402.0	\$451.3	
% Change		6.3%	12.0%	11.4%	12.4%	12.3%	10.9%
Total Expenditures	\$272.9	\$289.1	\$323.2	\$359.5	\$403.7	\$453.0	
% Change		6.0%	11.8%	11.2%	12.3%	12.2%	10.7%
Blended Water Rate (m3)	\$0.6990	\$0.7395	\$0.8200	\$0.9100	\$1.0166	\$1.1351	
% Change		5.8%	10.9%	11.0%	11.7%	11.6%	10.2%
Total Capital Expenditures	\$206.1	\$231.4	\$395.7	\$440.9	\$486.0	\$477.2	\$406.2
Household Impact (\$)	\$165	\$172	\$189	\$207	\$229	\$253	
% Change		4.5%	10.0%	9.5%	10.5%	10.5%	9.0%

**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 \$16.2 million in 2019 for a total budget of \$289.1 million (Attachment 1). This increase can be attributed to increasing capital costs, debt service and contribution to capital, to support infrastructure investments required to meet service requirements, growth demands and resilience upgrades. The 2019 increase represents a cost of \$7 to the average regional household for a total cost of \$172 for the year.

The 2019 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.
- Commence development of a Facility Master Plan that aligns with the long-term water supply strategy outlined in the Comprehensive Regional Water System Plan.
- Commence the development of an updated Drinking Water Management Plan.
- Complete Patton Creek drainage erosion control works in the Seymour Watershed.
- Complete fisheries habitat studies downstream of the Cleveland Dam associated with the approved Joint Water Use Plan for the Capilano and Seymour Watersheds.
- Complete asset condition assessment on Seymour Main No. 2 between Seymour Falls Dam and the Seymour Capilano Filtration Plant.
- Increase remote on-line water quality monitoring to improve real-time water quality data collection and analyses.

In 2019, Water Services is proposing to add 5 full-time permanent positions. A Senior Project Engineer to assist in the development and implementation of a joint utility environmental management system, a Records Clerk to support increasing requirements for physical and electronic records

maintenance, a Senior Project Engineer in Engineering and Construction to support electrical and instrumentation projects including backup power and an Engineering Technician II supporting coordinated dam safety actions at the Cleveland and Seymour Falls dams. A temporary Project Engineer position in Interagency Projects and Quality Control is proposed to be converted to full time to coordinate Metro Vancouver involvement in joint infrastructure projects.

Over the next five years, the Water Services budget is expected to increase an average of \$36.0 million per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$33.3 million on average over the next five years with operating programs increasing, on average, by \$2.8 million per year (approximately the rate of inflation). Over the five year plan, the cost to the average regional household for Metro Vancouver Water is increasing \$88 to a cost of \$253 representing an average increase of \$17.60 per year.

### Capital Budget Highlights

The Water Services capital budget for 2019 is \$231.4 million (Attachment 3). The capital program is funded by long-term debt, contributions from the operating budget, and some external (interagency) contributions.

Highlights of capital projects planned or ongoing for 2019 include the following:

- Complete Coquitlam Intake No. 2 Project Definition Report;
- Continue design of Coquitlam Main No. 4 (Central, South and Cape Horn Sections);
- Continue construction of Second Narrows Water Supply Tunnel;
- Continue detailed design of Annacis Water Supply Tunnel;
- Continue construction of Mackay Creek Debris Flow Mitigation project;
- Continue design of Kennedy-Newton Main;
- Continue design of Annacis Main No. 5 (South);
- Complete construction of South Delta Main No. 1 Replacement (Phases 3 and 4);
- Complete design of Capilano Raw Water Pump Station Backup Power;
- Continue design of Capilano Main No. 5 (Stanley Park Section);
- Commence construction of Fleetwood Reservoir;
- Continue construction of Jericho Reservoir;
- Commence construction of Port Mann Main No. 2 (South);
- Commence construction of Whalley Main; and
- Commence construction of Douglas Road Main No. 2 (Still Creek Section).

The capital expenditure budget for 2019 - 2023 totals \$2.03 billion, an average of \$406.2 million per year. The largest 10 projects (all but one over \$50 million) make up approximately 60% of the capital spending over the next 5 years. There are an additional 124 projects on the plan. Seven of these ten projects also represent the most significant expenditure drivers beyond the term of 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 system resiliency and maintenance of aging infrastructure. The following seven projects are the largest projects included in the five year plan:

- Coquitlam Intake No. 2, Tunnel and Treatment - \$2.3B (Completion: 2035);

- Second Narrows Crossing (Tunnel) - \$469M (Completion: 2025);
- Annacis Main No. 5 (Marine Crossing) - \$448M (Completion: 2026);
- Coquitlam Main No. 4 (Central Section) - \$200M (Completion: 2026);
- Coquitlam Main No. 4 (South Section) - \$154M (Completion: 2025);
- Kennedy Newton Main - \$142M (Completion: 2024); and
- Capilano Main No. 5 (South Shaft to Lost Lagoon) - \$139M (Completion: 2025).

### 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 2019 – 2023 Financial Plan for the next five years is summarized below:

LIQUID WASTE SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2018	2019	2020	2021	2022	2023	5 Year Ave
Sewer Levy	\$232.1	\$255.8	\$281.8	\$315.5	\$353.7	\$376.1	
% Change		10.2%	10.2%	12.0%	12.1%	6.3%	10.2%
Total Expenditures	\$266.9	\$308.6	\$342.0	\$390.5	\$445.5	\$482.4	
% Change		15.6%	10.8%	14.2%	14.1%	8.3%	12.6%
Total Capital Expenditures	\$354.9	\$564.9	\$873.1	\$718.6	\$492.7	\$521.9	\$634.2
Household Impact (\$)	\$231	\$250	\$271	\$298	\$328	\$343	
% Change		8.2%	8.2%	10.0%	10.2%	4.5%	8.2%

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

\$ Millions	2018	2019	2020	2021	2022	2023	5 Year Ave
Vancouver SA - Levy	\$73.4	\$79.6	\$84.4	\$87.2	\$91.5	\$93.8	5.0%
Household Impact (\$)	\$274	\$293	\$307	\$314	\$325	\$329	3.7%
North Shore SA - Levy	\$22.0	\$23.0	\$28.0	\$35.6	\$44.6	\$47.7	17.2%
Household Impact (\$)	\$292	\$304	\$366	\$460	\$571	\$605	16.0%
Lulu Island SA - Levy	\$19.9	\$21.4	\$25.4	\$30.5	\$34.5	\$35.9	12.7%
Household Impact (\$)	\$205	\$214	\$249	\$293	\$326	\$333	10.4%
Fraser SA - Levy	\$114.0	\$129.5	\$141.5	\$159.7	\$180.4	\$196.0	11.5%
Household Impact (\$)	\$205	\$226	\$243	\$268	\$296	\$315	9.0%
Drainage Areas – Levy (**)	\$2.8	\$2.2	\$2.5	\$2.5	\$26	\$2.6	7.3%

(\*\*) 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 \$41.7 million in 2019 for a total budget of \$308.6 million (Attachment 1). A significant portion of the increase can be attributed to increased debt servicing costs of \$28.7 million from the accelerating capital program, and increased annual contributions to capital of \$3.95 million to support infrastructure investments required to meet service requirements and growth demands. Increasing the annual contribution to capital is a planned strategy which will reduce the future impact of debt servicing costs on ratepayers. The 2019 increase represents an overall cost of \$19 to the average regional household for a total cost of \$250 for the year.

The 2019 operating budget includes the following key actions:

- Continuation of the decommissioning of the Iona Island WWTP biosolids stockpile. Acceleration of the grit dump decommissioning, increased disposal volumes due to weed seed contamination and shortage of beneficial use sites and delays in the decommissioning of the sludge lagoons are driving cost increases for 2019. The decommissioning of the biosolids stockpile will be completed by 2023.
- Complete the Project Definition Report for the Iona Island WWTP Secondary upgrade, including development of the indicative design for the new plant.
- Commence preparation for the commissioning and eventual takeover of operation of the North Shore WWTP. The 2019 budget includes a request for certified wastewater treatment plant operators to initiate the training of existing and new staff on the operation of the new secondary treatment processes.
- Update the Biosolids Management Strategy, identifying an action plan to manage future increases in biosolids generation resulting from growth and secondary treatment plant upgrades.
- Accelerated development of an updated hydraulic model for Vancouver Sewerage Area to support City of Vancouver planning for significant growth in Oakridge and other communities and to integrate combined sewer separation actions with these plans.
- Increased monitoring of Burrard Inlet to fulfill Metro Vancouver's responsibilities in the implementation of the Tsleil-Waututh Nation Burrard Inlet Action Plan.
- Increase enforcement, compliance support and outreach for new regulations being introduced in 2019 for hospitals, recently implemented regulations for fermentation operations and existing regulations for grease management in the food 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 2019, Liquid Waste Services proposes the addition of 5 new full-time staff positions. Three Wastewater Treatment Plant Operators will join the existing operations team at the new North Shore WWTP and receive training on the operation of advanced secondary treatment processes at the new plant. A Digital Control Software Specialist is proposed to respond to demands for automation of the WWTPs as additional treatment process units are added through plant upgrades and expansions, ensuring that operational staffing needs are optimized. A Senior Project Engineer is also being proposed to develop, apply and maintain hydrodynamic and effluent transport models for receiving water bodies, reducing costs and reliance on contracted resources in meeting regulatory reporting requirements and enabling expanded use of these models in optimizing environmental monitoring activities.

Over the next five years, the Liquid Waste budget is expected to increase an average of \$43.1 million per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$39.1 million on average over the next five years while the operating programs are increasing, on average, by \$4.0 million per year (approximately the rate of inflation). Over the five year plan, the cost to the average regional household, for the collection and treatment of Liquid Waste, is increasing \$112 to a cost of \$343 representing an average increase of \$22.40 per year.

### Capital Budget Highlights

The Liquid Waste Services capital budget for 2019 is \$564.9 million (Attachment 1). The capital program is funded by long-term debt, contributions from the operating budget, and some external contributions such as the grants from the Federal and Provincial governments for the North Shore Wastewater Treatment Plant (NSWWTP).

Highlights of capital projects planned or ongoing for 2019 include the following:

- Commence detailed design for the Northwest Langley Wastewater Treatment Plant expansion and commence ground improvements;
- Continue construction of the North Shore WWTP and commence construction of the Conveyance Project;
- Substantially complete construction of the Annacis Island WWTP Cogeneration Back-Up Power Project;
- Substantially complete construction of the Sapperton Pump Station;
- Continue construction of the Annacis Island WWTP Stage 5 expansion;
- Commence construction of the Annacis Island WWTP Outfall System;
- Continue construction of the last section of the twinning of the South Surrey Interceptor; and
- Commence construction on the Gilbert/Brighthouse Trunk Pressure Sewer Twinning.

Capital program increases over the next five years are largely driven by federally mandated upgrades to the two primary WWTPs, system expansion to meet the needs of a growing population and maintenance of aging infrastructure. The capital expenditures budgeted for 2019 - 2023 total \$3.17 billion, an average of \$634.2 million per year. The largest 8 projects (each over \$60 million) make up approximately 75% of the capital spending over the next 5 years. There are an additional 122 projects on the plan. Six of these eight projects also represent the most significant drivers of the plan: the two mandated upgrades to secondary treatment and new infrastructure that is responding to growth that has already occurred and is continuing in the South East area of the Fraser Sewerage Area. The following eight projects are the largest projects included in the five year plan:

- Iona Secondary Treatment Upgrade - \$1.9B (Completion: 2032)
- Northwest Langley WWTP and Golden Ears Projects - \$1.3B (Completion: 2027)
- Annacis Stage 5 Expansion and Outfall System - \$1.1B (Completion: 2027)
- North Shore WWTP Secondary Upgrade and Conveyance - \$778M (Completion: 2023)
- Gilbert/Brighthouse Trunk Pressure Sewer Twinning - \$183M (Completion: 2026)
- Burnaby Lake North Interceptor - \$165M (Completion: 2023)
- AIWWTP Secondary Clarifier Corrosion Repair - \$90M (Completion: 2024)
- IWWTP Biosolids Dewatering Facility - \$61M (Completion: 2022)



**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 2018 – 2022 Financial Plan for the next five years is summarized below:

<b>SOLID WASTE SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW</b>							
<b>\$ Millions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>5 Year Ave</b>
Tipping Fee Revenue	\$93.5	\$98.4	\$103.2	\$108.8	\$114.3	\$119.9	
% Change		5.3%	4.9%	5.4%	5.1%	4.9%	5.1%
Total Expenditures	\$101.6	\$107.2	\$112.5	\$118.7	\$124.5	\$130.1	
% Change		5.5%	5.0%	5.5%	4.9%	4.5%	5.0%
Total Capital Expenditures	\$31.1	\$89.2	\$57.4	\$33.8	\$26.5	\$3.9	\$42.2
Household Impact (\$)	\$56	\$57	\$58	\$61	\$63	\$65	
% Change		1.1%	2.4%	3.9%	3.6%	3.6%	2.9%
Tipping Fees:							
Up to 1 tonne	\$137	\$142	\$147	\$154	\$161	\$168	
1 to 9 tonnes	\$115	\$120	\$125	\$132	\$139	\$146	
Over 9 tonnes	\$82	\$90	\$99	\$106	\$113	\$120	
Municipal	\$103	\$108	\$113	\$120	\$127	\$134	

**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 \$5.6 million in 2019 for a total budget of \$107.2 million (Attachment 1). The two primary drivers of increased expenditures are increased landfill operating costs and increased debt servicing costs through implementation of various capital projects primarily related to transfer station development and upgrades to the Waste-to-Energy Facility. The 2019 increase represents an overall cost of \$1 to the average regional household for a total cost of \$56 for the year.

The 2019 operating budget includes the following key actions:

- Operate non-ferrous metal recovery system commissioned in fall 2018;
- Continue biosolids management research and design;
- Continue implementation of new solid waste regulatory framework;
- Monitor implementation of Expanded Polystyrene Disposal Ban;
- Review options for adding best practices into solid waste licensing for organics processing facilities;
- 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;
- Conduct market sounding and assess potential for development of new local construction and demolition processing capacity;
- Update regional waste composition monitoring;
- Track and manage waste flows;
- Update transfer stations customer service survey;
- Continue with replacement Coquitlam Transfer Station construction;
- 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.

There are no new full-time staff positions proposed for 2019.

Over the next five years, the Solid Waste budget is expected to increase an average of \$5.7 million per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$3.7 million on average over the next five years while the operating programs which are increasing, on average, by \$2.0 million roughly the rate of inflation. Over the five year plan, the cost to the average regional household, for the disposal of Solid Waste, is increasing \$9 to a cost of \$65 representing an average increase of \$1.80 per year.

While tipping fees are proposed to increase annually over 2019 to 2023, the impact on the average regional household is expected to increase at a slower rate as the waste generated by the average household continues to trend downward.

### **Capital Budget Highlights**

The proposed Solid Waste Services capital budget for 2019 is \$89.2 million (Attachment 1). 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 2019 include the following:

- Coquitlam Transfer Station replacement and Coquitlam Landfill Closure;
- Surrey Recycling and Waste Drop-off Facility;
- refuse crane at the Waste-to-Energy Facility; and
- second pass super heater replacement at the Waste-to-Energy Facility.

The capital program over the next five years is largely driven by the need to replace and build new transfer stations and upgrades to the Waste-to-Energy Facility. The capital expenditure budget for 2019 - 2023 totals \$210.8 million, an average of \$42.2 million per year. The largest four projects (each over \$10 million) make up approximately 78% of the capital spending over the next five years, with an additional 19 projects on the plan making up the balance. Key projects are:

- Coquitlam Transfer Station replacement - \$63.0M (\$70.2M total project) (Completion: 2020);

- Surrey Recycling and Waste Drop-off Facility - \$42.3M (Completion: 2021);
- Waste-to-Energy Facility infrastructure allowance - \$10.8M (\$12.8M total project) (Completion: 2023); and
- Waste-to-Energy Facility acid gas reduction project - \$45.6M (\$47.0M total project) (Completion: 2022).

**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 2018 – 2022 Financial Plan for the next five years is summarized below:

MVHC FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2018	2019	2020	2021	2022	2023	5 Year Ave
Housing Rents	\$38.8	\$39.3	\$40.7	\$42.1	\$43.2	\$44.2	
% Change		1.2%	3.7%	3.4%	2.5%	2.5%	2.6%
Total Expenditures	\$50.7	\$51.3	\$52.7	\$55.6	\$58.7	\$59.9	
% Change		1.0%	2.9%	5.4%	5.7%	2.0%	3.4%
Capital Replacement	\$8.7	\$10.0	\$10.0	\$11.5	\$13.6	\$14.0	\$11.8
Housing Development	\$20.0	\$21.3	\$19.3	\$0.8	\$ -	\$ -	

**Operating Budget Highlights**

The MVHC operating budget is separated into operating programs and funding required to support the housing infrastructure (debt service and contribution from reserve). It is proposed to increase by \$532,456 in 2019 for a total budget of \$51.3 million (Attachment 1). This increase can be attributed to increasing operational costs and capital maintenance expenditures to keep infrastructure in a state of good repair.

The 2019 operating budget includes the following key actions:

- Establish grants and partnerships for new development;
- Reduce building energy consumption through:
  - Mechanical System upgrades
  - Building Envelope upgrades
  - Tenant education initiatives
- Continue to develop, document and implement the asset management strategy;
- Identify potential redevelopment sites using asset management plan; and
- Develop programs to support tenants in life skills development

There are no new full-time staff positions proposed for 2019.

Over the next five years, the MVHC budget is expected to increase an average of \$1.8 million per year. Of this overall increase, funding related to the expanding capital maintenance program is increasing \$285,513 on average over the next five years while the operating programs are increasing, on average, by \$482,600 per year (approximately the rate of inflation).

**Capital Budget Highlights**

The MVHC capital budget for 2019 is \$21.3 million (Attachment 1). The capital program is funded by mortgage financing, reserve funding, and some contributions from external agencies. The capital projects planned and ongoing for 2019 are the redevelopment of Heather Place - Building A and Kingston Gardens - Phase I.

The capital expenditure budget for 2019 - 2023 totals \$41.4 million with both Heather Place - Building A and Kingston Gardens - Phase I slated for completion in 2020 and 2021, respectively.

**MVRD – REGIONAL DISTRICT**

The MVRD budget and financial plan presented includes twelve regional district functions of which ten 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 twelve 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               | Regional Prosperity                |
| Labour Relations                 | Sasamat Fire Protection Service    |

The Regional Prosperity function is being presented as a service with a separate budget for 2019. In previous years, expenditures for this service were included under General Government function as the service was under development as a feasibility initiative. The implementation of the new service will be conditional upon receiving partner funding from other levels of government and includes the potential of private sector funding for specific projects.

The MVRD 2019 – 2023 Financial Plan for the next five years is summarized below:

REGIONAL DISTRICT SERVICES FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2018	2019	2020	2021	2022	2023	5 Year Ave
Tax requisition	\$58.8	\$61.2	\$63.5	\$66.1	\$68.5	\$71.4	
% Change		4.1%	3.8%	4.1%	3.6%	4.2%	3.9%
Total Expenditures	\$73.8	\$75.2	\$77.1	\$79.6	\$82.1	\$85.0	
% Change		1.9%	2.5%	3.3%	3.1%	3.5%	2.9%
Total Capital Expenditures	\$12.1	\$15.9	\$13.7	\$16.7	\$17.4	\$15.2	\$15.8

Household Impact (\$)	\$54	\$55	\$56	\$58	\$59	\$61	
% Change		2.6%	2.3%	2.6%	2.1%	2.7%	2.5%

**Operating Budget Highlights**

In 2019, total expenditures for the Regional District Service Areas are proposed to increase \$1.4 million for total expenditures of \$75.2 million (Attachment 1). The increase is primarily due to the inflationary impact of operating the Regional Park system (57% of the MVRD tax requisition), additional consulting and contract delivered initiatives in Regional Planning, and additional costs associated with zero waste collaboration initiatives under the General Government function. The increased costs for the zero waste initiatives are somewhat offset by some additional third party revenues. The 2019 increase in regional services represents an overall MVRD cost of \$1 to the average regional household for a total cost of \$55 for the year.

The 2019 Regional District Service Area operating budgets includes the following key actions:

- Continue implementation of the Climate 2050 Strategy and related climate programs;
- Development of new air quality bylaws and regulations towards the goals of protection of human health and environment;
- Development of Long Range Growth scenarios;
- Development of the Regional Industrial Land Strategy;
- Metro 2040 reviews – Industrial and Mixed Employment Policy, Urban Centres and FTDA Policy, Environment and Climate Change Policy and Agricultural Policy;
- Development of models and capital investment scenarios to effectively maintain Regional Parks assets;
- Regional Park Asset Management Policy;
- Opportunities for collaboration with First Nations in Regional Parks;
- Enhanced Zero Waste Communications;
- Continue development of national and provincial data sources to ensure accurate and reliable labour relations data is available to members;
- Complete Regional Prosperity feasibility initiative.

In Air Quality, the financial plan for 2019 proposes to convert an existing full-time temporary Special and Community Events Coordinator to regular full-time to meet the ongoing need for community outreach and communication activities. In addition, Regulation and Enforcement is proposing a temporary full-time Project Engineer to focus on work related to air quality permits, including additional work expected in 2019 in regulating cannabis cultivation facilities.

Over the five year plan, the projected expenditures for Regional District services collectively is projecting to increase from \$73.8 million in 2018 to \$85.0 million in 2023, an average increase of \$2.2 million. Over the five year plan, the cost to the average regional household, for all Regional District Service is increasing \$7 to a cost of \$61 representing an average increase of \$1.40 per year.

**Capital Budget Highlights**

The Regional District capital budget for 2019 is \$15.9 million (Attachment 1) primarily representing expenditures in Regional Parks. The Regional Parks capital program is a “pay-as-you-go” program funded by reserves. The capital expenditures can be categorized as follows: \$7.6 million for potential Park Land acquisition, \$5.1 million for capital replacement and development and \$3.2 million for capital maintenance.

Highlights of capital projects planned for 2019 include the following:

- Colony Farm – Sheep Paddocks Trail;
- Crippen Park – New service yard;
- Aldergrove Park – Management Plan implementation;
- Capilano Park – New service yard;
- Colony Farm – Service yard building;
- Belcarra Park – South picnic area and septic system.

The Regional Parks capital program over the next five years totals \$78.9 million: \$37.9 million for land acquisition, \$23.7 million for capital replacement and development and \$17.3 million for capital maintenance. Regional Parks infrastructure is beginning to age and requires an increasing investment. As a result, the five year financial plan includes increasing contributions to the Capital Infrastructure Reserve to ensure sufficient funding is available for the required capital works. The primary projected capital investment projects include:

- Belcarra Park – South picnic area and cabins;
- Widgeon Marsh – Management Plan implementation;
- Burns Bog – Boardwalk replacement;
- Crippen Park – Davies Orchard Cabins; and
- Pacific Spirit Park – Service yard replacement.

### CENTRALIZED SUPPORT PROGRAM

The Centralized Support Program includes the following support services: Corporate Services, External Relations, Financial Services, Human Resources and Board 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 2019 – 2023 Financial Plan for the Centralized Support Program for the next five years is summarized below:

CENTRALIZED SUPPORT PROGRAM FIVE YEAR FINANCIAL PLAN OVERVIEW							
\$ Millions	2018	2019	2020	2021	2022	2023	5 Year Ave
Allocated to Functions	\$ 59.7	\$ 58.8	\$ 60.2	\$ 61.0	\$ 62.0	\$ 62.8	
% Change		(1.5%)	2.4%	1.2%	1.6%	1.3%	1.0%
Corporate Services	\$ 43.5	\$ 44.5	\$ 41.5	\$ 41.6	\$ 41.9	\$ 42.1	
External Relations	6.0	6.1	6.3	6.4	6.5	6.6	
Financial Services	11.9	12.1	12.5	12.7	13.1	13.3	
Human Resources	4.9	5.5	5.5	5.5	5.7	5.7	
Legal and Legislative	4.2	4.6	4.7	4.8	4.9	5.0	
	\$ 70.5	\$ 72.8	\$ 70.5	\$ 71.0	\$ 72.0	\$ 72.7	
% Change		3.2%	(3.1%)	0.7%	1.4%	1.0%	0.6%

### Operating Budget Highlights

In 2019, the Centralized Support Program expenditures are increasing \$2.3 million for total expenditures of \$72.8 million (Attachment 1). This increase is primarily due to labour inflationary

adjustments, a proposed new position in Aboriginal Relations, the addition of temporary resources in Information Management and the transfer of a position from Solid Waste to Human Resources.

In 2019, the allocation of centralized support program costs is declining by \$925,128 (1.5%). This decline is the result of higher third-party lease returns at head office and an increase in reserve funding for projects meeting the criteria for funding in accordance with the *Board Operating, Statutory and Discretionary Reserves Policy*.

The Aboriginal Relations program within Legal and Legislative Services is proposing the addition of one new program manager position to meet the increasing responsibilities and complexities related to communication and engagement with local First Nations.

Over the five years of the plan, the Centralized Support Program expenditures are increasing from \$70.5 million in 2018 to \$72.7 million in 2023 an average increase of \$440,000 per year. The 2019 - 2023 Financial Plan details for the Centralized Support Program are included Attachment 2.

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 Management System including enhancements pertaining to expense tracking and procurement.
- Coordinate the completion of the initial Metro Vancouver 30 Year Financial Plan focused on managing funding requirements through the implementation of financial policy.
- Continue the development of a formalized asset management process building on the approved policies for Liquid Waste and Housing.
- Review and update job classifications and generate job descriptions for the Teamsters positions.
- Implementation of a Talent Management Strategy for internal and external candidates.
- Implement enhancements to the corporate-wide document management system.

#### **CONSISTENCY WITH THE 2018 -2022 FINANCIAL PLAN**

The updated five year financial plan has been developed to be consistent with the *2018 – 2022 Metro Vancouver Financial Plan* for all four legal entities. In 2019 the impact on the average regional household is increasing by \$1 from the prior year projection for an average regional household cost of \$534 (2018 projection: \$533).

For the years 2020, 2021 and 2022 the household impact is projected to increase by an additional \$95 compared to the previous five year projection. The budget drivers for this increase are as follows: \$40 is within Liquid Waste for increased capital investment, \$36 is within Water Services for increased pay-as-you-go funding to align with the proposed *Board Financial Management Policy*, \$17 is within Solid Waste in tipping fee projections to support capital projects, and \$2 is within the Regional District for the anticipated launch of the Regional Prosperity function.

#### **ALTERNATIVES**

1. That the Board endorse the 2019 Budget and 2019 -2023 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 26, 2018 Metro Vancouver Districts and Housing Corporation Board meetings for consideration.

2. That the Board make recommendations to amend the 2019 Budget and 2019 -2023 Financial Plan for the Metro Vancouver Districts and Housing Corporation, as presented, and endorse the 2019 Budget and 2019 -2023 Financial Plan for the Metro Vancouver Districts and Housing Corporation as amended.

### **FINANCIAL IMPLICATIONS**

If the Board endorses the 2019 Budget and 2019 – 2023 Financial Plan for the Metro Vancouver Districts and Housing Corporation as presented under alternative one, the cost to the average regional household (\$1.227 million assessed value) will increase by \$28 in 2019 for a total impact of \$534 for all Metro Vancouver services. Over the next five years of the financial plan, the cost to the average regional household will increase from \$506 in 2018 to \$722 in 2023, an average annual increase of \$43. Of the projected \$216 increase to the average household cost over the next five years, \$194 is associated with infrastructure investments in Water, Liquid Waste and Solid Waste.

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 2019 Budget and 2019 – 2023 Financial Plans for Metro Vancouver’s legal entities and functions were presented to the following nine Board Standing Committees for the individual functions that fall under the oversight of those Committees:

- Aboriginal Relations\*
- Climate Action
- Electoral Area
- Finance and Intergovernment
- Housing
- Regional Parks
- Regional Planning
- Utilities
- Zero Waste

\*Quorum was not attained for this meeting

The Metro Vancouver Standing Committees were presented with individual reports covering the 2019 Budget and 2019 - 2023 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. With the exception of the Aboriginal Relations Committee, each Committee reviewed and endorsed their individual financial plans and provided comments and direction where appropriate for consideration by the Board at the October 17, 2018 Board Budget Workshop.

