

| Subject: | 2024 - 2028 Financial Plan – Air Quality and Climate Action | | | | | | | |
|----------|---|-------------------------------|--|--|--|--|--|--|
| Date: | October 3, 2023 | Meeting Date: October 5, 2023 | | | | | | |
| From: | Conor Reynolds, Director, Air Quality and Climate | Action Services | | | | | | |
| То: | Climate Action Committee | | | | | | | |

RECOMMENDATION

That the Climate Action Committee endorse the 2024 - 2028 Financial Plan for Air Quality and Climate Action as presented in the report dated October 3, 2023, titled "2024 - 2028 Financial Plan – Air Quality and Climate Action", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

The operating budget for the Air Quality and Climate Action function for 2024 is proposed to be \$16.1 million, an increase of 0.3% from 2023. The regulatory fee system is based on the polluter pays principle, with the costs of developing and administering permits and regulations recovered from authorized dischargers of air contaminants. The Board adopted amendments to the air quality fees bylaw in 2021, resulting in increased fee revenues in 2024, and decreased use of tax requisition, which is increasing by 9.7% for 2024.

Implementation of the actions in the *Clean Air Plan* and the *Climate 2050* Roadmaps continues to be a key priority in 2024. The Sustainability Innovation Fund (SIF) will supplement climate action projects, as will collaboration with external partners. A standing committee will make recommendations to the Board on SIF projects early in the new year. Climate action projects are being budgeted across the organization, supported by a recently established Corporate Climate Action Services team. In addition, staff will pursue air quality improvement and emission reductions

(including greenhouse gases) that protect health and the environment by promoting compliance with permits and air quality bylaws, implementing supporting policies and programs, and developing new bylaws.

PURPOSE

To present the 2024 - 2028 Financial Plan for Air Quality and Climate Action for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities
- Reduction of household impact, \$13 less that that previously projected for 2024

This report focuses on the Air Quality and Climate Action function and presents the 2024 annual budget and the updated five-year plan for the years 2024 to 2028 for committee consideration.

AIR QUALITY AND CLIMATE ACTION FUNCTION

The Air Quality and Climate Action function within the Metro Vancouver Regional District (MVRD) provides services to all 23 members and encompasses the management and regulation of air quality and greenhouse gas emissions within the region, under authority delegated from the Provincial government within the *Environmental Management Act*. Air Quality and Climate Action function services provided are presented in the following two program areas:

- Air Quality and Climate Action Services, which includes: the development and implementation of air quality and greenhouse gas reduction plans and policies, bylaws and regulations, environmental assessments, communications and outreach, air quality advisories, and supporting activities such as the operation of a network of air quality monitoring stations located throughout the airshed; this service also coordinates the development and implementation of corporate climate actions across the organization;
- Air Quality Regulation program area, which includes the issuance and administration of air quality permits, and promotion of compliance with and enforcement of Metro Vancouver air quality bylaws.

The provision of services by the Air Quality and Climate Action function is guided by direction in the *Board Strategic Plan*, as well as the *Climate 2050 Strategic Framework* and the *Clean Air Plan*, both adopted by the Board. Specific targets and actions from these plans include:

Board Strategic Plan:

- Protect public and environmental health and fight climate change by continuing to provide world class air quality and greenhouse gas management services, including monitoring, emissions inventories and air quality advisories;
- Expand the regional air quality monitoring network, including the new Tsawwassen First Nation station, and increase spatial coverage using small sensors;
- Introduce regulatory requirements to reduce greenhouse gas emissions from large and small buildings;
- Accelerate emission reductions from all types of vehicles through policies and regulations working in collaboration with regional partners;
- Promote transition to clean, renewable energy at the regional and corporate levels in collaboration with energy utilities and other partners;
- Lead by example by implementing corporate climate actions, including low- or zero-carbon policies for corporate fleet, travel, and procurement; and
- Continue partnering with, and advocating to, other governments and agencies to implement initiatives that accelerate emission reductions in priority areas.

Climate 2050:

- A carbon neutral region by 2050;
- Ensure our infrastructure, ecosystems, and communities are resilient to the impacts of climate change; and
- Implementation actions in the Board-endorsed *Climate 2050* Roadmaps.

Clean Air Plan – Regional 2030 Targets:

- Reduce regional greenhouse gas (GHG) emissions by 45% from 2010 levels;
- Ensure air quality in the region is continually improving, protecting human health and the environment; and
- Key targets for reducing health harming air contaminants:
 - Industrial facilities: 10% reduction in fine particulate matter emissions, 10% reduction in nitrogen oxides emissions, from 2020 levels; and

 Non-road engines: 50% reduction in diesel particulate matter emissions, from 2020 levels.

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

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plans for the Air Quality and Climate Action Services program and the Air Quality Regulation program are presented in this report (Attachment 2).

Within these work plans, performance indicators have been developed and are being tracked, including:

- Regional GHG emissions annually for onroad transportation and buildings (tonnes of carbon dioxide equivalent, CO₂e); note that additional sources will be added as the new annual regional GHG emissions inventory is enhanced;
- Corporate energy-related GHG emissions annually (tonnes of CO₂e);
- Days with air quality advisories in place (total, as well as the subset of advisory days due to emission sources located within the airshed);
- Reliability of air quality monitoring network (% of annual hours with monitoring data available for priority pollutants);
- Number of inspections of non-road diesel engines and permitted or regulated sites;
- Cumulative number of non-road diesel engines retired since 2012; and
- Number of Residential Indoor Wood Burning Best Burning Practices Declarations received.

The annual trend in the regional greenhouse gas emissions tracks progress toward the 45% reduction target by 2030 and carbon neutrality by 2050. Regional transportation emissions were lower in 2022 than 2019 (pre-pandemic), and despite significant increases in the number of vehicles and the distance travelled by those vehicles in the region, greenhouse gas emissions from the onroad transportation sector have not increased, and the per capita emissions have significantly decreased. However, more needs to be done to reduce emissions from transportation, buildings, and industry. This increased focus is reflected in the Work Plans.

These performance measures also track Metro Vancouver's progress toward reducing organizational greenhouse gas emissions in line with regional targets, through improvements to energy efficiency, utilization of waste streams to generate heat and/or energy, the use of clean electricity and low-carbon fuels, and the pursuit of new carbon capture and offset projects. With respect to air quality, programs are focused on continuous improvement in reducing emissions and ambient concentrations of health harming air contaminants and will respond to new challenges such as wildfire smoke events and extreme weather.

CONTINUOUS IMPROVEMENT

The Air Quality and Climate Action Services function continues to explore, evaluate and implement continuous improvement opportunities. The 2024 continuous improvement opportunities include the following:

- Continue to develop, review, and update *Climate 2050* roadmaps, taking an "action while planning" approach to ensure implementation progress. The roadmaps are intended to be dynamic and to evolve with new science, developing technologies, and public opinion.
- Establish a Corporate Climate Action Services program area, which includes corporate energy and greenhouse gas management coordination and support services for departments to ensure Metro Vancouver maintains its corporate climate leadership position.
- Develop new and amended regulations to drive continuous improvement in air quality, accelerate greenhouse gas reductions, and recover costs from regulated sources.
- Continue upgrades and enhancements to the regional air quality monitoring network, resulting in improvements and efficiencies in the collection of air quality data and dissemination to the public, especially during advisory events that are increasing in frequency due to climate change.
- Develop processes to integrate GHG emission reduction requirements into regulations and permits.
- Expand use of new analytical approaches and software to improve understanding and visualization of large datasets, to inform policy development and program implementation and to produce improved communications and outreach materials.
- Develop procedures and guidance for the issuance of administrative penalties.
- Create a five-year, high-resolution meteorological model database for the region to improve reliability of air quality assessments of existing and future facilities and projects resulting in better science-based decisions.
- Enhance the transparency of the regulatory program to increase awareness of and compliance with bylaw requirements that involve the public (e.g., indoor residential and open burning) and improve participation in our processes.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

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

The 2024 - 2028 Air Quality and Climate Action Financial Plan is included as Attachment 1. The 2024 Annual Work Plans for the Air Quality and Climate Action Services and the Air Quality Regulation program areas presented in this report are included in Attachment 2, and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 3.

Operating Budget Highlights

The Air Quality and Climate Action 2024 operating budget is proposed to increase by \$51,147 for a total budget of \$16,113,207 (Attachment 1). The 2024 budget includes previously-approved studies and projects funded by the Sustainability Innovation Fund (SIF), and additional SIF projects will be brought forward for committee and Board consideration as part of the annual application process, and some will be funded out of the SIF reserve funds in 2024. It is expected that projects in all three SIF areas will have a climate action theme. The decrease in SIF budget is partially offset by inflationary factors such as increments for salaries and benefits. It should also be noted that, with the development of the *Climate 2050* Roadmaps, additional climate action projects are funded in other areas, including the utilities, regional parks, and housing, and that the funds in the Air Quality and Climate Action operating budget are used to leverage additional funding for projects with external partners. Furthermore, as new policies are approved and program areas are developed in forthcoming years (in particular related to greenhouse gas reductions in the buildings, transportation, and industry sectors), additional operating budget may be requested.

The 2024 operating budget includes the following key actions:

- Continue to implement the *Clean Air Plan*, adopted by the Board in September 2021;
- Accelerate implementation of the greenhouse gas reduction actions in the *Climate 2050* roadmaps, with emphasis on the "Big Moves" that have the most potential to reduce regional emissions in the buildings, transportation, and industry sectors;
- Develop new air emission regulation bylaws and air quality objectives, that protect human health and the environment, and address continuous improvement in air quality, cost recovery from regulated sources, and development and integration of greenhouse gas requirements;
- Work with partners to develop programs to ensure information, support, and financial tools are available for residents, building owners, businesses, and others in the transition to a carbon neutral region;
- Provide support for accelerated actions to reduce corporate greenhouse gas emissions through an enhanced energy and greenhouse gas management framework;
- Develop and implement a public communication campaign regarding the upcoming (2025) prohibition on using unregistered indoor wood-burning appliances within the Urban Containment Boundary;
- Promote compliance with the Non-Road Diesel Engine Emission Regulation requirements for Tier 3 engines effective in January 2024;
- Improve public understanding of air quality and climate change, including outreach and progress reporting on *Climate 2050*, the *Clean Air Plan*, and the development of videos, web content, engagement activities, and other materials to support education and awareness; and

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

Over the next five years, expenditures are anticipated to increase by a total of \$626,411, or an average of 0.8% per year.

Communications Program

The 2024 Air Quality and Climate Action Communications Program of \$295,000 is focused on outreach, communication and engagement on *Climate 2050*, the *Clean Air Plan*, and air quality bylaws and regulations. Also in 2024, a one-time additional communications program amount of \$150,000 has been budgeted for promotion and communication activities related to the Residential Indoor Wood Burning Bylaw requirements.

Reserve Funds

The financial plan for Air Quality and Climate Action includes the use of reserves to annually fund one-time initiatives. This is consistent with the *Operating, Statutory and Discretionary Reserves Policy*. The 2024 - 2028 Projected Reserves for Air Quality are included in Attachment 4.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

• The 2024 - 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.

The Board will consider adoption of the 2024 Budget and endorsement of the 2024 - 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

- That the Climate Action Committee endorse the 2024 2028 Financial Plan for Air Quality and Climate Action as presented in the report dated September 25, 2023, titled "2024 - 2028 Financial Plan – Air Quality and Climate Action", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- 2. That the Climate Action Committee make recommendations and endorse an amended 2024 2028 Financial Plan for Air Quality and Climate Action and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2024 - 2028 Financial Plan for Air Quality and Climate Action, as presented under Alternative 1, in 2024 the Air Quality and Climate Action requisition will increase by \$739,111 (9.7%) for a total requisition of \$8,366,532. The review of the system of regulatory fees was completed in 2021, with Board adoption of an amended air quality fees bylaw. Implementation

of the amended bylaw has resulted in increases in fee revenues of 11.6% and 9.9% from permits and regulations, and non-road diesel engines, respectively, compared to 2023.

Over the term of the five-year plan, the annual Air Quality and Climate Action requisition is projected to decrease by an average of \$100,521 per year (1.1%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years for the Air Quality and Climate Action function will rise from just below \$7 in 2024 and will drop under \$6 in 2027. As new air quality and climate action policies are approved and program areas are developed in forthcoming years (in particular related to greenhouse gas reductions in the buildings, transportation, and industry sectors), additional operating budget may be requested.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

CONCLUSION

The 2024 Budget and Five-Year Financial Plan for Air Quality and Climate Action was prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Air Quality and Climate Action.

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

Staff recommends endorsing the 2024 - 2028 Financial Plan and Annual Work Plan for Air Quality and Climate Action as presented under Alternative one.

ATTACHMENTS

- 1. "2024 2028 Financial Plan Air Quality and Climate Action", dated October 3, 2023
- 2. 2024 Work Plans
 - A. "Air Quality and Climate Action Services Work Plan", dated October 3, 2023
 - B. "Environmental Regulation and Enforcement Air Quality Regulation Work Plan", dated October 3, 2023
- 3. "2024 2028 'What's Happening' Air Quality and Climate Action", dated October 3, 2023
- 4. "2024-2028 Projected Reserves Air Quality and Climate Action", dated October 3, 2023
- 5. Presentation re: "2024 2028 Financial Plan Air Quality and Climate Action", dated October 5, 2023

ATTACHMENT 1

METRO VANCOUVER REGIONAL DISTRICT AIR QUALITY AND CLIMATE ACTION 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|---|----------------|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| REVENUES | | | | | | | | | | | |
| Metro Vancouver Regional District Requisitions | \$ 7,627,421 | \$ 8,366,532 | 9.7% | \$ 8,455,740 | 1.1% | \$ 8,028,917 | (5.0%) | \$ 7,256,224 | (9.6%) | \$ 7,124,814 | (1.8%) |
| User Fees | 2,687,400 | 3,000,000 | | 3,500,000 | | 4,000,000 | | 4,500,000 | | 5,000,000 | |
| Non-Road Diesel Fees | 1,197,500 | 1,316,250 | | 1,985,000 | | 2,310,000 | | 2,975,000 | | 3,130,000 | |
| Other External Revenues | 709,242 | 720,425 | | 729,935 | | 689,684 | | 699,676 | | 709,918 | |
| Transfer from Sustainability Innovation Fund Reserves | 2,613,497 | 640,000 | | - | | - | | - | | - | |
| Transfer from Reserves | 1,227,000 | 2,070,000 | | 1,123,125 | | 1,146,453 | | 889,989 | | 723,739 | |
| TOTAL REVENUES | \$16,062,060 | \$16,113,207 | 0.3% | \$15,793,800 | (2.0%) | \$16,175,054 | 2.4% | \$16,320,889 | 0.9% | \$16,688,471 | 2.3% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Ambient Air Quality Monitoring | \$ 2,500,761 | \$ 2,709,224 | | \$ 2,787,278 | | \$ 3,082,770 | | \$ 2,849,630 | | \$ 2,838,707 | |
| Air Quality and Climate Action Policy | 3,381,648 | 3,414,877 | | 3,428,813 | | 3,488,280 | | 3,583,618 | | 3,675,997 | |
| Air Quality Bylaw and Regulation Development | 1,388,362 | 1,473,650 | | 1,505,914 | | 1,538,703 | | 1,576,264 | | 1,615,953 | |
| Corporate Climate Action Services | - | 740,219 | | 717,056 | | 580,940 | | 564,996 | | 569,670 | |
| Engineers in Training | 35,279 | 49,308 | | 64,213 | | 65,935 | | 67,680 | | 69,489 | |
| Regional Sustainability Initiatives | 2,613,497 | 640,000 | | - | | - | | - | | - | |
| Administration and Department Support | 592,548 | 764,718 | | 835,051 | | 857,576 | | 880,405 | | 905,379 | |
| | \$10,512,095 | \$ 9,791,996 | (6.9%) | \$ 9,338,325 | (4.6%) | \$ 9,614,204 | 3.0% | \$ 9,522,593 | (1.0%) | \$ 9,675,195 | 1.6% |
| Communications Program | 270,000 | 445,000 | 64.8% | 320,000 | (28.1%) | 345,000 | 7.8% | 350,000 | 1.4% | 350,000 | 0.0% |
| Environmental Regulation and Enforcement | 4,215,776 | 4,565,636 | 8.3% | 4,777,217 | 4.6% | 5,020,676 | 5.1% | 5,284,589 | 5.3% | 5,566,525 | 5.3% |
| Allocation of Centralized Support Costs | 1,064,189 | 1,310,575 | 23.2% | 1,358,258 | 3.6% | 1,195,174 | (12.0%) | 1,163,707 | (2.6%) | 1,096,751 | (5.8%) |
| TOTAL EXPENDITURES | \$16,062,060 | \$16,113,207 | 0.3% | \$15,793,800 | (2.0%) | \$16,175,054 | 2.4% | \$16,320,889 | 0.9% | \$16,688,471 | 2.3% |



AIR QUALITY AND CLIMATE ACTION SERVICES WORK PLAN

Description of services

Air Quality and Climate Action is a Metro Vancouver Regional District function established under the *Environmental Management Act* with the responsibility for managing air quality and regulating the discharge of air contaminants including greenhouse gas emissions. The service develops and implements management plans that recognize the strong connections between air quality, health and climate change. Whenever possible, actions aim to reduce both health harming air contaminants and greenhouse gases across the region, while improve resilience to climate impacts.

The Air Quality and Climate Action function comprises two programs: Air Quality and Climate Action Services (AQCAS) and the Air Quality Regulation program under Environmental Regulation and Enforcement (ER&E). This work plan focuses on the AQCAS program, whereas the Air Quality Regulation program is presented separately.

The AQCAS program includes development and implementation of management plans for emissions reduction. These plans take an evidence-based approach, relying in large measure on the regional network of air quality monitoring stations, the regional emissions inventory, and other indicators to measure performance and identify priority areas for action. Emission reduction actions involve both regulatory initiatives, such as air emissions bylaws and regulations, and non-regulatory projects and initiatives.

Strategic directions and high level goals supported

The 2022-2026 Board Strategic Plan identifies Climate Action as one of the Board's five strategic directions. Guided by Metro Vancouver's Board-adopted *Clean Air Plan, Climate 2050 Strategic Framework,* and the supporting *Climate 2050* Roadmaps, AQCAS develops and implements climate action policy for the Metro Vancouver region for the next 30 years. This includes:

- Leading the development of regional climate action policy for all Metro Vancouver functions, including both reduction of greenhouse gas emissions and adaptation to climate change.
- Implementing actions fundamental to meeting regional greenhouse gas emission targets for 2030 and 2050 through project implementation, partnerships, and advocacy to other orders of government.
- Supporting regional climate resilience through coordination, planning, and collaboration internally and with external partners.
- Coordinating and supporting corporate climate action to demonstrate Metro Vancouver's commitment to leadership as an organization, providing examples of best practices in greenhouse gas reduction and climate resilience.

Guided by the *Clean Air Plan*, AQCAS works to improve air quality by mitigating threats to public health and the environment, including:

• Improving understanding of air quality issues in the region by expanding air quality monitoring capacity.

- Continuing to identify air contaminants in the region, identify priorities, and pursue effective actions to reduce pollutants.
- Exploring solutions for mitigating health impacts of diminished air quality due to wildfires.

Furthermore, guided by the above plans, AQCAS works to strengthen awareness among and engagement with the public, member jurisdictions, other orders of government, and stakeholders in the implementation of *Climate 2050* and the *Clean Air Plan*, and foster regional coordination to achieve the long-term targets in air quality and reductions in greenhouse gas emissions.

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plan for AQCAS includes the following Performance Indicators (Table 1). Additional key performance indicators for *Climate 2050* are under development and reported in the *Climate 2050* Annual Report.

| Indicator | Historical and/or industry benchmark | Current performance | 2024 expected performance | | |
|--|--|--|--|--|--|
| Regional greenhouse gas emissions for onroad transportation and buildings | Onroad Transportation 2010: 6.4M tCO ₂ e | Onroad Transportation 2019-2022 average: 5.9M tCO ₂ e | Onroad Transportation 5.7M tCO ₂ e | | |
| (tonnes of carbon dioxide equivalent, tCO2e) | Buildings 2010: 4.1M tCO ₂ e | Buildings 2019-2022 average: 4.8M tCO2e | Buildings 4.7M tCO₂e | | |
| Corporate energy-related greenhouse gas emissions (tonnes of carbon dioxide equivalent, tCO ₂ e) | 2012: 22,422 tCO ₂ e Non-energy GHG reduction projects 2012: -110 tCO ₂ e | 2018-2021 average: 26,800 tCO ₂ e Non-energy GHG reduction projects 2018-2021 average: -8,540 tCO ₂ e | 25,500 tCO ₂ e Non-energy GHG reduction projects -9,600 tCO ₂ e | | |
| Days with air quality advisories in place due to emission sources located within the airshed | 2011: zero days | 2019-2022 average: 3.25 days | zero days | | |
| Reliability of air quality monitoring network (% of annual hours with monitoring data available for priority pollutants) | 2015: 96% | 2019-2022 average: 97%+ | > 95% | | |

Table 1. Metro Vancouver Performance Indicators relevant to AQCAS

AQCAS anticipates undertaking the following initiatives in 2024 in support of implementing *Climate* 2050 and the *Clean Air Plan* (Table 2).

Table 2. 2024 key actions

- Continue to implement actions in *Climate 2050 and the Clean Air Plan*, prioritizing Big Moves, including:
 - Advance proposed requirements to significantly reduce greenhouse gas emissions from existing large buildings;
 - Reduce emissions from existing heavy trucks through coordinated approaches with regional and provincial partners;
 - Continue to advance LDV vehicle policies and program that increase the uptake of zero emissions vehicles and shift to active transportation and transit; and
 - Develop policies and programs to reduce emissions from industrial sources in the region.
- Update the Regional Ground-Level Ozone Strategy and continue to implement targeted actions to reduce impacts of ground-level ozone on regional air quality.
- Leverage the Sustainability Innovation Fund to advance development of new and innovative climate actions, including new greenhouse gas reduction policies and programs, energy efficiency, renewable energy, and engagement and outreach.
- Develop new air quality bylaws, regulations and air quality objectives, towards goals for protection of human health and environment and continuous improvement in air quality, including:
 - engagement on new emission regulation bylaws for prioritized sources, including integration of greenhouse gas requirements; and
 - development of new ambient air quality objectives in collaboration with partner agencies as needed.
- Improve public understanding of air quality and climate change, including outreach and progress reporting on *Climate 2050* and the *Clean Air Plan*, for example the preparation of the *Climate 2050 Annual Report* and annual Air Quality Summary.
- Develop additional air quality monitoring and emissions assessment capabilities to provide the evidence basis and performance measurement for the air quality program, and provide air quality advisory services.



ENVIRONMENTAL REGULATION AND ENFORCEMENT - AIR QUALITY REGULATION WORK PLAN

Description of Services

The Air Quality and Climate Action function comprises two programs: Air Quality and Climate Action Services (AQCAS) and Air Quality Regulation under Environmental Regulation and Enforcement (ER&E). This section of the ER&E work plan describes the Air Quality Regulation program, which enables economic activity while advancing Metro Vancouver's air quality goals through the issuance of sitespecific authorizations and promoting compliance with those authorizations and Metro Vancouver air quality bylaws. Bylaws include regulations to control emissions from non-road diesel engines; gas- and wood-fired boilers; gas stations and gasoline storage facilities; automotive re-finishing facilities; concrete facilities; open burning; and residential indoor wood burning. The Air Quality Regulation program also manages a 24-hour public complaint service that annually handles 2,000 to 3,000 complaints, mostly about odours, smoke and dust.

Strategic Directions and High-Level Goals Supported

The Air Quality Regulation program supports Metro Vancouver's 2022-2026 Board Strategic Plan, the Clean Air Plan, and Climate 2050:

- Protect public and environmental health and fight climate change by continuing to provide world-class air quality and greenhouse gas management services
- Integrate greenhouse gas requirements into existing and new sector-specific emission regulations to maximize emission reductions from industrial, commercial and business sources
- Accelerate reductions of health-harming air contaminant and greenhouse gas emissions from industrial facilities
- Reduce non-road diesel emissions and support early adoption of zero-emission non-road equipment
- Implement requirements for higher-emitting wood-burning appliances
- Reduce open-air burning

Performance Indicators

| Air Quality Indicator | r Quality Indicator Historical and/or Curren (2022) (2023 YTD – | | | |
|---|--|------|------|--|
| Number of inspections of permitted facilities per year | 58 | 49 | 50 | |
| Number of inspections of regulated facilities per year | 75 | 36 | 110 | |
| Number of Non-Road Diesel Engine inspections per year | 335* | 231 | 375 | |
| Number of Residential Indoor Wood Burning Best Burning Practices Declarations received (cumulative) | 1614 | 1802 | 7500 | |
| Cumulative number of Non-Road Diesel Engines Retired since 2012 | 334 | 345 | 355 | |

* Benchmark is 2016 to 2021 average for number of inspections of Non-Road Diesel Engines

2024 Key Actions

Air Quality

- Bring unauthorized facilities into compliance with the Air Quality Management Bylaw
- Promote continuous improvement and reduction in PM, NOx, VOC and GHG emissions by large emitters
- Promote awareness of prohibition of use of unregistered residential indoor wood-burning appliances in UCB in 2025
- Promote awareness of and compliance with Tier 3 requirements of the Non-Road Diesel Engine Emission Regulation Bylaw 1329
- Increase awareness of non-road diesel engine retirement rebates
- Promote awareness of and compliance with Open Burning Emission Regulation Bylaw
- Support development of bylaw regulating greenhouse gas emissions from large buildings
- Implement procedures required for issuance of administrative penalties

LIQUID WASTE REGULATION

Description of Services

The Liquid Waste Regulation program enables economic activity while advancing Metro Vancouver's liquid waste management goals through the issuance of authorizations and promoting compliance with those authorizations and Metro Vancouver liquid waste bylaws.

Strategic Directions and High-Level Goals Supported

The Liquid Waste Regulation program supports Metro Vancouver's 2022-2026 Board Strategic Plan and the Integrated Liquid Waste and Resource Management Plan by:

- Issuing authorizations that limit the discharge of non-domestic waste to sewer
- Promoting compliance with liquid waste authorizations and regulations
- Identifying and bringing into compliance unauthorized discharges posing threats to the liquid waste management system and infrastructure, workers, biosolids quality and the environment

Performance Indicators

| Liquid Waste Indicator | Historical and/or Industry Benchmark (2022) | Current Performance (2023 YTD – June 30) | 2024 Performance Objective |
|--|---|---|-------------------------------|
| Number of permitted sites inspected per year* | 136 | 77 | 160 |
| Number of unpermitted sites inspected per year* | 34 | 26 | 30 |
| Number of permits or permit amendments issued per year | 20 | 17 | 20 |

*These numbers do not include sites that are actively regulated by City of Vancouver staff

2024 Key Actions

Liquid Waste

- Continue to support efforts by Liquid Waste Services to update the Liquid Waste Management Plan and identify priority amendments to the Sewer Use Bylaw.
- Support the corporate effort to develop a GVS&DD Notice of Bylaw Violation Bylaw.
- Work with the hospital sector on submission and review of pollution prevention plans and required updates to comply with the Hospital Pollution Prevention Plan Bylaw requirements. Inspect these facilities to verify compliance.
- Continue implementation of the Trucked Liquid Waste and Sani-dump Bylaws by issuing authorizations, conducting compliance inspections and addressing requests for authorization to bring out-of-region waste to Metro Vancouver facilities.
- Identify and assess emerging regional issues that may require regulatory attention such as the discharge of wastewater from municipal swimming pools and methods for efficiently regulating these types of activities.

SOLID WASTE REGULATION

The Solid Waste Regulation program enables economic activity while advancing Metro Vancouver's solid waste management goals through the issuance of licences and promoting compliance with those licences and Metro Vancouver solid waste bylaws.

Strategic Directions and High-Level Goals Supported

The Solid Waste Regulatory Program supports Metro Vancouver's 2022-2026 Board Strategic Plan and the Integrated Solid Waste and Resource Management Plan by:

- Issuing licences to private municipal solid waste and recyclable materials facilities
- Ensuring compliance with the licences and solid waste regulatory bylaws
- Promoting compliance by waste haulers with bylaw requirements to collect and remit the generator levy

Performance Indicators

| Solid Waste Indicator | Historical and/or Industry Benchmark (2022) | Current Performance (2023 YTD – June 30) | 2024 Performance Objective |
|--|---|---|-------------------------------|
| Number of Active Licences at Period End | 41 | 40 | 46 |
| Number of inspections completed at licensed facilities per year | 290 | 157 | 300 |
| Number of inspections completed at unlicensed facilities that <u>require</u> a licence per year | 64 | 40 | 96 |
| Number of inspections completed at unlicensed facilities that <u>may require</u> a licence per year | 139 | 91 | 104 |

2024 Key Actions

Solid Waste

- Promote compliance with solid waste licences issued under the GVS&DD Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996.
- Identify and bring into compliance unauthorized facilities that require a licence under the GVS&DD Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996.
- Support efforts by Solid Waste Services to complete the update of the Solid Waste and Resource Management Plan.
- Support the corporate effort to develop a GVS&DD Notice of Bylaw Violation bylaw.
- Implement the amended *GVS&DD Tipping Fee and Solid Waste Regulation Bylaw No. 306, 2017* bylaw by promoting awareness and compliance by waste haulers.

Air Quality and Climate Action

2024 to 2028 - WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by the Air Quality and Climate Action function over the next five years.

| Initiative | Description | Theme |
|---|---|--|
| 2024 | | |
| Climate 2050 | Complete initial <i>Climate 2050</i> roadmaps and proceed with implementation. Complete emissions inventory. Ongoing annual reporting on performance and progress towards targets. | Environmental Sustainability |
| Clean Air Plan | Ongoing implementation of the <i>Clean Air Plan</i>, adopted by the Board in September 2021. Review of ambient air quality objectives. | Environmental Sustainability |
| Bylaws and Regulations | Implementation of new and amended emission regulations, including: Advertise upcoming (2025) prohibition on using unregistered indoor wood-burning appliances within the Urban Containment Boundary; Enforce bylaw requirements for Tier 3 non-road diesel engines; and Promote compliance with requirements for open burning of vegetative debris. Development of new and amended emission regulations: Reducing GHG emissions from existing large buildings; Amendment of the boilers and process heaters emission regulation; Small non-road engines; and Wood product manufacturing facilities. | Regulatory and Legislative Environment Financial Sustainability Continuous Improvement |
| Environmental Monitoring and Indicators | Complete and report out on next regional air emissions inventory, for 2020, and annual GHG inventory, to track sources of emissions and trends. | System Stewardship |
| Sustainability Innovation Fund | Fund applications for climate action and other projects in regional district, liquid waste and water. | Environmental Sustainability |

| 2025 | | |
|-----------------------------------|---|--|
| Climate 2050 | Ongoing implementation of projects and actions based on <i>Climate 2050</i> Roadmaps. Annual reporting on performance and progress toward targets. Annual updates of emissions inventories. | Environmental Sustainability |
| Bylaws and Regulations | Ongoing development of new and amended emission regulations: small non-road engines reducing GHG emissions from existing buildings wood product manufacturing facilities Continuous improvement of emission regulations in response to enhanced ambient air quality objectives. Ongoing implementation of permit and regulatory fees to recover costs and provide incentives to reduce emissions and impacts. Inclusion of GHG requirements in permits. | Regulatory and Legislative Environment |
| Sustainability Innovation Fund | Fund applications for climate action and other projects in regional district, liquid waste and water. | Environmental Sustainability |

| 2026 | | | | | | |
|-----------------------------------|--|--|--|--|--|--|
| Climate 2050 | Climate 2050 Roadmaps. Annual reporting on performance and progress toward targets. Annual updates of emissions inventories. | | | | | |
| Bylaws and Regulations | Ongoing development and implementation of new and amended emission regulations. Continue promotion of emission reduction by large emitters. Continuous improvement of emission regulations in response to enhanced ambient air quality objectives. | Regulatory and Legislative Environment | | | | |
| Sustainability Innovation Fund | Fund applications for climate action and other projects in regional district, liquid waste and water. | Environmental Sustainability | | | | |

| 2027 | | | | |
|-----------------------------------|---|--|--|--|
| Climate 2050 | Ongoing implementation of projects and actions based on <i>Climate 2050</i> Roadmaps. Annual reporting on performance and progress toward targets. Annual updates of emissions inventories. | | | |
| Clean Air Plan | Mid-point progress report on Clean Air Plan. | Environmental Sustainability | | |
| Bylaws and Regulations | Ongoing development and implementation of new and amended emission regulations. Continue promotion of emissions reduction by large emitters. | Regulatory and Legislative Environment | | |
| Sustainability Innovation Fund | Fund applications for climate action and other projects in regional district, liquid waste and water. | Environmental Sustainability | | |

| 2028 | | | | | | |
|-----------------------------------|--|--|--|--|--|--|
| Climate 2050 | <i>Climate 2050</i> Roadmaps. Annual reporting on performance and progress toward targets. Annual updates of emissions inventories. | | | | | |
| Bylaws and Regulations | Ongoing development and implementation of new and amended emission regulations. Continue promotion of emissions reduction by large emitters. Promote and prepare for 2029 Tier 4 non-road diesel engine bylaw requirements | Regulatory and Legislative Environment | | | | |
| Sustainability Innovation Fund | Fund applications for climate action and other projects in regional district, liquid waste and water. | Environmental Sustainability | | | | |

METRO VANCOUVER DISTRICTS

2024-2028 PROJECTED RESERVES - AIR QUALITY AND CLIMATE ACTION

OPERATING RESERVES

| | 2023 2024 ENDING OPENING BALANCE BALANCE | | ENING | | | | 2024 ENDING | 2025 ENDING BALANCE | | 2026 ENDING | 2027 ENDING | | 2028 ENDING | | | |
|-------------|--|---------|-------|---------|--------------|------|----------------|---------------------------|-------|----------------|----------------|---------|----------------|-----------|-----|---------|
| | | BALANCE | BA | LANCE | CONTRIBUTION | WITH | DRAWALS | INTEREST | | BALANCE | BALA | INCE | BALANCE | BALANCE | | BALANCE |
| Air Quality | \$ | 636,504 | \$ | 636,504 | \$ - | - \$ | - \$ | 5 15,9 | 13 \$ | 652,417 | \$ | 668,727 | \$ 685,445 | \$ 702,58 | 1\$ | 720,146 |

DISCRETIONARY RESERVES

| | 2023 ENDING | 2024 OPENING | | | | | 2024 ENDING | 2025 ENDING | 2026 ENDING | 2027 ENDING | 2028 ENDING |
|-----------------------------|--------------------|-----------------|--------------|-----|----------------|-----------|----------------|----------------|------------------|----------------|----------------|
| | BALANCE | BALANCE | CONTRIBUTION | WIT | HDRAWALS | INTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| Air Quality General Reserve | \$ 3,713,874 \$ | 3,713,874 | | \$ | (2,070,000) \$ | 66,972 \$ | 1,710,846 | \$ 1,223,953 | \$ 701,268 \$ | 425,186 \$ | 310,530 |



| Subject: | 2024 - 2028 Financial Plan – Electoral | Area |
|----------|---|--|
| Date: | September 25, 2023 | Meeting Date: October 6, 2023 |
| From: | Marcin Pachcinski, Division Manager, Regional Planning and Housing Service | Electoral Area and Implementation Services |
| To: | Electoral Area Committee | |

RECOMMENDATION

That the Electoral Area Committee endorse the 2024 - 2028 Financial Plan for the Electoral Area Service as presented in the report dated September 25, 2023, titled "2024 - 2028 Financial Plan – Electoral Area", and forward it to the Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

The Electoral Area Service provides local government administration, planning, building inspection and emergency services to residents of Electoral Area A. The 2024 Work Plan focuses on advancing work on the Barnston Island dike improvements using provincial funding and completing a barge clean-up event for Indian Arm water access communities.

The 2024 - 2028 Financial Plan for the Electoral Area continues to reduce long-term reliance on reserve funds to smooth the tax requisition rate and reflects the local government election costs in 2022 and 2026. Over the next five years, operating programs are increasing by \$79,402 or an average of 58.4% per year. However, when netting out the impact of the provincial grant received for the Barnston Island dike improvement, over the next five years, operating programs are increasing by \$79,402 or an average of 2.3% per year.

PURPOSE

To present the 2024 - 2028 Financial Plan for the Electoral Area Service for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities
- Reduction of household impact, \$13 less that that previously projected for 2024

This report focuses on the Electoral Area Service and presents the 2024 annual budget and the updated five-year plan for the years 2024 to 2028 for committee consideration.

ELECTORAL AREA SERVICE

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

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

• support the efforts of members in developing complete, livable and healthy communities;

- enhance relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders; and
- build resilience in communities to prepare for and adapt to changing physical and environmental conditions.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plan for Electoral Area Service is presented in this report. Within the Electoral Area Work Plan, two performance indicators have been developed and are being tracked. These include:

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

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

CONTINUOUS IMPROVEMENT

Improvement initiatives include:

- Barge Cleanup Events (2024/2026/2028): Assist water access residents in recycling large, hard to manage items (appliances, furniture, Styrofoam, mattresses, batteries, etc.) and reduce the risk of contamination of the natural environment from improper disposal of waste (i.e. dumping or burning). Based on the ongoing need and strong resident support for repeating these cleanup events in Pitt Lake, Howe Sound, and Indian Arm, they have been included as future events in the five-year work plan
- Community Works Fund Projects (2024-2028): Engage with Electoral Area A communities to identify and implement projects to benefit local residents
- Internal permit process improvements (2024): Updating building permit filing and tracking system to increase efficiency.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

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

The 2024 - 2028 Electoral Area Service Financial Plan is included as Attachment 1. The 2024 Annual Work Plan for the Electoral Area Service presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 3.

Operating Budget Highlights

The Electoral Area Service 2024 operating budget is proposed to increase by \$489,602 for a total budget of \$1,218,728 (Attachment 1). This increase is largely due to the inclusion of a portion (\$450,000 included in Other External Revenues) of the \$5.25 million provincial grant for the Barnston Island dike improvements and which are part of the 2024 planned expenditures.

The 2024 operating budget includes the following key actions:

- advance work on the Barnston Island dike improvements using provincial funding;
- complete a barge clean-up event for Indian Arm water access communities;
- receive and consider the Electoral Area A Community Wildfire Resiliency Plan;
- consider Community Works Fund projects identified by the UEL community;
- continue to administer the building, zoning, official community plan, and unsightly premise and nuisance bylaws;
- communicate with Electoral Area residents through the Electoral Area Bulletin and Electoral Area Director's Update;
- engage the UBC/UEL communities on liquor license and retail cannabis referrals, and participate in the next steps of the Province's UEL Governance Study;
- continue to offer staff support to the Electoral Area Board Director; and
- facilitate emergency management education for residents.

Over the next five years, operating programs are increasing by \$79,402 or an average of 58.4% per year. However, when netting out the impact of the provincial grant received for the Barnston Island dike improvement, over the next five years, operating programs are increasing by \$79,402 or an average of 2.3% per year.

Reserve Funds

Electoral Area receives two annual grants from the Province. These grants, \$143,083 from the Community Works Fund and a Regional District grant of \$60,000 are received and contributed to a reserve pending plans for future use. In non-election years, \$30,000 is contributed annually to an election reserve. Every four years, this election reserve is to be used to fund the Electoral Area local government election. The financial plan for Electoral Area has utilized transfers from the Electoral Area General Reserve to offset and smooth some of the changes in expenditures over the five-year plan as well as utilizing reserves to annually fund one-time initiatives. This is consistent with the *Operating, Statutory and Discretionary Reserves Policy*. The 2024 - 2028 Projected Reserves for Electoral Area is included in Attachment 4.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.
- The Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

- That the Electoral Area Committee endorse the 2024 2028 Financial Plan for the Electoral Area Service as presented in the report dated September 25, 2023, titled "2024 - 2028 Financial Plan – Electoral Area", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- That the Electoral Area Committee make recommendations and endorse an amended 2024 -2028 Financial Plan for the Electoral Area Service and forward the amended Financial Plan to the Finance Committee on October 13, 2023 and to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2024 - 2028 Financial Plan for the Electoral Area Service, as presented under Alternative 1, in 2024 the Electoral Area requisition will increase by \$26,187 (6.4%) for a total requisition of \$433,645. The increase in the Electoral Area requisition represents a \$4 increase in the cost to the average Electoral Area household to \$62.

Over the term of the five-year plan, the annual Electoral Area requisition is projected to increase by an average of \$85,987 per year (3.9%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average Electoral Area household over the next five years for electoral area services will rise from \$62 in 2024 to \$71 in 2028 representing an approximate average annual increase of \$2 (3.9%).

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

CONCLUSION

The Electoral Area Service 2024 Budget and Five-year Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Electoral Area Services.

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

Staff recommends endorsing the 2024 - 2028 Financial Plan and Annual Work Plan for Electoral Area A Service as presented under alternative one.

ATTACHMENTS

- 1. 2024 2028 Financial Plan
- 2. 2024 Work Plan
- 3. 2024 2028 "What's Happening"
- 4. 2024 2028 Projected Reserves Electoral Area Service
- 5. Presentation re: 2024 2028 Financial Plan Electoral Area

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5.2 ATTACHMENT 1

METRO VANCOUVER REGIONAL DISTRICT ELECTORAL AREA SERVICE 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|-----------------------------------|----------------|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| REVENUES | | | | | | | | | | | |
| Electoral Area Requisition | \$ 407,458 | \$ 433,645 | 6.4% | \$ 457,999 | 5.6% | \$ 471,604 | 3.0% | \$ 479,693 | 1.7% | \$ 493,445 | 2.9% |
| User Fees | 11,000 | 12,000 | | 12,000 | | 12,000 | | 12,000 | | 12,000 | |
| Other External Revenues | 186,668 | 653,083 | | 4,703,083 | | 503,083 | | 203,083 | | 203,083 | |
| Transfer from Reserves | 124,000 | 120,000 | | 105,000 | | 200,000 | | 90,000 | | 100,000 | |
| TOTAL REVENUES | \$ 729,126 | \$ 1,218,728 | 67.1% | \$ 5,278,082 | 333.1% | \$ 1,186,687 | (77.5%) | \$ 784,776 | (33.9%) | \$ 808,528 | 3.0% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Community Planning | \$ 427,750 | \$ 889,432 | | \$ 4,945,877 | | \$ 767,668 | | \$ 464,579 | | \$ 486,837 | |
| Building Inspections | 21,250 | 27,191 | | 27,699 | | 28,229 | | 28,766 | | 29,318 | |
| Local Government Election | - | - | | - | | 124,676 | | - | | - | |
| Fraser Valley Library Services | 2,067 | 2,000 | | 2,000 | | 2,000 | | 2,000 | | 2,000 | |
| Emergency Planning | 20,000 | 20,000 | | 20,000 | | 20,000 | | 20,000 | | 20,000 | |
| | 471,067 | 938,623 | 99.3% | 4,995,576 | 432.2% | 942,573 | (81.1%) | 515,345 | (45.3%) | 538,155 | 4.4% |
| Contribution to Election Reserve | 30,000 | 30,000 | | 30,000 | | - | | 30,000 | | 30,000 | |
| Contribution to Reserve | 186,668 | 203,083 | 8.8% | 203,083 | 0.0% | 203,083 | 0.0% | 203,083 | 0.0% | 203,083 | 0.0% |
| | 216,668 | 233,083 | 7.6% | 233,083 | 0.0% | 203,083 | (12.9%) | 233,083 | 14.8% | 233,083 | 0.0% |
| Allocation of Centralized Support | 41,391 | 47,022 | 13.6% | 49,423 | 5.1% | 41,031 | (17.0%) | 36,348 | (11.4%) | 37,290 | 2.6% |
| TOTAL EXPENDITURES | \$ 729,126 | \$ 1,218,728 | 67.1% | \$ 5,278,082 | 333.1% | \$ 1,186,687 | (77.5%) | \$ 784,776 | (33.9%) | \$ 808,528 | 3.0% |



ELECTORAL AREA SERVICES

Description of services

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

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

Strategic directions and high-level goals supported

2020-2023 Board Strategic Plan

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

Performance indicators

| Indicator | Historical and/or industry benchmark | Current Performance | 2024 Performance Objective |
|---|--|---------------------------|-------------------------------|
| Number of public meetings and engagement events | 2019: 9 2020: 9 2021: 11 2022: 9 | Projected 2023: 9 | 9 |
| Number of visits to the Electoral Area A Website | 2019: 14,596 2020: 12,606 2021: 12,468 2022: 16,483 | Projected 2023: 12,000 | 12,000 |

2024 key actions

- Advance work on the Barnston Island dike improvements using provincial funding
- Complete a barge clean-up event for Indian Arm water access communities
- Receive and consider the Electoral Area A Community Wildfire Resiliency Plan
- Consider Community Works Fund projects identified by the UEL community
- Continue to administer the building, zoning, official community plan, and unsightly premise and nuisance bylaws
- Communicate with Electoral Area residents through the Electoral Area Bulletin and Electoral Area Director's Update
- Engage the UBC/UEL communities on liquor license and retail cannabis referrals, and participate in the next steps of the Province's UEL Governance Study
- Continue to offer staff support to the Electoral Area Board Director
- Facilitate emergency management education for residents

Electoral Area Services

2024 to 2028 – WHAT'S HAPPENING

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

| Initiative | Description | Theme | | | | |
|--------------------------------------|--|---|--|--|--|--|
| 2024 | | | | | | |
| Barnston Island Dike Improvements | Award contract(s) for design and early works for identified improvements | System Stewardship | | | | |
| Clean-up Event | Barge cleanup event in Indian Arm | Environmental Sustainability | | | | |
| Community Works Fund | Consider priority projects in UEL for funding through the Community Works Fund | Regional Growth Financial Sustainability | | | | |
| 2025 | | | | | | |
| Barnston Island Dike Improvements | Construction and implementation of identified improvements | System Stewardship | | | | |
| Emergency Preparedness | Support resident-preparedness for fires & earthquake (hands-on training, equipment) | Regional Growth System Stewardship | | | | |
| 2026 | | | | | | |
| Local Government Election | Administer local government election in Electoral Area A | System Stewardship | | | | |
| Clean-up Event | Barge cleanup event in Pitt lake | Environmental Sustainability | | | | |
| 2027 | | | | | | |
| Emergency Preparedness | Support resident-preparedness for fires & earthquake (hands-on training, equipment) | Regional Growth System Stewardship | | | | |
| Community Works Fund | Consider priority projects in UBC/UNA/UEL for funding through the Community Works Fund | Regional Growth Financial Sustainability | | | | |
| 2028 | | | | | | |
| Clean-up Event | Barge cleanup event in Howe Sound | Environmental Sustainability | | | | |

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METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - ELECTORAL AREA

OPERATING RESERVES

| | 2023 INDING ALANCE | 2024 OPENING BALANCE | CONTRIBUTION | WITHDRAWAL | s | INTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | | 2026 ENDING BALANCE | 2027 ENDING BALANCE | 2028 ENDING BALANCE |
|------------------------|--------------------------|----------------------------|--------------|------------|------|----------|---------------------------|---------------------------|-----|---------------------------|---------------------------|---------------------------|
| Electoral Area Service | \$ 30,682 | \$ 30,682 | \$ - | \$ | - \$ | 767 \$ | 31,449 | \$ 32,235 | 5\$ | 33,041 \$ | 33,867 \$ | 34,714 |

DISCRETIONARY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | CONTRIBU | TION | WITHDRAWALS | INTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING BALANCE | 2028 ENDING BALANCE |
|---------------------------------------|---------------------------|----------------------------|----------|-------|-----------------|----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Electoral Area General Reserve | \$ 1,610,776 | \$ 1,610,77 | 6\$6 | 0,000 | \$ (120,000) \$ | 39,519 | 1,590,295 | \$ 1,584,490 \$ | 1,573,477 \$ | 1,582,439 \$ | 1,581,500 |

STATUTORY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | сс | ONTRIBUTION | wi | THDRAWALS | INTEREST | | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING BALANCE | 2028 ENDING BALANCE |
|---------------------------------|---------------------------|----------------------------|----|-------------|----|-----------|-----------------|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Electoral Area Service | | | | | | | | | | | | | |
| Community Works Reserve | \$ 905,076 | \$ 905,076 | \$ | 143,083 | \$ | - | \$ 24,415 \$ | 5 | 1,072,574 | \$ 1,244,260 | \$ 1,420,238 | \$ 1,600,615 \$ | 1,785,502 |
| Electoral Area Election Reserve | 44,742 | 44,742 | | 30,000 | | - | 1,494 | | 76,236 | 108,517 | 20,105 | 50,983 | 82,633 |
| Total | \$ 949,818 | \$ 949,818 | \$ | 173,083 | \$ | - | \$ 25,909 \$ | ; | 1,148,810 | \$ 1,352,777 | \$ 1,440,343 | \$ 1,651,598 \$ | 1,868,135 |



| Subject: | 2024 - 2028 Financial Plan – Housing Planning and Policy | | | | | | | | |
|----------|--|--------------------------------|--|--|--|--|--|--|--|
| Date: | September 28, 2023 | Meeting Date: October 13, 2023 | | | | | | | |
| From: | Heather McNell, Deputy Chief Administrative Officer, Policy and Planning | | | | | | | | |
| То: | Housing Committee | | | | | | | | |

RECOMMENDATION

That the Housing Committee endorse the 2024 - 2028 Financial Plan for Housing Planning and Policy as presented in the report dated September 28, 2023, titled "2024 - 2028 Financial Plan – Housing Planning and Policy", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

The Housing Planning and Policy team supports the Metro Vancouver Housing Corporation capital (re)development housing projects and the implementation of the *Metro Vancouver Housing 10-Year Plan*. This function also supports and convenes member jurisdictions around housing issues, and supports regional housing priorities through the provision of planning and policy resources and information, best practices research, and advocacy.

PURPOSE

To present the 2024 - 2028 Financial Plan for the Housing Planning and Policy function for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024;
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions;
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities; and
- Reduction of household impact, \$13 less that that previously projected for 2024.

This report focuses on the Housing Planning and Policy Service and presents the 2024 provisional annual budget and the updated five-year plan for the years 2024 to 2028 for Committee consideration.

HOUSING PLANNING AND POLICY PROGRAM

The Housing Planning and Policy function contributes to processes and decisions related to regional housing planning and research, supports the development of affordable housing projects through implementation of the *Metro Vancouver Housing 10-Year Plan* and *Metro 2050*, coordinates the Regional Planning Advisory Committee – Housing Subcommittee and works to secure funding and available lands owned by member jurisdictions for new affordable housing.

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

- Implement the Metro Vancouver 10-Year Housing Plan to support affordable housing and engaged communities in the region;
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of Metro Vancouver Housing Corporation;

- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future ratepayers; and
- Support healthy engaged communities, preserve existing housing to maintain affordability and grow strategically through redevelopment and new developments.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plan for Housing Planning and Policy is presented in this report. Within the Housing Planning and Policy Work Plan, a number of performance indicators have been developed and are being tracked. These include:

- New Development The Steller (Burnaby) and Heron's Nest (Pitt Meadows) sites: 100% of design completed, begin construction in 2024;
- New Development Riverside Drive (District of North Vancouver): 100% of design completed, advance to shovel ready status for construction start in 2026;
- New Development Initiation of all Tranche 2 Partnership projects: 0-10% of design complete, partners secured for all identified sites;
- Redevelopment Moray Place (Port Moody): 40% of design complete; conclude concept planning and advance development approvals (i.e. rezoning);
- 350 partnership units initiated; and
- 600 new development units initiated.

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

CONTINUOUS IMPROVEMENT

Housing Planning and Policy supports and guides MVHC with policy and strategic planning as well as supporting member jurisdictions with research and best practices to advance housing policy in the region. A jurisdictional scan and best practice review of inclusionary housing policies and practices is currently underway, which will include creating a model inclusionary housing policy and an exploration of MVHC roles in supporting and administering units generated through inclusionary housing.

In 2023, MVHC entered into a Memorandum of Understanding with the Province to support the delivery of 2,000 new homes over the next 10 years. With a portfolio approach to funding, and with significant progress having been made toward delivering other objectives of the *Metro Vancouver Housing 10-Year Plan*, an update to the plan is required to ensure it remains relevant in guiding MVHC investments and decisions.

Further improvement initiatives include:

• Create a *Metro 2050* implementation guideline to support achievement of regional growth strategy housing policies, including the regional target of 15% affordable rental housing within Urban Centres and Frequent Transit Development Areas;

- Update the municipal measures matrix outlining actions being taken by member jurisdictions to further housing affordability and delivery;
- Refresh the *Metro Vancouver Housing 10-Year Plan* to reflect current market conditions and present a renewed vision for the future;
- Develop an expanded partnership approach including identifying criteria for evaluating opportunities and potential partners;
- Review and update internal finance and operational policies, procedures, and documentation to ensure clear and consistent documentation, identify opportunities to update and streamline procedures, and ensure standard application across different teams; and
- Ensure affordable housing supports those who need it most and supports greater financial sustainability and certainty for new development projects without reliance on external funding or ongoing operating subsidies by implementing new policies/procedures to introduce income testing for new Low End of Market tenants.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

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

The 2024 - 2028 Housing Planning and Policy Financial Plan is included as Attachment 1. The 2024 Annual Work Plan for Housing Planning and Policy presented in this report is included in Attachment 2, and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 3.

Operating Budget Highlights

The Housing Planning and Policy 2024 operating budget is proposed to increase by \$992,699 to a total budget of \$8.2 million (Attachment 1). This increase is primarily due to the planned initiation of new one-time Sustainability Innovation Fund projects (Building Resilience - Exploring the Potential of Renewable Energy Building Infrastructure; Step Code Implementation Impacts for Building Envelope Rehabilitation of Existing Buildings; Panelized Mass-timber for Retrofits, Adding Resiliency and Additional Units for Retrofits; and Living Building Challenge Certification Feasibility for Rehabilitation).

The 2024 operating budget includes the following actions:

• Support the implementation of the Metro Vancouver Housing 10-Year Plan

- o Initiate a 10-Year Plan update to reflect Tranche 2 objectives and expanded targets
- Progress concept design for new Riverside Drive site (District of North Vancouver) to schematic design and development approvals
- Initiate five new partnership projects to advance through design and approvals as part of MVHC's next phase of projects (Tranche 2)
- Continue to pursue partnership opportunities with public, private and other housing stakeholders
- o Continue to review and update internal procedures surrounding tenant subsidies
- Best practice research to support MVHC development standards
- Continue to update tenant policies as required (e.g., periodic income testing for low end of market tenants, ombudsperson procedure)
- Continue to explore opportunities to acquire or manage inclusionary housing units built by private developers
- Explore opportunities to acquire purpose-built rental housing buildings through the Rental Protection Fund
- o Continue to develop materials and communications to support tenant relocation
- Support the implementation of the Metro Vancouver Housing Redevelopment Plan to advance the redevelopment of four Tranche 2 redevelopment projects;
- Support Metro Vancouver Regional Planning implementation of policies related to housing for Metro 2050, the regional growth strategy;
- Convene the Regional Planning Advisory Committee Housing Subcommittee and support members around regional housing issues and support with best practice research and advocacy; and
- Continue to implement the strategy to update existing MVHC leases with municipal members, and explore innovative approaches such as rezoning MVHC properties on a portfolio basis.

Over the next five years, operating programs decrease by \$440,671 or an average of 0.9% per year. The decrease is due to the completion of planned projects funded through the Sustainability Innovation Fund. However, as new projects are identified and approved in future years, annual budgets will be adjusted accordingly.

Communications Program

The 2024 Housing Planning and Policy Communications Program of \$25,000 is focused on outreach to build better understanding and awareness of the Metro Vancouver Housing function in the region and to engage existing tenants to collect and analyze demographic and user experience data to guide development and operational planning. There will be emphasis on further branding work including multimedia support, focus groups and public opinion research where needed.

Reserve Funds

The 2024 - 2028 Financial Plan for Housing Planning and Policy includes a \$1.0 million annual contribution to support the re-development of existing housing sites through the affordable housing re-development reserve and a \$4.0 million annual contribution. This amount was previously anticipated to increase to a \$6.0 million annual contribution. With a one-time \$20 million in grant funding allocated from the Building Communities fund to support MVH expansion, this contemplated increase in the tax requisition has been deferred to be revisited in the future to

support the development of MVHC affordable housing on member jurisdiction or regional lands. Reserve usage is in accordance with the *Operating, Statutory and Discretionary Reserves Policy*.

The financial plan for Housing Planning and Policy does not have any proposed applications of reserve funding. The 2024 - 2028 Projected Reserves for Housing Planning and Policy is included in Attachment 4.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration. The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.
- The Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 28, 2022.

ALTERNATIVES

- That the Housing Committee endorse the 2024 2028 Financial Plan for Housing Planning and Policy as presented in the report dated September 28, 2023, titled "2024 - 2028 Financial Plan – Housing Planning and Policy", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- That the Housing Committee make recommendations and endorse an amended 2024 2028 Financial Plan for the Housing Planning and Policy Service and forward the amended Financial Plan to the to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2024 - 2028 Financial Plan for the Housing Planning and Policy Service, as presented under Alternative 1, in 2024 the Housing Planning and Policy requisition will increase by \$288,299 (4.6%) for a total requisition of \$6.6 million. Of this total, \$5 million per year comes from the property tax requisition allocated to both advancing the planning and design of capital redevelopment projects and for new sites developed in partnership with member jurisdictions.

Over the term of the five-year plan, the annual Housing Planning and Policy requisition is projected to increase by an average of \$93,706 per year (1.5%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years for the Housing Planning and Policy function will stay at current amount of \$5-\$6 per household.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

CONCLUSION

The Housing Planning and Policy function 2024 Budget and Five-Year Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Housing Planning and Policy.

The presentation of this year's five-year financial plan for Housing Planning and Policy provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed service related initiatives over the next five years. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain sustainable while keeping pace with our critical requirements. Staff recommends endorsing the 2024 - 2028 Financial Plan and Annual Work Plan for Housing Planning and Policy as presented under alternative one.

