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For Metro Vancouver meetings on Friday, September 24, 2021

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: Greg.Valou@metrovancouver.org.

Metro Vancouver Regional District

E1.1 Regional Economic Prosperity Service 2021 Deliverables Highlights

RECEIVED

The Regional Economic Prosperity Service has been actively engaged in establishing the new regional service since the first members of the team were on-boarded in January 2021.

This report presents a summary of the 2021 deliverable highlights to date for information, as well as describes some of the potential key service priorities going into 2022 and beyond. In a short amount of time, the Regional Economic Prosperity Service has established many valuable relationships, connections and partnerships across the region. The team has also developed a new brand identity; identified and activated the four strategic economic development priorities for the region in a fast-changing economy; operationalized the three functional areas as articulated in the business plan; and earmarked seven priority export-oriented industries to target in both capacity building work and investment attraction efforts.

The Board received the report for information.

E1.2 B.C. Economic Plan: Metro Vancouver Regional Economic Prosperity Service Recommendations

RECEIVED

On July 30, 2021 Metro Vancouver Board Chair Sav Dhaliwal submitted written input into the BC Economic Plan on behalf of REPS staff. Recommendations were informed by barriers to innovation and growth in the region as identified by members and other regional partners. The recommendations emphasize the importance of BC acting on its economic strengths and focusing on areas in which we have specialization. Aiming to address barriers to innovation and growth, the recommendations are focused on data to inform long-term decision-making, early-stage research investment and improvements to technology transfer, the provision of industry-critical physical spaces, and launching a centre to ensure the competitiveness of the province's labour market.

On August 20, 2021, the Vancouver Sun and BC Business published an opinion editorial written by Metro Vancouver Board Chair Sav Dhaliwal. The editorial expands on how public investment in innovation can help the province meet its climate targets and grow its competitiveness. The BC Economic Plan is anticipated to be delivered in the Fall of 2021.

The Board received the report for information.



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E2.1 Tsleil-Waututh Nation Pilot Guardian Program Report

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In 2020 Tsleil-Waututh Nation (TWN) and Metro Vancouver Regional District (MVRD) signed the Belcarra Regional Park Cultural Planning and Co-operation Agreement in an effort to formalize the working relationship and common objectives within the area known as Belcarra Regional Park.

Shortly after signing this agreement, TWN approached MVRD about the development of a First Nations Guardian Program in Belcarra Regional Park. TWN and MVRD worked together to develop, fund, and implement a Guardian Pilot Program that was initiated at the end of June 2021. The objectives of the Guardian Pilot Program are to develop strong working relationships between TWN members and MVRD staff, share knowledge between organizations, and to support TWN to apply for funding from additional external sources.

The Board received the report for information.

E3.1 Metro Vancouver's Clean Air Plan

APPROVED

The Clean Air Plan is Metro Vancouver's fourth 10-year management plan for regional air quality and greenhouse gas management. The Clean Air Plan is strongly linked to Climate 2050, Metro Vancouver's 30-year strategic framework for climate action. Urgent action is needed to accelerate greenhouse gas reductions to meet ambitious, science-based climate targets, while continuing to implement policies and programs to improve regional air quality. The plan is intended to provide deep reductions in regional GHG emissions and yield air quality health benefits estimated at up to \$1.6 billion. It includes 29 foundational "big moves" that need to be started as soon as possible. The plan is strongly aligned with actions and initiatives of others, and reflects feedback from engagement with residents, businesses and others in 2021. Feedback highlights, which were reported at the Climate Action Committee's July meeting and considered in finalizing the Clean Air Plan, included comments on costs, duplication of other governments' initiatives, collaboration, and the ability of small businesses to adjust.

The Board approved Metro Vancouver's Clean Air Plan as attached and will forward it to member jurisdictions, the Provincial Minister of Environment and Climate Change Strategy, Federal Minister of Environment and Climate Change, the region's Chief Medical Health Officers, local First Nations, TransLink, the Vancouver Fraser Port Authority, the Fraser Valley Regional District, and other key partners indicating the Board's continuing interest in working with them to reduce regional greenhouse gas emissions and continuously improve air quality in the Lower Fraser Valley air shed. Additionally, the Board directed staff to continue working with member jurisdictions and other partners to implement the actions in the Clean Air Plan.

