



For Metro Vancouver meetings on Friday, March 25, 2022

Please note these are not the official minutes. Board in Brief is an informal summary. Material relating to any of the following items is available on request from Metro Vancouver. For more information, please contact: media@metrovancover.org.

Metro Vancouver Regional District

E 1.1 Draft Climate 2050 Industry and Business Roadmap

APPROVED

The draft *Climate 2050* Industry and Business Roadmap is the next in a series of 10 roadmaps that will guide the region's policies and collective actions to transition to a carbon neutral, resilient region by 2050. The draft *Climate 2050* Industry and Business Roadmap lays out the goals, targets, strategies, and actions for reducing greenhouse gas emissions and increasing climate resilience in industry and business sectors. Staff will gather feedback on the draft Industry and Business Roadmap during an engagement period, with the intent of bringing an updated roadmap for endorsement by the MVRD Board in 2022. The 2030 targets and greenhouse gas reduction actions in the roadmap were adopted in the *Clean Air Plan*, so this engagement period will focus on the 2050 goals and targets, climate resilience strategies and actions, and the implementation process for actions.

The Board directed staff to proceed with engagement on the draft *Climate 2050* Industry and Business Roadmap, as presented.

E 1.2 Mobile Air Quality Monitoring Using Drone-Based Sensors

APPROVED

Sensor-equipped drone flights were conducted to measure air contaminant concentrations in three locations within the region. The work was part of a project funded by the Sustainability Innovation Fund to assess the cost and feasibility of mobile monitoring using drone-mounted small sensors to measure air contaminants from emissions sources in the region that are difficult to access or located in hazardous environments. Results revealed challenges in collecting data of sufficient quality to effectively assess emissions using drone-based monitoring platforms equipped with the relatively new technology of small sensors. Staff propose an alternative approach to completing the project that would enable a more robust assessment of using small sensors on additional types of mobile monitoring platforms.

The Board authorized staff to use the allocation from the Regional District Sustainability Innovation Fund for the mobile air quality monitoring project to evaluate the feasibility of using other mobile monitoring platforms for air emissions assessment.

E 1.3 Addressing the Use of Heavy Fuel Oil and Exhaust Gas Cleaning Systems in Marine Vessels in the Region

APPROVED

At its September 10, 2021 meeting, the Climate Action Committee received a delegation highlighting impacts from use of marine vessel heavy fuel oil (HFO) and on-board scrubbers. HFO and scrubbers are

increasingly being used on marine vessels as alternative mechanisms to comply with international fuel sulphur content standards, instead of using cleaner lower sulphur fuels.

Continued use of HFO and rapid uptake of scrubber technology has resulted in increased emissions of particulate matter, black carbon, and greenhouse gases, as well as marine impacts from the discharge of scrubber washwater into the ocean. The federal government and the Vancouver Fraser Port Authority are seeking to address the issues of air emissions and scrubber washwater discharge. Metro Vancouver can advocate to the federal government to take action to prohibit scrubber use and require cleaner lower sulphur fuels, and support work the port authority is doing to address water pollution.

The Board authorized the Board chair to:

- Write to the federal ministers of Environment and Climate Change Canada and Transport Canada to request the prohibition of scrubbers and require the use of cleaner, lower sulphur fuels that meet sulphur content limits without the use of scrubbers, in the North American Emission Control Area, and to prioritize the use of shore power; and
- Write to the Vancouver Fraser Port Authority to express support for their actions to prohibit the discharge of scrubber washwater while a vessel is at berth or anchor and further encourage this action to apply to vessels transiting all the waters within the port, as well as support their air emissions program that incentivizes the use of cleaner fuels and shore power.

The Board also authorized the Board chair to write the port authorities of Seattle, Tacoma, and Prince Rupert to call for prohibition on the discharge of scrubber washwater, similar to the actions of the Vancouver Fraser Port Authority.

E 2.1 Proposed Amendment to the 2022 Schedule of Regular Board Meetings

APPROVED

Two meetings on the approved 2022 annual schedule of regular board meetings need to change. The new proposed dates are July 7, 2022 and April 14, 2022. Per the *Procedure Bylaw*, date changes must be approved by board resolution.