Attachments:

- 1. 2024 2028 Financial Plan
- 2. 2024 Work Plan
- 3. 2024 2028 "What's Happening"
- 4. 2024 2028 Projected Reserves Housing Planning and Policy Service
- 5. Presentation re: 2024 2028 Financial Plan Housing Planning and Policy

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ATTACHMENT 1

METRO VANCOUVER REGIONAL DISTRICTS HOUSING PLANNING AND POLICY 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|--|----------------|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| REVENUES | | | | | | | | | | | |
| Metro Vancouver Regional District Requisitions | \$ 6,280,995 | \$ 6,569,294 | 4.6% | \$ 6,892,632 | 4.9% | \$ 6,750,314 | (2.1%) | \$ 6,717,515 | (0.5%) | \$ 6,749,524 | 0.5% |
| Transfer from Sustainability Innovation Fund Reserves | 909,200 | 1,613,600 | | 179,200 | | 20,000 | | | | | |
| TOTAL REVENUES | \$ 7,190,195 | \$ 8,182,894 | 13.8% | \$ 7,071,832 | (13.6%) | \$ 6,770,314 | (4.3%) | \$ 6,717,515 | (0.8%) | \$ 6,749,524 | 0.5% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Housing Planning and Policy | \$ 2,048,460 | \$ 3,041,677 | | \$ 1,765,440 | | \$ 1,597,077 | | \$ 1,566,505 | | \$ 1,609,365 | |
| Contribution to Housing Planning and Policy Re-development Reserve | 1,000,000 | 1,000,000 | | 1,000,000 | | 1,000,000 | | 1,000,000 | | 1,000,000 | |
| Contribution to Housing Planning and Policy Development Reserve | 4,000,000 | 4,000,000 | | 4,000,000 | | 4,000,000 | | 4,000,000 | | 4,000,000 | |
| | \$ 7,048,460 | \$ 8,041,677 | 14.1% | \$ 6,765,440 | (15.9%) | \$ 6,597,077 | (2.5%) | \$ 6,566,505 | (0.5%) | \$ 6,609,365 | 0.7% |
| Communications Program | 25,000 | 25,000 | 0.0% | 25,000 | 0.0% | 25,000 | 0.0% | 25,000 | 0.0% | 25,000 | 0.0% |
| Allocation of Centralized Support Costs | 116,735 | 116,217 | (0.4%) | 281,392 | 142.1% | 148,237 | (47.3%) | 126,010 | (15.0%) | 115,159 | (8.6%) |
| TOTAL EXPENDITURES | \$ 7,190,195 | \$ 8,182,894 | 13.8% | \$ 7,071,832 | (13.6%) | \$ 6,770,314 | (4.3%) | \$ 6,717,515 | (0.8%) | \$ 6,749,524 | 0.5% |



HOUSING PLANNING AND POLICY

Description of Services

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

The Housing Planning and Policy group has the following functions:

- Lead the planning and analysis of properties to assess redevelopment potential;
- Work with member municipalities to identify land for the development of affordable housing;
- Oversee initial site studies and assessment and confirm project viability;
- Lead concept planning for new development projects;
- Support MVHC affordable housing development projects including leading coordination of development approval processes, agreements, and community engagement;
- Support MVHC Operations on development projects including planning for tenant relocation, tenant engagement, communications, and rent-up;
- Research and integrate best practices to support development design decisions and standards;
- Support or lead funding applications for MVHC development projects including projectspecific funding calls and broader portfolio funding discussions with provincial and federal governments;
- Develop both Corporate and Board policies for Metro Vancouver Housing to ensure housing operations and development align and support the Board Strategic Plan, the *Metro Vancouver Housing 10-Year Plan, Metro 2050*, and the *Residential Tenancy Act*;
- Monitor a 10-year housing strategy to implement goals around operations, maintenance, growth, and partnerships and meet strategic targets;
- Coordinate the Regional Planning Advisory Committee Housing Subcommittee; and
- Provide support, planning and policy resources, best practice research and advocacy for regional housing priorities.

Strategic Directions and High-level Goals Supported

- Support the implementation of the *Metro Vancouver Housing 10-Year Plan*.
- Review, update and develop policies that reflect a commitment to sound financial management and long-term planning, in consideration of current and future residents.
- Strengthen awareness and engagement with the public, members, other orders of government, and key stakeholders on a range of initiatives regarding the role and value of Metro Vancouver Housing.
- Convene municipal staff and stakeholders to share ideas on affordable housing.
- Facilitate partnerships with member municipalities and other stakeholders to expand

affordable rental housing within the region.

- Pursue funding and program opportunities with other orders of government.
- Implement the *Metro Vancouver Housing Redevelopment Plan* to advance the redevelopment of MVHC housing sites.
- Support the implementation of housing related policy for *Metro 2050*, the regional growth strategy.

Performance indicators

| Indicator (% of design completed) | Historical and/or Industry Benchmark (2021) | Current Performance (2022) | 2024 Performance Objective |
|--|--|---|--|
| The Steller (Burnaby) – New development | Design 20% | Design 45% | Design 100% Construction <mark>10%</mark> |
| Heron's Nest (Pitt Meadows) – New development | Design 20% | Design 70% | Design 100% Construction <mark>30%</mark> |
| Riverside Drive (District of North Vancouver) – New development | 0% | Design 5% (feasibility study and preliminary concept complete in 2023) | Design 100% (continue design development, advance to shovel ready status for 2026 construction start) |
| Moray Place (Port Moody) – Redevelopment | Place (Port Moody) – 0% 0 | | Design 40% (complete concept planning and advance development approvals) |
| Tranche 2 Partnership projects (Various) | 0% | 0% | Design 0 – 10% (partners secured for all sites – project initiation) |

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

2024 Key Actions

Policy & Planning

- Support the implementation of the *Metro Vancouver Housing 10-Year Plan*
 - Initiate a 10-Year Plan update to reflect Tranche 2 objectives and expanded targets
 - Progress concept for new Expression of Interest (Round 2) site in the District of North Vancouver to schematic design and development approvals
 - Initiate five new partnership projects to advance through design and approvals as part of MVHC's next phase of projects (Tranche 2)
 - Continue to pursue partnership opportunities with public, private and other housing

stakeholders

- Continue to review and update internal procedures surrounding tenant subsidies
- Best practice research to support MVHC development standards
- Continue to update tenant policies as required (e.g., periodic income testing for low end of market tenants, ombudsperson procedure)
- Continue to explore opportunities to acquire or manage inclusionary housing units built by private developers
- Explore opportunities to acquire purpose-built rental housing buildings through the Rental Protection Fund
- Continue to develop materials and communications to support tenant relocation
- Support the implementation of the Metro Vancouver Housing Redevelopment Plan to advance the redevelopment of existing MVHC sites.
 - Continue to support planning needs of 5 active redevelopment projects
 - Continue to support planning for Expression of Interest (Round 2) site in the District of North Vancouver
 - Advance four redevelopment projects through design and approvals as part of MVH's next phase of projects (Tranche 2)
 - Coordinate requirements and applications for funding programs as needed
 - Work with Operations to create Rent Up Strategies for projects nearing completion
- Support Metro Vancouver Regional Planning implementation of policies related to housing for Metro 2050, the regional growth strategy
 - Implement the Regional Affordable Rental Housing Target and create an implementation guideline to support achievement of Metro 2050 housing policies
- Convene the Regional Planning Advisory Committee's Housing Subcommittee and support members around regional housing issues and development of best practice research and advocacy
 - Create a regional inclusionary housing policy model
- Continue to implement strategies to renew existing MVHC leases with municipal members, and explore innovative approaches such as rezoning MVHC properties on a portfolio basis

Communications Program

- Work to build a better understanding and awareness of MVHC among key stakeholders through further branding work including multimedia support where needed
- Work with Operations and External Relations to continue to update tenant-facing materials to improve clarity and understanding
- Continue to engage existing tenants to collect and analyze demographic and user experience data to guide development and operational planning

Housing Planning and Policy

2024 to 2028 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Housing Planning and Policy over the next 5 years.

| Initiative | Description | Theme |
|---|---|--|
| 2024 | | |
| 10-Year Plan Implementation | Continue to implement the <i>Metro Vancouver</i> <i>Housing 10-Year Plan</i> , and update the Plan based on Tranche 2 strategies and expanded targets | Regional growth, financial & environmental sustainability |
| Advance Tranche 1 redevelopment and new development projects to construction | Continue to advance Tranche 1 redevelopment and new development projects including: Heather Place B, Kingston Gardens, Salal Landing, The Connection, Heron's Nest, The Steller, and Malaspina Village – Phase 1 through to construction and occupancy | Regional growth |
| Progress new housing site on member lands | Progress concept plan for Riverside Drive site (DNV) to schematic design and development approvals. | Regional growth |
| Advance Tranche 2 redevelopment and new development projects through design and approvals | Initiate four new redevelopment projects to advance through design and approvals as part of MVH's next phase of projects (Tranche 2) | Regional growth |
| Strategic planning and policy for MVHC | Continue to develop and implement new policies and procedures to support periodic income testing of low end of market tenants, ombudsperson procedures, and tenant relocation. Implement an annual review process for all Corporate and Board operational policies for Metro Vancouver Housing. | Financial sustainability |
| Seek funding support for development projects | Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability | Regional growth, financial & environmental sustainability |
| Expand housing portfolio through development partnerships | Initiate five new partnership projects to advance through design and approvals as part of MVH's next phase of projects (Tranche 2) | Regional growth |
| Expand housing portfolio through acquisition or management of inclusionary housing units | Continue to explore opportunities to increase MVH's portfolio through acquisition or management of units obtained through inclusionary housing policies | Regional growth |

| planning and policy | Undertake best practice research to support | Regional capacity building |
|---|---|--|
| planning and policy on housing-related | regional housing priorities; support capacity building for MVHC as well as regional housing | bullung |
| issues | stakeholders; create a regional inclusionary housing policy model | |
| Support regional housing | Implement the Regional Affordable Rental | Regional planning |
| policy in Metro 2050 | Housing Target and create an implementation guideline to support achievement of Metro 2050 | |
| Lindata avisting MV/UC | housing policies Continue to plan for upcoming renewal of existing | Degulatory and |
| Update existing MVHC leases, and pre-zone | MVHC leases with member jurisdictions, and | Regulatory and Legislative |
| existing sites | explore innovative approaches such as rezoning MVHC properties on a portfolio basis | Environment |
| 2025 | | |
| 10-Year Plan | Continue to implement the Metro Vancouver | Regional growth, |
| Implementation | Housing 10-Year Plan | financial & |
| | | environmental sustainability |
| Implement | Continue to progress active redevelopment and | Regional growth |
| redevelopment and new | new development projects and partnerships; | |
| development projects | advance development approvals for Tranche 2 | |
| Seek funding support for | projects; initiate tenant relocation Continue to pursue provincial and federal funding | Regional growth, |
| development projects | for development projects, including funding | financial & |
| | opportunities to further enhance sustainability | environmental |
| | , | sustainability |
| Develop new Regional | Undertake the development of a new regional | Regional capacity |
| Affordable Housing | affordable housing strategy | building |
| Strategy | | |
| Strategy | | |
| Strategic planning and | Continue to develop new policies and procedures | Financial & |
| | to support operational, financial efficiency and | environmental |
| Strategic planning and policy for MVHC | to support operational, financial efficiency and industry best practices | environmental sustainability |
| Strategic planning and policy for MVHC Support regional | to support operational, financial efficiency and industry best practices Undertake best practice research to support | environmental sustainability Regional capacity |
| Strategic planning and policy for MVHC Support regional planning and policy | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity | environmental sustainability |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related | to support operational, financial efficiency and industry best practices Undertake best practice research to support | environmental sustainability Regional capacity |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing | environmental sustainability Regional capacity |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and | environmental sustainability Regional capacity building Regulatory and Legislative |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches | environmental sustainability Regional capacity building Regulatory and |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches such as rezoning MVHC properties on a | environmental sustainability Regional capacity building Regulatory and Legislative |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and pre-zone existing sites | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches | environmental sustainability Regional capacity building Regulatory and Legislative |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and pre-zone existing sites | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches such as rezoning MVHC properties on a | environmental sustainability Regional capacity building Regulatory and Legislative |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and pre-zone existing sites 2026 | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches such as rezoning MVHC properties on a portfolio basis | environmental sustainability Regional capacity building Regulatory and Legislative environment |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and pre-zone existing sites 2026 10-Year Plan | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches such as rezoning MVHC properties on a portfolio basis Continue to implement the Metro Vancouver | environmental sustainability Regional capacity building Regulatory and Legislative environment Regional growth, financial & environmental |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and pre-zone existing sites 2026 10-Year Plan Implementation | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches such as rezoning MVHC properties on a portfolio basis Continue to implement the Metro Vancouver Housing 10-Year Plan | environmental sustainability Regional capacity building Regulatory and Legislative environment Regional growth, financial & environmental sustainability |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and pre-zone existing sites 2026 10-Year Plan Implementation | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches such as rezoning MVHC properties on a portfolio basis Continue to implement the Metro Vancouver Housing 10-Year Plan Continue to progress active redevelopment | environmental sustainability Regional capacity building Regulatory and Legislative environment Regional growth, financial & environmental |
| Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and pre-zone existing sites 2026 10-Year Plan Implementation | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches such as rezoning MVHC properties on a portfolio basis Continue to implement the Metro Vancouver Housing 10-Year Plan | environmental sustainability Regional capacity building Regulatory and Legislative environment Regional growth, financial & environmental sustainability |

| development projects Develop new Regional Affordable Housing Strategy Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and | Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability Undertake the development of a new regional affordable housing strategy Continue to develop new policies and procedures to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and continue to explore innovative approaches | Regional growth, financial & environmental sustainability Regional capacity building Financial & environmental sustainability Regional capacity building Regional capacity building Regional capacity building Regional capacity building Regional capacity building |
|--|---|--|
| Affordable Housing Strategy Strategic planning and policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and | affordable housing strategy Continue to develop new policies and procedures to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and | Regional capacity building Financial & environmental sustainability Regional capacity building Regulatory and |
| policy for MVHC Support regional planning and policy on housing-related issues Update existing MVHC leases, and | to support operational, financial efficiency and industry best practices Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and | environmental sustainability Regional capacity building Regulatory and |
| planning and policy on housing-related issues Update existing MVHC leases, and | regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders Support upcoming renewal of existing MVHC leases with member jurisdictions, and | building Regulatory and |
| MVHC leases, and | leases with member jurisdictions, and | |
| | such as rezoning MVHC properties on a portfolio basis | environment |
| 2027 | | |
| | Continue to implement the Metro Vancouver Housing 10-Year Plan | Regional growth, financial & environmental sustainability |
| redevelopment and new | Continue to progress active redevelopment and new development projects and partnerships | Regional growth |
| development projects | Continue to pursue provincial and federal funding for development projects, including funding opportunities to further enhance sustainability | Regional growth, financial & environmental sustainability |
| - | Implement the new regional affordable housing strategy | Regional capacity building |
| policy for MVHC | Continue to develop new policies and procedures to support operational, financial efficiency and industry best practices | Financial & environmental sustainability |
| planning and policy on housing-related issues | Undertake best practice research to support regional housing priorities; support capacity building for MVHC as well as regional housing stakeholders | Regional capacity building |
| leases, and pre-zone existing sites | Support upcoming renewal of existing MVHC leases with member jurisdictions, and seek to implement rezoning of MVHC properties on a portfolio basis | Regulatory and Legislative environment |
| 2028 10-Year Plan | Continue to implement the Metro Vancouver | Regional growth, |

| Implementation | Housing 10-Year Plan | financial & |
|--------------------------|---|-------------------|
| | | environmental |
| | | sustainability |
| Implement | Continue to progress active redevelopment | Regional growth |
| redevelopment and new | and new development projects and | |
| development projects | partnerships | |
| Seek funding support for | Continue to pursue provincial and federal funding | Regional growth, |
| development projects | for development projects, including funding | financial & |
| | opportunities to further enhance sustainability | environmental |
| | | sustainability |
| Regional Affordable | Continue to implement the new regional | Regional capacity |
| Housing Strategy | affordable housing strategy | building |
| Implementation | | |
| Strategic planning and | Continue to develop new policies and procedures | Financial & |
| policy for MVHC | to support operational, financial efficiency and | environmental |
| | industry best practices | sustainability |
| Support regional | Undertake best practice research to support | Regional capacity |
| planning and policy on | regional housing priorities; support capacity | building |
| housing-related issues | building for MVHC as well as regional housing | |
| | stakeholders | |

ATTACHMENT 4

METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - HOUSING PLANNING AND POLICY

OPERATING RESERVES

| | 2023 | 2 | 2024 | | | | | | 2024 | 2025 | 2 | 2026 | 202 | 7 | 2028 | |
|-----------------------------|--------------|----|--------|--------------|-------|-----------|----------|----|--------|-----------|----|--------|------|-------|-------|------|
| | ENDING | | ENING | | | | | | NDING | ENDING | | NDING | ENDI | | ENDIN | - |
| | BALANCE | BA | LANCE | CONTRIBUTION | I WIT | THDRAWALS | INTEREST | BA | ALANCE | BALANCE | BA | LANCE | BALA | NCE | BALAN | CE |
| Housing Planning and Policy | \$ 68,902 | \$ | 68,902 | \$ - | - \$ | - 9 | 5 1,723 | \$ | 70,625 | \$ 72,391 | \$ | 74,201 | \$7 | 6,056 | \$77 | ,957 |

STATUTORY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | CON | TRIBUTION | WITHDRAWALS | I | NTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING ALANCE | 2028 ENDING BALANCE |
|---|---------------------------|----------------------------|-----|-----------|-------------|----|---------|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|
| Housing Planning and Policy | | | | | | | | | | | | |
| Housing Planning and Policy Re-development Reserve | \$ 6,882,179 | \$ 6,882,179 | \$ | 1,000,000 | \$ - | \$ | 184,554 | \$ 8,066,733 | \$ 1,180,901 | \$ 1,210,424 | \$ 1,240,685 | \$ 1,271,702 |
| Housing Planning and Policy Development Reserve | 16,651,641 | 16,651,641 | | 4,000,000 | - | | 466,291 | 21,117,932 | 5,445,880 | 4,569,527 | 2,658,765 | 1,712,734 |
| Total | \$ 23,533,820 | \$ 23,533,820 | \$ | 5,000,000 | \$ – | \$ | 650,845 | \$ 29,184,665 | \$ 6,626,781 | \$ 5,779,951 | \$ 3,899,450 | \$ 2,984,436 |



| Subject: | 2024 - 2028 Financial Plan – Metro | Vancouver Housing Corporation (MVHC) |
|----------|------------------------------------|---|
| Date: | September 26, 2023 | Meeting Date: October 13, 2023 |
| From: | Heather McNell, Deputy Chief Admi | nistrative Officer, Policy and Planning |
| То: | Housing Committee | |

RECOMMENDATION

That the Housing Committee endorse the 2024 - 2028 Financial Plan for the Metro Vancouver Housing Corporation as presented in the report dated September 26, 2023, titled "2024 - 2028 Financial Plan – Metro Vancouver Housing Corporation", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

MVHC's 5-year financial plan supports its goals of:

- supporting healthy engaged communities;
- preserving existing housing to maintain affordability and improve energy efficiency;
- growing strategically through redevelopment and new developments; and
- partnering to expand affordable rental housing across the region.

Over the next five years, the MVHC annual budgeted revenue is expected to increase an average of \$3.1 million or 5.2% per year as the portfolio grows. The projected capital cash flow for 2024 - 2028 totals \$629.1 million, or an average of \$125.8 million per year. The delivery of 882 new homes within five years, and the acceleration of building rehabilitation work result in projected 2024 capital expenditures of \$23.1 million for capital maintenance and \$108.2 million for capital development, supported by debt, grants and MVHC's Capital Development and Capital

Maintenance team manages the strategic redevelopment of existing sites, and expansion to new sites through partnerships with member jurisdictions, provincial and federal governments and others to develop additional affordable homes across the region.

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

- **Providing** safe, inclusive, diverse and affordable homes in communities throughout the region;
- **Preserving** the existing portfolio through capital maintenance to support affordability and improve sustainability and accessibility; and
- **Expanding** Metro Vancouver Housing's portfolio through redevelopment and partnerships with member jurisdictions and other orders of government.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plan for MVHC is presented in this report. Within the MVHC Work Plan, performance indicators have been developed and are being tracked, many from the MVH 10 Year Plan. These include:

- Percentage of total units rented to Rent Geared to Income tenants (deeper subsidy);
- Vacancy rate (percentage based on number of available units);
- Number of tenant program activities delivered;
- Reduction of GHG emissions (45% below 2010 levels by 2030);
- Redevelopment projects including: Kingston Gardens (Surrey), Salal Landing (Port Coquitlam), Heather Place – Building B (Vancouver), The Connection (Burnaby), and Malaspina Village (Phase I) (Coquitlam);
- New development projects including: Heron's Nest (Pitt Meadows), and The Steller (Burnaby); and
- Rehabilitation projects including: Strathearn Court (Vancouver), Manor House (North Vancouver), Crown Manor (New Westminster), Le Chateau Place (Coquitlam), Minato West (Richmond), Somerset Gardens (Surrey), Meridian Village (Port Coquitlam), and Knightsbridge (Richmond).

MVHC will continue to provide one third of the tenant portfolio with deeper subsidized tenants, maintain a very low vacancy rate (0.1%), increase tenant programs and activities and continue the decrease in GHG emissions from MVHC operations. The redevelopment at five existing MVHC sites, and delivery of two new projects on member jurisdiction lands puts MVHC on track to exceed the 10-Year Plan target of 1,350 new and redeveloped affordable rental homes in MVHC's portfolio. Retrofit and rehabilitation is planned for 634 homes, with major building envelope rehabilitation planned at eight sites, demonstrating the commitment to preserve and revitalize existing homes.

CONTINUOUS IMPROVEMENT

MVHC has been reviewing and updating its standards and procedures. Notable updates include *Project Management Standards* and templates that ensure the consistent and efficient delivery of

development projects. In addition, a review of Operations has been completed and recommendations are now being implemented.

Further improvement initiatives include:

- Expanding through redevelopment and partnerships;
- Accelerating the delivery of large capital rehabilitation projects through the financing of these projects;
- Reviewing procurement approaches and exploring alternatives to expedite cost effective delivery of projects;
- Installing high efficiency mechanical equipment and making thermal improvements to building structures;
- Delivering projects approved through the Sustainability Innovation Fund:
 - Building Resilience: Exploring the Potential of Renewable Energy Building Infrastructure
 - Step Code Implementation Impacts for Building Envelope Rehabilitation of Existing Buildings
 - Novel On-Demand Domestic Hot Water System Implementation and Study
 - Panelized Mass-timber for Retrofits
 - Adding Resiliency and Additional Units for Retrofits
 - \circ $\;$ Living Building Challenge Certification Feasibility for Rehabilitation; and
- Implementing a work order system and digital portal for tenants, and incorporating mobile technology into day-to-day field operations.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

The five priorities are as follows:

- Financial Sustainability and Affordability
- Climate Action
- Resilient Services and Infrastructure
- Affordable Housing
- Reconciliation

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

The 2024 - 2028 MVHC Financial Plan is included as Attachment 1. The 2024 Annual Work Plan for the MVHC presented in this report is included in Attachment 3 and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 4.

Operating Budget Highlights

The MVHC 2024 operating budget is proposed to increase by \$5.2 million for a total budget of \$60.3 million (Attachment 1). This increase is due to an increase in rents collected (more units coming on line and minor annual increase), and increased transfer from reserves for building maintenance.

The 2024 operating budget includes the following key actions:

- Continue implementation of the *Metro Vancouver Housing 10-Year Plan* and Asset Management Plan;
- Apply for currently available CMHC, FCM and CleanBC grants and other partnerships for our capital maintenance projects that target green building retrofits and the preservation of affordable housing. Any grants received will be applied to decrease the costs of projects, including financing where required.;
- Continue to develop and implement innovative tenant programs such as community gardens, free food programs, complimentary spring flowers programs, murals and communications projects;
- Continue to support tenants through relocation to support redevelopment;
- Develop and begin implementation of a new internal and external work order system;
- Enhance the online housing application process for tenants;
- Continue to build brand awareness with key industry stakeholders and residents of the region; and
- Work to build a better understanding the opinions and community needs of MVHC through focus group and public opinion research where needed.

Over the next five years, the MVHC annual budget is expected to increase an average of \$3.1 million or 5.2% per year, primarily due to the expansion of the housing portfolio as more units come on line.

Communications Program

The 2024 MVHC Communications Program of \$40,000 is focused on tenant and public engagement, video and graphic documentation of new and existing MVHC sites and programs for partner and tenant engagement, and marketing materials to help raise awareness and presence of MVHC as a leading provider of affordable housing in the region.

Capital Budget Highlights

The MVHC capital projects cash flow for 2024 is \$131.3 million with a total estimated spend of \$629.1 million over the next five years (Attachment 2). The capital program is funded by external financing, reserve funding, and grant funding from various levels of government. The capital projects planned and ongoing for 2024 include:

- The redevelopment and construction of Kingston Gardens Phase I (Surrey), Salal Landing (Port Coquitlam), and Heather Place Building B (Vancouver);
- Finalizing detailed design and construction tender for The Connection, The Steller (Burnaby) and Heron's Nest (Pitt Meadows) and finalizing detailed design for Malaspina Village – Phase I (Coquitlam); and

• Construction for Strathearn Court (Vancouver), Minato West (Richmond), Le Chateau Place (Coquitlam), Manor House (North Vancouver), and Somerset Gardens (Surrey) building envelope renewals and energy improvements.

Redevelopment Projects:

- Kingston Gardens Phase 1 (Surrey) and Salal Landing (Port Coquitlam) are on track for 97% construction completion by the end of 2024;
- Heather Place Building B (Vancouver) will achieve 35% construction in 2024;
- The Connection (Burnaby) will see finalized detailed design and construction tender in 2024; and
- Malaspina Village Phase 1 (Coquitlam) will finalize detailed design in 2024.
- In addition, two projects on member jurisdiction lands The Steller (Burnaby) and Heron's Nest (Pitt Meadows), are in detailed design and will start construction in 2024. These projects will be funded through a combination of reserves, grants, partnerships and mortgage financing.

Rehabilitation Projects:

- Some of the rehabilitation projects will be funded through a combination of reserves, grants, and financing in order to accelerate the projects and take advantage of current grant funding opportunities. These projects are considered part of the capital plan due to the financing element, the other rehabilitation projects remain in the operations plan, as Capital Maintenance.
- The projects planned for financing are Manor House and Strathearn Court. Manor House is scheduled to be 97% completed in 2024 and Strathearn is scheduled to be 97% completed construction mid 2025. Le Chateau and Minato West are due to be 97% complete construction by the end of 2025. Somerset Gardens will start a 3-year period construction in 2026.

Reserve Funds

The application of reserve funding in MVHC is in accordance with the *Operating, Statutory and Discretionary Reserves Policy* and is primarily made through its Capital Development and Capital Replacement Reserves. In 2024, the financial plan includes \$27.5 million in reserve usage for significant asset maintenance and replacement, of which \$14.3 million is from the Capital Replacement Reserve and the remaining \$1.7 million is from the Restricted Capital Replacement Reserve. In 2024, \$11.5 million in reserve funding will be applied for capital development projects. A one-time grant of \$20 million from the Growing Communities Fund is being applied to the Capital Development Reserve to assist with infrastructure costs associated with expanding affordable housing. The 2024 - 2028 Projected Reserves for MVHC is included in Attachment 5.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023; and
- The Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

- That the Housing Committee endorse the 2024 2028 Financial Plan for the Metro Vancouver Housing Corporation as presented in the report dated September 6, 2022, titled "2024 - 2028 Financial Plan – Metro Vancouver Housing Corporation", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- 2. That the Housing Committee make recommendations and endorse an amended 2024 2028 Financial Plan for the MVHC, and forward the amended Financial Plan to the to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

MVHC operations are funded primarily through rental revenues and do not have an impact on the overall MVRD tax requisition. If the MVRD Board endorses the 2024 - 2028 Financial Plan for the MVHC, as presented under Alternative 1, in 2024 the rental revenues are expected to generate a surplus from operations ranging from \$8.1 million in 2024 to \$9.0 million in 2028. This surplus has decreased moderately from prior projections owing to increases in operating costs exceeding increases in rents. The capital plan includes five redevelopment projects and five rehabilitation projects.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any amendments to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The MVHC 2024 Budget and Five-year Financial Plan was prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for MVHC.

The presentation of the 2024 budget and five-year financial plan for MVHC provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for MVHC investments that will be required to maintain our assets and to respond to our region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans.

Staff recommends endorsing the 2024 - 2028 Financial Plan and Annual Work Plan for MVHC as presented under alternative one.

Attachments:

- 1. 2024 2028 Financial Plan
- 2. 2024 2028 Capital Portfolio Housing Development
- 3. 2024 Work Plan
- 4. 2024 2028 "What's Happening"
- 5. 2024 2028 Projected Reserves Metro Vancouver Housing Corporation

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ATTACHMENT 1

METRO VANCOUVER HOUSING CORPORATION HOUSING 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|---|----------------|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| REVENUES | | | | | | | | | | | |
| Housing Rents | \$43,776,981 | \$ 45,207,881 | 3.3% | \$ 47,552,532 | 5.2% | \$ 52,589,082 | 10.6% | \$ 58,686,792 | 11.6% | \$ 61,114,867 | 4.1% |
| Housing Mortgage and Rental Subsidies | 1,254,011 | 1,254,012 | | 1,666,165 | | 1,699,488 | | 1,733,477 | | 1,768,148 | |
| Other External Revenues | 927,600 | 1,002,083 | | 1,011,925 | | 1,021,886 | | 1,031,959 | | 1,042,138 | |
| Financing Proceeds | - | - | | - | | - | | - | | - | |
| Transfer from Reserves | 9,190,781 | 12,856,377 | | 9,469,074 | | 7,488,611 | | 9,386,421 | | 6,727,879 | |
| TOTAL REVENUES | \$55,149,373 | \$ 60,320,353 | 9.4% | \$ 59,699,696 | (1.0%) | \$ 62,799,067 | 5.2% | \$ 70,838,649 | 12.8% | \$ 70,653,032 | (0.3%) |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Property Operations | \$19,493,214 | \$ 21,958,187 | | \$ 22,521,511 | | \$ 24,584,414 | | \$ 27,219,914 | | \$ 28,436,474 | |
| Maintenance | 1,136,393 | 1,221,612 | | 1,253,426 | | 1,286,427 | | 1,320,156 | | 1,354,658 | |
| Housing Finance Operations | 933,293 | 1,154,578 | | 1,185,493 | | 1,217,603 | | 1,250,141 | | 1,283,875 | |
| Tenant Program and Services | 609,913 | 874,407 | | 986,992 | | 1,010,700 | | 1,034,774 | | 1,059,681 | |
| Site Administration | 2,302,527 | 2,521,088 | | 2,585,627 | | 2,652,465 | | 2,720,358 | | 2,790,580 | |
| Engineers in Training | 7,350 | 10,273 | | 13,378 | | 13,736 | | 14,100 | | 14,477 | |
| Administration and Department Support | 1,515,185 | 1,543,513 | | 1,583,840 | | 1,625,551 | | 1,667,971 | | 1,711,794 | |
| | \$25,997,875 | \$ 29,283,658 | 12.6% | \$ 30,130,267 | 2.9% | \$ 32,390,896 | 7.5% | \$ 35,227,414 | 8.8% | \$ 36,651,539 | 4.0% |
| Communications Program | 40,000 | 40,000 | 0.0% | 40,000 | 0.0% | 40,000 | 0.0% | 40,000 | 0.0% | 40,000 | 0.0% |
| Allocation of Centralized Support Costs | \$ 2,352,769 | \$ 2,697,141 | 14.6% | \$ 2,806,334 | 4.0% | \$ 2,640,877 | (5.9%) | \$ 2,717,320 | 2.9% | \$ 2,782,822 | 2.4% |
| Total Operating Programs | \$28,390,644 | \$ 32,020,799 | 12.8% | \$ 32,976,601 | 3.0% | \$ 35,071,773 | 6.4% | \$ 37,984,734 | 8.3% | \$ 39,474,361 | 3.9% |
| Capital Maintenance | 8,978,156 | 12,032,204 | 34.0% | 7,706,948 | (35.9%) | 4,112,226 | (46.6%) | 5,590,056 | 35.9% | 2,511,534 | (55.1%) |
| Allocation of Project Delivery Cost | - | - | N/A | 839,936 | N/A | 874,493 | 4.1% | 908,669 | 3.9% | 936,219 | 3.0% |
| Debt Service: | | | | | | | | | | | |
| Mortgage Payments | 4,698,170 | 5,478,117 | 16.6% | 6,871,683 | 25.4% | 9,363,464 | 36.3% | 12,160,655 | 29.9% | 12,168,921 | 0.1% |
| Capital Maintenance Financing | 212,625 | 824,173 | 287.6% | 1,762,126 | 113.8% | 3,376,385 | 91.6% | 3,796,365 | 12.4% | 4,216,345 | 11.1% |
| Contribution to Capital Replacement Reserve | 1,858,786 | 1,911,397 | 2.8% | 1,993,342 | 4.3% | 2,135,704 | 7.1% | 2,330,443 | 9.1% | 2,388,398 | 2.5% |
| Contribution to Reserve | 11,010,992 | 8,053,663 | (26.9%) | 7,549,060 | (6.3%) | 7,865,022 | 4.2% | 8,067,727 | 2.6% | 8,957,254 | 11.0% |
| TOTAL EXPENDITURES | \$55,149,373 | \$ 60,320,353 | 9.4% | \$ 59,699,696 | (1.0%) | \$ 62,799,067 | 5.2% | \$ 70,838,649 | 12.8% | \$ 70,653,032 | (0.3%) |

ATTACHMENT 2

METRO VANCOUVER HOUSING CORPORATION CAPITAL PORTFOLIO HOUSING DEVELOPMENT 2024 CAPITAL BUDGET AND 2024 - 2028 CAPITAL PLAN

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|-------------------------------|-----------------------------------|---------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|----------------------------|
| CAPITAL EXPENDITURES | | | | | | | | | |
| Capital Development | | | | | | | | | |
| Heather Place - Building B | \$ 55,800,000 | \$19,000,000 | \$ 19,000,000 | \$ 10,200,000 | \$ - | \$ - | \$ 48,200,000 | Construction | Expand/Re-develop |
| Kingston Gardens - Phase 1 | 44,700,000 | 14,000,000 | - | - | - | - | 14,000,000 | Construction | Expand/Re-develop |
| Salal Landing | 36,100,000 | 15,700,000 | 2,600,000 | - | - | - | 18,300,000 | Construction | Expand/Re-develop |
| The Connection | 104,200,000 | 20,000,000 | 36,000,000 | 36,000,000 | 9,150,000 | - | 101,150,000 | Detailed Design | Expand/Re-develop |
| Malaspina | 117,900,000 | 2,000,000 | 4,000,000 | 30,000,000 | 40,000,000 | 39,050,000 | 115,050,000 | Detailed Design | Expand/Re-develop |
| Heron's Nest | 76,900,000 | 25,000,000 | 32,500,000 | 17,400,000 | - | - | 74,900,000 | Construction | Expand/Member Partnerships |
| The Steller | 75,000,000 | 10,000,000 | 29,500,000 | 29,500,000 | 4,550,000 | - | 73,550,000 | Detailed Design | Expand/Member Partnerships |
| Projects in Planning | 540,000,000 | 2,500,000 | 2,500,000 | 20,000,000 | 30,000,000 | 43,750,000 | 98,750,000 | Planned | Expand/Re-develop |
| Partnerships in Planning | - | - | - | 3,000,000 | 3,000,000 | 3,000,000 | 9,000,000 | Planned | Expand/Member Partnerships |
| Total Capital Development | \$1,050,600,000 | \$108,200,00 | \$126,100,000 | \$146,100,000 | \$86,700,000 | \$85,800,000 | \$552,900,000 | | |
| Building Rehabilitation | | | | | | | | | |
| Strathearn Court | 10,000,000 | 5,000,000 | 5,000,000 | - | - | - | 10,000,000 | Detailed Design | Preserve |
| Le Chateau Place | 5,600,000 | 846,400 | 4,130,800 | - | - | - | 4,977,200 | Design | Preserve |
| Crown Manor | 4,800,000 | 350,000 | 3,540,000 | - | - | - | 3,890,000 | Detailed Design | Preserve |
| Manor House | 11,000,000 | 11,000,000 | - | - | - | - | 11,000,000 | Detailed Design | Preserve |
| Minato West | 11,776,000 | 5,888,000 | 5,888,000 | - | - | - | 11,776,000 | Detailed Design | Preserve |
| Somerset Gardens | 25,100,000 | 50,000 | 150,000 | 8,300,000 | 8,300,000 | 8,300,000 | 25,100,000 | Planned | Preserve |
| Knightsbridge I | - | - | - | - | - | 5,000,000 | 5,000,000 | Planned | Preserve |
| Meridian Village | - | - | - | 3,000,000 | 1,500,000 | - | 4,500,000 | Planned | Preserve |
| Total Building Rehabilitation | \$ 68,276,000 | \$23,134,400 | \$ 18,708,800 | \$ 11,300,000 | \$ 9,800,000 | \$13,300,000 | \$ 76,243,200 | • | |
| TOTAL CAPITAL EXPENDITURES | \$1,118,876,000 | \$131,334,40 | \$144,808,800 | \$157,400,000 | \$96,500,000 | \$99,100,000 | \$629,143,200 | | |
| | | | | | | | | | |
| CAPITAL FUNDING | | | | | | | | | |
| Grants | | | | \$ 57,690,000 | | | | | |
| External Borrowing | 539,475,272 | 42,634,400 | 44,720,366 | 93,860,000 | | 34,500,000 | 268,564,766 | | |
| Reserve | 149,433,547 | | 11,680,000 | 5,850,000 | , , | 60,600,000 | 103,564,765 | | |
| Total | \$1,118,876,000 | \$131,334,40 | \$144,808,800 | \$157,400,000 | \$96,500,000 | \$99,100,000 | \$629,143,200 | | |
| SUMMARY BY DRIVER | | | | | | | | | |
| | \$ 808 700 000 | \$72 200 000 | \$ 64 100 000 | \$ 96,200,000 | ¢70 150 000 | ¢82 800 000 | \$ 205 <i>4</i> 50 000 | | |
| Expand/Re-develop | \$898,700,000 | | \$ 64,100,000 62,000,000 | | 7,550,000 | \$82,800,000 | | | |
| Expand/Member Partnerships | | | , , | 49,900,000 | | | 157,450,000 | | |
| Total | \$1,118,876,000 | ŞISI,334,40 | ə144,808,800 | \$157,400,000 | \$96,500,000 | \$99,100,000 | 3029,143,200 | | |



METRO VANCOUVER HOUSING CORPORATION

Description of Services

Metro Vancouver Housing Corporation (MVHC) is a not-for-profit entity with the Metro Vancouver Regional District as its sole shareholder. MVHC operates 49 housing sites that provide 3,400 units of affordable rental housing for low to moderate income households across the region. MVHC is primarily financed through the collection of tenant rents. Operations maintains MVHC assets, manages tenants and builds communities within the housing portfolio and surrounding neighborhoods.

Strategic Directions and High Level Goals Supported

- Provide safe, affordable rental homes to individuals and families across the region
- Implement the *Metro Vancouver Housing 10-Year Plan* provide, preserve and expand affordable housing in the region
- Continue to implement innovative tenant programs to engage healthy, livable communities
- Continue the implementation of the MVH Redevelopment and Asset Management plans. These plans:
 - Identify a pipeline of housing developments and building rehabilitations that are prioritized to create new units and maintain existing affordable rental homes
 - o Identify areas for environmental and energy sustainability improvements
 - Create an agreed standard of service and delivery for core building infrastructure

| Indicator | Historical and/or industry benchmark (2022) | Current performance (2023) | 2024 performance objective | | |
|--|--|--|---|--|--|
| Total units rented to subsidized tenants | 30% Target | 31% (2023) | 30% | | |
| Vacancy percentage (based on number of units) | 0.1% (3 Year Average) | 0.1% (2022) | 0.1% | | |
| Number of Tenant Program Activities | 107 | 180 | 230 | | |
| Reduce GHG emissions | 10.2 grams CO ² Emissions per square metre (2010 baseline) | 7.8 grams CO ² Emissions per square metre (2021 and 2022 avg) ¹ | 7.45 grams CO ² Emissions per square metre | | |
| Kingston Gardens, Surrey Redevelopment | 40% (construction) | 90% (construction) | 100% (construction) 100% (rent up) | | |
| Salal Landing, Port Coquitlam Redevelopment | 8% (construction) | 50% (construction) | 100% (construction) 25% (rent up) | | |
| Heather Place B, Vancouver Redevelopment | 60% (design) | 100% (design) 15% (construction) | 65% (construction) | | |
| The Connection, Burnaby Redevelopment | 60% (design) 0% (construction) | 100% (design) | 25% (construction) | | |

Performance Indicators

¹ Methodology for this calculation updated to comply with Carbon Neutral Government Regulation 59928043

| Indicator | Historical and/or industry benchmark (2022) | Current performance (2023) | 2024 performance objective | |
|--|---|-------------------------------------|-------------------------------|--|
| Heron's Nest, Pitt Meadows New development | 0% (construction) | 100% (design) | 30% (construction) | |
| The Steller, Burnaby New development | 0% (construction) | 80% (design) | 10% (construction) | |
| Malaspina Phase 1, Coquitlam Redevelopment | 35% (design) | 50% (design) | 90% (design) | |
| Strathearn Court Rehabilitation Project | 95% (design) 0% (construction) | 100% (design) 0% (construction) | 50% (construction) | |
| Minato West Rehabilitation Project | 0% (Design | 100% (design) 0% (construction) | 40% (construction) | |
| Crown Manor, New Westminster Rehabilitation Project | 30% (design) | 100% (design) | 20% (construction) | |
| Le Chateau Place, Coquitlam Rehabilitation Project | 30% (design) | 100% (design) | 20% (construction) | |
| Manor House, North Vancouver Rehabilitation Project | 50% (design) | 100% (design) 15% (construction) | 97% (construction) | |
| Somerset Gardens, Surrey Rehabilitation Project | | 5% (design) | 10% (design) | |

*The performance objective measures for municipal partnership projects at the concept stage are included in the Housing Planning and Policy Annual Work Plan Report.

2024 Key Actions – Metro Vancouver Housing

Operations & Maintenance

- Continue implementation of the Metro Vancouver Housing 10-Year Plan and Asset Management Plan;
- Construction for four rehabilitation and retrofit projects (Strathearn Court (Vancouver), Minato West (Richmond), Le Chateau Place (Coqutilam) and Manor House (North Vancouver) for building envelope renewals and energy improvements;
- Leverage existing grant funding through the province and other sources and increase certainty by continuing to advocate for predicable federal funding on a portfolio basis.
- Continue to develop and implement innovative tenant programs such as community gardens, free food programs, decorative wraps contests, complimentary spring flowers programs, murals and communications projects;
- Continue to support tenants that need to be relocated due to redevelopment;
- Develop and begin implementation of digital tools including a new internal and external work order system;
- Enhance the online housing application process for tenants;
- Continue to build brand awareness with key industry stakeholders and residents of the region; and
- Work to build a better understanding the opinions and community needs of MVHC through focus group and public opinion research where needed.

Redevelopment

- Complete construction of active redevelopment sites: Kingston Gardens Phase 1 (Surrey) and Salal Landing (Port Coquitlam);
- Continue construction at Heather Place Building B redevelopment (Vancouver);
- Finalized detailed design and construction tender for the Connection (Burnaby), the Steller (Burnaby), and the Heron's Nest (Pitt Meadows);
- Complete planning approvals for Malaspina Phase 1 (Coquitlam);
- Continuing working with BC Housing, CMHC and other agencies on funding partnerships to expand our portfolio and create additional homes;

Communications

- Continue to build brand awareness with key industry stakeholders and residents of the region
- Video and graphic documentation of new and existing MVHC sites and programs for partner and tenant engagement
- Work to build a better understanding the opinions and community needs of MVHC through focus group and public opinion research where needed

Metro Vancouver Housing Corporation

2024 to 2028 – WHAT'S HAPPENING

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

| Initiative | Description | Theme |
|--|---|--|
| 2024 | | |
| Metro Vancouver Housing 10-Year Plan | Continue the exploration and implementation of actions identified in the 10-Year Plan | Regional growth, financial sustainability & environmental sustainability |
| Kingston Gardens – Phase 1 Redevelopment | Complete construction and begin rent-up | Regional growth |
| Salal Landing Redevelopment | Complete construction and begin rent-up | Regional growth |
| Heather Place B Redevelopment | Continue construction phase of project | Regional growth |
| The Connection Redevelopment | Finalize detailed design and construction tender | Regional growth |
| Malaspina Village – Phase 1 Redevelopment | Continue detailed design | Regional growth |
| Heron's Nest – New development | Finalize detailed design and construction tender | Regional growth |
| The Steller – New development | Finalize detailed design and construction tender | Regional growth |
| Strathearn Court Rehabilitation Project | Continue construction phase | System stewardship |
| Manor House Rehabilitation Project | Continue construction phase | System stewardship |
| Crown Manor Rehabilitation Project | Begin construction phase | System stewardship |
| Le Chateau Place Rehabilitation Project | Begin construction phase | System stewardship |
| Minato West Rehabilitation Project | Begin construction phase | System stewardship |
| Process development | Review and refine preventative maintenance procedures | System stewardship |
| 2025 | | |
| Metro Vancouver Housing 10-Year Plan | Continue the exploration and implementation of actions identified in the 10-Year Plan | Regional growth, financial sustainability & environmental sustainability |
| Heather Place B Redevelopment | Continue construction phase | Regional growth |
| The Connection Redevelopment | Continue construction phase | Regional growth |
| Malaspina Village – Phase 1 Redevelopment | Finalize detailed design and construction tender | Regional growth |

| Heron's Nest – New | Continue construction phase | Regional growth |
|--------------------|-----------------------------|-----------------|
| development | | |
| The Steller – New | Continue construction phase | Regional growth |
| development | | |

| Strathearn Court Rehabilitation Project | Complete construction phase | System stewardship |
|--|---|--|
| Manor House Rehabilitation Project | Complete construction phase | System stewardship |
| Crown Manor Rehabilitation Project | Continue construction phase | System stewardship |
| Le Chateau Place Rehabilitation Project | Continue construction phase | System stewardship |
| Minato West Rehabilitation Project | Continue construction phase | System stewardship |
| 2026 | | |
| Metro Vancouver Housing 10-Year Plan | Continue the exploration and implementation of actions identified in the 10-Year Plan | Regional growth, financial sustainability & environmental sustainability |
| Heather Place B Redevelopment | Complete construction and begin rent-up | Regional growth |
| The Connection Redevelopment | Continue construction phase | Regional growth |
| Malaspina Village – Phase 1 Redevelopment | Continue construction phase | Regional growth |
| Heron's Nest – New development | Complete construction and begin rent-up | Regional growth |
| The Steller – New development | Continue construction phase | Regional growth |
| Crown Manor Rehabilitation Project | Complete construction phase | System stewardship |
| Le Chateau Place Rehabilitation Project | Complete construction phase | System stewardship |
| Minato West Rehabilitation Project | Complete construction phase | System stewardship |
| Meridian Village Rehabilitation Project | Begin construction phase | System stewardship |
| Somerset Gardens Rehabilitation Project | Begin construction phase | System stewardship |
| 2027 | | |
| Metro Vancouver Housing 10-Year Plan | Review 10-Year Plan and assess achievements to date. Monitor emerging trends and changes to the affordable housing sector | Regional growth, financial sustainability & environmental sustainability |
| The Connection Redevelopment | Complete construction and begin rent-up | Regional growth |
| Malaspina Village – Phase 1 Redevelopment | Continue to progress through construction | Regional growth |

| The Steller – New development | Complete construction and begin rent-up | Regional growth |
|--|---|--|
| Meridian Village Rehabilitation Project | Complete construction phase | System stewardship |
| Somerset Gardens Rehabilitation Project | Continue construction phase | System stewardship |
| 2028 | | |
| Metro Vancouver Housing 10-Year Plan | Review the 10-Year Plan and assess achievements to date. Monitor emerging trends and changes to the affordable housing sector | Regional growth, financial sustainability & environmental sustainability |

| Malaspina Village – Phase 1 Redevelopment | Complete construction and begin rent-up | Regional growth |
|--|---|--------------------|
| Somerset Gardens Rehabilitation Project | Continue construction phase | System stewardship |
| Knightsbridge Rehabilitation Project | Begin construction phase | System stewardship |

METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - METRO VANCOUVER HOUSING CORPORATION

OPERATING RESERVES

| | 2023 | 2024 | | | | | | 2024 | 2025 | 2026 | 2027 | 2028 |
|-------------------------------------|-----------------|-----------------|--------------|----------|-------------|----|---------|--------------|--------------|--------------|--------------|--------------|
| | ENDING | OPENING | | | | | | ENDING | ENDING | ENDING | ENDING | ENDING |
| | BALANCE | BALANCE | CONTRIBUTION | ۱ | WITHDRAWALS | I | NTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| Metro Vancouver Housing Corporation | \$ 2,720,993 | \$ 2,720,993 | \$ - | - \$ | \$ – | \$ | 68,025 | \$ 2,789,018 | \$ 2,858,743 | \$ 2,930,212 | \$ 3,003,467 | \$ 3,078,554 |

DISCRETIONARY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | со | NTRIBUTION | w | (ITHDRAWALS | INTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 20 END BALA | ING | 2027 ENDING BALANCE | 2028 ENDING BALANCE |
|----------------------------------|---------------------------|----------------------------|----|------------|----|-----------------|-----------|---------------------------|---------------------------|-------------------|--------|---------------------------|---------------------------|
| Housing | | | | | | | | | | | | | |
| MVHC Capital Replacement Reserve | \$ 4,393,942 | \$ 4,393,942 | \$ | 12,355,570 | \$ | (13,261,903) \$ | 98,519 | \$ 3,586,128 | \$ 3,973,440 | \$ 4,6 | 20,749 | \$ 4,123,639 | \$ 3,052,428 |
| MVHC Capital Development Reserve | 40,460,792 | 40,460,792 | | 4,434,090 | | (11,534,765) | 922,761 | 34,282,878 | 55,400,075 | 59,9 | 36,989 | 59,410,414 | 10,675,674 |
| Total | \$ 44,854,734 | \$ 44,854,734 | \$ | 16,789,660 | \$ | (24,796,668) \$ | 1,021,280 | \$ 37,869,006 | \$ 59,373,515 | \$ 64,5 | 57,738 | \$ 63,534,053 | \$ 13,728,102 |

STATUTORY RESERVES

| | 2023 | 2024 | | | | | | 2024 | 2025 | 2026 | 2027 | 2028 |
|--|-----------------|-----------------|----|-------------|------|----------------|----------|--------------|--------------|--------------|--------------|--------------|
| | ENDING | OPENING | | | | | | ENDING | ENDING | ENDING | ENDING | ENDING |
| | BALANCE | BALANCE | CO | ONTRIBUTION | WITH | DRAWALS | INTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| MVHC Restricted Cap. Replacement Reserve | \$ 3,246,828 | \$ 3,246,828 | \$ | 1,934,964 | \$ (| (1,705,952) \$ | 84,033 | \$ 3,559,873 | \$ 3,443,010 | \$ 2,569,554 | \$ 2,840,236 | \$ 3,757,555 |



| Subject: | 2024 - 2028 Financial Plan – Indigenous Relations | |
|----------|---|-------------------------------|
| Date: | September 25, 2023 | Meeting Date: October 5, 2023 |
| From: | Jessica Beverley, General Manager, Legal Services a | nd Indigenous Relations |
| То: | Indigenous Relations Committee | |

RECOMMENDATION

That the Indigenous Relations Committee endorse the 2024 - 2028 Financial Plan for Indigenous Relations as presented in the report dated September 25, 2023 titled "2024 - 2028 Financial Plan – Indigenous Relations", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

Indigenous Relations staff support Metro Vancouver's continuing efforts to strengthen relationships with local First Nations, provide advice and support to project teams on First Nations engagement and issues, respond to pan-municipal First Nation issues, represent regional and local government interests at active treaty tables, lead or support government-to-government negotiations, and contribute valuable work towards reconciliation. There are significantly increased expectations (from the federal and provincial governments, from First Nations, and from the broader public) that Metro Vancouver is continuously taking concrete actions towards reconciliation with First Nations. This translates to increased workload within the program, as is demonstrated by the Indigenous Relations performance indicators.

As a result of the increased demands on and expectations for the program, the Indigenous Relations operating budget is proposed to increase from \$1,684,460 in 2023 to \$1,885,907 in 2024, by a total of \$201,447. Over the five years, the operating program is increasing by an annual average of \$82,260, or 4.6% per year.

PURPOSE

To present the 2024 - 2028 Financial Plan for Indigenous Relations for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$31.6M for debt avoidance and increases in reserve contributions of just over \$6.2M for key functions
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities
- Reduction of household impact, \$13 less that that previously projected for 2024

This report focuses on Metro Vancouver's Indigenous Relations program and presents the 2024 provisional annual budget and the updated five-year plan for the years 2024 to 2028 for Committee consideration.

INDIGENOUS RELATIONS PROGRAM

The Indigenous Relations program provides information, advice, and support to Metro Vancouver entities on First Nations' interests and issues, and analyzes how such First Nations' interests and issues may affect Metro Vancouver's programs, processes and projects. In 2022, Indigenous Relations staff responded to over 4,000 requests; the current trend for 2023 is 5,000 requests. Indigenous Relations supports two committees: the Indigenous Relations Committee and a municipal staff advisory committee, the Municipal Technical Advisory Committee on Indigenous Relations (MTAC). The Indigenous Relations program also responds to pan-municipal First Nation issues and represents and supports Metro Vancouver local government interests at active treaty negotiation tables in the region as well as on provincial and federal issues.

Indigenous Relations supports the Board Strategic Plan as it relates to the strategic priority of Engagement, and the strategic direction of Fostering Collaboration and Engagement. Specifically, Indigenous Relations focuses on enhancing relationships between Metro Vancouver and other orders of government, First Nations, adjacent regional districts, and key stakeholders.

• Priority Action: Strengthen government-to-government relationships with First Nations by building trust through genuine collaboration, creating a mutually respectful space for meaningful dialogue and outcomes, and creating opportunities for Board-to-Nation relationships to thrive.

WORK PLAN PERFORMANCE INDICATORS

High-level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plan for Indigenous Relations is presented in this report. Within the Indigenous Relations Work Plan, four performance indicators have been developed and are being tracked. These include:

- Number of bilateral meetings between Metro Vancouver and the area First Nations
- Total number of requests for information or advice related to First Nations and/or Indigenous Relations
- Number of sessions and attendees at Indigenous Relations training sessions
- Special Indigenous Relations events hosted by Metro Vancouver (e.g. Community to Community Forums, workshops, lunch and learns): Number of events and number of attendees

The upward trend in these performance measures (see Attachment 2) reflects the increased expectation that Metro Vancouver is taking concrete actions towards Reconciliation with First Nations.

CONTINUOUS IMPROVEMENTS

Continuous improvements for 2023 have included:

- Creation of web-based and video-based modules for on-demand staff training purposes: Indigenous Relations staff is working with the External Relations Department to create videobased training modules for project managers, work crews and contractors.
- Continued identification and implementation of software to improve the productivity of the Indigenous Relations team, with the aim of managing workflows and workload more efficiently. Indigenous Relations staff is continuing to test various possible software in order to assist with the assigning and tracking of requests and performance indicators.
- Pursuing additional or different externally-facilitated course topics for Metro Vancouver staff training. Metro Vancouver has kept the course topics consistent over the past 5 years. With new and increased expectations on Metro Vancouver, it will be important to build on those earlier topics to continually enhance staff education and training.
- Reviewing Metro Vancouver's existing policies, processes, and practices for identifying additional and better opportunities for engagement with First Nations in light of the Board's commitment to reconciliation as well as First Nations' expectations with respect to the provincial and federal Declaration on the Rights of Indigenous Peoples Acts.

Continuous improvement initiatives for 2024 include:

- An updated First Nations Engagement Policy, with First Nations' input and feedback, to guide staff to improve efficiencies, including a decision tree catered for each department's use.
- Continuing to respond to the TRC Call to Action #57 on training for civil servants: better measuring the impact of training and making related improvements.
- Development of a Cultural Sensitivity training video, with Indigenous content providers. The video will be mandatory viewing/training for project managers, contractors and crews on Metro Vancouver project construction sites.

Key work for 2024 includes:

- Continuing to engage local First Nations on Relationship and Protocol Agreements.
- Co-creating an event with an area First Nation and the Board of Directors and the Indigenous Relations Committee that promotes mutual understanding and relationship-building.
- Operationalizing the Cultural Sensitivity training for crews and contractors working on Metro Vancouver projects.
- Completing a phase of the work on a web-based portal on the provision of electronic information on local First Nations, and continue to work on other phases, including processing project referrals and streamlining the First Nations engagement process.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

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

The 2024 - 2028 Indigenous Relations Financial Plan is included as Attachment 1. The 2024 Annual Work Plan for Indigenous Relations presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 3.

Operating Budget Highlights

The Indigenous Relations operating budget is proposed to increase by \$201,447 for a total budget of \$1,885,907 in 2024 (Attachment 1). This increase is a direct result of: a constantly changing and evolving Indigenous Relations landscape; increasing demands and expectations placed upon Metro Vancouver, including a recognized need to involve First Nations in the regional district's plans, projects and initiatives; and increasing labour costs.

• Continue to support ongoing First Nation engagement efforts (including agreements) on major

Metro Vancouver capital and construction projects such as North West Langley Wastewater Treatment Plant upgrade, Iona Island Wastewater Treatment Plant upgrade, Coquitlam Lake Water Supply project, Coquitlam Main Water project, and Widgeon Marsh Regional Park development.