G1.1 MVRD Banking Authority Bylaw 1324, 2021, GVWD Banking Authority Bylaw 255, **APPROVED** 2021, GVS&DD Banking Authority Bylaw 349, 2021

Signing Authority Bylaws establish authority for the execution of Metro Vancouver's banking and financial matters, and these bylaws need to be updated to accommodate the logistical challenges highlighted by the global pandemic and to improve efficiencies in handling the increased volume of requests.



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Designating the routine, lower risk matters to be handled by Class B and Class C signatories will reduce the burden on Class A signatories. The revised framework ensures there continues to be proper segregation of duty, sound internal controls, and strong governance structure for approvals, while improving the efficiency of the overall processes.

The Board gave first, second and third reading to the Metro Vancouver Regional District Banking Authority Bylaw then passed and finally adopted said bylaw.

E1.2 MVRD Procedure Amending Bylaw Number 1325, 2021

APPROVED

At the July 30, 2021 MVRD Board of Directors meeting, the Board expressed desire to maintain flexibility in how members attend meetings. During the pandemic, local governments have been authorized to hold electronic meetings under the authority of the COVID-19 Related Measures Act, including Ministerial Order M192. With Ministerial Order M192 set to expire September 28, 2021, an amendment to the Metro Vancouver Regional District Procedure Bylaw will be required if the Board wishes to maintain the ability for Board and Committee members to meet by electronic means.

The Board gave first, second and third readings to the Metro Vancouver Regional District Procedure Amending Bylaw then passed and finally adopted said bylaw. Furthermore, the Board directed staff to bring forward a policy regarding electronic participation at Board and Committee meetings.

I 1 Committee Information Items and Delegation Summaries

RECEIVED

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

Regional Parks Committee – September 8, 2021

Information Items:

5.2 Regional Parks Building Strategy Update

Regional Parks is developing a Buildings Strategy to guide decision making and investment in building maintenance, capital replacement, and new construction. Draft Levels of Service and Historic Building Framework reports have been developed as foundational elements of the strategy. Staff will use these as the basis for development of the final Building Strategy which will be brought forward for MVRD Board consideration in November 2021.

Finance and Intergovernment Committee – September 8, 2021

Information Items:

5.1 2021 Zero Waste Conference

The 2021 Zero Waste Conference, taking place October 28, promises to be a full day of dynamic, curated programming bringing together keynote speakers and panelists who will challenge participants to create a resilient, carbon neutral, and circular future through inspiring stories of changes and initiatives already underway and encouragement to take the bold steps required in transformative times. The virtual



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conference will be co-hosted by Metro Vancouver and the National Zero Waste Council and broadcast from the multimedia studio at the Annacis Research Centre with the opportunity for a small in-studio audience as BC navigates its restart The overarching theme of the Zero Waste Conference is a "Future without Waste".

This year's subthemes are: Unlock the power of imagination and transformation; Step into creative and innovative thinking; Design a resilient, carbon neutral and circular future.

5.2 2021 Update on National Zero Waste Council Activities

Climate Action Committee - September 10, 2021

In 2021, the National Zero Waste Council has a number of projects and initiatives that will advance waste prevention and circularity within Metro Vancouver and across Canada. Included is the Council's foundational work in reducing food waste across the value chain and by households and developing pilot projects to divert asphalt and wood waste while working collaboratively to champion a circular economy for plastics packaging and the creation of circular cities and regions in Canada.

Research analyzing the public health risks of reusables, confirmed the switch to single-use items during the pandemic was not warranted. By being strategic and effective in identifying areas of work, the Council has been able to leverage external funding expanding the capacity of the Council to deliver on its objectives — \$200,000 in 2021 to advance the Council's work in the circular economy and food loss and waste and \$371,500 in campaign partner service fees for Love Food Hate Waste Canada.

Delegations:

3.1 Anna Barford, Canada Shipping Campaigner, Stand.earth

Subject: Heavy Fuel Oil and Exhaust Gas Cleaning Systems, Air and Water Pollution from Marine Vessels Information Items:

5.2 2021 Update on Water Sustainability Innovation Fund Projects

This report provides an update on six projects that were approved for funding in 2018 through to 2020 under the Sustainability Innovation Fund. Of the six projects, the first phase of the Next Generation Snowpack Monitoring is now complete, all other projects are ongoing. Greywater Reuse and Rainwater Harvesting Demonstration: In Progress