Within this report, the 2019 Budget and 2019 – 2023 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 2019, the plan represents a \$28 increase to the cost of the average regional household (\$1.227 million



assessed value) for a total cost of \$534. Over the five year period, the cost to the average regional household will increase an average of \$43. 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 \$506 to \$722 over the next five years.

With Board endorsement, the *2019 – 2023 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 2019 Budget and 2019 – 2023 Financial Plan as presented under alternative one.

**Attachments:**

1. 2019 – 2023 Financial Plan

**Proposed  
2019-2023 Financial Plan**

October 2018



**Metro Vancouver Districts  
2019 - 2023 Financial Plan Information**

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**METRO VANCOUVER DISTRICTS  
ESTIMATED HOUSEHOLD IMPACT  
2019-2023 FINANCIAL PLAN**

	2018 FINAL	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>Vancouver Sewerage Area</b>											
Water Services	\$ 165	\$ 172	4.5%	\$ 189	10.0%	\$ 207	9.5%	\$ 229	10.5%	\$ 253	10.5%
Liquid Waste Services	274	293	7.0%	307	4.8%	314	2.1%	325	3.8%	329	1.0%
Solid Waste Services	56	57	1.1%	58	2.4%	61	3.9%	63	3.6%	65	3.6%
Metro Vancouver Regional District Services	54	55	2.6%	56	2.3%	58	2.6%	59	2.1%	61	2.7%
<b>Total Household Impact</b>	<b>\$ 549</b>	<b>\$ 577</b>	5.2%	<b>\$ 610</b>	5.9%	<b>\$ 640</b>	4.6%	<b>\$ 676</b>	5.8%	<b>\$ 708</b>	4.6%
<b>North Shore Sewerage Area</b>											
Water Services	\$ 165	\$ 172	4.5%	\$ 189	10.0%	\$ 207	9.5%	\$ 229	10.5%	\$ 253	10.5%
Liquid Waste Services	292	304	4.1%	366	20.3%	460	25.8%	571	24.1%	605	5.9%
Solid Waste Services	56	57	1.1%	58	2.4%	61	3.9%	63	3.6%	65	3.6%
Metro Vancouver Regional District Services	54	55	2.6%	56	2.3%	58	2.6%	59	2.1%	61	2.7%
<b>Total Household Impact</b>	<b>\$ 567</b>	<b>\$ 588</b>	3.8%	<b>\$ 669</b>	13.9%	<b>\$ 786</b>	17.4%	<b>\$ 922</b>	17.3%	<b>\$ 984</b>	6.7%
<b>Lulu Island West Sewerage Area</b>											
Water Services	\$ 165	\$ 172	4.5%	\$ 189	10.0%	\$ 207	9.5%	\$ 229	10.5%	\$ 253	10.5%
Liquid Waste Services	205	214	4.7%	249	16.2%	293	17.9%	326	11.2%	333	2.2%
Solid Waste Services	56	57	1.1%	58	2.4%	61	3.9%	63	3.6%	65	3.6%
Metro Vancouver Regional District Services	54	55	2.6%	56	2.3%	58	2.6%	59	2.1%	61	2.7%
<b>Total Household Impact</b>	<b>\$ 480</b>	<b>\$ 498</b>	4.0%	<b>\$ 552</b>	10.9%	<b>\$ 619</b>	12.0%	<b>\$ 677</b>	9.4%	<b>\$ 712</b>	5.2%
<b>Fraser Sewerage Area</b>											
Water Services	\$ 165	\$ 172	4.5%	\$ 189	10.0%	\$ 207	9.5%	\$ 229	10.5%	\$ 253	10.5%
Liquid Waste Services	205	226	10.5%	243	7.1%	268	10.4%	296	10.6%	315	6.5%
Solid Waste Services	56	57	1.1%	58	2.4%	61	3.9%	63	3.6%	65	3.6%
Metro Vancouver Regional District Services	54	55	2.6%	56	2.3%	58	2.6%	59	2.1%	61	2.7%
<b>Total Household Impact</b>	<b>\$ 480</b>	<b>\$ 510</b>	6.5%	<b>\$ 546</b>	7.0%	<b>\$ 594</b>	8.6%	<b>\$ 647</b>	9.0%	<b>\$ 694</b>	7.3%
<b>Metro Vancouver Average</b>											
	2018 Final	2019 Prior Year Forecast    Current Year Forecast		2020 Prior Year Forecast    Current Year Forecast		2021 Prior Year Forecast    Current Year Forecast		2022 Prior Year Forecast    Current Year Forecast		2023 Prior Year Forecast    Current Year Forecast	
Water Services	\$ 165	\$ 172	\$ 172	\$ 184	\$ 189	\$ 196	\$ 207	\$ 209	\$ 229	NA	\$ 253
Liquid Waste Services	231	250	250	265	271	287	298	305	328	NA	343
Solid Waste Services	56	55	57	55	58	55	61	55	63	NA	65
Metro Vancouver Regional District Services	54	56	55	56	56	57	58	58	59	NA	61
<b>Total Household Impact</b>	<b>\$ 506</b>	<b>\$ 533</b>	<b>\$ 534</b>	<b>\$ 560</b>	<b>\$ 574</b>	<b>\$ 595</b>	<b>\$ 624</b>	<b>\$ 627</b>	<b>\$ 679</b>	<b>NA</b>	<b>\$ 722</b>

**METRO VANCOUVER DISTRICTS  
REVENUE AND EXPENDITURE SUMMARY  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Water Sales	\$ 251,217,868	\$ 264,484,281	\$ 269,801,873	\$ 286,908,565	6.3%	\$ 321,211,826	12.0%	\$ 357,746,692	11.4%	\$ 401,957,293	12.4%	\$ 451,327,213	12.3%
GVS&DD Levy	200,250,619	213,889,658	232,134,204	255,810,755	10.2%	281,805,671	10.2%	315,510,034	12.0%	353,685,341	12.1%	376,133,837	6.3%
Tipping Fees	93,385,063	98,635,607	93,451,819	98,362,329	5.3%	103,180,526	4.9%	108,758,157	5.4%	114,321,470	5.1%	119,945,930	4.9%
MVRD Requisitions	48,862,866	51,870,510	58,792,185	61,188,452	4.1%	63,527,493	3.8%	66,130,502	4.1%	68,505,478	3.6%	71,379,090	4.2%
Compensation Services Revenue	323,437	330,835	359,960	478,280	32.9%	491,233	2.7%	494,184	0.6%	499,683	1.1%	505,722	1.2%
Collective Bargaining Services Revenue	741,539	813,019	763,645	867,558	13.6%	891,547	2.8%	898,424	0.8%	909,852	1.3%	922,287	1.4%
Housing Rents	36,885,649	38,630,214	38,839,322	39,309,579	1.2%	40,750,068	3.7%	42,125,813	3.4%	43,166,756	2.5%	44,244,519	2.5%
BOD/TSS Industrial Charges	8,495,783	9,838,338	10,144,566	11,022,967	8.7%	10,870,331	(1.4%)	11,087,737	2.0%	11,309,491	2.0%	11,535,681	2.0%
Energy Sales	5,796,681	5,642,942	5,777,099	5,927,304	2.6%	5,681,540	(4.1%)	6,239,530	9.8%	6,401,758	2.6%	6,568,204	2.6%
Transfer from DCC Reserves	6,045,889	5,201,933	12,926,848	31,665,173	145.0%	42,233,468	33.4%	58,294,850	38.0%	75,879,458	30.2%	91,550,577	20.7%
User Fees	5,790,191	6,058,434	5,382,659	5,257,010	(2.3%)	5,396,487	2.7%	5,566,491	3.2%	5,732,831	3.0%	5,902,742	3.0%
Housing Subsidies	3,792,823	2,915,541	2,045,617	1,088,554	(46.8%)	1,109,749	1.9%	1,137,159	2.5%	1,165,283	2.5%	1,193,744	(28.3%)
Non-Road Diesel Permit Fees	1,849,982	2,046,817	2,365,000	2,450,000	3.6%	2,350,000	(4.1%)	2,150,000	(8.5%)	2,150,000	0.0%	2,050,000	(4.7%)
GPS User Fees	324,316	310,688	314,180	314,180	1.1%	319,733	1.8%	324,686	1.5%	329,481	1.5%	334,533	1.5%
Electoral Area Requisition	363,567	371,734	382,424	396,510	3.7%	410,773	3.6%	417,873	1.7%	433,328	3.7%	442,870	2.2%
Love Food Hate Waste	-	-	184,000	556,000	202.2%	790,000	42.1%	1,090,000	38.0%	1,090,000	0.0%	1,026,000	(5.9%)
Zero Waste Conference	66,159	76,830	105,000	180,000	71.4%	189,375	5.2%	295,000	55.8%	331,250	12.3%	380,000	14.7%
Other External Revenues	8,757,755	15,489,805	8,370,209	9,311,422	11.2%	10,030,508	7.7%	10,167,866	1.4%	10,236,468	0.7%	10,041,227	(1.9%)
Sustainability Reserves	1,237,675	489,204	2,979,019	1,045,000	(64.9%)	520,000	(50.2%)	-	(100.0%)	-	0.0%	-	0.0%
Reserves	9,448,594	7,911,718	20,750,413	19,192,080	(7.5%)	15,649,250	(18.5%)	15,462,118	(1.2%)	16,401,506	6.1%	15,230,914	(7.1%)
<b>TOTAL REVENUES</b>	<b>\$ 683,636,456</b>	<b>\$ 725,038,139</b>	<b>\$ 765,866,551</b>	<b>\$ 831,331,717</b>	<b>8.5%</b>	<b>\$ 907,409,577</b>	<b>9.2%</b>	<b>\$ 1,003,897,116</b>	<b>10.6%</b>	<b>\$ 1,114,506,726</b>	<b>11.0%</b>	<b>\$ 1,210,357,090</b>	<b>8.6%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Greater Vancouver Water District	\$ 242,313,708	\$ 253,057,624	\$ 272,856,286	\$ 289,119,931	6.0%	\$ 323,157,192	11.8%	\$ 359,466,138	11.2%	\$ 403,680,901	12.3%	\$ 453,015,066	12.2%
Greater Vancouver Sewerage & Drainage District:													
Liquid Waste	209,856,318	224,083,754	266,909,919	308,580,625	15.6%	341,971,778	10.8%	390,558,688	14.2%	445,538,999	14.1%	482,398,228	8.3%
Solid Waste	101,058,151	108,353,638	101,551,671	107,157,766	5.5%	112,465,156	5.0%	118,660,359	5.5%	124,446,545	4.9%	130,049,829	4.5%
Metro Vancouver Housing Corporation	47,624,727	44,554,986	50,737,005	51,269,461	1.0%	52,733,983	2.9%	55,562,006	5.4%	58,738,992	5.7%	59,886,864	2.0%
Metro Vancouver Regional District													
Affordable Housing	168,391	119,164	2,040,909	1,839,479	(9.9%)	1,831,684	(0.4%)	1,843,014	0.6%	1,853,849	0.6%	1,865,284	0.6%
Air Quality	8,594,726	9,086,605	11,112,108	10,648,317	(4.2%)	10,671,928	0.2%	10,880,848	2.0%	11,140,652	2.4%	11,288,791	1.3%
E911 Emergency Telephone Service	4,100,736	4,184,972	4,304,583	4,411,585	2.5%	4,521,227	2.5%	4,633,573	2.5%	4,748,693	2.5%	4,866,654	2.5%
Electoral Area Service	534,487	365,575	701,098	651,984	(7.0%)	607,247	(6.9%)	649,347	6.9%	704,802	8.5%	624,344	(11.4%)
General Government	4,203,493	5,375,475	6,522,714	6,994,002	7.2%	7,240,036	3.5%	7,687,935	6.2%	7,715,315	0.4%	7,899,691	2.4%
Labour Relations	2,191,507	2,421,834	2,665,731	2,849,713	6.9%	2,775,373	(2.6%)	2,833,381	2.1%	2,903,546	2.5%	2,960,324	2.0%
Regional Emergency Management	313,292	338,345	202,331	228,104	12.7%	237,868	4.3%	222,944	(6.3%)	176,170	(21.0%)	182,547	3.6%
Regional Global Positioning System	533,324	257,659	345,688	549,880	59.1%	356,361	(35.2%)	362,266	1.7%	368,038	1.6%	374,092	1.6%
Regional Parks	33,973,442	35,482,626	42,065,706	42,679,708	1.5%	43,355,907	1.6%	45,077,766	4.0%	46,526,497	3.2%	48,241,906	3.7%
Regional Planning	2,689,585	2,703,612	3,173,263	3,527,732	11.2%	3,520,119	(0.2%)	3,580,243	1.7%	3,570,134	(0.3%)	3,651,788	2.3%
Regional Prosperity Initiative	-	-	281,382	484,500	72.2%	1,020,000	110.5%	1,530,000	50.0%	2,040,000	33.3%	2,550,000	25.0%
Sasamat Fire Protection Service	254,408	866,261	396,157	338,928	(14.4%)	943,718	178.4%	348,607	(63.1%)	353,593	1.4%	501,683	41.9%
	57,557,391	61,202,128	73,811,670	75,203,934	1.9%	77,081,468	2.5%	79,649,925	3.3%	82,101,289	3.1%	85,007,103	3.5%
<b>TOTAL EXPENDITURES</b>	<b>\$ 658,410,296</b>	<b>\$ 691,252,130</b>	<b>\$ 765,866,551</b>	<b>\$ 831,331,717</b>	<b>8.5%</b>	<b>\$ 907,409,577</b>	<b>9.2%</b>	<b>\$ 1,003,897,116</b>	<b>10.6%</b>	<b>\$ 1,114,506,726</b>	<b>11.0%</b>	<b>\$ 1,210,357,090</b>	<b>8.6%</b>

**GREATER VANCOUVER WATER DISTRICT  
WATER SERVICES  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Water Sales	\$ 251,217,868	\$ 264,484,281	\$ 269,801,873	\$ 286,908,565	6.3%	\$ 321,211,826	12.0%	\$ 357,746,692	11.4%	\$ 401,957,293	12.4%	\$ 451,327,213	12.3%
Other External Revenues	1,348,186	5,080,297	1,192,881	1,596,366		1,600,366		1,604,446		1,608,608		1,572,853	
Sustainability Reserve Funds	478,541	179,927	346,532	500,000		230,000		115,000		115,000		115,000	
Reserves	427,787	523,370	1,515,000	115,000		115,000							
<b>TOTAL REVENUES</b>	<b>\$ 253,472,382</b>	<b>\$ 270,267,875</b>	<b>\$ 272,856,286</b>	<b>\$ 289,119,931</b>	<b>6.0%</b>	<b>\$ 323,157,192</b>	<b>11.8%</b>	<b>\$ 359,466,138</b>	<b>11.2%</b>	<b>\$ 403,680,901</b>	<b>12.3%</b>	<b>\$ 453,015,066</b>	<b>12.2%</b>

<b>EXPENDITURES</b>													
<b>Operating Programs:</b>													
Policy Planning and Analysis													
Utility Analysis and Infrastructure	\$ 1,665,842	\$ 1,742,192	\$ 1,513,672	\$ 1,540,418		\$ 1,762,668		\$ 1,797,470		\$ 1,832,827		\$ 1,869,625	
Utility Policy and Planning	835,263	982,890	1,209,207	1,520,388		1,272,983		1,064,337		1,085,911		1,106,798	
	<u>2,501,105</u>	<u>2,725,082</u>	<u>2,722,878</u>	<u>3,060,806</u>	12.4%	<u>3,035,651</u>	(0.8%)	<u>2,861,807</u>	(5.7%)	<u>2,918,738</u>	2.0%	<u>2,976,423</u>	2.0%
Engineering and Construction													
Minor Capital Projects	8,168,652	7,965,914	9,052,888	9,840,909		10,238,680		10,510,116		10,780,987		11,074,940	
Dispatch	140,221	136,386	132,121	129,736		132,791		138,506		138,268		141,093	
Public Involvement	891,260	943,607	986,526	1,147,432		1,175,828		1,201,852		1,228,380		1,255,529	
	<u>9,200,133</u>	<u>9,045,907</u>	<u>10,171,536</u>	<u>11,118,076</u>	9.3%	<u>11,547,299</u>	3.9%	<u>11,847,474</u>	2.6%	<u>12,147,635</u>	2.5%	<u>12,471,563</u>	2.7%
Major Projects, Management Systems and Utility Services													
Department Technical Training	972,833	1,039,638	935,688	566,644		568,207		571,040		570,892		571,524	
Engineering Standards	111,344	112,581	121,794	118,520		121,393		123,889		126,426		129,017	
Engineers in Training	522,484	354,729	575,439	588,263		602,380		614,462		626,720		639,247	
Management Systems Utility Services	825,654	1,049,065	1,319,234	2,038,165		2,069,981		2,108,406		2,147,540		2,355,762	
Minor Capital Projects	461,452	561,989	907,381	873,316		908,616		932,704		956,742		982,829	
Records Management	104,903	108,747	112,778	109,800		112,463		114,776		117,127		119,529	
	<u>2,998,670</u>	<u>3,226,749</u>	<u>3,972,313</u>	<u>4,294,709</u>	8.1%	<u>4,383,039</u>	2.1%	<u>4,465,276</u>	1.9%	<u>4,545,448</u>	1.8%	<u>4,797,908</u>	5.6%
Watershed and Environmental Management													
Watershed and Environmental Management	10,299,302	10,347,734	12,087,392	12,621,419		12,480,074		12,666,917		12,752,441		12,830,911	
	<u>10,299,302</u>	<u>10,347,734</u>	<u>12,087,392</u>	<u>12,621,419</u>	4.4%	<u>12,480,074</u>	(1.1%)	<u>12,666,917</u>	1.5%	<u>12,752,441</u>	0.7%	<u>12,830,911</u>	0.6%
Operations and Maintenance													
Drinking Water Residuals	882,074	894,485	995,752	1,014,608		998,153		1,026,247		1,052,913		1,080,184	
Lake City Operations	1,024,083	986,342	957,644	965,126		1,033,884		1,047,911		1,066,235		1,084,949	
Maintenance	8,968,645	9,622,538	9,360,982	9,340,499		9,871,506		10,182,644		10,568,493		10,962,038	
SCADA Control Systems	4,544,347	4,817,590	5,256,746	5,251,889		5,371,683		5,381,024		5,482,854		5,663,158	
Secondary Disinfection	917,815	1,066,148	1,078,395	1,664,588		1,693,202		1,795,893		1,834,618		1,940,193	
Seymour Capilano Filtration Plant	8,133,694	8,620,239	9,065,017	9,001,545		9,574,978		10,105,409		10,611,816		10,948,465	
Coquitlam Water Treatment Plant	4,311,193	4,539,561	5,402,998	4,886,545		5,324,555		5,872,781		6,350,577		6,686,766	
Technical Support	788,949	816,623	1,248,644	1,499,628		1,636,793		1,666,585		1,795,705		1,828,059	
Utility Voice Radio	152,501	143,144	135,064	122,149		123,398		124,531		125,682		126,857	
Water Supply	14,246,801	14,614,901	18,822,973	17,830,503		18,277,037		18,959,669		19,695,748		20,620,354	
	<u>43,970,102</u>	<u>46,121,571</u>	<u>52,324,215</u>	<u>51,577,079</u>	(1.4%)	<u>53,905,189</u>	4.5%	<u>56,161,694</u>	4.2%	<u>58,584,641</u>	4.3%	<u>60,941,023</u>	4.0%
Interagency Projects and Quality Control													
Sustainability Fund	723,000	723,000	723,000	723,000		723,000		723,000		723,000		723,000	
Drinking Water Quality Control	2,585,177	2,582,554	2,592,084	2,637,574		2,721,043		2,820,195		2,872,676		2,919,549	
Energy Management	91,325	123,413	104,993	105,748		111,453		111,098		117,497		117,252	
Research and Innovation	520,487	473,883	745,203	744,758		771,839		799,523		828,477		858,809	
Interagency Projects	-	-	371,527	367,242		517,434		526,175		703,946		716,304	
Contribution to Reserve	46,000	46,000	46,000	46,000		46,000		46,000		46,000		46,000	
	<u>3,965,989</u>	<u>3,948,850</u>	<u>4,582,807</u>	<u>4,624,322</u>	0.9%	<u>4,890,769</u>	5.8%	<u>5,025,991</u>	2.8%	<u>5,291,596</u>	5.3%	<u>5,380,914</u>	1.7%
Administration and Department Support	1,679,625	1,619,680	1,956,661	2,117,455	8.2%	2,168,613	2.4%	2,213,529	2.1%	2,259,200	2.1%	2,305,886	2.1%
Communications Program	409,075	369,583	465,287	490,000	5.3%	440,000	(10.2%)	440,000	0.0%	440,000	0.0%	440,000	0.0%
Allocation of Centralized Costs	18,391,525	22,156,646	25,084,563	23,388,522	(6.8%)	23,444,732	0.2%	24,245,721	3.4%	24,528,220	1.2%	25,031,600	2.1%
Total Operating Programs	<u>93,415,526</u>	<u>99,561,802</u>	<u>113,367,651</u>	<u>113,292,388</u>	(0.1%)	<u>116,295,366</u>	2.7%	<u>119,928,408</u>	3.1%	<u>123,467,918</u>	3.0%	<u>127,176,227</u>	3.0%
Debt Service	93,782,607	92,972,679	90,996,415	72,683,912	(20.1%)	74,786,198	2.9%	94,561,971	26.4%	116,943,838	23.7%	139,522,550	19.3%
Contribution to Capital	55,115,575	60,523,143	68,492,220	103,143,631	50.6%	132,075,627	28.1%	144,975,759	9.8%	163,269,144	12.6%	186,316,289	14.1%
<b>TOTAL EXPENDITURES</b>	<b>\$ 242,313,708</b>	<b>\$ 253,057,624</b>	<b>\$ 272,856,286</b>	<b>\$ 289,119,931</b>	<b>6.0%</b>	<b>\$ 323,157,192</b>	<b>11.8%</b>	<b>\$ 359,466,138</b>	<b>11.2%</b>	<b>\$ 403,680,901</b>	<b>12.3%</b>	<b>\$ 453,015,066</b>	<b>12.2%</b>

<b>Blended Water Rate (\$/m<sup>3</sup>)</b>	\$ 0.6990	\$ 0.7395	5.8%	\$ 0.8200	10.9%	\$ 0.9100	11.0%	\$ 1.0166	11.7%	\$ 1.1351	11.6%
<b>Household Impact</b>	\$ 165	\$ 172	4.5%	\$ 189	10.0%	\$ 207	9.5%	\$ 229	10.5%	\$ 253	10.5%

**GREATER VANCOUVER WATER DISTRICT  
CAPITAL PROGRAMS AND PROJECT TOTALS  
WATER SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>CAPITAL EXPENDITURES</b>							
<b>Water Infrastructure Growth Capital</b>							
<b>Annacis Main No. 5</b>							
Annacis Main No. 5 (Marine Crossing)	\$ 7,000,000	\$ 25,000,000	\$ 55,000,000	\$ 65,000,000	\$ 65,000,000	\$ 217,000,000	\$ 448,000,000
Annacis Main No. 5 (North)	1,000,000	750,000	5,000,000	12,000,000	12,000,000	30,750,000	44,900,000
Annacis Main No. 5 (South)	650,000	-	-	-	9,000,000	9,650,000	48,100,000
<b>Burnaby Mountain Pump Station No. 2</b>							
Burnaby Mountain Pump Station No. 2	-	200,000	800,000	1,700,000	9,000,000	11,700,000	23,000,000
<b>Cape Horn Pump Station No. 3</b>							
Cape Horn Pump Station No. 3	500,000	1,600,000	2,150,000	12,400,000	15,000,000	31,650,000	56,950,000
<b>Coquitlam Intake No. 2 (Tunnel &amp; Treatment)</b>							
Coquitlam Intake No. 2 & Tunnel	2,000,000	3,000,000	10,500,000	21,500,000	32,000,000	69,000,000	1,369,230,000
Coquitlam Intake No. 2 (Water Treatment)	-	2,000,000	6,000,000	10,000,000	13,000,000	31,000,000	957,000,000
<b>Coquitlam Main No. 4</b>							
Coquitlam Main No. 4 (Cape Horn)	2,000,000	2,500,000	2,500,000	4,100,000	22,500,000	33,600,000	130,600,000
Coquitlam Main No. 4 (Central Section)	3,000,000	8,500,000	30,500,000	32,000,000	30,000,000	104,000,000	200,470,000
Coquitlam Main No. 4 (South Section)	3,000,000	11,500,000	19,800,000	34,000,000	30,000,000	98,300,000	153,650,000
<b>Fleetwood Reservoir</b>							
Fleetwood Reservoir	2,550,000	16,000,000	7,000,000	4,800,000	-	30,350,000	43,367,000
<b>Grandview Reservoir Unit No. 2</b>							
Grandview Reservoir Unit No. 2	-	-	-	400,000	800,000	1,200,000	26,000,000
<b>Haney Main No. 4 (West Section)</b>							
Haney Main No. 4 (West Section) Westwood to Dominion	1,100,000	1,500,000	5,700,000	15,000,000	14,600,000	37,900,000	93,000,000
<b>Hellings Tank No. 2</b>							
Hellings Tank No. 2	3,350,000	12,000,000	8,000,000	2,000,000	-	25,350,000	29,411,000
<b>Jericho Reservoir No. 1</b>							
Jericho Reservoir No. 1 Construction	11,000,000	15,000,000	4,400,000	-	-	30,400,000	38,065,000
<b>Kennedy Newton Main</b>							
Kennedy Newton Main (72 Ave to Newton)	-	-	8,100,000	16,200,000	9,600,000	33,900,000	39,600,000
Kennedy Newton Main (84 Ave to 72 Ave)	4,700,000	22,200,000	22,700,000	20,200,000	-	69,800,000	69,800,000
Kennedy Newton Main (Kennedy to 84 Ave)	-	5,000,000	10,000,000	5,000,000	4,000,000	24,000,000	24,000,000
Kennedy Newton Main - Design	750,000	3,350,000	-	-	-	4,100,000	8,500,000



**GREATER VANCOUVER WATER DISTRICT  
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2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Newton Pump Station No. 2</b>							
Newton Pump Station No. 2	1,850,000	7,000,000	7,900,000	5,400,000	3,600,000	25,750,000	28,800,000
<b>Port Mann Main No. 2 (South)</b>							
Port Mann Main No. 2 (South)	9,000,000	15,000,000	10,000,000	-	-	34,000,000	44,800,000
<b>South Delta Main No. 1 Upgrade</b>							
South Delta Main No. 1 Upgrade	150,000	-	-	-	-	150,000	16,150,000
<b>South Surrey Main No. 2</b>							
South Surrey Main No. 2	250,000	250,000	-	-	-	500,000	108,400,000
<b>Whalley Kennedy Main No. 2</b>							
Whalley Kennedy Main No. 2	-	-	500,000	1,700,000	1,900,000	4,100,000	61,800,000
<b>Whalley Main</b>							
Whalley Main	7,000,000	8,500,000	1,700,000	6,300,000	-	23,500,000	33,300,000
	<b>\$ 60,850,000</b>	<b>\$ 160,850,000</b>	<b>\$ 218,250,000</b>	<b>\$ 269,700,000</b>	<b>\$ 272,000,000</b>	<b>\$ 981,650,000</b>	<b>\$ 4,096,893,000</b>
<b>Water Infrastructure Maintenance Capital</b>							
<b>Annacis Main No. 2 - Queensborough Crossover Improvement</b>							
Annacis Main No. 2 - Queensborough Crossover Improvement	\$ 300,000	\$ 800,000	\$ 100,000	\$ -	\$ -	\$ 1,200,000	\$ 1,200,000
<b>Annacis Main No. 2 (River Crossing Removal)</b>							
Annacis Main No. 2 (River Crossing Removal)	-	-	-	-	400,000	400,000	10,400,000
<b>Annacis Main No. 3 BHP Potash Facility Pipe Protection</b>							
Annacis Main No. 3 BHP Potash Facility Pipe Protection	-	50,000	450,000	100,000	-	600,000	600,000
<b>Annacis Main No. 3 Fraser Grain Terminal Pipe Relocation and Protection</b>							
Annacis Main No. 3 Fraser Grain Terminal Pipe Relocation and Protection	600,000	-	-	-	-	600,000	600,000
<b>Boundary Road Main No. 2 &amp; No. 3 Decommissioning</b>							
Boundary Road Main No. 2 & No. 3 Decommissioning	500,000	500,000	300,000	-	-	1,300,000	1,500,000
<b>Capilano Main No. 4 Abandoning</b>							
Capilano Main No. 4 Abandoning	600,000	100,000	-	-	-	700,000	700,000
<b>Capilano Main No. 5 (South Shaft to Lost Lagoon)</b>							
Capilano Main No.5 (South Shaft to Lost Lagoon)	1,950,000	3,500,000	8,500,000	25,500,000	32,000,000	71,450,000	139,000,000
<b>Capilano Main No. 7 Line Valve &amp; Swing Connection</b>							
Capilano Main No. 7 Line Valve & Swing Connection	300,000	1,500,000	300,000	-	-	2,100,000	2,100,000