- Respond to the increasing number of internal requests from Metro Vancouver staff including: the provision of advice on information sharing and engagement with First Nations; the identification of First Nation economic and procurement opportunities; archaeology; as well as the coordination of, and participation in, meetings with First Nations involving staff from across the Metro Vancouver organization.
- Continue to provide ongoing training sessions for Metro Vancouver staff on various Indigenous Relations issues, including corporate policy related to information sharing and engagement with First Nations, the Board's procurement policy that includes economic opportunities and increased use of First Nations' services (e.g. archaeological) on Metro Vancouver projects; chance find protocols and archaeology.
- Continue to work with the Human Resources Department to identify and contract external facilitators to provide Indigenous awareness training sessions on evolving topics in the field such as Cultural Safety and Humility, and Decolonization.
- Continue to organize Lunch and Learn sessions and other opportunities for Metro Vancouver staff, including Intranet articles, to learn more about local First Nations as well as issues related to Indigenous Peoples.
- Complete a phase of the work on a web-based portal on the provision of electronic information on local First Nations, and continue to work on other phases, including processing project referrals and streamlining the First Nations engagement process.

Over the five years, the operating program is increasing by a total of \$411,298, which represents an annual average of \$82,260 or 4.6% per year.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration. The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented at the Metro Vancouver Board Budget Workshop on October 20, 2023.
- The Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

- That the Indigenous Relations Committee endorse the 2024 2028 Financial Plan for Indigenous Relations as presented in the report dated September 25, 2023, titled "2024 - 2028 Financial Plan – Indigenous Relations", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- That the Indigenous Relations Committee make recommendations and endorse an amended 2024 - 2028 Financial Plan for Indigenous Relations, and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2024 Budget and Five-year Financial Plan for Indigenous Relations, as presented under Alternative 1, the Program will be funded through the allocation of centralized support services. The 2024 - 2028 Financial Plan, if endorsed, will increase by \$411,298, or an average of \$82,260 (4.6%) per year. Indigenous Relations supports all Metro Vancouver entities and functions and its costs are allocated to those entities and functions through the centralized support allocation in accordance with the *Corporate Allocation Policy*.

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

CONCLUSION

The 2024 Budget and Five-year Financial Plan for Indigenous Relations has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan* and supports the goals of Metro Vancouver's four legal entities. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Indigenous Relations.

The presentation of this year's Five-Year Financial Plan for Indigenous Relations provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed program initiatives and the financial impact of these projects, over the next five years. The Financial Plan illustrates how Metro Vancouver proposes to pay for the Indigenous Relations program while addressing an increasing workload. Metro Vancouver's Financial Plan is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical requirements.

Indigenous Relations supports all Metro Vancouver entities and functions and the associated costs are allocated to those entities and functions as part of Centralized Support Services allocation in accordance with the *Corporate Allocation Policy*.

Staff recommend endorsing the 2024 - 2028 Financial Plan for Indigenous Relations as presented under alternative one.

ATTACHMENTS

- 1. 2024 2028 Financial Plan
- 2. 2024 Work Plan
- 3. 2024 2028 "What's Happening"

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METRO VANCOUVER DISTRICTS INDIGENOUS RELATIONS 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|-------------------------------------|----------------|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| REVENUES | | | | | | | | | | | |
| Allocated to Functional Departments | \$ 1,196,120 | \$ 1,379,080 | 15.3% | \$ 1,415,674 | 2.7% | \$ 1,453,618 | 2.7% | \$ 1,492,122 | 2.6% | \$ 1,531,987 | 2.7% |
| Transfer from Capital | 488,340 | 506,827 | | 520,438 | | 534,584 | 2.7% | 548,910 | 2.7% | 563,771 | 2.7% |
| TOTAL REVENUES | \$ 1,684,460 | \$ 1,885,907 | 12.0% | \$ 1,936,112 | 2.7% | \$ 1,988,202 | 2.7% | \$ 2,041,032 | 2.7% | \$ 2,095,758 | 2.7% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Indigenous Relations | \$ 1,684,460 | \$ 1,885,907 | | \$ 1,936,112 | | \$ 1,988,202 | | \$ 2,041,032 | | \$ 2,095,758 | |
| TOTAL EXPENDITURES | \$ 1,684,460 | \$ 1,885,907 | 12.0% | \$ 1,936,112 | 2.7% | \$ 1,988,202 | 2.7% | \$ 2,041,032 | 2.7% | \$ 2,095,758 | 2.7% |



LEGAL SERVICES AND INDIGENOUS RELATIONS

Indigenous Relations 2024 WORK PLAN

Description of Services

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

Strategic Directions and Priority Actions Supported

Board Strategic Plan, 2022-2026:

Reconciliation:

• Metro Vancouver will continue building and strengthening respectful and reciprocal relationships with local First Nations. Metro Vancouver will also continue to engage meaningfully with First Nations on plans, programs, and projects.

Priority Actions:

• Strengthen government-to-government relationships with First Nations by building trust through genuine collaboration, creating a mutually respectful space for meaningful dialogue and outcomes, and creating opportunities for Board-to-Nation relationships to thrive.

| Indicator | Historical and/or industry benchmark | Current performance | 2024 performance objective |
|---|--------------------------------------|---------------------|-------------------------------|
| Number of meetings with First Nations | MV 3-year average (2020-2022) | Projected 2023: | |
| | 65 | 125 | 150 |
| Total requests for information or | MV 3-year average (2020-2022) | Projected 2023: | |
| advice | 3,200 | 5,000 | 6,000 |
| Number of Indigenous Relations training sessions / participants | MV 3-year average (2020-2022) | Projected 2023: | |
| | 6 / 200 | 40 / 1,200 | 50 / 1,500 |
| Number of special Indigenous Relations events/participants | MV 3-year average (2020-2022) | Projected 2023: | |
| | 4 / 725 | 5 / 1,000 | 6 / 1,200 |

Performance Indicators

2024 Key Actions

- Continue to support ongoing First Nation engagement efforts (including agreements) on major Metro Vancouver capital and construction projects such as North West Langley Wastewater Treatment Plant upgrade, Iona Island Wastewater Treatment Plant upgrade, Coquitlam Lake Water Supply project, Coquitlam Main Water project, and Widgeon Marsh Regional Park development.
- Respond to the increasing number of internal requests from Metro Vancouver staff including: the provision of advice on information sharing and engagement with First Nations; the identification of First Nation economic and procurement opportunities; archaeology; as well as the coordination of, and participation in, meetings with First Nations involving staff from across the Metro Vancouver organization.
- Continue to provide ongoing training sessions for Metro Vancouver staff on various Indigenous Relations issues, including corporate policy related to information sharing and engagement with First Nations, the Board's procurement policy that includes economic opportunities and increased use of First Nations' services (e.g. archaeological) on Metro Vancouver projects; chance find protocols and archaeology.
- Complete the Cultural Safety training video, and operationalize the training for crews and contractors working on Metro Vancouver projects.
- Continue to work with the Human Resources Department to identify and contract external facilitators to provide Indigenous awareness training sessions on evolving topics in the field such as Cultural Safety and Humility, and Decolonization.
- Continue to organize Lunch and Learn sessions and other opportunities for Metro Vancouver staff, including Intranet articles, to learn more about local First Nations as well as issues related to Indigenous Peoples.
- Complete a phase of the work on a web-based portal on the provision of electronic information on local First Nations, and continue to work on other phases, including processing project referrals and streamlining the First Nations engagement process.
- Co-creating an event with an area First Nation and the Board of Directors and the Indigenous Relations Committee that promotes mutual understanding and relationship-building.

Indigenous Relations

2024 to 2028 – WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Indigenous Relations over the next 5 years.

| Initiative | Description | Theme |
|---|--|----------------|
| Regional Gatherings, Community to Community Forums, and/ or other Special Events | Events to be co-hosted by Metro Vancouver Indigenous Relations Committee and Metro Vancouver Board with local area First Nations. | Reconciliation |
| First Nations Engagement | Complete and implement an updated First Nations engagement approach with First Nations' input and feedback; and Track, analyze and make recommendations regarding Metro Vancouver's evolving obligations as implementation of the provincial <i>Declaration on the</i> <i>Rights of Indigenous Peoples Act Action Plan</i> progresses. Issues will include, but are not limited to, "advancing First Nations' participation in regional district boards" and working on "initiatives to advance collaborative stewardship of the environment, land and resources." | Reconciliation |
| Policy Review and Development | Review of existing policies, processes and practices for improving opportunities for engagement with First Nations based on the Board's commitment to Reconciliation and First Nations' expectations. | Reconciliation |
| Project Data Portal | Completion of various phases of a web-based platform for sharing project information and engaging with First Nations. | Reconciliation |
| Archaeological Management | Collaborate with First Nations on a renewed Metro Vancouver approach and policy on archaeological management. | Reconciliation |
| Capital and Construction Projects | Support ongoing First Nation engagement efforts on Metro Vancouver capital and construction projects. | Reconciliation |
| Sensitive Ecosystem Inventory | Support First Nation engagement in the 5-year update of the sensitive ecosystem inventory for the region. | Reconciliation |
| Climate 2050 | Support First Nation engagement and participation in the implementation of the Climate 2050 issue area roadmaps. | Reconciliation |
| Liquid Waste Management Plan | Support First Nation engagement and participation in the plan update. | Reconciliation |
| Drinking Water Management Plan | Support First Nations engagement and participation in the plan update. | Reconciliation |
| Solid Waste Management Plan | Support First Nation engagement and participation in the plan update. | Reconciliation |



| Subject: | 2024 - 2028 Financial Plan – Liquid Waste Services | <u>.</u> |
|----------|--|--------------------------------|
| Date: | October 5, 2023 | Meeting Date: October 11, 2023 |
| From: | Peter Navratil, General Manager, Liquid Waste Serv | vices |
| То: | Liquid Waste Committee | |

RECOMMENDATION

That the Liquid Waste Committee endorse the 2024 - 2028 Financial Plan for Liquid Waste Services as presented in the report dated October 5, 2023, titled "2024 - 2028 Financial Plan – Liquid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

In 2024, the Liquid Waste Services operating budget is proposed to increase by \$65.0 million (15.5%) for a total of \$485.8 million. A significant portion of this increase is related to capital expenditures which will be partially funded by External Interagency sources and DCC Reserves as well as resuming the removal of the biosolids lagoons at the Iona Island Wastewater Treatment Plant and inflation on input costs at the treatment plants. This will result in a levy increase of \$65.2 million (20.1%), which represents an \$52 increase (17.5%) for a total of \$349 in the cost to the average regional household (which compares to a previous forecast for 2024 of \$361). Efforts to reduce operating expenditures and debt service costs have resulted in a reduction in the overall Sewer levy of \$14.3 million from last year's projection.

PURPOSE

To present the 2024 - 2028 Financial Plan for Liquid Waste Services for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities
- Reduction of household impact, \$13 less that that previously projected for 2024.

This report focuses on the Liquid Waste Services function and presents the 2024 annual budget and the updated five-year plan for the years 2024 to 2028 for committee consideration.

LIQUID WASTE SERVICES

The Liquid Waste Services function is comprised of 19 member jurisdictions within Metro Vancouver, serving a population of approximately 2.7 million residents. The wastewater collection and treatment system consists of over 530 kilometers of trunk sewers, 34 pump stations, three storage tanks and 5 treatment plants that transport and treat an average of 1.2 billion litres of wastewater per day. The urban drainage function is comprised of the Still Creek/Brunette, Port Moody/Coquitlam and University Drainage Areas.

Liquid Waste Services initiatives planned over the next five years are guided by direction provided in the 2022 - 2026 Board Strategic Plan, and the 2010 Integrated Liquid Waste and Resource Management Plan, specifically: Board Strategic Plan:

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Integrated Liquid Waste and Resource Management Plan:

- Protect public health and the environment
- Use liquid waste as a resource
- Effective, affordable and collaborative management

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

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plans for Liquid Waste Services are presented in this report. Within the Liquid Waste Services Work Plans, 23 performance indicators have been developed and are being tracked. These include:

- Operating cost per million litres collected and treated;
- Compliance with treatment plant Operational Certificates;
- Annual combined sewage overflow (CSO) volume;
- Annual number of wet-weather related sanitary sewer overflows (SSO);
- Percentage of assets not meeting capacity or regulation within 10 years;
- Percent of biosolids beneficially used;
- Energy use in the collection and treatment of liquid waste per million litres processed;
- Percentage of digester gas used at the Wastewater Treatment Plants (WWTP); and
- Number of days swimming advisories posted by Health Authorities.

The trend in these performance measures indicates that the regional Liquid Waste treatment plants have performed well in complying with existing treatment plant operational certificates, although the North Shore Sewerage Area continues to be out of compliance with Federal regulations since January 1, 2021 and will remain so until the North Shore WWTP commences secondary treatment of wastewater flows from the North Shore municipalities. Wet weather sanitary sewer overflows have reduced, primarily as a result of reduced rainfall. Progress on key projects and initiatives must continue to ensure that needed infrastructure is delivered to comply with regulatory requirements, meet demands resulting from growth and to allow progress on climate change mitigation actions.

CONTINUOUS IMPROVEMENT

Several continuous improvement initiatives have resulted in the following achievements:

- Acquisition and deployment of new flush truck with water recycling capability and other technology to improve worker safety and productivity will result in annual savings of over \$250,000.
- Installation of Pilot Digestion Optimization Facility at Lulu Island WWTP providing the ability to test advanced digestion processes such as the SEED reactor which has the ability to increase revenues and reduce net GHG emissions by increasing resource recovery in the form of renewable natural gas and production of hydrogen as a fuel source.
- Changes to pump operating strategy at the Lynn Pump Station resulting in reduced energy costs, achieving annual savings of \$20k.
- Development of Electrical Safety Standards Program that coordinates existing electrical safe work procedures and training materials into a cohesive program and coordinated standard that will improve worker safety and productivity.
- Development of new environmental monitoring tools that use genomic-based approach to assess impact of WWTP discharges on Fraser River salmon, in collaboration with Department of Fisheries and Simon Fraser University.
- Introduction of an interim Reclaimed Water Policy that will enable the investigation of potential markets, pricing strategies and health and safety requirements for the distribution of reclaimed water.
- Real-time public notification of combined sewer overflows
- Agreement reached with Creative Energy for access to sewer heat for the Senakw development, which will reduce regional greenhouse gas emissions by 4,700 tonnes per year.

For 2024 the following activities will continue, resulting in future improvements:

- First step in transition to wet weather pricing to incentivize action on inflow and infiltration (I&I) in municipal sewers.
- Review of maintenance work processes and implementation of risk-based condition assessment program.
- Effluent Heat Recovery at Lulu Island WWTP, resulting in higher volume of digester gas available for conversion to Renewable Natural Gas. Projected \$415,000 per year increase in revenue and additional regional GHG reductions of 1,000 tonnes per year.
- Develop and distribute project profiles for upcoming GVS&DD capital projects to improve coordination of construction projects with member jurisdictions.
- Update of the Development Cost Charge (DCC) Rates to ensure that revenues from DCCs

support projected growth projects.

- Continue working with the City of New Westminster on the development of a sewer heat based heat recovery district energy system in the Sapperton district. This project has the potential to reduce regional greenhouse gas emissions by 5,700 tonnes per year.
- Continue to work with the City of Surrey, City of Richmond and City of Vancouver to identify and develop opportunities for additional sewer heat based district energy systems.
- Improvement of effluent quality at Lions Gate WWTP through continuous application of chemically enhanced primary treatment.
- Testing alternative innovative sludge digestion processes such as the thermophilic (high temperature) digestion, Volatile Fatty Acid-rich stream digestion and hydrogen injection.
- Continue to advance the O&M Business Optimization initiative to use evidence based tools to identify and implement improvement opportunities across a broad area of work activities with the goal of reducing operating and maintenance costs.
- Continue to identify and develop additional possible opportunities for green biomethane generation.
- Continue to develop advanced technologies such as hydrothermal liquefaction to increase options for wastewater solids beneficial use and increased resource recovery.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

Attached are the 2024 - 2028 Liquid Waste Services Financial Plan Operating Budget Summary (Attachment 1) and the 2024 - 2028 Liquid Waste Services Capital Budget Summary (Attachment 2).

Each Metro Vancouver function has Annual Work Plans that include strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years. The 2024 Annual Work Plans for the Liquid Waste Services budget presented in this report are included in Attachment 3 and the "What's Happening" highlights for Liquid Waste Services for the years 2024 - 2028 are included in Attachment 4.

Operating Budget Highlights

The Liquid Waste Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). It is proposed to increase by \$65.0 million in 2024 for a total budget of \$485.8 million (Attachment 1). This increase can essentially be attributed to increasing operating costs (close to \$36.1 million) due to the recommencement of biosolids lagoon decommissioning at Iona Island WWTP; escalation of materials, chemicals and insurance; environmental monitoring studies to catch up on work deferred

in 2023 to meet budget targets. A significant portion of the increase can also be attributed to supporting the capital program with an increase of debt service of \$10.6 million along with an increase in contributions to capital of \$18.3 million which will support infrastructure investments required to meet service requirements and growth demands.

The 2024 operating budget includes the following key actions:

- Resume decommissioning of the Iona Island WWTP biosolids lagoons.
- Coordinate overflow working groups with member municipalities to develop targeted sewer overflow plans and reduce wet weather flows through action on public and private works.
- Continue the update of the *Integrated Liquid Waste and Resource Management Plan* in accordance with a provincially-approved review strategy.
- Complete construction of the Glenbrook Sanitary Trunk Sewer expansion.
- Continuation of implementation of a comprehensive Maintenance Reliability Program to increase asset resilience.
- Commissioning and testing of two (2) pilot plants at Iona Island WWTP to evaluate the two
 preferred secondary treatment technologies (Aerobic Granular Sludge and Membrane
 Bioreactor).
- Conduct Lulu Island WWTP dye tracer study.
- Secure agreement for provision of sewer heat for Surrey Centre district energy system.

Highlights of contracts and consulting assignments anticipated to be undertaken in 2024 to respond to work plan requirements within the operating budget include the following:

- Iona Island WWTP sludge lagoon dewatering, biosolids hauling and beneficial use projects.
- Projects funded from the Sustainability Innovation Fund including Advanced Resource Recovery from Sludge and Handheld Microbial DNA Monitor.
- Monitoring programs for Iona Island WWTP and Strait of Georgia; Lions Gate WWTP and Burrard Inlet; Fraser River and the Fraser River WWTPs.
- Additional assignments that are regularly contracted for highly specialized functions, including: effluent toxicity testing, combined sewer overflow characterization and risk assessments, wastewater and biosolids characterization for CECs and toxics, development of environmental management system, maintenance hole monitoring and assessment.

Over the next five years, the Liquid Waste Services budget is expected to increase an average of \$91.4 million or 15.9% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$72.0 million on average over the next five years. The operating programs expenditures are increasing by \$19.4 million per year on average, to address core operating and facility commissioning requirements.

Capital Budget Highlights

The Liquid Waste Services capital budget for 2024 approval is \$7.65 billion (Attachment 2). This amount includes all capital projects underway or planned in 2024. The capital program is funded by a combination of long-term debt, contributions from the operating budget, some external (interagency and senior level government grant) contributions and development cost charges (DCCs).

The projected capital cash flow for 2024 - 2028 totals \$5.4 billion, an average of \$1,081.5 million per year. The largest twelve projects (\$50 million and greater cash flow between 2024 - 2028) make up approximately 81% of the capital spending over the next five years. In addition to the twelve projects, there are a further 137 projects on the plan.

Highlights of capital projects planned or ongoing for 2024 include the following:

- North Shore WWTP Advanced Treatment Upgrade;
- Northwest Langley WWTP Expansion;
- Iona Island WWTP Advanced Treatment Upgrade;
- Gilbert / Brighouse Trunk Sewer;
- Annacis Island WWTP Stage 5 Expansion and Outfall System;
- Annacis Island WWTP Refurbishment of the fourth and final Trickling Filter;
- Burnaby Lake North Interceptor Winston Section;
- South Surrey Interceptor Johnston Section;
- Jervis and Chilco Pump Station Backup Power facilities;
- Gleneagles Pump Stations 4 and 5;
- Crescent Beach Forcemain Replacement Project;
- New Westminster Front Street Pressure Sewer Rehabilitation.

Reserve Funds

The application of reserve funding in Liquid Waste Services is the Sustainability Innovation Fund Reserve, Drainage Area General Reserve and the Laboratory Equipment Reserve. In 2024, the financial plan includes \$452,000 to be used for several Board approved sustainability initiatives, \$225,000 for several Drainage Area initiatives and \$300,000 for equipment replacement in the analytical laboratories.

The 2024 - 2028 Projected Reserves for Liquid Waste Services is included in Attachment 5.

Wet Weather Cost Allocation

To address the increasing challenge of managing I&I of rainwater into the regional sewer systems and to ensure that costs for services are equitably allocated, wet weather pricing for liquid waste collection and transportation will be adopted. The first year of a 10-year gradual transition period will commence in 2024. Consultation with staff from the GVS&DD member jurisdictions has been ongoing in 2023 to address questions about the methodology that will be used to measure wet weather flows.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.
- The Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 28, 2022.

ALTERNATIVES

- That the Liquid Waste Committee endorse the 2024 2028 Financial Plan for Liquid Waste Services as presented in the report dated October 5, 2023, titled "2024 - 2028 Financial Plan – Liquid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- That the Liquid Waste Committee make recommendations and endorse an amended 2024 -2028 Financial Plan for Liquid Waste Services and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the GVS&DD Board approves the 2024 Budget and endorses the 2024 - 2028 Financial Plan for Liquid Waste Services, as presented under Alternative 1, in 2024 the revenue from the annual levy for the system will increase by \$65.2 million (20.1%) to \$389.5 million which will generate the majority of the \$485.8 million in total revenue required to offset total expenditures. The increase in the levy represents an \$52 increase in the cost to the average regional household to \$349 (2023 forecast for 2024: \$361.)

Over the term of the five-year Financial Plan, the Liquid Waste Services annual levy is projected to increase by an average of \$57 million per year to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years will rise from \$349 in 2024 to \$514 in 2028 representing an average annual increase of \$44.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the Liquid Waste Services Financial Plan.

CONCLUSION

The Liquid Waste Services 2024 Budget and Five-Year Financial Plan was prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Liquid Waste Services.

The presentation of the 2024 Budget and Five-Year Financial Plan for Liquid Waste Services provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for Liquid Waste investments that will be required to maintain our assets and to respond to our region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical infrastructure requirements. Staff recommend endorsing the 2024 - 2028 Financial Plan and Annual Work Plans for Liquid Waste Services as presented under Alternative 1, which includes direction to introduce changes to allow the staged introduction of wet weather costing into the apportionment of the levy.

Attachments:

- 1. 2024 2028 Liquid Waste Services Financial Plan
- 2. 2024 2028 Liquid Waste Services Capital Budget Summary
- 3. 2024 Liquid Waste Services Work Plans
- 4. 2024 2028 "What's Happening"
- 5. 2024 2028 Projected Reserves Liquid Waste Services
- 6. 2024 2028 Liquid Waste Services Financial Plan Presentation

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ATTACHMENT 1

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT LIQUID WASTE SERVICES 2024 BUDGET REVIEW

2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|--|---------------------------|---------------------------|-------------|--|-------------|---------------------------|-------------|-------------------------------|----------------------|---------------------------|-------------|
| | 202021 | DOD GLI | | | | | | | | | 6 |
| REVENUES | | | | | | | | A ==0 C +0 00C | | 4 coo oo= o=o | |
| Liquid Waste Services Levy | \$ 324,265,595 | | 20.1% | \$ 460,710,342 | 18.3% | \$ 510,271,231 | 10.8% | \$ 559,648,886 | 9.7% | \$ 609,927,350 | 9.0% |
| User Fees | 4,331,703 | 5,399,457 | | 6,628,443 | | 7,158,154 | | 7,588,608 | | 7,774,823 | |
| Transfer from DCC Reserves | 63,572,619 | 72,994,744 | | 87,958,117 | | 114,793,406 | | 169,453,587 | | 243,077,481 | |
| Liquid Waste Industrial Charges | 12,495,626 | 13,169,057 | | 13,655,992 | | 14,044,413 | | 14,465,746 | | 14,827,389 | |
| Other External Revenues | 1,793,792 | 1,986,884 | | 1,998,884 | | 2,010,884 | | 2,022,884 | | 2,022,884 | |
| Transfer from Sustainability Innovation Fund Reserves | 2,731,077 | 452,000 | | - | | - | | - | | - | |
| Transfer from Reserves | 11,618,251 | 2,331,007 | | 229,074 | | 275,000 | | 125,000 | | 125,000 | |
| TOTAL REVENUES | \$ 420,808,663 | \$ 485,831,252 | 15.5% | \$ 571,180,852 | 17.6% | \$ 648,553,088 | 13.5% | \$ 753,304,711 | 16.2% | \$ 877,754,927 | 16.5% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Policy Planning and Analysis | | | | | | | | | | | |
| Contribution to Sustainability Innovation Fund Reserve | ć 1 1 2 7 0 0 0 | ć 1 1 2 7 000 | | \$ 1.127.000 | | \$ 1.127.000 | | \$ 1.127.000 | | \$ 1.127.000 | |
| Utility Analysis and Infrastructure | \$ 1,127,000 2,970,042 | \$ 1,127,000 3,217,058 | | \$ 1,127,000 4,011,183 | | \$ 1,127,000 4,685,184 | | \$ 1,127,000 4,302,143 | | \$ 1,127,000 4,022,804 | |
| | , , | | | | | | | , , | | | |
| Utility Policy and Planning | 3,712,150 | 3,854,352 | | 3,955,686 | | 4,019,568 | | 4,123,768 | | 4,271,059 | |
| Wastewater Research and Innovation | 3,704,459 | 2,067,771 | | 1,851,913 | | 1,904,784 | | 1,954,882 | | 2,038,359 | |
| Wastewater Facilities Planning | 560,402 | 870,969 | | 1,331,231 | | 1,122,349 | | 1,413,278 | | 1,438,945 | |
| | 12,074,053 | 11,137,150 | (7.8%) | 12,277,013 | 10.2% | 12,858,885 | 4.7% | 12,921,071 | 0.5% | 12,898,167 | (0.2%) |
| Management Systems and Utility Services | | | | | | | | | | | |
| Annacis Research Centre | 502,112 | 525,741 | | 535,987 | | 546,228 | | 557,714 | | 570,902 | |
| Dispatch | 155,180 | 168,597 | | 173,666 | | 178,319 | | 183,048 | | 186,893 | |
| Energy Management | 323,386 | 364,251 | | 466,192 | | 481,436 | | 496,901 | | 512,429 | |
| Engineers in Training | 589,460 | 823,862 | | 1,072,887 | | 1,101,667 | | 1,130,814 | | 1,161,047 | |
| Management Systems Utility Services | 1,219,885 | 1,311,325 | | 1,307,845 | | 1,336,945 | | 1,366,413 | | 1,397,143 | |
| Records Management | 131,443 | 189,518 | | 194,590 | | 199,857 | | 205,196 | | 210,730 | |
| Utility Voice Radio | 135,465 | 142,589 | | 154,382 | | 161,530 | | 168,064 | | 174,797 | |
| | 3,056,931 | 3,525,883 | 15.3% | 3,905,549 | 10.8% | 4,005,982 | 2.6% | 4,108,150 | 2.6% | 4,213,941 | 2.6% |
| Environmental Management and Quality Control | 3,030,331 | 3,323,003 | 13.370 | 3,303,343 | 10.070 | 4,003,302 | 2.070 | 4,100,130 | 2.070 | 4,213,341 | 2.070 |
| Environmental Management and Quality Control | 12 445 222 | | | 17 172 205 | | 17 511 014 | | 10 055 727 | | 19,738,014 | |
| 5 | 13,445,222 | 15,573,512 | | 17,172,385 | | 17,511,014 | | 18,055,737 | | | |
| Source Compliance Monitoring | 412,888 | 438,745 | | 467,003 | | 641,777 | | 490,621 | | 502,887 | |
| Contribution to Reserve | 106,282 | 108,399 | | 109,835 | | 113,062 | | 116,264 | | 119,501 | |
| | 13,964,392 | 16,120,656 | 15.4% | 17,749,223 | 10.1% | 18,265,853 | 2.9% | 18,662,622 | 2.2% | 20,360,402 | 9.1% |
| Project Delivery | | | | | | | | | | | |
| Minor Capital Projects | 7,170,828 | 9,706,543 | | 10,152,057 | | 10,355,251 | | 10,618,409 | | 10,872,378 | |
| | 7,170,828 | 9,706,543 | 35.4% | 10,152,057 | 4.6% | 10,355,251 | 2.0% | 10,618,409 | 2.5% | 10,872,378 | 2.4% |
| Operations and Maintenance | | | | | | | | | | | |
| Lake City Operations | 1,027,079 | 1,058,982 | | 1,099,544 | | 1,129,638 | | 1,233,046 | | 1,315,614 | |
| Liquid Waste Residuals | 28,874,666 | 42,152,634 | | 45,234,938 | | 46,116,435 | | 48,682,283 | | 52,029,648 | |
| Maintenance | 36,063,178 | 38,457,280 | | 42,121,093 | | 44,293,104 | | 46,433,669 | | 48,096,133 | |
| SCADA Control Systems | 1,126,131 | 1,373,250 | | 1,449,064 | | 1,549,459 | | 1,617,573 | | 1,686,926 | |
| Urban Drainage | 1,406,189 | 2,106,676 | | 2,263,622 | | 2,350,120 | | 2,555,226 | | 2,635,228 | |
| Wastewater Collection | 17,671,887 | 18,235,181 | | 19,289,848 | | 20,281,536 | | 21,299,021 | | 21,983,121 | |
| Wastewater Concertion Wastewater Treatment | 55,069,772 | 63,322,632 | | 68,369,101 | | 71,295,411 | | 74,304,651 | | 76,982,069 | |
| Wastewater freatment | | | 10.00/ | <u> </u> | 7.0% | | 4.0% | | 4.0% | | 4 49/ |
| | 141,238,902 | 166,706,635 | 18.0% | 179,827,210 | 7.9% | 187,015,703 | 4.0% | 196,125,469 | 4.9% | 204,728,739 | 4.4% |
| Administration and Department Support | 2,882,626 | 2,969,536 | 3.0% | 3,626,312 | 22.1% | 3,790,540 | 4.5% | 4,055,989 | 7.0% | 3,945,411 | (2.7%) |
| Communications Program | 475,000 | 503,500 | 6.0% | 514,368 | 2.2% | 525,507 | 2.2% | 536,922 | 2.2% | 548,623 | 2.2% |
| Environmental Regulation and Enforcement | 2,278,451 | 2,432,995 | 6.8% | 2,507,241 | 3.1% | 2,577,670 | 2.8% | 2,654,527 | 3.0% | 2,716,762 | 2.3% |
| Allocation of Centralized Support Costs | 34,321,573 | 39,923,864 | 16.3% | 42,545,317 | 6.6% | 45,537,764 | 7.0% | 48,698,844 | 6.9% | 52,929,878 | 8.7% |
| Total Operating Programs | 217,462,756 | 253,026,762 | 16.4% | 273,104,290 | 7.9% | 284,933,155 | 4.3% | 298,382,003 | 4.7% | 313,214,301 | 5.0% |
| | | | | | | | | | | | |
| Allocation of Project Delivery Cost | 6,684,841 | 7,265,724 | 8.7% | 7,249,602 | (0.2%) | 7,547,881 | 4.1% | 7,842,854 | 3.9% | 8,080,639 | 3.0% |
| Debt Service | 116,305,572 | 126,907,374 | 9.1% | 159,867,703 | 26.0% | 203,328,170 | 27.2% | 288,978,024 | 42.1% | 396,235,443 | 37.1% |
| Contribution to Capital | 80,355,494 | 98,631,392 | 22.7% | 130,959,257 \$ 571,180,852 25 01 181 | 32.8% | 152,743,882 | 16.6% | 158,101,830 \$ 753,304,711 | 3.5% 16.2% | 160,224,544 | 1.3% |
| TOTAL EXPENDITURES | \$ 420,808,663 | | Page | | 17.6% | \$ 648,553,088 | 13.5% | | | \$ 877,754,927 | 16.5% |

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT LIQUID WASTE SERVICES 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN VANCOUVER SEWERAGE AREA

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|--|----------------------------|---------------------------------|----------------|---------------------|--------------|---------------------|--------------|---------------------------------|--------------|----------------------------|--------------|
| REVENUES | | | | | | | | | | | |
| Liquid Waste Services Levy | \$ 99,429,756 | \$125,868,534 | 26.6% | \$149,281,362 | 18.6% | \$163,020,066 | 9.2% | \$185,541,479 | 13.8% | \$212,488,095 | 14.5% |
| User Fees | 1,243,538 | 1,528,984 | | 1,931,824 | | 2,134,735 | | 2,337,719 | | 2,395,778 | |
| Transfer from DCC Reserves | 7,005,177 | 7,342,921 | | 8,235,365 | | 9,773,047 | | 16,028,628 | | 26,544,502 | |
| Liquid Waste Industrial Charges | 3,195,194 | 3,386,906 | | 3,522,382 | | 3,628,053 | | 3,736,895 | | 3,830,317 | |
| Other External Revenues | 154,282 | 237,127 | | 237,127 | | 237,127 | | 237,127 | | 237,127 | |
| Transfer from Sustainability Innovation Fund Reserves | 1,068,671 | 173,658 | | | | _ | | _ | | _ | |
| Transfer from Reserves | 11,373,251 | 1,921,267 | | 104,074 | | 57,630 | | - | | - | |
| TOTAL REVENUES | \$123,469,869 | | 13.8% | \$163,312,134 | 16.3% | \$178,850,658 | 9.5% | \$207,881,848 | 16.2% | \$245,495,819 | 18.1% |
| | <i><u>(110)</u></i> | <u> </u> | 101070 | | 2010/0 | ¢1,0,000,000 | 51070 | 0207/002/010 | 10.170 | <u> </u> | 1011/0 |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Policy Planning and Analysis | | | | | | | | | | | |
| Contribution to Sustainability Innovation Fund Reserve | \$ 440,995 | \$ 432,993 | | \$ 432,993 | | \$ 432,993 | | \$ 432,993 | | \$ 432,993 | |
| Utility Analysis and Infrastructure | 1,093,700 | 1,168,759 | | 1,439,866 | | 1,696,846 | | 1,547,686 | | 1,438,294 | |
| Utility Policy and Planning | 1,425,173 | 1.461.632 | | 1,500,565 | | 1,525,108 | | 1,565,142 | | 1,621,731 | |
| Wastewater Research and Innovation | 1,449,555 | 794,438 | | 711,505 | | 731,818 | | 751,066 | | 783,138 | |
| Wastewater Facilities Planning | 219,285 | 334,626 | | 511,459 | | 431,207 | | 542,980 | | 552,842 | |
| Wastewater Facilities Fiamming | 4,628,708 | 4,192,448 | (9.4%) | 4,596,388 | 9.6% | 4,817,972 | 4.8% | 4,839,867 | 0.5% | 4,828,998 | (0.2%) |
| Management Systems and Utility Services | 4,020,700 | 4,152,440 | (3.470) | 4,550,500 | 5.070 | 4,017,572 | 4.070 | 4,035,007 | 0.570 | 4,020,000 | (0.270) |
| Annacis Research Centre | 196,476 | 201,990 | | 205,926 | | 209.861 | | 214,274 | | 219.341 | |
| Dispatch | 45,088 | 49,654 | | 51,147 | | 52,517 | | 53,910 | | 55,042 | |
| Energy Management | 93,962 | 107,277 | | 137,300 | | 141,790 | | 146,344 | | 150,917 | |
| | | | | | | | | | | 446,062 | |
| Engineers in Training | 230,654 | 316,519 | | 412,192 | | 423,249 | | 434,447 | | , | |
| Management Systems Utility Services | 354,450 | 386,198 | | 385,173 | | 393,743 | | 402,422 | | 411,472 | |
| Records Management | 38,191 | 55,816 | | 57,309 | | 58,861 | | 60,433 | | 62,063 | |
| Utility Voice Radio | 48,639 | <u>51,196</u> 1,168,650 | 16.0% | 55,430 1,304,477 | 11.6% | 57,998 1,338,019 | 2.6% | 60,343 1,372,173 | 2.6% | <u>62,761</u> 1,407,658 | 2.6% |
| Environmental Management and Quality Control | 1,007,400 | 1,108,030 | 10.070 | 1,304,477 | 11.070 | 1,558,019 | 2.070 | 1,372,173 | 2.076 | 1,407,038 | 2.076 |
| Environmental Management and Quality Control | 5,049,905 | 5,774,470 | | 6,383,123 | | 6,496,539 | | 6,700,057 | | 7,342,121 | |
| Source Compliance Monitoring | 161,563 | 168,566 | | 179,423 | | 246,571 | | 188,497 | | 193,209 | |
| Contribution to Reserve | 41,588 | 41,647 | | 42,199 | | 43,438 | | 44,669 | | 45,912 | |
| Contribution to Reserve | 5,253,056 | 5,984,683 | 13.9% | 6,604,745 | 10.4% | 6,786,548 | 2.8% | 6,933,223 | 2.2% | 7,581,242 | 9.3% |
| Project Delivery | 3,233,030 | 3,304,003 | 13.570 | 0,004,745 | 10.470 | 0,700,340 | 2.0/0 | 0,555,225 | 2.270 | 7,501,242 | 5.570 |
| Minor Capital Projects | 1,496,392 | 2,815,821 | | 2,934,064 | | 2,992,043 | | 3,068,301 | | 3,139,954 | |
| | 1,496,392 | 2,815,821 | 88.2% | 2,934,064 | 4.2% | 2,992,043 | 2.0% | 3,068,301 | 2.5% | 3,139,954 | 2.3% |
| Operations and Maintenance | | | | | | | | | | | |
| Lake City Operations | 401,896 | 406,867 | | 422,450 | | 434,012 | | 473,742 | | 505,465 | |
| Liquid Waste Residuals | 17,569,473 | 25,227,925 | | 26,204,901 | | 27,100,753 | | 28,523,974 | | 30,241,207 | |
| Maintenance | 9,761,264 | 10,278,917 | | 10,978,603 | | 11,282,022 | | 11,690,301 | | 12,049,646 | |
| SCADA Control Systems | 310,583 | 378,739 | | 399,651 | | 427,338 | | 446,126 | | 465,253 | |
| Wastewater Collection | 4,781,815 | 5,409,875 | | 5,775,540 | | 6,115,297 | | 6,364,909 | | 6,559,427 | |
| Wastewater Treatment | 15,567,664 | 17,159,736 | | 18,472,921 | | 18,608,281 | | 19,777,773 | | 20,241,068 | |
| wastewater mediment | 48,392,695 | 58,862,059 | 21.6% | 62,254,066 | 5.8% | 63,967,703 | 2.8% | 67,276,825 | 5.2% | 70,062,066 | 4.1% |
| Administration and Department Support | 837,576 | 874,558 | 4.4% | 1,067,985 | 22.1% | 1,116,352 | 4.5% | 1,194,529 | 7.0% | 1,161,963 | (2.7%) |
| Communications Program | 185,868 | 193,445 | 4.4% | 197,620 | 2.2% | 201,900 | 2.2% | 206,285 | 2.2% | 210,781 | 2.2% |
| Environmental Regulation and Enforcement | 439,741 | 456,916 | 4.1% 3.9% | 470,860 | 2.2% 3.1% | 484,086 | 2.2% | 498,520 | 3.0% | 510,208 | 2.2% |
| Allocation of Centralized Support Costs | 439,741 9,984,775 | | 3.9% 17.2% | | 3.1% 4.8% | | 2.8% 6.0% | | 3.0% 3.1% | 14,621,453 | 2.3% 9.1% |
| | 9,984,775 | <u>11,703,180</u> 86,251,760 | 17.2% 19.4% | 12,265,980 | 4.8% 6.3% | 13,001,364 | 6.0% 3.3% | <u>13,405,224</u> 98,794,947 | 3.1% 4.3% | 14,621,453 | 9.1% 4.8% |
| Total Operating Programs | | | | 91,696,185 | | 94,705,987 | | | | | |
| Allocation of Project Delivery Cost | 1,868,052 | 2,338,649 | 25.2% | 2,333,460 | (0.2%) | 2,429,468 | 4.1% | 2,524,412 | 3.9% | 2,600,949 | 3.0% |
| Debt Service | 16,189,300 | 15,036,345 | (7.1%) | 18,652,265 | 24.0% | 23,032,410 | 23.5% | 46,826,074 | 103.3% | 79,579,439 | 69.9% |
| Contribution to Capital | 33,186,246 | 36,832,643 | 11.0% | 50,630,224 | 37.5% | 58,682,793 | 15.9% | 59,736,415 | 1.8% | 59,791,108 | 0.1% |
| TOTAL EXPENDITURES | \$123,469,869 | 64 40 450 207 | 13.8% | \$163,312,134 | 16.3% | \$178,850,658 | 9.5% | \$207,881,848 | 16.2% | \$245,495,819 | 18.1% |

LIQUID WASTE SERVICES

2024 BUDGET REVIEW

2024 - 2028 FINANCIAL PLAN

NORTH SHORE SEWERAGE AREA

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|--|---|----------------|-------------|------------------|-------------|--------------------------|-------------|------------------|-------------|------------------|-------------|
| REVENUES | | | | | | | | | | | |
| Liquid Waste Services Levy | \$ 34,247,339 | \$ 37,993,285 | 10.9% | \$ 53,421,720 | 40.6% | \$ 66,287,868 | 24.1% | \$ 73,714,927 | 11.2% | \$ 74,926,850 | 1.6% |
| User Fees | 63,459 | 60,893 | | 62,352 | | 63,848 | | 65,381 | | 66,953 | |
| Transfer from DCC Reserves | 2,513,190 | 2,470,796 | | 3,203,837 | | 4,301,680 | | 6,238,233 | | 9,108,329 | |
| Liquid Waste Industrial Charges | 924,953 | 942,527 | | 960,435 | | 978,683 | | 1,008,043 | | 1,033,244 | |
| Other External Revenues | 18,781 | 27,405 | | 27,405 | | 27,405 | | 27,405 | | 27,405 | |
| Transfer from Sustainability Innovation Fund Reserves | 176,701 | 28,476 | | | | | | | | | |
| Transfer from Reserves | - | 18,900 | | _ | | 9.450 | | _ | | _ | |
| TOTAL REVENUES | \$ 37,944,423 | , | 9.5% | \$ 57,675,749 | 38.8% | \$ 71,668,934 | 24.3% | \$ 81,053,989 | 13.1% | \$ 85,162,781 | 5.1% |
| | <u> </u> | 5 41,542,202 | 5.570 | 3 37,073,745 | 50.070 | <u> </u> | 24.370 | 5 61,055,505 | 13.170 | 5 05,102,701 | 5.170 |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Policy Planning and Analysis | | | | | | | | | | | |
| Contribution to Sustainability Innovation Fund Reserve | \$ 72,917 | \$ 71,001 | | \$ 71,001 | | \$ 71,001 | | \$ 71,001 | | \$ 71,001 | |
| Utility Analysis and Infrastructure | 180,839 | 191,650 | | 236,105 | | 278,244 | | 253,785 | | 235,847 | |
| Utility Policy and Planning | 235,647 | 239,674 | | 246,058 | | 250,083 | | 256,647 | | 265,927 | |
| Wastewater Research and Innovation | 239,678 | 130,270 | | 116,671 | | 120,001 | | 123,158 | | 128,417 | |
| Wastewater Facilities Planning | 36,258 | 54,871 | | 83,868 | | 70,708 | | 89,037 | | 90,654 | |
| | 765,339 | 687,466 | (10.2%) | 753,703 | 9.6% | 790,037 | 4.8% | 793,628 | 0.5% | 791,846 | (0.2%) |
| Management Systems and Utility Services | , | | (, | | | , | | | | | (===,=, |
| Annacis Research Centre | 32,487 | 33,122 | | 33,767 | | 34,412 | | 35,136 | | 35,967 | |
| Dispatch | 13,601 | 15.406 | | 15,868 | | 16,296 | | 16,725 | | 17.078 | |
| Energy Management | 28,338 | 33,287 | | 42,603 | | 43,996 | | 45,410 | | 46,829 | |
| Engineers in Training | 38,131 | 51,897 | | 67,584 | | 69,397 | | 71,233 | | 73,137 | |
| Management Systems Utility Services | 106,899 | 119,829 | | 119,511 | | 122,170 | | 124,863 | | 127,671 | |
| Records Management | 11,519 | 17,317 | | 17,780 | | 18,261 | | 18,749 | | 19,255 | |
| Utility Voice Radio | 12,894 | 13,572 | | 14,695 | | 15,375 | | 15,997 | | 16,638 | |
| | 243,869 | 284,430 | 16.6% | 311,808 | 9.6% | 319,907 | 2.6% | 328,113 | 2.6% | 336,575 | 2.6% |
| Environmental Management and Quality Control | 210,000 | 201/100 | 10.070 | 011,000 | 51070 | 010,007 | 210/0 | 510,115 | 2.070 | 000,070 | 2.070 |
| Environmental Management and Quality Control | 978,692 | 1,095,946 | | 1,199,784 | | 1,230,297 | | 1,267,784 | | 1,376,115 | |
| Source Compliance Monitoring | 26,714 | 27,641 | | 29,421 | | 40,432 | | 30,909 | | 31,682 | |
| Contribution to Reserve | 6,876 | 6,829 | | 6,920 | | 7,123 | | 7,325 | | 7,529 | |
| | 1,012,282 | 1,130,416 | 11.7% | 1,236,125 | 9.4% | 1,277,852 | 3.4% | 1,306,018 | 2.2% | 1,415,326 | 8.4% |
| Project Delivery | | | | | | | | _/= = = / = = = | | | |
| Minor Capital Projects | 373,392 | 301,847 | | 312,592 | | 322,627 | | 330,797 | | 338,144 | |
| | 373,392 | 301,847 | (19.2%) | 312,592 | 3.6% | 322,627 | 3.2% | 330,797 | 2.5% | 338,144 | 2.2% |
| Operations and Maintenance | | | | | | | | | | | |
| Lake City Operations | 66,452 | 66,715 | | 69,269 | | 71,166 | | 77,681 | | 82,882 | |
| Liquid Waste Residuals | 719,094 | 1,011,097 | | 1,080,336 | | 1,079,876 | | 1,144,563 | | 1,237,103 | |
| Maintenance | 3,972,973 | 4,301,122 | | 5,462,460 | | 5,585,209 | | 5,813,062 | | 5,975,680 | |
| SCADA Control Systems | 174,410 | 212,682 | | 224,423 | | 239,973 | | 250,522 | | 261,263 | |
| Wastewater Collection | 3,254,820 | 3,584,803 | | 3,762,618 | | 3,992,216 | | 4,179,575 | | 4,300,978 | |
| Wastewater Treatment | 7,023,825 | 7,974,484 | | 9,126,709 | | 10,186,842 | | 13,611,577 | | 14,019,962 | |
| | 15,211,574 | 17,150,903 | 12.7% | 19,725,815 | 15.0% | 21,155,282 | 7.2% | 25,076,980 | 18.5% | 25,877,868 | 3.2% |
| Administration and Department Support | 252,605 | 271,356 | 7.4% | 331,372 | 22.1% | 346,380 | 4.5% | 370,636 | 7.0% | 360,532 | (2.7)% |
| Communications Program | 30,733 | 31,721 | 3.2% | 32,405 | 2.2% | 33,107 | 2.2% | 33,826 | 2.2% | 34,563 | 2.2% |
| Environmental Regulation and Enforcement | 128,277 | 135,518 | 5.6% | 139,653 | 3.1% | 143,576 | 2.8% | 147,857 | 3.0% | 151,324 | 2.3% |
| Allocation of Centralized Support Costs | 3,009,200 | 3,626,724 | 20.5% | 3,646,815 | 0.6% | 4,651,971 | 27.6% | 5,392,059 | 15.9% | 5,668,423 | 5.1% |
| Total Operating Programs | 21,027,271 | 23,620,381 | 12.3% | 26,490,288 | 12.2% | 29,040,739 | 9.6% | 33,779,914 | 16.3% | 34,974,601 | 3.5% |
| Allocation of Project Delivery Cost | 530,045 | 493,754 | (6.8)% | 492,659 | (0.2)% | 512,929 | 4.1% | 532,974 | 3.9% | 549,133 | 3.0% |
| Debt Service | 7,615,799 | 7,688,674 | 1.0% | 12,267,237 | 59.5% | 17,155,132 | 39.8% | 19,972,181 | 16.4% | 22,834,162 | 14.3% |
| Contribution to Capital | 8,771,308 | 9,739,473 | 11.0% | 18,425,565 | 89.2% | 24,960,134 | 35.5% | 26,768,920 | 7.2% | 26,804,885 | 0.1% |
| TOTAL EXPENDITURES | \$ 37,944,423 | | 9.5% | \$ 57,675,749 | 38.8% | \$ 71,668,934 | 24.3% | \$ 81,053,989 | 13.1% | \$ 85,162,781 | 5.1% |
| | , ,,,,,,,,,, ,,,,,,,,,,,,,,,,,,,,,,,,, | ÷ 11,542,202 | 5.570 | <u> </u> | 30.070 | , , 1,000,004 | 2410/0 | <u> </u> | 1011/0 | <u> </u> | 3.1/0 |

LIQUID WASTE SERVICES

2024 BUDGET REVIEW

2024 - 2028 FINANCIAL PLAN

LULU ISLAND WEST SEWERAGE AREA

| Г | 2023 | 2024 | % | 2025 | % | 2026 | % | 2027 | % | 2028 | % |
|--|--------------------------|--------------------------|--------|-------------------|--------|--------------------------|--------------|--------------------------|--------------|--------------------------|--------------|
| | BUDGET | BUDGET | CHANGE | FORECAST | CHANGE | FORECAST | CHANGE | FORECAST | CHANGE | FORECAST | % CHANGE |
| REVENUES | | | | | | | | | | | |
| Liquid Waste Services Levy | \$ 29,380,218 | \$ 32 235 087 | 9.7% | \$ 39,200,653 | 21.6% | \$ 44,483,408 | 13.5% | \$ 48,555,691 | 9.2% | \$ 50,952,567 | 4.9% |
| User Fees | 146,209 | 134,132 | 5.770 | 137,416 | 21.070 | 140,782 | 13.570 | 144,232 | 5.270 | 147,769 | 4.576 |
| Transfer from DCC Reserves | 2,353,241 | 2,427,028 | | 2,468,627 | | 2,846,907 | | 4,793,330 | | 8,097,005 | |
| | | | | | | , , | | | | | |
| Liquid Waste Industrial Charges | 936,203 | 953,991 | | 972,117 | | 990,587 | | 1,020,305 | | 1,045,813 | |
| Other External Revenues | 678,268 | 705,059 | | 717,059 | | 729,059 | | 741,059 | | 741,059 | |
| Transfer from Sustainability Innovation Fund Reserves | 181,343 | 31,233 | | - | | - | | - | | - | |
| Transfer from Reserves | | 20,730 | | | | 10,365 | | | | | |
| TOTAL REVENUES | \$ 33,675,482 | \$ 36,507,260 | 8.4% | \$ 43,495,872 | 19.1% | \$ 49,201,108 | 13.1% | \$ 55,254,617 | 12.3% | \$ 60,984,213 | 10.4% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Policy Planning and Analysis | | | | | | | | | | | |
| | ć 7 4.000 | ¢ 77.076 | | ¢ 77.070 | | ¢ 77.076 | | ć 77.07.0 | | ¢ 77.076 | |
| Contribution to Sustainability Innovation Fund Reserve | \$ 74,833 | | | \$ 77,876 | | \$ 77,876 | | \$ 77,876 | | \$ 77,876 | |
| Utility Analysis and Infrastructure | 185,591 | 210,206 | | 258,966 | | 305,185 | | 278,358 | | 258,683 | |
| Utility Policy and Planning | 241,839 | 262,881 | | 269,883 | | 274,297 | | 281,497 | | 291,675 | |
| Wastewater Research and Innovation | 245,976 | 142,883 | | 127,967 | | 131,621 | | 135,082 | | 140,851 | |
| Wastewater Facilities Planning | 37,211 | 60,184 | | 91,988 | | 77,554 | | 97,658 | | 99,431 | |
| | 785,450 | 754,030 | (4.0%) | 826,680 | 9.6% | 866,533 | 4.8% | 870,471 | 0.5% | 868,516 | (0.2%) |
| Management Systems and Utility Services | | | | | | | | | | | |
| Annacis Research Centre | 33,340 | 36,329 | | 37,037 | | 37,744 | | 38,538 | | 39,449 | |
| Dispatch | 12,838 | 13,766 | | 14,180 | | 14,560 | | 14,946 | | 15,260 | |
| Energy Management | 26,753 | 29,744 | | 38,068 | | 39,313 | | 40,576 | | 41,844 | |
| Engineers in Training | 39,145 | 56,931 | | 74,139 | | 76,128 | | 78,142 | | 80,231 | |
| | | , | | | | , | | , | | , | |
| Management Systems Utility Services | 100,921 | 107,070 | | 106,786 | | 109,162 | | 111,568 | | 114,077 | |
| Records Management | 10,874 | 15,475 | | 15,889 | | 16,319 | | 16,755 | | 17,207 | |
| Utility Voice Radio | <u>11,348</u> 235.219 | <u>11,945</u> 271,260 | 15 20/ | 12,933 299,032 | 10.2% | <u>13,531</u> 306,757 | 2.6% | <u>14,079</u> 314,604 | 2.6% | <u>14,643</u> 322.711 | 2.6% |
| Environmental Management and Quality Centrel | 235,219 | 271,200 | 15.3% | 299,032 | 10.2% | 300,757 | 2.0% | 314,004 | 2.0% | 322,711 | 2.0% |
| Environmental Management and Quality Control | 050 705 | 4 4 2 4 5 0 4 | | 4 2 42 472 | | 4 974 999 | | 4 34 9 45 9 | | 4 427 022 | |
| Environmental Management and Quality Control | 950,795 | 1,131,504 | | 1,243,472 | | 1,271,292 | | 1,310,458 | | 1,427,833 | |
| Source Compliance Monitoring | 27,416 | 30,317 | | 32,270 | | 44,347 | | 33,902 | | 34,749 | |
| Contribution to Reserve | 7,057 | 7,490 | | 7,590 | | 7,813 | | 8,034 | | 8,258 | |
| | 985,268 | 1,169,311 | 18.7% | 1,283,332 | 9.8% | 1,323,452 | 3.1% | 1,352,394 | 2.2% | 1,470,840 | 8.8% |
| Project Delivery | | | | | | | | | | | |
| Minor Capital Projects | 827,092 | 1,273,204 | | 1,331,234 | | 1,356,169 | | 1,390,905 | | 1,425,250 | |
| | 827,092 | 1,273,204 | 53.9% | 1,331,234 | 4.6% | 1,356,169 | 1.9% | 1,390,905 | 2.6% | 1,425,250 | 2.5% |
| Operations and Maintenance | | | | | | | | | | | |
| Lake City Operations | 68,197 | 73,179 | | 75,985 | | 78,064 | | 85,209 | | 90,915 | |
| Liquid Waste Residuals | 1,472,479 | 1,937,345 | | 2,199,231 | | 2,183,988 | | 2,322,935 | | 2,511,424 | |
| Maintenance | 3,504,307 | 3,243,834 | | 3,594,185 | | 3,493,998 | | 3,588,471 | | 3,695,432 | |
| SCADA Control Systems | 30,510 | 37,206 | | 39,261 | | 41,980 | | 43,826 | | 45,705 | |
| Wastewater Collection | | 615,069 | | 680,499 | | 737,997 | | | | , | |
| | 551,341 | , | | · · · · | | , | | 782,664 | | 815,221 | |
| Wastewater Treatment | 6,701,565 | 7,140,880 | = | 7,513,297 | a | 7,958,463 | | 7,958,560 | | 8,363,757 | 5.1% |
| | 12,328,399 | 13,047,513 | 5.8% | 14,102,458 | 8.1% | 14,494,490 | 2.8% | 14,781,665 | 2.0% | 15,522,454 | 5.0% |
| Administration and Department Support | 238,480 | 242,463 | 1.7% | 296,088 | 22.1% | 309,498 | 4.5% | 331,172 | 7.0% | 322,143 | (2.7%) |
| Communications Program | 31,540 | 34,792 | 10.3% | 35,543 | 2.2% | 36,313 | 2.2% | 37,101 | 2.2% | 37,910 | 2.2% |
| Environmental Regulation and Enforcement | 236,048 | 240,867 | 2.0% | 248,217 | 3.1% | 255,189 | 2.8% | 262,798 | 3.0% | 268,959 | 2.3% |
| Allocation of Centralized Support Costs | 2,836,038 | 3,208,381 | 13.1% | 3,206,633 | (0.1)% | 3,496,544 | 9.0% | 3,717,806 | 6.3% | 3,903,336 | 5.0% |
| | 18,503,534 | 20,241,821 | 9.4% | 21,629,217 | 6.9% | 22,444,945 | 9.0% 3.8% | 23,058,916 | 0.3% 2.7% | 24,142,119 | 5.0% 4.7% |
| Total Operating Programs | | | 9.4% | | | | | | | | |
| Allocation of Project Delivery Cost | 392,453 | 411,218 | 4.8% | 410,305 | (0.2%) | 427,187 | 4.1% | 443,882 | 3.9% | 457,340 | 3.0% |
| Debt Service | 7,096,627 | 8,049,519 | 13.4% | 11,073,206 | 37.6% | 14,912,226 | 34.7% | 19,600,792 | 31.4% | 24,198,764 | 23.5% |
| Contribution to Capital | 7,682,868 | 7,804,702 | 1.6% | 10,383,144 | 33.0% | 11,416,750 | 10.0% | 12,151,027 | 6.4% | 12,185,990 | 0.3% |
| TOTAL EXPENDITURES | | \$ 36,507,260 | 8.4% | | 19.1% | | 13.1% | | 12.3% | | 10.4% |
| TOTAL EXPENDITURES | <u>\$ 33,675,482</u> | \$ 36,507,260 | 8.4% | \$ 43,495,872 | 19.1% | \$ 49,201,108 | 13.1% | \$ 55,254,617 | 12.3% | \$ 60,984,213 | 10. |