The Board amended the 2022 schedule of regular Board meetings by:

- Rescheduling the *Board Strategic Plan* review meeting set for February 26, 2022 to July 7, 2022 at 9:15 am
- Rescheduling the Board budget review meeting set for April 27, 2022 to April 14, 2022 at 1:00 pm

G 1.1 Consideration of Metro Vancouver Regional District Regional Growth Strategy Bylaw No. 1339, 2022, a Bylaw to Adopt Metro 2050

APPROVED

This report presents *Metro 2050*, via *Metro Vancouver Regional District Regional Growth Strategy Bylaw No. 1339, 2022*, to the Board for consideration of first and second readings and referral to a public hearing. *Metro 2050* is an update to *Metro Vancouver 2040: Shaping our Future*, and is the culmination of nearly three years of research, policy analysis, and deep engagement. The Board scoped the update to:

- Extend the projections and policies to the year 2050

- Align with *Transport 2050*
- Respond to member jurisdiction requests for improvements
- Strengthen policy actions to address climate change, tackle the challenges of providing affordable housing (particularly near transit), incorporate social equity outcomes, strengthen First Nations content and relationships, and do more to protect the environment

Metro 2050 introduces important new policies that will help Metro Vancouver, member jurisdictions, TransLink, and others address the significant challenges facing this region. Adopting this bylaw will result in the adoption of *Metro 2050* as the regional growth strategy for Metro Vancouver, replacing *Metro 2040*.

The Board:

- Gave first and second readings to *Metro Vancouver Regional District Regional Growth Strategy Bylaw No. 1339, 2022*, a bylaw that would adopt *Metro 2050* as the regional growth strategy
- Referred said bylaw to a public hearing to be held on April 20, 2022 at 6:00 pm

Additionally, given the urgent need to respond to climate change and prepare for extreme weather events, the Board directed staff to undertake work and engagement in order to propose an early amendment to *Metro 2050* post-adoption to strengthen climate action and policy language including the intent to improve integration of climate action into other *Metro 2050* priorities.

I 1 Committee Information Items and Delegation Summaries

RECEIVED

The Board received information items and delegation summaries from standing committees.

Regional Planning Committee – March 4, 2022

Delegation Summaries:

3.1 Alex Boston, Executive Director, Renewable Cities, Centre for Dialogue, Simon Fraser University

Information Items:

5.2 Metro 2050 Phase 2 Engagement Including Activities in Q4 2021

The second phase of the *Metro 2050* Engagement Plan was carried out between January and November of 2021 and included working closely with the Metro 2050 Intergovernmental Advisory Committee and Regional Planning Committee over five months to draft *Metro 2050*, followed by a five-month comment period where member jurisdictions, local First Nations, other regional agencies and stakeholders and members of the public were invited to provide comments on the draft plan.

Participation in engagement activities was strong including 25 presentations to councils and boards, over 8,000 visits to the *Metro 2050* website, over 200 attendees at the fall webinar, and over 50 feedback forms submitted by members of the public.

Phase 2 included coordination with the *Transport 2050*, *Climate 2050*, and *Clean Air Plan* project teams to ensure that the resulting plans are fully aligned and mutually supportive. All comments received have been reviewed, considered, and organized in the *Metro 2050* issue-response table, which was presented to the Regional Planning Committee and MVRD Board in January 2022, and summarized in this report (Reference

7). When broken out by topic, over 900 individual comments were submitted. Applying this input to the draft of *Metro 2050* has made it a stronger representation of the region's collective vision for the future. This report also includes a detailed quarterly report on the engagement activities that took place during Q4 of 2021.

Greater Vancouver Water District

E 1.1 Award of Contract Resulting from Tender No. 21-001: Construction - Fleetwood Reservoir Phase 1 **APPROVED**

The Fleetwood Reservoir Phase 1 project is located at 9008 Fleetwood Way in the City of Surrey. The work involves the construction of a two-cell underground reservoir with a capacity of 13.6 megalitres, as well as a valve control chamber. As part of a coordinated works agreement between the City of Surrey and the GVWD, this project may include a scope of work required by the City of Surrey that will only be awarded after approval by the city.

