

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT (GVS&DD) BOARD OF DIRECTORS

REGULAR BOARD MEETING

Friday, April 29, 2022

9:15 A.M.

Meeting conducted electronically pursuant to the Procedure Bylaw
28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia
Webstream available at <http://www.metrovanancouver.org>

[Membership and Votes](#)

A G E N D A¹

A. ADOPTION OF THE AGENDA

1. **April 29, 2022 Regular Meeting Agenda**

That the GVS&DD Board adopt the agenda for its regular meeting scheduled for April 29, 2022 as circulated.

B. ADOPTION OF THE MINUTES

1. **March 25, 2022 Regular Meeting Minutes**

That the GVS&DD Board adopt the minutes for its regular meeting held March 25, 2022 as circulated. pg. 7

2. **April 14, 2022 Regular Joint Meeting Minutes**

That the GVS&DD Board adopt the minutes for its regular joint meeting of the MVRD, MVHC, GVWD and the GVS&DD Board of Directors held April 14, 2022 as circulated. pg. 15

C. DELEGATIONS

D. INVITED PRESENTATIONS

E. CONSENT AGENDA

Note: Directors may adopt in one motion all recommendations appearing on the Consent Agenda or, prior to the vote, request an item be removed from the Consent Agenda for debate or discussion, voting in opposition to a recommendation, or declaring a conflict of interest with an item.

¹ Note: Recommendation is shown under each item, where applicable. All Directors vote unless otherwise noted.

1. ZERO WASTE COMMITTEE REPORTS

1.1 **Award of Contract Resulting from Request for Proposal No. 21-517: Operation and Maintenance of the Central Surrey Recycling and Waste Centre** pg. 19

That the GVS&DD Board:

- a) approve award of a contract in the amount of up to \$38,700,000 (exclusive of taxes) to Halton Recycling Ltd. (doing business as Emterra Environmental), resulting from Request for Proposal No. 21-517: Operation and Maintenance of the Central Surrey Recycling and Waste Centre, subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

1.2 **Amendment to Existing Sea to Sky Composting Inc. Contract to Process Yard Trimmings Received at the Central Surrey Recycling and Waste Centre** pg. 23

That the GVS&DD Board:

- a) approve an amendment to Contract 21-215 Organics Management awarded to Sea to Sky Composting Inc. in the amount of \$828,000 (exclusive of taxes) for a total contract value of \$5,042,520 to process yard trimmings received at the Central Surrey Recycling and Waste Centre, effective from facility opening to the existing contract expiry on December 31, 2025; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendment should proceed.

1.3 **Appointment of Solid Waste Manager, Deputy Solid Waste Manager, and Enforcement Officers** pg. 26

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* and the *Environmental Management Act*:
 - i. rescind the appointments of Ray Robb as the solid waste manager, and of Kathy Preston as the deputy solid waste manager;
 - ii. appoint Metro Vancouver employee Kathy Preston as the solid waste manager, and Metro Vancouver employee Michelle Jones as the deputy solid waste manager;
 - iii. rescind the appointments of Toby Gritten, Dan Saunders, and Rob Kemp as officers; and
 - iv. appoint Metro Vancouver employee Muhammad Ali as an officer.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*:
 - i. rescind the appointments of Toby Gritten, Dan Saunders, and Rob Kemp; and
 - ii. appoint Metro Vancouver employee Muhammad Ali.

1.4 Solid Waste Management Plan Update – Public/Technical Advisory Committee *pg. 29*
Applicant Evaluation Process

That the GVS&DD Board receive for information the report dated March 30, 2022, titled “Solid Waste Management Plan Update – Public/Technical Advisory Committee Applicant Evaluation Process”.

2. LIQUID WASTE COMMITTEE REPORTS

2.1 Appointment of Sewage Control Manager and Enforcement Officers *pg. 33*

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* and the *Environmental Management Act*:
 - i. rescind the appointments of former Metro Vancouver employee Ray Robb as a sewage control manager, and of Metro Vancouver employee Kathy Preston as a deputy sewage control manager;
 - ii. appoint Metro Vancouver employee Kathy Preston as a sewage control manager;
 - iii. rescind the appointments of former Metro Vancouver employees Toby Gritten, and Dan Saunders, and former City of Vancouver employee Ze Chen Liu as officers; and
 - iv. appoint Metro Vancouver employee Muhammad Ali as an officer.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
 - i. rescind the appointments of former Metro Vancouver employees Toby Gritten, and Dan Saunders, and former City of Vancouver employee Ze Chen Liu; and
 - ii. appoint Metro Vancouver employee Muhammad Ali.