LIQUID WASTE SERVICES

2024 BUDGET REVIEW

2024 - 2028 FINANCIAL PLAN

FRASER SEWERAGE AREA

| | 2023 | 2024 | % | 2025 | % | 2026 | % | 2027 | % | 2028 | % |
|--|---------------|---------------|----------------|-------------------------|--------------|---------------|--------------|---------------------------|--------------|---------------------------|--------------|
| | BUDGET | Budget | CHANGE | FORECAST | CHANGE | FORECAST | CHANGE | FORECAST | CHANGE | FORECAST | CHANGE |
| REVENUES | | | | | | | | | | | |
| Liquid Waste Services Levy | \$158,960,909 | \$190,533,872 | 19.9% | \$215,535,351 | 13.1% | \$233,103,981 | 8.2% | \$248,241,369 | 6.5% | \$267,864,999 | 7.9% |
| User Fees | 2,878,497 | 3,675,448 | 15.570 | 4,496,851 | 13.170 | 4,818,789 | 0.270 | 5,041,276 | 0.570 | 5,164,323 | 7.570 |
| Transfer from DCC Reserves | 51,701,011 | 60,753,999 | | 74,050,288 | | 97,871,772 | | 142,393,396 | | 199,327,645 | |
| Liquid Waste Industrial Charges | 7,439,276 | 7,885,633 | | 8,201,058 | | 8,447,090 | | 8,700,503 | | 8,918,015 | |
| Other External Revenues | 942,461 | 1,017,293 | | 1,017,293 | | 1,017,293 | | 1,017,293 | | 1,017,293 | |
| Transfer from Sustainability Innovation Fund Reserves | 1,304,362 | 218,633 | | | | | | | | | |
| Transfer from Reserves | | 145,110 | | | | 72,555 | | - | | - | |
| TOTAL REVENUES | \$223.226.516 | \$264,229,988 | 18.4% | \$303,300,841 | 14.8% | \$345,331,480 | 13.9% | \$405,393,837 | 17.4% | \$482,292,275 | 19.0% |
| | | | | | | | | | | | |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Policy Planning and Analysis | | | | | | | | | | | |
| Contribution to Sustainability Innovation Fund Reserve | \$ 538,255 | \$ 545,130 | | \$ 545,130 | | \$ 545,130 | | \$ 545,130 | | \$ 545,130 | |
| Utility Analysis and Infrastructure | 1,334,912 | 1,471,443 | | 1,812,761 | | 2,136,295 | | 1,948,506 | | 1,810,783 | |
| Utility Policy and Planning | 1,739,491 | 1,840,165 | | 1,889,180 | | 1,920,080 | | 1,970,482 | | 2,041,726 | |
| Wastewater Research and Innovation | 1,769,250 | 1,000,180 | | 895,770 | | 921,344 | | 945,576 | | 985,953 | |
| Wastewater Facilities Planning | 267,648 | 421,288 | | 643,916 | | 542,880 | | 683,603 | | 696,018 | |
| waste water racinties ratining | 5,649,556 | 5,278,206 | (6.6%) | 5,786,757 | 9.6% | 6,065,729 | 4.8% | 6,093,297 | 0.5% | 6,079,610 | (0.2%) |
| Management Systems and Utility Services | 5,045,550 | 3,270,200 | (0.070) | 3,700,737 | 5.070 | 0,003,723 | 4.070 | 0,000,201 | 0.570 | 0,075,010 | (0.270) |
| Annacis Research Centre | 239,809 | 254,300 | | 259,257 | | 264,211 | | 269,766 | | 276,145 | |
| Dispatch | 82,892 | 88,831 | | 91,502 | | 93,953 | | 96,445 | | 98,471 | |
| Energy Management | 172,748 | 191,913 | | 245,623 | | 253,655 | | 261,803 | | 269,984 | |
| Engineers in Training | 281,530 | 398,515 | | 518,972 | | 532,893 | | 546,992 | | 561,617 | |
| Management Systems Utility Services | 651,638 | 690,924 | | 689,090 | | 704,423 | | 719,949 | | 736,141 | |
| Records Management | 70,213 | 99,854 | | 102,526 | | 105,302 | | 108,114 | | 111,030 | |
| Utility Voice Radio | 62,584 | 65,876 | | 71,324 | | 74,626 | | 77,645 | | 80,755 | |
| | 1,561,414 | 1,790,213 | 14.7% | 1,978,294 | 10.5% | 2,029,063 | 2.6% | 2,080,714 | 2.5% | 2,134,143 | 2.6% |
| Environmental Management and Quality Control | | | | | | | | | | | |
| Environmental Management and Quality Control | 6,465,830 | 7,571,592 | | 8,346,006 | | 8,512,886 | | 8,777,438 | | 9,591,945 | |
| Source Compliance Monitoring | 197,195 | 212,221 | | 225,889 | | 310,427 | | 237,313 | | 243,247 | |
| Contribution to Reserve | 50,761 | 52,433 | | 53,126 | | 54,688 | | 56,236 | | 57,802 | |
| | 6,713,786 | 7,836,246 | 16.7% | 8,625,021 | 10.1% | 8,878,001 | 2.9% | 9,070,987 | 2.2% | 9,892,994 | 9.1% |
| Project Delivery | | | | | | | | | | | |
| Minor Capital Projects | 4,045,952 | 5,015,671 | | 5,266,667 | | 5,369,225 | | 5,505,339 | | 5,637,887 | |
| | 4,045,952 | 5,015,671 | 24.0% | 5,266,667 | 5.0% | 5,369,225 | 1.9% | 5,505,339 | 2.5% | 5,637,887 | 2.4% |
| Operations and Maintenance | | | | | | | | | | | |
| Lake City Operations | 490,534 | 512,221 | | 531,840 | | 546,396 | | 596,414 | | 636,352 | |
| Liquid Waste Residuals | 9,113,620 | 13,976,267 | | 15,750,470 | | 15,751,818 | | 16,690,811 | | 18,039,914 | |
| Maintenance | 18,640,284 | 20,475,209 | | 21,913,331 | | 23,754,811 | | 25,159,469 | | 26,187,832 | |
| SCADA Control Systems | 589,227 | 718,526 | | 758,192 | | 810,722 | | 846,360 | | 882,647 | |
| Wastewater Collection | 9,083,911 | 8,625,434 | | 9,071,191 | | 9,436,026 | | 9,971,873 | | 10,307,495 | |
| Wastewater Treatment | 25,776,718 | 31,047,532 | | 33,256,174 | | 34,541,825 | | 32,956,741 | | 34,357,282 | |
| | 63,694,294 | 75,355,189 | 18.3% | 81,281,198 | 7.9% | 84,841,598 | 4.4% | 86,221,668 | 1.6% | 90,411,522 | 4.9% |
| Administration and Department Support | 1,539,840 | 1,564,619 | 1.6% | 1,910,668 | 22.1% | 1,997,196 | 4.5% | 2,137,061 | 7.0% | 2,078,797 | (2.7%) |
| Communications Program | 226,859 | 243,542 | 7.4% | 248,800 | 2.2% | 254,187 | 2.2% | 259,710 | 2.2% | 265,369 | 2.2% |
| Environmental Regulation and Enforcement | 1,474,385 | 1,599,694 | 8.5% | 1,648,511 | 3.1% | 1,694,819 | 2.8% | 1,745,352 | 3.0% | 1,786,271 | 2.3% |
| - | | | | | | | | | | | |
| Allocation of Centralized Support Costs | 18,309,694 | 21,142,201 | 15.5% 16.1% | 23,151,522 | 9.5% 8.4% | 24,116,062 | 4.2% 4.1% | 25,919,189 139,033,317 | 7.5% 2.8% | 28,472,504 146,759,097 | 9.9% 5.6% |
| Total Operating Programs | 103,215,780 | 119,825,581 | | 129,897,438 | | | | | | | |
| Allocation of Project Delivery Cost | 3,891,818 | 4,016,997 | 3.2% | 4,008,084 | (0.2%) | 4,172,993 | 4.1% | 4,336,075 | 3.9% | 4,467,539 | 3.0% |
| Debt Service | 85,403,846 | 96,132,836 | 12.6% | 117,874,995 | 22.6% | 148,228,402 | 25.8% | 202,578,977 | 36.7% | 269,623,078 | 33.1% |
| Contribution to Capital | 30,715,072 | 44,254,574 | 44.1% | 51,520,324 | 16.4% | 57,684,205 | 12.0% | 59,445,468 | 3.1% | 61,442,561 | 3.4% |
| TOTAL EXPENDITURES | \$223.226.516 | \$264,229,988 | 18.4% | \$303,300,841 OF 181 | 14.8% | \$345,331,480 | 13.9% | \$405,393,837 | 17.4% | \$482,292,275 | 19.0% |

LIQUID WASTE SERVICES

2024 BUDGET REVIEW

2024 - 2028 FINANCIAL PLAN

DRAINAGE

| | E | 2023 BUDGET | 2024 BUDGET | % CHANGE | | 2025 FORECAST | % CHANGE | | 2026 FORECAST | % CHANGE | F | 2027 ORECAST | % CHANGE | F | 2028 ORECAST | % CHANGE |
|---|-----------------|--|--|-------------------------|-----------------|---|------------------------|-----------------|---|------------------------|-----------------|--|------------------------|-----------------|---|--------------------------|
| REVENUES Liquid Waste Services Levy Transfer from Reserves TOTAL REVENUES | \$ \$ | 2,247,373 245,000 2,492,373 | 2,867,325 225,000 3,092,325 | 27.6% 24.1% | \$ \$ | 3,271,256 125,000 3,396,256 | 14.1% 9.8% | \$ \$ | 3,375,908 125,000 3,500,908 | 3.2% 3.1% | \$ \$ | 3,595,420 125,000 3,720,420 | 6.5% 6.3% | \$ \$ | 3,694,839 125,000 3,819,839 | 2.8% 2.7% |
| EXPENDITURES Operating Programs: Policy Planning and Analysis Utility Analysis and Infrastructure Utility Policy and Planning | \$ | 175,000 70,000 | \$ 175,000 50,000 | | \$ | 263,485 50,000 | | \$ | 268,614 50,000 | | \$ | 273,808 50,000 | | \$ | 279,197 50,000 | |
| Management Systems and Utility Services Dispatch Energy Management | | 245,000 761 1,585 | 225,000 940 2,030 | (8.2%) | - | 313,485 969 2,598 | 39.3% | | 318,614 993 2,682 | 1.6% | | 1,022 2,768 | 1.6% | | 329,197 1,042 2,855 | 1.7% |
| Management Systems Utility Services Records Management Project Delivery | | 5,977 646 8,969 | 7,304 1,056 11,330 | 26.3% | _ | 7,285 1,086 11,938 | 5.4% | _ | 7,447 <u>1,114</u> 12,236 | 2.5% | | 7,611 1,145 12,546 | 2.5% | | 7,782 1,175 12,854 | 2.5% |
| Minor Capital Projects Operations and Maintenance Maintenance | | 428,000 428,000 184,350 | 300,000 300,000 158,198 | (29.9%) | _ | <u>307,500</u> <u>307,500</u> 172,514 | 2.5% | | <u>315,187</u> <u>315,187</u> 177,064 | 2.5% | | 323,067 323,067 182,366 | 2.5% | | <u>331,143</u> <u>331,143</u> 187,543 | 2.5% |
| SCADA Control Systems Urban Drainage | | 21,401 1,406,189 1,611,940 | 26,097 2,106,676 2,290,971 | 42.1% | _ | 27,537 2,263,622 2,463,673 | 7.5% | _ | 29,446 2,350,120 2,556,630 | 3.8% | | 30,739 2,555,226 2,768,331 | 8.3% | | 32,058 2,635,228 2,854,829 | 3.1% |
| Administration and Department Support Allocation of Centralized Support Costs Total Operating Programs | | 14,125 181,866 2,489,900 | 16,540 243,378 3,087,219 | 17.1% 33.8% 24.0% | _ | 20,199 274,367 3,391,162 | 22.1% 12.7% 9.8% | | 21,114 271,823 3,495,604 | 4.5% (0.9%) 3.1% | | 22,591 264,566 3,714,909 | 7.0% (2.7%) 6.3% | | 21,976 264,162 3,814,161 | (2.7%) (0.2%) 2.7% |
| Allocation of Project Delivery Cost TOTAL EXPENDITURES | \$ | 2,473 2,492,373 | \$ 5,106 3,092,325 | 106.5% 24.1% | \$ | 5,094 3,396,256 | (0.2%) 9.8% | \$ | 5,304 3,500,908 | 4.1% 3.1% | \$ | 5,511 3,720,420 | 3.9% 6.3% | \$ | 5,678 3,819,839 | 3.0% 2.7% |

ATTACHMENT 2

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2030 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|--|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| [| | | | | | | | | |
| CAPITAL EXPENDITURES | | | | | | | | | |
| Collections | | | | | | | | | |
| 8th Avenue Interceptor Air Treatment Facilities | \$ 500,000 | \$ - | \$ - | \$ 500,000 | \$ 500,000 | \$ 100,000 | \$ 1,100,000 | Definition | Upgrade |
| Albert Street Trunk Sewer | 10,250,000 | 450,000 | - | - | - | - | 450,000 | Construction | Growth |
| Big Bend Forcemain - Gate Replacement | 200,000 | - | 126,000 | 600,000 | 650,000 | 650,000 | 2,026,000 | Design | Maintenance |
| Burnaby Lake North Interceptor Cariboo Section | 1,000,000 | 50,000 | 650,000 | 1,700,000 | 11,200,000 | 15,000,000 | 28,600,000 | Design | Growth |
| Burnaby Lake North Interceptor Winston Section | 103,700,000 | 23,890,000 | 13,150,000 | 5,150,000 | 5,350,000 | 5,000,000 | 52,540,000 | Construction | Growth |
| Burnaby South Slope Interceptor | 500,000 | 200,000 | 250,000 | 500,000 | 650,000 | 4,550,000 | 6,150,000 | Multiple | Growth |
| Cloverdale Pump Station Capacity Upgrade | 11,400,000 | 370,000 | 1,110,000 | 3,730,000 | 3,900,000 | 2,200,000 | 11,310,000 | Construction | Growth |
| Cloverdale Trunk Sewer Capacity Upgrade | 1,200,000 | 450,000 | 1,800,000 | 900,000 | 8,150,000 | 8,000,000 | 19,300,000 | Design | Growth |
| Combined Sewer Overflow Sampling Station Enhancements | 1,900,000 | 400,000 | - | - | - | - | 400,000 | Construction | Maintenance |
| Crescent Beach FM - Replacement | 34,850,000 | - | - | - | 250,000 | 1,000,000 | 1,250,000 | Construction | Maintenance |
| Eagle Creek (Lower Section) Channel Restoration | - | - | 750,000 | - | - | - | 750,000 | Not Started | Resilience |
| EMQC-Chemistry Laboratory | 1,400,000 | 400,000 | 2,500,000 | 4,000,000 | 1,500,000 | - | 8,400,000 | Design | Upgrade |
| Fraser Sewerage Area Integrated Resource Recovery (IRR) Study | 1,200,000 | 250,000 | 250,000 | 250,000 | - | - | 750,000 | Design | Opportunity |
| Front Street Pressure Sewer Access Hatches Reinforcement | 5,000,000 | 1,700,000 | 500,000 | 500,000 | 500,000 | 470,000 | 3,670,000 | Construction | Maintenance |
| FSA Flow Metering Program | 3,500,000 | 620,000 | 520,000 | - | - | - | 1,140,000 | Construction | Maintenanc |
| FSA River Crossing Scour Protection Program - Phase 1 | 6,400,000 | 450,000 | 1,730,000 | - | - | - | 2,180,000 | Construction | Maintenanc |
| FSA Sewer Relocations and Protections | 11,700,000 | 500,000 | 3,050,000 | - | - | - | 3,550,000 | Construction | Maintenanc |
| FSA Statutory Right of Way Acquisitions Phase 1 | 35,100,000 | 5,350,000 | 14,000,000 | 800,000 | - | - | 20,150,000 | Design | Maintenance |
| Gilbert/Brighouse Trunk Pressure Sewer | 175,650,000 | 38,091,000 | 29,017,000 | 9,620,000 | 600,000 | 2,400,000 | 79,728,000 | Multiple | Maintenance |
| Glenbrook Combined Trunk Kingsway Sanitary Section | 8,100,000 | 5,200,000 | 1,000,000 | 938,000 | - | - | 7,138,000 | Construction | Growth |
| Glenbrook CSO Gate Replacement | 5,150,000 | 3,780,000 | 100,000 | - | - | - | 3,880,000 | Construction | Maintenanc |
| Gleneagles Forcemain Replacement | 15,850,000 | 2,130,000 | 5,880,000 | 3,517,000 | - | - | 11,527,000 | Multiple | Maintenance |
| Gleneagles Pump Stations Improvements | 41,000,000 | 6,400,000 | 8,700,000 | 6,500,000 | 12,500,000 | 500,000 | 34,600,000 | Construction | Maintenance |
| Harbour PS Air Treatment Facilities | - | - | - | - | - | 150,000 | 150,000 | Not Started | Upgrade |
| Harbour Pump Station Discharge Header Repair and Valve Replacements | 4,850,000 | 4,273,000 | - | - | - | - | 4,273,000 | Construction | Maintenance |
| Harbour Pump Station Power Distribution Equipment Replacement | 3,650,000 | 2,107,000 | 628,000 | - | - | - | 2,735,000 | Construction | Maintenance |
| Harbour Sewerage Pump Station (HRB) - Suction Piping Replacement | 850,000 | 200,000 | 1,650,000 | 3,000,000 | 1,000,000 | - | 5,850,000 | Design | Maintenance |
| Highbury Interceptor Diversion Junction Chamber Wall Rehabilitation | 500,000 | 350,000 | 100,000 | 4,000,000 | 1,500,000 | - | 5,950,000 | Design | Maintenance |

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT CAPITAL PORTFOLIO LIQUID WASTE SERVICES

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2030 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|--|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| | | | | | | | | | |
| Jervis Pump Station 25kV Voltage Conversion | 1,300,000 | 990,000 | - | - | - | - | 990,000 | Construction | Maintenance |
| Jervis Sewerage Pump Station (JRV) - Suction Piping Replacement | 500,000 | 200,000 | 300,000 | 2,500,000 | 1,000,000 | - | 4,000,000 | Design | Maintenance |
| Kent Pump Station High Voltage Switchgear Replacement | 3,000,000 | 1,030,000 | 470,000 | 350,000 | - | - | 1,850,000 | Construction | Maintenance |
| Lozells Sanitary Trunk Golf Course Section | - | - | 50,000 | 400,000 | 200,000 | 1,000,000 | 1,650,000 | Not Started | Growth |
| LSA Flow Metering Program | 300,000 | 50,000 | - | - | - | - | 50,000 | Construction | Maintenance |
| Marshend Pump Station | 10,500,000 | 700,000 | 2,350,000 | 8,470,000 | 6,520,000 | 500,000 | 18,540,000 | Multiple | Growth |
| New West Interceptor - Annacis Section 2 | 20,000,000 | 1,320,000 | 7,150,000 | 3,000,000 | 9,000,000 | 8,000,000 | 28,470,000 | Construction | Maintenance |
| New West Interceptor Grit Chamber | 1,250,000 | 400,000 | 650,000 | 4,000,000 | 4,000,000 | - | 9,050,000 | Design | Maintenance |
| New Westminster Interceptor Annacis Channel Crossing Scour Protection | 500,000 | 500,000 | 2,000,000 | - | - | - | 2,500,000 | Design | Resilience |
| New Westminster Interceptor Repair Columbia St. Section | 38,050,000 | 200,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 4,200,000 | Construction | Maintenance |
| New Westminster Interceptor West Branch and Columbia Extension Rehabilitation | 3,900,000 | 1,135,000 | 1,665,000 | 15,225,000 | 15,000,000 | 3,000,000 | 36,025,000 | Design | Maintenance |
| North Road Trunk Sewer | 23,650,000 | 5,380,000 | 4,450,000 | 2,400,000 | 500,000 | 600,000 | 13,330,000 | Multiple | Growth |
| North Surrey Interceptor - Port Mann Section - Odour Control | 5,050,000 | 750,000 | 2,000,000 | 4,184,000 | 6,795,000 | 6,600,000 | 20,329,000 | Construction | Upgrade |
| North Surrey Interceptor Improvements | 6,000,000 | 1,950,000 | 2,950,000 | 1,000,000 | - | - | 5,900,000 | Multiple | Maintenance |
| North Surrey Interceptor Roebuck Section Replacement | 19,450,000 | 2,500,000 | 6,750,000 | 7,600,000 | 1,000,000 | - | 17,850,000 | Construction | Maintenance |
| NSA Flow Metering Program | 900,000 | 55,000 | 350,000 | 60,000 | - | - | 465,000 | Construction | Maintenance |
| NSA Scour Protection Upgrades | 2,250,000 | 200,000 | 1,500,000 | 360,000 | - | - | 2,060,000 | Construction | Maintenance |
| NSI 104th Ave Extension | 12,950,000 | - | 500,000 | 6,000,000 | 1,500,000 | - | 8,000,000 | Construction | Growth |
| NSI Flow Management | 21,500,000 | 3,250,000 | 4,500,000 | 4,842,000 | 32,750,000 | 30,000,000 | 75,342,000 | Construction | Upgrade |
| NSI Manson | 17,400,000 | 1,270,000 | 6,900,000 | 11,550,000 | 10,900,000 | 5,900,000 | 36,520,000 | Construction | Maintenance |
| NVI Lynn Branch Siphon – SSO Treatment | - | - | 750,000 | 4,800,000 | 6,150,000 | 3,800,000 | 15,500,000 | Not Started | Upgrade |
| NWP Dip Investigation and Repair | 4,500,000 | 1,000,000 | 1,000,000 | 1,000,000 | 500,000 | 500,000 | 4,000,000 | Construction | Maintenance |
| Ocean Park Trunk Manholes Lining | 50,000 | 50,000 | 1,000,000 | - | - | - | 1,050,000 | Design | Maintenance |
| Ocean Park Trunk Sewer - Air Management Facility | 7,750,000 | 1,340,000 | 1,550,000 | 2,500,000 | 500,000 | - | 5,890,000 | Construction | Upgrade |
| Port Coquitlam Pump Station Overflow | - | - | 210,000 | 1,000,000 | 3,000,000 | - | 4,210,000 | Not Started | Resilience |
| Port Coquitlam Pump Station Refurbishment | 7,600,000 | 500,000 | 1,800,000 | 1,350,000 | 16,050,000 | 35,700,000 | 55,400,000 | Design | Maintenance |
| Port Moody Pump Station Capacity Upgrade | 2,300,000 | 230,000 | 1,860,000 | 1,090,000 | 5,000,000 | 8,000,000 | 16,180,000 | Design | Growth |
| Port Moody South Interceptor Capacity Upgrade | 200,000 | 50,000 | 300,000 | 150,000 | 1,900,000 | 1,000,000 | 3,400,000 | Design | Growth |
| Port Moody Storm Drain Rehabilitation | 1,650,000 | 400,000 | 600,000 | 600,000 | - | - | 1,600,000 | Construction | Maintenance |
| Production Way Facility Access and Parking Improvements | 4,850,000 | 4,600,000 | - | - | - | - | 4,600,000 | Construction | Maintenance |
| Production Way Operation Centre | 40,400,000 | 2,300,000 | 23,000,000 | 12,000,000 | - | - | 37,300,000 | Construction | Upgrade |
| Rosemary Heights Pressure Sewer Capacity Upgrade | - | - | 350,000 | 500,000 | 700,000 | 2,500,000 | 4,050,000 | Not Started | Growth |

2024 CAPITAL BUDGET AND 2024 - 2028 CAPITAL PLAN

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2030 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|--|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| | | | | | | | | | |
| Royal Ave PS Rehabilitation | 12,900,000 | 1,430,000 | 8,300,000 | 800,000 | - | - | 10,530,000 | Construction | Maintenance |
| Sapperton Pump Station | 97,500,000 | 520,000 | 1,200,000 | 4,100,000 | - | - | 5,820,000 | Multiple | Growth |
| Sapperton Pump Station Emergency Backup Power | 5,000,000 | 1,725,000 | 2,315,000 | 525,000 | 175,000 | - | 4,740,000 | Construction | Resilience |
| Sewer Heat Projects | 57,000,000 | 3,800,000 | 11,600,000 | 12,900,000 | 17,400,000 | 16,600,000 | 62,300,000 | Multiple | Opportunity |
| South Surrey Interceptor Johnston Section | 84,050,000 | 1,180,000 | 9,080,000 | 7,178,000 | 2,000,000 | 1,000,000 | 20,438,000 | Construction | Growth |
| South Surrey Interceptor Rehabilitation | 45,300,000 | 1,900,000 | 2,500,000 | 6,400,000 | 10,700,000 | 15,000,000 | 36,500,000 | Multiple | Maintenance |
| SSI Delta - Air Management Facility Construction | 11,750,000 | 5,700,000 | 2,000,000 | 800,000 | - | - | 8,500,000 | Construction | Upgrade |
| SSI Influent Control Chamber Repair and Replace Gates | 150,000 | 60,000 | 15,000 | 1,150,000 | - | - | 1,225,000 | Design | Maintenance |
| Still Creek Culvert Rehabilitation (Gilmore section) | 100,000 | 100,000 | 100,000 | 1,250,000 | - | - | 1,450,000 | Design | Maintenance |
| Stoney Creek Sanitary Trunk | 67,700,000 | 682,000 | 3,096,000 | 11,474,000 | 12,024,000 | 15,024,000 | 42,300,000 | Construction | Growth |
| Surrey Central Valley Capacity Upgrade | - | - | - | 150,000 | 450,000 | 1,000,000 | 1,600,000 | Not Started | Growth |
| Surrey Corrosion Control Facility Replacement | 7,400,000 | 125,000 | 4,500,000 | 1,000,000 | 350,000 | - | 5,975,000 | Construction | Maintenance |
| VSA Emergency Backup Power | 29,300,000 | 3,850,000 | 3,100,000 | 3,100,000 | 3,000,000 | 500,000 | 13,550,000 | Construction | Resilience |
| VSA Flow Metering Program | 5,800,000 | 530,000 | 1,900,000 | 2,000,000 | - | - | 4,430,000 | Construction | Maintenance |
| VSA Grit Chamber Access Improvements | 2,700,000 | 100,000 | 2,000,000 | 600,000 | - | - | 2,700,000 | Construction | Maintenance |
| VSA Sewer Relocations and Protections | 34,850,000 | 200,000 | 7,650,000 | - | - | - | 7,850,000 | Construction | Maintenance |
| VSA Statutory Right of Way Acquisitions 2024-2026 | 16,000,000 | 8,500,000 | 3,000,000 | 4,500,000 | - | - | 16,000,000 | Construction | Maintenance |
| Westridge FM Replacement | 8,650,000 | 5,099,000 | 900,000 | 500,000 | 500,000 | 390,000 | 7,389,000 | Construction | Maintenance |
| Westridge Pump Stations 1 & 2 Refurbishment | 8,900,000 | 1,380,000 | 3,475,000 | 6,200,000 | 6,950,000 | - | 18,005,000 | Construction | Maintenance |
| White Rock Forcemain Rehabilitation | 14,800,000 | 1,100,000 | 5,000,000 | 5,000,000 | 1,500,000 | 1,000,000 | 13,600,000 | Construction | Maintenance |
| Total Collections | \$1,253,000,000 | \$167,942,000 | \$237,147,000 | \$213,763,000 | \$ 227,264,000 | \$ 198,634,000 | \$1,044,750,000 | | |
| | | | | | | | | | |
| Treatment Plants | | | | | | | | | |
| AIWWTP Ammonia Removal – Sidestream | \$ 4,000,000 | | | | \$ 1,050,000 | \$ 4,140,000 | \$ 8,240,000 | - | Upgrade |
| AIWWTP Centrifuge Schwing HPU replacement | 1,650,000 | 170,000 | 1,000,000 | 450,000 | - | - | | Construction | Maintenance |
| AIWWTP Chemical Lab UPS System Replacement | 900,000 | 150,000 | 350,000 | - | - | - | , | Construction | Maintenance |
| AIWWTP Cogeneration Backup Power | 81,150,000 | 500,000 | 2,050,000 | - | - | - | 2,550,000 | | Resilience |
| AIWWTP Digester No. 5* | 6,900,000 | 500,000 | 3,500,000 | 3,387,000 | 4,000,000 | 5,500,000 | 16,887,000 | Design | Growth |
| AIWWTP Effluent Pump Station | - | - | - | - | - | 500,000 | , | Not Started | Growth |
| AIWWTP Electrical Distribution System Protection Control and Monitoring | 2,650,000 | 200,000 | 50,000 | 400,000 | - | - | 650,000 | Construction | Upgrade |
| AIWWTP Hydrothermal Processing Pilot | 39,350,000 | 8,550,000 | 14,400,000 | 3,400,000 | 1,550,000 | - | 27,900,000 | Construction | Opportunity |
| AIWWTP ICS Replacement Program | 14,350,000 | 1,400,000 | 1,500,000 | 2,250,000 | 2,500,000 | 2,000,000 | 9,650,000 | Construction | Maintenance |
| AIWWTP Influent System Remediation | 22,400,000 | 250,000 | 850,000 | 2,035,000 | 14,112,000 | 17,510,000 | 34,757,000 | Design | Maintenance |

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2030 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|---|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| | | | | | | | | | |
| AIWWTP IPS Gates Replacements | 300,000 | 75,000 | - | - | - | - | 75,000 | Construction | Maintenance |
| AIWWTP IPS Pump Building Roof Replacement Phase 2 | 800,000 | 100,000 | 500,000 | 200,000 | - | - | 800,000 | Construction | Maintenance |
| AIWWTP Lubrication Storage Facility Conversion | 500,000 | 500,000 | - | - | - | - | 500,000 | Construction | Maintenance |
| AIWWTP O&M Building Refurbishment | 100,000 | 100,000 | 300,000 | 1,200,000 | 3,100,000 | 1,800,000 | 6,500,000 | Design | Maintenance |
| AIWWTP Outfall Repair | - | - | 400,000 | 750,000 | 400,000 | - | 1,550,000 | Not Started | Maintenance |
| AIWWTP PWD line refurbishment/replacement | 1,650,000 | 250,000 | 1,400,000 | - | - | - | 1,650,000 | Construction | Maintenance |
| AIWWTP Replacement of Protective Relays | 3,050,000 | 50,000 | - | - | - | - | 50,000 | Construction | Maintenance |
| AIWWTP Scheduled 64kV Potential & Current Transformer Replacements | 400,000 | 50,000 | - | - | - | - | 50,000 | Design | Maintenance |
| AIWWTP Scum Pump Replacement | 400,000 | 200,000 | 150,000 | 500,000 | 500,000 | - | 1,350,000 | Design | Maintenance |
| AIWWTP Secondary Clarifier Corrosion Repair | 51,850,000 | 1,450,000 | 1,400,000 | 400,000 | 200,000 | - | 3,450,000 | Multiple | Maintenance |
| AIWWTP Sludge Control Building Electrical Room HVAC upgrade | 850,000 | 425,000 | - | - | - | - | 425,000 | Construction | Maintenance |
| AIWWTP Stage 5 Expansion* | 1,004,350,000 | 62,780,000 | 65,000,000 | 80,000,000 | 75,000,000 | 91,000,000 | 373,780,000 | Multiple | Growth |
| AIWWTP Station Battery Replacement | 1,250,000 | 50,000 | - | - | - | - | 50,000 | Multiple | Maintenance |
| AIWWTP Trickling Filter Media & Distributor Arms & Ducting Replacement | 90,700,000 | 5,485,000 | 3,295,000 | 10,006,000 | - | - | 18,786,000 | Construction | Maintenance |
| AIWWTP UPS Condition Monitoring System | 550,000 | 50,000 | 250,000 | 250,000 | - | - | 550,000 | Construction | Resilience |
| All WWTPs Power Quality Monitoring & Outage Alarming Network | 3,000,000 | 50,000 | - | - | - | - | 50,000 | Construction | Upgrade |
| Annacis Influent System Surge Control Refurbishment | 22,000,000 | 2,100,000 | 400,000 | 50,000 | 50,000 | - | 2,600,000 | Construction | Growth |
| Annacis MCC 80 051, 80 070, 80 071 Replacement | 2,850,000 | 50,000 | 550,000 | - | - | - | 600,000 | Construction | Maintenance |
| Annacis Outfall System* | 356,050,000 | 11,500,000 | 1,550,000 | 50,000 | 50,000 | 71,650,000 | 84,800,000 | Construction | Growth |
| IIWWTP - Biogas Lines Relocation | 5,750,000 | 50,000 | - | - | - | - | 50,000 | Construction | Resilience |
| IIWWTP Biosolids Dewatering Facility | 61,300,000 | 1,150,000 | 50,000 | - | - | - | 1,200,000 | Construction | Upgrade |
| IIWWTP CEPT Polymer Line Replacement | 3,300,000 | 1,750,000 | 250,000 | - | - | - | 2,000,000 | Construction | Maintenance |
| IIWWTP CEPT Winterization | 1,500,000 | 1,100,000 | 250,000 | - | - | - | 1,350,000 | Construction | Maintenance |
| IIWWTP ICS IPS Control Replacement | 1,750,000 | 700,000 | - | - | - | - | 700,000 | Construction | Maintenance |
| IIWWTP ICS Migration Program | - | - | 500,000 | 3,000,000 | 4,000,000 | 3,000,000 | 10,500,000 | Not Started | Maintenance |
| IIWWTP ICS Replacement Program | 750,000 | 300,000 | 200,000 | 100,000 | - | - | 600,000 | Construction | Maintenance |
| IIWWTP Influent Gate Refurbishment | 1,350,000 | 100,000 | - | - | - | - | 100,000 | Construction | Maintenance |
| IIWWTP IPS Drive Remediation | 2,300,000 | 125,000 | 200,000 | 400,000 | 575,000 | 750,000 | 2,050,000 | Construction | Maintenance |
| IIWWTP MCC/Power Distribution Assess/Replace - Phase 2 | 1,000,000 | 50,000 | 300,000 | - | - | - | 350,000 | Construction | Maintenance |
| IIWWTP Non-Domestic Trucked Liquid Waste Alternative | 800,000 | 50,000 | 500,000 | 150,000 | - | - | 700,000 | Construction | Maintenance |
| IIWWTP Outfall Refurbishment* | 20,000,000 | 2,000,000 | 3,000,000 | 3,000,000 | 63,000,000 | 72,000,000 | 143,000,000 | Design | Maintenance |
| IIWWTP PA Tanks Improvement | 7,500,000 | 1,500,000 | 1,550,000 | 1,100,000 | 1,150,000 | 1,200,000 | 6,500,000 | Construction | Maintenance |

| 000 100,00 000 100,00 000 200,00 000 100,00 000 100,00 000 100,00 000 100,00 000 100,00 000 50,00 000 50,00 000 500,00 000 500,00 000 200,00 000 200,00 000 200,00 000 500,00 000 500,00 | 550,000 500,000 50,000 20,000 225,000 221,952,000 231,952,000 100,000 5,000,000 1,000,000 1,000,000 400,0000 | 50,000 - 900,000 - 1,200,000 750,000 - 218,279,000 650,000 - 4,300,000 1,125,000 400,000 150,000 | 650,000 500,000 - 1,100,000 - 289,282,000 - - - 5,000,000 250,000 | - - - 1,000,000 - - 723,788,000 - - 8,000,000 - | 2,100,000 150,000 2,000,000 50,000 1,572,521,000 800,000 50,000 9,800,000 15,600,000 | Construction Construction Multiple Design Design Construction Design Construction Construction | Maintenance Maintenance Maintenance Resilience Maintenance Upgrade Maintenance Opportunity Opportunity Maintenance |
|--|--|---|--|---|--|---|---|
| 000 100,00 000 200,00 000 100,00 000 100,00 000 25,00 000 50,00 000 50,00 000 50,00 000 50,00 000 500,00 000 500,00 000 475,00 000 400,00 000 500,00 | 550,000 500,000 50,000 20,000 225,000 221,952,000 231,952,000 100,000 5,000,000 1,000,000 1,000,000 400,0000 | | _ 500,000 _ 1,100,000 _ 289,282,000 _ 289,282,000 _ _ 5,000,000 | - 1,000,000 - 723,788,000 - - 8,000,000 | 650,000 2,100,000 4,200,000 2,000,000 50,000 1,572,521,000 800,000 50,000 9,800,000 15,600,000 | Construction Construction Multiple Design Construction Construction Construction Construction Construction Design | Maintenance Maintenance Resilience Maintenance Upgrade Maintenance Opportunity Opportunity Maintenance |
| 000 200,00 000 100,00 000 100,00 000 25,00 000 50,00 000 50,00 000 50,00 000 50,00 000 50,00 000 500,00 000 475,00 000 400,00 000 500,00 | 0 500,000 0 50,000 0 800,000 0 225,000 0 231,952,000 0 100,000 0 5,000,000 0 5,000,000 0 600,000 0 400,000 | | _ 1,100,000 _ 289,282,000 _ _ _ 5,000,000 | _ 723,788,000 _ _ _ 8,000,000 | 2,100,000 150,000 2,000,000 50,000 1,572,521,000 800,000 50,000 9,800,000 15,600,000 | Construction Multiple Design Construction Construction Construction Construction Design | Maintenance Maintenance Maintenance Maintenance Upgrade Maintenance Opportunity Opportunity Maintenance |
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| 000 100,00 000 25,00 000 50,00 000 50,00 000 50,00 000 50,00 000 50,00 000 500,00 000 500,00 000 475,00 000 4475,00 000 500,00 000 500,00 | 0 800,000 0 225,000 0 225,000 0 231,952,000 0 100,000 0 5,000,000 0 1,000,000 0 600,000 0 400,000 | 750,000 - 218,279,000 650,000 - 4,300,000 1,125,000 400,000 | 1,000,000 | _ 723,788,000 _ _ _ 8,000,000 | 4,200,000 2,000,000 50,000 1,572,521,000 800,000 50,000 9,800,000 15,600,000 | Design Design Construction Construction Design Construction Design | Resilience Maintenance Maintenance Upgrade Maintenance Opportunity Opportunity Maintenance |
| 000 25,000 000 50,000 000 109,220,000 000 50,000 000 500,000 000 500,000 000 475,000 000 200,000 000 300,000 000 500,000 000 500,000 |) 225,000) 231,952,000) 100,000) 5,000,000) 5,000,000) 600,000) 400,000 | 750,000 - 218,279,000 650,000 - 4,300,000 1,125,000 400,000 | 1,000,000 | _ 723,788,000 _ _ _ 8,000,000 | 2,000,000 50,000 1,572,521,000 800,000 50,000 9,800,000 15,600,000 | Design Construction Construction Design Construction Construction Design | Maintenance Maintenance Upgrade Maintenance Opportunity Opportunity Maintenance |
| 000 50,000 000 109,220,000 000 50,000 000 500,000 000 500,000 000 475,000 000 200,000 000 500,000 000 500,000 000 500,000 |) – 231,952,000) 100,000) – 5,000,000) 1,000,000) 600,000) 400,000 | _ 218,279,000 650,000 - 4,300,000 1,125,000 400,000 | _ 289,282,000 _ _ _ 5,000,000 | – 723,788,000 – – 8,000,000 | 50,000 1,572,521,000 800,000 50,000 9,800,000 15,600,000 | Construction Construction Design Construction Construction Design | Maintenance Upgrade Maintenance Opportunity Opportunity Maintenance |
| 109,220,00 109,220,00 50,00 50,00 500 500 500 500 500 500 500 500,00 500,00 475,00 500,00 400,00 500,00 500,00 | 231,952,000 100,000 5,000,000 1,000,000 600,000 400,000 | 650,000 - 4,300,000 1,125,000 400,000 | - - 5,000,000 | 723,788,000 8,000,000 | 1,572,521,000 800,000 50,000 9,800,000 15,600,000 | Construction Design Construction Construction Design | Upgrade Maintenance Opportunity Opportunity Maintenance |
| 000 50,000 000 50,000 000 500,000 000 475,000 000 200,000 000 400,000 000 500,000 |) 100,000) -) 5,000,000) 1,000,000) 600,000) 400,000 | 650,000 - 4,300,000 1,125,000 400,000 | - - 5,000,000 | - - 8,000,000 | 800,000 50,000 9,800,000 15,600,000 | Design Construction Construction Design | Maintenanc Opportunity Opportunity Maintenanc |
| 000 50,000 000 500,000 000 475,000 000 200,000 000 400,000 000 500,000 |) -) 5,000,000) 1,000,000) 600,000) 400,000 | - 4,300,000 1,125,000 400,000 | | - 8,000,000 | 50,000 9,800,000 15,600,000 | Construction Construction Design | Opportunity Opportunity Maintenanc |
| 000 500,00 000 475,00 000 200,00 000 400,00 000 500,00 | 5,000,000 1,000,000 600,000 400,000 | 1,125,000 400,000 | | - 8,000,000 | 9,800,000 15,600,000 | Construction Design | Opportunity Maintenanc |
| 000 475,00 000 200,00 000 400,00 000 500,00 | 1,000,000 600,000 400,000 | 1,125,000 400,000 | | 8,000,000 | 15,600,000 | Design | Maintenand |
| 200,00 200,00 400,00 500,00 | 600,000 400,000 | 400,000 | | | | | |
| 400,00 000 500,00 | 400,000 | | 250,000 | - | 1,450,000 | Construction | |
| 500,00 | | 150,000 | _ | | | | Maintenan |
| | 1,750,000 | | | - | 950,000 | Construction | Maintenan |
| | | 3,500,000 | 1,250,000 | - | 7,000,000 | Design | Maintenan |
| 2,250,00 | 2,000,000 | 450,000 | - | - | 4,700,000 | Construction | Maintenan |
| 300,00 | 300,000 | 3,000,000 | - | - | 3,600,000 | Construction | Maintenan |
| 500,00 | 300,000 | 100,000 | 50,000 | - | 950,000 | Construction | Opportunit |
| 2,380,00 | 4,710,000 | 1,052,000 | 660,000 | - | 8,802,000 | Construction | Resilience |
| 300,00 | 800,000 | 700,000 | 1,000,000 | 150,000 | 2,950,000 | Design | Maintenan |
| 400,00 | 800,000 | 10,250,000 | 10,000,000 | 10,000,000 | 31,450,000 | Design | Maintenan |
| 50,00 |) – | - | - | - | 50,000 | Construction | Maintenan |
| 700,00 | 275,000 | - | - | - | 975,000 | Construction | Resilience |
| 308,812,00 | 63,110,000 | - | - | - | 371,922,000 | Construction | Upgrade |
| 00 78,770,00 | 102,379,000 | 228,297,000 | 453,067,000 | 587,817,000 | 1,450,330,000 | Multiple | Growth |
| 00 500,00 | 2,500,000 | 11,000,000 | 20,090,000 | 63,500,000 | 97,590,000 | Design | Opportunity |
| | 200,000 | 400,000 | 400,000 | 200,000 | 1,400,000 | Construction | Resilience |
| 200,00 | | A | | | | • | |
| ,0 | ,000 78,770,000 ,000 500,000 | ,000 78,770,000 102,379,000 ,000 500,000 2,500,000 | ,000 78,770,000 102,379,000 228,297,000 ,000 500,000 2,500,000 11,000,000 ,000 200,000 200,000 400,000 | ,000 78,770,000 102,379,000 228,297,000 453,067,000 ,000 500,000 2,500,000 11,000,000 20,090,000 ,000 200,000 200,000 400,000 400,000 | ,000 78,770,000 102,379,000 228,297,000 453,067,000 587,817,000 ,000 500,000 2,500,000 11,000,000 20,090,000 63,500,000 | ,000 78,770,000 102,379,000 228,297,000 453,067,000 587,817,000 1,450,330,000 ,000 500,000 2,500,000 11,000,000 20,090,000 63,500,000 97,590,000 | ,000 78,770,000 102,379,000 228,297,000 453,067,000 587,817,000 1,450,330,000 Multiple ,000 500,000 2,500,000 11,000,000 20,090,000 63,500,000 97,590,000 Design |

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2030 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMA DRIVE |
|---------------------------------------|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|----------------|
| | | | | | | | | | |
| CAPITAL FUNDING | | | | | | | | | |
| New External Borrowing funded by Levy | \$3,238,984,000 | \$410,547,000 | \$ 295,346,000 | \$292,712,000 | \$ 435,440,000 | \$ 856,091,000 | \$2,290,136,000 | | |
| New Borrowing funded by DCC | 2,949,203,000 | 125,506,000 | 163,638,000 | 364,696,000 | 586,427,000 | 845,070,000 | 2,085,337,000 | | |
| Direct DCC Application | 119,216,000 | 42,967,000 | 41,329,000 | - | - | - | 84,296,000 | | |
| Contribution to Capital from LWS Levy | 979,247,000 | 98,000,000 | 129,639,000 | 150,861,000 | 155,933,000 | 157,978,000 | 692,411,000 | | |
| Reserve | 49,963,000 | 12,028,000 | 6,450,000 | 6,850,000 | 5,000,000 | 5,000,000 | 35,328,000 | | |
| External Funding - Interagency | 311,387,000 | 92,186,000 | 127,866,000 | 125,000 | - | - | 220,177,000 | | |
| Total | \$7,648,000,000 | \$781,234,000 | \$ 764,268,000 | \$815,244,000 | \$1,182,800,000 | \$1,864,139,000 | \$5,407,685,000 | | |
| | | | | | | | | | |
| SUMMARY BY DRIVER | | | | | | | | | |
| Growth | \$4,104,950,000 | \$ 195,002,000 | \$214,025,000 | \$366,614,000 | \$ 592,211,000 | \$ 821,841,000 | \$2,189,693,000 | | |
| Maintenance | 974,800,000 | 128,655,000 | 167,071,000 | 154,998,000 | 204,637,000 | 191,920,000 | 847,281,000 | | |
| Resilience | 139,550,000 | 10,055,000 | 16,660,000 | 7,527,000 | 8,335,000 | 1,700,000 | 44,277,000 | | |
| Upgrade | 2,277,200,000 | 433,372,000 | 332,462,000 | 254,155,000 | 338,527,000 | 768,578,000 | 2,127,094,000 | | |
| Opportunity | 151,500,000 | 14,150,000 | 34,050,000 | 31,950,000 | 39,090,000 | 80,100,000 | 199,340,000 | | |
| Total | \$7,648,000,000 | \$ 781 234 000 | \$ 764 268 000 | \$ 815 244 000 | \$1 182 800 000 | \$1,864,139,000 | \$5 407 685 000 | | |

* Project is part of Metro Vancouver's formal stage gate framework. Detailed project report will be brought forward as part of the stage gate review process.



LIQUID WASTE SERVICES Policy, Planning and Analysis

Description of Services

Liquid Waste Services provide wastewater collection and treatment services through the Liquid Waste function under the Greater Vancouver Sewerage & Drainage District (GVS&DD). The Policy, Planning and Analysis Division includes innovations, utility planning, policy and resiliency management to comply with provincial and federal legislation. The Division undertakes utility infrastructure analysis to service growth planning with municipalities, facilities modeling, scenario analysis, scope development for capital projects, and facility analysis and planning. Divisional mandate also includes source control strategies that protect receiving environments, ensure health and safety and protect infrastructure; maintain liquid waste regulatory bylaws; expand public awareness and education; and develops strategic actions for emerging contaminants. Included in the portfolio is innovation management involving technology evaluations, resource recovery assessments, innovative business modelling and enhancing value via Sustainability Innovation Fund projects.

Strategic Directions and High Level Goals Supported

Board Strategic Plan:

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Integrated Liquid Waste and Resource Management Plan:

- Goal 1 Protect public health and the environment
- Goal 2 Use liquid waste as a resource
- Goal 3 Effective, affordable and collaborative management

Performance Indicators

| Indicator | Historical and/or industry benchmark | Current performance | 2024 Performance objective |
|--|--|---------------------|-------------------------------|
| Annual number of wet-weather related sanitary sewer overflow (SSO) events from Metro Vancouver sewers | MV 3-year average: 57 2022: 42 2021: 76 2020: 40 | 42 | 0 |
| Annual CSO Volume (ML) | MV 3-year average: 33,900 2022: 29,100 2021: 38,500 2020: 36,900 | 29,100 | 32,500 |
| Percentage of Assets not Meeting Capacity or Regulation within 10 Years | MV 3-year average: 22% 2022: 22% 2021: 22% 2020: 23% | 22% | 22% |

2024 Key Actions

- Co-develop with members, the review and update of the Liquid Waste Management Plan in accordance with provincial direction.
- Develop and/or maintain short and long range servicing plans for the collection system and each wastewater treatment plant, outlining the scope, scale, budget and timing.
- Coordinate overflow working groups with members to develop targeted overflow mitigation plans and reduce wet weather flows through actions on public and private works.
- Strengthen source control capabilities through regulatory improvements, public awareness, and stakeholder collaboration.
- Review and update sewer use bylaws, modernizing and achieving full cost recovery.
- Develop with drainage area members and First Nations, a policy to clarify jurisdictional roles on flood management strategies and their implementation.
- Complete the detailed design of the pilot-scale anaerobic digestion optimizer, including Phase 1 of the Hydrogen Integration system at the Lulu Island Pilot Digestion Optimization Facility.
- Continue to lead the research program for the Hydrothermal Processing Demonstration Facility and support the operations and maintenance contract.
- Undertake regulatory reviews including WWTP Operational Certificate amendments.



LIQUID WASTE SERVICES Engineering, Design and Construction

Description of Services

Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Engineering, Design and Construction (EDC) Division is responsible for the delivery of the core major and minor capital projects, including trunk sewers, pump stations, SSO storage and wastewater treatment facilities identified in the GVS&DD long range plan and minor operating projects.

Strategic Directions and High Level Goals Supported

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Integrated Liquid Waste and Resource Management Plan

- Goal 1 Protect public health and the environment
- Goal 2 Use liquid waste as a resource
- Goal 3 Effective, affordable and collaborative management

Performance Indicators ¹

| Indicator | Historical and/or industry Benchmark | Current performance ² | 2024 Performance objective |
|--|--|-------------------------------------|-------------------------------|
| Percent of Capital Program Expenditures Achieved (Projects >\$90M) (7 PROJECTS – \$106M) | 3-year average: 63% 2022: 59% 2021: 39% 2020: 62% | 20% | 95% |
| Percent of Capital Program Expenditures Achieved (Projects \$20M - \$90M) (32 PROJECTS – \$81M) | 3-year average: 58% 2022: 54% 2021: 47% 2020: 73% | 24% | 90% |

| Indicator | Historical and/or industry Benchmark | Current performance ² | 2024 Performance objective |
|--|--|-------------------------------------|-------------------------------|
| Percent of Capital Program Expenditures Achieved (Projects \$5M - \$20M (36 Projects – \$72M) | 3-year average: 40% 2022: 25% 2021: 59% 2020: 36% | 8% | 75% |
| Percent of Capital Program Expenditures Achieved Projects < \$5M (56 Projects – \$27M) | 3-year average: 35% 2022: 36% 2021: 34% 2020: 36% | 16% | 75% |
| Percent of Minor Capital Program Expenditures (Total Budget - \$8M) | 3-year average: 67% 2022: 78% 2021: 70% 2020: 72% | 35% | 90% |

1. The Performance Indicators include projects being completed by other LWS divisions, such as utility relocates and Industrial Control System upgrades, but excluded projects being completed by the Project Delivery department

2. Current Performance is based upon Actuals for year to date end of May, and so is not indicative of expected year end performance

2024 Key Actions

- In conjunction with the PMO (Project Delivery Department), continue to support project management process improvements including the implementation of a Portfolio Management Information System (PMIS).
- Continue to support the Project Delivery Department in the delivery of the expansions and upgrades of four Waste Water Treatment Plants by providing Subject Matter Expertise on Electrical Engineering, Instrumentation and Controls services.
- Complete the review and revisions of the Minor Capital Program, including project prioritization processes and improved program level controls.
- Complete detailed design:
 - Effluent Heat Recovery and Boiler Project at LIWWTP (Richmond)
 - WWTP Electrical System Studies & Upgrades at AIWWTP (Delta)
 - Kent PS Power Distribution System and High Voltage Switchgear Replacement (Vancouver)
 - Sapperton PS Emergency Backup Power (New Westminster)
 - Stoney Creek Trunk Sewer Upgrade (Coquitlam Section)
 - White Rock Forcemain Replacement and Rehabilitation (White Rock)
 - NSI Manson Road Phase 1 and Phase 2 (Surrey)
- Substantially complete:
 - Front Street Pressure Sewer Rehabilitation (New Westminster)
 - Rehabilitation of Trickling Filter 4 at AIWWTP (Delta)
 - o IIWWTP CEPT System Rehabilitation (Richmond)
 - North Road Trunk Sewer Phase 2 (Burnaby and Coquitlam)
 - Hydraulic Gate Improvements Project at AIWWTP (Delta)
 - Gleneagles Pump Stations 4 and 5 Rehabilitation (West Vancouver)

- Jervis Pump Station Voltage Conversation (Vancouver)
- LIWWTP Power Reliability DVR (Richmond)
- Glenbrook Sanitary Trunk Sewer (Burnaby),
- Burnaby Lake North Interceptor No.2 Winston St Section Phase 2 (Burnaby)
- Initiate construction:
 - Last section of the South Surrey Interceptor Twinning (SSJ2 Phase IV, Surrey)
 - Harbour PS Power Distribution System Replacement (Vancouver)
 - Corrosion Control Facility at the Cloverdale PS (Surrey)
 - Hydrothermal Liquefaction System at AIWWTP (Delta)
 - o Standby Diesel Generator Recommissioning at AIWWTP (Delta)
 - Westridge Forcemain Replacement and Pump Station 2 Refurbishment (Burnaby)
 - IIWWTP Influent Pump Station Drive Remediation (Richmond)
 - Gleneagles Forcemains Replacement (West Vancouver)
 - LIWWTP Power Reliability SDG and Building (Richmond)
 - Permanent Backup Power at Jervis Pump Station (Vancouver)
- Initiate and complete construction:
 - MSG Line Replacement at AIWWTP (Delta)
 - Sludge Control Building Electrical Room HVAC Upgrade at AIWWTP (Delta)
 - South Surrey Interceptor Delta Section Air Management Facility (Delta)
 - o Harbour Pump Station Header Replacement (Vancouver)
 - Glenbrook CSO Gate Replacement (New Westminster)
 - New Westminster Interceptor Upper Sapperton Connection Rehabilitation (New Westminster)



LIQUID WASTE SERVICES

Operations and Maintenance - Wastewater Collections and Drainage

Description of Services

Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Wastewater Collection and Drainage Division is responsible for managing the operations and maintenance of the sewer collection network and providing maintenance services to Greater Vancouver Water District (GVWD) as a shared service provider. This includes day-to-day management of the infrastructure assets and supporting infrastructure. This business area is also responsible for managing the operations and maintenance of Urban Drainage areas including the Still Creek/Brunette, Port Moody/Coquitlam and UBC Drainage areas.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Integrated Liquid Waste and Resource Management Plan

- Goal 1 Protect public health and the environment
- Goal 2 Use liquid waste as a resource
- Goal 3 Effective, affordable and collaborative management

Performance Indicators

| Indicator | Historical and/or | Current | 2024 Performance |
|---|--|-------------|------------------|
| | Industry Benchmark | Performance | Objective |
| Number of reported events of sanitary sewer overflows (SSOs): non-weather related | MV 3-year average: 18.3 2022:14 2021: 6 2020: 35 | 10 | 0 |

| Indicator | Historical and/or Industry Benchmark | Current Performance | 2024 Performance Objective |
|----------------------------|---|------------------------|-------------------------------|
| | MV 3-year average: | | |
| Number of odour complaints | 12 | 2 | 10 |
| received | 2022: 8 | | |
| | 2021: 7 | | |
| | 2020: 21 | | |
| | | | |

2024 Key actions

- Review the Pump Station Design Standard with Technical Services
- Develop and implement project lifecycle KPIs for the Construction crew
- Create and implement a continuous improvement process for KPIs
- Expand self-serve LWS sewer/rainfall datasets available to member municipalities
- Inspect 5% of sewer collection system
- Continuation of implementation of a comprehensive Maintenance Reliability Program to increase asset resilience.
- Continue asset verification audits and initiate implementation of the new 2023 Engineering Naming Standard.
- Implement asset management for our Lake City Operations Centre facility. All associated equipment to be entered into EAM with preventative maintenance schedules established to help avoid asset failures and downtime, ensure regulatory maintenance is performed on time, lower maintenance costs, and monitor and document asset lifecycles for future planning and budgeting.



LIQUID WASTE SERVICES

Operations & Maintenance - Wastewater Treatment & Residuals Management

Description of Services

Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Wastewater Treatment & Residuals Management division is responsible for managing the operations and maintenance of the five regional wastewater treatment plants (WWTPs). This includes long-range facility planning and day-to-day management of the infrastructure assets and supporting infrastructure with the objective of complying with provincial and federal regulations and recovering as much resources from the wastewater as economically feasible. This business area is also responsible for the beneficial use of biosolids and other residuals produced through the treatment process.

Strategic Directions and High Level Goals Supported

Board Strategic Plan

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- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
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Integrated Liquid Waste and Resource Management Plan

- Goal 1 Protect public health and the environment
- Goal 2 Use liquid waste as a resource
- Goal 3 Effective, affordable and collaborative management

Performance Indicators

| Indicator | Historical and/or industry benchmark | Current performance | 2024 Performance objective |
|------------------------------|---|---------------------|-------------------------------|
| | MV 3-year average: | | |
| | 448,676 | 418,500 | 446,400 |
| Volume treated per year (ML) | 2022: 435,178 | | |
| | 2021: 451,732 | | |
| | 2020: 459,118 | | |

| Indicator | Historical and/or industry benchmark | Current performance | 2024 Performance objective |
|---|--|---------------------|-------------------------------|
| | MV 3-year average: | | |
| Percent of digester gas used at | 57.9% | 66% | 68% |
| the Wastewater Treatment | 2022: 64.5% | | |
| Plants | 2021: 53.7% | | |
| | 2020: 55.5% | | |
| Compliance with treatment plant Operational Certificates (%) | MV 3-year average: 99.94% 2022: 99.99% 2021: 99.99% 2020: 99.83% | 99.99% | 100% |
| Percent of biosolids beneficially used | MV 3-year average: 99.8% 2022: 100% 2021: 100% 2020: 99.5% | 100% | 100% |
| Percentage of Biosolids beneficially used in Metro Vancouver Region | MV 3-year average: 16.6% 2022: 14.4% 2021: 17.9% 2020: 17.6% | 15% | 11% |

2024 Key actions

New Initiatives

- Commissioning and testing of two (2) pilot plants at Iona Island WWTP to evaluate the two preferred secondary treatment technologies (Aerobic Granular Sludge and Membrane Bioreactor).
- Development of process safety management system.
- Commissioning and testing of the new Annacis island WWTP outfall.
- Strategic procurement for commodities, chemicals and service contracts.
- Resiliency Upgrade Projects
- Complete Annacis Island WWTP trickling filter 4 refurbishment and media replacement.
- Continue ICS migration project.
- Commissioning and testing of new centrifuge polymer system at Lulu Island WWTP
- Rebuild bar screens, cogens, influent and effluent pumps at Iona Island WWTP
- Complete primary sedimentation tanks maintenance, screen compactor and grinder overhauls at Lions Gate WWTP.
- Complete primary sedimentation tanks repair and modifications, trickling filter pump rebuild, centrifuge rebuild, cogen and air handling equipment maintenance at Annacis Island WWTP.
- Purchase spare trickling effluent pumps at Northwest Langley WWTP.