- Next Generation Snowpack Monitoring (NGSM): Phase 1 Complete
- Treating Emerging Contaminants at the Seymour Capilano Filtration Plant: In Progress
- UV Transmittance Analyzers for Continuous Monitoring of Disinfection By-Products: In Progress
- Earthquake Early Warning and Strategic Response System Pilot: In Progress
- Enhancing the Data Processing of the Water Flow Metering Network: In Progress

Greater Vancouver Water District



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E1.1 Coquitlam Sockeye Hatchery – Proposed BC Hydro Facility

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A sockeye salmon hatchery is planned for construction in the Coquitlam Watershed in 2021. The hatchery is funded by BC Hydro and will be located on their fee simple property on the west abutment of the Coquitlam Dam. Sockeye stocks are severely depleted in the Coquitlam River Watershed, primarily due to the loss of spawning and rearing habitat in Coquitlam Lake some 115 years ago upon completion of the first hydro-electric dam. GVWD has worked with the Kwikwetlem First Nation, to whom sockeye restoration represents a critical cultural restoration goal, and agency partners in support of sockeye recovery since 2004. The new hatchery will require a GVWD water connection from the raw water intake pipeline at the base of the Coquitlam Dam and an agreement for that supply will be coming to the Board in the future.

The Board received the report for information.

E1.2 Award of Contract Resulting from Request for Proposal (RFP) No. 21-063: Supply and **APPROVED Delivery of Steel Pipe for 2021 Water Services Construction Projects**

Request for Proposal No. 21-063 was issued for the supply and delivery of steel pipe for the 2021 Water Services construction projects, and Northwest Pipe Company was the only pre-qualified supplier that submitted a proposal.

The Board approved the award of a contract in the amount of up to \$16,973,012.00 (exclusive of taxes) to Northwest Pipe Company resulting from Request for Proposal (RFP) No. 21-063: Supply and Delivery of Steel Pipe for 2021 Water Services Construction Projects, subject to final review by the Commissioner; and authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied the award should proceed.

E1.3 Coquitlam Lake Water Supply - Project Update

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In October 2018, the Board endorsed the North Intake – Phased Filtration option to be carried forward into Project Definition for the Coquitlam Lake Water Supply Project. This is an important, complex project that is needed to meet projected future water demands, even with increased water conservation measures. Since the 2018 Board option endorsement, Project Definition and Value Engineering have been completed and this project update is part of the new Project Delivery stage gate process. This recent work has determined that the 2018 Board endorsed option, with some minor modifications, is still the preferred option (Option 4 – North Intake Smaller Initial Filtration), which provides some life cycle and capital cost savings compared to the 2018 endorsed option.

Engagement with First Nations, stakeholders and the community has commenced and will continue during the Permitting and Regulatory Phase following the completion of the Project Definition Phase in late 2021. Staff will continue to work with the various ministries at the Province and with the City of Coquitlam with respect to the Environmental Assessment, Water Licence and acquisition of the treatment plant site.

The Board endorsed Option 4 North Intake Smaller Initial Filtration to be carried forward through Permitting and Regulatory Phase into Preliminary Design.



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The Board gave first, second and third readings to the Greater Vancouver Water District Banking Authority Bylaw then passed and finally adopted said bylaw.

I 1 Committee Information Items and Delegation Summaries

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

Water Committee - September 9, 2021

Information Items:

5.4 Water Infrastructure Projects – Progress Update

Metro Vancouver has successfully achieved significant project milestones on a number of water infrastructure projects, which are key in meeting the goals identified in The Board Strategic Plan 2019 to 2022 for the Water Services function. These projects significantly contribute to Metro Vancouver's goals to secure additional long-term water supply capacity from the Coquitlam source and also ensure that the treatment, storage and distribution components of the water system are expanded, upgraded, strengthened and replaced to allow the continued supply of safe, clean drinking water to the region's residents and businesses.

Greater Vancouver Sewage and Drainage District

G1.1 MVRD Banking Authority Bylaw 1324, 2021, GVWD Banking Authority Bylaw 255, **APPROVED** 2021, GVS&DD Banking Authority Bylaw 349, 2021

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The Board gave first, second and third readings to Greater Vancouver Sewerage and Drainage District Banking Authority Bylaw then passed and finally adopted said bylaw.