**GREATER VANCOUVER WATER DISTRICT  
CAPITAL PROGRAMS AND PROJECT TOTALS  
WATER SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Capilano Raw Water Pump Station Bypass PRV Upgrades</b>							
Capilano Raw Water Pump Station Bypass PRV Upgrades	-	-	-	-	200,000	200,000	900,000
<b>Capilano Watershed Security Gatehouse</b>							
Capilano Watershed Security Gatehouse	400,000	1,000,000	500,000	-	-	1,900,000	2,300,000
<b>Central Park Main Replacement (10th Ave to Westburnco)</b>							
Central Park Main Replacement (10th Ave to Westburnco)	-	-	1,300,000	1,200,000	6,300,000	8,800,000	28,350,000
<b>Central Park Main Replacement (Patterson to 10th Ave)</b>							
Central Park Main Replacement (Patterson to 10th Ave)	4,400,000	7,100,000	14,000,000	14,000,000	12,700,000	52,200,000	66,100,000
<b>Central Park PS Seismic Upgrade</b>							
Central Park PS Seismic Upgrade	1,000,000	1,650,000	-	-	-	2,650,000	3,700,000
<b>Central Park WPS Starters Replacement</b>							
Central Park WPS Starters Replacement	1,800,000	1,750,000	-	-	-	3,550,000	5,300,000
<b>CLD &amp; SFD Fasteners Replacement &amp; Coating Repairs</b>							
CLD & SFD Fasteners Replacement & Coating Repairs	650,000	250,000	-	-	-	900,000	900,000
<b>Cleveland Dam - Lower Outlet HBV Rehabilitation</b>							
Cleveland Dam - Lower Outlet HBV Rehabilitation	1,000,000	1,700,000	700,000	800,000	-	4,200,000	4,600,000
<b>Cleveland Dam - Spillway Concrete Repairs</b>							
Cleveland Dam - Spillway Concrete Repairs	2,700,000	-	-	-	-	2,700,000	5,500,000
<b>Cleveland Dam Drumgate Seal Replacement</b>							
Cleveland Dam Drumgate Seal Replacement	-	-	500,000	500,000	-	1,000,000	1,250,000
<b>Cleveland Dam Elevator Decommissioning and Ladder Replacement</b>							
Cleveland Dam Elevator Decommissioning and Ladder Replacement	400,000	100,000	-	-	-	500,000	500,000
<b>Coquitlam Pipeline Road Remediation</b>							
Coquitlam Pipeline Road Remediation	2,000,000	-	-	-	-	2,000,000	2,000,000
<b>CWTP pH, Alkalinity Upgrades</b>							
CWTP pH, Alkalinity Upgrades	700,000	1,000,000	-	-	-	1,700,000	1,700,000
<b>Douglas Road Main No. 2 - Kincaid Section</b>							
Douglas Road Main No. 2 - Kincaid Section	600,000	1,300,000	-	-	-	1,900,000	12,300,000
<b>Douglas Road Main No. 2 (Vancouver Heights Section)</b>							
Douglas Road Main No. 2 (Vancouver Heights Section)	8,150,000	6,700,000	5,300,000	-	-	20,150,000	28,486,000
<b>Douglas Road Main No. 2 Still Creek</b>							
Douglas Road Main No. 2 Still Creek	3,550,000	16,800,000	15,200,000	9,000,000	15,250,000	59,800,000	63,100,000

**GREATER VANCOUVER WATER DISTRICT  
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	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>E2 Shaft Phase 3</b>							
E2 Shaft Phase 3 Production Well	2,400,000	-	-	-	-	2,400,000	16,500,000
<b>First Narrows Tunnel Isolation Chamber Improvements</b>							
First Narrows Tunnel Isolation Chamber Improvements	2,500,000	1,500,000	1,000,000	2,000,000	-	7,000,000	7,000,000
<b>Improvements to Capilano Mains No. 4 and 5</b>							
Improvements to Capilano Mains No. 4 and 5	800,000	550,000	350,000	-	-	1,700,000	1,700,000
<b>Kersland Reservoir No. 1 Structural Improvements</b>							
Kersland Reservoir No. 1 Structural Improvements	450,000	1,800,000	700,000	500,000	-	3,450,000	3,750,000
<b>Little Mountain Reservoir Roof Upgrades</b>							
Little Mountain Reservoir Roof Upgrades	200,000	700,000	200,000	-	-	1,100,000	1,100,000
<b>Lulu Island - Delta Main - Bridgeport Road Relocation</b>							
Lulu Island - Delta Main - Bridgeport Road Relocation	450,000	1,450,000	2,000,000	1,600,000	2,000,000	7,500,000	7,500,000
<b>Lulu Island - Delta Main - Scour Protection Phase 2</b>							
Lulu Island - Delta Main - Scour Protection Phase 2	-	250,000	2,500,000	800,000	-	3,550,000	3,550,000
<b>Lulu Island - Delta Main No. 2 (Marine Crossing)</b>							
Lulu Island - Delta Main No. 2 (Marine Crossing)	-	-	-	-	5,000,000	5,000,000	370,000,000
<b>Maple Ridge Main West Lining Repairs</b>							
Maple Ridge Main West Lining Repairs	550,000	300,000	-	-	-	850,000	1,350,000
<b>Maple Ridge Pump Station Decommissioning</b>							
Maple Ridge Pump Station Decommissioning	200,000	-	-	-	-	200,000	800,000
<b>Port Mann Main No. 1 (Fraser River Crossing Removal)</b>							
Port Mann Main No. 1 (Fraser River Crossing Removal) Phase 2	1,000,000	-	2,000,000	5,000,000	5,000,000	13,000,000	13,500,000
<b>Port Moody Main No. 3 Dewdney Trunk Rd Relocation</b>							
Port Moody Main No. 3 Dewdney Trunk Rd Relocation	-	1,800,000	300,000	-	-	2,100,000	2,100,000
<b>Port Moody Main No. 3 Scott Creek Section</b>							
Port Moody Main No. 3 Scott Creek Section	400,000	1,400,000	2,000,000	700,000	-	4,500,000	4,750,000
<b>Queensborough Main Royal Avenue Relocation</b>							
Queensborough Main Royal Avenue Relocation	100,000	3,400,000	2,400,000	1,500,000	-	7,400,000	7,500,000
<b>Rechlorination Station SHS Storage Tank Replacement</b>							
Rechlorination Station SHS Storage Tank Replacement	-	400,000	400,000	-	-	800,000	800,000
<b>Rechlorination Station Upgrades</b>							
Rechlorination Station Upgrades	100,000	700,000	1,200,000	6,000,000	4,700,000	12,700,000	12,900,000

**GREATER VANCOUVER WATER DISTRICT  
CAPITAL PROGRAMS AND PROJECT TOTALS  
WATER SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Relocation and Protection for Translink Exp Projects</b>							
Relocation and Protection for Translink Exp Projects South of Fraser Ph. 1	100,000	3,700,000	5,000,000	2,000,000	-	10,800,000	22,900,000
<b>River Road West Main Hwy 99 Crossing Relocation</b>							
River Road West Main Hwy 99 Crossing Relocation	-	100,000	500,000	500,000	100,000	1,200,000	1,200,000
<b>Sasamat Reservoir Joint Upgrades</b>							
Sasamat Reservoir Joint Upgrades	50,000	450,000	100,000	-	-	600,000	700,000
<b>SCFP Clearwell Membrane Replacement</b>							
SCFP Clearwell Membrane Replacement	-	200,000	800,000	11,000,000	5,000,000	17,000,000	17,000,000
<b>SCFP Concrete Coatings</b>							
SCFP Concrete Coatings	600,000	200,000	-	-	-	800,000	6,500,000
<b>SCFP Filter Underdrain Repairs</b>							
SCFP Filter Underdrain Repairs	7,200,000	7,000,000	7,000,000	4,500,000	-	25,700,000	29,000,000
<b>SCFP OMC Building Expansion</b>							
SCFP OMC Building Expansion	150,000	350,000	800,000	100,000	-	1,400,000	1,400,000
<b>SCFP Polymer System Upgrade</b>							
SCFP Polymer System Upgrade	2,000,000	500,000	-	-	-	2,500,000	2,950,000
<b>Seymour Falls Dam-Relief Wells Inspection &amp; Rehab</b>							
Seymour Falls Dam-Relief Wells Inspection & Rehab	100,000	-	-	-	-	100,000	350,000
<b>South Delta Main No. 1 - Ferry Road Check Valve Replacement</b>							
South Delta Main No. 1 - Ferry Road Check Valve Replacement	400,000	200,000	-	-	-	600,000	600,000
<b>South Surrey Supply Main (Serpentine River) Bridge Support Modification</b>							
South Surrey Supply Main (Serpentine River) Bridge Support Modification	200,000	-	-	-	-	200,000	400,000
<b>Tilbury Main North Fraser Way Valve Addition</b>							
Tilbury Main North Fraser Way Valve Addition	400,000	1,000,000	500,000	-	-	1,900,000	1,900,000
<b>Westburnco #1 Water PS Main Transformer and MCC Replacement</b>							
Westburnco #1 Water PS Main Transformer and MCC Replacement	100,000	-	-	-	-	100,000	943,000
<b>Westburnco Pump Station No. 2 VFD Replacements</b>							
Westburnco Pump Station No. 2 VFD Replacements	300,000	1,950,000	300,000	-	-	2,550,000	2,550,000
<b>Whalley Clayton Main Fraser Highway Relocation</b>							
Whalley Clayton Main Fraser Highway Relocation	100,000	-	-	-	-	100,000	650,000
	<b>\$ 52,450,000</b>	<b>\$ 75,700,000</b>	<b>\$ 77,200,000</b>	<b>\$ 87,300,000</b>	<b>\$ 88,650,000</b>	<b>\$ 381,300,000</b>	<b>\$ 926,929,000</b>

**GREATER VANCOUVER WATER DISTRICT  
CAPITAL PROGRAMS AND PROJECT TOTALS  
WATER SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Water Infrastructure Resilience Capital</b>							
<b>Barnston/Maple Ridge Pump Station - Back-up Power</b>							
Barnston/Maple Ridge Pump Station - Back-up Power	\$ 300,000	\$ 200,000	\$ 1,000,000	\$ 3,000,000	\$ 2,700,000	\$ 7,200,000	\$ 9,000,000
<b>Burnaby Mountain Reservoir Seismic Upgrade</b>							
Burnaby Mountain Reservoir Seismic Upgrade	400,000	-	-	-	-	400,000	5,300,000
<b>Burnaby Mountain Tank Upgrades</b>							
Burnaby Mountain Tank Upgrades	2,750,000	6,200,000	9,000,000	3,000,000	-	20,950,000	21,350,000
<b>Cambie Richmond Main (Marine Crossing)</b>							
Cambie Richmond Main (Marine Crossing)	5,000,000	5,000,000	5,000,000	10,000,000	10,000,000	35,000,000	370,250,000
<b>Cape Horn PS 1 &amp; 2 Seismic Upgrade</b>							
Cape Horn PS 1 & 2 Seismic Upgrade	300,000	-	-	-	-	300,000	2,300,000
<b>Cape Horn Pump Station 2 - Back-Up Power</b>							
Cape Horn Pump Station 2 - Back-Up Power	50,000	650,000	450,000	2,000,000	3,500,000	6,650,000	8,150,000
<b>Capilano Raw Water Pump Station - Back-up Power</b>							
Capilano Raw Water Pump Station - Back-up Power	8,000,000	14,900,000	8,000,000	-	-	30,900,000	33,000,000
<b>Clayton Langley Main Alternate Supply</b>							
Clayton Langley Main Alternate Supply	-	-	600,000	1,300,000	500,000	2,400,000	30,300,000
<b>Cleveland Dam Pump House Seismic Upgrade</b>							
Cleveland Dam Pump House Seismic Upgrade Construction	200,000	-	-	-	-	200,000	2,800,000
<b>Coquitlam Intake Tower Seismic Upgrade</b>							
Coquitlam Intake Tower Seismic Upgrade	100,000	2,000,000	8,500,000	5,100,000	-	15,700,000	16,600,000
<b>Critical Control Sites - Back-Up Power</b>							
Critical Control Sites - Back-Up Power	-	200,000	100,000	400,000	700,000	1,400,000	1,800,000
<b>CWTP Ozone Back-up Power</b>							
CWTP Ozone Back-up Power	-	500,000	1,450,000	4,000,000	1,500,000	7,450,000	7,450,000
<b>Emergency Power Strategy for Regional Water Facilities</b>							
Emergency Power Strategy for Regional Water Facilities	300,000	-	-	-	-	300,000	400,000
<b>Grandview Pump Station Improvements</b>							
Grandview Pump Station Improvements	150,000	1,350,000	700,000	-	-	2,200,000	2,200,000
<b>Haney Main No 4 (Marine Crossing)</b>							
Haney Main No. 4 (Marine Crossing)	-	-	5,000,000	5,000,000	5,000,000	15,000,000	370,250,000

**GREATER VANCOUVER WATER DISTRICT  
CAPITAL PROGRAMS AND PROJECT TOTALS  
WATER SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Mackay Creek Debris Flow Mitigation</b>							
Mackay Creek Debris Flow Mitigation	3,000,000	-	-	-	-	3,000,000	9,000,000
<b>Pebble Hill Pump Station Seismic Upgrade</b>							
Pebble Hill Pump Station Seismic Upgrade	-	250,000	1,100,000	300,000	-	1,650,000	1,650,000
<b>Pebble Hill Reservoir No. 3 Seismic Upgrade</b>							
Pebble Hill Reservoir No. 3 Seismic Upgrade	300,000	6,700,000	1,900,000	-	-	8,900,000	8,900,000
<b>Pebble Hill Reservoir Seismic Upgrade</b>							
Pebble Hill Reservoir Seismic Upgrade Unit 1	4,200,000	3,000,000	-	-	-	7,200,000	7,400,000
Pebble Hill Reservoir Seismic Upgrade Unit 2	4,200,000	3,000,000	-	-	-	7,200,000	7,400,000
<b>Reservoir Isolation Valve Automation</b>							
Reservoir Isolation Valve Automation	2,000,000	2,150,000	1,000,000	-	-	5,150,000	6,450,000
<b>SCFP UPS Reconfiguration</b>							
SCFP UPS Reconfiguration	100,000	-	-	-	-	100,000	1,270,000
<b>Second Narrows Crossing (Tunnel)</b>							
Second Narrows Crossing (Tunnel)	51,000,000	75,000,000	75,000,000	75,000,000	75,000,000	351,000,000	468,550,000
<b>Seymour Main No. 2 Joint Improvements</b>							
Seymour Main No. 2 Joint Improvements	50,000	50,000	300,000	-	-	400,000	827,000
<b>Seymour Main No. 5 III ( North )</b>							
Seymour Main No. 5 III ( North )	2,000,000	2,000,000	1,900,000	-	-	5,900,000	198,000,000
<b>Seymour Reservoir Mid-Lake Debris Boom</b>							
Seymour Reservoir Mid-Lake Debris Boom	700,000	200,000	-	-	-	900,000	1,200,000
<b>South Delta Main No. 3 - 12th Ave to Pebble Hill</b>							
South Delta Main No. 3 - 12th Ave to Pebble Hill	200,000	-	-	-	-	200,000	18,200,000
<b>Sunnyside Reservoir Unit 1 Upgrades</b>							
Sunnyside Reservoir Unit 1 Upgrades	2,000,000	150,000	-	-	-	2,150,000	8,050,000
<b>Sunnyside Reservoir Units 1 and 2 Seismic Upgrade</b>							
Sunnyside Reservoir Unit 1 Seismic Upgrade	3,300,000	2,200,000	-	-	-	5,500,000	8,500,000
Sunnyside Reservoir Unit 2 Seismic Upgrade	-	2,000,000	3,000,000	3,200,000	-	8,200,000	8,200,000
Sunnyside Reservoir Units 1 and 2 Seismic Upgrade	200,000	-	-	-	-	200,000	600,000
<b>System Seismic Upgrade</b>							
System Seismic Upgrade	-	-	600,000	600,000	7,600,000	8,800,000	122,800,000

**GREATER VANCOUVER WATER DISTRICT  
CAPITAL PROGRAMS AND PROJECT TOTALS  
WATER SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Westburnco Pump Station - Back-up Power</b>							
Westburnco Pump Station - Back-up Power	2,000,000	11,000,000	3,000,000	-	-	16,000,000	19,000,000
	<u>\$ 92,800,000</u>	<u>\$ 138,700,000</u>	<u>\$ 127,600,000</u>	<u>\$ 112,900,000</u>	<u>\$ 106,500,000</u>	<u>\$ 578,500,000</u>	<u>\$ 1,777,147,000</u>
<b>Water Infrastructure Upgrade Capital</b>							
<b>Burwell Alpine Reservoir Valve Improvements</b>							
Burwell Alpine Reservoir Valve Improvements	\$ 100,000	\$ -	\$ -	\$ -	\$ -	100,000	\$ 650,000
<b>Cleveland Dam East Abutment Additional GV Series Pump Wells</b>							
Cleveland Dam East Abutment Additional GV Series Pump Wells	150,000	50,000	-	-	-	200,000	750,000
<b>Coquitlam Communication Improvements</b>							
Coquitlam Communication Improvements	900,000	-	-	-	-	900,000	1,801,000
<b>CWTP Ozone Generation Upgrades for Units 2 &amp; 3</b>							
CWTP Ozone Generation Upgrades for Units 2 & 3	3,200,000	1,000,000	-	-	-	4,200,000	12,000,000
<b>Haney Main No. 2 Valve Chamber Upgrade - Abernethy Way and 232nd St</b>							
Haney Main No. 2 Valve Chamber Upgrade - Abernethy Way and 232nd St	700,000	-	-	-	-	700,000	1,600,000
<b>Infrastructure Upgrade Allowance - Water</b>							
Infrastructure Upgrade Allowance - Water	-	-	-	-	1,400,000	1,400,000	134,900,000
<b>LCOC Metal Shop Expansion and Dry Storage Development</b>							
LCOC Metal Shop Expansion and Dry Storage Development	500,000	2,200,000	1,000,000	-	-	3,700,000	3,820,000
<b>Lower Seymour Conservation Reserve Learning Lodge Replacement</b>							
Lower Seymour Conservation Reserve Learning Lodge Replacement	2,000,000	2,600,000	-	-	-	4,600,000	5,000,000
<b>Sapperton Main No. 1 New Line Valve and Chamber</b>							
Sapperton Main No. 1 New Line Valve and Chamber	1,250,000	-	-	-	-	1,250,000	3,800,000
<b>SCFP Interior Lighting Efficiency Upgrade</b>							
SCFP Interior Lighting Efficiency Upgrade	450,000	50,000	-	-	-	500,000	500,000
<b>South Delta Main No. 1 - 28 Ave to 34B Ave</b>							
South Delta Main No. 1 - 28 Ave to 34B Ave	6,500,000	3,500,000	-	-	-	10,000,000	18,050,000
<b>South Delta Mains - 28 Ave Crossover</b>							
South Delta Mains - 28 Ave Crossover	2,500,000	-	-	-	-	2,500,000	8,500,000
<b>Tilbury Junction Chamber Valves Replacement with Actuators</b>							
Tilbury Junction Chamber Valves Replacement with Actuators	1,600,000	-	-	-	-	1,600,000	4,700,000
<b>Water Meter Upgrades</b>							
Water Meter Upgrades	2,750,000	4,750,000	6,100,000	5,000,000	-	18,600,000	22,400,000

**GREATER VANCOUVER WATER DISTRICT  
CAPITAL PROGRAMS AND PROJECT TOTALS  
WATER SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Water Optimization - Flow Meters (Non-billing) Phase 1</b>							
Water Optimization - Flow Meters (Non-billing) Phase 1	-	1,500,000	4,000,000	6,900,000	5,600,000	18,000,000	18,000,000
<b>Water Optimization - Flow Meters (Non-billing) Phase 2</b>							
Water Optimization - Flow Meters (Non-billing) Phase 2	-	-	-	-	1,500,000	1,500,000	18,000,000
<b>Water Optimization - Instrumentation</b>							
Water Optimization - Instrumentation	-	800,000	4,200,000	4,200,000	1,500,000	10,700,000	10,700,000
<b>Water Optimization Automation &amp; Instrumentation</b>							
Water Optimization Automation & Instrumentation	2,000,000	2,000,000	1,500,000	-	-	5,500,000	9,540,000
	<b>\$ 24,600,000</b>	<b>\$ 18,450,000</b>	<b>\$ 16,800,000</b>	<b>\$ 16,100,000</b>	<b>\$ 10,000,000</b>	<b>\$ 85,950,000</b>	<b>\$ 274,711,000</b>
<b>Water Opportunity Capital</b>							
<b>Capilano Hydropower</b>							
Capilano Hydropower	700,000	2,000,000	1,000,000	-	-	3,700,000	99,250,000
	<b>\$ 700,000</b>	<b>\$ 2,000,000</b>	<b>\$ 1,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,700,000</b>	<b>\$ 99,250,000</b>
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>\$ 231,400,000</b>	<b>\$ 395,700,000</b>	<b>\$ 440,850,000</b>	<b>\$ 486,000,000</b>	<b>\$ 477,150,000</b>	<b>\$ 2,031,100,000</b>	<b>\$ 7,174,930,000</b>
<b>CAPITAL FUNDING</b>							
New External Borrowing	\$ 74,150,000	\$ 247,100,000	\$ 279,900,000	\$ 312,000,000	\$ 283,750,000	\$ 1,196,900,000	
Contribution to Capital	103,100,000	132,100,000	145,000,000	163,300,000	186,300,000	729,800,000	
Surplus from Prior Year	52,500,000	6,000,000	5,500,000	5,000,000	5,000,000	74,000,000	
External Funding - Interagency	1,650,000	10,500,000	10,450,000	5,700,000	2,100,000	30,400,000	
	<b>\$ 231,400,000</b>	<b>\$ 395,700,000</b>	<b>\$ 440,850,000</b>	<b>\$ 486,000,000</b>	<b>\$ 477,150,000</b>	<b>\$ 2,031,100,000</b>	
<b>DEBT SERVICING</b>							
Debt Servicing - Existing	\$ 72,600,000	\$ 72,700,000	\$ 74,800,000	\$ 94,600,000	\$ 116,900,000	\$ 431,600,000	
Debt Servicing - From New Borrowing	100,000	2,100,000	19,800,000	22,300,000	22,600,000	66,900,000	
	<b>\$ 72,700,000</b>	<b>\$ 74,800,000</b>	<b>\$ 94,600,000</b>	<b>\$ 116,900,000</b>	<b>\$ 139,500,000</b>	<b>\$ 498,500,000</b>	



**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
LIQUID WASTE SERVICES  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
GVS&DD Levy	\$ 200,250,619	\$ 213,889,658	\$ 232,134,204	\$ 255,810,755	10.2%	\$ 281,805,671	10.2%	\$ 315,510,034	12.0%	\$ 353,685,341	12.1%	\$ 376,133,837	6.3%
User Fees	2,345,849	2,500,967	2,537,546	2,403,269		2,449,334		2,501,321		2,549,248		2,603,133	
Transfer from DCC Reserves	6,045,889	5,201,933	12,926,848	31,665,173		42,233,468		58,294,850		75,879,458		91,550,577	
BOD/TSS Industrial Charges	8,495,783	9,838,338	10,144,566	11,022,967		10,870,331		11,087,737		11,309,491		11,535,681	
Other External Revenues	974,425	1,064,312	150,000	540,000		545,000		545,000		550,000		550,000	
Sustainability Reserve Funds	428,417	187,863	2,034,818	475,000		290,000							
Reserves	566,412	35,871	6,981,936	6,663,461		3,777,974		2,619,746		1,565,461		25,000	
<b>TOTAL REVENUES</b>	<b>\$ 219,107,394</b>	<b>\$ 232,718,942</b>	<b>\$ 266,909,919</b>	<b>\$ 308,580,625</b>	<b>15.6%</b>	<b>\$ 341,971,778</b>	<b>10.8%</b>	<b>\$ 390,558,688</b>	<b>14.2%</b>	<b>\$ 445,538,999</b>	<b>14.1%</b>	<b>\$ 482,398,228</b>	<b>8.3%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Policy Planning and Analysis													
Sustainability Fund	\$ 1,127,000	\$ 1,127,000	\$ 1,127,000	\$ 1,127,000		\$ 1,127,000		\$ 1,127,000		\$ 1,127,000		\$ 1,127,000	
Utility Analysis and Infrastructure	1,140,350	1,327,637	1,591,433	1,992,283		1,769,335		1,796,819		1,749,680		1,628,120	
Utility Policy and Planning	1,123,427	1,426,255	1,656,183	1,844,851		2,469,096		2,514,693		1,851,642		2,006,266	
	3,390,777	3,880,892	4,374,616	4,964,134	13.5%	5,365,431	8.1%	5,438,512	1.4%	4,728,322	(13.1%)	4,761,386	0.7%
Management Systems and Utility Services													
Annacis Research Centre	443,286	442,392	484,596	513,674		480,038		518,293		520,910		503,514	
Department Technical Training	972,834	1,071,804	935,688	566,644		568,206		571,040		570,892		571,524	
Dispatch	126,409	122,953	117,352	127,983		130,997		133,676		136,401		139,188	
Energy Management	213,092	219,498	244,983	246,745		260,058		259,229		274,159		273,587	
Engineers in Training	522,484	354,357	575,440	588,263		602,380		614,461		626,721		639,247	
Engineering Standards	100,377	101,491	108,180	116,919		119,753		122,215		127,717		127,274	
Liquid Waste Residuals	14,736,438	16,514,470	23,501,906	28,392,006		28,023,839		27,595,480		28,454,971		20,743,327	
Management Systems Utility Services	1,212,139	1,430,222	1,559,041	2,457,172		2,488,642		2,715,432		2,894,269		2,938,776	
Records Management	94,571	98,036	100,171	108,318		110,944		113,225		115,544		117,914	
Utility Voice Radio	136,180	161,480	146,803	159,409		161,038		162,517		164,019		165,553	
Wastewater Research and Innovation	1,345,782	1,376,492	3,245,620	1,747,459		1,689,563		1,419,275		1,443,732		1,464,080	
	19,903,592	21,893,195	31,019,780	35,024,592	12.9%	34,635,458	(1.1%)	34,224,843	(1.2%)	35,326,335	3.2%	27,683,964	(21.6%)
Environmental Management and Quality Control													
Environmental Management and Quality Control	9,473,073	10,227,747	11,199,616	11,529,370		12,141,095		12,708,200		12,846,497		13,111,851	
Source Compliance Monitoring	229,530	363,894	417,302	420,620		428,845		437,382		446,005		454,813	
Contribution to Reserve	91,890	93,819	95,788	97,800		99,854		101,951		104,092		106,278	
	9,794,493	10,685,460	11,712,706	12,047,790	2.9%	12,669,794	5.2%	13,247,533	4.6%	13,396,594	1.1%	13,672,942	2.1%
Project Delivery													
Minor Capital Projects	4,751,842	4,259,572	7,053,192	8,025,514		7,333,155		7,375,916		7,552,186		7,712,447	
Public Involvement	1,106,776	1,131,284	1,180,470	1,207,174		1,234,458		1,259,139		1,284,227		1,309,845	
	5,858,618	5,390,856	8,233,662	9,232,688	12.1%	8,567,613	(7.2%)	8,635,055	0.8%	8,836,413	2.3%	9,022,292	2.1%
Operations and Maintenance													
Lake City Operations	1,024,083	983,882	957,645	965,125		1,033,884		1,047,912		1,066,235		1,084,949	
Maintenance	28,785,795	28,661,200	30,398,028	29,390,557		30,457,633		31,695,203		32,652,957		33,439,799	
SCADA Control Systems	968,571	848,848	976,099	984,573		1,003,169		994,751		1,010,854		1,027,364	
Urban Drainage	975,441	846,217	1,141,794	1,048,272		1,073,950		1,097,908		1,122,551		1,147,701	
Wastewater Collection	11,831,353	12,712,575	12,889,510	14,977,385		15,772,916		16,085,750		16,081,459		16,523,770	
Wastewater Treatment	35,014,593	35,783,299	38,568,317	39,767,060		40,239,393		41,640,383		42,401,029		46,401,029	
	78,600,016	79,836,021	84,931,393	87,132,972	2.6%	89,580,945	2.8%	92,561,907	3.3%	97,195,503	5.0%	99,624,612	2.5%
Administration and Department Support													
	1,883,917	1,891,856	2,058,772	2,126,503	3.3%	2,176,016	2.3%	2,219,405	2.0%	2,263,891	2.0%	2,308,794	2.0%
Communication and Outreach													
	375,387	409,201	400,000	400,000	0.0%	400,000	0.0%	400,000	0.0%	400,000	0.0%	400,000	0.0%
Environmental Regulation and Enforcement													
	1,534,419	1,543,920	1,770,679	1,899,700	7.3%	1,944,520	2.4%	1,983,672	2.0%	2,023,465	2.0%	2,062,778	1.9%
Allocation of Centralized Costs													
	16,192,380	19,588,472	22,094,123	22,757,172	3.0%	24,806,053	9.0%	25,249,271	1.8%	26,290,833	4.1%	27,219,060	3.5%
<b>Total Operating Programs</b>	<b>137,533,599</b>	<b>145,119,873</b>	<b>166,595,731</b>	<b>175,585,551</b>	<b>5.4%</b>	<b>180,145,830</b>	<b>2.6%</b>	<b>183,960,198</b>	<b>2.1%</b>	<b>190,461,356</b>	<b>3.5%</b>	<b>186,755,828</b>	<b>(1.9%)</b>
Debt Service													
	12,072,032	14,175,516	25,611,895	54,340,894	112.2%	80,015,606	47.2%	124,530,354	55.6%	172,072,147	38.2%	212,368,696	23.4%
Contribution to Capital													
	60,250,687	64,788,365	74,702,292	78,654,181	5.3%	81,810,342	4.0%	82,068,135	0.3%	83,005,495	1.1%	83,273,704	0.3%
<b>TOTAL EXPENDITURES</b>	<b>\$ 209,856,318</b>	<b>\$ 224,083,754</b>	<b>\$ 266,909,919</b>	<b>\$ 308,580,625</b>	<b>15.6%</b>	<b>\$ 341,971,778</b>	<b>10.8%</b>	<b>\$ 390,558,688</b>	<b>14.2%</b>	<b>\$ 445,538,999</b>	<b>14.1%</b>	<b>\$ 482,398,228</b>	<b>8.3%</b>
<b>Household Impact</b>			\$ 231	\$ 250	8.2%	\$ 271	8.2%	\$ 298	10.0%	\$ 328	10.2%	\$ 343	4.5%