Ongoing Works

- Complete removal of land-dried biosolids stockpile at Iona Island WWTP, if not completed by end of 2023. Handover site to PDE
- Complete the cleaning of the southeast lagoon at Iona Island WWTP and handover to PDE.
- Construct biosolids storage area at the Iona WWTP dewatering building.
- Operate and maintain the Pilot Digester Optimization Facility.
- Review and update critical operations, maintenance and safety documents related to plant process, operating and maintenance procedures for the wastewater treatment plants

Optimization Works

- Biosolids dewatering polymer optimization at Iona Island WWTP.
- Renewable Natural Gas Facility Optimization at Lulu Island WWTP.
- Update ICS Alarm Rationalization Philosophy .



LIQUID WASTE SERVICES Environmental Management & Quality Control

Description of Services

This business area is responsible for management of environmental programs and initiatives for GVS&DD, analytical services for liquid waste, water and solid waste regulatory, quality control, source control and process control purposes, and federal and provincial regulatory reporting of environmental and wastewater quality and treatment. The work includes environmental investigations, laboratory analyses, modeling, forecasting, simulations, monitoring, risk assessments, support for management of stormwater and urban drainage, development of an Environmental Management System for Liquid Waste Services, implementation of selected source control programs, and liaison with senior governments, academia and environmental stakeholders.

Strategic Directions and High Level Goals Supported

Board Strategic Plan:

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Integrated Liquid Waste and Resource Management Plan:

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- Goal 3 Effective, affordable and collaborative management

Performance Indicators

| Indicator | Historical and/or industry benchmark | Current performance | 2024 Performance objective |
|--|---|---------------------|-------------------------------|
| Number of days between May 1 st and September 30 th swimming advisories posted by the Health | MV 3-year average: 36 2021: 26 | 52 | 32 |
| Authorities (combined totals for all beaches in region) | 2020: 42 2019: 39 | | |

| Indicator | Historical and/or industry benchmark | Current performance | 2024 Performance objective |
|---|--|---------------------|-------------------------------|
| Fraser River water quality index ¹ | MV historical 3-year averages: 2019-2021: 74 2018-2020: 77 2017-2019: 88 | 2020-2022: 80 | 80 |
| Burrard Inlet water quality index | MV historical 3-year average: 2018-2020: 76 2017-2019: 82 2016-2018: 87 | 2019-2021: 83 | 83 |
| Sturgeon Bank water quality index | MV historical 3-year average: 2018-2020: 90 2017-2019: 96 2016-2018: 92 | 2019-2021: 87 | 87 |

¹ Water Quality Index (WQI) ranking of water quality: Excellent (WQI value 95-100), Good (80-94), Fair (65-79), Marginal (45-64), Poor (0-44)

2024 Key Actions

- Produce the 2023 GVS&DD Environmental Management & Quality Control Annual Report.
- Complete and submit 2023 National Pollution Release Inventory (NPRI) Report to Environment Canada.
- Update the SSO Rapid Risk Ranking Tool for all sanitary sewer overflows (SSOs) for the 5-year interval of 2019-2023.
- Continue scenario modelling and now-casting to support regulatory reporting of sewer overflows and WWTP process upsets.
- Conduct water quality monitoring in the Fraser River.
- Continue the Burrard Inlet fish health monitoring program and sediment coring in the Strait of Georgia, in accordance with recommendations from the Water Body Environmental Program Reviews.
- Conduct Lulu Island WWTP dye tracer study.
- Continue the collaborative work on advancing the use of wastewater based epidemiology for the protection of public health.
- Continue collaborative work with BCCDC to develop molecular methods for recreational water quality monitoring.
- Continue collaboration with DFO and SFU on development of genomics solutions for understanding impacts of wastewater treatment plant (WWTP) discharges on Fraser River salmon.
- Continue the quarterly analyses of pharmaceuticals and personal care products (PPCPs) in wastewater, and semi-annual analyses of Perfluoroalkyl and Polyfluoroalkyl (PFAS) substances in drinking water.
- Expand scope of the Canadian Association for Laboratory Accreditation (CALA) accredited PFAS compounds.



LIQUID WASTE SERVICES Support Services and Strategic Initiatives

Description of Services

Liquid Waste Services provides wastewater collection and treatment services to the region through the Liquid Waste function under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). The Support Services and Strategic Initiatives division is responsible for the following Liquid Waste Services functions: business and financial planning and management; capital budget planning; asset management; performance management; energy management and the Annacis Research Centre.

Strategic Directions and High Level Goals Supported

Board Strategic Plan

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Integrated Liquid Waste and Resource Management Plan

- Goal 1 Protect public health and the environment
- Goal 2 Use liquid waste as a resource
- Goal 3 Effective, affordable and collaborative management

Performance Indicators

| Indicator | Historical and/or industry benchmark | Current performance | 2024 Performance objective |
|---|--|---------------------|-------------------------------|
| Operating cost per million litres collected and treated (\$/ML) | MV 3-year average: \$425 2022: \$472 2021: \$408 2020: \$395 | \$472 | \$569 |
| Total LWS energy consumption (GJ/ML) | MV 3-year average: 2.20 2022: 2.25 2021: 2.19 2020: 2.18 | 2.25 | 2.30 |

| Indicator | Historical and/or industry benchmark | Current performance | 2024 Performance objective |
|-------------------------------------|---|---------------------|-------------------------------|
| | MV 3-year average: | | |
| Total Greenhouse gas emissions from | 20.4 | 19.0 | 21.3 |
| energy and direct emissions | 2022: 19.0 | | |
| (kg CO ₂ e/ML) | 2021: 18.8 | | |
| | 2020: 23.2 | | |
| | MV 3-year average: | | |
| | 1,770,000 | 1,800,000 | 635,000 |
| Energy Savings Realized (kWh/y) | 2022: 1,880,000 | | |
| | 2021: 3,300,000 | | |
| | 2020: 138,000 | | |

2024 Key Actions

- Develop tools for tracking actual energy consumption/generation against projections developed with the facilities and for recording results of investigations and corrective actions pertaining to out-of-tolerance consumption/generation events.
- In support of Climate 2050 emission reduction targets, and in collaboration with utilities worldwide through the WEF Greenhouse Gas Communities group (Committee), develop plans for monitoring and ultimately reducing process-based greenhouse gas emissions at LIWWTP, as a first step toward reducing process emissions at all WWTPs.
- Promote and pursue additional partnerships with municipalities, utilities and the property development community to implement opportunities for resource recovery from liquid waste with emphasis on projects that achieve regional greenhouse gas emissions reductions.
- Develop training resources on document management processes for new and existing staff.
- Improve the management of departmental performance monitoring data using enterprise tools such as Metrolytics.
- Further discussion with member advisory committees of the expansion of Tier III cost apportionment into operating budget activities.

2024 to 2028 – WHAT'S HAPPENING

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

| Initiative | Description | Theme |
|---|---|---|
| 2024 | · · · · · | |
| Wet Weather Pricing | First year of implementation of a regionally revenue-neutral sewer levy split into dry and wet weather components, providing incentives to mitigate I&I and separate | Environmental Sustainability / Financial Sustainability |
| Iona Island WWTP | combined sewers. Commence preliminary Design of WWTP and commence construction of WWTP ground improvement works and secondary treatment technology piloting, and commencement of dewatering of lagoons | Regulatory and Legislative Environment |
| Annacis Island WWTP Outfall | Completion of construction of the outfall system | Regional Growth |
| Annacis Island WWTP | Completion of construction of Primary Sludge Gravity Thickeners #4 and #5 | Regional Growth |
| Annacis Island WWTP | Commence preliminary design of Digester No. 5 and Regional Biosolids Dryer | Regional Growth and Opportunity |
| Burnaby Lake North Interceptor | Completion of construction of the tunneled section of the Burnaby Lake North Interceptor | Regional Growth |
| Integrated Liquid Waste and Resource Management Plan | Submission of the updated Integrated Liquid Waste and Resource Management Plan to the Province. | Regulatory and Legislative Environment |
| Vancouver Sewerage Area (VSA) Pump Station Backup Power | Generators installed at Jervis and Chilco Pump Stations. VSA Pump Station Backup Power Program complete. | System Stewardship |
| Gleneagles Forcemain | Completion of construction of replacement of the Gleneagles Forcemain, this will be the last section to connect to Hollyburn Interceptor | Regional Growth |
| 2025 | • | • |
| Gilbert Trunk Sewer | Completion of the twinning of the Gilbert Trunk Sewer to improve system reliability and resiliency. | System Stewardship |
| Northwest Langley WWTP | Commence wastewater treatment plant construction | Regional Growth |
| Iona Island WWTP | Select secondary treatment technology | Regulatory and Legislative Environment |
| Annacis Island WWTP | Commence ground improvements for Trickling Filters #5 and #6 | Regional Growth |
| Annacis Island WWTP Trickling Filters | Completion of replacement of media, distributor arms and foul air ducting. | System Stewardship |
| South Surrey Interceptor | Completion of construction of the South Surrey Interceptor – Johnson Road Section, the last part of the system to be twinned. | Regional Growth |

| Initiative | Description | Theme |
|------------------------|---|----------------------------|
| 2026 | | |
| Liquid Waste Services | Complete Comprehensive Long-Range Plan, | Environmental |
| Comprehensive Long- | identifying regional infrastructure needs to | Sustainability |
| Range Plan | service growth, mitigate overflows, improve | |
| - | receiving water quality, enhance resiliency. | |
| Marshend Pump Station | Completion of replacement of the pump | System Stewardship |
| | station to meet current safety and seismic | |
| | regulations, and to expand the capacity. | |
| Cloverdale Pump | Completion of construction the first phase of | System Stewardship |
| Station | project to meet the current capacity. | |
| Westridge Pump Station | Completion of rehabilitation of Westridge | System Stewardship |
| | Pump Station 2 and upgrade of Westridge | -, |
| | Pump Station 1 to meet current safety | |
| | regulations and expand station capacity. | |
| New Westminster | Completion of rehabilitation for West Branch | System Stewardship |
| Interceptor | and Columbia Street Extension | |
| Iona Island WWTP | Completion of preliminary design of WWTP, | Regulatory and Legislative |
| | completion of ground improvements and | Environment |
| | Phase 1 ecological projects. | Linvironment |
| Annacis Island WWTP | Completion of construction of the HTP | Environmental |
| | - | |
| Hydrothermal | facility. | Sustainability |
| Processing (HTP) | | |
| Demonstration Facility | | |
| Annacis Island WWTP | Commence construction of Trickling Filters #5 | Regional Growth |
| | and #6, Trickling Filter Pump Station, | |
| | Centrifuges, and Maintenance Workshop | |
| | Building | |
| Annacis Island WWTP | Commence detailed design of Digester No. 5 | Regional Growth and |
| | and Regional Biosolids Dryer | Opportunity |
| North Surrey | Completion of construction of odor control | System Stewardship |
| Interceptor Odour | system. | |
| Control | | |
| 2027 | 1 | |
| Iona Island WWTP | Commence detailed design of WWTP | Regulatory and Legislative |
| | | Environment |
| Annacis Island WWTP | Commence operation of the HTP facility and | Environmental |
| Hydrothermal | initial production of biocrude oil at | Sustainability |
| Processing (HTP) | demonstration scale. | |
| Demonstration Facility | | |
| Northwest Langley | Commence outfall construction | Regional Growth |
| WWTP | | |
| Stoney Creek Trunk | Completion of the construction of the | Regional Growth and |
| Sewer | upgrade of Stoney Creek Trunk to mitigate | System Stewardship |
| | overflow into the Stoney Creek and increase | |
| | capacity | |
| 2028 | | · |
| Annacis Island WWTP | Completion of construction of Centrifuges | Regional Growth |
| | | |
| | and Maintenance Workshop Building and | |

| Initiative | Description | Theme |
|---------------------|---|-------------|
| Annacis Island WWTP | Commence construction of Regional Biosolids | Opportunity |
| | Dryer | |

ATTACHMENT 5

METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - LIQUID WASTE

OPERATING RESERVES

| | 2023 ENDIN | 3 | 2024 OPENING | | | | | 2024 ENDING | 2025 ENDING | 2026 ENDING | 2027 ENDING | 2028 ENDING |
|-----------------------|---------------|-----------|-----------------|--------------|------------|------|----------|----------------|----------------|----------------|----------------|----------------|
| | BALAN | | BALANCE | CONTRIBUTION | WITHDRAWAL | .s | INTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| Liquid Waste Services | \$ 38,39 | 98,701 \$ | 38,398,701 | \$ – | \$ | - \$ | 959,968 | \$ 39,358,669 | \$ 40,342,636 | \$ 41,351,202 | \$ 42,384,982 | \$ 43,444,607 |

DISCRETIONARY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | CONTRIBUT | ION | WITHDRAWALS | INTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING BALANCE | EN | 2028 NDING ILANCE |
|--|---------------------------|----------------------------|-----------|-----|----------------|------------|---------------------------|---------------------------|---------------------------|---------------------------|-----|-------------------------|
| Liquid Waste Services | | | | | | | | | | | | |
| Biosolids Inventory Reserve | \$ 1,910,081 | \$ 1,910,081 | \$ | - | \$ (1,806,007) | \$ - | \$ 104,074 | \$ - \$ | | \$ - | \$ | - |
| Liquid Waste General Debt Reserve Fund | 2,229,071 | 2,229,071 | | - | - | 55,727 | 2,284,798 | 2,341,918 | 2,400,466 | 2,460,478 | 2 | ,521,990 |
| Lions Gate Contingency | 1,564,365 | 1,564,365 | | - | - | 39,109 | 1,603,474 | 1,643,561 | 1,684,650 | 1,726,766 | 1 | ,769,935 |
| Drainage General Reserve | 5,465,528 | 5,465,528 | | - | (725,000) | 127,576 | 4,868,104 | 3,395,119 | 1,480,309 | 1,517,317 | 1 | ,555,250 |
| Total | \$ 11,169,045 | \$ 11,169,045 | \$ | - | \$ (2,531,007) | \$ 222,412 | \$ 8,860,450 | \$ 7,380,598 \$ | 5,565,425 | \$ 5,704,561 | \$5 | ,847,175 |

STATUTORY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | CON | TRIBUTION | wi | THDRAWALS | INTEREST | | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING SALANCE | | 2028 NDING ALANCE |
|---|---------------------------|----------------------------|-----|-----------|----|----------------|----------|-----|---------------------------|---------------------------|---------------------------|---------------------------|-----|-------------------------|
| Liquid Waste Services | | | | | | | | | | | | | | |
| Liquid Waste Laboratory Equipment Reserve | \$ 851,197 | \$ 851,197 | \$ | 108,399 | \$ | (300,000) \$ | 18,88 | 5\$ | 678,481 | \$ 806,651 | \$ 789,418 | \$ 926,871 | \$ | 1,071,038 |
| Liquid Waste Sustainability Innovation Fund Reserve | 9,651,116 | 9,651,116 | | 1,127,000 | | (6,979,870) | 168,11 | 7 | 3,966,363 | 5,206,610 | 6,477,863 | 7,780,897 | | 9,116,507 |
| Total | \$ 10,502,313 | \$ 10,502,313 | \$ | 1,235,399 | \$ | (7,279,870) \$ | 187,00 | 2\$ | 4,644,844 | \$ 6,013,261 | \$ 7,267,281 | \$ 8,707,768 | \$1 | 0,187,545 |



| Subject: | 2024 - 2028 Financial Plan – Regional Parks | |
|----------|---|--------------------------------|
| Date: | September 25, 2023 | Meeting Date: October 18, 2023 |
| From: | Mike Redpath, Director, Regional Parks | |
| То: | Regional Parks Committee | |

RECOMMENDATION

That the Regional Parks Committee endorse the 2024 - 2028 Financial Plan for Regional Parks as presented in the report dated September 25, 2023, titled "2024 - 2028 Financial Plan – Regional Parks", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

Over the next five years, the Regional Parks budget is expected to decrease an average of \$1,281,801 or 1.4% per year. This is a result of the implementation of DCCs for parkland acquisition which will mitigate the increases to the contributions to the parkland acquisition and development reserve. Adjusting for the decreases in the contribution to the Regional Parks Land Acquisition and Development Reserve in 2024 to 2028, the average increase per year is 2.7%. Over the 2024-2028 Financial Plan there are still pressures for new service levels, land acquisition and accelerated park and greenway development.

Before 2020, Regional Parks visitation was growing at roughly 4% year, or roughly twice the rate of regional population growth. In 2020, Regional Parks saw 16.5 million visits – an increase of 38% from 2019, when there were 11.9 million visits. High levels of visitation have continued through 2021. Parks are essential to support community resilience, are vital to the physical and mental health and well-being of residents and play a key role in regional climate action.

PURPOSE

To present the 2024 - 2028 Financial Plan for Regional Parks for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities
- Reduction of household impact, \$13 less that that previously projected for 2024

This report focuses on the Regional Parks Service and presents the 2024 provisional annual budget and the updated five-year plan for the years 2024 to 2028 for Committee consideration.

REGIONAL PARKS SERVICE

Regional Parks contribute to a livable region by conserving natural assets and connecting to nature. Regional Parks manages 13,938 ha of land for 23 regional parks, 5 regional greenways, 3 Regional Park reserves and 2 ecological conservation areas through:

- Stewardship of the Regional Parks' ecosystems and natural areas
- Safe and secure parks and facilities to connect people with nature
- Park maintenance and bylaw enforcement/regulation
- Park system visitation, programs and services
- Indigenous cooperation, consultation and engagement

- Public education, interpretation, events and cultural engagement
- Park planning and management of built and natural assets
- Capital construction and asset management
- Acquisition of new park land to complete existing parks and create new parks

Regional Parks' initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan*, and *Regional Parks Plan*, and *Regional Greenways Strategy* specifically:

2022-2026 Board Strategic Plan:

- Update existing financial tools and investigate additional financial mechanisms to support service provision, land acquisition, and operations and maintenance of park land including development cost charges, grant opportunities, and philanthropic endeavors
- Work together with First Nations to develop collaborative agreements (such as cultural planning and cooperation agreements), and name or rename regional parks to affirm the importance of the lands to the Nations
- Provide more passive recreation opportunities and improve ecological health and resilience of the region by growing the regional parks system, as identified in the Regional Parks Land Acquisition 2050 Strategy
- Collaborate with others to advance the completion of the regional greenways network to support sustainable transportation and access to regional parks
- Develop and implement a climate action strategy for regional parks
- Advance nature-based solutions to climate change to increase infrastructure and ecosystem resilience, including monitoring forest health and implementing necessary restoration activities to support long-term resilience and ecological health
- Expand the ecological stewardship program to provide more opportunities for people to engage with regional parks
- Deliver interpretive and educational events that provide opportunities for people to connect with nature
- Manage built and natural assets proactively as part of an asset management system to support the provision of safe and well-maintained infrastructure and integrity of ecosystems
- Design, develop, and program parks to provide a range of opportunities to support the region's growing and diverse population
- Develop a visitor use strategy to protect natural resources and support a safe and highquality visitor experience.

Regional Parks Plan:

| GOALS | |
|--------|--|
| Goal 1 | The region's important natural areas are protected in perpetuity. |
| Goal 2 | Everyone has the opportunity to benefit from exceptional experiences in nature. |
| Goal 3 | Regional parks are sustainably managed and well-maintained for the safety of visitors and integrity of ecosystems. |
| Goal 4 | First Nations have an active role in the planning and stewardship of regional parks. |
| Goal 5 | Regional parks adapt to change and contribute to regional resilience. |

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

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year and to assist in long-term planning. The 2024 Work Plan for Regional Parks is presented in this report. Within the Regional Parks Work Plan, four performance indicators have been developed and are being tracked. These include:

- Annual number of visits to Regional Parks
- Annual number of participants in Regional Park public programming
- Annual number of volunteer hours through stewardship, partnership and visitor services programs
- Total hectares of Regional Park lands

The trends in these performance measures suggests that Regional Parks will continue to have an increase in the annual number of visits to Regional Parks, and will see a reduction in the annual number of participants in Regional Parks programming and number of volunteer hours due to the COVID-19 pandemic. Modest increases in the amount of sensitive ecosystems located within regional parks are expected.

CONTINUOUS IMPROVEMENT

Regional Parks continues to explore, evaluate and implement continuous improvement opportunities. The 2024 continuous improvement opportunities include the following:

- Deepen relationships with First Nations knowledge sharing and collaboration on planning, design, resource management, and education.
- Pilot project to install real-time parking management platform for select regional parks
- Complete and begin implementation of Regional Parks Asset Management Plan
- Implement new Hazard Tree Inventory Management System guided by new Board policy
- Quantify carbon sequestration value of recent land acquisitions at Cape Roger Curtis and Kanaka Creek, and ecological restoration of Burns Bog
- Development Cost Charge program to support Regional Parks land acquisition
- Work with Fleet Services to replace gas powered vehicles and equipment with electric options
- Continued Implementation of pay parking as part of a parking visitor management strategy for Belcarra and Lynn Headwaters Regional Parks
- Positioning capital projects for funding from other levels of government and partnering with local municipalities and others.
- Continued implementation of Regional Parks Land Acquisition 2050 carbon credits from Regional park land acquisition and restoration enabled Metro Vancouver to achieve carbon neutrality.
- Promotion of Peatland Recovery in areas affected by wildfire in Burns Bog Ecological Conservancy Area. This project will contribute to restoring desired ecological conditions on 37 ha of peatland affected by wildfire. Research will contribute to knowledge on peatland function and potential for long-term carbon benefits. The results will guide future management of other similarly affected peatlands across the region.
- Development of a methodology for the valuation of natural assets in Regional Parks that will be shared with member municipalities.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

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

The 2024 - 2028 Regional Parks Financial Plan is included as Attachment 1. The 2024 Annual Work Plan for the Regional Parks function presented in this report is included in Attachment 3 and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 4.

Operating Budget Highlights

The Regional Parks 2024 operating budget is proposed to increase by \$8,701,690 for a total budget of \$85,683,837 (Attachment 1). This is a result of pressures for new service levels, land acquisition and accelerated park and greenway development.

The 2024 operating budget includes the following key actions:

- Continued recovery of Regional Parks revenue streams: filming, public programming and facility rentals.
- Participation in the Metro Vancouver activation at the Pacific National Exhibition (PNE) including provision of outreach nature based programming for visitors to the exhibit.
- Continued implementation of *Public Programming Strategy* (2020).
- Commence a review for additional opportunities for pay parking to help manage parking demand.
- Continue the implementation of measures to support visitor demand management strategies for the Regional Park system.
- Enhanced working relationships with First Nations.
- Alignment of the five-year capital budget with the recommendations of the Asset Management Plan and Buildings Strategy and begin implementation.
- Pursue the acquisition of new lands for Regional Parks and greenways in support of the *Regional Parks Land Acquisition 2050* strategy.
- Completion and commencement of implementation of the Community Relationships Strategy.
- Continued implementation of *Tsleil-Waututh Nation Cultural Planning and Cooperation Agreement* and engagement for Belcarra Regional Park.
- Advancement of the development of cultural planning and cooperative agreements with Katzie and Kwikwetlem First Nation.
- Initiation of Phase 1 park development at Widgeon Marsh Regional Park.
- Initiation of Bowen Island- Cape Roger Curtis design and Planning process for a new regional park.
- Investigation of the feasibility of an indigenous framework to be included in the *Regional Parks Plan*.
- Renewal of the Burnaby Lake Regional Park lease with the City of Burnaby.
- Continued implementation of the Grouse Mountain Trail and Amenity Improvement Project, funded by the Investing in Canada Infrastructure Grant Program.
- Initiation of Phase 1 of the *Campbell Valley Management Plan* Implementation Project.

Over the next five years, the Regional Parks budget is expected to decrease an average of \$1,281,801 or 1.4% per year. Adjusting for the decreases in the contribution to the Regional Parks Land Acquisition and Development Reserve in 2024 to 2028, the average increase per year is 2.7%.

Capital Budget Highlights

The Regional Parks capital budget for 2024 approval is \$118.2M (Attachment 2). The capital program is funded primarily by reserve funds. The Regional Parks capital program includes major park development and land acquisition.

Highlights of capital projects planned or ongoing in 2024 include the following:

- 1. Widgeon Marsh Park Development (multiyear, \$20.0 M)
- 2. Bowen Island Park Development (multiyear, \$16.3 M)
- 3. Burns Bog Delta Nature Reserve Development (multiyear, \$11.0 M)
- 2. Campbell Valley Management Plan Implementation (multiyear, \$8.0M)
- 3. təmtəmíx^wtən/Belcarra South Picnic Area and Cabins (*multiyear*, \$6.8M)
- 4. Grouse Mountain Trail and Amenity Improvements (multiyear, \$3.5M)
- 5. Capilano River Service Yard (*multiyear*, \$1.8M)
- 6. System-wide Asset Management
- 7. Ongoing Land Acquisition

The projected capital cash flows for 2024 - 2028 totals to \$171.7M and is largely driven by new regional park developments, land acquisition and required infrastructure replacements. These include:

- Construction and opening of Widgeon Marsh Regional Park
- Construction of Crippen Regional Park-Davies Orchard Day Use Area and Dorman Point
- Construction of the Belcarra Regional Park South Picnic Area
- Planning and development for a new regional Park with camping facilities and other amenities at Cape Roger Curtis on Bowen Island
- Campbell Valley Regional Park Trail and open space improvements
- Implementation of Investing in Canada Grant (Grouse Mountain Regional Park)
- Implementation of the Regional Greenways 2050 strategy including the Delta South Surrey Greenway and Burnaby Lake Greenway improvements
- Development of Burns Bog Ecological Conservancy Area Delta Nature Reserve
- Trail developments at Aldergrove, Tynehead, Campbell Valley and Pacific Spirit Regional Parks
- Land acquisition in support of *Regional Parks Land Acquisition 2050*

Reserve Funds

The application of reserve funding in Regional Parks includes several operating initiatives which are delivered through consulting or contract services as well as capital maintenance. In 2024, \$385,000 of operating initiatives, \$2.5M of litigation costs/legal fees and \$7.1M of asset maintenance costs are funded from reserves, which is in accordance with the Board *Operating, Statutory and Discretionary Reserves Policy*. The capital program for Regional Parks is funded primarily from

reserves. In 2024, \$30.7M in reserve funding will be applied for capital development projects and land acquisition. The 2024 - 2028 projected reserves for Regional Parks is included in Attachment 5.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.
- The Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

- That the Regional Parks Committee endorse the 2024 2028 Financial Plan for Regional Parks as presented in the report "2024 - 2028 Financial Plan – Regional Parks" dated September 25, 2023 and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- 2. That the Regional Parks Committee make recommendations and endorse an amended 2024 2028 Financial Plan for the Regional Parks function and forward the amended Financial Plan to the to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2024 - 2028 Financial Plan for Regional Parks, as presented under Alternative 1, in 2024 the Regional Parks requisition will increase by \$9,016,449 (14.1%) for a total requisition of \$73,123,635.

Over the term of the five-year plan, the annual Regional Parks requisition is projected to decrease by an average of \$1,202,658 per year (-1.4%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household for the Regional Parks function will drop from \$60 in 2024 to just over \$44 in 2028.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

CONCLUSION

The Regional Parks 2024 Budget and five-year financial plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Regional Parks.

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

Staff recommends endorsing the 2024 - 2028 Financial Plan and Annual Work Plan for Regional Parks as presented under Alternative 1.

Attachments

- 1. 2024 2028 Financial Plan
- 2. 2024 2028 Capital Portfolio Regional Parks
- 3. 2024 Work Plan
- 4. 2024 2028 "What's Happening"
- 5. 2024 2028 Projected Reserves Regional Parks
- 6. Presentation re: 2024 2028 Financial Plan Regional Parks

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ATTACHMENT 1

METRO VANCOUVER REGIONAL DISTRICT REGIONAL PARKS

2024 BUDGET REVIEW

2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|--|-------------------------|-------------------------|---------------|----------------------|----------------|----------------------|----------------|------------------|--------------|-------------------------|----------------|
| REVENUES | | | | | | | | | | | |
| Metro Vancouver Regional District Requisitions | \$64,107,186 | \$73,123,635 | 14.1% | \$75,987,031 | 3.9% | \$62,518,576 | (17.7)% | \$ 58,495,444 | (6.4)% | \$ 58,093,896 | (0.7)% |
| User Fees | 867,927 | 878,074 | | 890,521 | | 895,590 | | 898,198 | | 900,846 | |
| Other External Revenues | 1,760,439 | 1,602,027 | | 1,602,093 | | 1,507,160 | | 1,507,228 | | 1,651,933 | |
| Transfer from Sustainability Innovation Fund Reserves | 541,595 | 73,912 | | 36,955 | | - | | - | | - | |
| Transfer from Reserves | 9,705,000 | 10,006,189 | | 8,151,474 | | 8,695,771 | | 8,965,161 | | 9,926,465 | |
| TOTAL REVENUES | \$76,982,147 | \$85,683,837 | 11.3% | \$86,668,074 | 1.1% | \$73,617,097 | (15.1)% | \$69,866,031 | (5.1)% | \$70,573,140 | 1.0% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Systems Planning, Design and Development Services | | | | | | | | | | | |
| Planning and Resource Management | \$ 2,777,878 | \$ 2,905,752 | | \$ 2,893,176 | | \$ 2,867,093 | | \$ 2,968,319 | | \$ 2,983,344 | |
| Design and Development | 1,391,136 | 1,725,156 | | 1,621,160 | | 1,662,600 | | 1,704,204 | | 1,747,742 | |
| Engineers in Training | 11,760 | 16,436 | | 21,404 | | 21,978 | | 22,560 | | 23,163 | |
| | 4,180,774 | 4,647,344 | 11.2% | 4,535,740 | (2.4)% | 4,551,671 | 0.4% | 4,695,083 | 3.2% | 4,754,249 | 1.3% |
| Systems Visitor and Operations Services | | | | | | | | | | | |
| Visitor Services | 1,472,808 | 1,521,557 | | 1,575,879 | | 1,597,130 | | 1,573,666 | | 1,600,827 | |
| Operations Services | 1,750,630 | 1,970,362 | | 1,905,574 | | 1,943,610 | | 2,017,302 | | 2,022,300 | |
| | 3,223,438 | 3,491,919 | 8.3% | 3,481,453 | (0.3)% | 3,540,740 | 1.7% | 3,590,968 | 1.4% | 3,623,127 | 0.9% |
| Central Area Services | | | | | | | | | | | |
| Operations and Maintenance | 7,255,705 | 7,558,260 | | 7,805,141 | | 7,837,239 | | 8,025,842 | | 8,185,302 | |
| Area Visitor Services | 632,447 | 680,961 | | 698,660 | | 740,694 | | 740,242 | | 757,363 | |
| Area Management and Administration | 3,444,740 | 3,491,779 | | 740,208 | | 758,975 | | 777,976 | | 797,064 | |
| Area Planning | 166,746 | 180,135 | | 184,437 | | 188,389 | | 192,391 | | 201,543 | |
| Burns Bog Ecological Conservancy Area | 491,777 | 526,683 | | 536,115 | | 543,841 | | 575,239 | | 609,952 | |
| Contribution to Reserve | 173,000 | 123,000 | | 173,000 | | 173,000 | | 173,000 | | 173,000 | |
| | 12,164,415 | 12,560,818 | 3.3% | 10,137,561 | (19.3)% | 10,242,138 | 1.0% | 10,484,690 | 2.4% | 10,724,224 | 2.3% |
| East Area Services | | | | | | | | | | | |
| Operations and Maintenance | 4,984,936 | 5,648,740 | | 5,881,909 | | 6,138,430 | | 6,454,885 | | 6,559,746 | |
| Area Visitor Services | 640,426 | 673,320 | | 688,674 | | 704,649 | | 720,834 | | 737,580 | |
| Area Management and Administration | 649,872 | 688,513 | | 706,193 | | 724,628 | | 743,308 | | 762,688 | |
| Area Planning | 170,926 | 180,853 | | 184,655 | | 188,607 | | 192,609 | | 196,761 | |
| | 6,446,160 | 7,191,426 | 11.6% | 7,461,431 | 3.8% | 7,756,314 | 4.0% | 8,111,636 | 4.6% | 8,256,775 | 1.8% |
| West Area Services | | | | | | | | | | | |
| Operations and Maintenance | 5,237,540 | 5,689,497 | | 5,948,559 | | 6,249,951 | | 6,594,528 | | 6,809,271 | |
| Area Visitor Services | 640,315 | 699,949 | | 715,597 | | 731,879 | | 748,377 | | 765,443 | |
| Area Management and Administration | 989,454 | 1,035,059 | | 1,054,761 | | 1,075,239 | | 1,095,981 | | 1,117,497 | |
| Area Planning | 162,537 | 171,046 | | 174,848 | | 178,800 | | 182,802 | | 186,954 | |
| | 7,029,846 | 7,595,551 | 8.0% | 7,893,765 | 3.9% | 8,235,869 | 4.3% | 8,621,688 | 4.7% | 8,879,165 | 3.0% |
| Administration and Department Support | 1,376,718 | 1,657,821 | 20.4% | 1,686,594 | 1.7% | 1,720,502 | 2.0% | 1,752,639 | 1.9% | 1,788,525 | 2.0% |
| Communications Program | 130,000 | 130,000 | 0.0% | 130,000 | 0.0% | 130,000 | 0.0% | 130,000 | 0.0% | 130,000 | 0.0% |
| Utility Voice Radio | 69,943 | 73,622 | 5.3% | 79,711 | 8.3% | 83,401 | 4.6% | 86,775 | 4.0% | 90,251 | 4.0% |
| Quality Control Allocated | 56,945 | 61,717 | 8.4% | 63,383 | 2.7% | 68,314 | 7.8% | 70,017 | 2.5% | 71,278 | 1.8% |
| Allocation of Centralized Support Costs Total | 4,606,908 39,285,147 | 5,150,430 42,560,648 | 11.8% 8.3% | 5,174,824 40,644,462 | 0.5% (4.5)% | 4,680,770 41,009,719 | (9.5)% 0.9% | 4,686,403 | 0.1% 3.0% | 4,300,561 42,618,155 | (8.2)% 0.9% |
| Total Operating Programs | | 42,560,648 | | | . , | | | | | | |
| Allocation of Project Delivery Cost | - | - | N/A | 230,138 | N/A | 239,607 | 4.1% | 248,971 | 3.9% | 256,520 | 3.0% |
| Asset Maintenance | 6,945,000 | 7,121,189 | 2.5% | 8,091,474 | 13.6% | 8,635,771 | 6.7% | 8,905,161 | 3.1% | 9,866,465 | 10.8% |
| Contribution to Capital Infrastructure Reserve Contribution to Parkland Acquisition and Development | 7,182,000 | 8,432,000 | 17.4% | 10,132,000 | 20.2% | 12,732,000 | 25.7% | 14,732,000 | 15.7% | 16,732,000 | 13.6% |
| Reserve | 23,570,000 | 27,570,000 | 17.0% | 27,570,000 | 0.0% | 11,000,000 | (60.1)% | 3,750,000 | (65.9)% | 1,100,000 | (70.7)% |
| TOTAL EXPENDITURES | \$76,982,147 | \$85,683,837 | 11.3% | \$86,668,074 | 1.1% | \$73,617,097 | (15.1)% | \$69,866,031 | (5.1)% | \$70,573,140 | 1.0% |

METRO VANCOUVER REGIONAL DISTRICT CAPITAL PORTFOLIO REGIONAL PARKS

2024 CAPITAL BUDGET AND 2024 - 2028 CAPITAL PLAN

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|---|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|--|
| CAPITAL EXPENDITURES | | | | | | | | | |
| Major Projects | | | | | | | | | |
| Grouse Mountain - Regional Park Trail and Amenity Improvements | \$ 3,475,000 | \$ 750,000 | \$ 250,000 | \$ – | \$ – | \$ – | \$ 1,000,000 | Construction | Capacity, Growth & Ecological Resilience |
| Widgeon Marsh New Park Development | 20,000,000 | 1,000,000 | 3,000,000 | 3,000,000 | 3,000,000 | 6,000,000 | 16,000,000 | Construction | Capacity, Growth & Ecological Resilience |
| Campbell Valley - Management Plan Implementation | 8,000,000 | 500,000 | 1,500,000 | 2,000,000 | 2,500,000 | 1,500,000 | 8,000,000 | Construction | Capacity, Growth & Ecological Resilience |
| Belcarra - South Picnic Area and Cabins | 6,789,600 | 750,000 | 2,000,000 | 3,500,000 | - | - | 6,250,000 | Planned | Capacity, Growth & Ecological Resilience |
| Bowen Island - Park Development | 16,300,000 | 400,000 | 4,000,000 | 250,000 | 5,800,000 | 250,000 | 10,700,000 | | Capacity, Growth & Ecological Resilience |
| West Creek Wetlands - Park Development | - | - | - | - | 300,000 | 750,000 | 1,050,000 | | Capacity, Growth & Ecological Resilience |
| Burns Bog - Fire Restoration | - | - | - | 500,000 | 1,000,000 | 1,000,000 | 2,500,000 | Planned | Capacity, Growth & Ecological Resilience |
| Fotal Major Projects | \$ 54,564,600 | \$ 3,400,000 | \$10,750,000 | \$ 9,250,000 | \$12,600,000 | \$ 9,500,000 | \$ 45,500,000 | - | |
| Greenways | | | | | | | | | |
| DNR / DSSG Management Plan Implementation | \$ 11,000,000 | | | \$ 3,500,000 | \$ 4,000,000 | \$ - | \$ 10,500,000 | | Connected Network |
| Boundary Bay - Perimeter Trail | 2,000,000 | 1,500,000 | 500,000 | - | - | - | 2,000,000 | | Connected Network |
| Tynehead - Perimeter Trail Phase 2 | 3,500,000 | 1,500,000 | 1,000,000 | - | - | - | 2,500,000 | | Connected Network |
| Burnaby Lake - Glencarin Day Use Area | 3,500,000 | 1,500,000 | 2,000,000 | - | - | - | 3,500,000 | | Connected Network |
| Other Greenways Upgrades | - | - | - | 100,000 | 100,000 | 300,000 | , | Planned | Connected Network |
| Total Greenways | \$ 20,000,000 | \$ 5,000,000 | \$ 6,000,000 | \$ 3,600,000 | \$ 4,100,000 | \$ 300,000 | \$ 19,000,000 | - | |
| Service Facilities | | | | | | | | | |
| Burnaby Lake - Service Yard Building Replacement | \$ - | | • | \$ – | \$ - | \$ 50,000 | | Planned | Facility Replacement & Asset Managemen |
| Capilano New Service Yard | 1,750,000 | 500,000 | 1,000,000 | - | - | - | | Construction | Facility Replacement & Asset Managemen |
| Total Service Facilities | \$ 1,750,000 | \$ 500,000 | \$ 1,000,000 | \$ - | \$ - | \$ 50,000 | \$ 1,550,000 | | |
| Park Development | | | | | | | | | |
| Crippen - Davies Orchard Cabins | \$ 1,925,000 | \$ 50,000 | \$ 500,000 | \$ - | \$ - | \$ - | \$ 550,000 | Construction | Capacity, Growth & Ecological Resilience |
| Campbell Valley - Replacement of Little River Loop Boardwalk | 1,600,000 | 100,000 | 1,500,000 | _ | _ | _ | 1,600,000 | Planned | Facility Replacement & Asset Managemen |
| Pacific Spirit - Beach Access Improvements | - | - | - | 50,000 | 100,000 | 500,000 | 650,000 | Planned | Facility Replacement & Asset Managemen |
| Lynn Headwaters - Parking and Access Improvements | 3,150,000 | 150,000 | - | 500,000 | 2,500,000 | - | 3,150,000 | Planned | Facility Replacement & Asset Managemen |
| Park Amenities and Visitor Experience | 2,500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 2,500,000 | | Capacity, Growth & Ecological Resilience |
| Small Capital Replacement and Development Projects | 12,670,000 | 2,270,000 | 4,550,000 | 1,750,000 | 1,150,000 | 2,950,000 | 12,670,000 | | Facility Replacement & Asset Managemer |
| Total Park Development | | \$ 3,070,000 | | | | \$ 3,950,000 | | Fidiliteu | racinty heplacement & Asset Managemen |
| · | ÷ 21,043,000 | \$ 3,070,000 | ÷ 7,050,000 | ÷ 2,000,000 | ÷ +,230,000 | ÷ 3,330,000 | ÷ 21,120,000 | • | |
| Regional Parks Land Acquisition | ¢ 20 000 000 | 420.000.000 | 647 000 CCC | 64F 000 CCC | 642 F00 C00 | ¢40.000.000 | A | | |
| Regional Parks Land Acquisition | 1 .,, | 1 .,,. | 1 ,,. | 1 -))) | \$13,500,000 | 1 -)) | 1 -))) | - | Land Acquisition |
| Fotal Regional Parks Land Acquisition | . , , | | . , , | | \$13,500,000 | | . , , | - | |
| TOTAL CAPITAL EXPENDITURES | \$118,159,600 | \$31,970,000 | \$41,800,000 | \$30,650,000 | \$34,450,000 | \$32,800,000 | \$ 171,670,000 | - | |

METRO VANCOUVER REGIONAL DISTRICT CAPITAL PORTFOLIO REGIONAL PARKS 2024 CAPITAL BUDGET AND 2024 - 2028 CAPITAL PLAN

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|-----------------|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| CAPITAL FUNDING | | | | | | | | | |

| Reserve | 115,262,600 | 30,673,000 | 40,200,000 | 23,150,000 | 24,325,000 | 13,990,000 | 132,338,000 |
|---------------------------|---------------|--------------|--------------|--------------|--------------|--------------|---------------|
| DCCs | - | - | - | 7,500,000 | 10,125,000 | 18,810,000 | 36,435,000 |
| External Funding - Grants | 2,897,000 | 1,297,000 | 1,600,000 | _ | - | _ | 2,897,000 |
| Total | \$118,159,600 | \$31,970,000 | \$41,800,000 | \$30,650,000 | \$34,450,000 | \$32,800,000 | \$171,670,000 |
| | | | | | | | |

| SUMMARY BY DRIVER | | | | | | | |
|--|---------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Capacity, Growth & Ecological Resilience | \$ 58,989,600 | \$ 3,950,000 | \$11,750,000 | \$ 9,750,000 | \$13,100,000 | \$10,000,000 | \$ 48,550,000 |
| Facility Replacement & Asset Management | 19,170,000 | 3,020,000 | 7,050,000 | 2,300,000 | 3,750,000 | 3,500,000 | 19,620,000 |
| Connected Network | 20,000,000 | 5,000,000 | 6,000,000 | 3,600,000 | 4,100,000 | 300,000 | 19,000,000 |
| Land Acquisition | 20,000,000 | 20,000,000 | 17,000,000 | 15,000,000 | 13,500,000 | 19,000,000 | 84,500,000 |
| Total | \$118,159,600 | \$31,970,000 | \$41,800,000 | \$30,650,000 | \$34,450,000 | \$32,800,000 | \$ 171,670,000 |
| | | | | | | | |



REGIONAL PARKS

Description of Services

Regional Parks is a service function of Metro Vancouver that exists to protect a range of diverse natural landscapes and habitats and to connect residents with nature. The service operates 23 regional parks, 2 ecological conservancy areas, 3 regional park reserves and 5 regional greenways. For over 50 years, Metro Vancouver's regional parks system has protected natural areas for people to connect with nature, reduce stress, and maintain their physical and mental health. While protecting over 13,938 hectares of natural areas throughout the region, regional parks experienced strong visitation in 2022, with records set at 3 regional parks and greenways. Over 14.3 million visits connected people with important protected natural areas.

Regional Parks provides a number of important internal and external services including: planning, operations and maintenance, park development, asset management, land acquisition, natural resource management, regulations and compliance, public communications, ecological stewardship, community development, facility rentals / film permitting, public programming and events.

Strategic Directions and High-Level Goals Supported:

GOALS

Goal 1The region's important natural areas are protected in perpetuity.Image: Goal 2Everyone has the opportunity to benefit from exceptional experiences in nature.Image: Goal 3Regional parks are sustainably managed and well-maintained for the safety of visitors and integrity of ecosystems.Image: Goal 4First Nations have an active role in the planning and stewardship of regional parks.Image: Goal 5Regional parks adapt to change and contribute to regional resilience.

Performance Indicators

| Indicator | Historical and/or Industry Benchmark | 2022 Performance | 2024 performance objective |
|---|--|------------------|-------------------------------|
| Annual number of visits to Regional Parks | 3-year average: 15,708,000 2022: 14,280,000 2021: 16,348,000 2020: 16,497,000 | 14.3M | 15M |
| Annual number of participants in Regional Park public programming | 3-year average: | 39,389 | |
| | 22,896 2022: 39,389 2021: 23,670 2020: 5,629* *impacted due to Covid pandemic | | 40,000 |
| Annual number of volunteer hours through stewardship, partnership and visitor services programs | 3-year average: 11,747 2022: 15,398 2021: 11,606 2020: 8,237 | 15,398 | 20,000 |
| Total hectares of Regional Parks land | 2021: 13,824 ha 2020: 13,743 ha 2019: 13,632 ha | 13,824 ha | 13,950ha |

2024 Key Actions

Goal 1 – The region's important natural areas are protected in perpetuity

- Grow the regional parks system as identified in the *Regional Parks Land Acquisition 2050 Strategy*, including core natural areas, ecological buffer areas, and recreational access areas 2024 Actions
 - Pursue the acquisition of new lands for regional parks and greenways in support of the Regional Parks Land Acquisition 2050 strategy
 - Initiate advanced design for the proposed regional park at Cape Roger Curtis on Bowen Island.
- Promote, support, and collaborate with the Metro Vancouver Regional Parks Foundation to align strategic funding priorities
 - 2024 Actions
 - o Ongoing collaborating with the Metro Vancouver Regional Parks Foundation
 - Work with the Foundation to assist in the development of an *ethical gift acceptance policy*
 - Develop a draft *corporate sponsorship policy* to guide the evaluation or approval of potential relationships with corporate entities
- Explore alternative revenue-generating opportunities that are consistent with the role of Metro Vancouver Regional Parks, including philanthropic endeavors, Development Cost Charges, and grant opportunities with other orders of government

2024 Actions

- Develop a Development Cost Charges program with Finance and ERL to support Regional Parks land acquisition. This will reduce household impact and provide an alternative revenue source for Regional Parks
- Expand the ecological stewardship program to provide more opportunities for people to engage with regional parks

2024 Actions

- Secure additional staff resources to support the stewardship program in the busy fall period
- Implement the Natural Resource Management Framework to enhance and restore ecological integrity in regional parks

2024 Actions

- Advance guidelines for producing Construction Environmental Management Plans to protect regional parks' natural assets
- Continue development of the corporate-wide 10-year Salmon Enhancement Action Plan, including engagement with First Nations and member jurisdictions
- Advance 21 habitat restoration projects across the system
- Support research that helps to broaden understanding of natural resources in regional parks and informs management decisions
 - 2024 Actions
 - Ongoing research work includes wildlife camera studies to understand animal movements (multiple parks), water table monitoring at Langley bog in Derby Reach Regional Park, and Sustainability Innovation Funded research into potential climate impacts on carbon storage and greenhouse gas emissions at Burns Bog Ecological Conservancy Area.

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Goal 2 – Everyone has the opportunity to benefit from exceptional experiences in nature

- Design and develop parks to provide a diversity of opportunities to connect with and be active in nature
 - 2024 Actions
 - Continue Phase 1 park development at Widgeon Marsh Regional Park including partnering with City of Coquitlam for upgrades to Quarry Road
 - Continue implementation of the Grouse Mountain Trail and Amenity Improvement Project, funded by the Investing in Canada Infrastructure Grant Program
 - Continue implementation of the Campbell Valley Management Plan Implementation Project, including the development of new staging areas and greenways and the design of the McLean Pond Day Use Area
 - Complete implementation of Davies Orchard Revitalization Project Phase 1, funded by Community Economic Recovery Infrastructure Program, and open for public use
 - Complete implementation of the Tynehead Perimeter Trail Extension and open for public use
 - Complete design of the Campbell Valley Little River Loop Boardwalk
 - Finalize design and begin implementation of Belcarra South Day Use Area improvements
 - Advance the planning and design of Iona Beach Regional Park through collaboration with Liquid Waste Services and PDE on the Iona Island Wastewater Treatment Plant Replacement Project
 - Initiate advanced design for park development projects including new Bowen Island parkland, təmtəmíx^wtən/Belcarra South Day Use Area, Admiralty Heights Trail Decommissioning
 - Continue to work with the Department of Fisheries and Oceans Capilano Hatchery Strategic Partners Leadership Team Advisory Committee and contribute to the redesign of the Capliano River Hatchery
- Build and upgrade the Metro Vancouver Regional Parks' segments of the Regional Greenways Network

2024 Actions

- Complete advanced design for greenway projects including the Delta Nature Reserve, Delta South Surrey Greenway, Glencarin to Avalon Central Valley Greenway Connection,
- o Construct the Aldergrove South Slopes Greenway and Boundary Bay Park Perimeter Trail
- Collaborate with others to advance completion of the Regional Greenways Network 2024 Actions
 - o Continued implementation of the Regional Greenways Plan 2050
 - Work collaboratively City of Delta on the planning and design of the Delta South Surrey Greenway
 - Collaborate with Bowen Island Municipality to advance the Cross Island Multi Use Pathway (Regional Greenway)
- Update existing financial tools and investigate additional financial mechanisms to support service provision, land acquisition, and operation and maintenance of new parkland 2024 Actions
 - Develop a corporate sponsorship policy to guide regional parks and Metro Vancouver Regional Parks Foundation's access to corporate funding of initiatives and events
- Conduct an annual review of fees and charges 2024 Actions

- Implement financial access program established in 2023
- Utilize social science and other data sources to understand who regional park visitors are, barriers to preventing use of regional parks, and benefits derived from visiting regional parks 2024 Actions
 - Initiate a program to understand who visits regional parks as part of the work to ensure regional parks are a welcoming, inclusive space for all
 - Complete a 2024 visitor survey to better understand visitor use patterns, park use, satisfaction with regional parks, and demographic profile of park visitors
- Develop and implement new approaches to encourage sustainable transportation options to regional parks
 - 2024 Actions
 - Advance sustainable transportation projects to reduce barriers to accessing regional parks
- Provide a range of meaningful and relevant volunteer opportunities that support the mandate of Metro Vancouver Regional Parks
 - 2024 Actions
 - Opportunities include stewardship, community science, educational activities, Beachkeepers, and other events
- Use a range of communications tools from in-park signs to print materials to web-based and other digital resources that considers the full visitor experience cycle that starts before arrival and ends with memories of the visit
 - 2024 Actions
 - Complete project to re-imagine the use of park kiosk communications across the system
- Develop interpretive plans for each regional park that tell the story of the park, incorporating natural and cultural history
 - 2024 Actions
 - Complete the template for park interpretation plans and implement for Campbell Valley Regional Park



Goal 3 – Regional parks are sustainably managed and well-maintained for the safety of visitors and integrity of ecosystems

- Develop and implement a coordinated natural asset management approach to maintain and enhance ecological health
 - 2024 Actions
 - Advance natural asset management in Regional Parks through an in-depth study of natural assets and priority ecosystem services at a pilot location
- Update the asset management and related maintenance program using a continuous improvement approach
 - 2024 Actions
 - Finalize and begin implementation of the Regional Parks Asset Management Plan
- Integrate natural assets into the asset management program
 - 2024 Actions
 - o Integrate natural assets into the Regional Parks Asset Management Plan
- Develop and implement a buildings strategy and other asset strategies
 - 2024 Actions
 - Align the five-year capital budget with the recommendations of the Asset Management Plan and Buildings Strategy and begin implementation

- Test and implement technological tools and other innovate approaches to visitor use management 2024 Actions
 - Complete year three of three-year pilot project to install a real-time parking management platform for select regional parks as a Sustainability Innovation Fund (SIF) project, and identify other potential locations for the use of the technology in future budget years
- Develop and implement operational policies and procedures to manage risks to the safety of staff and visitors, the protection of built and natural assets, or the continuity of service delivery 2024 Actions
 - Implement new corporate Hazard Tree Inventory Management System guided by new Board policy and corporate procedures for managing hazard trees on Metro Vancouver lands
 - Determine appropriate use of both in-house and contracting options for the completion of hazard tree risk assessments and for performing tree mitigation works, including removals
 - \circ $\,$ Develop implementation plan for the Regulations and Compliance Program Review completed 2023 $\,$
 - Procure a new service contract, and renewed pest management plan for the Metro Vancouver Nuisance Mosquito Control program
 - Continue to collaborate with Water Services on recommendations from the Capilano River Use Study and the Cleveland Dam Safety Enhancements project
 - Implement new Hazard Tree Management on MV Lands operation procedures
- Develop and update system and individual park emergency plans to guide staff in preparing for, responding to, and recovering from large scale emergencies
 - 2024 Actions
 - Work to create clear terms of reference for the new corporate emergency management function and the Regional Parks emergency management function to ensure cooperation and consistency is maintained.
- Develop a strategy for managing visitor use that takes into account the effects of visitor use on ecological, physical, and experiential conditions
 - 2024 Actions
 - Initiate a Visitor Use Management Strategy that takes into account the effects of visitor use on ecological, physical, and experiential conditions
- Promote the sharing of expertise between member jurisdictions, First Nations, other orders of government and other work for regional parks
 - 2024 Actions
 - Ongoing work includes the Regional Parks Advisory Committee and the Natural Assets Technical Advisory Group.