I 1 Committee Information Items and Delegation Summaries

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

Liquid Waste Committee - September 9, 2021

Information Items:

5.1 Regional Microfibres Reduction Campaign Launch

Microfibres from laundry are one of the largest sources of microplastics pollution in the ocean. Research has shown that washing in cold water can reduce the microfibres associated with laundry. A regional microfibres reduction campaign will run September 13 to October 31, 2021, with the objective to lower the amount of microfibres released into the aquatic environment when clothes are washed. The campaign targets residents, specifically parents with children under 18, and asks them to reduce microfibre shedding through the small act of washing laundry in cold water. Pre-campaign research showed that while there is high awareness of microplastics issues, people were generally unaware of microfibre impacts but were open to taking an action that fit into their current routine. The campaign's creative theme — "The Environment Thanks You" — features marine animals thanking people for switching to cold. The media strategy includes YouTube, Facebook, Instagram, television, digital billboards and Google adwords.

5.2 2021 Regional Unflushables Campaign Results

The 2021 regional Unflushables campaign took place from April 26 to June 20, 2021. A post-campaign survey showed that the number of residents who report flushing wipes and other campaign items has decreased from 49% (2017) to 37% (2021). De-ragging incidents at pump stations have also decreased from 121 events (2017) to 16 events (projected for 2021). The campaign addresses seven key items that cause ongoing problems for the region's wastewater system, with an extra focus on wipes and medications. The campaign included social media, television, radio, Spotify, and placements in grocery stores, medical offices, elevators, and hair salons. The campaign delivered 6.4 million impressions on social media, 433 engagements, 732,000 video views and 2,800 clicks for more information, reaching 361,442 residents with campaign messaging. A second two-week digital flight will run in October 2021, and the campaign will run again in 2022 re-using existing creative materials with tweaks as needed.

5.3 Continuous Improvement – Innovations Portfolio Management

Some projects funded through the Sustainability Innovation Fund are creating intellectual property assets and have revenue-generating potential. Maximizing value and returns on the utility's exposure to technological and financial risks have highlighted the need to evolve standard business casing methods to a value-proposition approach with the use of the Business Model Canvas. The Business Model Canvas framework considers a broader suite of business elements to help determine whether a project should: proceed, pivot, or terminate based on new results and other information gained during the research and development journey. The quality of the innovation portfolio is strengthened by the application of the



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value-proposition approach and successful projects will influence facility planning and process unit designs for more cost-effective service delivery.

Zero Waste Committee - September 10, 2021

Delegations:

3.1 Ben Liegley, Co-Founder & Director, Rethink2gether, and Accredited Consultant The PLEDGE on Food Waste

Information Items:

5.1 2020 Disposal Ban Program Update

Garbage loads received at regional solid waste facilities are visually inspected for banned materials, and surcharges are applied if banned materials are present. Metro Vancouver's solid waste facilities received 782,000 loads of garbage in 2020 up 7% from 2019. This increase is associated with an increase in small loads likely resulting from pandemic related impacts. 221,875 garbage loads were inspected (28% of total loads): 27,040 were found to contain banned materials and 6,642 surcharge notices were issued, representing a surcharge rate of 3%. Electronic waste, corrugated cardboard and oversized objects were the top three banned materials identified. The pandemic may have contributed to more electronics in the waste stream due to temporary disruptions in the electronics collection network. Surcharges on mattresses and gypsum decreased in 2020. Total surcharge revenues were \$724,729 and total program expenditures were \$721,902. A temporary disposal ban waiver has been put in place for waxed cardboard as a result of reduced options for recycling waxed cardboard.

5.2 Waste-to-Energy Facility Environmental Monitoring and Reporting 2020 Update

The Metro Vancouver Waste-to-Energy Facility operates well within environmental standards. All air emission related parameters monitored during 2020 were in compliance with the Waste-to-Energy Facility Operational Certificate. Metal emissions are less than 5% of regulatory limits. Dioxins/furans and trace organics are less than 2% of regulatory limits, with the exception of chlorobenzenes being less than 25% of the regulatory limit. Nitrogen oxides and fine particulate waste-to-energy emissions represent 0.4% and 0.002% of regional air shed totals. The Waste-to-Energy Facility accounts for less than 1% of regional greenhouse gas emissions.