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
LIQUID WASTE REGULATION  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Liquid Waste Revenues	\$ 1,534,419	\$ 1,543,920	\$ 1,770,679	\$ 1,899,700	7.3%	\$ 1,944,520	2.4%	\$ 1,983,672	2.0%	\$ 2,023,465	2.0%	\$ 2,062,778	1.9%
<b>TOTAL REVENUES</b>	<b>\$ 1,534,419</b>	<b>\$ 1,543,920</b>	<b>\$ 1,770,679</b>	<b>\$ 1,899,700</b>	<b>7.3%</b>	<b>\$ 1,944,520</b>	<b>2.4%</b>	<b>\$ 1,983,672</b>	<b>2.0%</b>	<b>\$ 2,023,465</b>	<b>2.0%</b>	<b>\$ 2,062,778</b>	<b>1.9%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Environmental Regulation and Enforcement	\$ 1,411,681	\$ 1,413,674	\$ 1,596,829	\$ 1,765,868		\$ 1,807,555		\$ 1,843,997		\$ 1,881,038		\$ 1,918,903	
Administration and Department Support	122,738	130,246	173,850	133,832		136,965		139,675		142,427		143,875	
<b>TOTAL EXPENDITURES</b>	<b>\$ 1,534,419</b>	<b>\$ 1,543,920</b>	<b>\$ 1,770,679</b>	<b>\$ 1,899,700</b>	<b>7.3%</b>	<b>\$ 1,944,520</b>	<b>2.4%</b>	<b>\$ 1,983,672</b>	<b>2.0%</b>	<b>\$ 2,023,465</b>	<b>2.0%</b>	<b>\$ 2,062,778</b>	<b>1.9%</b>

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
LIQUID WASTE SERVICES  
VANCOUVER SEWERAGE AREA  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
GVS&DD Levy	\$ 64,653,215	\$ 65,382,851	\$ 73,438,596	\$ 79,609,908	8.4%	\$ 84,364,454	6.0%	\$ 87,186,354	3.3%	\$ 91,543,170	5.0%	\$ 93,771,001	2.4%
User Fees	476,311	609,571	523,302	579,307		589,847		602,618		613,584		626,789	
Transfer from DCC Reserves	507,749	-	1,814,366	3,096,988		4,654,003		6,176,219		7,665,751		8,781,541	
BOD/TSS Industrial Charges	2,416,910	2,693,709	2,912,153	2,849,111		2,532,998		2,583,658		2,635,331		2,688,038	
Other External Revenues	215,034	140,656	-	82,120		84,140		84,140		86,160		86,160	
Sustainability Reserve Funds	174,751	74,957	834,886	191,900		117,160		-		-		-	
Reserves	-	-	2,693,075	5,251,461		3,661,251		2,594,746		1,540,461		-	
<b>TOTAL REVENUES</b>	<b>\$ 68,443,970</b>	<b>\$ 68,901,744</b>	<b>\$ 82,216,378</b>	<b>\$ 91,660,795</b>	<b>11.5%</b>	<b>\$ 96,003,854</b>	<b>4.7%</b>	<b>\$ 99,227,735</b>	<b>3.4%</b>	<b>\$ 104,084,456</b>	<b>4.9%</b>	<b>\$ 105,953,529</b>	<b>1.8%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Policy Planning and Analysis	\$ 1,349,763	\$ 1,521,582	\$ 1,701,400	\$ 1,912,926		\$ 2,112,903		\$ 2,141,979		\$ 1,854,605		\$ 1,867,498	
Management Systems and Utility Services	7,710,532	9,429,855	13,433,319	15,998,571		15,200,583		15,264,184		15,801,815		12,043,280	
Environmental Management and Quality Control	3,015,680	3,202,158	4,619,952	4,686,358		4,928,398		5,160,415		5,216,268		5,322,804	
Project Delivery	1,798,972	1,876,841	2,935,190	3,903,059		3,082,348		3,095,486		3,166,274		3,225,961	
Operations and Maintenance	20,411,594	20,981,794	21,905,116	22,358,251		23,541,683		23,252,307		24,247,665		25,288,780	
Administration and Department Support	561,428	568,578	624,755	654,601		669,843		683,199		696,896		710,715	
Communications Program	153,120	163,271	164,120	161,600		161,600		161,600		161,600		161,600	
Environmental Regulation and Enforcement	317,994	316,842	337,137	353,913		362,264		369,558		376,972		384,296	
Allocation of Centralized Support Costs	4,825,488	5,887,122	6,704,683	7,034,097		7,372,265		7,090,274		6,675,748		6,377,721	
Total Operating Programs	40,144,571	43,948,043	52,425,671	57,063,376	8.8%	57,431,887	0.6%	57,219,002	(0.4%)	58,197,843	1.7%	55,382,655	(4.8%)
Debt Service	2,591,680	2,505,248	4,103,480	5,864,427	42.9%	8,588,871	46.5%	11,978,023	39.5%	15,200,367	26.9%	19,835,090	30.5%
Contribution to Capital	22,816,743	21,430,406	25,687,227	28,732,992	11.9%	29,983,096	4.4%	30,030,710	0.2%	30,686,246	2.2%	30,735,784	0.2%
<b>TOTAL EXPENDITURES</b>	<b>\$ 65,552,994</b>	<b>\$ 67,883,697</b>	<b>\$ 82,216,378</b>	<b>\$ 91,660,795</b>	<b>11.5%</b>	<b>\$ 96,003,854</b>	<b>4.7%</b>	<b>\$ 99,227,735</b>	<b>3.4%</b>	<b>\$ 104,084,456</b>	<b>4.9%</b>	<b>\$ 105,953,529</b>	<b>1.8%</b>
<b>Household Impact</b>			\$ 274	\$ 293	7.0%	\$ 307	4.8%	\$ 314	2.1%	\$ 325	3.8%	\$ 329	1.0%

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
LIQUID WASTE SERVICES  
NORTH SHORE SEWERAGE AREA  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
GVS&DD Levy	\$ 18,604,713	\$ 20,407,056	\$ 21,950,741	\$ 23,045,180	5.0%	\$ 28,011,369	21.5%	\$ 35,609,582	27.1%	\$ 44,624,166	25.3%	\$ 47,730,816	7.0%
User Fees	76,588	81,849	85,585	71,525		72,848		74,533		75,909		77,649	
Transfer from DCC Reserves	487,479	70,828	963,543	1,409,438		1,563,300		2,227,516		2,327,883		2,901,370	
BOD/TSS Industrial Charges	534,966	695,989	667,407	759,135		774,318		789,804		805,600		821,712	
Other External Revenues	2,491	1,818	-	2,016		2,352		2,352		2,688		2,688	
Sustainability Reserve Funds	67,404	13,319	141,827	31,920		19,488		-		-		-	
Reserves	-	-	-	-		11,305		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 19,773,641</b>	<b>\$ 21,270,859</b>	<b>\$ 23,809,103</b>	<b>\$ 25,319,214</b>	<b>6.3%</b>	<b>\$ 30,454,980</b>	<b>20.3%</b>	<b>\$ 38,703,787</b>	<b>27.1%</b>	<b>\$ 47,836,246</b>	<b>23.6%</b>	<b>\$ 51,534,235</b>	<b>7.7%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Policy Planning and Analysis	\$ 227,554	\$ 266,107	\$ 289,027	\$ 318,189		\$ 351,453		\$ 356,289		\$ 308,488		\$ 310,633	
Management Systems and Utility Services	992,597	827,999	1,135,070	1,230,109		1,207,369		1,203,084		1,246,956		1,067,686	
Environmental Management and Quality Control	1,799,156	1,967,466	903,032	905,015		951,972		992,338		1,004,743		1,025,722	
Project Delivery	345,059	236,999	376,467	351,874		361,852		362,455		370,620		378,559	
Operations and Maintenance	9,432,767	9,739,934	10,540,446	11,167,622		12,222,511		11,688,692		14,723,931		14,730,390	
Administration and Department Support	167,254	172,178	186,833	189,577		193,992		197,860		201,826		205,829	
Communications Program	25,827	29,012	27,880	26,880		26,880		26,880		26,880		26,880	
Environmental Regulation and Enforcement	99,757	99,795	109,959	112,653		115,310		117,632		119,991		122,323	
Allocation of Centralized Support Costs	1,437,559	1,782,745	2,005,042	2,024,686		2,019,344		2,258,203		2,613,845		2,923,592	
Total Operating Programs	14,527,530	15,122,235	15,573,756	16,326,605	4.8%	17,450,683	6.9%	17,203,434	(1.4%)	20,617,281	19.8%	20,791,615	0.8%
Debt Service	2,022,851	1,480,450	2,855,516	3,082,684	8.0%	5,363,676	74.0%	13,828,423	157.8%	19,447,657	40.6%	22,938,737	18.0%
Contribution to Capital	2,765,755	3,953,505	5,379,831	5,909,925	9.9%	7,640,621	29.3%	7,671,931	0.4%	7,771,308	1.3%	7,803,883	0.4%
<b>TOTAL EXPENDITURES</b>	<b>\$ 19,316,136</b>	<b>\$ 20,556,190</b>	<b>\$ 23,809,103</b>	<b>\$ 25,319,214</b>	<b>6.3%</b>	<b>\$ 30,454,980</b>	<b>20.3%</b>	<b>\$ 38,703,787</b>	<b>27.1%</b>	<b>\$ 47,836,246</b>	<b>23.6%</b>	<b>\$ 51,534,235</b>	<b>7.7%</b>
<b>Household Impact</b>			\$ 292	\$ 304	4.1%	\$ 366	20.3%	\$ 460	25.8%	\$ 571	24.1%	\$ 605	5.9%

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
LIQUID WASTE SERVICES  
LULU ISLAND WEST SEWERAGE AREA  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
GVS&DD Levy	\$ 20,226,292	\$ 19,561,956	\$ 19,914,895	\$ 21,446,957	7.7%	\$ 25,352,868	18.2%	\$ 30,452,494	20.1%	\$ 34,514,478	13.3%	\$ 35,946,478	4.1%
User Fees	140,750	165,376	174,622	138,058		140,704		143,763		146,516		149,684	
Transfer from DCC Reserves	174,315	113,583	438,017	519,742		1,115,863		1,804,863		2,677,196		3,423,625	
BOD/TSS Industrial Charges	459,523	843,586	744,778	907,497		925,647		944,160		963,043		982,304	
Other External Revenues	86,623	177,256	-	2,160		2,520		2,520		2,880		2,880	
Sustainability Reserve Funds	31,103	13,902	142,844	34,200		20,880		-		-		-	
Reserves	-	-	-	-		11,334		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 21,118,606</b>	<b>\$ 20,875,659</b>	<b>\$ 21,415,155</b>	<b>\$ 23,048,613</b>	<b>7.6%</b>	<b>\$ 27,569,816</b>	<b>19.6%</b>	<b>\$ 33,347,800</b>	<b>21.0%</b>	<b>\$ 38,304,113</b>	<b>14.9%</b>	<b>\$ 40,504,971</b>	<b>5.7%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Policy Planning and Analysis	\$ 236,636	\$ 277,742	\$ 291,099	\$ 340,917		\$ 376,557		\$ 381,739		\$ 330,524		\$ 332,821	
Management Systems and Utility Services	1,814,486	1,800,089	2,124,573	2,099,468		2,213,803		2,068,791		2,142,769		1,779,545	
Environmental Management and Quality Control	1,009,140	1,111,352	865,651	909,069		955,963		997,827		1,009,558		1,030,648	
Project Delivery	544,908	480,329	1,178,910	1,193,030		1,224,842		1,252,115		1,283,631		1,315,756	
Operations and Maintenance	7,301,286	7,506,394	8,188,276	8,496,802		8,919,301		9,178,693		9,366,929		9,566,056	
Administration and Department Support	172,868	173,729	175,922	169,674		173,624		177,086		180,636		184,219	
Communications Program	27,253	30,281	28,080	28,800		28,800		28,800		28,800		28,800	
Environmental Regulation and Enforcement	168,358	161,744	185,744	182,562		186,868		190,631		194,455		198,233	
Allocation of Centralized Support Costs	1,485,812	1,798,811	1,887,943	1,815,715		1,842,055		2,045,470		2,248,486		2,336,193	
Total Operating Programs	12,760,747	13,340,471	14,926,198	15,236,037	2.1%	15,921,813	4.5%	16,321,152	2.5%	16,785,788	2.8%	16,772,271	(0.1%)
Debt Service	188,388	164,089	876,668	1,571,032	79.2%	5,376,619	242.2%	10,724,826	99.5%	15,185,456	41.6%	17,368,165	14.4%
Contribution to Capital	4,780,089	4,755,631	5,612,289	6,241,544	11.2%	6,271,385	0.5%	6,301,822	0.5%	6,332,868	0.5%	6,364,535	0.5%
<b>TOTAL EXPENDITURES</b>	<b>\$ 17,729,224</b>	<b>\$ 18,260,191</b>	<b>\$ 21,415,155</b>	<b>\$ 23,048,613</b>	<b>7.6%</b>	<b>\$ 27,569,816</b>	<b>19.6%</b>	<b>\$ 33,347,800</b>	<b>21.0%</b>	<b>\$ 38,304,113</b>	<b>14.9%</b>	<b>\$ 40,504,971</b>	<b>5.7%</b>
<b>Household Impact</b>			\$ 205	\$ 214	4.7%	\$ 249	16.2%	\$ 293	17.9%	\$ 326	11.2%	\$ 333	2.2%

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
LIQUID WASTE SERVICES  
FRASER SEWERAGE AREA  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
GVS&DD Levy	\$ 94,465,317	\$ 105,989,926	\$ 114,012,490	\$ 129,540,876	13.6%	\$ 141,545,458	9.3%	\$ 159,715,748	12.8%	\$ 180,414,748	13.0%	\$ 196,035,971	8.7%
User Fees	1,652,200	1,644,171	1,754,037	1,614,379		1,645,935		1,680,407		1,713,239		1,749,011	
Transfer from DCC Reserves	4,876,346	5,017,522	9,710,923	26,639,005		34,900,302		48,086,252		63,208,628		76,444,040	
BOD/TSS Industrial Charges	5,084,384	5,605,054	5,820,228	6,507,224		6,637,368		6,770,115		6,905,517		7,043,627	
Other External Revenues	541,877	744,582	150,000	453,704		455,988		455,988		458,272		458,272	
Sustainability Reserve Funds	155,159	85,685	915,261	216,980		132,472		-		-		-	
Reserves	566,412	-	4,140,000	950,000		69,084		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 107,341,695</b>	<b>\$ 119,086,940</b>	<b>\$ 136,502,939</b>	<b>\$ 165,922,169</b>	<b>21.6%</b>	<b>\$ 185,386,607</b>	<b>11.7%</b>	<b>\$ 216,708,510</b>	<b>16.9%</b>	<b>\$ 252,700,404</b>	<b>16.6%</b>	<b>\$ 281,730,921</b>	<b>11.5%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Policy Planning and Analysis	\$ 1,474,333	\$ 1,711,869	\$ 1,865,196	\$ 2,162,933		\$ 2,389,046		\$ 2,421,920		\$ 2,096,990		\$ 2,111,567	
Management Systems and Utility Services	9,359,500	9,806,615	14,288,979	15,663,432		15,980,095		15,652,678		16,096,577		12,754,772	
Environmental Management and Quality Control	3,970,517	4,404,484	5,324,071	5,547,348		5,833,461		6,086,953		6,166,025		6,293,768	
Project Delivery	3,069,093	2,434,501	3,225,356	3,032,756		3,122,558		3,130,995		3,203,515		3,271,827	
Operations and Maintenance	40,271,058	40,530,550	42,763,661	43,753,258		43,515,645		47,047,602		47,426,214		48,554,836	
Administration and Department Support	959,987	955,198	1,045,569	1,089,153		1,114,512		1,136,735		1,159,519		1,182,518	
Communications Program	169,187	186,637	179,920	182,720		182,720		182,720		182,720		182,720	
Environmental Regulation and Enforcement	948,310	965,539	1,137,839	1,250,572		1,280,078		1,305,851		1,332,047		1,357,926	
Allocation of Centralized Support Costs	8,251,149	9,890,224	11,220,721	11,647,527		13,366,811		13,670,301		14,583,058		15,424,782	
Total Operating Programs	68,473,134	70,885,617	81,051,312	84,329,698	4.0%	86,784,926	2.9%	90,645,755	4.4%	92,246,664	1.8%	91,134,716	(1.2%)
Debt Service	7,269,113	9,919,135	17,824,576	43,822,751	145.9%	60,686,441	38.5%	87,999,082	45.0%	122,238,666	38.9%	152,226,704	24.5%
Contribution to Capital	29,492,206	34,252,929	37,627,051	37,769,719	0.4%	37,915,241	0.4%	38,063,673	0.4%	38,215,073	0.4%	38,369,502	0.4%
<b>TOTAL EXPENDITURES</b>	<b>\$ 105,234,453</b>	<b>\$ 115,057,681</b>	<b>\$ 136,502,939</b>	<b>\$ 165,922,169</b>	<b>21.6%</b>	<b>\$ 185,386,607</b>	<b>11.7%</b>	<b>\$ 216,708,510</b>	<b>16.9%</b>	<b>\$ 252,700,404</b>	<b>16.6%</b>	<b>\$ 281,730,921</b>	<b>11.5%</b>
<b>Household Impact</b>			\$ 205	\$ 226	10.5%	\$ 243	7.1%	\$ 268	10.4%	\$ 296	10.6%	\$ 315	6.5%

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
LIQUID WASTE SERVICES  
DRAINAGE  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
GVS&DD Levy	\$ 2,301,082	\$ 2,547,869	\$ 2,866,240	\$ 2,167,834	(24.4%)	\$ 2,531,521	16.8%	\$ 2,545,856	0.6%	\$ 2,588,780	1.7%	\$ 2,649,571	2.3%
Other External Revenues	128,400	-	-	-		-		-		-		-	
Reserves	-	35,871	148,861	462,000		25,000		25,000		25,000		25,000	
<b>TOTAL REVENUES</b>	<b>\$ 2,429,482</b>	<b>\$ 2,583,740</b>	<b>\$ 3,015,101</b>	<b>\$ 2,629,834</b>	<b>(12.8%)</b>	<b>\$ 2,556,521</b>	<b>(2.8%)</b>	<b>\$ 2,570,856</b>	<b>0.6%</b>	<b>\$ 2,613,780</b>	<b>1.7%</b>	<b>\$ 2,674,571</b>	<b>2.3%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Policy Planning and Analysis	\$ 102,491	\$ 103,592	\$ 227,894	\$ 229,169		\$ 135,472		\$ 136,585		\$ 137,715		\$ 138,867	
Management Systems and Utility Services	26,477	28,637	38,252	33,012		33,608		36,106		38,218		38,681	
Project Delivery	100,586	362,186	517,739	751,969		776,013		794,004		812,373		830,189	
Operations and Maintenance	1,183,311	1,077,349	1,533,894	1,357,039		1,381,805		1,394,613		1,430,764		1,484,550	
Administration and Department Support	22,380	22,173	25,693	23,498		24,045		24,525		25,014		25,513	
Allocation of Centralized Support Costs	192,372	229,570	275,735	235,147		205,578		185,023		169,696		156,771	
Total Operating Programs	1,627,617	1,823,507	2,619,207	2,629,834	0.4%	2,556,521	(2.8%)	2,570,856	0.6%	2,613,780	1.7%	2,674,571	2.3%
Contribution to Capital	395,894	395,894	395,894	-	(100.0%)	-	0.0%	-	0.0%	-	0.0%	-	0.0%
<b>TOTAL EXPENDITURES</b>	<b>\$ 2,151,911</b>	<b>\$ 2,219,401</b>	<b>\$ 3,015,101</b>	<b>\$ 2,629,834</b>	<b>(12.8%)</b>	<b>\$ 2,556,521</b>	<b>(2.8%)</b>	<b>\$ 2,570,856</b>	<b>0.6%</b>	<b>\$ 2,613,780</b>	<b>1.7%</b>	<b>\$ 2,674,571</b>	<b>2.3%</b>

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>CAPITAL EXPENDITURES</b>							
<b>SD Infrastructure Growth Capital</b>							
<b>AIWWTP Site Construction Layout</b>							
FSA - AIWWTP Site Construction Layout	\$ 450,000	\$ -	\$ -	\$ -	\$ -	450,000	\$ 600,000
<b>AIWWTP Stage 5 Expansion &amp; Outfall System</b>							
FSA - Annacis Outfall System	28,600,000	81,000,000	83,000,000	76,000,000	57,950,000	326,550,000	378,000,000
FSA - Annacis Stage 5 Expansion Phase 1 T1 & T2	34,000,000	2,200,000	-	-	-	36,200,000	243,500,000
FSA - Annacis Stage 5 Expansion Phase 2	550,000	3,000,000	3,000,000	5,100,000	-	11,650,000	22,000,000
FSA - Annacis Stage 5 Expansion Phase 2a	35,500,000	35,000,000	8,000,000	6,400,000	-	84,900,000	180,000,000
FSA - Annacis Stage 5 Expansion Phase 2b	10,000,000	15,000,000	15,000,000	10,500,000	18,500,000	69,000,000	150,000,000
FSA - Annacis Stage 5 Expansion Phase 2c	-	-	-	5,000,000	5,000,000	10,000,000	90,000,000
<b>Albert Street Trunk Sewer</b>							
FSA - Albert Street Trunk Sewer	2,700,000	600,000	1,500,000	300,000	-	5,100,000	5,550,000
<b>Burnaby Lake North Interceptor</b>							
FSA - Burnaby Lake North Interceptor Cariboo Section	1,200,000	2,300,000	15,000,000	10,500,000	12,000,000	41,000,000	41,000,000
FSA - Burnaby Lake North Interceptor Winston Section	1,900,000	25,000,000	40,000,000	29,600,000	16,950,000	113,450,000	116,950,000
<b>Burnaby South Slope Interceptor</b>							
FSA - Burnaby South Slope Interceptor Main Branch	-	150,000	550,000	450,000	3,450,000	4,600,000	9,500,000
FSA - Burnaby South Slope Interceptor West Branch Extension	-	-	-	250,000	750,000	1,000,000	13,200,000
<b>Cloverdale PS Upgrade</b>							
FSA - Cloverdale PS Upgrade	500,000	1,200,000	750,000	10,000,000	10,500,000	22,950,000	31,100,000
<b>Cloverdale Trunk Sewer Upgrade</b>							
FSA - Cloverdale Trunk Sewer Upgrade	-	300,000	1,050,000	1,200,000	8,400,000	10,950,000	29,000,000
<b>Collingwood Trunk Sewer</b>							
VSA - Collingwood Trunk Sewer	100,000	-	-	-	-	100,000	5,415,000
<b>Glenbrook Combined Trunk Kingsway Sanitary Section</b>							
FSA - Glenbrook Combined Trunk Kingsway Sanitary Section	150,000	200,000	2,000,000	500,000	-	2,850,000	3,000,000
<b>Hastings Sanitary Trunk Sewer</b>							
VSA - Hastings Sanitary Trunk Sewer	6,000,000	1,050,000	-	-	-	7,050,000	15,031,000
VSA - Hastings Sanitary Trunk Sewer No. 2	9,000,000	3,300,000	4,000,000	-	-	16,300,000	20,000,000
<b>Hastings-Cassiar Intake Connection</b>							
VSA - Hastings-Cassiar Intake Connection	300,000	200,000	-	-	-	500,000	750,000



**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>LIWWTP Digester No 3</b>							
LSA - Lulu Island WWTP Digester No 3	2,250,000	2,350,000	10,100,000	12,000,000	10,000,000	36,700,000	53,300,000
<b>Lozells Sanitary Trunk Golf Course Section</b>							
FSA - Lozells Sanitary Trunk Golf Course Section	-	-	-	1,000,000	1,000,000	2,000,000	27,650,000
<b>Marshend Pump Station</b>							
FSA - Marshend Pump Station Capacity Upgrade	600,000	750,000	4,000,000	1,000,000	3,000,000	9,350,000	10,025,000
<b>NLWWTP Clarifiers</b>							
FSA - NLWWTP Clarifiers	2,000,000	2,000,000	2,000,000	2,000,000	1,800,000	9,800,000	64,300,000
<b>North Road Trunk Sewer</b>							
FSA - North Road Trunk Sewer	3,000,000	2,000,000	1,500,000	-	-	6,500,000	7,675,000
FSA - North Road Trunk Sewer Phase 2	300,000	500,000	500,000	2,000,000	500,000	3,800,000	3,938,000
<b>North Vancouver Interceptor - Lynn Branch Pre-build</b>							
NSA - North Vancouver Interceptor - Lynn Branch Pre-build	100,000	-	-	-	-	100,000	3,950,000
<b>Northwest Langley Wastewater Treatment Projects</b>							
FSA - Golden Ears Forcemain and River Crossing	6,500,000	8,500,000	40,000,000	30,000,000	-	85,000,000	86,000,000
FSA - Golden Ears Pump Station	5,700,000	12,200,000	15,000,000	7,100,000	100,000	40,100,000	50,200,000
FSA - NLWWTP Ground Improvements	18,000,000	22,000,000	3,000,000	-	15,000,000	58,000,000	83,000,000
FSA - NLWWTP Outfall	-	1,500,000	6,500,000	4,000,000	22,000,000	34,000,000	159,000,000
FSA - NLWWTP Stage 1	12,000,000	35,000,000	39,000,000	40,000,000	146,000,000	272,000,000	901,000,000
<b>NSI Flow Management</b>							
FSA - NSI Flow Management	3,800,000	15,000,000	15,000,000	5,000,000	-	38,800,000	42,500,000
<b>Port Moody PS Upgrade</b>							
FSA - Port Moody PS Upgrade	400,000	50,000	4,500,000	3,800,000	-	8,750,000	9,755,000
<b>Port Moody South Interceptor Upgrade</b>							
FSA - Port Moody South Interceptor Upgrade	-	150,000	350,000	1,000,000	1,000,000	2,500,000	3,450,000
<b>Rosemary Heights Pressure Sewer Upgrade</b>							
FSA - Rosemary Heights Pressure Sewer Upgrade	-	150,000	500,000	650,000	4,800,000	6,100,000	10,750,000
<b>Sapperton Pump Station</b>							
FSA - Sapperton Forcemain Pump Station Connections	500,000	-	-	-	-	500,000	10,000,000
FSA - Sapperton Pump Station	10,000,000	8,000,000	15,000,000	-	-	33,000,000	82,003,000
<b>South Surrey Interceptor Twinning</b>							
FSA - South Surrey Interceptor Johnston Section	20,000,000	10,000,000	4,750,000	-	-	34,750,000	66,176,000
FSA - SSI - King George Section - Odor Control Facility (OCF) and Grit Chamber	6,500,000	3,500,000	500,000	-	-	10,500,000	19,500,000