2.2 Regional Public Works Mutual Aid Agreement *pg. 36*

That the GVS&DD Board authorize the Board Chair and Chief Administrative Officer to sign the new Regional Public Works Mutual Aid Agreement.

2.3 North Shore Wastewater Treatment Plant Project Update *pg. 69*

That the GVS&DD Board receive for information the report dated April 1, 2022, titled “North Shore Wastewater Treatment Plant Project Update”.

2.4 Iona Island Wastewater Treatment Plant – Cost Sharing of Ferguson Road Upgrades *pg. 72*

That the GVS&DD Board authorize the Commissioner to execute a Road Corridor Construction and Cost Sharing Agreement with Vancouver Airport Authority for upgrades to and realignment of Ferguson Road, as outlined in the report dated April 6, 2022, titled “Iona Island Wastewater Treatment Plant – Cost Sharing of Ferguson Road Upgrades”.

- 2.5 Liquid Waste Management Plan Review and Update – Report on Phase 1** *pg. 77*
That the GVS&DD Board authorize staff to proceed with the next phase of the engagement process to update the Liquid Waste Management Plan, as outlined in the report dated March 23, 2022, titled “Liquid Waste Management Plan Review and Update – Report on Phase 1”.
- 2.6 Award of Contract Resulting from RFP No. 21-283: Program Management Consulting Services for the Iona Island Wastewater Treatment Plant Projects** *pg. 114*
That the GVS&DD Board:
- a) approve the award of contract resulting from Request for Proposal No. 21-283: Program Management Consulting Services for the Iona Island Wastewater Treatment Plant Projects to Stantec Consulting Ltd., in an amount of up to \$99,500,000 (exclusive of taxes) over five years, subject to final review by the Commissioner; and
 - b) authorize the Commissioner and Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

3. PERFORMANCE AND AUDIT COMMITTEE REPORTS

- 3.1 Audited 2021 Financial Statements** *pg. 119*
That the GVS&DD Board approve the Audited 2021 Financial Statements for the Greater Vancouver Sewerage and Drainage District.

4. COMMISSIONER REPORTS

- 4.1 Asset Management and Long Term Financial Planning** *pg. 160*
That the GVS&DD Board direct staff to provide context for decision making by completing long-range plans for major 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.

F. ITEMS REMOVED FROM THE CONSENT AGENDA

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

1. ZERO WASTE COMMITTEE REPORTS

1.1 GVS&DD Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022

pg. 165

*[Recommendation a) and b): simple weighted majority vote.] and
[Recommendation c): 2/3 weighted majority vote.]*

That the GVS&DD Board

- a) approve the following amendments to the Tipping Fee Bylaw effective June 1, 2022:
 - i. remove references to the Coquitlam Recycling and Waste Centre;
 - ii. set the minimum fee for Central Surrey Recycling and Waste Centre at \$15 per load including transaction fee; and
 - iii. establish a rate of \$130 per tonne for residuals from construction and demolition waste processing facilities.
- b) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022*; and
- c) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022*.

2. LIQUID WASTE COMMITTEE REPORTS

2.1 Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022 – Vancouver Sewerage Area and Fraser Sewerage Area Map Administrative Correction

pg. 189

*[Recommendation a): simple weighted majority vote.] and
[Recommendation b): 2/3 weighted majority vote.]*

That the GVS&DD Board:

- a) give first, second and third reading to the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022*; and,
- b) pass, and finally adopt the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022*.

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

I. OTHER BUSINESS

1. GVS&DD Board Committee Information Items and Delegation Summaries

pg. 202

J. BUSINESS ARISING FROM DELEGATIONS

K. RESOLUTION TO CLOSE MEETING

Note: The Board must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.