As a result of Request for Qualifications No. 20-205, four experienced firms were shortlisted and invited to respond to the tender. Kenaidan Contracting Ltd was identified as offering the lowest compliant bid which is within the overall project budget.

The Board approved the award of a contract in the amount of \$30,959,650 (exclusive of taxes) to Kenaidan Contracting Ltd for the Fleetwood Reservoir Phase 1 project, subject to final review by the Commissioner.

I 1 Committee Information Items and Delegation Summaries **RECEIVED**

The Board received information items and delegation summaries from standing committees.

Water Committee – March 2, 2022

Information Items:

5.1 2022 Water Sustainability Innovation Fund Applications

The Climate Action Committee is responsible for overseeing the Sustainability Innovation Funds, and for making all funding recommendations to the respective Boards. This report presents six Water Services projects that were recommended for funding, totaling \$2,980,000 over the years 2022 to 2025, which will be funded through the Water Sustainability Innovation Fund. The projects cover a wide range of climate action areas including habitat protection, energy use, and the equity and affordability of drinking water.

5.3 Port Mann Corridor Upgrades – Completion Report

Metro Vancouver staff have successfully completed a multi-phase program to upgrade and enhance the Port Mann water supply corridor. Completion of these growth and resiliency projects is key in meeting the goals identified in the *Board Strategic Plan 2019 – 2022* for the Water Services function. By collaborating closely with staff from the cities of Coquitlam and Surrey, impacts from construction of these large water infrastructure projects were mitigated.



These projects significantly contribute to Metro Vancouver’s goals to increase the supply capacity from the Coquitlam source and also ensure that the transmission components of the water system are expanded and strengthened to allow the continued supply of safe, clean drinking water to the region’s residents and businesses.

5.4 GVWD Electrical Energy Use, Generation and Management

The GVWD Electrical Energy Use, Generation and Management report outlines electrical usage by the water utility, as well as energy generation and energy management projects. GVWD avoids electricity purchases of between \$250,000 to \$600,000 annually by generating electrical energy at four facilities. Energy management projects completed since 2015 provide an additional estimated annual savings of \$180,000.

Greater Vancouver Sewage and Drainage District

E 1.1 Iona Island Wastewater Treatment Plant Projects – Project Definition Engagement Results RECEIVED

Metro Vancouver began engagement activities for the project definition phase of the Iona Island Wastewater Treatment Plant (IIWWTP) projects in June 2018. Engagement supported project introduction, the development of an initial design concept, and the development of a revised design concept in response to identified challenges. Staff engaged the Board, standing committees, staff advisory committees, Vancouver Sewerage Area member jurisdiction staff, the public and key stakeholders, and First Nations. Key themes that emerged during engagement were treatment level, regulatory deadline, health of the Salish Sea and Fraser River, chinook salmon, southern resident killer whales, resident and migratory birds, collaboration with Musqueam Indian Band, delivery strategy, cost, funding, and governance. Many issues raised during engagement were addressed in the development of the conceptual design, with others to be addressed during preliminary design. An engagement strategy will be developed to support the next stages including the preliminary design, early works, and ecological restoration projects.

The Board received the report for information.

E 1.2 Iona Island Wastewater Treatment Plant Upgrade Projects – Project Definition and Conceptual Design Approval (Stage Gate 1) APPROVED

At its November 26, 2021 meeting, the Board endorsed a revised design concept for the Iona Island Wastewater Treatment Plant (IIWWTP) projects and directed staff to finalize the project definition report for Board approval in March 2022.