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Sperling Pump Station</b>							
FSA - Sperling PS Increase Pump Capacity	750,000	400,000	-	-	-	1,150,000	3,150,000
<b>Surrey Central Valley Upgrade</b>							
FSA - Surrey Central Valley Upgrade	-	-	150,000	450,000	1,000,000	1,600,000	60,800,000
	<b>\$ 223,350,000</b>	<b>\$ 294,550,000</b>	<b>\$ 336,200,000</b>	<b>\$ 265,800,000</b>	<b>\$ 339,700,000</b>	<b>\$ 1,459,600,000</b>	<b>\$ 3,112,718,000</b>
<b>SD Infrastructure Maintenance Capital</b>							
<b>AIWWTP Fibre Optic Infrastructure</b>							
FSA - AIWWTP Fibre Optic Infrastructure	\$ 950,000	\$ 100,000	\$ -	\$ -	\$ -	1,050,000	\$ 1,500,000
<b>AIWWTP Gravity Thickner and DAF Steel Repair and Recoating</b>							
FSA - AIWWTP Gravity Thickner and DAF Steel Repair and Recoating	150,000	-	-	-	-	150,000	2,000,000
<b>AIWWTP IPS Pump Building Roof Replacement Phase 2</b>							
FSA - AIWWTP IPS Pump Building Roof Replacement Phase 2	100,000	700,000	-	-	-	800,000	830,000
<b>AIWWTP Outfall Repair</b>							
FSA - AIWWTP Outfall Repair	250,000	600,000	550,000	450,000	450,000	2,300,000	2,300,000
<b>AIWWTP Replacement of CDAC Equipment</b>							
FSA - AIWWTP Replacement of CDAC Equipment in Galleries	600,000	1,050,000	350,000	100,000	-	2,100,000	2,895,000
FSA - Annacis Island WWTP - CDAC Component Replacement and Upgrade Program	100,000	-	-	-	-	100,000	1,500,000
<b>AIWWTP Scheduled 64kV Potential &amp; Current Transformer Replacements</b>							
FSA - AIWWTP Scheduled 64kV Potential & Current Transformer Replacements	400,000	300,000	100,000	-	-	800,000	800,000
<b>AIWWTP Secondary Clarifier Corrosion Repair</b>							
FSA - AIWWTP SCL Flow Balancing	-	600,000	900,000	250,000	50,000	1,800,000	2,450,000
FSA - AIWWTP SCL Flow Control	1,050,000	8,000,000	14,000,000	11,000,000	16,000,000	50,050,000	63,500,000
FSA - Annacis Secondary Clarifier Corrosion Repair	50,000	-	-	-	-	50,000	2,534,000
FSA - Annacis Secondary Clarifier Corrosion Repair and Leveling Phase 2	400,000	4,000,000	3,700,000	5,800,000	-	13,900,000	22,000,000
<b>AIWWTP Secondary Effluent Discharge Flowmeter Replacement</b>							
FSA - AIWWTP Secondary Effluent Discharge Flowmeter Replacement	150,000	150,000	100,000	-	-	400,000	400,000
<b>AIWWTP Spare Trickling Filter Pump &amp; Motor Purchase</b>							
FSA - AIWWTP Spare Trickling Filter Pump & Motor Purchase	1,650,000	300,000	-	-	-	1,950,000	1,950,000
<b>AIWWTP Station Battery Replacement</b>							
FSA - AIWWTP Station Battery Replacement - PHASE 2	150,000	100,000	50,000	-	-	300,000	400,000
<b>AIWWTP Trickling Filter Media &amp; Distributor Arms &amp; Ducting Replacement</b>							
FSA - AIWWTP Trickling Filter Media & Distributor Arms & Ducting Replacement	4,750,000	12,000,000	11,900,000	11,200,000	11,200,000	51,050,000	57,900,000

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Annacis MCC 80 051, 80 070, 80 071 Replacement</b>							
FSA - Annacis MCC 80 051, 80 070, 80 071 Replacement	600,000	750,000	150,000	100,000	-	1,600,000	2,844,000
<b>Cambie Trunk Sewer Relocation for Translink Millennium Broadway Extension</b>							
VSA - Cambie Trunk Sewer Relocation for Translink Millennium Broadway Extensior	3,500,000	1,000,000	-	-	-	4,500,000	4,500,000
<b>Cost Allocation Billing Network (Combined 96 F4)</b>							
FSA - Cost Allocation Billing Network (Combined 96 F4)	50,000	-	-	-	-	50,000	5,230,000
<b>Crescent Beach FM - Replacement</b>							
FSA - Crescent Beach FM - Replacement	800,000	7,350,000	1,500,000	-	-	9,650,000	21,515,000
<b>English Bay/Balaclava Outfalls Improvement</b>							
VSA - English Bay/Balaclava Outfalls Improvement	-	-	250,000	500,000	150,000	900,000	900,000
<b>Gilbert/Brighthouse Trunk Pressure Sewer</b>							
LSA - Gilbert/Brighthouse Trunk Pressure Sewer Rehab Phase 5	-	-	-	-	200,000	200,000	23,200,000
LSA - Gilbert/Brighthouse Trunk Pressure Sewer Twinning Phase 2	21,000,000	9,500,000	-	-	-	30,500,000	50,501,000
LSA - Gilbert/Brighthouse Trunk Pressure Sewer Twinning Phase 3	-	20,000,000	23,400,000	-	-	43,400,000	44,400,000
LSA - Gilbert/Brighthouse Trunk Pressure Sewer Twinning Phase 4	10,000,000	15,000,000	10,000,000	5,400,000	-	40,400,000	41,400,000
<b>Glen Eagles Forcemain Replacement</b>							
NSA - Glen Eagles Forcemains Replacement Phase 2	-	250,000	2,300,000	2,500,000	2,500,000	7,550,000	7,750,000
<b>Glen Eagles Pump Stations</b>							
NSA - Glen Eagles Pump Stations Phase 1	1,500,000	600,000	5,000,000	5,000,000	4,900,000	17,000,000	17,500,000
NSA - Glen Eagles Pump Stations Phase 2	-	1,500,000	2,500,000	6,000,000	5,000,000	15,000,000	25,000,000
<b>Golden Ears SSO Storage</b>							
FSA - Golden Ears SSO Storage	4,500,000	19,000,000	15,000,000	10,000,000	-	48,500,000	51,500,000
<b>Harbour West &amp; East Interceptors Reloc &amp; Protect</b>							
VSA - Harbour West & East Interceptors Reloc & Protect	3,050,000	3,000,000	-	-	-	6,050,000	19,500,000
<b>IWWTP CDAC IPS Control Replacement</b>							
VSA - IWWTP CDAC IPS Control Replacement	800,000	950,000	-	-	-	1,750,000	1,750,000
<b>IWWTP HVAC upgrade</b>							
VSA - IWWTP HVAC upgrade	50,000	-	-	-	-	50,000	2,095,000
<b>IWWTP Influent Gate Refurbishment</b>							
VSA - IWWTP Influent Gate Refurbishment	500,000	250,000	250,000	250,000	-	1,250,000	1,350,000
<b>IWWTP Maintenance and Administration Building HVAC</b>							
VSA - IWWTP Maintenance and Administration Building HVAC	150,000	-	-	-	-	150,000	550,000

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>IWWTP MCC/Power Distribution Assess/Replace - Phase 2</b>							
VSA - IWWTP MCC/Power Distribution Assess/Replace - Phase 2	200,000	100,000	-	-	-	300,000	1,000,000
<b>IWWTP PA-Sed Tank &amp; Gallery Wall Refurbishment</b>							
VSA - IWWTP PA-Sed Tank & Gallery Wall Refurbishment	550,000	450,000	300,000	-	-	1,300,000	1,375,000
<b>IWWTP Replacement of CoGen Control System</b>							
VSA - IWWTP Replacement of CoGen Control System	1,350,000	250,000	-	-	-	1,600,000	2,470,000
<b>IWWTP Sedimentation Tank</b>							
VSA - IWWTP Sed Tank Trough Replacement	50,000	-	-	-	-	50,000	1,600,000
<b>IWWTP Siphon Chamber Refurbishment</b>							
VSA - IWWTP Siphon Chamber Refurbishment	250,000	750,000	750,000	450,000	-	2,200,000	2,200,000
<b>IWWTP Water Supply</b>							
VSA - IWWTP Water Supply	150,000	650,000	2,000,000	2,500,000	1,000,000	6,300,000	6,500,000
<b>Iona Island Control &amp; Instrumentation Replacement 2011</b>							
VSA - Iona Island Control & Instrumentation Replacement 2011	950,000	200,000	-	-	-	1,150,000	2,750,000
<b>Iona MCC/Power Distribution Assess/Replace</b>							
VSA - Iona MCC/Power Distribution Assess/Replace	400,000	200,000	-	-	-	600,000	2,918,000
<b>Iona Solids Handling Upgrade Project</b>							
VSA - IWWTP Digester 4 Roof Replacement & Mixing Upgrade	3,550,000	5,900,000	3,200,000	2,600,000	-	15,250,000	24,800,000
VSA - Iona Grit System Upgrade	250,000	250,000	250,000	-	-	750,000	8,100,000
VSA - Iona Solids Handling Upgrade Project	1,050,000	500,000	-	-	-	1,550,000	30,500,000
<b>Lions Gate Control and Instrumentation Replacement</b>							
NSA - Lions Gate Control and Instrumentation Replacement 2011	50,000	50,000	50,000	-	-	150,000	600,000
<b>LIWWTP - Process Waste Drainage (PWD) Replacement</b>							
LSA - LIWWTP - Process Waste Drainage (PWD) Replacement	50,000	-	-	-	-	50,000	600,000
<b>LIWWTP CCT Isolation Gates</b>							
LSA - LIWWTP CCT Isolation Gates	100,000	400,000	500,000	600,000	450,000	2,050,000	2,050,000
<b>LIWWTP CDAC Component Upgrade</b>							
LSA - LIWWTP CDAC Component Upgrade	150,000	50,000	-	-	-	200,000	360,000
<b>LIWWTP Fibre Optic Infrastructure</b>							
LSA - LIWWTP Fibre Optic Infrastructure	200,000	-	-	-	-	200,000	600,000
<b>LIWWTP High Efficiency Boiler</b>							
LSA - LIWWTP High Efficiency Boiler	-	400,000	150,000	-	-	550,000	730,000

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>LIWWTP PA-Sed Tank Refurbishment</b>							
LSA - LIWWTP PA-Sed Tank Refurbishment	1,150,000	1,000,000	1,000,000	900,000	-	4,050,000	4,115,000
<b>Marshend PS Rehab</b>							
FSA - Marshend PS Rehab	100,000	100,000	2,200,000	2,000,000	1,800,000	6,200,000	7,000,000
<b>New West Interceptor - Annacis Section 2</b>							
FSA - NWI - Annacis Section 2 Improvement	2,400,000	3,400,000	8,000,000	15,000,000	16,000,000	44,800,000	45,000,000
<b>New West Interceptor Grit Chamber</b>							
FSA - New West Interceptor Grit Chamber	-	3,000,000	3,000,000	2,000,000	-	8,000,000	8,250,000
<b>New Westminster Interceptor Repair Columbia St. Section</b>							
FSA - New Westminster Interceptor Repair Columbia St. Section	200,000	400,000	4,300,000	2,600,000	2,450,000	9,950,000	10,882,000
<b>NLWWTP Screw Pump Replacement</b>							
FSA - NLWWTP Screw Pump Replacement	1,300,000	250,000	-	-	-	1,550,000	1,550,000
<b>NSI Rehab or Replacement</b>							
FSA - NSI Rehab or Replacement - Phase 2	2,500,000	11,450,000	5,000,000	5,000,000	-	23,950,000	24,750,000
<b>NWL WWTP 25 kV Substation Replacement</b>							
FSA - NWL WWTP 25 kV Substation Replacement	4,550,000	3,000,000	1,000,000	-	-	8,550,000	10,025,000
<b>NWL WWTP CDAC System Hardware Upgrade</b>							
FSA - NWL WWTP CDAC System Hardware Upgrade	200,000	-	-	-	-	200,000	1,500,000
<b>Ocean Park Trunk Manholes Lining</b>							
FSA - Ocean Park Trunk Manholes Lining	-	-	50,000	350,000	150,000	550,000	550,000
<b>Royal Ave. Sewer Pump Station (RYA) Building Expansion &amp; Electrical Upgrade</b>							
FSA - Royal Ave. Sewer Pump Station (RYA) Building Expansion & Electrical Upgrade	1,500,000	1,300,000	-	-	-	2,800,000	4,218,000
<b>Sewer Relocations and Protections at Fraser Surrey Docks</b>							
FSA - Sewer Relocations and Protections at Fraser Surrey Docks	1,600,000	1,600,000	16,000,000	5,000,000	-	24,200,000	24,200,000
<b>Sewer Relocations and Protections for Pattullo Bridge Replacement Project</b>							
FSA - Sewer Relocations and Protections for Pattullo Bridge Replacement Project	1,000,000	4,500,000	1,500,000	-	-	7,000,000	7,000,000
<b>South Surrey Interceptor Fraser River Crossing Scour Protection</b>							
FSA - South Surrey Interceptor Fraser River Crossing Scour Protection	1,700,000	500,000	-	-	-	2,200,000	2,200,000
<b>Surrey H2S Control Facility Replacement</b>							
FSA - Surrey H2S Control Facility Replacement	100,000	1,550,000	1,200,000	-	-	2,850,000	2,900,000
<b>West Ridge Pump Stations 1 and 2</b>							
FSA - Westridge PS 1 & 2 Upgrades	150,000	500,000	6,500,000	6,300,000	1,500,000	14,950,000	15,950,000

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>Westridge FM Replacement</b>							
FSA - Westridge FM Replacement	500,000	2,000,000	600,000	-	-	3,100,000	3,650,000
<b>WWTPs Electrical System Studies &amp; Upgrades</b>							
FSA - WWTPs Electrical System Studies & Upgrades	100,000	450,000	450,000	550,000	250,000	1,800,000	1,900,000
	<b>\$ 85,600,000</b>	<b>\$ 152,200,000</b>	<b>\$ 150,000,000</b>	<b>\$ 104,400,000</b>	<b>\$ 64,050,000</b>	<b>\$ 556,250,000</b>	<b>\$ 749,237,000</b>
<b>SD Infrastructure Resilience Capital</b>							
<b>AIWWTP Automation of Influent Gates</b>							
FSA - AIWWTP Automation of Influent Gates	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	1,000,000	\$ 3,700,000
<b>AIWWTP Cogeneration Backup Power</b>							
FSA - AIWWTP 69 kV Substation Modifications	600,000	2,550,000	2,950,000	2,150,000	-	8,250,000	8,500,000
FSA - AIWWTP Cogeneration Backup Power	16,300,000	3,100,000	750,000	-	-	20,150,000	75,003,000
<b>AIWWTP Influent System Remediation</b>							
FSA - AIWWTP Influent System Remediation	500,000	1,100,000	3,000,000	13,000,000	15,000,000	32,600,000	82,600,000
<b>AIWWTP PST Area Walkway &amp; Column Remediation</b>							
FSA - AIWWTP PST Area Walkway & Column Remediation	1,300,000	350,000	300,000	300,000	-	2,250,000	3,100,000
<b>FSA Easement Acquisition</b>							
FSA - FSA Easement Acquisition Program	50,000	-	-	-	-	50,000	1,500,000
<b>FSA Sewer Seismic Upgrades Implementation</b>							
FSA - FSA Sewer Seismic Upgrades Implementation	100,000	-	-	-	-	100,000	187,100,000
<b>Highbury Interceptor Air Treatment Facilities</b>							
VSA - Highbury Interceptor Air Treatment Facilities	1,000,000	700,000	-	-	-	1,700,000	11,500,000
<b>IWWTP Biogas Lines Relocation</b>							
VSA - IWWTP - Biogas Lines Relocation	3,200,000	500,000	-	-	-	3,700,000	5,780,000
<b>IWWTP Standby Diesel Generators</b>							
VSA - IWWTP Standby Diesel Generators	500,000	600,000	1,600,000	2,300,000	2,000,000	7,000,000	8,500,000
<b>New CSO Management Gates for New Westminster Interceptor</b>							
FSA - New CSO Management Gates for New Westminster Interceptor	350,000	3,250,000	1,000,000	1,200,000	-	5,800,000	5,925,000
<b>Ocean Park Trunk Crescent Section (OPC) Pipe Rehabilitation/Replacement</b>							
FSA - Ocean Park Trunk Crescent Section (OPC) Pipe Rehabilitation/Replacement	100,000	1,500,000	2,000,000	500,000	500,000	4,600,000	4,953,000
<b>SSI Sulfide Odour and Corrosion Control</b>							
FSA - SSI Sulfide Odour and Corrosion Control	1,450,000	4,000,000	1,500,000	-	-	6,950,000	7,700,000

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
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	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>VSA Easement Acquisition Program</b>							
VSA - VSA Easement Acquisition Program	50,000	-	-	-	-	50,000	670,000
<b>VSA Emergency Backup Power</b>							
VSA - VSA Emergency Backup Power	5,700,000	4,600,000	4,000,000	1,950,000	-	16,250,000	20,510,000
	<b>\$ 32,200,000</b>	<b>\$ 22,250,000</b>	<b>\$ 17,100,000</b>	<b>\$ 21,400,000</b>	<b>\$ 17,500,000</b>	<b>\$ 110,450,000</b>	<b>\$ 427,041,000</b>
<b>SD Infrastructure Upgrade Capital</b>							
<b>8th Avenue Interceptor Air Treatment Facilities</b>							
VSA - 8th Avenue Interceptor Air Treatment Facilities	\$ 650,000	\$ 500,000	\$ -	\$ -	\$ -	1,150,000	\$ 14,200,000
<b>AIWWTP Ammonia Removal</b>							
FSA - AIWWTP Ammonia Removal	100,000	-	-	-	-	100,000	112,900,000
<b>AIWWTP Biosolids Dryer</b>							
FSA - AIWWTP Biosolids Dryer	7,700,000	7,000,000	-	-	-	14,700,000	14,700,000
<b>AIWWTP DAF Polymer Building Replacement</b>							
FSA - AIWWTP DAF Polymer Building Replacement	300,000	200,000	50,000	-	-	550,000	550,000
<b>AIWWTP Electrical Distribution System Protection Control and Monitoring</b>							
FSA - AIWWTP Electrical Distribution System Protection Control and Monitoring	900,000	1,100,000	350,000	-	-	2,350,000	2,650,000
<b>AIWWTP Replacement of Protective Relays</b>							
FSA - AIWWTP Replacement of Protective Relays	750,000	500,000	400,000	-	-	1,650,000	3,258,000
<b>AIWWTP Secondary Bypass</b>							
FSA - AIWWTP Secondary Bypass	300,000	-	-	-	-	300,000	1,725,000
<b>All WWTPs Power Quality Monitoring &amp; Outage Alarming Network</b>							
FSA - All WWTPs Power Quality Monitoring & Outage Alarming Network	850,000	400,000	300,000	100,000	-	1,650,000	2,870,000
<b>Big Bend Forcemain - Gate Replacement</b>							
FSA - Big Bend Forcemain - Gate Replacement	-	-	-	-	50,000	50,000	2,680,000
<b>Combined Sewer Overflow Sampling Station Enhancements</b>							
FSA - Combined Sewer Overflow Sampling Station Enhancements	600,000	400,000	500,000	400,000	-	1,900,000	1,900,000
<b>FSA Flow Metering Program – Phase 1</b>							
FSA - FSA Flow Metering Program – Phase 1	800,000	800,000	500,000	-	-	2,100,000	2,700,000
<b>FSA Wastewater Meter Upgrades</b>							
FSA - FSA Wastewater Meter Upgrades	50,000	-	-	-	-	50,000	600,000
<b>Glenbrook Combined Trunk Sewer Separation</b>							
FSA - Glenbrook Combined Trunk Sewer Separation	600,000	-	-	-	-	600,000	74,950,000

**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
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	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>IWWTP Biosolids Dewatering Facility</b>							
VSA - IWWTP Biosolids Dewatering Facility	14,700,000	36,550,000	6,250,000	2,000,000	-	59,500,000	61,300,000
<b>IWWTP Provision of a Redundant 12.5 kV Feeder to Switch House</b>							
VSA - IWWTP Provision of a Redundant 12.5 kV Feeder to Switch House	300,000	150,000	-	-	-	450,000	850,000
<b>Lions Gate Sludge Thickener No. 2</b>							
NSA - Lions Gate Sludge Thickener No. 2	50,000	-	-	-	-	50,000	3,380,000
<b>LIWSA Wastewater Meter Upgrades</b>							
LSA - LIWSA Wastewater Meter Upgrades	50,000	50,000	50,000	50,000	-	200,000	300,000
<b>LIWWTP Ammonia Removal</b>							
LSA - LIWWTP Ammonia Removal	150,000	150,000	100,000	-	-	400,000	600,000
<b>LIWWTP Power Reliability</b>							
LSA - LIWWTP Power Reliability	1,800,000	1,900,000	1,000,000	200,000	-	4,900,000	5,702,000
<b>NSA Flow Metering Program – Phase 1</b>							
NSA - NSA Flow Metering Program – Phase 1	50,000	-	-	-	-	50,000	300,000
<b>NSSA Wastewater Meter Upgrades</b>							
NSA - NSSA Wastewater Meter Upgrades	50,000	-	-	-	-	50,000	300,000
<b>Sperling Pump Station Upgrade</b>							
FSA - Sperling Pump Station Upgrade	300,000	-	-	-	-	300,000	7,500,000
<b>SSI Influent Control Chamber Repair and Replace Gates</b>							
FSA - SSI Influent Control Chamber Repair and Replace Gates	400,000	750,000	-	-	-	1,150,000	1,305,000
<b>VSA Flow Metering Program – Phase 1</b>							
VSA - VSA Flow Metering Program – Phase 1	500,000	800,000	800,000	850,000	-	2,950,000	3,200,000
<b>VSA Wastewater Meter Upgrades</b>							
VSA - VSA Wastewater Meter Upgrades	50,000	-	-	-	-	50,000	464,000
	<b>\$ 32,000,000</b>	<b>\$ 51,250,000</b>	<b>\$ 10,300,000</b>	<b>\$ 3,600,000</b>	<b>\$ 50,000</b>	<b>\$ 97,200,000</b>	<b>\$ 320,884,000</b>
<b>SD Infrastructure Upgrade: Secondary Treatment Capital</b>							
<b>Iona Secondary Wastewater Treatment</b>							
VSA - Iona Secondary Treatment Upgrade	6,000,000	3,000,000	10,000,000	60,000,000	100,000,000	179,000,000	1,904,500,000
<b>North Shore WWTP Secondary Upgrade and Conveyance</b>							
NSA - North Shore WWTP Secondary Upgrade and Conveyance	176,100,000	336,300,000	191,500,000	36,800,000	600,000	741,300,000	777,900,000
	<b>\$ 182,100,000</b>	<b>\$ 339,300,000</b>	<b>\$ 201,500,000</b>	<b>\$ 96,800,000</b>	<b>\$ 100,600,000</b>	<b>\$ 920,300,000</b>	<b>\$ 2,682,400,000</b>



**GREATER VANCOUVER SEWERAGE DRAINAGE DISTRICT  
CAPITAL PROGRAMS PROJECT TOTALS  
LIQUID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>SD Opportunity Capital</b>							
<b>AIWWTP Hydrothermal Processing Pilot</b>							
FSA - AIWWTP Hydrothermal Processing Pilot	\$ 2,800,000	\$ 4,800,000	\$ 950,000	\$ 200,000	\$ -	\$ 8,750,000	\$ 8,980,000
<b>Fraser Sewerage Area Integrated Resource Recovery (IRR) Study</b>							
FSA - Fraser Sewerage Area Integrated Resource Recovery (IRR) Study	-	300,000	400,000	500,000	-	1,200,000	1,200,000
<b>LIWWTP Biogas Clean-up Project</b>							
LSA - LIWWTP Biogas Clean-up Project	5,000,000	2,000,000	500,000	-	-	7,500,000	10,400,000
<b>LIWWTP Pilot Digestion Optimization Facility</b>							
LSA - LIWWTP Pilot Digestion Optimization Facility	1,050,000	1,300,000	-	-	-	2,350,000	2,500,000
<b>North Surrey Interceptor - Port Mann Section - Odour Control</b>							
FSA - North Surrey Interceptor - Port Mann Section - Odour Control	750,000	5,100,000	1,600,000	-	-	7,450,000	7,500,000
	<u>\$ 9,600,000</u>	<u>\$ 13,500,000</u>	<u>\$ 3,450,000</u>	<u>\$ 700,000</u>	<u>\$ -</u>	<u>\$ 27,250,000</u>	<u>\$ 30,580,000</u>
<b>TOTAL CAPITAL EXPENDITURES</b>	<u>\$ 564,850,000</u>	<u>\$ 873,050,000</u>	<u>\$ 718,550,000</u>	<u>\$ 492,700,000</u>	<u>\$ 521,900,000</u>	<u>\$ 3,171,050,000</u>	<u>\$ 7,322,860,000</u>

<b>CAPITAL FUNDING</b>							
New External Borrowing	\$ 375,650,000	\$ 584,650,000	\$ 534,100,000	\$ 383,300,000	\$ 433,600,000	\$ 2,311,300,000	
Contribution to Capital	78,700,000	81,800,000	82,100,000	83,000,000	83,300,000	408,900,000	
Surplus from Prior Year/ Reserves	9,300,000	10,800,000	6,450,000	5,200,000	5,000,000	36,750,000	
External Funding - North Shore WWTP	96,700,000	190,300,000	94,400,000	21,200,000	-	402,600,000	
External Funding - Interagency	4,500,000	5,500,000	1,500,000	-	-	11,500,000	
	<u>\$ 564,850,000</u>	<u>\$ 873,050,000</u>	<u>\$ 718,550,000</u>	<u>\$ 492,700,000</u>	<u>\$ 521,900,000</u>	<u>\$ 3,171,050,000</u>	

<b>DEBT SERVICING</b>							
Debt Servicing - Existing	\$ 53,000,000	\$ 54,300,000	\$ 80,000,000	\$ 124,500,000	\$ 172,100,000	\$ 483,900,000	
Debt Servicing - From New Borrowing	1,300,000	25,700,000	44,500,000	47,600,000	40,300,000	159,400,000	
	<u>\$ 54,300,000</u>	<u>\$ 80,000,000</u>	<u>\$ 124,500,000</u>	<u>\$ 172,100,000</u>	<u>\$ 212,400,000</u>	<u>\$ 643,300,000</u>	