That the GVS&DD Board close its regular meeting scheduled for April 29, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (a), (e) and (g) as follows:

“90 (1) A part of a board meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

- (a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the regional district or another position appointed by the regional district;
- (e) the acquisition, disposition or expropriation of land or improvements, if the board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district; and
- (g) litigation or potential litigation affecting the regional district.”

L. RISE AND REPORT (Items Released from Closed Meeting)

M. ADJOURNMENT/CONCLUSION

That the GVS&DD Board adjourn/conclude its regular meeting of April 29, 2022.

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BOARD OF DIRECTORS**

Minutes of the Regular Meeting of the Greater Vancouver Sewerage and Drainage District (GVS&DD) Board of Directors held at 11:37 a.m. on Friday, March 25, 2022 in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Burnaby, Chair, Director Sav Dhaliwal	Port Coquitlam, Director Brad West*
North Vancouver City, Vice Chair Director Linda Buchanan*	Port Moody, Director Rob Vagramov*
Anmore, Director John McEwen*	Richmond, Director Malcolm Brodie*
Burnaby, Director Pietro Calendino* (departed at 11:50 a.m.)	Richmond, Director Harold Steves*
Burnaby, Director Mike Hurley	Surrey, Director Linda Annis*
Coquitlam, Director Craig Hodge*	Surrey, Director Doug Elford*
Coquitlam, Director Richard Stewart*	Surrey, Director Laurie Guerra*
Delta, Director George Harvie* (departed at 12:13 p.m.)	Surrey, Director Doug McCallum*
Delta, Director Jeannie Kanakos*	Surrey, Director Allison Patton*
Electoral Area A, Director Jen McCutcheon*	Vancouver, Alternate Director Jean Swanson* for Christine Boyle
Langley City, Director Gayle Martin*	Vancouver, Director Adriane Carr*
Langley Township, Director Jack Froese*	Vancouver, Director Melissa De Genova*
Langley Township, Director Kim Richter*	Vancouver, Director Lisa Dominato*
Maple Ridge, Director Mike Morden*	Vancouver, Director Colleen Hardwick*
New Westminster, Director Jonathan Coté* (departed at 11:38 a.m.)	Vancouver, Director Kennedy Stewart*
North Vancouver District, Director Lisa Muri*	Vancouver, Director Michael Wiebe*
Pitt Meadows, Director Bill Dingwall*	West Vancouver, Director Mary-Ann Booth*
	White Rock, Director Darryl Walker*
	Commissioner Jerry W. Dobrovolsky (Non-voting member)

MEMBERS ABSENT:

Surrey, Director Mandeep Nagra

STAFF PRESENT:

Chris Plagnol, Corporate Officer
Natalia Melnikov, Legislative Services Coordinator, Board and Information Services

*denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

A. ADOPTION OF THE AGENDA

1. March 25, 2022 Regular Meeting Agenda

It was MOVED and SECONDED

That the GVS&DD Board adopt the agenda for its regular meeting scheduled for March 25, 2022 as circulated.

CARRIED

B. ADOPTION OF THE MINUTES

1. February 25, 2022 Regular Meeting Minutes

It was MOVED and SECONDED

That the GVS&DD Board adopt the minutes for its regular meeting held February 25, 2022 as circulated.

CARRIED

11:38 a.m. Director Coté departed the meeting.

C. DELEGATIONS

No items presented.

D. INVITED PRESENTATIONS

No items presented.

E. CONSENT AGENDA

At the request of Directors, the following items were removed from the Consent Agenda, in the following order, for consideration under Section F. Items Removed from the Consent Agenda:

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

It was MOVED and SECONDED

That the GVS&DD Board adopt the recommendations presented in the following items as presented in the March 25, 2022 GVS&DD Board Consent Agenda:

- 1.1 Iona Island Wastewater Treatment Plant Projects – Project Definition Engagement Results
- 1.3 Out-of-Region Trucked Liquid Waste Discharge Requests

CARRIED

The items and recommendations referred to above are as follows:

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

Report dated March 2, 2022, from Amanda McCuaig, Director, Communications, External Relations and Tom Sadleir, Program Manager, Community Engagement, External Relations, providing the GVS&DD Board with a summary of engagement activities and key issues raised during the project definition phase of the Iona Island Wastewater Treatment Plant Projects, for the GVS&DD Board's consideration of the final conceptual design and project definition report, which are the subject of a separate report to the Liquid Waste Committee, dated March 2, 2022, titled "Iona Island Wastewater Treatment Plant Upgrade Projects – Project Definition and Conceptual Design Approval (Stage Gate 1)".