On December 3, 2020, the Operational Certificate was amended to defer the reduction in discharge limits for hydrogen chloride and sulphur dioxide from December 31, 2022 to March 3, 2025. Metro Vancouver installed a new air quality monitoring station immediately adjacent to the Waste-to-Energy Facility and added air quality monitoring equipment to an existing monitoring station near the Waste-to-Energy Facility. Data collected to date shows ambient concentrations of hydrogen chloride and sulphur dioxide are less than 5% of ambient air quality standards, and well below modelling projections.

5.3 Illegal Dumping in Metro Vancouver

In 2020, member jurisdictions reported 47,000 illegal dumping incidents, including 720 incidents of abandoned gypsum. Municipalities spent \$3.6 million on the removal and disposal of abandoned items. In addition, municipalities spent \$2.5 million on large item pick-up programs. COVID-19 restrictions coincided with a temporary decrease in illegal dumping incidents in spring 2020, followed by increases in subsequent months. Overall costs of illegal dumping have increased across the region by on average 4.7%



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per year over the last three years. Some of the increases in the total number of illegal dumping incidents may be a result of improved reporting practices, rather than a true increase in illegal dumping activity. Illegal dumping of gypsum materials continues to be a challenging and costly issue for municipalities. Receipt of residential gypsum at all Metro Vancouver recycling and waste centres as of the fall of 2018 appears to have provided some benefit with respect to reducing illegal dumping of gypsum materials.

Metro Vancouver and member jurisdictions continue to advance a number of initiatives including education, enforcement and enhanced data management to help reduce illegal dumping. Enhanced extended producer responsibility programs for items such as mattresses would help reduce illegal dumping by reducing costs to residents to manage those materials.

5.4 Continuous Improvement, Innovation, and Collaboration with Adjacent Regional Districts

Metro Vancouver applies continuous improvement and innovation to consistently increase the value and effectiveness of its facilities, services, and business processes. In 2021, several continuous improvement initiatives have been implemented resulting in both cost savings and enhanced services. Examples of recent innovations include the recycling depot funding strategy, organics management contracts and modernization of weigh scale software systems. Metro Vancouver collaborates with adjacent regional districts to share information and partner on waste reduction projects. A number of foundational studies are underway to support the development of an updated solid waste management plan. To help answer questions posed by Zero Waste Committee members, Metro Vancouver will initiate a new study to assess options to manage residual garbage.

5.5 2021 Reuse and Repair Initiatives Update

As local governments and businesses grapple with global challenges such as waste reduction, climate change and ocean plastics, reuse and repair initiatives provide attractive solutions. Clothing, household goods, takeout containers and bags continue to be key sectors for reuse and repair in the region. In addition, the role of reuse in the built environment is an emerging area of interest for waste reduction and climate action. Metro Vancouver continues to help advance reuse and repair initiatives through data collection, information sharing and behavior change campaigns. Although implementation of further reuse and repair initiatives was put on pause in 2020/2021 due to COVID-19 restrictions, planning for the future continued. An expanded pilot for reuse education at regional recycling and waste centres and several regionally supported repair events are anticipated for 2022.

5.6 2021 Update on the National Zero Waste Council Activities

In 2021, the National Zero Waste Council has a number of projects and initiatives that will advance waste prevention and circularity within Metro Vancouver and across Canada. Included is the Council's foundational work in reducing food waste across the value chain and by households and developing pilot projects to divert asphalt and wood waste while working collaboratively to champion a circular economy for plastics packaging and the creation of circular cities and regions in Canada. Research analyzing the public health risks of reusables confirmed the switch to single-use items during the pandemic was not warranted. By being strategic and effective in identifying areas of work, the Council has been able to leverage external funding expanding the capacity of the Council to deliver on its objectives: \$200,000 in 2021 to advance the Council's work in the circular economy and food loss and waste and \$371,500 in campaign partner service fees for Love Food Hate Waste Canada.



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5.7 2021 Zero Waste Conference Update

The 2021 Zero Waste Conference, taking place October 28, promises to be a full day of dynamic, curated programming bringing together keynote speakers and panelists who will challenge participants to create a resilient, carbon neutral and circular future through inspiring stories of changes and initiatives already underway and encouragement to take the bold steps required in transformative times. The primarily virtual conference will be co-hosted by Metro Vancouver and the National Zero Waste Council and broadcast from the multimedia studio at the Annacis Research Centre. The overarching theme of the Zero Waste Conference is a "Future without Waste". This year's subthemes are: Unlock the power of imagination and transformation; Step into creative and innovative thinking; and, Design a resilient, carbon neutral and circular future.