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
SOLID WASTE SERVICES  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Tipping Fees	\$ 93,385,063	\$ 98,635,607	\$ 93,451,819	\$ 98,362,329	5.3%	\$ 103,180,526	4.9%	\$ 108,758,157	5.4%	\$ 114,321,470	5.1%	\$ 119,945,930	4.9%
Energy Sales	5,796,681	5,642,942	5,777,099	5,927,304		5,681,540		6,239,530		6,401,758		6,568,204	
Other External Revenues	1,876,407	4,075,089	2,322,753	2,868,134		3,603,091		3,662,672		3,723,317		3,535,695	
<b>TOTAL REVENUES</b>	<b>\$ 101,058,151</b>	<b>\$ 108,353,638</b>	<b>\$ 101,551,671</b>	<b>\$ 107,157,766</b>	<b>5.5%</b>	<b>\$ 112,465,156</b>	<b>5.0%</b>	<b>\$ 118,660,359</b>	<b>5.5%</b>	<b>\$ 124,446,545</b>	<b>4.9%</b>	<b>\$ 130,049,829</b>	<b>4.5%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Solid Waste Operations													
Allocated Quality Control	\$ 22,760	\$ 16,621	\$ 25,917	\$ 26,437		\$ 30,919		\$ 32,120		\$ 33,081		\$ 32,754	
Ashcroft Ranch	197,410	213,155	1,149,289	587,543		364,995		372,166		379,495		387,005	
Engineers in Training	116,108	78,746	127,875	130,725		133,862		136,547		139,271		142,055	
Transfer Stations-Environmental Initiatives	4,516,937	4,757,414	6,379,410	6,303,746		6,332,422		6,662,568		6,837,184		7,005,687	
Landfills	28,888,160	37,591,183	31,098,048	33,507,835		32,662,871		34,328,439		34,921,414		34,880,040	
Transfer Station System	36,419,754	25,879,493	27,586,878	28,088,004		29,916,319		29,506,228		29,933,729		30,553,555	
Waste to Energy Facility	20,437,204	20,575,965	22,033,577	22,646,504		23,355,471		23,939,153		24,637,764		24,987,543	
	90,598,333	89,112,577	88,400,994	91,290,794	3.3%	92,796,859	1.6%	94,977,221	2.3%	96,881,938	2.0%	97,988,639	1.1%
Solid Waste Planning													
Policy and Facility Development	784,399	739,270	921,561	836,841		857,123		875,483		894,186		913,321	
Zero Waste Implementation	1,316,507	1,327,223	1,843,729	1,741,398		2,284,452		2,823,826		2,863,955		2,405,021	
Programs and Public Involvement	218,911	302,483	437,604	369,758		378,802		386,844		395,027		403,396	
	2,319,817	2,368,976	3,202,894	2,947,997	(8.0%)	3,520,377	19.4%	4,086,153	16.1%	4,153,168	1.6%	3,721,738	(10.4%)
Administration and Department Support	764,044	705,811	743,910	657,069	(11.7%)	672,320	2.3%	685,662	2.0%	699,216	2.0%	713,544	2.0%
Environmental Regulation and Enforcement	737,654	783,766	861,701	962,853	11.7%	985,400	2.3%	1,004,997	2.0%	1,024,799	2.0%	1,044,396	1.9%
Allocation of Centralized Costs	3,243,141	3,976,545	4,348,952	4,674,251	7.5%	4,258,379	(8.9%)	4,252,172	(0.1%)	4,306,778	1.3%	4,144,751	(3.8%)
<b>Total Operating Programs</b>	<b>97,662,989</b>	<b>96,947,675</b>	<b>97,558,451</b>	<b>100,532,964</b>	<b>3.0%</b>	<b>102,233,335</b>	<b>1.7%</b>	<b>105,006,205</b>	<b>2.7%</b>	<b>107,065,899</b>	<b>2.0%</b>	<b>107,613,068</b>	<b>0.5%</b>
Debt Service	739,234	581,197	1,041,891	2,494,949	139.5%	8,080,816	223.9%	13,283,987	64.4%	16,784,376	26.4%	19,094,889	13.8%
Contribution to Capital	2,655,928	10,824,766	2,951,329	4,129,853	39.9%	2,151,005	(47.9%)	370,167	(82.8%)	596,271	61.1%	3,341,871	460.5%
<b>TOTAL EXPENDITURES</b>	<b>\$ 101,058,151</b>	<b>\$ 108,353,638</b>	<b>\$ 101,551,671</b>	<b>\$ 107,157,766</b>	<b>5.5%</b>	<b>\$ 112,465,156</b>	<b>5.0%</b>	<b>\$ 118,660,359</b>	<b>5.5%</b>	<b>\$ 124,446,545</b>	<b>4.9%</b>	<b>\$ 130,049,829</b>	<b>4.5%</b>
<b>Household Impact</b>			\$ 56	\$ 57	1.1%	\$ 58	2.4%	\$ 61	3.9%	\$ 63	3.6%	\$ 65	3.6%

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
SOLID WASTE REGULATION  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Solid Waste Revenues	\$ 737,654	\$ 783,766	\$ 861,701	\$ 962,853	11.7%	\$ 985,400	2.3%	\$ 1,004,997	2.0%	\$ 1,024,799	2.0%	\$ 1,044,396	1.9%
<b>TOTAL REVENUES</b>	<b>\$ 737,654</b>	<b>\$ 783,766</b>	<b>\$ 861,701</b>	<b>\$ 962,853</b>	<b>11.7%</b>	<b>\$ 985,400</b>	<b>2.3%</b>	<b>\$ 1,004,997</b>	<b>2.0%</b>	<b>\$ 1,024,799</b>	<b>2.0%</b>	<b>\$ 1,044,396</b>	<b>1.9%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Environmental Regulation and Enforcement	\$ 658,235	\$ 713,647	\$ 781,486	\$ 901,103		\$ 922,204		\$ 940,550		\$ 959,082		\$ 978,012	
Administration and Department Support	79,419	70,119	80,215	61,750		63,196		64,447		65,717		66,384	
<b>TOTAL EXPENDITURES</b>	<b>\$ 737,654</b>	<b>\$ 783,766</b>	<b>\$ 861,701</b>	<b>\$ 962,853</b>	<b>11.7%</b>	<b>\$ 985,400</b>	<b>2.3%</b>	<b>\$ 1,004,997</b>	<b>2.0%</b>	<b>\$ 1,024,799</b>	<b>2.0%</b>	<b>\$ 1,044,396</b>	<b>1.9%</b>

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
CAPITAL PROGRAMS & PROJECT TOTALS  
SOLID WASTE SERVICES  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>CAPITAL EXPENDITURES</b>							
<b>SW Landfills Capital</b>							
Coquitlam Landfill Closure	\$ 4,500,000	\$ -	\$ -	\$ -	\$ -	\$ 4,500,000	\$ 5,000,000
Coquitlam Landfill East Closure	-	400,000	-	-	3,500,000	3,900,000	5,000,000
Coquitlam Landfill Fly Ash Cell 2 Closure Final Cover	3,200,000	-	-	-	-	3,200,000	3,200,000
Coquitlam Landfill Gas Collection Upgrades	1,000,000	-	-	-	-	1,000,000	3,300,000
Coquitlam Landfill Pump Station Upgrade	500,000	100,000	-	-	-	600,000	600,000
Coquitlam Landfill: Leachate Collection System Grade Realignment	200,000	480,000	320,000	-	-	1,000,000	1,000,000
	<u>\$ 9,400,000</u>	<u>\$ 980,000</u>	<u>\$ 320,000</u>	<u>\$ -</u>	<u>\$ 3,500,000</u>	<u>\$ 14,200,000</u>	<u>\$ 18,100,000</u>
<b>SW Opportunity Capital</b>							
WTE Facility District Heating Opportunities	210,000	2,090,000	-	-	-	2,300,000	2,300,000
	<u>\$ 210,000</u>	<u>\$ 2,090,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2,300,000</u>	<u>\$ 2,300,000</u>
<b>SW Transfer Stations Capital</b>							
Coquitlam Transfer Station Replacement	\$ 40,000,000	\$ 23,000,000	\$ -	\$ -	\$ -	\$ 63,000,000	\$ 70,200,000
Maple Ridge Transfer Station Upgrades	-	-	2,000,000	-	-	2,000,000	2,000,000
North Shore Transfer Station Compactor Replacement	-	-	-	2,000,000	-	2,000,000	2,000,000
Surrey Recycling and Waste Drop-Off	22,000,000	12,800,000	7,500,000	-	-	42,300,000	42,300,000
Surrey Transfer Station Building Upgrades	1,000,000	-	-	-	-	1,000,000	1,000,000
Surrey Transfer Station Compactor Replacement	2,000,000	-	-	-	-	2,000,000	2,000,000
	<u>\$ 65,000,000</u>	<u>\$ 35,800,000</u>	<u>\$ 9,500,000</u>	<u>\$ 2,000,000</u>	<u>\$ -</u>	<u>\$ 112,300,000</u>	<u>\$ 119,500,000</u>
<b>SW Waste to Energy Facility Capital</b>							
Biosolids Processing	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ 500,000
Bottom Ash Dischargers / Conveyors	500,000	-	-	-	-	500,000	1,700,000
Feed Hopper/Chute	2,300,000	-	-	-	-	2,300,000	2,600,000
Feedwater Pump Replacement	1,000,000	-	-	-	-	1,000,000	1,000,000
Furnace Liner Upgrade	800,000	-	-	-	-	800,000	2,500,000
Infrastructure Allowance	-	9,000,000	-	1,500,000	350,000	10,850,000	12,850,000
Primary Economizer Replacement	-	-	2,000,000	3,000,000	-	5,000,000	5,000,000
Refuse Crane	4,000,000	-	-	-	-	4,000,000	7,000,000
Scrubber	-	5,550,000	20,000,000	20,000,000	-	45,550,000	47,000,000
Second Pass Superheater Replacement	5,500,000	-	-	-	-	5,500,000	5,500,000
Secondary Economizers Replacement	-	4,000,000	2,000,000	-	-	6,000,000	6,000,000
	<u>\$ 14,600,000</u>	<u>\$ 18,550,000</u>	<u>\$ 24,000,000</u>	<u>\$ 24,500,000</u>	<u>\$ 350,000</u>	<u>\$ 82,000,000</u>	<u>\$ 91,650,000</u>
<b>TOTAL CAPITAL EXPENDITURES</b>	<u>\$ 89,210,000</u>	<u>\$ 57,420,000</u>	<u>\$ 33,820,000</u>	<u>\$ 26,500,000</u>	<u>\$ 3,850,000</u>	<u>\$ 210,800,000</u>	<u>\$ 231,550,000</u>

<b>CAPITAL FUNDING</b>							
<b>New External Borrowing</b>	\$ 86,010,000	\$ 53,320,000	\$ 31,620,000	\$ 26,100,000	\$ 3,250,000	\$ 200,300,000	
<b>Surplus from Prior Year</b>	3,200,000	4,100,000	2,200,000	400,000	600,000	10,500,000	
	<u>\$ 89,210,000</u>	<u>\$ 57,420,000</u>	<u>\$ 33,820,000</u>	<u>\$ 26,500,000</u>	<u>\$ 3,850,000</u>	<u>\$ 210,800,000</u>	

<b>DEBT SERVICING</b>							
<b>Debt Servicing - Existing</b>	\$ 1,800,000	\$ 2,500,000	\$ 8,100,000	\$ 13,300,000	\$ 16,800,000	\$ 42,500,000	
<b>Debt Servicing - From New Borrowing</b>	700,000	5,600,000	5,200,000	3,500,000	2,300,000	17,300,000	
	<u>\$ 2,500,000</u>	<u>\$ 8,100,000</u>	<u>\$ 13,300,000</u>	<u>\$ 16,800,000</u>	<u>\$ 19,100,000</u>	<u>\$ 59,800,000</u>	

**METRO VANCOUVER HOUSING CORPORATION  
HOUSING  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Housing Rents	\$ 36,885,649	\$ 38,630,214	\$ 38,839,322	\$ 39,309,579	1.2%	\$ 40,750,068	3.7%	\$ 42,125,813	3.4%	\$ 43,166,756	2.5%	\$ 44,244,519	2.5%
Housing Subsidies	3,792,823	2,915,541	2,045,617	1,088,554		1,109,749		1,137,159		1,165,283		835,744	
Other External Revenues	1,034,000	1,155,285	1,157,147	870,086		831,124		846,792		792,711		802,359	
Reserves	6,928,686	5,708,265	8,694,919	10,001,242		10,043,042		11,452,242		13,614,242		14,004,242	
<b>TOTAL REVENUES</b>	<b>\$ 48,641,158</b>	<b>\$ 48,409,305</b>	<b>\$ 50,737,005</b>	<b>\$ 51,269,461</b>	<b>1.0%</b>	<b>\$ 52,733,983</b>	<b>2.9%</b>	<b>\$ 55,562,006</b>	<b>5.4%</b>	<b>\$ 58,738,992</b>	<b>5.7%</b>	<b>\$ 59,886,864</b>	<b>2.0%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Property Operations	\$ 15,584,475	\$ 14,971,816	\$ 16,519,600	\$ 17,243,436		\$ 17,640,617		\$ 18,057,604		\$ 18,490,697		\$ 18,830,530	
Maintenance	1,934,445	1,151,203	1,093,831	1,265,069		1,293,025		1,318,315		1,344,092		1,370,249	
Financial Services	553,347	541,266	659,856	670,587		686,580		700,407		714,453		728,903	
Tenant Program and Services	470,041	466,039	565,035	578,388		591,911		603,907		616,098		628,553	
Site Administration	1,155,924	1,433,961	1,544,372	1,474,480		1,508,991		1,540,070		1,571,696		1,604,623	
Administration and Department Support	879,580	677,784	881,120	1,210,353		1,239,567		1,266,417		1,293,682		1,320,359	
	20,577,812	19,242,069	21,263,814	22,442,313	5.5%	22,960,691	2.3%	23,486,720	2.3%	24,030,718	2.3%	24,483,217	1.9%
Communications Program	-	-	20,000	40,000	100.0%	30,000	(25.0%)	30,000	0.0%	30,000	0.0%	30,000	0.0%
Allocation of Centralized Costs	2,080,217	4,124,906	2,417,680	2,119,752	(12.3%)	2,036,534	(3.9%)	1,885,711	(7.4%)	1,737,102	(7.9%)	1,601,249	(7.8%)
Total Operating Programs	22,658,028	23,366,975	23,701,494	24,602,065	3.8%	25,027,225	1.7%	25,402,431	1.5%	25,797,820	1.6%	26,114,466	1.2%
Capital Replacement	6,928,686	5,708,265	8,694,919	10,001,242	15.0%	10,043,042	0.4%	11,452,242	14.0%	13,614,242	18.9%	14,004,242	2.9%
Debt Service	15,436,335	12,531,806	8,163,506	6,201,762	(24.0%)	4,847,835	(21.8%)	4,529,937	(6.6%)	4,514,744	(0.3%)	4,322,551	(4.3%)
Contribution to Capital Replacement Reserve	1,719,533	1,719,533	1,719,289	1,720,636	0.1%	1,729,993	0.5%	1,739,550	0.6%	1,739,550	0.0%	1,739,550	0.0%
Contribution to Reserve	882,145	1,228,407	8,457,797	8,743,756	3.4%	11,085,888	26.8%	12,437,846	12.2%	13,072,636	5.1%	13,706,055	4.8%
<b>TOTAL EXPENDITURES</b>	<b>\$ 47,624,727</b>	<b>\$ 44,554,986</b>	<b>\$ 50,737,005</b>	<b>\$ 51,269,461</b>	<b>1.0%</b>	<b>\$ 52,733,983</b>	<b>2.9%</b>	<b>\$ 55,562,006</b>	<b>5.4%</b>	<b>\$ 58,738,992</b>	<b>5.7%</b>	<b>\$ 59,886,864</b>	<b>2.0%</b>

**METRO VANCOUVER HOUSING CORPORATION**  
**CAPITAL PROGRAMS AND PROJECT TOTALS**  
**HOUSING**  
**2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>CAPITAL EXPENDITURES</b>							
<b>Housing Development</b>							
Heather Place - Building A	\$ 12,150,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ 13,150,000	\$ 28,500,000
Kingston Gardens - Phase 1	9,167,000	18,333,000	750,000	-	-	28,250,000	29,000,000
	<u>\$ 21,317,000</u>	<u>\$ 19,333,000</u>	<u>\$ 750,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 41,400,000</u>	<u>\$ 57,500,000</u>
<b>CAPITAL FUNDING</b>							
Reserve Funding	21,317,000	19,333,000	750,000	-	-	41,400,000	
	<u>\$ 21,317,000</u>	<u>\$ 19,333,000</u>	<u>\$ 750,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 41,400,000</u>	

**METRO VANCOUVER DISTRICTS  
REGIONAL DISTRICT SUMMARY  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 48,862,866	\$ 51,870,510	\$ 58,792,185	\$ 61,188,452	4.1%	\$ 63,527,493	3.8%	\$ 66,130,502	4.1%	\$ 68,505,478	3.6%	\$ 71,379,090	4.2%
Compensation Services Revenue	323,437	330,835	359,960	478,280	32.9%	491,233	2.7%	494,184	0.6%	499,683	1.1%	505,722	1.2%
Collective Bargaining Services Revenue	741,539	813,019	763,645	867,558	13.6%	891,547	2.8%	898,424	0.8%	909,852	1.3%	922,287	1.4%
Electoral Area Requisition	363,567	371,734	382,424	396,510	3.7%	410,773	3.6%	417,873	1.7%	433,328	3.7%	442,870	2.2%
GPS User Fees	324,316	340,719	310,688	314,180	1.1%	319,733	1.8%	324,686	1.5%	329,481	1.5%	334,533	1.5%
User Fees	3,444,342	3,557,467	2,845,113	2,853,741	0.3%	2,947,153	3.3%	3,065,170	4.0%	3,183,583	3.9%	3,299,609	3.6%
Non-Road Diesel Permit Fees	1,849,982	2,046,817	2,365,000	2,450,000	3.6%	2,350,000	(4.1%)	2,150,000	(8.5%)	2,150,000	0.0%	2,050,000	(4.7%)
Love Food Hate Waste	-	-	184,000	556,000	202.2%	790,000	42.1%	1,090,000	38.0%	1,090,000	0.0%	1,026,000	(5.9%)
Zero Waste Conference	66,159	76,830	105,000	180,000	71.4%	189,375	5.2%	295,000	55.8%	331,250	12.3%	380,000	14.7%
Other External Revenues	3,524,737	4,114,822	3,547,428	3,436,836	(3.1%)	3,450,927	0.4%	3,508,956	1.7%	3,561,832	1.5%	3,580,320	0.5%
Sustainability Reserve Funds	330,717	121,414	597,669	70,000	(88.3%)	-	(100.0%)	-	0.0%	-	0.0%	-	0.0%
Reserves	1,525,709	1,644,212	3,558,558	2,412,377	(32.2%)	1,713,234	(29.0%)	1,275,130	(25.6%)	1,106,803	(13.2%)	1,086,672	(1.8%)
<b>TOTAL REVENUES</b>	<b>\$ 61,357,371</b>	<b>\$ 65,288,379</b>	<b>\$ 73,811,670</b>	<b>\$ 75,203,934</b>	<b>1.9%</b>	<b>\$ 77,081,468</b>	<b>2.5%</b>	<b>\$ 79,649,925</b>	<b>3.3%</b>	<b>\$ 82,101,289</b>	<b>3.1%</b>	<b>\$ 85,007,103</b>	<b>3.5%</b>

<b>EXPENDITURES</b>													
Greater Vancouver Regional District													
Affordable Housing	\$ 168,391	\$ 119,164	\$ 2,040,909	\$ 1,839,479	(9.9%)	\$ 1,831,684	(0.4%)	\$ 1,843,014	0.6%	\$ 1,853,849	0.6%	\$ 1,865,284	0.6%
Air Quality	8,594,726	9,086,605	11,112,108	10,648,317	(4.2%)	10,671,928	0.2%	10,880,848	2.0%	11,140,652	2.4%	11,288,791	1.3%
E911 Emergency Telephone Service	4,100,736	4,184,972	4,304,583	4,411,585	2.5%	4,521,227	2.5%	4,633,573	2.5%	4,748,693	2.5%	4,866,654	2.5%
Electoral Area Service	534,487	365,575	701,098	651,984	(7.0%)	607,247	(6.9%)	649,347	6.9%	704,802	8.5%	624,344	(11.4%)
General Government	4,203,493	5,375,475	6,522,714	6,994,002	7.2%	7,240,036	3.5%	7,687,935	6.2%	7,715,315	0.4%	7,899,691	2.4%
Labour Relations	2,191,507	2,421,834	2,665,731	2,849,713	6.9%	2,775,373	(2.6%)	2,833,381	2.1%	2,903,546	2.5%	2,960,324	2.0%
Regional Emergency Management	313,292	338,345	202,331	228,104	12.7%	237,868	4.3%	222,944	(6.3%)	176,170	(21.0%)	182,547	3.6%
Regional Global Positioning System	533,324	257,659	345,688	549,880	59.1%	356,361	(35.2%)	362,266	1.7%	368,038	1.6%	374,092	1.6%
Regional Parks	33,973,442	35,482,626	42,065,706	42,679,708	1.5%	43,355,907	1.6%	45,077,766	4.0%	46,526,497	3.2%	48,241,906	3.7%
Regional Planning	2,689,585	2,703,612	3,173,263	3,527,732	11.2%	3,520,119	(0.2%)	3,580,243	1.7%	3,570,134	(0.3%)	3,651,788	2.3%
Regional Prosperity Initiative	-	-	281,382	484,500	72.2%	1,020,000	110.5%	1,530,000	50.0%	2,040,000	33.3%	2,550,000	25.0%
Sasamat Fire Protection Service	254,408	866,261	396,157	338,928	(14.4%)	943,718	178.4%	348,607	(63.1%)	353,593	1.4%	501,683	41.9%
<b>TOTAL EXPENDITURES</b>	<b>\$ 57,557,391</b>	<b>\$ 61,202,128</b>	<b>\$ 73,811,670</b>	<b>\$ 75,203,934</b>	<b>1.9%</b>	<b>\$ 77,081,468</b>	<b>2.5%</b>	<b>\$ 79,649,925</b>	<b>3.3%</b>	<b>\$ 82,101,289</b>	<b>3.1%</b>	<b>\$ 85,007,103</b>	<b>3.5%</b>

<b>Household Impact</b>			\$ 54	\$ 55	2.6%	\$ 56	2.3%	\$ 58	2.6%	\$ 59	2.1%	\$ 61	2.7%
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**METRO VANCOUVER REGIONAL DISTRICT  
AFFORDABLE HOUSING  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	%	2020 FORECAST	%	2021 FORECAST	%	2022 FORECAST	%	2023 FORECAST	%
<b>REVENUES</b>													
MVRD Requisitions	\$ 177,591	\$ 407,304	\$ 2,018,817	\$ 1,839,479	(8.9%)	\$ 1,831,684	(0.4%)	\$ 1,843,014	0.6%	\$ 1,853,849	0.6%	\$ 1,865,284	0.6%
Other External Revenues	36,427		22,092	-		-		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 214,018</b>	<b>\$ 407,304</b>	<b>\$ 2,040,909</b>	<b>\$ 1,839,479</b>	<b>(9.9%)</b>	<b>\$ 1,831,684</b>	<b>(0.4%)</b>	<b>\$ 1,843,014</b>	<b>0.6%</b>	<b>\$ 1,853,849</b>	<b>0.6%</b>	<b>\$ 1,865,284</b>	<b>0.6%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Housing Policy and Planning	\$ 168,391	\$ 119,164	\$ 969,271	\$ 724,823		\$ 742,313		\$ 757,625		\$ 773,184		\$ 789,086	
Contribution to Reserve	-	-	1,000,000	1,000,000		1,000,000		1,000,000		1,000,000		1,000,000	
	\$ 168,391	\$ 119,164	\$ 1,969,271	\$ 1,724,823	(12.4%)	\$ 1,742,313	1.0%	\$ 1,757,625	0.9%	\$ 1,773,184	0.9%	\$ 1,789,086	0.9%
Communications Program	-	-	-	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	-	-	71,638	89,656	25.2%	64,371	(28.2%)	60,389	(6.2%)	55,665	(7.8%)	51,198	(8.0%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 168,391</b>	<b>\$ 119,164</b>	<b>\$ 2,040,909</b>	<b>\$ 1,839,479</b>	<b>(9.9%)</b>	<b>\$ 1,831,684</b>	<b>(0.4%)</b>	<b>\$ 1,843,014</b>	<b>0.6%</b>	<b>\$ 1,853,849</b>	<b>0.6%</b>	<b>\$ 1,865,284</b>	<b>0.6%</b>



**METRO VANCOUVER REGIONAL DISTRICT  
AIR QUALITY  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 3,771,560	\$ 3,950,376	\$ 4,545,845	\$ 4,878,970	7.3%	\$ 5,402,542	10.7%	\$ 5,683,122	5.2%	\$ 5,778,619	1.7%	\$ 5,882,266	1.8%
User Fees	1,983,457	2,103,071	1,800,000	1,800,000		1,900,000		2,000,000		2,100,000		2,200,000	
Non-Road Diesel Permit Fees	1,849,982	2,046,817	2,365,000	2,450,000		2,350,000		2,150,000		2,150,000		2,050,000	
Other External Revenues	572,247	544,248	492,400	517,400		547,400		582,400		612,400		622,400	
Sustainability Reserve Funds	272,117	38,227	539,356	70,000		-		-		-		-	
Reserves	708,214	544,973	1,369,507	931,947		471,986		465,326		499,633		534,125	
<b>TOTAL REVENUES</b>	<b>\$ 9,157,576</b>	<b>\$ 9,227,712</b>	<b>\$ 11,112,108</b>	<b>\$ 10,648,317</b>	<b>(4.2%)</b>	<b>\$ 10,671,928</b>	<b>0.2%</b>	<b>\$ 10,880,848</b>	<b>2.0%</b>	<b>\$ 11,140,652</b>	<b>2.4%</b>	<b>\$ 11,288,791</b>	<b>1.3%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Ambient Air Quality Monitoring	\$ 1,994,528	\$ 1,870,565	\$ 2,037,931	\$ 2,186,944		\$ 2,081,628		\$ 2,122,782		\$ 2,209,656		\$ 2,262,416	
Air Quality and Climate Change Policy	1,783,003	2,009,755	1,795,233	1,657,057		1,689,762		1,761,459		1,844,555		1,885,171	
Air Quality Bylaw and Regulation Development	660,413	826,438	1,615,742	1,666,193		1,722,405		1,756,901		1,806,866		1,842,580	
Administration and Department Support	436,492	429,315	447,546	425,330		435,055		443,359		451,783		460,402	
Regional Sustainability Initiatives	272,117	38,227	539,356	70,000		-		-		-		-	
	5,146,552	5,174,300	6,435,808	6,005,524	(6.7%)	5,928,850	(1.3%)	6,084,501	2.6%	6,312,860	3.8%	6,450,569	2.2%
Communications Program	1,983	55,836	100,000	106,000	6.0%	118,000	11.3%	93,000	(21.2%)	93,000	0.0%	93,000	0.0%
Environmental Regulation and Enforcement	2,191,984	2,741,153	2,982,390	3,033,392		3,061,354		3,129,458		3,190,919		3,251,736	
Non Road Diesel Provision	767,080	524,812	640,000	625,000		725,000		800,000		825,000		825,000	
	2,959,064	3,265,965	3,622,390	3,658,392	1.0%	3,786,354	3.5%	3,929,458	3.8%	4,015,919	2.2%	4,076,736	1.5%
Allocation of Centralized Support Costs	487,127	590,504	953,910	878,401	(7.9%)	838,724	(4.5%)	773,889	(7.7%)	718,873	(7.1%)	668,486	(7.0%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 8,594,726</b>	<b>\$ 9,086,605</b>	<b>\$ 11,112,108</b>	<b>\$ 10,648,317</b>	<b>(4.2%)</b>	<b>\$ 10,671,928</b>	<b>0.2%</b>	<b>\$ 10,880,848</b>	<b>2.0%</b>	<b>\$ 11,140,652</b>	<b>2.4%</b>	<b>\$ 11,288,791</b>	<b>1.3%</b>

**METRO VANCOUVER REGIONAL DISTRICT  
AIR QUALITY REGULATION  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Air Quality Revenues	\$ 3,199,323	\$ 3,724,081	\$ 3,622,390	\$ 3,658,392	1.0%	\$ 3,786,354	3.5%	\$ 3,929,458	3.8%	\$ 4,015,919	2.2%	\$ 4,076,736	1.5%
<b>TOTAL REVENUES</b>	<b>\$ 3,199,323</b>	<b>\$ 3,724,081</b>	<b>\$ 3,622,390</b>	<b>\$ 3,658,392</b>	<b>1.0%</b>	<b>\$ 3,786,354</b>	<b>3.5%</b>	<b>\$ 3,929,458</b>	<b>3.8%</b>	<b>\$ 4,015,919</b>	<b>2.2%</b>	<b>\$ 4,076,736</b>	<b>1.5%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Environmental Regulation and Enforcement	\$ 2,033,146	\$ 2,580,815	\$ 2,726,183	\$ 2,836,160		\$ 2,859,505		\$ 2,923,613		\$ 2,981,019		\$ 3,039,702	
Non Road Diesel Provision	767,080	524,812	640,000	625,000		725,000		800,000		825,000		825,000	
Administration and Department Support	158,838	160,338	256,207	197,232		201,849		205,845		209,900		212,034	
<b>TOTAL EXPENDITURES</b>	<b>\$ 2,959,064</b>	<b>\$ 3,265,965</b>	<b>\$ 3,622,390</b>	<b>\$ 3,658,392</b>	<b>1.0%</b>	<b>\$ 3,786,354</b>	<b>3.5%</b>	<b>\$ 3,929,458</b>	<b>3.8%</b>	<b>\$ 4,015,919</b>	<b>2.2%</b>	<b>\$ 4,076,736</b>	<b>1.5%</b>