Recommendation:

That the GVS&DD Board receive for information the report dated March 2, 2022, titled "Iona Island Wastewater Treatment Plant Projects – Project Definition Engagement Results".

Adopted on Consent

1.3 Out-of-Region Trucked Liquid Waste Discharge Requests

Report dated February 7, 2022, from Dana Zheng, Program Manager, Policy, Planning and Analysis, Liquid Waste Services, seeking the GVS&DD Board's authorization for staff to issue out-of-region discharge numbers to three generators for the continuing discharge of out-of-region Trucked Liquid Waste at GVS&DD Wastewater Treatment Plants.

Recommendation:

That the GVS&DD Board:

- a) authorize 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 pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*;
- b) authorize 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 pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*; and
- c) authorize staff to issue an out-of-region discharge number for trucked liquid waste generated from Point Roberts, Washington, U.S. from June 1, 2022 to May 31, 2027 pursuant to *GVS&DD Trucked Liquid Waste Bylaw No. 345, 2021*

as presented in the report dated February 7, 2022 titled "Out-of-Region Trucked Liquid Waste Discharge Requests".

Adopted on Consent

F. ITEMS REMOVED FROM THE CONSENT AGENDA

Items removed from the Consent Agenda for consideration under Section F were considered in numerical order.

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

Report dated March 2, 2022, from Brett Young, Director, Major Projects, Project Delivery and Cheryl Nelms, General Manager, Project Delivery, seeking the GVS&DD Board's approval for the project definition and conceptual design for the Iona Island Wastewater Treatment Plant Project as presented in the report dated March 2, 2022, titled "Iona Island Wastewater Treatment Plant Projects – Project Definition and Conceptual Design Approval (Stage Gate 1)".

Members were provided a presentation on the Iona Island Wastewater Treatment Plant upgrade projects, outlining the Federal and Provincial regulatory requirements and deadlines, a projected timeline, and an overview of the delivery schedule, funding strategy, and conceptual design.

11:50 a.m. Director Calendino departed the meeting.

Presentation material titled "Iona Island Wastewater Treatment Plant Upgrade Projects – Project Definition and Conceptual Design" is retained with the March 25, 2022 GVS&DD Board agenda.

12:13 p.m. Director Harvie departed the meeting.

A member proposed revising the language in proposition b) to strengthen the need for funding from other orders of government.

It was MOVED and SECONDED

That the GVS&DD Board:

- a) approve the conceptual design for the Iona Island Wastewater Treatment Plant Upgrade Projects as developed through the project definition process and summarized in the report dated March 2, 2022 titled "Iona Island Wastewater Treatment Plant Upgrade Projects – Project Definition and Conceptual Design Approval (Stage Gate 1)", with an estimated cost of \$9.9 billion, including escalation and risk reserve, subject to further stage gate approvals;
- b) direct staff to continue focused efforts to pursue the cost-share contributions from Provincial and Federal governments that will be required for implementation of the projects;
- c) direct staff to work collaboratively with member jurisdictions to confirm project cost allocations and rate impacts in accordance with *Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014*; and

- d) direct staff to finalize a funding and financing strategy for Board approval, and ensure capital expenditure cash flows for the Projects are updated and included in the annual budgeting process.

Additional information was requested on long-range planning to give context to the Iona Island Wastewater Treatment Plant Upgrade.

Amendment to the Main Motion

It was MOVED and SECONDED

That the GVS&DD Board amend the Main Motion after subsection d) by adding:

- e) direct staff to provide context for this 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.

Members considered referring the motion to staff for review of the required elements of this undertaking.

Referral Motion

It was MOVED and SECONDED

That the GVS&DD Board refer the Amendment to the Main Motion to staff for review and assessment of the details outlined in the motion.

CARRIED

Distinct Propositions

At the request of a member, the main motion was requested to be considered in four distinct propositions.