Goal 4 – First Nations have an active role in the planning and stewardship of regional parks

- Partner with local First Nations to develop collaborative agreements, such as cultural planning and co-operation agreements
 - 2024 Actions
 - Advance the continued development of cultural planning and cooperative agreements with Katzie and Kwikwetlem First Nations
 - Continue implementation of təmtəmíx^wtən/Belcarra Regional Park's Cultural Planning and Cooperation Agreement and engagement with Tsleil-Waututh Nations

- Work with First Nations to better understand the archaeological potential of lands within regional parks and review and update on an ongoing basis to incorporate new information 2024 Actions
 - Continue to work with Musqueam Archaeology Department on the Multi-Assessment Permit for archaeology work for Pacific Spirit Regional Park and Iona Beach Regional Park
 - Procure Heritage Conservation Act Multi- Assessment Permits for parks with high archaeological potential
- Collaborate with local First Nations on the naming, renaming, or dedication of regional parks and park features to affirm the history and importance of the lands to the Nations

2024 Actions

- Implement renaming of Colony Farm Regional Park to Åéxətəm Regional Park
- Develop cultural recognition plans with First Nations to guide approaches to respect and honour Indigenous Peoples' culture and connection with the land

2024 Actions

- Advance the design and development of interpretive displays in Capilano River Regional Park collaboratively with Squamish First Nation
- Explore opportunities for art, interpretation and programing with Kwantlen First Nation as part of the Campbell Valley Management Plan Implementation project
- Work with First Nations to support guardian programs to advance shared learning and collaborative stewardship of the land

2024 Actions

- Continue working with Tsleil-Waututh Nation to support their guardian program at təmtəmíx^wtən/Belcarra Regional Park
- Provide training opportunities for staff on cultural awareness, including appropriate management of cultural resources

2024 Actions

- Ongoing and new training courses offered for staff including, Indigenous cultural safety, decolonization, and territorial acknowledgements
- Work with First Nations to better understand cultural resources in regional parks, to enable respectful and appropriate protection and management protocols 2024 Actions
 - Continue to work closely with Musqueam First Nation on cultural resource management in Pacific Spirit Regional Park
- Collaborate with First Nations to incorporate Indigenous Knowledge and values into planning, stewardship and other work for regional parks

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Goal 5 – Regional parks adapt to change and contribute to regional resilience

- Develop and implement strategies to reduce Metro Vancouver Regional Parks' greenhouse gas emissions, with a focus on increasing energy efficiency in buildings and electrifying vehicles and equipment
 - 2024 Actions
 - Continue to provide leadership on a regional level, and work with MV Fleet to replace diesel and gasoline powered vehicles and equipment with electric options where possible
- Improve understanding of climate impacts on regional parks ecosystems and infrastructure to inform a climate strategy for regional parks 2024 Actions

- Initiate a vulnerability study for regional parks
- Incorporate climate change considerations into design and development of regional parks infrastructure
 - 2024 Actions
 - Use Surrey Bend Regional park parking lot as a demonstration parking lot that shows paving methods
- Continue to monitor forest health to inform long-term resilience of the forests in regional parks 2024 Actions
 - Monitor forest health and develop new arboriculture management practices to strengthen forest resilience and keep the public safe
- Participate in advancing the proposed Regional Green Infrastructure Network and regional efforts to enhance ecosystem connectivity and ecological health
 - 2024 Actions
 - Continue to collaborate with Regional Planning and participate on the organizing project team
- Participate in implementing *Climate 2050,* the regional climate strategy 2024 Actions
 - Continue to co-lead the implementation of the *Climate 2050 Nature and Ecosystems Roadmap* with Regional Planning

All Goals

- Review and update the process and framework for park management plans
 - Initiate the Burnaby Lake Regional Park management plan
- Apply the Protect-Connect Continuum to provide consistent guidance and support park-level decision-making
 - Initiate development of the Protect-Connect Continuum
- Advance implementation of the Regional Parks Plan

ATTACHMENT 4

Regional Parks

2024 to 2028 – WHAT'S HAPPENING

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

| Initiative | Description | Theme |
|---|---|--|
| 2024 | | |
| Capital Development Program | Complete Phase 1 Widgeon Marsh park development Continued implementation of Campbell Valley Management Plan – Greenway and open space development Implementation Continued implementation of Grouse Mountain Regional Park Trail and Amenity Improvements, funded by Investing in Canada Infrastructure Grant Regional Park at Cape Roger Curtis – detailed design subject to rezoning approval Delta Nature Reserve and Delta/South Surrey Greenway – Trail/Road detailed design and tendering. Construction of Aldergrove South Slopes Greenway Construction of Tynehead Perimeter Trail Extension IWWTP - Iona Beach Regional Park (LWS lead, integrated team support) Complete and begin implementation of Asset Management and Building Strategies Advanced design for future year capital programs | System Stewardship/ Regional Growth/ Environmental Sustainability |
| Land Acquisition | • Pursue park land acquisition opportunities in support of <i>Regional Parks Land Acquisition 2050</i> strategy | Regional Growth |
| Planning/ Outreach and Engagement | Implementation Regional Parks Plan 2050 recommendations Continued engagement with local First Nations on Regional Parks initiatives Implementation of system-wide initiatives to enhance natural areas and connect with local communities Ongoing collaboration with the Metro Vancouver Regional Parks Foundation Implementation of a Development Cost Charge (DCC) program to support Regional Park land acquisition. Regulation and Compliance Review Development of a 10-year salmon action enhancement plan Phased implementation for the electrification of Regional Park Fleet and Equipment | System Stewardship |

| 2025 | | |
|-------------------------------------|--|---|
| Capital Development Program | Phase 1 Construction of Delta South Surrey Greenway and Delta Nature Reserve Completion of Grouse Mountain Regional Park Trail and Amenity Improvements, funded by Investing in Canada Infrastructure Grant Continued implementation of Widgeon Marsh Regional Park Regional Park at Cape Roger Curtis – Construction of Phase I park development Continued implementation of Campbell Valley Management Plan – Greenway and open space development Implementation Continued implementation of Delta Nature Reserve and Delta/South Surrey Greenway IWWTP - Iona Beach Regional Park (LWS lead, integrated team support) | System Stewardship Regional Growth |
| Land Acquisition | Pursue park land acquisition opportunities in support of <i>Regional Parks Land Acquisition 2050</i> strategies | Regional Growth |
| Planning/Outreach and Engagement | Regional Parks Plan 2050 Implementation Explore opportunities for working with local First Nations on Regional Parks initiatives Implementation of system-wide initiatives to enhance natural areas and connect with local communities Phased implementation for the electrification of Regional Park Fleet and Equipment | System Stewardship |

| 2026 | | |
|-------------------------------------|---|---|
| Capital Development Program | Completion of Davies Orchard Revitalization at Crippen Regional Park. Completion of Belcarra South Picnic Area development at Belcarra Regional Park Continued implementation of Widgeon Marsh Regional Park Regional Park at Cape Roger Curtis – Detailed design of Phase II park development Continued implementation of Campbell Valley Management Plan – Greenway and open space development Implementation Continued implementation of Delta Nature Reserve and Delta/South Surrey Greenway IWWTP - Iona Beach Regional Park (LWS lead, integrated team support) Begin Implementation of Lynn Headwaters Park Entry and Open Space enhancements | System Stewardship Regional Growth |
| Land Acquisition | Pursue park land acquisition opportunities in support of <i>Regional Parks Land Acquisition 2050</i> strategy | Regional Growth |
| Planning/Outreach and Engagement | Explore opportunities for working with local First Nations on Regional Parks initiatives Implementation of system-wide initiatives to enhance natural areas and connect with local communities | System Stewardship |

| 2027 | | |
|-------------------------------------|---|---|
| Capital Development Program | Initiate design of Codd Wetland Regional Park Pacific Spirit Regional Park Beach Access Improvements Advanced design for future year capital programs Continued implementation of Widgeon Marsh Regional Park Regional Park at Cape Roger Curtis – Implementation of Phase II park development Continued implementation of Campbell Valley Management Plan – Greenway and open space development Implementation Continued implementation of Delta Nature Reserve and Delta/South Surrey Greenway IWWTP - Iona Beach Regional Park (LWS lead, integrated team support) Complete Implementation of Lynn Headwaters Park Entry and Open Space enhancements | System Stewardship Regional Growth |
| Land Acquisition | Pursue park land acquisition opportunities in support of Regional Parks Land Acquisition 2050 strategy | Regional Growth |
| Planning/Outreach and Engagement | Explore opportunities for working with local First Nations on Regional Parks initiatives Implementation of system-wide initiatives to enhance natural areas and connect with local communities | System Stewardship |

| 2028 | | |
|--------------------------------------|--|---|
| Capital Development Program | Major asset management replacement and deferred capital maintenance initiative implementation Pacific Spirit Beach and Trail Improvements Park Amenity and Visitor Experience Improvements Advanced design for future year capital programs Pacific Spirit Regional Park Beach Access Improvements Continued implementation of Widgeon Marsh Regional Park Regional Park at Cape Roger Curtis – Implementation of Phase III park development Continued implementation of Campbell Valley Management Plan – Greenway and open space development Implementation IWWTP - Iona Beach Regional Park (LWS lead, integrated team support) | System Stewardship Regional Growth |
| Land Acquisition | Pursue park land acquisition opportunities in support of Regional Parks Land Acquisition 2050 strategy. | Regional Growth |
| Planning/ Outreach and Engagement | Explore opportunities for working with local First Nations on Regional Parks initiatives Implementation of system-wide initiatives to enhance natural areas and connect with local communities | System Stewardship |

ATTACHMENT 5

METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - REGIONAL PARKS

OPERATING RESERVES

| | 2023 | 2024 | | | | 2024 | 2025 | 2026 | 2027 | 2028 |
|----------------|-----------------|--------------|--------------|-------------|-----------|--------------|-----------------|-----------|--------------|--------------|
| | ENDING | OPENING | | | | ENDING | ENDING | ENDING | ENDING | ENDING |
| | BALANCE | BALANCE | CONTRIBUTION | WITHDRAWALS | INTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| Regional Parks | \$ 1,892,305 \$ | \$ 1,892,305 | \$ – | \$ – | \$ 47,308 | \$ 1,939,613 | \$ 1,988,103 \$ | 2,037,806 | \$ 2,088,751 | \$ 2,140,970 |

DISCRETIONARY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | CONTRIBUTION | WITHDRAWALS | INTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING BALANCE | 2028 ENDING BALANCE |
|--------------------------------|---------------------------|----------------------------|--------------|----------------|-----------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Regional Parks General Reserve | \$ 2,515,568 | \$ 2,515,568 | \$ 150,000 | \$ (2,650,000) | \$ 31,639 | \$ 47,207 | \$ 250,887 | \$ 459,659 | \$ 673,650 | \$ 892,991 |

STATUTORY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | CONTRIBUTION | WITHDRAWALS | INTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING BALANCE | 2028 ENDING BALANCE |
|--|---------------------------|----------------------------|---------------|-----------------|------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Regional Parks | | | | | | | | | | |
| Regional Parks Infrastructure Reserve | \$ 1,523,628 | \$ 1,523,628 | \$ 8,432,000 | \$ (9,794,189) | \$ 21,063 | \$ 182,502 | \$ 329,347 | \$ 283,138 | \$ 165,516 | \$ 236,008 |
| Regional Parkland Acquisition Reserve Fund | 6,922,734 | 6,922,734 | - | (6,000,000) | 98,068 | 1,020,802 | 1,046,322 | 1,072,480 | 86,792 | 88,962 |
| Regional Parkland Acquisition and Development Reserve Fund | 5,161,065 | 5,161,065 | 27,570,000 | (22,175,000) | 196,464 | 10,752,529 | 157,217 | 1,173,647 | 1,962,363 | 3,125,172 |
| Delta Airpark Reserve | 171,873 | 171,873 | 23,000 | - | 4,584 | 199,457 | 227,731 | 256,712 | 286,417 | 316,865 |
| Regional Parks Legacy Fund | 2,697,304 | 2,697,304 | - | (60,000) | 66,683 | 2,703,987 | 2,710,837 | 2,717,858 | 2,725,054 | 2,732,430 |
| Total | \$16,476,604 | \$ 16,476,604 | \$ 36,025,000 | \$ (38,029,189) | \$ 386,862 | \$ 14,859,277 | \$ 4,471,454 | \$ 5,503,835 | \$ 5,226,142 | \$ 6,499,437 |



| Subject: | 2024 - 2028 Financial Plan – Regional Planning | |
|----------|--|-------------------------------|
| Date: | September 26, 2023 | Meeting Date: October 6, 2023 |
| From: | Jonathan Cote, Deputy General Manager, Regional Planning and Housing Development, Regional Planning and Housing Services | |
| То: | Regional Planning Committee | |

RECOMMENDATION

That the Regional Planning Committee endorse the 2024 - 2028 Financial Plan for Regional Planning as presented in the report dated September 26, 2023, titled "2024 - 2028 Financial Plan – Regional Planning", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

Regional Planning supports planning throughout the region including for utilities, member jurisdictions, TransLink and other regional agencies through the provision of projections and data, policy research, convening stakeholders on issues of regional interest, providing a planning resource and leadership and innovation. The team provides a long range, cross-boundary, interdisciplinary perspective, and the main function is developing, administering, monitoring and stewarding *Metro 2050*, the regional growth strategy.

The 2024 - 2028 Financial Plan for Regional Planning reflects an increase in Land Use Policy projects and work relating to *Metro 2050* while continuing to reduce long-term reliance on reserve funds to smooth the tax requisition rate. Over the next five years, operating programs are to increase by a total of \$13,699, or an average of 0.1% per year.

PURPOSE

To present the 2024 - 2028 Financial Plan for Regional Planning for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions
- Reduced total capital cash flow of roughly \$655M between 2024 and 2027 for the utilities
- Reduction of household impact, \$13 less than previously projected for 2024

This report focuses on the Regional Planning Service and presents the 2024 provisional annual budget and the updated five-year plan for the years 2024 to 2028 for Committee consideration.

REGIONAL PLANNING

The Regional Planning service at the Metro Vancouver Regional District (MVRD) represent functions that include 22 members and provides projections, data and policy research in support of a prosperous, resilient and livable region. The primary responsibility is to develop, administer, implement and monitor *Metro 2050*, the regional growth strategy. There are three program areas in the Regional Planning Division: Regional Land Use Policy, Planning Analytics and Implementation Services.

The Regional Planning initiatives planned over the next five years are guided by direction provided in the *Board Strategic Plan*, specifically:

- Work closely with member jurisdictions, TransLink, First Nations, the Province and other regional agencies to advance Metro 2050's goals, strategies, and policy actions.
- Develop policy models, including best practice guidance to achieve more housing (specifically more affordable rental housing) using tools like inclusionary policies and zoning.
- Support member jurisdictions to develop and implement effective policies that will help the region achieve its targets to: ensure 15% of new housing in Urban Centres and along transit corridors is affordable rental; protect 50% of the land base for nature and achieve 40% tree canopy cover within the Urban Containment Boundary.
- Undertake innovative research that supports the overarching goals in Metro 2050, including projects such as a Regional Parking Study, Housing and Transportation Cost Burden Update, Regional Food System Strategy Update, and Growth Management and Investment Model.
- Work with member jurisdictions to protect Industrial and Employment lands as per the Regional Industrial Lands Strategy.
- Continue to refine and update the population, housing and employment and land use projections and their expected geographic distributions to support the long range planning of Utilities, TransLink and member jurisdictions.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plan for Regional Planning is presented in this report. Within the Regional Planning Work Plan, six performance indicators have been developed and are being tracked. These include:

- Percentage of residential growth occurring within the Urban Containment Boundary;
- Percentage of new dwelling units located within Urban Centres;
- Percentage of residential growth located along Transit Corridors;
- Number of hectares of land with the Metro 2050 Agricultural Designation;
- Number of hectares of land with the *Metro 2050* Industrial Designation; and
- Number of hectares of land with the *Metro 2050* Employment Designation.

The trend in these performance measures suggests that the region is on target with regards to meeting the goals laid out in the regional growth strategy. *Metro 2050* sets a target to contain 98% of growth within the Urban Containment Boundary. Since 2011, this target has been met. *Metro 2050* also strives to direct 40% of dwelling unit growth and 50% of employment growth to a network of 26 Urban Centres. Between 2011 and 2016, 39% of dwelling unit growth occurred in Urban Centres. Data will be updated following the release and analysis of the 2021 Census.

CONTINUOUS IMPROVEMENT

With the recent adoption of *Metro 2050* there is a significant opportunity to advance work on public policy projects to help advance regional goals related to housing and climate action. Projects identified in the upcoming work plans will help advance the region's work in the following areas:

- Climate action and resilience
- Increasing transit-oriented affordable housing
- Protection of natural areas

Further improvement initiatives include:

- The development of a new Regional Planning Share Point site dedicated to sharing planning information among member jurisdictions and other regional organizations. The intent of the site is to facilitate greater collaboration and knowledge sharing among planning teams across the region.
- Reducing dependencies on consultants for data analytics and modeling work. The Planning Analytics teams is exploring new approaches to build internal capacity to accomplish updates on ongoing data and modeling work that will reduce the reliance upon external consultants.
- Developing closer alignment between Housing Policy and Planning and Regional Planning teams. Currently these two policy teams work in separate divisions, but to better support the housing strategies included in Goal 4 of *Metro 2050* there is a need to have these teams work and collaborate more closely together.

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

Regional Planning is also guided by direction provided in *Metro 2050*, specifically to support the goals, strategies and policy actions in the plan to:

- Goal 1 Create a compact urban area
- Goal 2 Support a sustainable economy
- Goal 3 Protect the environment, address climate change, and respond to natural hazards
- Goal 4 Provide diverse and affordable housing choices
- Goal 5 Support sustainable transportation choices

Each Metro Vancouver function has an Annual Work Plan that includes strategic directions, performance indicators and key actions to guide the work for the coming year. Each function also has a "What's Happening" summary that highlights the program highlights for the next five years. The 2024 - 2028 Regional Planning Financial Plan is included as Attachment 1. The 2024 Annual Work Plan for Regional Planning presented in this report is included in Attachment 2 and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 3.

Operating Budget Highlights

The Regional Planning 2024 operating budget is proposed to decrease by \$2,852 for a total budget of \$5,212,977.

With the adoption of *Metro 2050* the Regional Planning Team will be transitioning to focusing on projects related to the implementation of *Metro 2050* and other associated research. The 2024 operating budget includes the following key actions:

- Regional Parking Strategy
- Regional Food System Strategy Update
- Housing and Transportation Cost Burden Study Update
- Climate and Natural Hazards Mitigation Research
- Land Use Resilience Best Practices Guide Floods
- Urban Centres and FTDAs Policy and Target Review
- Regional Industrial Lands Strategy Implementation
- Regional Green Infrastructure Network Guidelines & Financing Options
- Supporting Transportation Corridor Studies in the Region
- Preparing Regional Growth Strategy Implementation Tools and Guidelines
- Land Use Model Scenario Development
- Extended Reality (XR) Modelling Platform for Metro Vancouver
- Projections Model Update
- Census Data Custom Runs
- Walkability Index Update

Over the next five years, expenditures are increasing by a total of \$13,699, or an average of 0.1% per year.

Reserve Funds

The financial plan for Regional Planning includes the utilization of reserves to annually fund one-time initiatives. This is consistent with the *Operating, Statutory and Discretionary Reserves Policy*. The 2024 - 2028 Projected Reserves for Regional Planning are included in Attachment 4.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.
- The Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

 That the Regional Planning Committee endorse the 2024 - 2028 Financial Plan for Regional Planning as presented in the report dated September 26, 2023, titled "2024 - 2028 Financial Plan - Regional Planning", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration. That the Regional Planning Committee make recommendations and endorse an amended 2024

 2028 Financial Plan for Regional Planning and forward the amended Financial Plan to the Finance Committee on October 12, 2023 and to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the MVRD Board endorses the 2024 - 2028 Financial Plan for Regional Planning, as presented under Alternative 1, in 2024 the Regional Planning requisition will increase by \$316,952 (7.7%) for a total requisition of \$4,447,977, although the overall Regional Planning budget is decreasing slightly. This is mainly due to a reduction in the use of reserve funding to support the Regional Planning budget.

Over the term of the five-year plan, the annual Regional Planning requisition is projected to increase by an average of \$147,701 per year (3.4%) to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years for the Regional Planning function will remain relatively stable at \$4 from 2024 to 2028.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-Year Financial Plan for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the MVRD Financial Plan.

SUMMARY / CONCLUSION

The Regional Planning 2024 Budget and Five-Year Financial Plan has been prepared following direction received at the April 19, 2023 Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Regional Planning.

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

Staff recommends endorsing the 2024 - 2028 Financial Plan and Annual Work Plan for Regional Planning as presented under Alternative one.

ATTACHMENTS

- 1. 2024 2028 Financial Plan
- 2. 2024 Work Plan
- 3. 2024 2028 "What's Happening"
- 4. 2024 2028 Projected Reserves Regional Planning
- 5. Presentation re: 2024-2028 Financial Plan Regional Planning

5.2 ATTACHMENT 1

METRO VANCOUVER REGIONAL DISTRICT REGIONAL PLANNING 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|---|----------------|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| | | | | | | | | | | | |
| REVENUES | | | | | | | | | | | |
| Metro Vancouver Regional District Requisitions | \$ 4,131,025 | \$ 4,447,977 | 7.7% | \$ 4,727,823 | 6.3% | \$ 4,739,172 | 0.2% | \$ 4,777,435 | 0.8% | \$ 4,869,528 | 1.9% |
| Transfer from Sustainability Innovation Fund Reserves | 599,804 | 400,000 | | - | | - | | - | | - | |
| Transfer from Reserves | 485,000 | 365,000 | | 270,000 | | 310,000 | | 360,000 | | 360,000 | |
| TOTAL REVENUES | \$ 5,215,829 | \$ 5,212,977 | (0.1%) | \$ 4,997,823 | (4.1%) | \$ 5,049,172 | 1.0% | \$ 5,137,435 | 1.7% | \$ 5,229,528 | 1.8% |
| EXPENDITURES | | | | | | | | | | | |
| EXPENDITORES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Implementation Services | \$ 744,616 | \$ 707,293 | | \$ 725,272 | | \$ 743,960 | | \$ 762,883 | | \$ 782,519 | |
| Regional Land Use Policy | 1,612,264 | 1,796,784 | | 1,831,400 | | 1,873,467 | | 1,910,888 | | 1,948,368 | |
| Planning Analytics | 1,000,622 | 1,049,783 | | 1,155,805 | | 1,186,691 | | 1,211,516 | | 1,241,840 | |
| Regional Sustainability Initiatives | 599,804 | 400,000 | | - | | - | | - | | - | |
| Administration and Department Support | 846,550 | 789,976 | | 800,933 | | 822,646 | | 844,224 | | 866,325 | |
| | 4,803,856 | 4,743,836 | (1.2%) | 4,513,410 | (4.9%) | 4,626,764 | 2.5% | 4,729,511 | 2.2% | 4,839,052 | 2.3% |
| Communications Program | 45,000 | 45,000 | 0.0% | 45,000 | 0.0% | 45,000 | 0.0% | 45,000 | 0.0% | 45,000 | 0.0% |
| Allocation of Centralized Support Costs | 366,973 | 424,141 | 15.6% | 439,413 | 3.6% | 377,408 | (14.1%) | 362,924 | (3.8%) | 345,476 | (4.8%) |
| TOTAL EXPENDITURES | \$ 5,215,829 | \$ 5,212,977 | (0.1%) | \$ 4,997,823 | (4.1%) | \$ 5,049,172 | 1.0% | \$ 5,137,435 | 1.7% | \$ 5,229,528 | 1.8% |



REGIONAL PLANNING

Description of Services

Regional Planning is a Metro Vancouver Regional District function established to provide data, policy research, convene on issues of regional interest, and support local planning in support of a prosperous, resilient and livable region. The primary responsibility is to develop, administer, implement and monitor *Metro 2050*, the Regional Growth Strategy. There are three programs within the Regional Planning Division: Regional Land Use Policy, Implementation Services and Planning Analytics.

Regional Land Use Policy

Regional Land Use Policy is primarily responsible for developing policy for the Regional Growth Strategy, providing policy interpretation and support for Implementation Services (local level interactions and amendments) and undertaking applied policy research, and development of best practices in collaboration with member jurisdictions, the Province, TransLink and other agencies. There are a number of portfolios within this group including: complete communities; industrial and employment lands; structuring growth – centres and corridors; affordable and diverse housing, particularly near transit; protecting the environment; supporting agriculture; and providing mobility choices.

Planning Analytics

Planning Analytics collects and analyzes data for Regional Planning as well as other regional functions including utilities and transportation planning. Primary roles include the provision of population, dwelling unit and employment projections, *Metro 2050* performance monitoring, and the completion of numerous regional inventories.

Implementation Services

Implementation Services prepares, maintains and assists with implementing Regional Growth Strategy Implementation Guidelines. It has the core function of building strong relationships with member jurisdictions, First Nations, the Province, TransLink and other community organizations as it relates to Regional Planning activities. This group also leads the administration of the Regional Growth Strategy including proposed amendments and Regional Context Statements and coordinates corporation wide responses to environmental assessments and other large capital projects that impact Metro Vancouver interests and assets.

Strategic Directions and High-Level Goals Supported

Board Strategic Plan

- Continue to develop and implement effective and adaptive tools and processes for achieving the goals and implementing the policy actions of *Metro 2050*;
- Continue to support the efforts of members in developing equitable, complete, livable and resilient communities;
- Develop policies, plans, tools and creative solutions for managing competing demands on land in the region;
- Advocate for the merits of integrating regional land use and transportation planning; and
- Support integration of the Regional Growth Strategy with other long range planning activities within the region.

Metro 2050

- Goal 1 Create a compact urban area
- Goal 2 Support a sustainable economy
- Goal 3 Protect the environment, address climate change, and respond to natural hazards
- Goal 4 Provide diverse and affordable housing choices
- Goal 5 Support sustainable transportation choices

Goals

- Ensure regional planning policies are prepared and monitored with a focus towards a system of equity, fairness, access and affordability.
- Build modelling and data systems to support regional planning activities and policy creation/monitoring.
- Ensure an equitable and resilient region through responsible growth and financial sustainability
- Protect agricultural lands and the environment
- Build strong connections with neighbouring regional districts and other regional agencies to support infrastructure investment for responsible growth.

| Indicator | Historical and/or industry | Current Performance | 2024 Performance Objective |
|--|---|--|----------------------------------|
| Percentage of residential growth occurring within the Urban Containment Boundary (UCB) | 2011 baseline: 97% 2014 review: 98% 2015 review: 99% | 98% | 98% |
| Percentage of new dwelling units located within Urban Centres | 2011 target 40% of growth to Centres 2011 baseline: 26% located in Centres | 39% of growth to Centres; 28% located in Centres | 40% |
| Number of hectares of land with an Agricultural regional land use designation | 2011 baseline: 55,313 | 55,162 | No net loss |
| Number of hectares of land with an Industrial regional land use designation | 2011 baseline: 10,195 | 10,189 | No net loss |
| Number of hectares of land with a Mixed Employment regional land use designation | 2011 baseline: 3,415 | 3,538 | No net loss |

Performance Indicators

2024 Key Actions

Regional Land Use Policy

- Complete Urban Centres and FTDAs Policy and Target Review
- Regional Industrial Lands Strategy Implementation
- Regional Green Infrastructure Network Guidelines & Financing Options
- Update the Housing and Transportation Cost Burden Study
- Regional Food System Strategy Update
- Regional Parking Strategy
- Climate and Natural Hazards Mitigation Research
- Land Use Resilience Best Practices Guide Floods

Implementation Services

- Supporting Transportation Corridor Studies in the Region
- Preparing Regional Growth Strategy Implementation Tools and Guidelines

Planning Analytics

- Land Use Model Scenario Development
- Extended Reality (XR) Modelling Platform for Metro Vancouver
- Projections Model Update
- Census Data Custom Runs
- Walkability Index Update

Regional Planning

2024 to 2028 - WHAT'S HAPPENING

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

| Initiative | Description | Theme |
|----------------------|---|------------------------|
| 2024 | | |
| Metro 2050 | Prepare Implementation Guidelines and data tools to | Regional Growth |
| Implementation Tools | assist member jurisdictions. | |
| Regional Food System | Begin work to update Regional Food System Strategy to | Regional Growth |
| Strategy Update | address emerging challenges to the regions food system | |
| | and increasing food insecurity. | |
| Climate and Natural | Conduct policy research to determine how multi-hazard | Regional Growth, |
| Hazards Mitigation | mapping could be used to inform regional land use | Environmental |
| Research | policy. | Sustainability |
| Housing and | Complete a five-year update to this critical study on | Regional Growth |
| Transportation Cost | transportation and housing costs for a more complete | |
| Burden Study Update | picture of affordability. | |
| Walkability Index | Complete a five-year update to Walkability Index to | Regional Growth |
| Update | better understand how sustainable transportation | _ |
| | options are changing and provide members with | |
| | updated policy tool to support municipal land use and | |
| | transportation decision making. | |
| Regional Parking | Analyze regional parking utilization rates within different | Regional Growth |
| Strategy | urban forms | _ |
| Urban Centres and | Review and update Urban Centre and FTDA policy and | Regional Growth |
| FTDA Targets Update | targets within the Regional Growth Strategy. | _ |
| Regional Green | Research and prepare guidelines for the development | Regional Growth, |
| Infrastructure | and enhancement of the Regional Green Infrastructure | Environmental |
| Guidelines | Network | Sustainability |
| Census Bulletins and | Prepare bulletins outlining information/data from the | Regional Growth |
| Custom Data | most recent census and request custom data runs to | _ |
| | assist with analyzing RGS targets. | |
| Frequent Transit | Undertake a land use and transportation study for a | Regional Growth |
| Corridor Study | frequent transit corridor in the region to support | _ |
| | member jurisdiction initiatives related to planning and | |
| | transportation. | |
| Economic and | Update the Economic Impact and Future Importance of | Regional Growth |
| Employment | Industrial Lands report prepared in 2019 for the Regional | _ |
| Contribution of | Industrial Lands Strategy | |
| Industrial Lands | | |
| Activities | | |
| Prepare a regional | Study the composition and changing nature of the | Regional Growth |
| Labour Force Survey | region's labour force | |
| 2025 | | |
| Growth Management | Phase 2 – Integrate the Demographics Component | Regional Growth, |
| and Investment | to support updated population, dwelling unit, | Financial |
| Model | employment and land use projections. | Sustainability |

| Urban Forestry | Undertake further work related to zoning tools and | Regional Growth, |
|---|--|---|
| Implementation Tools | urban forest support to support municipalities towards achieving regional urban tree canopy targets. | Environmental Sustainability |
| Census Bulletins | Prepare bulletins outlining information/data from the most recent census | Regional Growth |
| Regional Ecosystem Connectivity Evaluation Climate Scenarios | Exploring the impacts of a changing climate on the region's ecosystems | Climate Change, Environmental Sustainability |
| Soil Tracking on Agricultural Lands | Exploring options for developing a pilot project to track soil movement and deposition of fill on the region's agricultural lands | Environmental Sustainability |
| Land Use Resilience Best Practice - Flooding | Advance the hazard, risk and vulnerability work to explore flood resilience practices and options, and recommend new approaches for the region | Environmental Sustainability |
| 2026 | | |
| Regional Employment Survey | Complete survey work to understand current trends and land use | Regional Growth |
| Frequent Transit Corridor Study | Undertake a land use and transportation study for a frequent transit corridor in the region to support member jurisdiction initiatives related to planning and transportation. | Regional Growth |
| Regional Industrial Lands Inventory | Complete Regional Inventory of Industrial Lands in the region. | Regional Growth |
| Office in Centres Inventory | 4-year update of the Office in Urban Centres Inventory and report | Regional Growth |
| 2027 | 1 | I |
| 0 | | |
| Growth Management and Investment Model | Develop data tool and calibrate information. Large component of this phase will include survey and demographic work. | Regional Growth |
| Agricultural Land Use Inventory Update | 5-year update of the region's Agricultural Land Use Inventory in partnership with the Ministry of Agriculture | Regional Growth |
| Ecosystem Protection and Connectivity | Further work that supports the Regional Green Infrastructure Network and the Sensitive Ecosystem Inventory | Regional Growth |
| Land Use and GHG Emissions Study | Explore the connection between GHG emissions and land use densities and form | Regional Growth, Environmental Sustainability |
| 2028 | | |
| Frequent Transit Corridor Study | Undertake a land use and transportation study for a frequent transit corridor in the region to support member jurisdictions and TransLink. | Regional Growth |
| Growth Management and Investment Model | Develop data tool and calibrate information. Begin to prepare scenario modelling for the region. | Regional Growth |

METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - REGIONAL PLANNING

OPERATING RESERVES

| | | 2023 | 2 | 2024 | | | | | 2024 | | 2025 | 2026 | 2027 | 2028 |
|-------------------|----|---------|----|---------|-----------|-----|-------------|----------------|---------|-----|---------------|---------|------------|---------------|
| | E | NDING | OP | ENING | | | | | ENDING | | ENDING | ENDING | ENDING | ENDING |
| | B/ | ALANCE | BA | LANCE | CONTRIBUT | ION | WITHDRAWALS | INTEREST | BALANCE | | BALANCE | BALANCE | BALANCE | BALANCE |
| Regional Planning | \$ | 218,206 | \$ | 218,206 | \$ | - | \$ – | \$ 5,455 \$ | 223,6 | 561 | \$ 229,253 \$ | 234,984 | \$ 240,859 | \$ 246,880 |

DISCRETIONARY RESERVES

| | 2023 | 2024 | | | 2024 | 2025 | 2026 | 2027 | 2028 |
|-----------------------------------|--------------|--------------|--------------------|--------------------|----------------|--------------|-----------------|--------------|-----------|
| | ENDING | OPENING | | | ENDING | ENDING | ENDING | ENDING | ENDING |
| | BALANCE | BALANCE | CONTRIBUTION WITHE | DRAWALS INTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| Regional Planning General Reserve | \$ 2,913,475 | \$ 2,913,475 | \$ - \$ | (365,000) \$ 68,27 | 4 \$ 2,616,749 | \$ 2,408,793 | \$ 2,155,138 \$ | 1,844,516 \$ | 1,526,129 |



| Subject: | 2024 - 2028 Financial Plan – Water Services | |
|----------|---|--------------------------------|
| Date: | October 4, 2023 | Meeting Date: October 11, 2023 |
| From: | Marilyn Towill, General Manager, Water Services | |
| То: | Water Committee | |

RECOMMENDATION

That the Water Committee endorse the 2024 - 2028 Financial Plan for Water Services as presented in the report dated October 4, 2023, titled "2024 - 2028 Financial Plan – Water Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

In 2024, the average water rate will increase by 7.6% to \$0.9333 per cubic metre (/m3) (2023 average water rate: \$0.8676/m3). This represents a \$12 (6.7%) increase in the cost to the average regional household to \$189, which is less than the \$192 forecasted for 2024 in the prior year budget.

Metro Vancouver, through the GVWD, continues to provide a reliable source of uninterrupted, high quality drinking water to support the growing region and its economic prosperity. Growing demand for drinking water, system resilience, and infrastructure maintenance are met through robust, proactive capital and operating programs supported by long term planning and monitoring.

PURPOSE

To present the 2024 - 2028 Financial Plan for Water Services for consideration by the Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities
- Reduction of household impact, \$13 less than that previously projected for 2024

This report focuses on the Water Services function and presents the 2024 annual budget and the updated five-year plan for the years 2024 to 2028 for Committee consideration. The updated plan has resulted in a revision of the household impact from Water Services as follows:

| Item | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|--|-------|-------|-------|-------|-------|-------|
| 2023 Household Impact target | \$177 | \$191 | \$215 | \$240 | \$270 | |
| 2024 Household Impact target | | \$189 | \$203 | \$214 | \$219 | \$223 |
| Year-over-year % increase for Water Services | | 7% | 7% | 5% | 2% | 2% |
| Corporate target from Financial Plan Task Force | | 12% | 11% | 5% | 5% | |

WATER SERVICES PROGRAM

The Water Services function comprises 18 member municipalities, one electoral area and one treaty First Nation within Metro Vancouver, serving a population of approximately 2.8 million. Source water is collected from within three protected mountain water supply areas covering approximately 60,000 hectares. The system itself comprises six mountain storage lakes, five water supply dams, two major water treatment facilities, over 520 km of large diameter transmission mains, 27 storage reservoirs, 19 pump stations, and eight rechlorination stations. The system treats and distributes an average of 1.0 billion litres of drinking water per day with summer time peak demands increasing to over 1.5 billion litres per day.

Water Services initiatives planned over the next five years are guided by direction provided in the 2022-2026 Board Strategic Plan and in the 2011 Drinking Water Management Plan, specifically:

2022-2026 Board Strategic Plan strategic priorities:

- Ensure **financial sustainability and regional affordability** by completing a long-term financial plan, which will ensure the long-term serviceability of its assets and funding sources.
- Take **climate action** to mitigate unavoidable climate impacts while reducing regional greenhouse gas emissions.
- Continue to invest and adapt in **resilient services and infrastructure** to ensure local communities and organizations can prepare, avoid, absorb, recover and adapt to the effects of shocks and stresses in an efficient manner.
- Continue **reconciliation** efforts by building and strengthening respectful and reciprocal relationships with local First Nations.

Drinking Water Management Plan:

- Provide clean, safe drinking water
- Ensure the sustainable use of water resources
- Ensure the efficient supply of water

The region's population continues to grow and with it total water demand. Anticipated impacts of climate change will also put pressure on the regional water supply. Metro Vancouver is taking a two-pronged approach to planning for the future: the first is to continue promoting water conservation through various plans and campaigns to reduce demand for drinking water. The second is ensuring adequate water supply and appropriate infrastructure are in place.

WORK PLAN PERFORMANCE INDICATORS

High level performance indicators have been developed across the organization to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plans for Water Services are presented in this report. Within the Water Services Work Plans, 33 performance indicators have been developed and are being tracked. These include:

- Peak per capita water use
- Progress on major and minor capital projects
- Volume of water treated and delivered
- Energy use per unit volume of water treated
- Compliance with treatment operating permit criteria
- Water transmission system leak repairs
- Water samples collected and analyzed
- Continuous improvement dollar savings

CONTINUOUS IMPROVEMENT

Water Services continues to explore, evaluate and implement continuous improvement opportunities. The department identified numerous opportunities in 2022 and has made progress on many including:

- Completed the earthquake early warning system pilot. Staff will now receive an early warning of any impending significant earthquake, be able to take action to stay safe and mitigate possible system impacts
- Initiated updates to the regional water transmission model to improve growth and resilience planning as well as providing short term forecasting to support daily operations and maintenance
- Moved pipe storage from the U.S. to a local space resulting in \$500,000 in cost savings in 2022 with \$1M more expected in 2023. Resiliency is improved with repair materials being readily available
- Completed construction on the Watershed Centre, a multiuse public educational and office building, in the Lower Seymour Conservation Reserve in summer 2023
- Worked with industry experts to adopt new technology that uses snow survey real-time data resulting in more accurate water supply planning and reduced GHG emissions from helicopter flights
- Finalized the Quality Management System for Drinking Water, which facilitates ongoing reviews and improvements for all aspects of drinking water system operation, and completed the inaugural audit which identified 24 improvement opportunities.
- Replaced 2.6 km of Central Park Main which had the highest leakage rate of all Metro's water mains.

For 2024, some opportunities for continuous improvement have been carried forward and new ones have been added including:

- Enhance water quality monitoring throughout the transmission system by installing improved in-system reservoir sampling equipment and remote data monitoring of re-chlorination stations.
- Initiate the development of a Facility Master Plan to prioritize projects and upgrades within the water system based on updated modelling analysis from growth.
- Continue to incorporate Lean Six Sigma methodology to standardize business practices. For example, reduce lost time incidents and meet AWWA Guidelines for reservoir cleaning and inspection through monthly reporting and investigation.
- Continue formalizing a valve exercising and inspection program and improve documentation using the asset and work management system
- Developing and implementing an ISO 14001 compliant Environmental Management System to improve environmental performance resulting in reduced environmental and regulatory risks and fewer reportable environmental incidents

2024 BUDGET AND 2024 - 2028 FINANCIAL PLAN

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

• Financial Sustainability and Regional Affordability

- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

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

The 2024 - 2028 Water Services Financial Plan is included as Attachment 1. The 2024 Annual Work Plans for Water Services presented in this report are included in Attachment 3 and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 4.

Operating Budget Highlights

The Water Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). In the previous budget cycle it was proposed that the budget would increase by \$34.2 million to \$376.7 million for 2024. It is now proposed to increase by \$28.4 million in 2024 for a total budget of \$374.5 million (Attachment 1). This increase can be attributed to core operating fund increases (\$9.4 million), increases to allocated programs (\$3.1 million), increases to contributions to capital (\$16.7 million) and decreases to debt servicing (-\$0.8 million).

The 2024 financial plan includes increased water sales revenues of approximately \$29.2 million, based on higher summer rates (\$1.2537m3) for June through September and the lower rate of \$0.7119/m3 applying for the rest of the year (equating to an overall average water rate of \$0.9333/m3 compared to 2023 forecast for 2024 of \$0.9456/m3). The differential rates are intended to incentivize conservation efforts in the region and to assist in reducing long term pressures on the Capital Budget.

The 2024 operating budget includes the following key actions:

- Operationalize the new interim Dam Safety Policy to standardize Dam Safety regulatory compliance activities for all departments
- Continue coordination of interagency projects such as the new DFO water supply intake at Capilano Reservoir for the redeveloped hatchery
- Finalize the Climate 2050 Water and Wastewater Infrastructure Roadmap, and develop a Water Utility Climate Action Plan to establish GHG reduction targets and actions
- Continue community wildfire planning with key municipal partners who border the water supply areas, and implement small-scale forest fuel reduction strategies
- Continue collaboration with GVWD members to strengthen regional drinking water conservation and enforcement, reducing pressures on infrastructure development to support population growth

Highlights of contracts and consulting assignments anticipated to be undertaken in 2024 to respond to work plan requirements within the operating budget include the following:

- Updates to Drinking Water Management Plan and continue the Drinking Water Conservation Plan Summer Support program to support members with conservation, education and enforcement
- Asset condition assessments
- Development and implementation of an ISO 14001 compliant Environmental Management System in collaboration with Liquid Waste Services
- Reservoir Limnology Program to monitor the chemical, physical and biological parameters of the Capilano, Seymour and Coquitlam source water supply reservoirs
- Tree assessments and site treatments associated with the Water Services Hazard Tree Program
- Contracted laboratories or the BCCDC for the analysis of specialized legislated water quality parameters

Capital Budget Highlights

The Water Services 2024 - 2028 Capital Plan (Attachment 2) includes \$424.9 million in planned expenditures for 2024 and a total of \$3.0 billion over the five years, with an average of \$605.0 million in capital expenditures per year. There are 143 projects on the five-year plan and the largest nine projects make up more than 50% of the capital spending.

The capital program is funded by a combination of long-term debt, reserves, contributions from the operating budget, external (interagency) contributions and projected, future development cost charges (DCCs) funding growth.

Capital program expenditures over the next five years are largely driven by system expansion to meet the needs of a growing population, upgrades to improve system resiliency, maintenance of aging infrastructure, and opportunities to reduce life-cycle costs for services and/or achieve Board goals such as climate change mitigation. Highlights of capital projects planned or ongoing for 2024 include the following:

- Commence construction: Central Park Main No. 2 (Phase 2), Annacis Main No. 5 (North), and Stanley Park Water Supply Tunnel
- Continue construction: Kennedy Newton Main, Fleetwood Reservoir, Capilano Raw Water Pump Station Back-up Power, Douglas Road Main No. 2 (Still Creek Section), Coquitlam Water Main, Annacis Water Supply Tunnel, and Second Narrows Water Supply Tunnel
- Complete construction: replacement of the Seymour and Capilano Reservoir Dam Safety Booms, and Pebble Hill Reservoir Seismic Upgrade Units 1 & 2

Throughout the capital planning process, staff reviewed project schedules to ensure efficient project timing, deliverability and scope. This exercise was performed in preparing the Water 2024 - 2028 Capital Plan and resulted in the deferral of \$311 million in capital expenditures into future years.

Reserve Funds

The application of reserve funding in Water Services over the 2024-2028 Financial Plan comes from the Sustainability Innovation Fund reserve. In 2024, the financial plan includes \$1,652,000 in

funding from the Water Sustainability Innovation Fund for several sustainability project initiatives approved by the Board being undertaken and a further planned use of \$345,000 in 2025. The 2024 - 2028 Projected Reserves for Water Services is included in Attachment 5.

APPROVAL PROCESS

The proposed 2024 - 2028 Financial Plan and Annual Work Plan is presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are the 2024 - 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.

The Board will consider adoption of the 2024 Budget and endorsement of the 2024 - 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

- That the Water Committee endorse the 2024 2028 Financial Plan for Water Services as presented in the report dated October 4, 2023, titled "2024 - 2028 Financial Plan – Water Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- 2. That the Water Committee make recommendations and endorse an amended 2024 2028 Financial Plan for Water Services and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the Greater Vancouver Water District Board approves the 2024 Budget and endorses the Five-Year Financial Plan for Water Services, as presented under Alternative 1, in 2024, with the increase applied 100% to the Water Rate for June to September, the projected Water Rates would be \$1.2537/m3 for June through September and remain at \$0.7119/m3 for January through May and October through December (average water rate of \$0.9333/m3 compared to 2023 forecast for 2024 of \$0.9456/m3). Revenue from the sale of water is projected to increase by \$29.2 million (8.6%) to \$367.5 million which will generate the majority of the \$374.5 million in total revenue required to offset projected expenditures. The increase in the average water rate represents a \$12 increase in the annual cost to the average regional household to \$189 which is less than the \$192 forecasted for 2024 in the prior year budget. The application of the proposed increase for 2024 to the peak water rate does not have bearing on the budget or the financial plan.

Over the term of the five-year plan, the blended water rate is projected to increase by an average of \$0.0564/m3 with water sales increasing by an average of \$24.2 million per year to provide the required revenue to offset projected expenditures. It is anticipated that the annual cost to the average regional household over the next five years will rise from \$189 in 2024 to \$223 in 2028 representing an average annual increase of \$9. Future budgets will be adjusted based on the success of conservation efforts across the region.

CONCLUSION

The 2024 Budget and Five-Year Financial Plan for Water Services have been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan* and to support the 2011 *Drinking Water Management Plan*. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Water Services.

The presentation of the 2024 budget and five-year financial plan for Water Services provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for Water investments, notwithstanding additional successes in regional water conservation efforts, that will be required to maintain our assets and to respond to our region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with our critical infrastructure requirements.

Staff recommend endorsing the 2024 - 2028 Financial Plan and Annual Work Plans for Water Services as presented under Alternative 1.

Attachments

- 1. 2024 2028 Water Services Financial Plan
- 2. 2024 2028 Water Services Capital Budget Summary
- 3. 2024 Water Services Work Plans
- 4. 2024 2028 "What's Happening"
- 5. 2024 2028 Projected Reserves Water Services

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GREATER VANCOUVER WATER DISTRICT WATER SERVICES 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

ATTACHMENT 1

| REVENUES \$ 338 Water Sales \$ 338 Other External Revenues 2 Transfer from DCC Reserves 2 Transfer from Sustainability Innovation Fund Reserves 5 Transfer from Reserves 5 TOTAL REVENUES 5 Operating Programs: Policy Planning and Analysis Contribution to Sustainability Innovation Reserve \$ Research and Innovation Utility Modeling and Data Analytics 2 Utility Policy and Planning 4 Engineering and Construction 8 Minor Capital Projects 9 Infrastructure Operations Support 1 Shared and Support Services 1 Engineers in Training 8 Business & Shared Services Support 1 Shared & Utility Services 1 Minor Capital Projects 3 Watershed and Environmental Management 3 Water Dam Safety 3 Water Dam Safety 3 Water Dam Safety 3 Maintenance 9 ScADA Control Systems 6 Secondary Disinfection </th <th>576,682 - 50,516 96,000</th> <th>- 1,823,949 5 1,625,000 0 - 0 5 374,463,930 0 \$ 723,000 5 716,477</th> <th>% CHANGE 8.6% 8.2%</th> <th>2025 FORECAST \$ 400,622,928 3,560,952 10,908,659 345,000 </th> <th>% CHANGE 9.0% 10.9%</th> <th>2026 FORECAST \$427,937,918 3,526,265 36,566,198 - </th> <th>% CHANGE 6.8% 12.7%</th> <th>2027 FORECAST \$ 444,404,061 3,553,428 77,363,341 - -</th> <th>% CHANGE 3.8%</th> <th>2028 FORECAST \$ 459,303,602 3,489,941 111,822,348 -</th> <th>% CHANGE 3.4%</th> | 576,682 - 50,516 96,000 | - 1,823,949 5 1,625,000 0 - 0 5 374,463,930 0 \$ 723,000 5 716,477 | % CHANGE 8.6% 8.2% | 2025 FORECAST \$ 400,622,928 3,560,952 10,908,659 345,000 | % CHANGE 9.0% 10.9% | 2026 FORECAST \$427,937,918 3,526,265 36,566,198 - | % CHANGE 6.8% 12.7% | 2027 FORECAST \$ 444,404,061 3,553,428 77,363,341 - - | % CHANGE 3.8% | 2028 FORECAST \$ 459,303,602 3,489,941 111,822,348 - | % CHANGE 3.4% |
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| Minor Capital Projects 9 Infrastructure Operations Support 2 Dispatch 12 Shared and Support Services 12 Shared and Support Services Support 1 Shared & Utility Services Support 1 Shared & Utility Services Support 1 Minor Capital Projects Records Management Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Water Dam Safety 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 11 Utility Voice Radio 12 Water Supply 21 Interagency Projects and Quality Control 3 Interagency Projects 3 | 92,975 | | . , | | | | . , | | | | |
| Infrastructure Operations Support 2 Dispatch 12 Shared and Support Services Engineers in Training Business & Shared Services Support 1 Shared & Utility Services Minor Capital Projects Records Management 3 Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Operations and Maintenance 9 Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 10 Water Supply 21 Interagency Projects and Quality Control 3 Interagency Projects 3 | ,52,573 | 5 10,718,619 | | 11,429,413 | | 11,988,734 | | 12,348,788 | | 12,686,788 | |
| Dispatch 12 Shared and Support Services Engineers in Training Business & Shared Services Support 1 Shared & Utility Services Minor Capital Projects Records Management 3 Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Operations and Maintenance 1 Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 10 Water Supply 21 Interagency Projects and Quality Control 3 Drinking Water Quality Control 3 | 804,108 | | | 2,874,188 | | 2,937,319 | | 3,153,438 | | 3,219,254 | |
| 12 Shared and Support Services Engineers in Training Business & Shared Services Support Minor Capital Projects Records Management Watershed and Environmental Management Water Dam Safety Water Dam Safety Operations and Maintenance Drinking Water Residuals Lake City Operations Maintenance ScADA Control Systems Secondary Disinfection Seymour Capilano Filtration Plant Utility Voice Radio Water Supply 21 Interagency Projects and Quality Control Drinking Water Quality Control Dater Supply | | | | | | | | , , | | | |
| Shared and Support Services Engineers in Training Business & Shared Services Support Shared & Utility Services Minor Capital Projects Records Management Watershed and Environmental Management Water Dam Safety Water Dam Safety Operations and Maintenance Drinking Water Residuals Lake City Operations Maintenance ScADA Control Systems Secondary Disinfection Seymour Capilano Filtration Plant Utility Voice Radio Water Supply 21 Interagency Projects and Quality Control Drinking Water Quality Control Sinteragency Projects | 133,312 1 30,39 5 | | 7.8% | 141,804 14,445,405 | 7.8% | 145,602 15,071,655 | 4.3% | 149,464 15,651,690 | 3.8% | 152,603 16,058,645 | 2.6% |
| Engineers in Training Business & Shared Services Support 1 Shared & Utility Services Minor Capital Projects Records Management 3 Watershed and Environmental Management 13 Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Operations and Maintenance 9 Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 66 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 21 Utility Voice Radio 9 Water Supply 21 Interagency Projects and Quality Control 3 Interagency Projects 3 | 50,393 | 13,402,930 | 7.070 | 14,445,405 | 7.070 | 13,071,035 | 4.370 | 13,031,090 | 3.070 | 10,038,045 | 2.070 |
| Business & Shared Services Support 1 Shared & Utility Services Minor Capital Projects Records Management 3 Watershed and Environmental Management 13 Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Operations and Maintenance 9 Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 10 Water Supply 21 Sepinetre Supply 21 Drinking Water Quality Control 3 Interagency Projects and Quality Control 3 Interagency Projects 3 | 877,784 | 528.011 | | 687,611 | | 706,055 | | 724,736 | | 744,113 | |
| Shared & Utility Services Minor Capital Projects Records Management Watershed and Environmental Management Watershed and Environmental Management 13 Water Dam Safety Water Dam Safety Operations and Maintenance Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 5 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management Utility Voice Radio Water Supply 21 59 Interagency Projects and Quality Control Drinking Water Quality Control 3 Interagency Projects | 520,112 | | | 2,781,059 | | 2,993,006 | | 3,072,442 | | 3,364,968 | |
| Minor Capital Projects Records Management Watershed and Environmental Management Watershed and Environmental Management Water Dam Safety Water Dam Safety Operations and Maintenance Drinking Water Residuals Lake City Operations Maintenance SCADA Control Systems Secondary Disinfection Seymour Capilano Filtration Plant Utility Voice Radio Water Supply 21 Interagency Projects and Quality Control Drinking Water Quality Control Sinteragency Projects | | | | | | | | | | | |
| Records Management 3 Watershed and Environmental Management 13 Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Operations and Maintenance 14 Drinking Water Residuals 1 Lake City Operations 1 Maintenance 99 SCADA Control Systems 66 Secondary Disinfection 1 Seymour Capilano Filtration Plant 100 Coquitlam Water Treatment Plant 7 Energy Management 7 Utility Voice Radio 21 Water Supply 21 Drinking Water Quality Control 59 Interagency Projects and Quality Control 3 Interagency Projects 3 | 339,274 | | | 222,129 | | 228,130 | | 234,214 | | 240,518 | |
| 3 Watershed and Environmental Management Watershed and Environmental Management 13 Water Dam Safety Water Dam Safety Operations and Maintenance Drinking Water Residuals 1 Lake City Operations Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management Utility Voice Radio Water Supply 21 Drinking Water Quality Control Drinking Water Quality Control Drinking Water Quality Control Jinteragency Projects | 385,627 | | | 1,012,931 | | 1,062,501 | | 1,094,411 | | 1,124,366 | |
| Watershed and Environmental Management 13 Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Operations and Maintenance 14 Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 21 Water Supply 21 Drinking Water Quality Control 3 Interagency Projects and Quality Control 3 | 12,920 | | (0.00() | 158,888 | | 163,190 | c | 167,548 | | 172,067 | 6 7 0/ |
| Watershed and Environmental Management 13 Water Dam Safety 13 Water Dam Safety 13 Operations and Maintenance 14 Drinking Water Residuals 1 Lake City Operations 1 Maintenance 99 SCADA Control Systems 66 Secondary Disinfection 1 Seymour Capilano Filtration Plant 100 Coquitlam Water Treatment Plant 7 Energy Management 100 Utility Voice Radio 21 Water Supply 21 Drinking Water Quality Control 3 Interagency Projects and Quality Control 3 Interagency Projects 3 | 35,717 | 3,407,116 | (8.8%) | 4,862,618 | 42.7% | 5,152,882 | 6.0% | 5,293,351 | 2.7% | 5,646,032 | 6.7% |
| 13 Water Dam Safety Water Dam Safety Operations and Maintenance Drinking Water Residuals Lake City Operations Maintenance SCADA Control Systems Secondary Disinfection Seymour Capilano Filtration Plant Utility Voice Radio Water Supply 21 Interagency Projects and Quality Control Drinking Water Quality Control Jinteragency Projects | | | | | | | | | | | |
| Water Dam Safety Water Dam Safety Operations and Maintenance Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 21 Water Supply 21 Drinking Water Quality Control 3 Interagency Projects and Quality Control 3 | 571,420 | | | 15,221,694 | | 15,689,254 | | 16,349,909 | | 16,987,861 | |
| Water Dam Safety Operations and Maintenance Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 21 Water Supply 21 Drinking Water Quality Control 3 Interagency Projects and Quality Control 3 | 571,420 | 15,008,009 | 9.8% | 15,221,694 | 1.4% | 15,689,254 | 3.1% | 16,349,909 | 4.2% | 16,987,861 | 3.9% |
| Operations and Maintenance Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 21 Water Supply 21 Drinking Water Quality Control 3 Interagency Projects and Quality Control 3 | | | | | | | | | | | |
| Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 21 Water Supply 21 Interagency Projects and Quality Control 3 Drinking Water Quality Control 3 | - | - 3,922,949 | | 3,608,167 | | 3,883,822 | | 4,074,715 | | 4,281,981 | |
| Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 21 Water Supply 21 Interagency Projects and Quality Control 3 Drinking Water Quality Control 3 | - | 3,922,949 | | 3,608,167 | | 3,883,822 | | 4,074,715 | | 4,281,981 | |
| Drinking Water Residuals 1 Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 21 Water Supply 21 Interagency Projects and Quality Control 3 Drinking Water Quality Control 3 | | | | | | | | | | | |
| Lake City Operations 1 Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 21 Water Supply 21 Interagency Projects and Quality Control 3 Drinking Water Quality Control 3 | 260,654 | 1,278,759 | | 1,314,329 | | 1,350,964 | | 1,388,687 | | 1,427,586 | |
| Maintenance 9 SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 21 Water Supply 21 Interagency Projects and Quality Control 3 Interagency Projects 3 | 27,080 | | | 1,099,545 | | 1,129,638 | | 1,233,047 | | 1,315,615 | |
| SCADA Control Systems 6 Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 7 Utility Voice Radio 21 Water Supply 21 Drinking Water Quality Control 3 Interagency Projects 4 | | | | | | | | 11,943,544 | | 12,429,596 | |
| Secondary Disinfection 1 Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 10 Utility Voice Radio 21 Water Supply 21 Interagency Projects and Quality Control 59 Interagency Projects 3 Interagency Projects 9 | 372,262 | | | 10,962,146 | | 11,472,652 | | | | | |
| Seymour Capilano Filtration Plant 10 Coquitlam Water Treatment Plant 7 Energy Management 7 Utility Voice Radio 21 Water Supply 21 Interagency Projects and Quality Control 59 Interagency Projects 3 Interagency Projects 9 |)75,523 | | | 7,360,596 | | 7,793,283 | | 8,118,982 | | 8,452,384 | |
| Coquitlam Water Treatment Plant 7 Energy Management 7 Utility Voice Radio 21 Water Supply 21 Interagency Projects and Quality Control 59 Interagency Projects 3 Interagency Projects 4 | 251,732 | | | 1,560,014 | | 1,696,176 | | 1,764,724 | | 1,892,203 | |
| Energy Management Utility Voice Radio Water Supply 21 Interagency Projects and Quality Control Drinking Water Quality Control 3 Interagency Projects | 339,293 | | | 14,159,068 | | 14,784,514 | | 15,295,988 | | 15,862,386 | |
| Utility Voice Radio Water Supply 21 Interagency Projects and Quality Control Drinking Water Quality Control 3 Interagency Projects | 198,119 | 7,914,438 | | 8,436,260 | | 9,053,959 | | 9,454,281 | | 10,051,402 | |
| Water Supply 21 Second System 59 Interagency Projects and Quality Control 3 Drinking Water Quality Control 3 Interagency Projects | 138,594 | 156,107 | | 199,797 | | 206,330 | | 212,958 | | 219,613 | |
| 59 Interagency Projects and Quality Control Drinking Water Quality Control Interagency Projects | 03,802 | 109,261 | | 118,298 | | 123,774 | | 128,781 | | 133,941 | |
| 59 Interagency Projects and Quality Control Drinking Water Quality Control Interagency Projects | 592,200 | 20,915,815 | | 22,329,548 | | 23,102,588 | | 23,785,338 | | 24,488,993 | |
| Interagency Projects and Quality Control Drinking Water Quality Control 3 Interagency Projects | 59,259 | | 7.0% | 67,539,601 | 6.7% | 70,713,878 | 4.7% | 73,326,330 | 3.7% | 76,273,719 | 4.0% |
| Drinking Water Quality Control 3 Interagency Projects | ,_00 | , | | , | | | | , | | , | |
| Interagency Projects | 235,929 | 3,133,654 | | 3,272,006 | | 3,465,537 | | 3,557,760 | | 3,636,792 | |
| | 53,925 581,688 | | | 844,067 | | 3,465,537 879,237 | | 3,557,760 900,677 | | 922,919 | |
| i 3 | | | (0.49/) | | 0.6% | | E F0/ | | 2 60/ | | 2 20/ |
| | 817,617 | | (0.4%) | 4,166,073 | 9.6% | 4,394,774 | 5.5% | 4,508,437 | 2.6% | 4,609,711 | 2.2% |
| | 701,727 | | 7.3% | 3,069,137 | 5.8% | 3,151,845 | 2.7% | 3,318,357 | 5.3% | 3,172,121 | (4.4%) |
| Communications Program | 508,879 | | 26.6% | 539,871 | (16.2%) | 553,367 | 2.5% | 567,202 | 2.5% | 581,382 | 2.5% |
| | | | 9.4% | 33,564,476 | 0.7% | 33,990,658 | 1.3% | 36,171,737 | 6.4% | 37,931,644 | 4.9% |
| Total Operating Programs 134 | 162,293 | 146,842,124 | 9.1% | 154,371,040 | 5.1% | 159,074,751 | 3.0% | 166,196,278 | 4.5% | 172,702,704 | 3.9% |
| Allocation of Project Delivery Cost 3 | 162,293 500,029 | 4,064,247 | 6.7% | 4,055,229 | (0.2%) | 4,222,077 | 4.1% | 4,387,078 | 3.9% | 4,520,088 | 3.0% |
| Debt Service 83 | | 83,113,987 | (0.9%) | 93,163,912 | 12.1% | 112,641,137 | 20.9% | 156,620,994 | 39.0% | 190,853,847 | 21.9% |
| Contribution to Capital 123 | 500,029 | 3 140,443,572 | 13.5% | 163,847,358 | 16.7% | 192,092,416 | 17.2% | 198,116,480 | 3.1% | 206,539,252 | 4.3% |
| TOTAL EXPENDITURES \$ 346 | 500,029 310,519 | \$ 374,463,930 | 8.2% | \$ 415,437,539 | 10.9% | \$468,030,381 | 12.7% | \$ 525,320,830 | 12.2% | \$ 574,615,891 | 9.4% |
| Blended Water Rate (\$/m3) \$ | 5 00,029 310,519 380,609 769,143 | 5 \$ 0.9333 | 7.6% | 4 of 172 | 8.9% | \$ 1.0812 | 6.4% | \$ 1.1188 | 3.5% | \$ 1.1494 | 2.7% |