METRO VANCOUVER REGIONAL DISTRICT  
 E911 EMERGENCY TELEPHONE SERVICE  
 2019 BUDGET REVIEW  
 2019-2023 FINANCIAL PLAN

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 4,060,273	\$ 4,118,674	\$ 4,236,501	\$ 4,344,017	2.5%	\$ 4,451,980	2.5%	\$ 4,562,606	2.5%	\$ 4,676,513	2.5%	\$ 4,792,680	2.5%
Other External Revenues	68,432	66,426	68,082	67,568		69,247		70,967		72,180		73,974	
<b>TOTAL REVENUES</b>	<b>\$ 4,128,705</b>	<b>\$ 4,185,100</b>	<b>\$ 4,304,583</b>	<b>\$ 4,411,585</b>	<b>2.5%</b>	<b>\$ 4,521,227</b>	<b>2.5%</b>	<b>\$ 4,633,573</b>	<b>2.5%</b>	<b>\$ 4,748,693</b>	<b>2.5%</b>	<b>\$ 4,866,654</b>	<b>2.5%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Emergency Telephone Service	\$ 4,019,816	\$ 4,102,857	\$ 4,220,179	\$ 4,325,083		\$ 4,432,575		\$ 4,542,719		\$ 4,655,581		\$ 4,771,229	
Allocation of Centralized Support Costs	80,920	82,115	84,404	86,502		88,652		90,854		93,112		95,425	
<b>TOTAL EXPENDITURES</b>	<b>\$ 4,100,736</b>	<b>\$ 4,184,972</b>	<b>\$ 4,304,583</b>	<b>\$ 4,411,585</b>	<b>2.5%</b>	<b>\$ 4,521,227</b>	<b>2.5%</b>	<b>\$ 4,633,573</b>	<b>2.5%</b>	<b>\$ 4,748,693</b>	<b>2.5%</b>	<b>\$ 4,866,654</b>	<b>2.5%</b>

**METRO VANCOUVER REGIONAL DISTRICT  
ELECTORAL AREA SERVICE  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Electoral Area Requisition	\$ 363,567	\$ 371,734	\$ 382,424	\$ 396,510	3.7%	\$ 410,773	3.6%	\$ 417,873	1.7%	\$ 433,328	3.7%	\$ 442,870	2.2%
User Fees	3,283	13,584	10,000	10,000		10,000		10,000		10,000		10,000	
Other External Revenues	155,664	58,330	165,834	171,474		171,474		171,474		171,474		171,474	
Reserves	57,500	17,514	142,840	74,000		15,000		50,000		90,000		-	
<b>TOTAL REVENUES</b>	<b>\$ 580,014</b>	<b>\$ 461,162</b>	<b>\$ 701,098</b>	<b>\$ 651,984</b>	<b>(7.0%)</b>	<b>\$ 607,247</b>	<b>(6.9%)</b>	<b>\$ 649,347</b>	<b>6.9%</b>	<b>\$ 704,802</b>	<b>8.5%</b>	<b>\$ 624,344</b>	<b>(11.4%)</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Administration	\$ 381,671	\$ 260,170	\$ 339,946	\$ 369,634		\$ 329,635		\$ 370,892		\$ 327,245		\$ 341,803	
Building Inspections	13,728	13,246	30,544	20,966		21,404		21,780		22,163		22,541	
Local Government Election	-	-	117,840	-		-		-		122,141		-	
Fraser Valley Library Services	1,000	1,500	2,000	2,000		2,000		2,000		2,000		2,000	
Emergency Planning	-	-	6,000	12,000		18,000		24,000		30,000		30,000	
	396,399	274,916	496,330	404,600	(18.5%)	371,039	(8.3%)	418,672	12.8%	503,549	20.3%	396,344	(21.3%)
Contribution to Election Reserve	-	-	-	30,000		30,000		30,000		-		30,000	
Contribution to Reserve	111,421	58,330	165,834	171,474	21.5%	171,474	0.0%	171,474	0.0%	171,474	(14.9%)	171,474	17.5%
	111,421	58,330	165,834	201,474		201,474		201,474		171,474		201,474	
Allocation of Centralized Support Costs	26,667	32,329	38,934	45,910	17.9%	34,734	(24.3%)	29,201	(15.9%)	29,779	2.0%	26,526	(10.9%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 534,487</b>	<b>\$ 365,575</b>	<b>\$ 701,098</b>	<b>\$ 651,984</b>	<b>(7.0%)</b>	<b>\$ 607,247</b>	<b>(6.9%)</b>	<b>\$ 649,347</b>	<b>6.9%</b>	<b>\$ 704,802</b>	<b>8.5%</b>	<b>\$ 624,344</b>	<b>(11.4%)</b>

**METRO VANCOUVER REGIONAL DISTRICT  
GENERAL GOVERNMENT  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 4,660,335	\$ 4,769,656	\$ 4,848,214	\$ 4,943,002	2.0%	\$ 5,127,751	3.7%	\$ 5,157,567	0.6%	\$ 5,146,190	(0.2%)	\$ 5,343,258	3.8%
Love Food Hate Waste	-	-	184,000	556,000		790,000		1,090,000		1,090,000		1,026,000	
Zero Waste Conference	66,159	76,830	105,000	180,000		189,375		295,000		331,250		380,000	
Other External Revenues	759,763	1,528,781	990,500	1,010,000		992,910		995,368		997,875		1,000,433	
Reserves	100,000	110,000	395,000	305,000		140,000		150,000		150,000		150,000	
<b>TOTAL REVENUES</b>	<b>\$ 5,586,257</b>	<b>\$ 6,485,267</b>	<b>\$ 6,522,714</b>	<b>\$ 6,994,002</b>	<b>7.2%</b>	<b>\$ 7,240,036</b>	<b>3.5%</b>	<b>\$ 7,687,935</b>	<b>6.2%</b>	<b>\$ 7,715,315</b>	<b>0.4%</b>	<b>\$ 7,899,691</b>	<b>2.4%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Audit, Legal and Insurance	\$ 79,027	\$ 115,652	\$ 110,929	\$ 110,929		\$ 111,774		\$ 112,636		\$ 113,515		\$ 114,412	
Board and Legislative Services	1,556,298	2,361,937	2,464,286	2,524,121		2,548,478		2,599,602		2,656,755		2,890,128	
External Contributions	405,000	415,000	425,000	435,000		445,000		455,000		455,000		455,000	
Leadership and Engagement	270,150	252,025	604,541	488,440		495,313		502,330		509,494		516,807	
Mosquito Control Contract	93,554	109,128	115,500	135,000		117,810		120,166		122,569		125,021	
Regional Culture	36,075	36,480	35,345	36,077		36,825		37,464		38,111		38,773	
Sustainability Fund	347,000	347,000	347,000	347,000		347,000		347,000		347,000		347,000	
	2,787,105	3,637,222	4,102,601	4,076,567	(0.6%)	4,102,200	0.6%	4,174,198	1.8%	4,242,444	1.6%	4,487,141	5.8%
Communications Program	296,200	476,958	1,001,500	1,032,000	3.0%	1,007,000	(2.4%)	1,002,000	(0.5%)	972,000	(3.0%)	972,000	0.0%
Collaboration Initiatives													
National Zero Waste Council	353,484	364,141	383,128	383,128		383,128		383,128		383,128		383,128	
Love Food Hate Waste	87,113	76,438	184,000	556,000		790,000		1,090,000		1,090,000		1,026,000	
Zero Waste Conference	180,363	268,383	317,000	392,000		399,375		505,000		541,250		590,000	
Circular Economy	-	-	-	32,500		32,500		32,500		-		-	
	620,960	708,962	884,128	1,363,628	54.2%	1,605,003	17.7%	2,010,628	25.3%	2,014,378	0.2%	1,999,128	(0.8%)
Allocation of Centralized Support Costs	499,227	552,333	534,485	521,807	(2.4%)	525,833	0.8%	501,109	(4.7%)	486,493	(2.9%)	441,422	(9.3%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 4,203,493</b>	<b>\$ 5,375,475</b>	<b>\$ 6,522,714</b>	<b>\$ 6,994,002</b>	<b>7.2%</b>	<b>\$ 7,240,036</b>	<b>3.5%</b>	<b>\$ 7,687,935</b>	<b>6.2%</b>	<b>\$ 7,715,315</b>	<b>0.4%</b>	<b>\$ 7,899,691</b>	<b>2.4%</b>

\* Regional Prosperity Initiatives established as Statutory Function in 2017 and 2018

**METRO VANCOUVER REGIONAL DISTRICT  
LABOUR RELATIONS  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 1,033,691	\$ 1,054,360	\$ 1,086,930	\$ 946,739	(12.9%)	\$ 986,759	4.2%	\$ 1,021,072	3.5%	\$ 1,060,268	3.8%	\$ 1,086,748	2.5%
Compensation Services Revenue	323,437	330,835	359,960	478,280		491,233		494,184		499,683		505,722	
Collective Bargaining Services Revenue	741,539	813,019	763,645	867,558		891,547		898,424		909,852		922,287	
Other External Revenues	386,296	437,730	405,196	391,190		405,834		419,701		433,743		445,567	
Reserves	123,000	18,865	50,000	165,946		-		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 2,607,963</b>	<b>\$ 2,654,809</b>	<b>\$ 2,665,731</b>	<b>\$ 2,849,713</b>	<b>6.9%</b>	<b>\$ 2,775,373</b>	<b>(2.6%)</b>	<b>\$ 2,833,381</b>	<b>2.1%</b>	<b>\$ 2,903,546</b>	<b>2.5%</b>	<b>\$ 2,960,324</b>	<b>2.0%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Information & Advisory Services	\$ 997,184	\$ 1,064,789	\$ 1,076,864	\$ 1,199,104		\$ 1,088,812		\$ 1,141,476		\$ 1,194,526		\$ 1,233,094	
Compensation Services	256,270	319,479	424,847	516,329		528,793		539,499		550,368		561,476	
Collective Bargaining	695,701	743,791	919,952	910,279		932,357		951,720		971,398		991,522	
	1,949,154	2,128,059	2,421,663	2,625,712	8.4%	2,549,962	(2.9%)	2,632,695	3.2%	2,716,292	3.2%	2,786,092	2.6%
Allocation of Centralized Support Costs	242,353	293,775	244,068	224,001	(8.2%)	225,411	0.6%	200,686	(11.0%)	187,254	(6.7%)	174,232	(7.0%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 2,191,507</b>	<b>\$ 2,421,834</b>	<b>\$ 2,665,731</b>	<b>\$ 2,849,713</b>	<b>6.9%</b>	<b>\$ 2,775,373</b>	<b>(2.6%)</b>	<b>\$ 2,833,381</b>	<b>2.1%</b>	<b>\$ 2,903,546</b>	<b>2.5%</b>	<b>\$ 2,960,324</b>	<b>2.0%</b>

METRO VANCOUVER REGIONAL DISTRICT  
 REGIONAL EMERGENCY MANAGEMENT  
 2019 BUDGET REVIEW  
 2019-2023 FINANCIAL PLAN

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 150,000	\$ 150,000	\$ 155,000	\$ 159,000	2.6%	\$ 163,000	2.5%	\$ 167,000	2.5%	\$ 170,000	1.8%	\$ 173,000	1.8%
Other External Revenues	150,000	150,000	-	-		-		-		-		-	
Reserves	-	38,345	47,331	69,104		74,868		55,944		6,170		9,547	
<b>TOTAL REVENUES</b>	<b>\$ 300,000</b>	<b>\$ 338,345</b>	<b>\$ 202,331</b>	<b>\$ 228,104</b>	<b>12.7%</b>	<b>\$ 237,868</b>	<b>4.3%</b>	<b>\$ 222,944</b>	<b>(6.3%)</b>	<b>\$ 176,170</b>	<b>(21.0%)</b>	<b>\$ 182,547</b>	<b>3.6%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Regional Emergency Management	\$ 313,292	\$ 323,345	\$ 192,214	\$ 217,242		\$ 226,541		\$ 212,328		\$ 167,781		\$ 173,854	
Allocation of Centralized Support Costs	-	15,000	10,117	10,862		11,327		10,616		8,389		8,693	
<b>TOTAL EXPENDITURES</b>	<b>\$ 313,292</b>	<b>\$ 338,345</b>	<b>\$ 202,331</b>	<b>\$ 228,104</b>	<b>12.7%</b>	<b>\$ 237,868</b>	<b>4.3%</b>	<b>\$ 222,944</b>	<b>(6.3%)</b>	<b>\$ 176,170</b>	<b>(21.0%)</b>	<b>\$ 182,547</b>	<b>3.6%</b>

METRO VANCOUVER REGIONAL DISTRICT  
 REGIONAL GLOBAL POSITIONING SYSTEM  
 2019 BUDGET REVIEW  
 2019-2023 FINANCIAL PLAN

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
User Fees	\$ 324,316	\$ 340,719	\$ 310,688	\$ 314,180	1.1%	\$ 319,733	1.8%	\$ 324,686	1.5%	\$ 329,481	1.5%	\$ 334,533	1.5%
Other External Revenues	49,667	58,561	35,000	35,700		36,628		37,580		38,557		39,559	
Reserves	257,397	-	-	200,000		-		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 631,380</b>	<b>\$ 399,280</b>	<b>\$ 345,688</b>	<b>\$ 549,880</b>	<b>59.1%</b>	<b>\$ 356,361</b>	<b>(35.2%)</b>	<b>\$ 362,266</b>	<b>1.7%</b>	<b>\$ 368,038</b>	<b>1.6%</b>	<b>\$ 374,092</b>	<b>1.6%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Regional Global Positioning System	\$ 481,832	\$ 164,527	\$ 283,140	\$ 488,844		\$ 296,042		\$ 302,755		\$ 309,606		\$ 316,617	
Contribution to Reserve	-	30,709	31,323	31,949		32,780		33,632		34,506		35,403	
Allocation of Centralized Support Costs	51,492	62,423	31,225	29,087		27,539		25,879		23,926		22,072	
<b>TOTAL EXPENDITURES</b>	<b>\$ 533,324</b>	<b>\$ 257,659</b>	<b>\$ 345,688</b>	<b>\$ 549,880</b>	<b>59.1%</b>	<b>\$ 356,361</b>	<b>(35.2%)</b>	<b>\$ 362,266</b>	<b>1.7%</b>	<b>\$ 368,038</b>	<b>1.6%</b>	<b>\$ 374,092</b>	<b>1.6%</b>



**METRO VANCOUVER REGIONAL DISTRICT  
REGIONAL PARKS  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 31,840,537	\$ 33,916,446	\$ 38,455,889	\$ 40,231,083	4.6%	\$ 41,029,940	2.0%	\$ 42,612,270	3.9%	\$ 44,171,311	3.7%	\$ 45,879,384	3.9%
User Fees	1,133,286	1,100,093	1,035,113	1,043,741		1,037,153		1,055,170		1,073,583		1,089,609	
Other External Revenues	1,331,242	1,255,746	1,358,324	1,233,504		1,217,434		1,221,466		1,225,603		1,216,913	
Reserves	259,598	264,698	1,216,380	171,380		71,380		188,860		56,000		56,000	
<b>TOTAL REVENUES</b>	<b>\$ 34,564,663</b>	<b>\$ 36,536,983</b>	<b>\$ 42,065,706</b>	<b>\$ 42,679,708</b>	<b>1.5%</b>	<b>\$ 43,355,907</b>	<b>1.6%</b>	<b>\$ 45,077,766</b>	<b>4.0%</b>	<b>\$ 46,526,497</b>	<b>3.2%</b>	<b>\$ 48,241,906</b>	<b>3.7%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Systems Planning and Engineering Services													
Planning and Research	\$ 1,048,748	\$ 989,426	\$ 1,117,385	\$ 1,123,834		\$ 1,092,682		\$ 1,111,023		\$ 1,262,079		\$ 1,283,737	
Engineering Services	931,121	1,095,159	1,198,596	1,303,096		1,329,770		1,352,527		1,375,618		1,398,709	
	<u>1,979,869</u>	<u>2,084,585</u>	<u>2,315,981</u>	<u>2,426,930</u>	4.8%	<u>2,422,452</u>	(0.2%)	<u>2,463,550</u>	1.7%	<u>2,637,697</u>	7.1%	<u>2,682,446</u>	1.7%
Systems Visitor and Operations Services													
Visitor Services	1,505,308	1,572,085	1,505,175	1,752,235		1,668,540		1,704,432		1,719,241		1,700,436	
Operations Services	1,919,704	1,855,260	2,147,145	2,313,319		2,395,876		2,500,042		2,603,539		2,716,674	
	<u>3,425,012</u>	<u>3,427,345</u>	<u>3,652,320</u>	<u>4,065,554</u>	11.3%	<u>4,064,416</u>	0.0%	<u>4,204,474</u>	3.4%	<u>4,322,780</u>	2.8%	<u>4,417,110</u>	2.2%
Central Area Services													
Operations and Maintenance	3,560,116	3,695,141	3,870,690	4,809,481		4,915,084		5,249,883		5,223,775		5,320,475	
Area Visitor Services	560,036	609,202	653,562	672,698		679,810		725,580		752,588		788,543	
Area Management and Administration	472,019	482,528	531,676	541,978		553,411		563,900		574,544		585,421	
Area Resource Management	220,162	209,814	237,521	261,334		264,689		269,043		273,461		318,559	
Area Planning	173,611	170,125	176,223	154,031		156,902		159,351		161,836		164,375	
Burns Bog Ecological Conservancy Area	327,083	386,566	403,368	353,124		361,311		367,809		384,388		391,219	
Contribution to Reserve				23,000		23,000		23,000		23,000		23,000	
	<u>5,313,027</u>	<u>5,553,376</u>	<u>5,873,040</u>	<u>6,815,646</u>	16.0%	<u>6,954,207</u>	2.0%	<u>7,358,566</u>	5.8%	<u>7,393,592</u>	0.5%	<u>7,591,592</u>	2.7%
East Area Services													
Operations and Maintenance	3,496,199	3,760,080	4,650,285	4,189,494		4,278,682		4,410,430		4,480,097		4,539,805	
Area Visitor Services	587,509	628,666	678,952	706,235		709,285		740,224		752,251		764,524	
Area Management and Administration	521,326	522,322	541,285	552,500		564,899		575,507		586,274		596,753	
Area Resource Management	223,633	223,246	225,330	247,393		252,498		256,852		261,270		306,368	
Area Planning	100,733	127,452	138,988	152,091		154,962		157,411		159,896		162,444	
	<u>4,929,400</u>	<u>5,261,766</u>	<u>6,234,840</u>	<u>5,847,713</u>	(6.2%)	<u>5,960,326</u>	1.9%	<u>6,140,424</u>	3.0%	<u>6,239,788</u>	1.6%	<u>6,369,894</u>	2.1%
West Area Services													
Operations and Maintenance	4,574,577	4,855,648	5,127,289	4,008,383		4,069,999		4,163,657		4,276,158		4,354,260	
Area Visitor Services	585,968	628,007	692,567	702,524		716,698		745,090		769,559		782,526	
Area Management and Administration	716,231	740,414	788,756	812,988		825,590		847,235		836,332		858,374	
Area Resource Management	194,298	210,713	245,606	269,739		274,844		279,198		283,616		328,714	
Area Planning	157,695	118,635	190,300	149,721		152,592		155,041		157,526		160,065	
Contribution to Reserve	36,575	20,571	23,000	-		-		-		-		-	
	<u>6,265,343</u>	<u>6,573,988</u>	<u>7,067,518</u>	<u>5,943,355</u>	(15.9%)	<u>6,039,723</u>	1.6%	<u>6,179,318</u>	2.3%	<u>6,334,094</u>	2.5%	<u>6,483,939</u>	2.4%
Administration and Department Support													
	1,256,329	1,269,028	1,529,388	1,532,352	0.2%	1,560,016	1.8%	1,583,638	1.5%	1,607,612	1.5%	1,886,735	17.4%
Communications Program													
	39,602	79,267	70,000	110,000	57.1%	110,000	0.0%	110,000	0.0%	110,000	0.0%	110,000	0.0%
Utility Voice Radio													
	65,292	72,955	77,154	82,306	6.7%	83,148	1.0%	83,911	0.9%	84,686	0.9%	85,478	0.9%
Quality Control Allocated													
	51,012	51,803	49,286	51,385	4.3%	53,437	4.0%	54,746	2.4%	56,013	2.3%	57,375	2.4%
Allocation of Centralized Support Costs													
	2,677,549	3,215,914	3,517,305	3,698,560	5.2%	3,556,182	(3.8%)	3,347,139	(5.9%)	3,188,235	(4.7%)	3,005,337	(5.7%)
Total Operating Programs	26,002,435	27,590,027	30,386,832	30,573,801	0.6%	30,803,907	0.8%	31,525,766	2.3%	31,974,497	1.4%	32,689,906	2.2%
Debt Service													
	219,007	140,599	126,874	53,907	(57.5%)	-	(100.0%)	-	0.0%	-	0.0%	-	0.0%
Contribution to Capital Infrastructure Reserve													
	2,790,720	3,770,000	3,982,000	4,482,000		4,982,000		5,982,000		6,982,000		7,982,000	
Contribution to Parkland Acquisition Reserve													
	4,961,280	3,982,000	7,570,000	7,570,000		7,570,000		7,570,000		7,570,000		7,570,000	
	<u>7,752,000</u>	<u>7,752,000</u>	<u>11,552,000</u>	<u>12,052,000</u>	4.3%	<u>12,552,000</u>	4.1%	<u>13,552,000</u>	8.0%	<u>14,552,000</u>	7.4%	<u>15,552,000</u>	6.9%
<b>TOTAL EXPENDITURES</b>	<b>\$ 33,973,442</b>	<b>\$ 35,482,626</b>	<b>\$ 42,065,706</b>	<b>\$ 42,679,708</b>	<b>1.5%</b>	<b>\$ 43,355,907</b>	<b>1.6%</b>	<b>\$ 45,077,766</b>	<b>4.0%</b>	<b>\$ 46,526,497</b>	<b>3.2%</b>	<b>\$ 48,241,906</b>	<b>3.7%</b>

**METRO VANCOUVER REGIONAL DISTRICT  
CAPITAL PROGRAMS & PROJECT TOTALS  
REGIONAL PARKS  
2019 - 2023 CAPITAL PLAN**

	2019 CAPITAL BUDGET	2020 CAPITAL PLAN	2021 CAPITAL PLAN	2022 CAPITAL PLAN	2023 CAPITAL PLAN	2019 TO 2023 TOTAL	TOTAL PROJECT COSTS
<b>CAPITAL EXPENDITURES</b>							
<b>Parks-Capital Replacement and Development</b>							
Colony Farm - Sheep Paddocks Trail Rebuild	\$ 2,690,000	\$ 430,000	\$ 100,000	\$ 100,000	\$ -	\$ 3,320,000	\$ 3,320,000
Crippen - New Service yard	750,000	-	-	-	-	750,000	750,000
Aldergrove - Implement Management Plan	690,000	-	-	-	-	690,000	690,000
Capilano - New Service Yard	500,000	500,000	150,000	-	-	1,150,000	1,150,000
Colony Farm - Service Yard Building Replacement	230,000	-	-	-	-	230,000	230,000
Belcarra - South Picnic Area, Cabins	150,000	100,000	-	1,000,000	1,500,000	2,750,000	2,750,000
Belcarra - Septic System Replacements	50,000	300,000	-	-	-	350,000	350,000
Small Capital Replacement and Development Projects	50,000	-	-	100,000	-	150,000	150,000
Derby Reach - Full Service Washroom and Day Use Upgrades	-	600,000	500,000	-	-	1,100,000	1,100,000
Widgeon Marsh - Management Plan Implementation	-	500,000	3,000,000	3,000,000	-	6,500,000	6,500,000
Brunette Fraser Greenway - Sapperton Staging Area	-	200,000	200,000	200,000	200,000	800,000	800,000
Belcarra - Connection to Water	-	50,000	350,000	-	-	400,000	400,000
Burns Bog Delta Nature Reserve - Boardwalk Replacement	-	50,000	50,000	500,000	500,000	1,100,000	1,100,000
Crippen - Davies Orchard Cabins	-	-	1,000,000	1,000,000	-	2,000,000	2,000,000
Pacific Spirit - Service Yard Replacement	-	-	150,000	-	1,500,000	1,650,000	1,650,000
Campbell Valley - Nature House	-	-	-	200,000	-	200,000	200,000
Brunette Fraser Greenway - Coal House Repairs	-	-	-	160,000	-	160,000	160,000
Belcarra - Washroom Renovation / Replacement Picnic Area & White Pine	-	-	-	50,000	150,000	200,000	200,000
Grouse - Trailhead Development	-	-	-	-	250,000	250,000	250,000
	<u>\$ 5,110,000</u>	<u>\$ 2,730,000</u>	<u>\$ 5,500,000</u>	<u>\$ 6,310,000</u>	<u>\$ 4,100,000</u>	<u>\$ 23,750,000</u>	<u>\$ 23,750,000</u>
<b>Regional Parks Land Acquisition</b>							
Regional Parks Land Acquisition Projects	7,570,000	7,570,000	7,570,000	7,570,000	7,570,000	37,850,000	37,850,000
	<u>\$ 7,570,000</u>	<u>\$ 7,570,000</u>	<u>\$ 7,570,000</u>	<u>\$ 7,570,000</u>	<u>\$ 7,570,000</u>	<u>\$ 37,850,000</u>	<u>\$ 37,850,000</u>
<b>Capital Maintenance Projects</b>							
Capital Maintenance Projects	3,175,000	3,410,000	3,605,000	3,555,000	3,570,000	17,315,000	17,315,000
	<u>\$ 3,175,000</u>	<u>\$ 3,410,000</u>	<u>\$ 3,605,000</u>	<u>\$ 3,555,000</u>	<u>\$ 3,570,000</u>	<u>\$ 17,315,000</u>	<u>\$ 17,315,000</u>
<b>TOTAL CAPITAL EXPENDITURES</b>	<u>\$ 15,855,000</u>	<u>\$ 13,710,000</u>	<u>\$ 16,675,000</u>	<u>\$ 17,435,000</u>	<u>\$ 15,240,000</u>	<u>\$ 78,915,000</u>	<u>\$ 78,915,000</u>

<b>CAPITAL FUNDING</b>							
<b>Reserve Funding</b>	15,855,000	13,710,000	16,675,000	17,435,000	15,240,000	78,915,000	
	<u>\$ 15,855,000</u>	<u>\$ 13,710,000</u>	<u>\$ 16,675,000</u>	<u>\$ 17,435,000</u>	<u>\$ 15,240,000</u>	<u>\$ 78,915,000</u>	