Question on the Main Motion

Proposition a) was before the Board at this point.

Question was then called on proposition a) and it was

CARRIED

Vice Chair Buchanan and Directors Booth and Muri voted in the negative.

Proposition b) was before the Board at this point.

Question was then called on proposition b) and it was

CARRIED

Vice Chair Buchanan voted in the negative.

Proposition c) was before the Board at this point.

Question was then called on proposition c) and it was

CARRIED

Proposition d) was before the Board at this point.

Question was then called on proposition d) and it was

CARRIED

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

Report dated March 4, 2022, from Cheryl Nelms, General Manager, Project Delivery, seeking the GVS&DD Board's authorization to amend the contract with AECOM Canada Ltd. (AECOM) to assume the design consultant responsibilities for Phase 1 in an amount of up to \$15,000,000 (exclusive of taxes).

It was MOVED and SECONDED

That the GVS&DD Board:

- a) amend 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; and
- b) authorize the Commissioner and Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendment should proceed.

CARRIED

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

1.1 Development Cost Charge Review Process and Rate Amending Bylaw

Report dated March 1, 2022, from Joe Sass, Director, Financial Planning, Finance Services, providing the GVS&DD Board with an update on the Development Cost Charges rate review, summarizing feedback from public consultation and from First Nations engagement, and recommending that the GVS&DD Board give three readings to *Greater Vancouver Sewerage and Drainage District Development Cost Charge Amending Bylaw No.353*.

It was MOVED and SECONDED

That the GVS&DD Board:

- a) approve the implementation of new Development Cost Charge rates, as proposed, and endorse the inclusion of interest costs directly related to those activities that are approved by the Inspector of Municipalities in the Development Cost Charge program;

- b) give first, second and third reading to the *Greater Vancouver Sewerage and Drainage District Development Cost Charge Amending Bylaw No. 353, 2022*; and
- c) direct staff to forward the *Greater Vancouver Sewerage and Drainage District Development Cost Charge Amending Bylaw No. 353, 2022* to the Inspector of Municipalities for approval.

CARRIED

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

Report dated February 16, 2022, from Dana Zheng, Program Manager, Policy, Planning and Analysis, Liquid Waste Services, seeking the GVS&DD Board's adoption of the Trucked Liquid Waste Amending Bylaw No. 352, 2022.

It was MOVED and SECONDED

That the GVS&DD Board give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Trucked Liquid Waste Amending Bylaw No. 352, 2022*.

CARRIED

It was MOVED and SECONDED

That the GVS&DD Board pass and finally adopt *Greater Vancouver Sewerage and Drainage District Trucked Liquid Waste Amending Bylaw No. 352, 2022*.

CARRIED

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

No items presented.

I. OTHER BUSINESS

1. GVS&DD Board Committee Information Items and Delegation Summaries

It was MOVED and SECONDED

That the GVS&DD Board receive for information the GVS&DD Board Committee Information Items and Delegation Summaries, dated March 25, 2022.

CARRIED

J. BUSINESS ARISING FROM DELEGATIONS

No items presented.

K. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED

That the GVS&DD Board close its regular meeting scheduled for March 25, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (g) as follows:

“90 (1) A part of a board meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

(g) litigation or potential litigation affecting the regional district.”

CARRIED

L. RISE AND REPORT (Items Released from Closed Meeting)

No items presented.

M. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the GVS&DD Board adjourn its regular meeting of March 25, 2022.

CARRIED

(Time: 12:40 p.m.)

CERTIFIED CORRECT

Chris Plagnol, Corporate Officer

Sav Dhaliwal, Chair

51682800 FINAL

**REGULAR JOINT MEETING
MVRD, MVHC, GVWD, and GVS&DD BOARDS**

Minutes of the Regular Joint Meeting of the Metro Vancouver Regional District (MVRD), Metro Vancouver Housing Corporation (MVHC), the Greater Vancouver Water District (GVWD), and the Greater Vancouver Sewerage and Drainage District (GVS&DD) Board of Directors held at 1:00 p.m. on April 14, 2022 in the 28th Floor Boardroom, 4730 Kingsway, Burnaby, British Columbia, to participate in a workshop on preparations for the 2023 budget.