ATTACHMENT 2

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|---|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| CAPITAL EXPENDITURES | | | | | | | | | |
| Water Mains | | | | | | | | | |
| 37th Avenue Main No. 2 (Rupert Street to Little Mountain Reservoir) | 1,150,000 | _ | - | - | - | 500,000 | 500,000 | Design | Maintenance |
| Angus Drive Main | 30,700,000 | 50,000 | - | - | - | - | 50,000 | Construction | Growth |
| Angus Drive Turbine | - | - | - | - | - | 50,000 | 50,000 | Not Started | Opportunity |
| Annacis Main No. 2 - Queensborough Crossover Improvement | 1,200,000 | 50,000 | - | - | - | - | 50,000 | Construction | Maintenance |
| Annacis Main No. 2 and Barnston Island Main Online Chlorine and pH Analyzers | 1,200,000 | 700,000 | - | - | - | - | 700,000 | Construction | Upgrade |
| Annacis Main No. 3 BHP Potash Facility Pipe Protection | 600,000 | 50,000 | 500,000 | - | - | - | 550,000 | Construction | Maintenance |
| Annacis Main No. 5 (North) | 81,100,000 | 1,500,000 | 20,500,000 | 20,000,000 | 10,300,000 | 13,200,000 | 65,500,000 | Construction | Growth |
| Annacis Main No. 5 (South) | 80,950,000 | 5,100,000 | 18,000,000 | 18,000,000 | 7,600,000 | 4,000,000 | 52,700,000 | Construction | Growth |
| Annacis Water Supply Tunnel* | 482,100,000 | 76,000,000 | 65,000,000 | 54,500,000 | 50,000,000 | 10,000,000 | 255,500,000 | Construction | Growth |
| Burnaby Mountain Main No. 2 | 2,300,000 | 600,000 | 600,000 | 2,600,000 | 5,000,000 | 6,500,000 | 15,300,000 | Design | Maintenance |
| Cambie-Richmond Water Supply Tunnel* | 62,800,000 | 6,100,000 | 10,000,000 | 14,150,000 | 19,680,000 | 94,850,000 | 144,780,000 | Design | Resilience |
| Central Park Main No. 2 (10th Ave to Westburnco) | 4,750,000 | 1,500,000 | 3,500,000 | 10,000,000 | 7,000,000 | 6,500,000 | 28,500,000 | Construction | Maintenance |
| Central Park Main No. 2 (Patterson to 10th Ave) | 109,100,000 | 10,350,000 | 17,000,000 | 17,000,000 | 3,000,000 | 9,000,000 | 56,350,000 | Construction | Maintenance |
| Clayton Langley Main No. 2 | 1,900,000 | 500,000 | 400,000 | 1,000,000 | 5,000,000 | 3,800,000 | 10,700,000 | Design | Resilience |
| Coquitlam Water Main* | 293,700,000 | 95,200,000 | 89,000,000 | 143,000,000 | 142,000,000 | 199,000,000 | 668,200,000 | Multiple | Growth |
| Douglas Road Main No. 2 (Flow Meter 169) Replacement | 2,000,000 | 500,000 | 750,000 | - | - | - | 1,250,000 | Construction | Maintenance |
| Douglas Road Main No. 2 (Vancouver Heights Section) | 21,450,000 | 450,000 | - | - | - | - | 450,000 | Construction | Maintenance |
| Douglas Road Main No. 2 Still Creek | 60,050,000 | 11,050,000 | 5,000,000 | 6,400,000 | - | - | 22,450,000 | Construction | Maintenance |
| Douglas Road Main Protection | 1,500,000 | 550,000 | 150,000 | - | - | - | 700,000 | Construction | Maintenance |
| Haney Main No. 4 (West Section) | 1,900,000 | 750,000 | 2,850,000 | 3,500,000 | 9,000,000 | 20,000,000 | 36,100,000 | Multiple | Growth |
| Haney Water Supply Tunnel* | 50,250,000 | 1,750,000 | 8,050,000 | 11,000,000 | 14,750,000 | 7,000,000 | 42,550,000 | Design | Resilience |
| Improvements to Capilano Mains No. 4 and 5 | 2,700,000 | 250,000 | 1,750,000 | 500,000 | - | - | 2,500,000 | Construction | Maintenance |
| Kennedy Newton Main | 166,350,000 | 17,100,000 | 15,000,000 | 14,600,000 | 5,000,000 | 13,200,000 | 64,900,000 | Construction | Growth |
| Lulu Island - Delta Main - Scour Protection Phase 2 | 250,000 | 50,000 | 2,550,000 | 850,000 | 50,000 | - | 3,500,000 | Design | Maintenance |
| Lulu-Delta Water Supply Tunnel* | 5,000,000 | 1,250,000 | 3,000,000 | 4,500,000 | 4,000,000 | 54,000,000 | 66,750,000 | Definition | Maintenance |
| Lynn Valley Road Main No. 2 | 650,000 | - | - | - | 50,000 | 550,000 | 600,000 | Design | Maintenance |
| Lynn Valley Road Main, Seymour Main No. 3 & Seymour Main No. 4 Aerial Crossings Rehabilitation | 4,200,000 | 2,270,000 | - | - | _ | - | 2,270,000 | Construction | Maintenance |
| Maple Ridge Main West Lining Repairs | 5,900,000 | 50,000 | 2,500,000 | 2,800,000 | 350,000 | - | 5,700,000 | Construction | Maintenance |
| Newton Reservoir Connection | 850,000 | 450,000 | 1,100,000 | 2,500,000 | 4,200,000 | 7,000,000 | 15,250,000 | Design | Growth |
| Palisade Outlet Works Rehabilitation | 2,200,000 | 900,000 | 900,000 | 4,000,000 | 3,000,000 | 2,000,000 | 10,800,000 | Construction | Maintenance |
| Port Mann Main No. 2 (South) | 41,100,000 | 3,050,000 | 3,000,000 | - | - | 1,000,000 | 7,050,000 | Multiple | Growth |

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|--|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| Port Mann No. 1 South Section Decommissioning | 550,000 | 350,000 | 350,000 | 600,000 | - | - | 1,300,000 | Design | Maintenance |
| Port Moody Main No. 1 Christmas Way Relocation | 2,350,000 | 100,000 | 2,150,000 | - | - | - | 2,250,000 | Construction | Maintenance |
| Port Moody Main No. 3 Scott Creek Section | 28,000,000 | 2,000,000 | 10,500,000 | 13,000,000 | 7,000,000 | 9,000,000 | 41,500,000 | Construction | Maintenance |
| Queensborough Main Royal Avenue Relocation | 7,500,000 | 100,000 | 100,000 | 7,200,000 | - | - | 7,400,000 | Construction | Maintenance |
| Rehabilitation of AN2 on Queensborough Bridge | 3,850,000 | 470,000 | - | - | - | - | 470,000 | Construction | Maintenance |
| Relocation and Protection for MOTI Expansion Project Broadway | 8,900,000 | 100,000 | 100,000 | 8,500,000 | - | - | 8,700,000 | Construction | Maintenance |
| Relocation and Protection for MOTI George Massey Crossing Replacement | 2,450,000 | 100,000 | 100,000 | 100,000 | 300,000 | 50,000 | 650,000 | Construction | Maintenance |
| Relocation and Protection for Translink Expansion Project Surrey Langley SkyTrain | 6,600,000 | 100,000 | 100,000 | 100,000 | 100,000 | 6,150,000 | 6,550,000 | Construction | Maintenance |
| Sapperton Main No. 1 New Line Valve and Chamber | 3,850,000 | 50,000 | - | - | - | - | 50,000 | Construction | Upgrade |
| Sapperton Main No. 2 North Road Relocation and Protection | 6,500,000 | 6,400,000 | - | - | - | - | 6,400,000 | Construction | Maintenance |
| Scour Protection Assessments and Construction General | 4,000,000 | 150,000 | 1,000,000 | - | 650,000 | - | 1,800,000 | Construction | Resilience |
| Second Narrows Crossing 1 & 2 (Burrard Inlet Crossing Removal)* | 2,000,000 | - | - | - | 800,000 | 700,000 | 1,500,000 | Design | Maintenance |
| Second Narrows Water Supply Tunnel* | 468,550,000 | 25,000,000 | 15,000,000 | 10,000,000 | 10,000,000 | 42,637,000 | 102,637,000 | Construction | Resilience |
| Seymour Main No. 2 Joint Improvements | 7,100,000 | 100,000 | 2,000,000 | 2,000,000 | 1,750,000 | 1,500,000 | 7,350,000 | Construction | Resilience |
| Seymour Main No. 5 III (North) | 26,600,000 | 2,100,000 | 5,000,000 | 5,000,000 | 4,900,000 | 15,000,000 | 32,000,000 | Design | Resilience |
| South Delta Main No. 1 - Ferry Road Check Valve Replacement | 600,000 | 100,000 | - | - | - | - | 100,000 | Construction | Maintenance |
| South Fraser Storage Yard | 500,000 | 250,000 | 750,000 | 2,000,000 | 1,000,000 | 5,000,000 | 9,000,000 | Design | Maintenance |
| South Surrey Main No. 1 Nickomekl Dam Relocation | 7,100,000 | 3,600,000 | 2,100,000 | 1,000,000 | - | - | 6,700,000 | Construction | Maintenance |
| South Surrey Main No. 2 | 2,000,000 | 800,000 | 1,400,000 | 5,000,000 | 8,500,000 | 24,500,000 | 40,200,000 | Design | Growth |
| South Surrey Main No. 2 Nickomekl Dam Prebuild | 2,000,000 | 1,000,000 | 500,000 | - | - | - | 1,500,000 | Construction | Growth |
| South Surrey Supply Main (Serpentine River) Bridge Support Modification | 1,350,000 | 50,000 | _ | _ | - | - | 50,000 | Construction | Maintenance |
| Stanley Park Water Supply Tunnel* | 395,000,000 | 26,075,000 | 45,000,000 | 67,500,000 | 52,500,000 | 70,000,000 | 261,075,000 | Construction | Maintenance |
| Tilbury Junction Chamber Valves Replacement with Actuators | 5,600,000 | 200,000 | - | - | - | - | 200,000 | Construction | Upgrade |
| Tilbury Main North Fraser Way Valve Addition | 3,100,000 | 1,500,000 | 500,000 | - | - | - | 2,000,000 | Construction | Maintenance |
| Water Chamber Improvements and Repairs | 2,000,000 | 250,000 | 200,000 | - | - | - | 450,000 | Construction | Maintenance |
| Water Meter Upgrades | 22,400,000 | 2,000,000 | 2,000,000 | 2,500,000 | 1,900,000 | 1,500,000 | 9,900,000 | Construction | Upgrade |
| Water Optimization - Instrumentation | 39,050,000 | 1,200,000 | 1,250,000 | 2,750,000 | 6,500,000 | 7,250,000 | 18,950,000 | Multiple | Upgrade |
| Whalley Kennedy Main No. 2 | 2,900,000 | 300,000 | 1,300,000 | 1,700,000 | 2,000,000 | 2,000,000 | 7,300,000 | Design | Growth |
| Whalley Main | 31,800,000 | 50,000 | - | - | - | - | 50,000 | Construction | Growth |
| Fotal Water Mains | \$2,614,100,000 | \$312,615,000 | \$362,500,000 | \$459,850,000 | \$387,880,000 | \$637,437,000 | \$2,160,282,000 | - | |

ATTACHMENT 2

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|---|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| Pump Stations | | | | | | | | | |
| Barnston/Maple Ridge Pump Station - Back-up Power | \$ 16,000,000 | \$ 2,100,000 | \$ 100,000 | \$ 650,000 | \$ 2,100,000 | \$ 2,850,000 | \$ 7,800,000 | Construction | Resilience |
| Barnston/Maple Ridge Pump Station Power Generation | 2,900,000 | - | - | - | - | 200,000 | 200,000 | Construction | Opportunity |
| Burnaby Mountain Pump Station No. 2 | 1,300,000 | 400,000 | 1,400,000 | 3,500,000 | 3,500,000 | 15,000,000 | 23,800,000 | Design | Maintenance |
| Cape Horn Pump Station No. 3 | 29,050,000 | 2,500,000 | 5,100,000 | 3,000,000 | 32,000,000 | 70,000,000 | 112,600,000 | Design | Growth |
| Capilano Raw Water Pump Station - Back-up Power | 81,000,000 | 21,000,000 | 21,000,000 | 7,000,000 | 8,000,000 | - | 57,000,000 | Construction | Resilience |
| Capilano Raw Water Pump Station Bypass PRV Upgrades | 3,800,000 | 1,950,000 | 700,000 | - | - | - | 2,650,000 | Construction | Maintenance |
| Central Park WPS Starters Replacement | 20,000,000 | 5,000,000 | 5,000,000 | 4,000,000 | 3,000,000 | - | 17,000,000 | Construction | Maintenance |
| Grandview Pump Station Improvements | 4,500,000 | 1,500,000 | 1,000,000 | - | - | - | 2,500,000 | Construction | Resilience |
| Newton Pump Station No. 2 | 82,550,000 | 9,450,000 | 21,000,000 | 10,000,000 | 4,000,000 | 13,000,000 | 57,450,000 | Construction | Growth |
| Pebble Hill Pump Station Seismic Upgrade | - | - | 150,000 | 350,000 | 1,000,000 | 1,000,000 | 2,500,000 | Not Started | Resilience |
| Westburnco Pump Station - Back-up Power | 3,800,000 | 1,500,000 | 4,600,000 | 14,000,000 | 14,000,000 | 8,000,000 | 42,100,000 | Design | Resilience |
| Westburnco Pump Station No. 2 VFD Replacements | 3,050,000 | 1,100,000 | - | - | - | - | 1,100,000 | Construction | Maintenance |
| Total Pump Stations | \$ 247,950,000 | \$ 46,500,000 | \$ 60,050,000 | \$ 42,500,000 | \$ 67,600,000 | \$110,050,000 | \$ 326,700,000 | - | |
| Reservoirs | | | | | | | | - | |
| Burnaby Mountain Tank No. 2 and No. 3 | \$ 6,750,000 | \$ 990,000 | \$ 2,450,000 | \$ 2,460,000 | \$ 7.500.000 | \$ 19,800,000 | \$ 33,200,000 | Design | Resilience |
| Cape Horn Reservoir Condition Assessment and Structural Repair | 500,000 | 250,000 | 1,100,000 | 1,000,000 | - | - | 2,350,000 | • | Maintenance |
| Capilano Energy Recovery Facility 66" PRV Replacement | - | - | 1,450,000 | 350,000 | 3,500,000 | 3,500,000 | | Not Started | Maintenance |
| Capilano Energy Recovery Facility Operational Upgrades | 1,800,000 | 750,000 | 450,000 | 300,000 | - | - | 1,500,000 | Construction | Maintenance |
| Central Park Reservoir Structural Improvements | - | - | 400,000 | 1,700,000 | 1,200,000 | - | 3,300,000 | Not Started | Maintenance |
| Clayton Reservoir | 25,750,000 | 50,000 | - | - | - | - | 50,000 | Construction | Resilience |
| Dechlorination for Reservoir Overflow and Underdrain Discharges | 2,700,000 | 1,000,000 | 1,000,000 | - | - | - | 2,000,000 | Construction | Maintenance |
| Fleetwood Reservoir | 58,850,000 | 16,500,000 | 3,700,000 | 3,700,000 | - | - | 23,900,000 | Construction | Growth |
| Grandview Reservoir Unit No. 2 | - | - | 400,000 | 800,000 | 1,400,000 | 1,000,000 | 3,600,000 | Not Started | Growth |
| Hellings Tank No. 2 | 15,950,000 | 400,000 | 3,800,000 | 2,390,000 | 2,000,000 | - | 8,590,000 | Construction | Growth |
| Kersland Reservoir No. 1 Structural Improvements | 5,500,000 | 500,000 | - | - | - | - | 500,000 | Construction | Maintenance |
| Pebble Hill Reservoir No. 3 Seismic Upgrade | 500,000 | 50,000 | - | - | - | - | 50,000 | Design | Resilience |
| Pebble Hill Reservoir Seismic Upgrade | 12,350,000 | 500,000 | - | - | - | - | 500,000 | Construction | Resilience |
| Reservoir Isolation Valve Automation | 6,450,000 | 550,000 | 1,250,000 | 1,550,000 | 1,000,000 | - | 4,350,000 | Construction | Resilience |
| Reservoir Sampling Kiosks - Multi Location | 1,300,000 | 350,000 | 400,000 | 200,000 | - | - | 950,000 | Construction | Upgrade |
| Reservoir Structural Preliminary Assessments | 3,200,000 | 1,200,000 | 1,500,000 | - | - | - | 2,700,000 | Definition | Maintenance |
| Sasamat Reservoir Refurbishment | 400,000 | 250,000 | 700,000 | 1,300,000 | 500,000 | - | 2,750,000 | Design | Maintenance |
| Sunnyside Reservoir Units 1 and 2 Seismic Upgrade | 8,000,000 | 100,000 | 2,500,000 | 7,000,000 | 3,500,000 | - | 13,100,000 | Construction | Resilience |
| Vancouver Heights System Resiliency Improvements | 2,500,000 | 450,000 | 750,000 | 500,000 | - | - | 1,700,000 | Construction | Resilience |
| Total Reservoirs | \$ 152,500,000 | \$ 23,890,000 | \$ 21,850,000 | \$ 23,250,000 | \$ 20,600,000 | \$ 24,300,000 | \$ 113,890,000 | - | |

ATTACHMENT 2

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|---|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| Treatment Plants | | | | | | | | | |
| Coquitlam Intake Tower Seismic Upgrade | \$ 2,500,000 | \$ 100,000 | \$ - | \$ - | \$ - | \$ - | \$ 100,000 | Design | Resilience |
| Coquitlam Lake Water Supply* | 160,750,000 | 14,000,000 | 24,000,000 | 37,000,000 | 47,400,000 | 97,700,000 | 220,100,000 | Multiple | Growth |
| Critical Control Sites - Back-Up Power | - | - | - | 300,000 | 400,000 | 500,000 | 1,200,000 | Not Started | Resilience |
| CWTP CO2 System Improvements | 750,000 | 500,000 | 250,000 | 1,500,000 | 1,500,000 | - | 3,750,000 | Design | Maintenance |
| CWTP Mobile Disinfection System | 900,000 | 500,000 | 1,500,000 | 500,000 | - | - | 2,500,000 | Construction | Upgrade |
| CWTP Ozone Back-up Power | - | - | 500,000 | 800,000 | 1,500,000 | 4,000,000 | 6,800,000 | Not Started | Resilience |
| CWTP Ozone Generation Upgrades for Units 2 & 3 | 7,500,000 | 1,000,000 | - | - | - | - | 1,000,000 | Construction | Upgrade |
| CWTP Ozone Sidestream Pipe Heat Trace and Insulation | 900,000 | 150,000 | - | - | - | - | 150,000 | Construction | Maintenance |
| CWTP Ozone Sidestream Pump VFD Replacement | 1,400,000 | 500,000 | 200,000 | - | - | - | 700,000 | Construction | Maintenance |
| CWTP Temporary Water Supply | 600,000 | - | - | - | - | 400,000 | 400,000 | Design | Maintenance |
| Online Chlorine and pH Analyzers | 2,500,000 | 1,400,000 | 700,000 | - | - | 500,000 | 2,600,000 | Multiple | Upgrade |
| SCADA Moscad Server & ICS Historian Expansion & Partitioning | 1,500,000 | 1,500,000 | - | - | - | - | 1,500,000 | Construction | Maintenance |
| SCFP Additional Pre-Treatment | - | - | - | 1,000,000 | 7,300,000 | 17,000,000 | 25,300,000 | Not Started | Upgrade |
| SCFP Centralized Compressed Air System | 1,900,000 | 1,350,000 | - | - | - | - | 1,350,000 | Construction | Maintenance |
| SCFP Clearwell Baffle Replacement | 600,000 | 250,000 | 1,350,000 | 1,000,000 | 1,000,000 | 3,300,000 | 6,900,000 | Multiple | Maintenance |
| SCFP Clearwell Membrane Replacement | 1,800,000 | 600,000 | 600,000 | 5,900,000 | 5,500,000 | 5,000,000 | 17,600,000 | Design | Maintenance |
| Improve Accessibility | 800,000 | 500,000 | 6,000,000 | 2,000,000 | 1,000,000 | - | 9,500,000 | Design | Maintenance |
| SCFP OMC Building Expansion | 1,100,000 | 500,000 | 300,000 | 1,500,000 | 1,500,000 | - | 3,800,000 | Design | Maintenance |
| SCFP Polymer System Upgrade | 4,650,000 | 1,000,000 | - | - | - | - | 1,000,000 | Construction | Maintenance |
| SCFP SCADA/ICS Controller Replacement | 2,400,000 | 1,200,000 | - | - | - | - | 1,200,000 | Design | Maintenance |
| Total Treatment Plants | \$ 192,550,000 | \$ 25,050,000 | \$ 35,400,000 | \$ 51,500,000 | \$ 67,100,000 | \$128,400,000 | \$ 307,450,000 | - | |
| Others | | | | | | | | | |
| Beach Yard Facility - Site Redevelopment | \$ - | \$ - | \$ 500,000 | \$ 1,000,000 | \$ 1,500,000 | \$ 8,500,000 | \$ 11,500,000 | Not Started | Maintenance |
| Capilano Raw Water Pump Station VFD Upgrades | 2,600,000 | 300,000 | 2,200,000 | 1,200,000 | - | - | 3,700,000 | Construction | Maintenance |
| Capilano Reservoir and Seymour Reservoir Dam Safety Boom Replacement | 3,700,000 | 500,000 | - | - | - | - | 500,000 | Construction | Maintenance |
| Capilano Watershed Bridge Replacements - Crown Creek and Capilano River | - | - | - | 95,000 | 200,000 | 1,000,000 | 1,295,000 | Not Started | Maintenance |
| Capilano Watershed Security Gatehouse | 5,700,000 | 1,800,000 | 1,700,000 | 600,000 | - | - | 4,100,000 | Construction | Maintenance |
| CLD & SFD Fasteners Replacement & Coating Repairs | 2,350,000 | 50,000 | - | - | - | - | 50,000 | Construction | Maintenance |
| CLD and SFD Lead Paint Removal, Surface Crack Injection and General Corrosion Mitigation | 500,000 | 500,000 | 500,000 | 500,000 | - | - | 1,500,000 | Construction | Maintenance |
| Cleveland Dam - Lower Outlet HBV Rehabilitation | 4,900,000 | 250,000 | - | - | - | - | 250,000 | Construction | Maintenance |
| Cleveland Dam Drumgate Seal Replacement | 1,300,000 | 500,000 | 500,000 | - | _ | - | 1,000,000 | Construction | Maintenance |

| | | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|---|--------------------------------|--------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------------------|---------------------------|
| Cleveland Dam Lower Outlet Tr Removal | ashrack Replacement and Debris | | | | F 00 000 | F 00 000 | 1 500 000 | 2 500 000 | Not Started | Maintananaa |
| | Improvements | 1 700 000 | 700,000 | - | 500,000 | 500,000 | 1,500,000 | | Not Started Construction | Maintenance Resilience |
| Cleveland Dam Power Resilienc | • | 1,700,000 | , | 800,000 | 2 750 000 | - | _ | | | |
| Cleveland Dam Public Warning | | 10,000,000 | 1,750,000 | 2,000,000 | 2,750,000 | - | - | | Construction | Maintenance |
| Cleveland Dam Seismic Stability | | 800,000 | 400,000 | - | - | - | - | 400,000 | • | Resilience |
| Cleveland Dam Spillway Resurfa | - | - | - | - | 400,000 | 1,000,000 | 3,000,000 | | Not Started | Maintenance |
| Facilities O&M Documentation | Development | 2,000,000 | 1,000,000 | 500,000 | - | - | - | 1,500,000 | • | Resilience |
| Lake City HVAC Upgrade | | 900,000 | 400,000 | 800,000 | - | - | - | | Construction | Resilience |
| Loch Lomond Formalized Spillw | , . | - | - | - | - | - | 50,000 | | Not Started | Maintenance |
| Loch Lomond Outlet Works Reh | abilitation | 450,000 | 250,000 | 200,000 | 500,000 | 200,000 | 200,000 | 1,350,000 | Design | Resilience |
| Lower Seymour Conservation R Replacement | eserve Learning Lodge | 5,050,000 | 50,000 | - | - | - | - | 50,000 | Construction | Upgrade |
| Microbiology Laboratory Expan | sion | 500,000 | 250,000 | 650,000 | 1,400,000 | 3,000,000 | 250,000 | 5,550,000 | Design | Maintenance |
| Newton Rechlorination Station | No. 2 | - | - | 400,000 | 1,050,000 | 1,100,000 | 2,500,000 | 5,050,000 | Not Started | Maintenance |
| Pitt River Rechlorination Statior | Reconstruction | - | - | 500,000 | 1,200,000 | 1,800,000 | 1,500,000 | 5,000,000 | Not Started | Maintenance |
| Rechlorination Sites - Back-Up F | ower | - | - | - | - | - | 300,000 | 300,000 | Not Started | Resilience |
| Rechlorination Station SHS Stor | age Tank Replacement | 1,200,000 | 100,000 | - | - | - | - | 100,000 | Construction | Maintenance |
| Rechlorination Station Upgrade | 5 | 5,300,000 | 2,000,000 | 1,800,000 | 1,000,000 | 6,000,000 | 6,000,000 | 16,800,000 | Design | Maintenance |
| Rice Lake Dams Rehabilitation | | 3,000,000 | 900,000 | 1,200,000 | 600,000 | - | - | 2,700,000 | Construction | Maintenance |
| Seymour Falls Dam Public Warn | ing System | 10,000,000 | 1,250,000 | 2,500,000 | 3,000,000 | 3,000,000 | - | 9,750,000 | Construction | Maintenance |
| Seymour Falls Dam Seismic Stat | ility Assessment | 1,800,000 | 750,000 | 1,800,000 | 1,000,000 | 1,000,000 | 2,500,000 | 7,050,000 | Definition | Resilience |
| South Fraser Works Yard | | 71,000,000 | 2,500,000 | 5,000,000 | 5,000,000 | 5,500,000 | - | 18,000,000 | Design | Maintenance |
| Water Utilities SLC Control System | em Upgrades Phase 1 | 3,000,000 | 600,000 | 600,000 | 600,000 | 600,000 | 600,000 | 3,000,000 | Construction | Maintenance |
| Total Others | | \$ 137,750,000 | \$ 16,800,000 | \$ 24,150,000 | \$ 22,395,000 | \$ 25,400,000 | \$ 27,900,000 | \$ 116,645,000 | - | |
| TOTAL CAPITAL EXPENDITURES | | \$3,344,850,000 | \$424,855,000 | \$503,950,000 | \$599,495,000 | \$568,580,000 | \$928,087,000 | \$3,024,967,000 | - | |
| CAPITAL FUNDING | | | | | | | | | | |
| New External Borrowing | | \$ 727,433,000 | \$147,322,000 | \$127,217,000 | \$ 77,380,000 | \$ 44,137,000 | \$261,809,000 | \$ 657,865,000 | | |
| New Borrowing funded by DCC | | 1,506,113,000 | 83,944,000 | 201,189,000 | 307,478,000 | 320,927,000 | 448,539,000 | 1,362,077,000 | | |
| Direct DCC Application | | 40,688,000 | 36,797,000 | - | | | - | 36,797,000 | | |
| Contribution to Capital | | 996,321,000 | 140,444,000 | 163,847,000 | 192,092,000 | 198,116,000 | 206,539,000 | 901,038,000 | | |
| Reserve | | 27,644,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 | 25,000,000 | | |
| | | | | | | | , , | | | |
| External Funding - Interagency | | 46,651,000 | 11,348,000 | 6,697,000 | 17,545,000 | 400,000 | 6,200,000 | 42,190,000 | | |

ATTACHMENT 2

GREATER VANCOUVER WATER DISTRICT CAPITAL PORTFOLIO WATER SERVICES 2024 CAPITAL BUDGET AND 2024 - 2028 CAPITAL PLAN

| CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|--------------------------------------|---|---|---|---|--|--|--|---|
| | | | | | | | | |
| \$1,564,600,000 | \$244,200,000 | \$275,650,000 | \$319,690,000 | \$325,400,000 | \$475,600,000 | \$1,640,540,000 | | |
| 889,050,000 | 105,115,000 | 142,600,000 | 193,595,000 | 130,550,000 | 222,050,000 | 793,910,000 | | |
| 798,950,000 | 68,090,000 | 79,850,000 | 79,260,000 | 96,930,000 | 203,937,000 | 528,067,000 | | |
| 89,350,000 | 7,450,000 | 5,850,000 | 6,950,000 | 15,700,000 | 26,250,000 | 62,200,000 | | |
| 2,900,000 | - | - | - | - | 250,000 | 250,000 | | |
| \$3,344,850,000 | \$424,855,000 | \$503,950,000 | \$599,495,000 | \$568,580,000 | \$928,087,000 | \$3,024,967,000 | | |
| | BUDGET FOR APPROVAL \$1,564,600,000 889,050,000 798,950,000 89,350,000 2,900,000 | BUDGET FOR APPROVAL 2024 CAPITAL CASH FLOW \$1,564,600,000 \$244,200,000 \$89,050,000 105,115,000 798,950,000 68,090,000 89,350,000 7,450,000 2,900,000 - | BUDGET FOR APPROVAL 2024 CAPITAL CASH FLOW 2025 CAPITAL CASH FLOW \$1,564,600,000 \$244,200,000 \$275,650,000 \$89,050,000 105,115,000 142,600,000 798,950,000 68,090,000 79,850,000 89,350,000 7,450,000 5,850,000 2,900,000 — — | BUDGET FOR APPROVAL 2024 CAPITAL CASH FLOW 2025 CAPITAL CASH FLOW 2026 CAPITAL CASH TAL CASH FLOW \$1,564,600,000 \$244,200,000 \$275,650,000 \$319,690,000 \$89,050,000 105,115,000 142,600,000 \$319,690,000 798,950,000 68,090,000 79,850,000 79,260,000 89,350,000 7,450,000 5,850,000 6,950,000 2,900,000 — — — | BUDGET FOR APPROVAL 2024 CAPITAL CASH FLOW 2025 CAPITAL CASH FLOW 2026 CAPITAL CASH TAL CASH TAL 2027 CAPITAL CASH TAL 2027 CAPITAL CASH TAL 2027 CAPITAL CASH TAL \$1,564,600,000 \$244,200,000 \$275,650,000 \$319,690,000 \$325,400,000 \$89,050,000 105,115,000 142,600,000 193,595,000 130,550,000 798,950,000 68,090,000 79,850,000 79,260,000 96,930,000 89,350,000 7,450,000 5,850,000 6,950,000 15,700,000 2,900,000 - - - - | BUDGET FOR APPROVAL 2024 CAPITAL CASH FLOW 2025 CAPITAL CASH FLOW 2026 CAPITAL CASH FLOW 2027 CAPITAL CASH FLOW 2028 CAPITAL CASH FLOW \$1,564,600,000 \$244,200,000 \$275,650,000 \$319,690,000 \$325,400,000 \$475,600,000 \$89,050,000 105,115,000 142,600,000 193,595,000 130,550,000 222,050,000 798,950,000 68,090,000 79,850,000 79,260,000 15,700,000 203,937,000 89,350,000 7,450,000 5,850,000 6,950,000 15,700,000 26,250,000 2,900,000 - - - - 250,000 | BUDGET FOR APPROVAL 2024 CAPITAL CASH FLOW 2025 CAPITAL CASH FLOW 2026 CAPITAL CASH FLOW 2027 CAPITAL CASH FLOW 2028 CAPITAL CASH FLOW TOTAL CAPITAL CASH FLOW \$1,564,600,000 \$244,200,000 \$275,650,000 \$319,690,000 \$325,400,000 \$475,600,000 \$1,640,540,000 \$89,050,000 105,115,000 142,600,000 193,595,000 130,550,000 222,050,000 793,910,000 798,950,000 68,090,000 79,850,000 69,930,000 203,937,000 528,067,000 89,350,000 7,450,000 5,850,000 6,950,000 15,700,000 26,250,000 62,200,000 | BUDGET FOR APPROVAL 2024 CAPITAL CASH FLOW 2025 CAPITAL CASH FLOW 2026 CAPITAL CASH FLOW 2027 CAPITAL CASH FLOW 2028 CAPITAL CASH FLOW TOTAL CASH TAL CASH FLOW ACTIVE PHASE \$1,564,600,000 \$244,200,000 \$275,650,000 \$319,690,000 \$325,400,000 \$475,600,000 \$1,640,540,000 \$89,050,000 105,115,000 142,600,000 193,595,000 130,550,000 222,050,000 793,910,000 798,950,000 68,090,000 79,260,000 96,930,000 262,250,000 528,067,000 89,350,000 7,450,000 5,850,000 6,950,000 15,700,000 26,250,000 62,200,000 2,900,000 - - - - 250,000 250,000 |

* Project is part of Metro Vancouver's formal stage gate framework. Detailed project report will be brought forward as part of the stage gate review process.



2024 WORK PLAN

Water Services Watersheds & Environment

Description of Services

Water Services provides high quality drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Watersheds & Environment Division protects and maintains 60,000 hectares of GVWD water supply lands and associated infrastructure surrounding the three primary source reservoirs of Capilano, Seymour, and Coquitlam. The division also oversees the Environmental Management System and various environmental programs and initiatives for the drinking water utility. Technical and field staff in this area undertake a breadth of work ranging from collection of reservoir and potable water samples, fisheries management, environmental protection and watershed management activities including security, road and infrastructure maintenance, wildfire response for both GVWD lands and GVRD Regional Parks and public education on the region's water supply.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Engage and collaborate with the public, members, other orders of government, interested and affected parties, and First Nations on a range of initiatives that support Metro Vancouver's services.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Drinking Water Management Plan

- Goal 1 Provide clean, safe drinking water
- Goal 2 Ensure the sustainable use of water resources

| Indicator | Historical and/or Industry Benchmark | Current Performance | 2024 Performance Objective |
|--|---|------------------------|----------------------------------|
| Annual participants in water education | MV 3-year average | 2023 YTD | 6,000 |
| tours and K-12 school programs | (2020-2022): 6,731 | (May): 3,000 | |
| conducted in person and virtually. | 2020: 3,802 | | |
| | 2021: 8,880 | Objective 6,000 | |
| | 2022: 7,513 | | |
| Number of days the water supply areas | MV 3-year average | 2023 YTD | 31 |
| are in high or extreme fire hazard | (2020-2022): 31 | 3 (May) | |
| | 2020: 12 | | |
| *Objective will equal 3 year average | 2021: 52 | Objective: 29 | |
| | 2022: 29 | | |

Performance Indicators

2024 Key Actions

- Complete replacement of the dam safety booms in Capilano and Seymour Reservoirs.
- Continue work with Strategic Municipal Partners and their Community Wildfire Protection Plans; seeking joint opportunities to conduct forest fuels mitigation work.
- Complete preparation required to seek ISO Certification of the GVWD Environmental Management System in 2025.
- Complete 10 Year Salmon Action Plan SIF Project jointly with LWS, Regional Parks and Regional Planning.



WATER SERVICES Policy, Planning and Analysis

Description of Services

Water Services provides high quality drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Policy, Planning, and Analysis division provides policy development and coordination; conducts infrastructure analysis and planning; develops and implements the *Drinking Water Management Plan*; leads regional water conservation efforts through the *Drinking Water Conservation Plan*; implements key components of the *Joint Water Use Plan* for the Capilano and Seymour Watersheds; supports the water metering network; and ensures QA/QC on water billing and issues monthly bills.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Engage with members on processes and initiatives that contribute to an effective and wellfunctioning organization.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Drinking Water Management Plan

- Goal 1 Provide clean, safe drinking water
- Goal 2 Ensure the sustainable use of water resources
- Goal 3 Ensure the efficient supply of water

Performance Indicators

| Indicator | Historical and/or Industry Benchmark | Current Performance | 2024 Performance Objective |
|--|--|--|----------------------------------|
| Peak day per capita water use (litres/c/day) | MV 5-year average (2018 - 2022): 609 2018: 660 2019: 560 2020: 600 2021: 651 2022: 573 | 2023 Objective: 592 | 577 |
| Average day per capita water use (litres/c/day) | MV 5-year average (2018 - 2022): 410 2018: 430 2019: 418 2020: 401 2021: 405 2022: 394 | 2023 Objective: 374 | 373 |
| Annual volume of drinking water sales (ML) | MV 5-year average (2018 - 2022): 386,400 2018: 389,800 2019: 383,400 2020: 378,700 2021: 392,000 2022: 388,600 | 2023 Jan - Jul: 234,936 2023 Objective: 389,000 | 393,000 |

2024 Key Actions

Utility Planning and Policy

- Continue development of an updated *Drinking Water Management Plan*.
- Continue to implement the *Joint Water Use Plan* for the Capilano and Seymour Watersheds, including coordination of monitoring and reporting to the regulatory agencies.
- In partnership with Liquid Waste Services, develop the Climate 2050 Infrastructure Roadmap.
- Support GVWD members with implementation of Metro Vancouver's *Drinking Water Conservation Plan*.
- Update the Transfer of Water Facilities Policy and continue development of an accompanying process.
- Continue development of a Drinking Water Stress Index.
- Initiate assessment of the feasibility of producing green hydrogen from hydropower at Cleveland Dam.
- Continue a feasibility study to optimize energy use in the transmission system.
- Continue work on the regional equity and affordability of drinking water.

Utility Modelling and Data Analytics

- Complete the new Regional Water Transmission Hydraulic Model.
- Complete hydrological models for the Capilano and Seymour watersheds.
- Lead the implementation of the updated Peak Day Demand Methodology for the water transmission system.
- Initiate the Water Facility Master Plan.
- Initiate Phase 2 of the Smart Water Foundation project (Data Analysis Platform).
- Initiate the 2023 Water Use by Sector Report.
- Continue to provide system planning and analysis support to O&M, E&C, and PDE projects.
- Continue the Capital Water Meter Upgrades Program.
- Continue the water demand forecasting process for Finance and rate updates.
- Initiate the Regional Water Audit project.



WATER SERVICES Engineering and Construction

Description of Services

Water Services provides high quality drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Engineering and Construction division provides delivery of water infrastructure projects, including water mains, reservoirs, pump stations and water treatment facilities and also provides shared construction and dispatch services.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Engage and collaborate with the public, members, other orders of government, interested and affected parties, and First Nations on a range of initiatives that support Metro Vancouver's services.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Drinking Water Management Plan

- Goal 1 Provide clean, safe drinking water
- Goal 2 Ensure the sustainable use of water resources
- Goal 3 Ensure the efficient supply of water

Performance Indicators

| Indicator | Historical and/or Industry Benchmark | Current Performance (as of August 2023) | 2024 Performance Objective |
|---|---|---|----------------------------------|
| Percent of GVWD Capital Program Expenditures Achieved: | 3 year average (2020 – 2022): 59% 2020: 63% 2021: 50% 2022: 63% | YTD: 34.5% Objective: 67% | 80% |
| Percent of Minor Capital Program Expenditures Achieved: | 3 year average (2020 – 2022): 78% 2020: 57% 2021: 98% 2022: 80% | YTD: 53.6% Objective: 67% | 100% |
| Percent of project complete: | | | |
| Kennedy Newton Main (Phase 3) – Construction | n/a | 40% | 60% |
| Annacis Main No. 5 (North) – Construction | n/a | 0% | 10% |
| Capilano Raw Water Pump Station Backup Power – Construction | n/a | 40% | 70% |
| Fleetwood Reservoir plus Feeder Main – Construction | n/a | 45% | 85% |
| Pebble Hill Reservoir Seismic upgrade Units 1 & 2 - Construction | n/a | 85% | 100% |
| Central Park Main No. 2 (Phase 2) – Construction | n/a | 0% | 30% |
| Douglas Road Main No. 2 (Still Creek Section) – Construction | n/a | 60% | 90% |
| Cape Horn Pump Station No. 3 – Design | n/a | 35% | 80% |

2024 Key Actions

- Continue construction of Kennedy-Newton Main (Phase 3).
- Commence construction of Annacis Main No. 5 (North).
- Continue construction of Capilano Raw Water Pump Station Backup Power.
- Continue construction of Fleetwood Reservoir plus Feeder Main.
- Complete construction of Pebble Hill Reservoir Seismic Upgrade Units 1 & 2.
- Commence construction of Central Park Main No. 2 (Phase 2).
- Continue construction of Douglas Road Main No. 2 (Still Creek Section).
- Continue design of Cape Horn Pump Station No. 3.



WATER SERVICES Operations and Maintenance

Description of Services

Water Services delivers high quality drinking water to the Metro Vancouver region through the Greater Vancouver Water District.

The Operations and Maintenance (O&M) division provides management of the source water reservoirs and dams, treatment of source water, operation and control of the water transmission system, secondary disinfection of treated water, and maintenance of associated supporting infrastructure (works yards, communications systems, and control systems). The division closely collaborates with shared services which provides maintenance of all water treatment and transmission infrastructure, and management and disposal of water treatment residuals.

The nature of O&M's work involves close collaboration with other Water Services divisions to ensure the safe, efficient and cost effective operation of the water system. In addition, the O&M teams provide support from design through commissioning for major and minor capital projects.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wind storms, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Drinking Water Management Plan

- Goal 1 Provide clean, safe drinking water
- Goal 2 Ensure the sustainable use of water resources
- Goal 3 Ensure the efficient supply of water

| Indicator | Historical and/or Industry Benchmark | 2023 2 nd Quarter Performance | 2024 Performance Objective |
|---|--|---|----------------------------------|
| Annual volume of drinking water treated, delivered (in million litres) | MV 3-year average (2020-22): 386,311 2020: 378,734 2021: 391,709 2022: 388,490 | 148,048 (Jan – May only) | 389,000 |
| Energy use in the treatment and delivery of drinking water (amount of gigajoules (GJ) used per ML of water) | MV 3-year average (2020-22): 0.50 2020: 0.44 2021: 0.54 2022: 0.52 | 0.52 (Jan – Apr only) | 0.50 |
| Compliance with treatment operating permit criteria | MV 3-year average (2020-22): 100% 2020: 100% 2021: 100% 2022: 100% | 100% | 100% |
| Number of leak repairs in water transmission system piping per 100 kilometers of pipe ¹ | MV 3-year average (2020-22): 2.27 2020: 2.25 2021: 1.87 2022: 2.68 | 0.95 (Jan – Jun only) | < 3.1 |
| Number of remote monitoring and control points to ensure system resiliency | MV 3-year average (2020-22): 31,708 2020: 31,382 2021: 31,746 2022: 31,995 | 31,945 | 32,800 |

Performance Indicators

Note 1: AWWA Partnership for Safe Water Distribution System Optimization Program goal: 9 breaks/100 km/year

2024 Key Actions

Develop new safety initiatives and a centralized documentation system with Corporate Safety.

- Continue to expand the current valve inspection program and asset documentation.
- Continue annual cleaning and inspection of drinking water reservoirs (six reservoirs per year) to meet Water Services goals and AWWA Guidelines.



WATER SERVICES Dam Safety

Description of Services

Water Services delivers high quality drinking water to the Metro Vancouver region through the Greater Vancouver Water District.

The Dam Safety division manages dam safety activities for the Water Services dams. This includes Dam Geotechnical Monitoring, Dam Safety Compliance, and Dam Studies & Assessments. The division manages geotechnical instruments and groundwater control infrastructure, maintains regulatory documents and conducts formal dam inspections, and completes dam safety studies, assessments and reviews. Starting in 2024, the division will also manage a corporate Dam Safety Management System and monitor dam activities for Water Services, Liquid Waste Services, Solid Waste Services, and Regional Parks.

The nature of the Dam Safety division's work involves close collaboration with other Water Services divisions to ensure the overall safety of the portfolio of dams.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

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Drinking Water Management Plan

- Goal 1 Provide clean, safe drinking water
- Goal 2 Ensure the sustainable use of water resources
- Goal 3 Ensure the efficient supply of water

Performance Indicators

| | Historical and/or Industry Benchmark | Current Pe | Current Performance | |
|--|--|-------------------|----------------------------|--------------------------|
| Indicator | | 2023 Jan - Aug | Objective | Performance Objective |
| Percent of formal regulatory dam inspections completed | 3-year average (2020- 22): 100% 2020: 100% 2021: 100% 2022: 100% | 75% | 75% | 100% |
| Percent of annual (Q4) Emergency Response Plan communication tests completed | 3-year average (2020- 22): 100% 2020: 100% 2021: 100% 2022: 100% | 0% | 0% | 100% |
| Percent of annual (June) Water Committee and regulatory (Q1) Dam Status Reports completed | 3-year average (2020- 22): 100% 2020: 100% 2021: 100% 2022: 100% | 100% | 100% | 100% |
| Percent of operating program expenditures achieved | 3-year average (2020- 22): 116% 2020: 91% 2021: 103% 2022: 153% | 55% | 100% | 100% |

2024 Key Actions

- Operationalize the Interim Corporate Dam Safety Policy and carry out associated dam safety activities for all departments.
- Continue enhancements to Dam Safety Tracking System, incorporate other department dams.
- Work with IT to develop Dam Safety Field Reporting Project application, for geotechnical instrument monitoring as well as dam surveillance and inspection activities.
- Continue updates to all Dam Emergency Response Plans, with lessons-learned from CLD/SFD external partner engagement.



WATER SERVICES Interagency Projects and Quality Control

Description of Services

Water Services provides clean, high quality drinking water to the Metro Vancouver region through the Greater Vancouver Water District. The Interagency Projects and Quality Control division provides the coordination of major interagency projects impacting Metro Vancouver's water utility infrastructure. The Division is responsible for testing and monitoring drinking water quality to ensure federal guidelines and provincial regulatory standards for the region's drinking water are met and liaising with local health authorities for Water Services. Quality Control is performed by technical and scientific staff undertaking a breadth of activities including field support, laboratory analysis of drinking water for Metro Vancouver and member jurisdictions, as well as system water quality data review, ensuring compliance with quality control standards for the region's drinking water.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
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- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Drinking Water Management Plan

- Goal 1 Provide clean, safe drinking water
- Goal 2 Ensure the sustainable use of water resources
- Goal 3 Ensure the efficient supply of water

| Indicator | Historical and/or | Current Performance | | 2024 Deutermannen |
|--|--|------------------------|-------------------|--------------------------|
| | Industry Benchmark | 2023 YTD August 31 | Projected 2023 | Performance Objective |
| Number of water tests completed on samples collected from the GVWD and member jurisdiction water systems | MV 3-year average (2020-2022): 168,971 2020: 161,564 2021: 178,675 2022: 166,674 | 76,760 | 165,000 | 168,000 |
| Number of samples collected from the GVWD system that were positive for <i>E.coli</i> bacteria | MV 3-year average (2020-2022): 0 2020: 0 2021: 0 2022: 0 | 0 | 0 | 0* |
| Percent of Samples Positive for Total Coliform bacteria in the GVWD system | MV 3-year average (2020-2022): 0.3% 2020: 0.4% 2021: 0.2% 2022: 0.2% | 0.4% | <10% | <10%* |
| Number of major interagency projects coordinated | MV 3-year average (2020-2022): 11 2020: 10 2021: 12 2022: 13 | 15 | 15 | 16 |

Performance Indicators

*Based on BC Water Quality Standards for Potable Water

2024 Key Actions

- Continue coordination of interagency work for key projects such as the DFO Capilano River Salmon Hatchery, MOTI Broadway Subway, TransLink Operations and Maintenance Centre 4, and MOTI Fraser River Tunnel.
- Continue to install improved in-system reservoir sampling equipment at high priority reservoir sites.
- Complete the upgrade and customization of the Laboratory Information Management System.
- Enhance level of laboratory accreditation with the introduction of additional key parameters.
- Initiate the design of the expanded microbiology laboratory to enhance functionality, efficiency and safety.
- Evaluate the use of qPCR technology in the laboratory for advanced microbial analysis to increase efficiency, resulting in reduced reporting time.



WATER SERVICES Shared and Support Services

Description of Services

Water Services provides high quality drinking water to the Metro Vancouver region through the Greater Vancouver Water District. Shared and Support Services (SSS) provides: Survey, Inspection and Drafting Services to WS, LWS and PDE departments through its Shared Utility Services (SUS) Division; oversees shared WS Maintenance services as provided by LWS to WS; provides Administrative Support services to WS; operates the Regional GPS program; and provides oversight and coordination to WS on business planning, financial management, capital planning, emergency planning/response, asset management, performance management, continuous improvement, and utility benchmarking, in collaboration with Finance, PDE and Corporate Safety and Emergency Management.

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Drinking Water Management Plan

- Goal 1 Provide clean, safe drinking water
- Goal 2 Ensure the sustainable use of water resources
- Goal 3 Ensure the efficient supply of water

Performance Indicators

S&SS supports the KPIs identified in O&M and E&C Work Plans.

| Indicator | Historical and/or Industry Benchmark | Current Performance (as of August 31 2023) | 2024 Performance Objective |
|---|---|---|----------------------------------|
| Continuous improvement savings (\$/yr) | 2021: \$15,000 2022: \$912,515 | \$1,117,786 | \$600,000 |
| Continuous improvement safety – time loss incidents | 2021: 8 2022: 7 | 3 | 0 |
| Continuous improvement safety - injuries | 2021: 52 2022: 44 | 24 | 0 |
| Number of operational (level 1) condition assessments completed | 2021: 14 2022: 86 | 79 | 150+ |
| Number of expert (level 2) condition assessments completed | 2021: 15 2022: 3 | 8 | 14 |

2024 Key Actions

- Continue to improve performance using Lean processes and tools. For example, reduce lost time incidents by improving the investigation and reporting.
- Develop Water Utility Climate Action Plan in alignment with Climate 2050 to establish GHG emission reduction targets and actions to achieve targets.
 - Reduce GHG emissions by working with Fleet Services to electrify Water Services vehicles.
 - Set target for energy reduction and develop facility specific energy management plans.
- Improve knowledge of WS asset condition to enable improved data-driven decision making and sustain service level targets.
- Support the adoption and smooth integration of Building Information Modeling (BIM) standards and procedures for applicable water and liquid waste infrastructure projects.
 - Begin tracking reduced design and/or change order costs (capital projects), as a result of implementing 3D design reviews process/tools.
- Launch next phase of the BIM program, based on approved action plan devised at the end of 2023 (end of BIM Phase I project).
- Expand the utility of the Earthquake Early Warning and Strategic Response System to include more sites and / or response actions
- Develop access points at key reservoirs for emergency supply of water, in accordance with the Temporary Provision of Water Guidelines developed by REAC.
- Implement field, mobile access to engineering drawings and tablet use for construction quality assurance inspections.
- Implement digital engineering drawings field mark-ups, processing and approvals.



WATER SERVICES REGIONAL GLOBAL POSITIONING SYSTEM

Description of Services

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

Alignment of Strategic Directions and High Level Goals

Board Strategic Plan

- Ensure that our critical regional infrastructure is sufficiently maintained or replaced to meet current and future service needs, and is resilient to impacts from seismic events, wildfires, power failures, and natural disasters.
- Ensure that our services and infrastructure are able to meet the needs of a growing population.
- Ensure that all services and infrastructure anticipate and meet regulatory requirements, and that the organization is responsive to legislative change.
- Deliver utility and regional services in a way that ensures affordability for residents and long-term financial sustainability for the organization, using sound fiscal policies that balance the organization's long-term financial health while maintaining affordability for regional ratepayers.
- Proactively work to respond to the climate emergency by preparing for the impacts of climate change and accelerating reductions in greenhouse gas emissions.
- Continue to make investments and adaptations in service areas to ensure that our communities and organizations can prepare, avoid, absorb, recover, and adapt to the effects of shocks and stresses in an efficient manner.

Performance Indicators

| Indicator | Historical and/or Industry Benchmark | Current Performance (2023) | 2024 Performance Objective |
|--|---|----------------------------------|-------------------------------|
| Percent of service uptime (business hours, 8am – 4pm, M-F): Real-time service to mobile surveyors | MV 3-year average (2020-2022): 99% 2020 99% 2021 99% 2022 99% | 99% | 99% |
| Percent of service uptime (24x7, 365 days / year): Post-mission data availability through Provincial portal | MV 3-year average (2020-2022): 99% 2020 99% 2021 99% 2022 99% | 99% | 99% |

2024 Key Actions

- With local government partners, update and seek REAC endorsement for new five-year (2024-2028) GPS Program Strategic Plan.
- Process High Precision Network (HPN) monuments maintenance survey results, in partnership with the Province. Province to adopt and publish results in 2024.
- Update the Active Control Point (ACP) system antennae and other components, as required, to maintain service levels and/or meet emerging client needs.
- With local government partners, look for opportunities for further innovation and continuous improvement to enhance the utility of the HPN and ACPs for geo-spatial referencing applications.