The project definition phase started in 2018 and the Project Definition Report Summary is attached for reference, which includes:

- The conceptual design for upgrading the WWTP, including resource recovery and ecological restoration opportunities
- A plan to construct the WWTP to meet the federal regulations by 2035
- A cost estimate using Metro Vancouver’s Best Practice Cost Estimating Framework

- A recommended delivery strategy that is intentionally flexible to address some of the complex program challenges and to allow for refinement at later stages

Approval of the project definition will allow staff to focus on the next phases of the projects related to advancing the design and undertaking works to prepare the site for future construction of the WWTP upgrades, so that the proposed schedule can be maintained. This will mitigate further delays in meeting the regulatory requirements and avoid the potential for increasing costs through escalation.

Completing the project definition and confirming the project scope and budget will also allow for clearer, more focused efforts in pursuing and securing sources of funding for this major capital project and for collaborating with member jurisdictions on finalizing cost apportionment and household impacts.

With approval of the project definition and conceptual design, staff will continue with subsequent phase of works including WWTP design, as well as the early and enabling site works. Regular progress updates and approvals will be brought to the GVS&DD Board for consideration including, but not limited to, large contract approvals, land tenure changes, project funding agreements, and potential governance enhancements.

The Board:

- Approved the conceptual design for the Iona Island Wastewater Treatment Plant upgrade projects as presented, with an estimated cost of \$9.9 billion, including escalation and risk reserve, subject to further stage gate approvals
- Directed staff to continue focused efforts to pursue the cost share contribution from Provincial and Federal governments that will be required for implementation of the projects
- Directed staff to work collaboratively with member jurisdictions to confirm project cost allocations and rate impacts in accordance with *GVS&DD Cost Apportionment Bylaw No. 283, 2014*
- Directed staff to finalize a funding and financing strategy for Board approval, and to ensure capital expenditure cash flows for the projects are updated and included in the annual budgeting process
- Referred a motion to direct staff to provide context for the project by completing a 20-year asset management plan for major water and liquid waste capital projects including an asset inventory, asset condition assessment, and a proposed timeline of maintenance, repair, replacement, and funding requirements for these major projects and report back to the Board with this plan

E 1.3 Out-of-Region Trucked Liquid Waste Discharge Requests

APPROVED

As set out in *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*, effective June 1, 2022 the discharge of trucked liquid waste (TLW) generated outside the Metro Vancouver region is restricted at Metro Vancouver wastewater treatment plants (WWTPs). Out-of-region waste may only be accepted on the basis of an out-of-region discharge number as authorized by the Board for a set period. If authorized, these discharges would be subject to all of the provisions in the TLW bylaw.

In January, 2022, the follow applicants submitted requests for continued discharge of out-of-region TLW after June 1, 2022:

- Fraser Valley Regional District (FVRD)
- Correctional Service of Canada's Kent and Mountain Institutions in Agassiz

- Point Roberts, Washington

Staff recommended discharge authorization to these applicants based on, respectively: disruptions to neighbouring infrastructure from recent unprecedented flooding in the FVRD, an existing temporary allowance for Correctional Service of Canada, and Point Roberts' long-standing reliance on GVS&DD WWTPs due to their unique geographic circumstances.

The Board, pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*:

- Authorized staff to issue an out-of-region discharge number for trucked liquid waste generated from wastewater treatment plants owned and operated by the Fraser Valley Regional District from June 1, 2022 to May 31, 2024
- Authorized staff to issue an out-of-region discharge number for trucked liquid waste generated from Correctional Service of Canada's Kent and Mountain Institutions, Agassiz, BC from June 1, 2022 to December 31, 2022
- Authorized staff to issue an out-of-region discharge number for trucked liquid waste generated from Point Roberts, Washington, US from June 1, 2022 to May 31, 2027

E 1.4 Contract Amendment of RFP No. 14-205 - Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant to Design Consultant, Engineer of Record Service **APPROVED**

Metro Vancouver terminated its contract with Acciona Wastewater Solutions LP and is moving forward with a new project delivery model to complete the North Shore Wastewater Treatment Plant Project. Under the new model, Metro Vancouver will work with a general contractor to finalize construction and a design consultant to complete the design, to be the engineer of record, and to provide quality assurance services.