MEMBERS PRESENT:

Burnaby, Chair, Director Sav Dhaliwal
North Vancouver City, Vice Chair Director
Linda Buchanan*

Anmore, Director John McEwen*
Belcarra, Director Jamie Ross*
Bowen Island, Director David Hocking*
Burnaby, Director Pietro Calendino*
Burnaby, Director Mike Hurley* (departed at 2:47 p.m.)
Coquitlam, Director Craig Hodge* (arrived at 1:11 p.m.)
Coquitlam, Director Richard Stewart* (arrived at 1:01 p.m.)
Delta, Director George Harvie*
Delta, Alternate Director Bruce McDonald* for Jeannie Kanakos
Electoral Area A, Director Jen McCutcheon*
Langley City, Director Gayle Martin*
Langley Township, Director Jack Froese*
Langley Township, Alternate Director Petrina Arnason* for Kim Richter
Lions Bay, Director Ron McLaughlin* (arrived at 1:05 p.m.)
Maple Ridge, Director Mike Morden*
New Westminster, Director Jonathan Coté*
North Vancouver District, Director Lisa Muri*
Pitt Meadows, Director Bill Dingwall*
Port Coquitlam, Director Brad West* (arrived at 1:14 p.m.)

Port Moody, Director Rob Vagramov* (arrived at 1:02 p.m.)
Richmond, Director Malcolm Brodie*
Richmond, Director Harold Steves*
Surrey, Director Linda Annis*
Surrey, Director Doug Elford*
Surrey, Director Laurie Guerra*
Surrey, Director Doug McCallum* (departed at 2:00 p.m.)
Surrey, Director Mandeep Nagra* (arrived at 1:37 p.m.; departed at 2:22 p.m.)
Surrey, Director Allison Patton*
Tsawwassen, Director Ken Baird*
Vancouver, Director Christine Boyle* (arrived at 1:43 p.m.)
Vancouver, Director Adriane Carr*
Vancouver, Director Melissa De Genova* (arrived at 1:03 p.m.)
Vancouver, Director Lisa Dominato* (arrived at 1:01 p.m.)
Vancouver, Director Colleen Hardwick* (arrived at 1:01 p.m.)
Vancouver, Alternate Director Pete Fry* for Kennedy Stewart
Vancouver, Director Michael Wiebe*
West Vancouver, Director Mary-Ann Booth* (arrived at 1:02 p.m.)
White Rock, Director Darryl Walker*

MEMBERS ABSENT:

None

*denotes electronic meeting participation as authorized by Section 3.6.2 of the Procedure Bylaw

STAFF PRESENT:

Jerry W. Dobrovolny, Chief Administrative Officer

Katie Karn, Deputy Corporate Officer

Natalia Melnikov, Legislative Services Coordinator, Board and Information Services

A. ADOPTION OF THE AGENDA

1. April 14, 2022 Regular Joint Board Meeting Agenda

It was MOVED and SECONDED

That the MVRD, GVS&DD, GVWD, and MVHC Board adopt the agenda for its regular joint meeting scheduled for April 14, 2022 as circulated.

CARRIED

1:01 p.m. Directors Hardwick, Stewart, and Dominato arrived at the meeting.

1:02 p.m. Directors Booth and Vagramov arrived at the meeting.

1:03 p.m. Director De Genova arrived at the meeting.

1:05 p.m. Directors McLaughlin and Wiebe arrived at the meeting.

B. PRESENTATION AND DISCUSSION

1. Board Budget Workshop Background Materials

Jerry W. Dobrovolny, Chief Administrative Officer/Commissioner introduced the 2023 Metro Vancouver Districts and Housing Corporation Budget Workshop, highlighting the process, timeline, and the context for the 2023 budget.

1:11 p.m. Director Hodge arrived at the meeting.

1:14 p.m. Director West arrived at the meeting.

2022 – 2026 Financial Plan

Jennifer Crosby, Director, Project Management Office, provided members with an overview of how asset management ties into the budget process, including a review of the existing processes that are used for asset assessment, assessment management, and projecting future needs.

Culture of Continuous Improvement

Dean Rear, Chief Financial Officer/General Manager, Financial Services, provided members an overview of the culture of continuous improvement, reviewing ongoing strategic improvements and an overview of the financial planning environment.