**METRO VANCOUVER REGIONAL DISTRICT  
REGIONAL PLANNING  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 2,891,733	\$ 2,944,465	\$ 2,842,450	\$ 3,107,732	9.3%	\$ 3,180,119	2.3%	\$ 3,215,243	1.1%	\$ 3,265,134	1.6%	\$ 3,314,788	1.5%
Sustainability Reserve Funds	58,600	83,187	58,313	-		-		-		-		-	
Reserves	20,000	89,137	272,500	420,000		340,000		365,000		305,000		337,000	
<b>TOTAL REVENUES</b>	<b>\$ 2,970,333</b>	<b>\$ 3,116,789</b>	<b>\$ 3,173,263</b>	<b>\$ 3,527,732</b>	<b>11.2%</b>	<b>\$ 3,520,119</b>	<b>(0.2%)</b>	<b>\$ 3,580,243</b>	<b>1.7%</b>	<b>\$ 3,570,134</b>	<b>(0.3%)</b>	<b>\$ 3,651,788</b>	<b>2.3%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Growth Management and Transportation	\$ -	\$ 1,034,231	\$ 1,352,460	\$ 1,360,783		\$ 1,332,159		\$ 1,300,898		\$ 1,346,982		\$ 1,403,838	
Planning Analytics	-	429,294	596,646	538,966		550,450		560,247		600,188		624,845	
Environment	1,960,516	476,667	498,562	775,070		753,919		850,734		782,722		794,970	
Administration and Department Support	501,681	473,163	364,180	511,277		523,204		533,392		543,727		554,306	
	2,462,197	2,413,355	2,811,848	3,186,096	13.3%	3,159,732	(0.8%)	3,245,271	2.7%	3,273,619	0.9%	3,377,959	3.2%
Communications Program	32,200	53,645	75,000	80,000	6.7%	80,000	0.0%	80,000	0.0%	60,000	(25.0%)	60,000	0.0%
Allocation of Centralized Support Costs	195,188	236,612	286,415	261,636	(8.7%)	280,387	7.2%	254,972	(9.1%)	236,515	(7.2%)	213,829	(9.6%)
<b>TOTAL EXPENDITURES</b>	<b>\$ 2,689,585</b>	<b>\$ 2,703,612</b>	<b>\$ 3,173,263</b>	<b>\$ 3,527,732</b>	<b>11.2%</b>	<b>\$ 3,520,119</b>	<b>(0.2%)</b>	<b>\$ 3,580,243</b>	<b>1.7%</b>	<b>\$ 3,570,134</b>	<b>(0.3%)</b>	<b>\$ 3,651,788</b>	<b>2.3%</b>

**METRO VANCOUVER REGIONAL DISTRICT  
REGIONAL PROSPERITY <sup>(1)</sup>  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ -	\$ 233,997	\$ 281,382	\$ 409,500	45.5%	\$ 1,020,000	149.1%	\$ 1,530,000	50.0%	\$ 2,040,000	33.3%	\$ 2,550,000	25.0%
Reserves	-	31,000	-	75,000		-		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ -</b>	<b>\$ 264,997</b>	<b>\$ 281,382</b>	<b>\$ 484,500</b>	<b>72.2%</b>	<b>\$ 1,020,000</b>	<b>110.5%</b>	<b>\$ 1,530,000</b>	<b>50.0%</b>	<b>\$ 2,040,000</b>	<b>33.3%</b>	<b>\$ 2,550,000</b>	<b>25.0%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Regional Prosperity Initiative	\$ -	\$ 201,543	\$ 281,382	\$ 400,000		\$ 1,000,000		\$ 1,500,000		\$ 2,000,000		\$ 2,500,000	
Transition	-	-	-	75,000		-		-		-		-	
	-	201,543	281,382	475,000	68.8%	1,000,000	110.5%	1,500,000	50.0%	2,000,000	33.3%	2,500,000	25.0%
Allocation of Centralized Support Costs <sup>(2)</sup>	-	-	-	9,500	0.0%	20,000	110.5%	30,000	50.0%	40,000	33.3%	50,000	25.0%
<b>TOTAL EXPENDITURES</b>	<b>\$ -</b>	<b>\$ 201,543</b>	<b>\$ 281,382</b>	<b>\$ 484,500</b>	<b>72.2%</b>	<b>\$ 1,020,000</b>	<b>110.5%</b>	<b>\$ 1,530,000</b>	<b>50.0%</b>	<b>\$ 2,040,000</b>	<b>33.3%</b>	<b>\$ 2,550,000</b>	<b>25.0%</b>

(1) Included in the General Government function in 2017 and 2018

(2) Centralized Support Costs will be allocated in accordance with the Corporate Allocation Policy as an external service contract

**METRO VANCOUVER REGIONAL DISTRICT  
SASAMAT FIRE PROTECTION SERVICE  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
MVRD Requisitions	\$ 277,146	\$ 325,232	\$ 321,157	\$ 328,928	2.4%	\$ 333,718	1.5%	\$ 338,607	1.5%	\$ 343,593	1.5%	\$ 491,683	43.1%
Other External Revenues	15,000	15,000	10,000	10,000		10,000		10,000		10,000		10,000	
Reserves	-	560,680	65,000	-		600,000		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 292,146</b>	<b>\$ 900,912</b>	<b>\$ 396,157</b>	<b>\$ 338,928</b>	<b>(14.4%)</b>	<b>\$ 943,718</b>	<b>178.4%</b>	<b>\$ 348,607</b>	<b>(63.1%)</b>	<b>\$ 353,593</b>	<b>1.4%</b>	<b>\$ 501,683</b>	<b>41.9%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Sasamat Fire Protection Service	\$ 181,287	\$ 299,010	\$ 278,688	\$ 224,389		\$ 828,744		\$ 233,188		\$ 237,721		\$ 372,348	
Contribution to Reserves	67,100	560,680	92,100	92,100		92,100		92,100		92,100		92,100	
	248,387	859,690	370,788	316,489	(14.6%)	920,844	191.0%	325,288	(64.7%)	329,821	1.4%	464,448	40.8%
Allocation of Centralized Support Costs	6,021	6,571	25,369	22,439	(11.5%)	22,874	1.9%	23,319	1.9%	23,772	1.9%	37,235	56.6%
<b>TOTAL EXPENDITURES</b>	<b>\$ 254,408</b>	<b>\$ 866,261</b>	<b>\$ 396,157</b>	<b>\$ 338,928</b>	<b>(14.4%)</b>	<b>\$ 943,718</b>	<b>178.4%</b>	<b>\$ 348,607</b>	<b>(63.1%)</b>	<b>\$ 353,593</b>	<b>1.4%</b>	<b>\$ 501,683</b>	<b>41.9%</b>

**METRO VANCOUVER DISTRICTS  
CENTRALIZED SUPPORT PROGRAM SUMMARY  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Allocated to Functional Departments (net)	\$ 44,173,807	\$ 54,934,145	\$ 59,743,188	\$ 58,818,060	(1.5%)	\$ 60,241,731	2.4%	\$ 60,980,930	1.2%	\$ 61,954,947	1.6%	\$ 62,791,114	1.3%
Other External Revenues	6,600,052	6,281,283	6,349,433	7,179,160	13.1%	7,750,360	8.0%	7,859,119	1.4%	7,920,759	0.8%	7,967,515	0.6%
Reserves	3,941,959	8,245,044	4,412,415	6,778,309	53.6%	2,523,800	(62.8%)	2,160,000	(14.4%)	2,110,000	(2.3%)	1,930,000	(8.5%)
<b>TOTAL REVENUES</b>	<b>\$ 54,715,818</b>	<b>\$ 69,460,472</b>	<b>\$ 70,505,036</b>	<b>\$ 72,775,529</b>	<b>3.2%</b>	<b>\$ 70,515,891</b>	<b>(3.1%)</b>	<b>\$ 71,000,049</b>	<b>0.7%</b>	<b>\$ 71,985,706</b>	<b>1.4%</b>	<b>\$ 72,688,629</b>	<b>1.0%</b>
<b>EXPENDITURES</b>													
Corporate Services	30,920,261	41,451,405	43,481,528	44,459,211	2.2%	41,547,844	(6.5%)	41,590,008	0.1%	41,905,663	0.8%	42,062,197	0.4%
External Relations	5,143,847	5,582,153	5,950,596	6,106,370	2.6%	6,263,991	2.6%	6,379,873	1.8%	6,496,989	1.8%	6,613,601	1.8%
Financial Services	10,453,785	10,938,379	11,939,229	12,122,277	1.5%	12,512,224	3.2%	12,708,500	1.6%	13,061,482	2.8%	13,318,824	2.0%
Human Resources	4,521,319	4,658,880	4,905,451	5,466,732	11.4%	5,479,807	0.2%	5,523,226	0.8%	5,635,384	2.0%	5,718,163	1.5%
Legal and Legislative Services	3,755,347	3,408,345	4,228,232	4,620,939	9.3%	4,712,025	2.0%	4,798,442	1.8%	4,886,188	1.8%	4,975,844	1.8%
<b>TOTAL EXPENDITURES</b>	<b>\$ 54,794,559</b>	<b>\$ 66,039,162</b>	<b>\$ 70,505,036</b>	<b>\$ 72,775,529</b>	<b>3.2%</b>	<b>\$ 70,515,891</b>	<b>(3.1%)</b>	<b>\$ 71,000,049</b>	<b>0.7%</b>	<b>\$ 71,985,706</b>	<b>1.4%</b>	<b>\$ 72,688,629</b>	<b>1.0%</b>
<b>ALLOCATED TO FUNCTIONAL DEPARTMENTS</b>													
Water	\$ 18,391,525	\$ 22,156,646	\$ 25,084,563	\$ 23,388,522	(6.8%)	\$ 23,444,732	0.2%	\$ 24,245,721	3.4%	\$ 24,528,220	1.2%	\$ 25,031,600	2.1%
Liquid Waste	16,192,380	19,588,472	22,094,123	22,757,172	3.0%	24,806,053	9.0%	25,249,271	1.8%	26,290,833	4.1%	27,219,060	3.5%
Solid Waste	3,243,141	3,976,545	4,348,952	4,674,251	7.5%	4,258,379	(8.9%)	4,252,172	(0.1%)	4,306,778	1.3%	4,144,751	(3.8%)
Housing	2,080,217	4,124,906	2,417,680	2,119,752	(12.3%)	2,036,534	(3.9%)	1,885,711	(7.4%)	1,737,102	(7.9%)	1,601,249	(7.8%)
Affordable Housing	-	-	71,638	89,656	25.2%	64,371	(28.2%)	60,389	(6.2%)	55,665	(7.8%)	51,198	(8.0%)
Air Quality	487,127	590,504	953,910	878,401	(7.9%)	838,724	(4.5%)	773,889	(7.7%)	718,873	(7.1%)	668,486	(7.0%)
E911 Emergency Telephone Service	80,920	82,115	84,404	86,502	2.5%	88,652	2.5%	90,854	2.5%	93,112	2.5%	95,425	2.5%
Electoral Area Service	26,667	32,329	38,934	45,910	17.9%	34,734	(24.3%)	29,201	(15.9%)	29,779	2.0%	26,526	(10.9%)
General Government	499,227	552,333	534,485	521,807	(2.4%)	525,833	0.8%	501,109	(4.7%)	486,493	(2.9%)	441,422	(9.3%)
Labour Relations	242,353	293,775	244,068	224,001	(8.2%)	225,411	0.6%	200,686	(11.0%)	187,254	(6.7%)	174,232	(7.0%)
Regional Emergency Management	-	15,000	10,117	10,862	7.4%	11,327	4.3%	10,616	(6.3%)	8,389	(21.0%)	8,693	3.6%
Regional Global Positioning System	51,492	62,423	31,225	29,087	(6.8%)	27,539	(5.3%)	25,879	(6.0%)	23,926	(7.5%)	22,072	(7.7%)
Regional Parks	2,677,549	3,215,914	3,517,305	3,698,560	5.2%	3,556,182	(3.8%)	3,347,139	(5.9%)	3,188,235	(4.7%)	3,005,337	(5.7%)
Regional Planning	195,188	236,612	286,415	261,636	(8.7%)	280,387	7.2%	254,972	(9.1%)	236,515	(7.2%)	213,829	(9.6%)
Regional Prosperity Initiatives	-	-	-	9,500	0.0%	20,000	110.5%	30,000	50.0%	40,000	33.3%	50,000	25.0%
Sasamat Fire Protection Service	6,021	6,571	25,369	22,439	(11.5%)	22,874	1.9%	23,319	1.9%	23,772	1.9%	37,235	56.6%
	<b>\$ 44,173,807</b>	<b>\$ 54,934,145</b>	<b>\$ 59,743,188</b>	<b>\$ 58,818,060</b>	<b>(1.5%)</b>	<b>\$ 60,241,731</b>	<b>2.4%</b>	<b>\$ 60,980,930</b>	<b>1.2%</b>	<b>\$ 61,954,947</b>	<b>1.6%</b>	<b>\$ 62,791,114</b>	<b>1.3%</b>

**METRO VANCOUVER DISTRICTS  
CORPORATE SERVICES  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Allocated to Functional Departments	\$ 19,109,959	\$ 29,241,132	\$ 33,131,384	\$ 31,278,044	(5.6%)	\$ 31,851,612	1.8%	\$ 32,094,317	0.8%	\$ 32,368,332	0.9%	\$ 32,646,810	0.9%
Other External Revenues	6,400,491	5,793,253	6,062,729	6,804,152		7,345,432		7,400,691		7,462,331		7,520,387	
Reserves	3,893,834	8,245,044	4,287,415	6,377,015		2,350,800		2,095,000		2,075,000		1,895,000	
<b>TOTAL REVENUES</b>	<b>\$ 29,404,284</b>	<b>\$ 43,279,429</b>	<b>\$ 43,481,528</b>	<b>\$ 44,459,211</b>	<b>2.2%</b>	<b>\$ 41,547,844</b>	<b>(6.5%)</b>	<b>\$ 41,590,008</b>	<b>0.1%</b>	<b>\$ 41,905,663</b>	<b>0.8%</b>	<b>\$ 42,062,197</b>	<b>0.4%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Business Systems	\$ 9,019,475	\$ 9,116,659	\$ 9,714,023	\$ 9,012,414		\$ 10,023,355		\$ 9,579,386		\$ 9,616,018		\$ 10,001,665	
Corporate Projects and Facilities	5,964,100	6,644,506	6,994,725	7,302,169		6,718,432		6,847,784		6,989,177		7,141,612	
Safety Security and Emergency Management	3,345,972	3,017,219	3,932,950	3,931,957		3,737,238		3,845,410		3,957,146		4,072,746	
Technical Services	6,047,484	8,061,450	7,130,394	7,174,994		7,334,401		7,570,573		7,708,919		7,818,472	
Administration and Department Support	822,491	828,039	679,117	690,895		705,476		717,913		730,533		743,426	
	25,199,522	27,667,873	28,451,209	28,112,429	(1.2%)	28,518,902	1.4%	28,561,066	0.1%	29,001,793	1.5%	29,777,921	2.7%
Debt Service	5,705,436	11,135,820	14,685,319	13,976,782	(4.8%)	12,828,942	(8.2%)	12,828,942	0.0%	12,703,870	(1.0%)	12,084,276	(4.9%)
Capital	15,303	2,647,712	345,000	2,370,000	587.0%	200,000	(91.6%)	200,000	0.0%	200,000	0.0%	200,000	0.0%
<b>TOTAL EXPENDITURES</b>	<b>\$ 30,920,261</b>	<b>\$ 41,451,405</b>	<b>\$ 43,481,528</b>	<b>\$ 44,459,211</b>	<b>2.2%</b>	<b>\$ 41,547,844</b>	<b>(6.5%)</b>	<b>\$ 41,590,008</b>	<b>0.1%</b>	<b>\$ 41,905,663</b>	<b>0.8%</b>	<b>\$ 42,062,197</b>	<b>0.4%</b>

**METRO VANCOUVER DISTRICTS  
EXTERNAL RELATIONS  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Allocated to Functional Departments	\$ 5,441,738	\$ 5,466,114	\$ 5,688,168	\$ 5,743,742	1.0%	\$ 5,859,063	2.0%	\$ 5,921,445	1.1%	\$ 6,038,561	2.0%	\$ 6,166,473	2.1%
Other External Revenues	-	253,531	262,428	362,628		404,928		458,428		458,428		447,128	
<b>TOTAL REVENUES</b>	<b>\$ 5,441,738</b>	<b>\$ 5,719,645</b>	<b>\$ 5,950,596</b>	<b>\$ 6,106,370</b>	<b>2.6%</b>	<b>\$ 6,263,991</b>	<b>2.6%</b>	<b>\$ 6,379,873</b>	<b>1.8%</b>	<b>\$ 6,496,989</b>	<b>1.8%</b>	<b>\$ 6,613,601</b>	<b>1.8%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Corporate Communications	\$ 1,005,502	\$ 976,156	\$ 1,122,750	\$ 1,158,044		\$ 1,201,328		\$ 1,224,764		\$ 1,248,032		\$ 1,271,808	
Media Relations	457,050	577,161	616,347	624,434		638,801		651,279		663,916		676,797	
Multi-Media Services	1,849,657	1,952,344	1,988,817	2,032,018		2,073,670		2,109,542		2,146,372		2,183,259	
Stakeholder Engagement	805,426	785,383	853,806	881,898		897,840		911,440		925,238		939,337	
Administration and Department Support	634,732	716,196	771,321	787,858		804,765		819,187		833,821		848,772	
Collaboration Initiatives	391,480	574,913	597,555	622,118		647,587		663,661		679,610		693,628	
	5,143,847	5,582,153	5,950,596	6,106,370	2.6%	6,263,991	2.6%	6,379,873	1.8%	6,496,989	1.8%	6,613,601	1.8%
<b>TOTAL EXPENDITURES</b>	<b>\$ 5,143,847</b>	<b>\$ 5,582,153</b>	<b>\$ 5,950,596</b>	<b>\$ 6,106,370</b>	<b>2.6%</b>	<b>\$ 6,263,991</b>	<b>2.6%</b>	<b>\$ 6,379,873</b>	<b>1.8%</b>	<b>\$ 6,496,989</b>	<b>1.8%</b>	<b>\$ 6,613,601</b>	<b>1.8%</b>



**METRO VANCOUVER DISTRICTS  
FINANCIAL SERVICES  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Allocated to Functional Departments	\$ 11,035,102	\$ 11,374,405	\$ 11,814,229	\$ 12,022,277	1.8%	\$ 12,407,224	3.2%	\$ 12,643,500	1.9%	\$ 13,026,482	3.0%	\$ 13,283,824	2.0%
Other External Revenues	189,494	223,389	-	-		-		-		-		-	
Reserves	48,125	-	125,000	100,000		105,000		65,000		35,000		35,000	
<b>TOTAL REVENUES</b>	<b>\$ 11,272,721</b>	<b>\$ 11,597,794</b>	<b>\$ 11,939,229</b>	<b>\$ 12,122,277</b>	<b>1.5%</b>	<b>\$ 12,512,224</b>	<b>3.2%</b>	<b>\$ 12,708,500</b>	<b>1.6%</b>	<b>\$ 13,061,482</b>	<b>2.8%</b>	<b>\$ 13,318,824</b>	<b>2.0%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Purchasing and Risk Management	\$ 3,477,981	\$ 3,549,367	\$ 3,780,445	\$ 3,919,446		\$ 3,981,821		\$ 4,057,609		\$ 4,134,546		\$ 4,213,010	
Financial Planning and Operations	4,496,226	4,673,583	5,335,224	5,325,148		5,554,533		5,616,127		5,862,387		5,980,172	
Property Services	1,720,841	1,866,826	2,052,739	2,050,971		2,099,536		2,141,382		2,183,855		2,227,249	
Administration and Department Support	758,737	848,603	770,821	826,712		876,334		893,382		880,694		898,393	
<b>TOTAL EXPENDITURES</b>	<b>\$ 10,453,785</b>	<b>\$ 10,938,379</b>	<b>\$ 11,939,229</b>	<b>\$ 12,122,277</b>	<b>1.5%</b>	<b>\$ 12,512,224</b>	<b>3.2%</b>	<b>\$ 12,708,500</b>	<b>1.6%</b>	<b>\$ 13,061,482</b>	<b>2.8%</b>	<b>\$ 13,318,824</b>	<b>2.0%</b>

**METRO VANCOUVER DISTRICTS  
HUMAN RESOURCES  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Allocated to Functional Departments	\$ 4,602,835	\$ 4,727,715	\$ 4,905,451	\$ 5,165,438	5.3%	\$ 5,411,807	4.8%	\$ 5,523,226	2.1%	\$ 5,635,384	2.0%	\$ 5,718,163	1.5%
Reserves	-	-	-	301,294		68,000		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 4,602,835</b>	<b>\$ 4,727,715</b>	<b>\$ 4,905,451</b>	<b>\$ 5,466,732</b>	<b>11.4%</b>	<b>\$ 5,479,807</b>	<b>0.2%</b>	<b>\$ 5,523,226</b>	<b>0.8%</b>	<b>\$ 5,635,384</b>	<b>2.0%</b>	<b>\$ 5,718,163</b>	<b>1.5%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Employee and Labour Relations	\$ 959,458	\$ 673,196	\$ 1,211,709	\$ 1,323,646		\$ 1,250,406		\$ 1,280,149		\$ 1,310,276		\$ 1,318,674	
Talent Management & Organization Development	1,992,198	1,779,231	1,975,454	2,264,283		2,218,171		2,230,008		2,272,537		2,315,958	
Systems and Processes	994,574	1,610,571	1,028,739	1,000,465		1,107,835		1,091,874		1,113,334		1,125,864	
Administration and Department Support	575,089	595,882	689,549	878,338		903,395		921,195		939,237		957,667	
<b>TOTAL EXPENDITURES</b>	<b>\$ 4,521,319</b>	<b>\$ 4,658,880</b>	<b>\$ 4,905,451</b>	<b>\$ 5,466,732</b>	<b>11.4%</b>	<b>\$ 5,479,807</b>	<b>0.2%</b>	<b>\$ 5,523,226</b>	<b>0.8%</b>	<b>\$ 5,635,384</b>	<b>2.0%</b>	<b>\$ 5,718,163</b>	<b>1.5%</b>

**METRO VANCOUVER DISTRICTS  
LEGAL AND LEGISLATIVE SERVICES  
2019 BUDGET REVIEW  
2019-2023 FINANCIAL PLAN**

	2016 ACTUAL	2017 ACTUAL	2018 BUDGET	2019 BUDGET	% CHANGE	2020 FORECAST	% CHANGE	2021 FORECAST	% CHANGE	2022 FORECAST	% CHANGE	2023 FORECAST	% CHANGE
<b>REVENUES</b>													
Allocated to Functional Departments	\$ 3,974,796	\$ 4,019,078	\$ 4,228,232	\$ 4,620,939	9.3%	\$ 4,712,025	2.0%	\$ 4,798,442	1.8%	\$ 4,886,188	1.8%	\$ 4,975,844	1.8%
Other External Revenues	10,067	11,110	-	-		-		-		-		-	
<b>TOTAL REVENUES</b>	<b>\$ 3,984,863</b>	<b>\$ 4,030,188</b>	<b>\$ 4,228,232</b>	<b>\$ 4,620,939</b>	<b>9.3%</b>	<b>\$ 4,712,025</b>	<b>2.0%</b>	<b>\$ 4,798,442</b>	<b>1.8%</b>	<b>\$ 4,886,188</b>	<b>1.8%</b>	<b>\$ 4,975,844</b>	<b>1.8%</b>
<b>EXPENDITURES</b>													
Operating Programs:													
Aboriginal Relations	\$ 323,574	\$ 345,802	\$ 379,161	\$ 572,196		\$ 578,648		\$ 590,292		\$ 602,110		\$ 614,194	
Corporate Administration	861,435	820,551	722,620	979,030		996,095		1,010,652		1,025,425		1,040,516	
In House Legal	1,158,950	836,978	1,319,935	1,349,876		1,380,572		1,407,074		1,433,971		1,461,457	
Information Management	993,174	979,989	1,377,159	1,262,089		1,289,709		1,314,382		1,339,463		1,365,082	
Administration and Department Support	418,214	425,025	429,357	457,748		467,001		476,042		485,219		494,595	
<b>TOTAL EXPENDITURES</b>	<b>\$ 3,755,347</b>	<b>\$ 3,408,345</b>	<b>\$ 4,228,232</b>	<b>\$ 4,620,939</b>	<b>9.3%</b>	<b>\$ 4,712,025</b>	<b>2.0%</b>	<b>\$ 4,798,442</b>	<b>1.8%</b>	<b>\$ 4,886,188</b>	<b>1.8%</b>	<b>\$ 4,975,844</b>	<b>1.8%</b>



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To: Board of Directors

From: Carol Mason, Commissioner/Chief Administrative Officer  
Phil Trotzuk, Chief Financial Officer

Date: October 8, 2018 Meeting Date: October 17, 2018

Subject: **Proposed 2019 Metro Vancouver Position Requests**

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Provided to the Board below is additional information regarding the rationale behind proposed new permanent positions as part of the 2019 Metro Vancouver Budget.

**Water Services:**

## Senior Project Engineer

- Responsible for environmental policy development and implementation of a joint utility environmental management system.
- Ensures that the utility meets all federal and provincial regulations and meets or exceed industry best practices.
- Will be the Water Services lead on review of the current program, gap analysis, procedure and training material development and delivery as well as support services for the Engineering and Construction Division and the Operations and Maintenance Division.

## Senior Project Engineer

- Responds to a need for improving the resilience of the water distribution system by supporting electrical and instrumentation projects including backup power in key water system facilities.
- Responsible for developing specifications, briefing of design consultants, review of submittals, BC Hydro liaison and assisting with facility commissioning.
- Initially will be assigned to assist with the Westburnco Pump Station Back-Up Power project, the Newton Pump Station project, and the Cape Horn Pump Station 3 project.
- In order to fund this position, there has been a corresponding reduction in the consulting/secondment budget for Water Services.

## Engineering Technician II

- Responsible for coordinated dam safety actions at the Cleveland and Seymour Falls dams.
- Will manage the Automated Data Acquisition System “evergreening” program to improve system resiliency and ensure all components are current technology
- Provides technical support for continuous and planned replacement of ageing geotechnical instruments and installation of new geotechnical instruments at the dams.

## Records Clerk

- Responsible for supporting records management with increasing regulatory requirements for records maintenance.

- Responsible for validation of department folders and ensuring compliance with records management standards.
- Will provide training for new and existing staff on record structures and procedures.

#### Project Engineer

- Conversion of a temporary position to regular full-time
- Coordinates Metro Vancouver involvement in joint infrastructure projects such as the Pattullo Bridge replacement, the Millenium Line Broadway Extension and LRT projects south of the Fraser River.
- Will collaborate and share information on conceptual plans, schedules, constructability, service impacts and financial planning.
- Responsible for handling of environmental assessments and other project referrals.

#### Liquid Waste Services:

##### Senior Project Engineer

- Responsible for developing, applying and maintaining hydrodynamic and effluent transport models for receiving water bodies.
- Will assess and adjust inputs for models with flow changes, plant upgrades and changes in regulatory requirements.
- This approach reduces costs and reliance on contracted resources in meeting regulatory reporting requirements and enabling expanded use of these models in optimizing environmental monitoring activities.

##### WWTP Operator II (3 positions)

- Three Wastewater Treatment Plant Operators are proposed to join the existing operations team at the new North Shore WWTP and receive training on the operation of advanced secondary treatment processes at the new plant.
- Onboarding the new operators early also provides the necessary staff coverage to enable the six existing Lions Gate WWTP Operators and Foreman to obtain secondary treatment operating experience through rotating work assignments at one of the three MV secondary treatment plants.

##### Digital Control Software Specialist

- Supports the five WWTPs through a centralized service model based at Annacis Island WWTP.
- Responds to demands for automation of the WWTP's due to expanded Metro Vancouver transmission control systems (CDACS/SCADA) infrastructure resulting from ongoing plant expansion work (Iona Solids Handling Facility, Annacis Cogen replacement) and upcoming major projects such as the North Shore WWTP, Stage V Expansion, and East Fraser Servicing Expansion.
- Ensures operational staffing needs are optimized.

##### Permitting and Enforcement Officer

- Under the Environmental Regulation and Enforcement program
- Responds to recently implemented and upcoming source control regulations (Fermentation Bylaw and Hospital Pollution Prevention Plan Bylaw).

- Targets specific discharges more effectively managed at the source than through the wastewater treatment system.
- Works with customers attempting to comply with the regulations and take enforcement action where needed.

**Air Quality:**

Special and Community Events Coordinator

- Conversion of an existing full time temporary Special and Community Events Coordinator to regular full time in the Policy and Planning area.
- Position coordinates outreach and communication events related to climate change program, including electric vehicle program, building energy efficiency, climate programs for business, and new initiatives under Climate 2050, the regional climate action strategy.

**Aboriginal Relations:**

Program Manager

- Responds to increasing demands and expectations related to the communication and engagement through special events and bilateral meetings with regional First Nations.
- Provides guidance, oversight and advice of this evolving area to support senior management.
- Understands and manages the reporting out of the ongoing complexities of treaty negotiations, outcomes of legal cases, and changing First Nation interests, as well as updated federal/provincial legislation and policies.
- Aboriginal Relations is part of centralized support program supporting all Metro Vancouver entities and functions.

Below is additional information regarding a proposed new temporary position that was included in the 2019 Metro Vancouver Air Quality Budget presented to the Climate Action Committee. The Committee expressed concerns regarding implications of costs downloaded on local government as a result of the new Cannabis Regulation.

**Air Quality:**

Project Engineer - *Temporary*

- Provides technical expertise related to permits and the regulation of cannabis cultivation facilities.