2024 to 2028 - WHAT'S HAPPENING

Below is a summary of the significant initiatives to be undertaken by Water Services over the next five years. Includes water-related projects managed by the Project Delivery Department.

| Initiative | Description | Theme |
|------------------------|---|---------------------|
| 2024 | | |
| Dam Safety Review for | Complete formal Dam Safety Review for | Regulatory and |
| Cleveland Dam | Cleveland Dam (commenced 2023) in | Legislative |
| | accordance with the provincial Dam Safety | Environment |
| | Regulations. | |
| Coquitlam Water | Programming and design to upgrade the | System Stewardship |
| Treatment Plant | controls at the Coquitlam Water Treatment | |
| Control System | Plant Ozone Generation, Corrosion Control, | |
| Upgrade | and Chlorination facilities. | |
| Coquitlam Water | Conduct study to evaluate options to | Financial |
| Treatment Plant | produce liquid oxygen (LOX) on site and | Sustainability |
| Feasibility Study for | incorporate an oxygen recovery system. | |
| On-site Oxygen | Potential benefits are savings on LOX, | |
| Generation and | minimized GHG emissions and improved | |
| Recovery | efficiency of LOX usage. | |
| Drinking Water | Technical analysis to support development | Regional Growth and |
| Management Plan | of the strategies and actions in the updated | System Stewardship |
| Update | Drinking Water Management Plan. | |
| | Engagement will include member | |
| | jurisdictions, First Nations, and the public. | |
| Water Use by Sector | Complete the Water Use by Sector report to | System Stewardship |
| report (for years 2022 | provide an update on the trends of water | |
| and 2023) | demand by various sectors. | |
| Climate 2050 Water | In partnership with Liquid Waste Services, | Environmental |
| and Wastewater | finalize the Climate 2050 Water and | Sustainability |
| Infrastructure | Wastewater Infrastructure Roadmap. | |
| Roadmap | | |
| Hydraulic and | Update the models for our water system and | System Stewardship |
| Hydrologic Models | incorporate predictive analysis for short | |
| Update | term forecasting and transparent | |
| | performance tracking. | |
| Water Audit Study | Perform a water audit study for the | System Stewardship |
| | transmission system to identify and | |
| | document system losses and recommend | |
| | areas for improvement | |

| Dam Safatu Daama in | Complete replacement of the Course of the | Suctor |
|-----------------------------|--|-----------------|
| Dam Safety Booms in | Complete replacement of the Seymour and | System |
| Seymour and Capilano | Capilano dam safety booms. These booms | Stewardship & |
| Reservoirs | prevent debris from entering the dam | Environmental |
| Replacement | spillways and provide a physical barrier to | Sustainability |
| | maintain safe distance from dam | |
| | infrastructure for boat operations on the | |
| | reservoir. Current booms are at end of life. | |
| Canadian Association | Enhance the level of accreditation with the | Regulatory and |
| of Laboratory | implementation of additional key parameters. | Legislative |
| Accreditation (CALA) | | Environment |
| Microbiology | Initiate design for the Metro Vancouver | Regulatory and |
| Laboratory Upgrade at | Microbiology Laboratory upgrade at the Lake | |
| | | Legislative |
| Lake City Operations | City Operations Centre. | Environment |
| Centre | | |
| DFO Capilano River | Work with DFO on their design and | Environmental |
| Salmon Hatchery | construction of a new water supply intake in | Sustainability |
| Renewal | Capilano Reservoir and pipeline for the | |
| | redeveloped hatchery. | |
| Transmission System | Begin a multi-year program to install additional | System |
| Online Chlorine | online chlorine analyzers within the | Stewardship |
| Analyzers Addition | transmission system to provide real time | |
| , | chlorine residual data. (continues to 2026) | |
| Newton Pump Station | Continue construction of the Newton Pump | Regional Growth |
| No. 2 - Construction | Station No. 2, required to meet growing water | Regional Growth |
| | demand in the City of Surrey. | |
| Annacis Main No. 5 | Continue construction of Annacis Main No. 5 | Degional Crowth |
| | | Regional Growth |
| (South) - Construction | (South), required to convey water from the | |
| | south shaft of the Annacis Water Supply | |
| | Tunnel to the Kennedy Reservoir in the City of | |
| | Surrey. The project consists of 3 km of 1.8 m | |
| | diameter steel watermain. | |
| Building Information | Complete implementation of standards, | System |
| Modeling (BIM) Phase | protocols and training for 3D design processes | Stewardship & |
| I-II implementation | for Utilities. Begin pilot to enable greater | Environmental |
| - | utilization of collaborative 3D design methods | Sustainability |
| | and resolve conflicts. | 1 |
| Formal Valve | Continue formalizing a valve exercising and | System |
| Exercising and | inspection program to extend asset lifespan, | Stewardship |
| Inspection Program | improve asset condition knowledge, and | |
| mspection Program | | |
| | enable data-driven decision making regarding | |
| | valve replacement. | |
| Earthquake Early | Define automated actions and other measures | System |
| Warning and Strategic | to take advantage of new earthquake early | Stewardship & |
| Response System | warning alarm capability. Develop action plan | Environmental |
| (EEW-SRS) | for expansion of the FEW/SPS to breaden | Sustainability |
| | for expansion of the EEW-SRS to broaden | Sustainability |

| WS Emergency | Develop access points at key reservoirs for | System |
|----------------------------------|---|------------------------|
| Response Planning | emergency supply of water for local | Stewardship & |
| | jurisdictions. | Environmental |
| | , | Sustainability |
| Engineering Quality | Implement field, mobile access to engineering | System |
| Assurance (Field) | drawings and tablet use for construction | Stewardship & |
| | quality assurance inspections. | Environmental |
| | | Sustainability |
| Engineering Drawing | Implement digital engineering drawings field | System |
| Updates (Field) | mark-ups, processing and approvals. | Stewardship & |
| opuates (Field) | mark ups, processing and approvals. | Environmental |
| | | Sustainability |
| Utility Climate Action | Dovelop a Water Litility Climate Action Plan in | Environmental |
| Plan | Develop a Water Utility Climate Action Plan in alignment with Climate 2050 to establish GHG | Stewardship |
| FIdII | _ | Stewaruship |
| | emission reduction targets and actions to | |
| Second Narrows | achieve targets. Achieve substantial completion for | System |
| Water Supply Tunnel - | construction of the 1.1 km long water supply | Stewardship |
| Construction | tunnel under Burrard Inlet. | Stewaruship |
| | | <u>Custom</u> |
| Stanley Park Water | Commence Construction of the 1.4 km long | System Stowardship |
| Supply Tunnel – | water supply tunnel under Stanley Park. | Stewardship |
| Construction | Continue Construction of a 2.2 km long water | Deciencel Crowth |
| Annacis Water Supply | Continue Construction of a 2.3 km long water | Regional Growth |
| Tunnel - Construction | supply tunnel under the Fraser River. | Custom |
| Cambie-Richmond | Commence preliminary design of a 1 km long | System Stauwardahia |
| Water Supply Tunnel – | water supply tunnel under the Fraser River. | Stewardship |
| Preliminary Design | | Devised Care th |
| Coquitlam Water Main | Continue Construction of Coquitlam Water | Regional Growth |
| Construction | Main – South Section (Robson Drive to | |
| 2025 | Guildford Way). | |
| 2025 | | |
| Dam Safety Review for | Carry out scheduled dam safety review for Rice | Regulatory and |
| Rice Lake Dams | Lake Dams. | Legislative |
| | | Environment |
| Facility Master Plan | Proceed with development of the facility | System |
| | master plan to identify longer term capital | Stewardship |
| | projects to address growth. | |
| Adaptive Pathway | Conduct an Adaptive Pathway Study to identify | System |
| study | how Water Services can plan for various | Stewardship |
| | plausible futures. | |
| Drinking Water | Finalize the updated Drinking Water | Regional Growth |
| Management Plan | Management Plan. | and System |
| Update | | Stewardship |

| Westburnco Pump | Complete design and construction of | System |
|-------------------------|--|---------------------|
| Station Backup Power | Westburnco Pump Station No. 1 & No. 2 | Stewardship |
| – Design & | Backup Power, as part of ongoing program to | |
| Construction | provide backup power for key infrastructure. | |
| Fleetwood Reservoir - | Complete construction of Fleetwood Reservoir, | Regional Growth |
| Construction | a 13.6 ML Reservoir, and 1.1 km feeder main | |
| | that will increase water supply to meet | |
| | growing demand in the City of Surrey. | |
| Douglas Road | Complete Douglas Road Main No. 2 (Still Creek | System |
| Main No. 2 (Still Creek | Section), the last remaining 2.5km section | Stewardship |
| Section) - Construction | (1.5m diameter steel pipe) to be installed for | |
| | the overall Douglas Road Main No. 2 water | |
| | main project. | |
| Annacis Main No. 5 | Commence construction of Annacis Main No. 5 | Regional Growth |
| (North) - Construction | (North), required to convey water from the | |
| | existing system within the City of Burnaby to | |
| | the north shaft of the Annacis Water Supply | |
| | Tunnel in the City of New Westminster. The | |
| | project consists of 2.5 km of 1.8 m diameter | |
| | steel watermain. | |
| Capilano Raw Water | Complete construction of the Capilano Raw | System |
| Pump Station Backup | Water Pump Station Backup Power Facility, | Stewardship |
| Power Facility - | providing backup power to 4 x 2,000 HP pumps | |
| Construction | during power outages. | |
| Port Moody Main No. | Commence construction of Port Moody Main | System |
| 3 – Scott Creek Section | No. 3 – Scott Creek Section, required to | Stewardship |
| - Construction | replace and increase capacity of the existing | |
| | Port Moody Main No. 1 within the City of | |
| | Coquitlam. The project consists of 2.0 km of | |
| | 0.91 m diameter steel watermain. | |
| Pitt River (Haney) | Commence preliminary design of new water | System |
| Water Supply Tunnel – | supply tunnel under Pitt River | Stewardship |
| Preliminary Design | | |
| Lulu-Delta Tunnel – | Commence preliminary design of new water | System |
| Preliminary Design | supply tunnel under the Fraser River. | Stewardship |
| Coquitlam Water Main | Commence Construction of Coquitlam Water | Regional Growth |
| – Construction | Main – Cape Horn Section Prebuild (Dewdney | |
| | Trunk Road). | |
| Environmental | Complete ISO 14001 certification process for | Environmental |
| Management System | the water utility'ss Environmental | Sustainability & |
| C , | Management System. | , Regulatory and |
| | | Legislative |
| | | Environment |

| Building Information Modeling (BIM) Phases II-III Implementation | Phases II-III will enable field and office based connections with broader corporate systems. Implementation to continue through 2025 with completion in 2027. | System Stewardship & Environmental Sustainability |
|---|---|--|
| (multi-year program) Earthquake Early Warning and Strategic Response System (EEW-SRS) | Implement automated actions and other measures to take advantage of new earthquake early warning alarm capability. Implement action plan for expansion of the | System Stewardship & Environmental Sustainability |
| Engineering Drawing Updates (Field) | EEW-SRS to broaden coverage and robustness. Complete implementation of digital engineering drawings field mark-ups, processing and approvals. | System Stewardship & Environmental Sustainability |
| Canadian Association of Laboratory Accreditation (CALA) | Conduct a national laboratory accreditation audit required for continued operation of the Metro Vancouver laboratory (continues every two years). | Regulatory and Legislative Environment |
| Enhanced Water Quality Assurance Audit (EWQA) | Conduct a provincial laboratory accreditation audit required for continued operation of the Metro Vancouver Microbiology laboratory. | Regulatory and Legislative Environment |
| 2026 Dam Safety Review for Alpine Lake Dams | Carry out dam safety review for Palisade, Burwell and Loch Lomond Dams. | Regulatory and Legislative Environment |
| CWTP Ozone Backup Power - Construction | Ongoing program to provide backup power for key infrastructure so it will operate during power outages. | System Stewardship |
| North Shore Works Yard - Planning | Plan for redevelopment of Beach Yard Works Yard, after Second Narrows Water Supply Tunnel project completion. | System Stewardship |
| Water Supply Area Security Upgrades | Complete system upgrades to allow for enhanced monitoring across the three water supply areas | System Stewardship |
| Drinking Water Management Plan | Develop an internal strategic framework to implement the Drinking Water Management Plan strategies and actions, including a system to manage and report on member jurisdiction progress. | System Stewardship |
| Cape Horn Pump Station No. 3 - Construction | Commence construction of Cape Horn Pump Station No. 3, required to meet growing water demand south of the Fraser River. The new pump station will be located at the existing pump station site and will include full back-up power redundancy. | Regional Growth |

| Building Information Modeling (BIM) Phases II-III Implementation (continued) | Continuation of multi-year Phase II-III program. | System Stewardship & Environmental Sustainability |
|--|--|--|
| Earthquake Early Warning and Strategic Response System (EEW-SRS) | Complete action plans associated with the EEW-SRS program. | System Stewardship & Environmental Sustainability |
| Review of Metro Vancouver Water Pricing | Conduct a study to review current MV water pricing and provide recommendations on changes to the rate structure. | Financial Sustainability |
| Central Park Main No. 2 – New Westminster Section | Commissioning of Central Park Main No. 2, required to replace the existing Central Park Main in the City of New Westminster, which has been in service since 1931. The proposed 0.6m diameter and 5.5 km-long CPM2 will enhance system reliability and provide increased capacity to meet future water demands. | System Stewardship |
| Coquitlam Water Main – Construction | Commence Construction of Coquitlam Water Main – Central Section (Pipeline Road North Section). Commence Construction of Coquitlam Water Main – City Centre Tunnel Section. | Regional Growth |
| Coquitlam Lake Water Supply – Preliminary Design | Commence preliminary design of intake, tunnel and treatment plant | Regional Growth |
| 2027 Newton Pump Station No. 2 - Construction | Complete construction of Newton Pump Station No. 2, required to meet growing water demand in the City of Surrey. | Regional Growth |
| Kennedy-Newton Main - Construction | Complete construction of Kennedy-Newton Main, required to convey water from the Kennedy Reservoir to the Newton Reservoir in the City of Surrey. The project consists of 9 km of 1.8 m diameter steel water main. | Regional Growth |
| Building Information Modeling (BIM) Phases II-III Implementation (continued) | Continuation of multi-year Phase II-III program. | System Stewardship & Environmental Sustainability |

| Renewal of water licenses for Capilano | Water licenses will need to be renewed to allow for potential investigation of | System Stewardship |
|---|--|--------------------|
| and Seymour | hydropower at Cleveland and Seymour | |
| associated with the | Dams. | |
| Joint Water Use Plan | | |
| Lulu-Delta Water | Commence detailed design of new water | System Stewardship |
| Supply Tunnel – | tunnel under the Fraser River. | |
| Detailed Design | | |
| Second Narrows | Commissioning of new infrastructure related | System Stewardship |
| Water Supply Tunnel | to new water tunnel beneath Burrard Inlet. | |
| South Fraser Works | Complete development of South Fraser | System Stewardship |
| and Storage Yard | Works and Storage Yard to support WS | |
| | Construction activities. | |
| Canadian Association | Conduct a national laboratory accreditation | Regulatory and |
| of Laboratory | audit required for continued operation of | Legislative |
| Accreditation (CALA) | the Metro Vancouver laboratory (continues | Environment |
| | every two years). | |
| 2028 | | |
| Dam Safety Review for | Carry out formal Dam Safety Review for | Regulatory and |
| Seymour Falls Dam | Seymour Falls Dam in accordance with the | Legislative |
| | provincial Dam Safety Regulations. | Environment |
| Wildfire Preparedness | Complete Community Wildfire Planning with | System Stewardship |
| | key municipal partners who border the | |
| | water supply areas and continue | |
| | implementation of forest fuel reduction | |
| | treatments along the interface zones. | |
| Annacis Main No. 5 | Commissioning of Annacis Main No. 5 (North | Regional Growth |
| (North and South) - | and South), required to convey water from | |
| Construction | the existing system within the City of | |
| | Burnaby, through the Annacis Water Supply | |
| | Tunnel to the Kennedy Reservoir in the City | |
| | of Surrey. The project consists of 5.5 km of | |
| | 1.8 m diameter steel watermain. | |
| Central Park Main | Commissioning of Central Park Main No. 2, | System Stewardship |
| No. 2 – Burnaby | required to replace the existing Central Park | |
| Section - Construction | Main in the City of Burnaby, which has been | |
| | in service since 1931. The proposed 7.0 km- | |
| | long CPM2 will enhance system reliability | |
| | and provide increased capacity to meet | |
| | future water demands. | - |
| Building Information | Complete implementation of multi-year | System Stewardship |
| Modeling (BIM) | Phase II-III program. | & Environmental |
| Phases II-III | | Sustainability |
| Implementation | | |
| (continued) | | |

| Coquitlam Lake Water Supply – Detailed Design | Commence detailed design of intake, tunnel and treatment plant. | Regional Growth |
|---|---|--|
| Enhanced Water Quality Assurance Audit (EWQA) | Conduct a provincial laboratory accreditation audit required for continued operation of the Metro Vancouver | Regulatory and Legislative Environment |
| | Microbiology laboratory. | |

ATTACHMENT 5

METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - WATER

OPERATING RESERVES

| | 2023 | 2024 | | | | | | 2024 | 2025 | 2026 | 2027 | 2028 |
|----------------|------------------|------------------|------|----------|------|-------------|---------------|---------------|------------------|---------------|---------------|------------|
| | ENDING | OPENING | | | | | | ENDING | ENDING | ENDING | ENDING | ENDING |
| | BALANCE | BALANCE | CONT | RIBUTION | I V | VITHDRAWALS | NTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| Water Services | \$ 33,117,131 | \$ 33,117,131 | \$ | - | - \$ | - | \$ 827,928 | \$ 33,945,059 | \$ 34,793,685 \$ | 35,663,527 \$ | 36,555,115 \$ | 37,468,993 |

STATUTORY RESERVES

| | 2023 ENDING BALANCE | 2024 OPENING BALANCE | CON | NTRIBUTION | WITHDRAW | LS | INTEREST | EN | 2024 NDING MANCE | 2025 ENDING BALANCE | | 2026 ENDING BALANCE | 2027 ENDING GALANCE | 2028 ENDING GALANCE |
|--|---------------------------|----------------------------|-----|------------|-------------|--------|----------|-------|------------------------|---------------------------|----|---------------------------|---------------------------|---------------------------|
| Water Services | | | | | | | | | | | | | | |
| Water Laboratory Equipment Reserve | \$ 726,605 | \$ 726,605 | \$ | 50,000 | \$ | - \$ | 18,790 | \$ | 795,395 \$ | 865,905 | \$ | 938,178 | \$ 1,012,257 | \$ 1,088,188 |
| Water Sustainability Innovation Fund Reserve | 10,560,439 | 10,560,439 | | 723,000 | (1,625,0 | 00) | 252,736 | 9 | 9,911,175 | 10,541,679 |) | 11,537,258 | 12,557,727 | 13,603,708 |
| Total | \$ 11,287,044 | \$ 11,287,044 | \$ | 773,000 | \$ (1,625,0 | 00) \$ | 271,526 | \$ 10 | ,706,570 \$ | 11,407,584 | \$ | 12,475,436 | \$ 13,569,984 | \$ 14,691,896 |



| Subject: | 2024 - 2028 Financial Plan – Solid Waste Services | |
|----------|---|--------------------------------|
| Date: | October 5, 2023 | Meeting Date: October 12, 2023 |
| From: | Paul Henderson, General Manager, Solid Waste Ser | rvices |
| То: | Zero Waste Committee | |

RECOMMENDATION

That the Zero Waste Committee endorse the 2024 - 2028 Financial Plan for Solid Waste Services as presented in the report dated October 5, 2023, titled "2024 - 2028 Financial Plan – Solid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

EXECUTIVE SUMMARY

The 2024 - 2028 Metro Vancouver Financial Plan has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop. The direction followed the recommendations of the Financial Plan Task Force, which included the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan. This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Metro Vancouver has met the household impact targets that were recommended by the Financial Plan Task Force and adopted at the April 19, 2023 Board Budget Workshop. This has resulted in an overall consolidated household impact for 2024 to be 12.0%, down from the 14.2% projected for 2024 in the prior financial planning cycle, as well as a reduction in the cumulative household impact of 40% over the common four years in comparison to the prior financial plan.

The proposed 2024 garbage tipping fees increase of \$7 per tonne is equal to the prior cycle projected increase. The per household cost is \$68 per household, up from \$65 in 2023 for an increase of \$3 per household or 4.6%. Key cost drivers include increasing landfill disposal costs, Waste-to-Energy Facility operating costs, recycling and waste centre operating costs and debt costs.

Priorities for the Solid Waste function include the solid waste management plan update as well as continued progress towards zero waste and a circular economy, greenhouse gas emission reduction, and customer service enhancement and monitoring.

PURPOSE

To present the 2024 - 2028 Financial Plan for Solid Waste Services for consideration by the Zero Waste Committee.

BACKGROUND

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

On April 19, 2023 a Metro Vancouver Board Budget Workshop was held with the objective to seek direction for the preparation of the 2024 - 2028 Financial Plan. The workshop outlined the principles that guide the work of Metro Vancouver as an organization and provided a proposed approach for the 2024 - 2028 Financial Plan based on the work of the Financial Plan Task Force that was created by the Board Chair. This included an adoption of the following household impact targets: 12.0% for 2024, 11.0% for 2025, 5.0% for 2026 and 5.0% for 2027 as well as direction to move Liquid Waste Development Cost Charges (DCCs) and Water DCCs to a 1% assist factor and implement a new Regional Parks DCC and move it to a 1% assist factor over the financial plan.

This has resulted in a plan that maintains the goals and objectives of Metro Vancouver while minimizing the impact on ratepayers through realistic evaluation of the capital program and focussing on the development of growth revenue.

Key highlights of the overall Metro Vancouver 2024 proposed budget are as follows:

- A reduction of \$15 million of the total 2024 Metro Vancouver proposed operating budget compared to that previously projected for 2024
- Increased contribution to capital of \$32M for debt avoidance and increases in reserve contributions of just over \$6M for key functions
- Reduced total capital cash flow of roughly \$655M 2024 through 2027 for the utilities
- Reduction of household impact, \$13 less that that previously projected for 2024

SOLID WASTE SERVICES PROGRAM

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

Solid Waste Services works collaboratively with member jurisdictions and others to provide waste management services to the region's 2.8 million people. The Metro Vancouver solid waste system is comprised of recycling and waste centres and a waste-to-energy facility. The City of Vancouver owns and operates the Vancouver South Transfer Station and Vancouver Landfill: facilities that are integrated into the regional solid waste system.

Solid Waste Services initiatives are guided by direction provided in the 2022 – 2026 Board Strategic Plan, and the Integrated Solid Waste and Resource Management Plan, specifically the following:

- Reduce waste, increase recycling, and increase recovery of materials and energy from remaining waste. Dispose of residuals in a cost effective and environmentally sustainable manner.
- Develop and implement financial plans and policies that reflect a commitment to sound financial management and long-term planning, and which consider current and future ratepayers.
- Continue to develop programs and related communication campaigns that increase diversion rates of materials that can be reused, repurposed, or recycled.

The *Board Strategic Plan* also includes a number of initiatives related to implementing district energy, reviewing organics processing, and promoting cross-sector collaboration by leveraging the National Zero Waste Council and the Zero Waste Conference.

Integrated Solid Waste and Resource Management Plan (2010) (update underway):

- Goal 1 Minimize waste generation
- Goal 2 Maximize reuse, recycling & material recovery
- Goal 3 Recover energy from waste stream after material recovery
- Goal 4 Dispose of all waste in landfill after recycling & energy recovery

Work Plan Performance Indicators

High-level performance indicators have been developed across Metro Vancouver to evaluate trends, determine key actions for the coming year, and to assist in long-term planning. The 2024 Work Plans for Solid Waste Services are presented in this report. Within the Solid Waste Services Work Plans, four performance indicators have been developed and are being tracked. These include:

- Annual waste flows in Metro Vancouver system (tonnes);
- Availability of the Waste-to-Energy Facility and recycling and waste centres (percent);
- Recycling rate (percent of solid waste diverted from final disposal); and
- Waste disposed per capita (tonnes/capita).

The trend in these performance measures show a slight increase in waste quantities projected for 2023 compared to the 2022 budgeted quantities. Metro Vancouver's recycling and waste centres and Waste-to-Energy Facility have high customer availability (>99%). The recycling rate is currently at 65%, approximately twice the Canadian average. Waste disposed per capita is currently at 0.45 tonnes, compared to the Canadian average of 0.69 tonnes.

Continuous Improvement

Solid Waste Services regularly implements continuous improvement initiatives. Some recent initiatives include:

- Completed Surrey residents' drop-off events at the new Central Surrey Recycling and Waste Centre;
- Comprehensive and inclusive community engagement vision and guiding principles for new solid waste management plan;

- Pilot contracts for bottom ash and small vehicle load processing to recover recyclables and alternative fuels; and
- New opportunities to divert waste materials from disposal to reuse, repair and recycling.

New or continuous improvement initiatives for 2024 include:

- Waste-to-Energy Facility District Energy System development;
- New weighscale system software replacement;
- North Surrey and Langley recycling depot design and development; and
- Zero waste / circular economy community actions.

2024 Budget and 2024 - 2028 Financial Plan

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

- Financial Sustainability and Regional Affordability
- Climate Action
- Resilient Services and Infrastructure
- Reconciliation
- Housing

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

The 2024 - 2028 Solid Waste Services Financial Plan is included as Attachment 1. The 2024 Annual Work Plan for Solid Waste Services is included in Attachment 3 and the "What's Happening" highlights for the years 2024 - 2028 are included in Attachment 4.

Operating Budget Highlights

The Solid Waste Services operating budget is separated into operating programs and funding required to support the expanding capital program (debt service and contribution to capital). It is proposed to increase by \$9.0 million in 2024 for a total budget of \$142.4 million (Attachment 1). This increase is primarily a result of increased landfill disposal costs, increased Waste-to-Energy Facility operating costs, increased recycling and waste centre operating costs, and increased debt.

The 2024 operating budget includes the following key actions:

- Continued work on the solid waste management plan update to advance zero waste and the circular economy;
- Continue to enhance customer service and monitoring including investigating continuous feedback mechanisms;
- Alternative fuel and recyclable recovery pilot project;
- Bottom ash beneficial use pilot;
- Asset management program, including data validation and program guideline development;

- Support for behavior change programs for textiles, single-use items, seasonal wastes, food wastes, illegal dumping, and the Zero Waste Conference;
- Expand reuse events at recycling and waste centres, and repair events in partnership with member jurisdictions; and
- Support the National Zero Waste Council including work on implementing the Circular Economy and Zero Plastics Waste.

Highlights of contracts and consulting projects anticipated to be undertaken in 2024 to respond to work plan requirements within the operating budget include the following:

- Langley Recycling and Waste Centre recycling depot design;
- Waste-to-Energy Facility district energy design;
- Solid waste management plan engagement activities and technical support; and
- Waste composition analysis

Over the next five years, the Solid Waste Services budget is expected to increase an average of \$12.6 million or 8.0% per year. Of this overall increase, funding related to the expanding capital program (debt servicing and contribution to the capital) is increasing \$5.5 million per year on average over the next five years leaving the operating programs which are increasing, on average, by \$7.1 million per year, or approximately 5.4% increase per year.

Capital Budget Highlights

The Solid Waste Services capital budget for 2024 approval is \$262.9 million (Attachment 2). This amount includes all capital projects underway or planned in 2024. The capital program is funded by long-term debt and planned contribution to capital from the annual operating budget as available.

The projected capital cash flow for 2024 - 2028 totals \$313.5 million, an average of \$62.7 million per year. The largest five projects (each over \$15 million) make up approximately 64% of the capital spending over the next five years. There are 23 projects on the 5-year capital plan.

The capital program over the next five years is largely driven by the need to replace aging Waste-to-Energy Facility infrastructure and enhance recycling services at the recycling and waste centres. The addition of biosolids management and the district energy project at the Waste-to-Energy Facility are expected to increase beneficial use of waste materials and reduce greenhouse gas emissions.

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

- North Surrey and Langley Recycling and Waste Centre Recycling Depots
- Waste-to-Energy Facility District Energy (Phase 1 and Phase 2)
- Waste-to-Energy Facility Biosolids Management
- Waste-to-Energy Facility Acid Gas Reduction
- Various Waste-to-Energy capital replacement projects including replacement of the refuse cranes

Capital plan costs over the same 2024-2027 period have increased by \$49.4M compared to the previous cycle; this includes \$21 million deferred from 2023. Costs associated with new initiatives or updated costs estimates from currently planned projects are partially offset by new project delivery

methods and deferral of some projects not required at this time. Of note, the planned alternative fuel and recycling recovery facility construction has been moved out of the capital plan to be replaced through working with existing and planned private construction and demolition waste processors to manage materials dropped off in small loads at recycling and waste centres. Additional ambient air monitoring at the Waste-to-Energy Facility is being done to compare ambient concentrations to dispersion modelling results and ambient air quality objectives in order to confirm the timing of the acid gas reduction project. Data collected to date continues to show low levels of ambient air hydrogen chloride and sulfur dioxide, at less than 10% of ambient air quality objectives.

2024 - 2028 Tipping Fee Projections

The following table shows the tipping fee projections based on the required revenue to offset expected expenditures. Tipping fees for 2024 are proposed to increase by \$7 per tonne. Requirements for 2025 and beyond will be reviewed during future budget processes with the goal of reducing tipping fee increases where possible.

The 2024 tipping fee was projected to increase by \$7 per tonne in the previous cycle. All other years match previous budget cycle projections. 2028 tipping fees are projected to increase by \$8 per tonne.

| Projected Tipping Fees for Municipal Solid Waste (\$/tonne) | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|--------|--------|--------|--------|--------|--------|
| Tipping Fee Increase | | \$7 | \$7 | \$7 | \$8 | \$8 |
| Municipal Tipping Fee | \$ 127 | \$ 134 | \$ 141 | \$ 148 | \$ 156 | \$ 164 |
| Small Vehicles (0-1t) | \$ 161 | \$ 168 | \$ 175 | \$ 182 | \$ 190 | \$ 198 |
| Medium Vehicles (1-8t) | \$ 139 | \$ 146 | \$ 153 | \$ 160 | \$ 168 | \$ 176 |
| Large Vehicles (>8t) | \$ 113 | \$ 120 | \$ 127 | \$ 134 | \$ 142 | \$ 150 |

Waste Flows

With garbage tipping fees being the primary revenue source for the Solid Waste function, waste flow projections are the key driver for annual budget projections. Waste flow projections in the regional solid waste system for 2023 are currently estimated at approximately 1,040,000 tonnes, slightly higher than 2022 actuals. The increase in tonnage in 2023 is due, in part to increasing waste flow as a result of population growth. The waste flow for 2024 is budgeted at approximately 930,000 tonnes. If actual waste flows are higher than projected, increased revenues are offset by increased costs, particularly for contingency disposal to remote landfill as the Waste-to-Energy Facility and Vancouver Landfill annual tonnage accepted are fixed.

Reserve Funds

There are no proposed applications of reserve funding in the 2024 - 2028 Financial Plan. The 2024 - 2028 Projected Reserves for Solid Waste Services is included in Attachment 5.

Approval Process

The proposed 2024 - 2028 Financial Plan and Annual Work Plans for Solid Waste Services are presented for consideration and endorsement before being forwarded to the Board for consideration.

The next steps of the process are:

- The 2024 2028 Financial Plan and Annual Work Plan will be presented for consideration at the Metro Vancouver Board Budget Workshop on October 20, 2023.
- The Greater Vancouver Sewerage and Drainage District Board will consider adoption of the 2024 Budget and endorsement of the 2024 2028 Financial Plan on October 27, 2023.

ALTERNATIVES

- That the Zero Waste Committee endorse the 2024 2028 Financial Plan for Solid Waste Services as presented in the report dated October 5, 2023, titled "2024 - 2028 Financial Plan – Solid Waste Services", and forward it to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.
- 2. That the Zero Waste Committee make recommendations and endorse an amended 2024 2028 Financial Plan for Solid Waste Services and forward the amended Financial Plan to the Metro Vancouver Board Budget Workshop on October 20, 2023 for consideration.

FINANCIAL IMPLICATIONS

If the Greater Vancouver Sewerage and Drainage District Board approves the 2024 Budget and endorses the Five-Year Financial Plan for Solid Waste Services, as presented under Alternative 1, in 2024 the revenue from tipping fees for the system will increase by \$10.2 million (8.4%) to \$132.1 million which will generate the majority of the \$142.4 million in total revenue required to offset projected expenditures. This represents a \$3 or 4.6% increase in the cost to the average regional household to \$68 (2023 - \$65).

Over the term of the five-year plan, the annual tipping fee revenue is projected to increase by an average of \$11.5 million per year to provide the required revenue to offset projected expenditures. It is anticipated that the cost to the average regional household over the next five years will rise from \$68 in 2024; to \$82 in 2028 representing an average annual increase of approximately \$3 per household. The per household cost projected for the 2024 - 2027 period is the same as the previous budget cycle.

Under Alternative 2, the Committee may wish to consider recommending amendments to the 2024 Budget and Five-Year Financial Plan for Solid Waste Services for consideration at the Metro Vancouver Board Budget Workshop. Any changes to the plan may have an impact on the Solid Waste Services Financial Plan.

CONCLUSION

The 2024 Budget and Five-Year Financial Plan for Solid Waste Services has been prepared following direction received at the April 19, 2023 Metro Vancouver Board Budget Workshop and to respond to direction provided in the *Board Strategic Plan* and support the *Integrated Solid Waste and*

Resource Management Plan. It is presented to Committee and Board members to provide overview information on activities and financial impacts for the years 2024 to 2028 for Solid Waste Services.

The 2024 Budget and Five-Year Financial Plan for Solid Waste Services provides the opportunity for Metro Vancouver to share with its member jurisdictions the proposed capital projects and operating programs, and the financial impact of these projects, over the next five years. The financial plan illustrates how Metro Vancouver proposes to pay for Solid Waste Services investments that are required to maintain assets and respond to the region's growing population. It is intended to be used as a guiding document for member jurisdictions in the development of their five-year financial plans and includes projections on household impact to demonstrate how the plan will remain affordable for Metro Vancouver residents while keeping pace with critical infrastructure requirements.

Staff recommend endorsing the 2024 - 2028 Budget and Five-Year Financial Plan and Annual Work Plans for Solid Waste Services as presented under Alternative 1.

Attachments:

- 1. 2024 2028 Solid Waste Financial Plan
- 2. 2024 2028 Capital Programs and Project Total Solid Waste Services
- 3. 2024 Solid Waste Work Plans
- 4. 2024 2028 "What's Happening"
- 5. 2024 2028 Projected Reserves Solid Waste
- 6. Presentation re: 2024 2028 Financial Plan Solid Waste Services

61118528

ATTACHMENT 1

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT SOLID WASTE SERVICES 2024 BUDGET REVIEW 2024 - 2028 FINANCIAL PLAN

| | 2023 BUDGET | 2024 BUDGET | % CHANGE | 2025 FORECAST | % CHANGE | 2026 FORECAST | % CHANGE | 2027 FORECAST | % CHANGE | 2028 FORECAST | % CHANGE |
|--|----------------|----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| REVENUES | | | | | | | | | | | |
| Solid Waste Tipping Fees | \$121,921,930 | \$132,115,288 | 8.4% | \$144,608,656 | 9.5% | \$155,085,460 | 7.2% | \$166,849,986 | 7.6% | \$179,182,416 | 7.4% |
| Energy Sales | 5,900,000 | 6,254,000 | | 6,504,160 | | 6,699,285 | | 6,900,263 | | 6,969,266 | |
| Other External Revenues | 5,569,809 | 4,042,041 | | 7,148,776 | | 7,330,803 | | 9,881,950 | | 10,053,201 | |
| TOTAL REVENUES | \$133,391,739 | \$142,411,329 | 6.8% | \$158,261,592 | 11.1% | \$169,115,548 | 6.9% | \$183,632,199 | 8.6% | \$196,204,883 | 6.8% |
| EXPENDITURES | | | | | | | | | | | |
| Operating Programs: | | | | | | | | | | | |
| Solid Waste Operations | | | | | | | | | | | |
| Allocated Quality Control | \$ 20,107 | \$ 20,085 | | \$ 23,092 | | \$ 25,798 | | \$ 26,782 | | \$ 27,910 | |
| Ashcroft Ranch | 862,425 | 971,187 | | 522,683 | | 747,946 | | 465,537 | | 484,709 | |
| Engineers in Training | 89,668 | 125,326 | | 163,207 | | 167,585 | | 172,019 | | 176,618 | |
| Landfills | 28,131,613 | 29,869,233 | | 32,195,422 | | 34,261,835 | | 36,660,981 | | 39,390,058 | |
| Contribution to Reserve – Landfills | 5,723,220 | 5,956,330 | | 6,310,000 | | 5,893,110 | | 5,872,040 | | 5,957,630 | |
| Recycling and Waste Centre | 44,524,742 | 49,564,839 | | 51,831,548 | | 54,089,823 | | 57,196,809 | | 58,883,182 | |
| Waste to Energy Facility | 26,251,301 | 29,266,387 | | 29,378,887 | | 32,124,045 | | 33,367,326 | | 34,269,466 | |
| | 105,603,076 | 115,773,387 | 9.6% | 120,424,839 | 4.0% | 127,310,142 | 5.7% | 133,761,494 | 5.1% | 139,189,573 | 4.1% |
| Solid Waste Planning | | | | | | | | | | | |
| Policy and Facility Development | 591,574 | 644,339 | | 660,273 | | 676,832 | | 693,603 | | 711,000 | |
| Zero Waste Implementation | 2,455,259 | 2,590,242 | | 2,634,905 | | 2,681,279 | | 2,508,288 | | 2,557,011 | |
| Programs and Public Involvement | 828,368 | 1,106,108 | | 1,129,390 | | 1,138,556 | | 1,063,060 | | 1,088,443 | |
| | 3,875,201 | 4,340,689 | 12.0% | 4,424,568 | 1.9% | 4,496,667 | 1.6% | 4,264,951 | (5.2%) | 4,356,454 | 2.1% |
| Administration and Department Support | 703,540 | 745,527 | 6.0% | 763,883 | 2.5% | 784,182 | 2.7% | 805,290 | 2.7% | 826,898 | 2.7% |
| Environmental Regulation and Enforcement | 1,631,268 | 1,581,695 | (3.0%) | 1,629,796 | 3.0% | 1,668,995 | 2.4% | 1,710,199 | 2.5% | 1,756,040 | 2.7% |
| Allocation of Centralized Support Costs | 5,693,279 | 5,775,338 | 1.4% | 5,712,196 | (1.1%) | 5,860,667 | 2.6% | 6,191,886 | 5.7% | 6,561,441 | 6.0% |
| Total Operating Programs | 117,506,364 | 128,216,636 | 9.1% | 132,955,282 | 3.7% | 140,120,653 | 5.4% | 146,733,820 | 4.7% | 152,690,406 | 4.1% |
| Allocation of Project Delivery Cost | 345,469 | 421,208 | 21.9% | 420,274 | (0.2%) | 437,566 | 4.1% | 454,666 | 3.9% | 468,451 | 3.0% |
| Debt Service | 10,819,361 | 12,465,692 | 15.2% | 19,390,542 | 55.6% | 24,533,941 | 26.5% | 32,496,708 | 32.5% | 38,473,652 | 18.4% |
| Contribution to Reserve | 4,720,545 | 1,307,793 | (72.3%) | 5,495,494 | 320.2% | 4,023,388 | (26.8%) | 3,947,005 | (1.9%) | 4,572,374 | 15.8% |
| TOTAL EXPENDITURES | \$133,391,739 | \$142,411,329 | 6.8% | \$158,261,592 | 11.1% | \$169,115,548 | 6.9% | \$183,632,199 | 8.6% | \$196,204,883 | 6.8% |

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT CAPITAL PORTFOLIO SOLID WASTE SERVICES

2024 CAPITAL BUDGET AND 2024 - 2028 CAPITAL PLAN

| | CAPITAL UDGET FOR APPROVAL | c | 2024 CAPITAL CASH FLOW | c | 2025 CAPITAL CASH FLOW | 2026 CAPITAL ASH FLOW | | 2027 APITAL SH FLOW | C | 2028 APITAL SH FLOW | 024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|--|----------------------------------|----|------------------------------|----|------------------------------|-----------------------------|------|---------------------------|------|---------------------------|--|-----------------|-------------------|
| CAPITAL EXPENDITURES | | | | | | | | | | | | | |
| Landfills | | | | | | | | | | | | | |
| Alternative Fuel and Recyclables Recovery Centre | \$ - | \$ | - | \$ | - | \$ - | \$ | - | \$ | 1,500,000 | \$ 1,500,000 | Not Started | Opportunity |
| Coquitlam Landfill Gas Collection Upgrades | 8,100,000 | | 1,500,000 | | - | - | | - | | - | 1,500,000 | Multiple | Maintenanc |
| Coquitlam Landfill Maintenance | 13,600,000 | | 2,350,000 | | 3,600,000 | 1,600,000 | | - | | - | 7,550,000 | Multiple | Resilience |
| Total Landfills | \$ 21,700,000 | \$ | 3,850,000 | \$ | 3,600,000 | \$ 1,600,000 | \$ | - | \$ | 1,500,000 | \$ 10,550,000 | | |
| Recycling and Waste Centres | | | | | | | | | | | | | |
| Langley Recycling and Waste Centre Site Reconfiguration | \$ - | \$ | - | \$ | 4,000,000 | \$ 6,500,000 | \$ | - | \$ | - | \$ 10,500,000 | Not Started | Maintenan |
| Langley Recycling Depot Development | 8,000,000 | | 1,000,000 | | 3,000,000 | 3,750,000 | | - | | - | 7,750,000 | Construction | Upgrade |
| Maple Ridge Recycling and Waste Centre Upgrades | 2,000,000 | | 500,000 | | 750,000 | 750,000 | | - | | - | 2,000,000 | Construction | Maintenan |
| North Shore Recycling and Waste Centre Compactor Replacement | - | | - | | - | 4,000,000 | | - | | - | 4,000,000 | Not Started | Maintenan |
| North Surrey Site Reconfiguration | - | | - | | - | 3,000,000 | | 4,500,000 | | - | 7,500,000 | Not Started | Maintenan |
| North Surrey Compactor | 3,000,000 | | 100,000 | | - | - | | - | | - | 100,000 | Construction | Maintenan |
| North Surrey Recycling Depot Development | 32,000,000 | | 1,000,000 | | 3,000,000 | 3,750,000 | | - | | - | 7,750,000 | Construction | Upgrade |
| Weigh Scale Replacement | 3,500,000 | | 2,500,000 | | - | - | | - | | - | 2,500,000 | Construction | Maintenan |
| Total Recycling and Waste Centres | \$ 48,500,000 | \$ | 5,100,000 | \$ | 10,750,000 | \$ 21,750,000 | \$ | 4,500,000 | \$ | - | \$ 42,100,000 | | |
| Waste To Energy Facilities | | | | | | | | | | | | | |
| Acid Gas Reduction | \$ 2,100,000 | \$ | 850,000 | \$ | 800,000 | \$ 10,000,000 | \$ 1 | 0,000,000 | \$ 1 | 0,000,000 | \$ 31,650,000 | Design | Upgrade |
| Biosolids Processing | 23,850,000 | | 8,000,000 | | 7,000,000 | 4,000,000 | | 2,000,000 | | - | 21,000,000 | Construction | Resilience |
| Bottom Ash Processing | 6,800,000 | | 50,000 | | - | - | | - | | - | 50,000 | Construction | Opportunit |
| Generation Bank Replacement | 12,000,000 | | 5,900,000 | | 3,000,000 | 3,000,000 | | - | | - | 11,900,000 | Construction | Maintenan |
| Primary Economizer Replacement | 7,000,000 | | 500,000 | | - | - | | - | | - | 500,000 | Construction | Maintenan |
| Refuse Crane | 17,850,000 | | 5,650,000 | | 5,800,000 | 5,000,000 | | - | | - | 16,450,000 | Construction | Maintenan |
| Secondary Economizers Replacement | 6,000,000 | | 1,750,000 | | 3,000,000 | 1,000,000 | | - | | - | 5,750,000 | Construction | Maintenan |
| Special Handle Waste Direct Feed System | - | | - | | 2,500,000 | 2,500,000 | | 2,500,000 | | 2,500,000 | 10,000,000 | Not Started | Opportunit |
| Waste-to-Energy Facility Maintenance | 30,750,000 | | 9,900,000 | | 9,700,000 | 3,650,000 | | 7,250,000 | | - | 30,500,000 | Multiple | Maintenan |
| WTE Facility District Energy Phase 2 | - | | - | | - | - | | - | 5 | 0,000,000 | 50,000,000 | Not Started | Resilience |
| WTE Facility District Energy | 84,000,000 | | 12,500,000 | | 17,500,000 | 16,000,000 | 3 | 7,000,000 | | - | 83,000,000 | Construction | Resilience |
| WTE Facility District Energy Opportunities | 2,300,000 | | 50,000 | | - | - | | - | | - | 50,000 | Construction | Opportunit |
| Total Waste To Energy Facilities | \$ 192,650,000 | \$ | 45,150,000 | \$ | 49,300,000 | \$ 45,150,000 | \$5 | 8,750,000 | \$ 6 | 2,500,000 | \$ 260,850,000 | | |
| OTAL CAPITAL EXPENDITURES | \$ 262,850,000 | \$ | 54,100,000 | \$ | 63,650,000 | \$ 68,500,000 | \$6 | 3,250,000 | \$6 | 4,000,000 | \$ 313,500,000 | | |

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT CAPITAL PORTFOLIO SOLID WASTE SERVICES 2024 CAPITAL BUDGET AND 2024 - 2028 CAPITAL PLAN

| | CAPITAL BUDGET FOR APPROVAL | 2024 CAPITAL CASH FLOW | 2025 CAPITAL CASH FLOW | 2026 CAPITAL CASH FLOW | 2027 CAPITAL CASH FLOW | 2028 CAPITAL CASH FLOW | 2024 TO 2028 TOTAL CAPITAL CASH FLOW | ACTIVE PHASE | PRIMARY DRIVER |
|-------------------------------------|-----------------------------------|---------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|-----------------|-------------------|
| CAPITAL FUNDING | | | | | | | | | |
| New External Borrowing | \$ 230,702,000 | \$ 43,531,000 | \$ 55,342,000 | \$ 59,004,000 | \$ 57,227,000 | \$ 60,053,000 | \$ 275,157,000 | | |
| Reserve | 14,541,000 | 2,569,000 | 1,308,000 | 5,496,000 | 4,023,000 | 3,947,000 | 17,343,000 | | |
| External Funding - Interagency | 17,607,000 | 8,000,000 | 7,000,000 | 4,000,000 | 2,000,000 | - | 21,000,000 | | |
| Total | \$ 262,850,000 | \$ 54,100,000 | \$ 63,650,000 | \$ 68,500,000 | \$ 63,250,000 | \$ 64,000,000 | \$ 313,500,000 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| SUMMARY BY DRIVER | | | | | | | | | |
| SUMMARY BY DRIVER Growth | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| | \$ – 90,200,000 | | \$ | \$ — 26,900,000 | \$ – 11,750,000 | \$ - | \$ – 93,200,000 | | |
| Growth | * | 28,300,000 | | | | | | | |
| Growth Maintenance | 90,200,000 | 28,300,000 22,850,000 | 26,250,000 | 26,900,000 | 11,750,000 | - | 93,200,000 | | |
| Growth Maintenance Resilience | 90,200,000 121,450,000 | 28,300,000 22,850,000 2,850,000 | 26,250,000 28,100,000 | 26,900,000 21,600,000 | 11,750,000 39,000,000 | - 50,000,000 | 93,200,000 161,550,000 | | |



2024 WORK PLAN

SOLID WASTE SERVICES Solid Waste Operations

Description of Services

Solid Waste Services provides waste reduction and recycling planning and solid waste facility operations to the region under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). Solid Waste Operations is responsible for operating an integrated solid waste management system with service delivery focused on achieving Metro Vancouver's zero waste objectives through reliable, cost-effective, safe and environmentally-sound operations. The regional solid waste system is a user pay model, primarily funded through tipping fees.

Metro Vancouver facilities include the North Shore, United Boulevard, North Surrey, Central Surrey, Maple Ridge, and Langley recycling and waste centres; and Waste-to-Energy Facility; these facilities are managed through several large contracts. Metro Vancouver also manages the closed Coquitlam Landfill, the former Matsqui Transfer Station site, and the Ashcroft Ranch.

Strategic Directions and High Level Goals Supported

Board Strategic Plan

- Continue to expand and enhance the disposal ban program
- Continue to expand recycling options at regional recycling and waste centres
- Implementing district energy at the Waste-to-Energy Facility

Integrated Solid Waste and Resource Management Plan

- Goal 1 Minimize waste generation
- Goal 2 Maximize reuse, recycling & material recovery
- Goal 3 Recover energy from waste stream after material recovery
- Goal 4 Dispose of all waste in landfill after recycling & energy recovery

Performance indicators

| Indicator | Historical and/or Industry Benchmark | Current Performance | 2024 Performance Objective |
|--|---|-------------------------|-------------------------------|
| Annual solid waste flows in Metro Vancouver system (tonnes) | 2022: 1,002,000 2021: 976,000 2020: 854,000 | projected: 1,040,000 | 930,000 |
| Processing Availability of the Waste- to-Energy Facility | 2022: 90.6% 2021: 91.4% 2020: 91.6% | projected: 92% | 93% |
| Customer availability for the Waste- to-Energy Facility | 2022: 99% 2021: 99% | projected: 99% | 99.0% |
| Customer availability for the Recycling and Waste Centres | 2022: 99.9% 2021: 99.9% 2020: 99.9% | projected: 99.9% | 99.9% |

2024 Key Actions

<u>General</u>

- Asset management program development, including condition assessments and asset policy development
- Implementation and further development of new weigh scale software including new features for improved customer service

Recycling and Waste Centres

- Recycling depot development design at North Surrey and Langley recycling and waste centres
- Compactor replacement at North Surrey Recycling and Waste Centre
- Alternative fuel and recyclables recovery pilot targeting small vehicle waste
- Tipping floor repairs at North Shore and North Surrey recycling and waste centres
- North Surrey Recycling and Waste Centre administration building refurbishment
- Recycling and waste centres building and asset assessment
- Assess opportunities to improve pedestrian and cyclist access

Waste-to-Energy Facility

- Complete feed hopper/feed chute, primary economizer, and feedwater pump replacement projects
- Continue work on non-ferrous metal recovery, programmable logic controllers replacement, island power, electrical transformer replacement, and fire suppression system projects
- Advance refuse crane, bottom ash crane, fabric filter hopper, and compressed air replacement projects
- Initiate design for secondary economizer, fly ash silo, pug mill enclosure ventilation system, and refuse pit bunker door replacement projects.
- Biosolids processing system detailed design
- District energy system detailed design
- Bottom ash beneficial use pilot testing
- Continue procurement activities related to new Operating and Maintenance Contract. Current contract expires in March 2025

<u>Landfills</u>

- Ongoing environmental operations at Coquitlam Landfill (leachate and landfill gas), leachate, landfill gas, and groundwater monitoring and reporting for environmental compliance
- Complete upgrade for the east leachate pump station upgrade
- Complete detailed design for the flare station upgrade

Ashcroft Ranch

- McLean Lake Dam hydrological and geotechnical assessment consulting study
- Fencing replacement



SOLID WASTE SERVICES

Solid Waste Planning and Community Engagement

Description of Services

Solid Waste Services provides waste reduction and recycling planning, zero waste implementation and solid waste facility operations to the region under the authority of the Greater Vancouver Sewerage and Drainage District (GVS&DD). Solid waste planning and community engagement activities include:

- Technical and audience research and engagement to develop an updated regional solid waste management plan;
- Regional waste reduction and recycling initiatives in the current solid waste management plan, including disposal bans, bylaws, regional policies and recycling services, etc.;
- Regional infrastructure planning and development to fulfill future needs for waste recycling, transfer and disposal; and,
- Stakeholder engagement services.

In addition, to support Metro Vancouver's commitment to protect the environment and conserve resources, Environmental Regulation and Enforcement negotiates and issues permits, orders and licenses and then promotes compliance, and enforces solid waste bylaws. According to a user-pay principle, these regulatory costs are recovered through fees.

Strategic Directions and High Level Goals Supported

Board Strategic Plan

- Expand actions that will reduce the amount of litter and waste that Metro Vancouver members manage, including strategies to reduce single-use items and other disposable consumer products
- Continue to provide technical support to communication campaigns that increase diversion through source reduction, reuse, repurposing or recycling
- Research opportunities to ensure sufficient capacity in the regional recycling and reuse system, including assessing opportunities for organics and wood
- Identify future disposal alternatives with full life cycle, cost and greenhouse gas emission analyses

Integrated Solid Waste and Resource Management Plan

- Goal 1 Minimize waste generation
- Goal 2 Maximize reuse, recycling & material recovery
- Goal 3 Recover energy from waste stream after material recovery
- Goal 4 Dispose of all waste in landfill after recycling & energy recovery

Performance Indicators

| Indicator | Historical and/or industry benchmark | Current performance ¹ | 2024 performance objective |
|--|---|-------------------------------------|----------------------------|
| Recycling rate (percent of solid waste | Canadian average ² : | | |
| diverted from final disposal) | 27.6% | 65% | 66% |
| | Metro Vancouver | | |
| | historical: | | |
| | 2020: 64% | | |
| | 2019: 63% | | |
| | 2018: 64% | | |
| | 2017: 63% | | |
| Waste disposed per capita | Canadian average ¹ : | | |
| (tonnes) | 0.69 | 0.45 | 0.43 |
| | Metro Vancouver | | |
| | historical: | | |
| | 2020: 0.45 | | |
| | 2019: 0.48 | | |
| | 2018: 0.48 | | |
| | 2017: 0.49 | | |

¹Most recent figures derived from Statistics Canada disposal & diversion tonnages (2018) and Metro Vancouver 2021 Annual Solid Waste and Recycling Summary

2024 Key Actions

- Solid Waste and Recycling Industry Advisory Committee support
- Independent Consultation and Engagement Panel support
- Engagement for review and update of the solid waste management plan, including supporting the Public/Technical Advisory Committee
- Disposal Ban Program implementation monitoring
- Textiles, single-use items, seasonal waste, food waste, illegal dumping, and the Zero Waste Conference support
- National Zero Waste Council including work on implementing the Circular Economy
- Canada Plastic Pact support
- National Solid Waste Benchmarking Initiative and applied waste research
- Regional waste composition monitoring
- Solid waste initiatives public engagement
- Regional Food Recovery Network
- Regional reuse and repair events
- Zero waste construction certification
- Carbon capture, utilization, sequestration study
- Recycling depot development at North Surrey and Langley recycling and waste centres

Solid Waste Services

2024 to 2028 – WHAT'S HAPPENING

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

| Initiative | Description | Theme |
|--|---|---|
| 2024 | | |
| Weigh scale software replacement | Autoscale software replacement installation and customer service enhancements | System Stewardship |
| Asset management planning | Asset management program plan development | System Stewardship |
| Biosolids utilization at the Waste-to-Energy Facility | Detailed design/commence construction of biosolids utilization system | Opportunities for Innovation and Enhanced Service |
| North Surrey compactor replacement | Replace North Surrey Recycling and Waste Centre compactor | System Stewardship |
| District energy system at the Waste-to-Energy Facility | District energy system detailed design | Environmental Protection and Climate Action |
| Zero waste initiatives | Research on waste prevention and diversion initiatives, such as new policies, incentives, business models and regulatory measures, to move toward a circular economy | Environmental Protection and Climate Action |
| Bottom ash beneficial use | Pilot testing for beneficial use of bottom ash | Environmental Protection and Climate Action |
| Alternative fuel and recyclables recovery | Alternative fuel and recyclables project pilot testing | Environmental Protection and Climate Action |
| North Surrey and Langley Recycling Depots | North Surrey and Langley recycling and waste centre recycling depot design and commence construction | Environmental Protection and Climate Action |
| Reuse and Repair events | Expand reuse events at recycling and waste centers and community repair events | Environmental Protection and Climate Action |
| Capital replacements at the Waste-to-Energy Facility | Capital replacements and upgrades, including primary and secondary economizers, generation bank, refuse crane, and bottom ash crane | System Stewardship |
| Solid waste management plan update | Continue review and update of the region's solid waste management plan | Environmental Protection and Climate Action |

| Coquitlam Landfill | Construction of east leachate pump station upgrade | System Stewardship |
|--|--|---|
| Coquitlam Landfill | Detailed design / commence construction for the flare station upgrade | System Stewardship |
| 2025 | | |
| Capital replacements at the Waste-to-Energy Facility | Continue capital replacements and upgrades, including secondary economizers, generation bank, refuse crane, and primary superheaters | System Stewardship |
| Solid waste management plan update | Continue review and update of the region's solid waste management plan | Environmental Protection and Climate Action |
| Zero waste initiatives | Continued research and development of waste prevention and diversion initiatives, such as new policies, incentives, business models and regulatory measures, to move toward a circular economy | Environmental Protection and Climate Action |
| Alternative fuel and recyclables recovery | Alternative fuel and recyclables pilot project implementation | Environmental Protection and Climate Action |
| Recycling and Waste Centre recycling depots | New recycling depots operating at the Langley and North Surrey facilities | Environmental Protection and Climate Action |
| District energy system at the Waste-to-Energy Facility | Construction of Phase 1 of the District Energy system, providing waste heat to River District community | Environmental Protection and Climate Action |
| Biosolids at the Waste- to-Energy Facility | Complete construction/commissioning of a biosolids receiving system at the Waste-to- Energy Facility | Opportunities for Innovation and Enhanced Service |
| 2026 | | |
| Capital replacements at the Waste-to-Energy Facility | Continue capital replacements and upgrades, including stack refurbishment | System Stewardship |
| Solid waste management plan review | Complete review and update of the region's solid waste management plan | Environmental Protection and Climate Action |
| Zero waste initiatives | Begin to implement and monitor the new waste prevention and diversion initiatives in the updated solid waste management plan | Environmental Protection and Climate Action |

| Alternative fuel and | Alternative fuel and recyclables recovery | Environmental |
|-------------------------|---|--------------------|
| recyclables recovery | facility development | Protection and |
| | | Climate Action |
| District energy system | Complete commissioning of Phase 1 of the | Environmental |
| at the Waste-to-Energy | District Energy system | Protection and |
| Facility | | Climate Action |
| 2027 | | |
| Capital replacements at | Continue capital replacements and upgrades, | System Stewardship |
| the Waste-to Energy | including boiler grate and feed table supports | -, |
| Facility | replacement project | |
| Tacinty | | |
| Zero waste initiatives | Implement and monitor the new waste | Environmental |
| | prevention and diversion initiatives in the | Protection and |
| | updated solid waste management plan | Climate Action |
| North Shore compactor | Replace North Shore Recycling and Waste | System Stewardship |
| replacement | Centre compactor | System Stewardship |
| replacement | Centre compactor | |
| Alternative Fuel and | Begin design of the full scale Alternative Fuel | Environmental |
| Recyclables Recovery | and Recyclables Recovery Centre | Protection and |
| Centre Design | | Climate Action |
| 2028 | | |
| Western region | Begin design for the western region recycling | Addressing |
| recycling and waste | and waste centre replacement | Regional |
| centre replacement | | Growth |
| | | GIUWIII |
| Capital replacements at | Continue capital replacements and upgrades | System Stewardship |
| the Waste-to Energy | and begin construction of the acid gas | |
| Facility | reduction system | |
| Zero waste initiatives | Continue to implement and monitor the new | Environmental |
| | waste prevention and diversion initiatives in the | Protection and |
| | updated solid waste management plan | Climate Action |
| | | |
| District energy system | Commence construction of Phase 2 of the | Environmental |
| at the Waste-to-Energy | District Energy system | Protection |
| Facility | | and Climate |
| | | Action |

METRO VANCOUVER DISTRICTS

2024 - 2028 PROJECTED RESERVES - SOLID WASTE

OPERATING RESERVES

| | 2 | 023 | 202 | 4 | | | | | | 2024 | 2025 | 2026 | 2027 | 2028 |
|----------------------|-------|--------------|-------|--------|-----------|-----|-----------|------|------------|------------|---------------------|------------|---------------|------------------|
| | EN | DING | OPENI | NG | | | | | | ENDING | ENDING | ENDING | ENDING | ENDING |
| | BAL | LANCE | BALAN | NCE | CONTRIBUT | ION | WITHDRAWA | LS | INTEREST | BALANCE | BALANCE | BALANCE | BALANCE | BALANCE |
| Solid Waste Services | \$ 16 | 5,412,984 \$ | 16,4 | 12,984 | \$ | - | \$ | - \$ | 410,325 \$ | 16,823,309 | \$ 17,243,892 \$ | 17,674,989 | \$ 18,116,864 | \$ 18,569,786 |

DISCRETIONARY RESERVES

| | 2023 ENDING BALANCE | OF | 2024 PENING ALANCE | CONT | TRIBUTION | WITHDRAWA | LS | INTEREST | 2024 ENDING BALANCE | 2025 ENDING BALANCE | 2026 ENDING BALANCE | 2027 ENDING BALANCE | 2028 ENDING BALANCE |
|-------------------------------|---------------------------|------|--------------------------|------|-----------|-----------|------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Solid Waste Services | | | | | | | | | | | | | |
| Solid Waste General Reserve | \$ 27,673,818 \$ | \$ 3 | 27,673,818 | \$ | - | \$ | - \$ | 691,845 \$ | \$ 28,365,663 | \$ 29,074,805 | \$ 29,801,675 | \$ 30,546,717 | \$ 31,310,385 |
| Landfill Post Closure Reserve | 48,883,385 | | 48,883,385 | | 5,956,330 | | - | 1,296,539 | 56,136,254 | 63,928,535 | 71,493,522 | 79,226,301 | 87,239,059 |
| Landfill Reserve | 11,870,256 | | 11,870,256 | | - | | - | 296,756 | 12,167,012 | 12,471,187 | 12,782,967 | 13,102,541 | 13,430,105 |
| Total | \$ 88,427,459 \$ | \$ | 88,427,459 | \$ | 5,956,330 | \$ | - \$ | 2,285,140 \$ | \$ 96,668,929 | \$ 105,474,527 | \$ 114,078,164 | \$ 122,875,559 | \$ 131,979,549 |