Financial Planning Environment

The Board members were provided information on the financial context in which Metro Vancouver operates, including a review of the legislation and the four legal

entities comprising Metro Vancouver, the financial environment, including bond returns and treasury yields; inflation and deflation; and commodity prices, a review of major utility projects, and mitigating financial risks.

2023 Budget Approach

Jerry W. Dobrovolny, Commissioner/Chief Administrative Officer, provided an overview of the 2023 Financial Plan outlining the proposed approach to manage the household impact with focus on services and plans currently underway.

1:37 p.m. Director Nagra arrived at the meeting.

1:43 p.m. Director Boyle arrived at the meeting.

Discussion ensued on the 2023 budget information including the following:

- clarification regarding how Metro Vancouver will be examining hedging strategies
- the use of short-term levers versus long-term strategies; taking from reserves is not sustainable for the long-term
- projects are driven either by regulatory requirements or growth and the need to have full understanding of the cost of growth
- new design factors and requirements are being put in place to take into consideration the acceleration of extreme climate change
- the obligation to the current population and the population coming forward to provide regional services
- the suggestion to have the budget split into core service costing and non-core service costing
- the promotion of growth versus the management of growth and the distinction between population growth and new housing

Staff advised that a Special Joint meeting of the Boards would be scheduled in the future to further discuss the 2023 budget and items raised at the April 14, 2022 Joint Board meeting.

2:00 p.m. Director McCallum departed the meeting.

2:22 p.m. Director Nagra departed the meeting.

2:47 p.m. Director Hurley departed the meeting.

Presentation material titled “Board Budget Workshop - 2023 Financial Planning Cycle” is retained with the April 14, 2022 Metro Vancouver Joint Board Meeting agenda.

C. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the MVRD/MVHC/GVWD/GVS&DD Board conclude its regular joint meeting of April 14, 2022.

CARRIED

(Time: 2:51 p.m.)

CERTIFIED CORRECT

Katie Karn, Deputy Corporate Officer

Sav Dhaliwal, Chair

52102938 FINAL

To: Zero Waste Committee

From: Roy Moulder, Director, Procurement
Chris Allan, Director, Solid Waste Operations

Date: March 30, 2022 Meeting Date: April 8, 2022

Subject: **Award of Contract Resulting from Request for Proposal No. 21-517: Operation and Maintenance of the Central Surrey Recycling and Waste Centre**

RECOMMENDATION

That the GVS&DD Board:

- a) approve award of a contract in the amount of up to \$38,700,000 (exclusive of taxes) to Halton Recycling Ltd. (doing business as Emterra Environmental), resulting from Request for Proposal No. 21-517: Operation and Maintenance of the Central Surrey Recycling and Waste Centre, subject to final review by the Commissioner; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
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EXECUTIVE SUMMARY

Construction of Central Surrey Recycling and Waste Centre is nearing completion. Central Surrey Recycling and Waste Centre will increase recycling options and reduce facility users' travel distance by approximately 2,000,000 km/year. Greenhouse gas emissions will be reduced by approximately 500 tonnes per year as a result of the reduced travel distances. The new facility is anticipated to open in June 2022.

Request for Proposal (RFP) No. 21-517 was issued to two shortlisted contractors for the operation and maintenance of the Central Surrey Recycling and Waste Centre and Halton Recycling Ltd. (doing business as Emterra Environmental) submitted the highest ranked (and lowest priced) proposal. Staff recommend that the GVS&DD Board approve award and authorize the Commissioner and the Corporate Officer to execute a contract with Halton Recycling Ltd. (doing business as Emterra Environmental) for a total of up to \$38,700,000 (exclusive of taxes). The contract is for an approximate 8.5-year term expiring on December 31, 2030.

PURPOSE

The purpose of this report is to advise the GVS&DD Board (the Board) of the results of Request for Proposal No. 21-517: Operation and Maintenance of the Central Surrey Recycling and Waste Centre, and to recommend award of an approximate 8.5-year term contract expiring on December 31, 2030 in the amount of up to \$38,700,000 (exclusive of taxes) to Halton Recycling Ltd., doing business as Emterra Environmental, (Emterra).