Metro Vancouver staff have worked collaboratively with AECOM for them to become the design consultant. This will require an amendment to their current "Owners Engineering" agreement which will allow AECOM to assume all design responsibilities and obligations for the North Shore Wastewater Treatment Facility including both the constructed and future works. Initial amendment of AECOM's contract in the amount of up to \$15,000,000 reflects the Phase 1 scope of services under this new delivery model.

The Board amended the contract resulting from RFP No. 14-205 - Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant in an amount of up to \$15,000,000 (exclusive of taxes) to allow AECOM Canada Ltd. to become the design consultant for the project, subject to final review by the commissioner.

G 1.1 Development Cost Charge Review Process and Rate Amending Bylaw **APPROVED**

As part of a plan to update the liquid waste development cost charge (DCC) program more frequently, a program review was initiated in 2020, with approval from the Board in July 2021 to proceed with engagement on the proposed update to the liquid waste development cost charge program.

Significant engagement with industry, member jurisdictions, First Nations, and the public took place in the fall of 2021 in which feedback and comments were received and addressed. Of note is the inclusion of interest associated with financing growth capital in the calculation of DCC rates based on specific feedback from member jurisdictions.

The Board approved the implementation of new development cost charge rates as proposed, and endorsed the inclusion of interest costs directly related to activities that are approved by the Inspector of Municipalities in the development cost charge program.

The Board gave first, second, and third readings to the relevant bylaw, and directed staff to forward said bylaw to the Inspector of Municipalities for approval.

Once the *GVS&DD District Development Cost Charge Amending Bylaw No.353* is approved by the Inspector of Municipalities, staff will bring it back final adoption by the Board.

G 1.2 Greater Vancouver Sewerage and Drainage District Trucked Liquid Waste Amending Bylaw No. 352, 2022 **APPROVED**

This amending bylaw addresses enforceability issues identified after the adoption of *Greater Vancouver Sewerage and Drainage District Trucked Liquid Waste Bylaw No. 345, 2021* on May 28, 2021.

The Board gave first, second, and third readings to the amending bylaw, then passed and finally adopted it.

I 1 Committee Information Items and Delegation Summaries

RECEIVED

The Board received information items and delegation summaries from standing committees.

Liquid Waste Committee – March 9, 2022

Information Items:

5.4 Development of a Wet Weather Pricing Approach

The Metro Vancouver region has been facing increasing challenges from climate change induced events, such as atmospheric rivers, alongside its aging public and private assets. These challenges have led to higher levels of inflow and infiltration (I&I), compromising the capacity of the region’s sanitary sewage systems and directly leading to an increasing number of wet weather sanitary sewer overflow events.

Current approaches used by the GVS&DD for cost allocation do not adequately incentivize action to address I&I, such as replacement of aging private and municipal sewers. As per Board direction, staff are developing an approach to split this existing levy into separate “dry” and “wet” components for each member, initially without financial consequence for the 2022 billing year. Additional new approaches for wet weather cost allocation are being developed and will be reviewed in consultation with municipal staff prior to providing staff recommendations to the Liquid Waste Committee.

Metro Vancouver Housing Corporation

I 1 Committee Information Items and Delegation Summaries

RECEIVED

The Board received information items and delegation summaries from standing committees.

Housing Committee – March 3, 2022

Information Items:

5.1 Case Study Comparison - Modular versus Woodframe Construction

The *Metro Vancouver Housing 10-Year Plan* seeks to expand Metro Vancouver Housing’s portfolio. To ensure efficient and cost-effective delivery of new housing, the Housing Committee directed staff to explore modular construction compared to conventional woodframe construction. In July 2021, staff brought forward a high level review of the pros and cons of modular construction, and recommended further exploration at the feasibility stage of a project.

This report presents a feasibility study comparison of modular versus woodframe for a sample project site. This analysis shows that woodframe construction currently remains the most financially feasible and suitable construction method. While modular construction can offer efficiencies, such as a shorter construction timeline, it is significantly more expensive than woodframe construction. Because it is an evolving industry, Metro Vancouver will continue to monitor costs and trends for modular and other forms of construction, and identify the most viable options for future development projects.