BACKGROUND

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014* and the *Procurement and Real Property Contracting Authority Policy*, procurement contracts that exceed a value of \$5 million require the approval of the Board of Directors.

This report is being brought forward for consideration by the Zero Waste Committee and Board to authorize the award of an approximate 8.5-year term contract to Emterra for the operation and maintenance of the Central Surrey Recycling and Waste Centre.

OPERATION AND MAINTENANCE OF THE CENTRAL SURREY RECYCLING AND WASTE CENTRE

Central Surrey Recycling and Waste Centre construction is nearing completion. The new facility will accept recyclables, yard trimmings and municipal solid waste from manually unloaded small vehicles and will expand the existing Metro Vancouver solid waste system to six recycling and waste centres, filling a gap in service level in this growing area of the region. As a result of the new facility, travel distance for facility users will drop by approximately 2,000,000 km per year resulting in more than 500 tonnes per year of greenhouse gas emission reductions.

Procurement for Operation & Maintenance Services

In 2021, GVS&DD started a two-step procurement process that included a request for qualifications followed by a request for proposals (RFP) to retain a qualified contractor for the operation and maintenance of the Central Surrey Recycling and Waste Centre. Request for Qualifications (RFQ) No. 21-044 was issued on March 2, 2021 and closed on March 26, 2021. Following an evaluation of the compliant submissions, the following two respondents were shortlisted to participate in the RFP:

- GFL Environmental Inc.
- Halton Recycling Ltd. (doing business as Emterra Environmental)

The RFP included a draft agreement for the operation and maintenance of the Central Surrey Recycling and Waste Services for an approximate 8.5-year term expiring on December 31, 2030, with an option for a two-year extension. An 8.5-year term was selected to coincide with the expected expiry of the next contracts for operation of Metro Vancouver's other recycling and waste centres. RFP No. 21-517 was issued on December 20, 2021 to the two shortlisted proponents based on the scope of services and terms as described in the draft agreement. The RFP closed on February 16, 2022 and proposals were received from both proponents.

Evaluation Criteria and Proposal Evaluation

The proposals were evaluated based on criteria classified under the following three categories: experience and reputation (20%), technical (30%), and financial (50%).

Both proponents' proposals demonstrated good experience and reputation in operating similar solid waste management facilities. Both proponents and their proposed staff are well experienced as they both currently operate GVS&DD's other recycling and waste centres. Emterra proposed on-site mobile equipment that is state-of-the-art technology and would significantly reduce greenhouse gas emissions. The equipment includes two fully electric wheel loaders and one fully electric forklift that

have zero emissions, along with a hybrid excavator with significantly lower emissions compared to a conventional excavator.

Emterra's proposed costs were approximately 14% lower than GFL's proposed costs. As the tonnage of recyclable materials at the Central Surrey Recycling and Waste Centre is anticipated to increase in this growing part of the region, the Emterra proposal will likely result in greater savings over the full contract term.

RFP 21-517: Summary of Proposed Monthly Financial Costs

	Emterra	GFL
Fixed Monthly Costs	\$167,923	\$165,000
Hauling of Garbage	\$59,905	\$65,583
Management & Hauling of Recyclables	\$21,805	\$54,083
Total	\$249,633	\$284,666

The above financial costs are based on monthly tonnages for various materials included in the RFP for evaluation purposes only. The contract value is based on a 8.5-year contract term. The contract value for award is \$38,700,000. If the 2-year extension is considered at a later date, staff would bring a recommendation to the Board for consideration. The value of the 2-year extension is estimated at \$10,446,000.

Emterra has extensive experience in the waste management industry and proposed a team that has a comprehensive understanding in recycling and waste centre operations and maintenance. Emterra's technical proposal addressed requirements for starting up the new facility, maximizing recycling and reuse, and reducing greenhouse gas emissions.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) approve award of a contract in the amount of up to \$38,700,000 (exclusive of taxes) to Halton Recycling Ltd. doing business as Emterra Environmental, resulting from Request for Proposal No. 21-517: Operation and Maintenance of the Central Surrey Recycling and Waste Centre, subject to final review by the Commissioner; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
2. That the GVS&DD Board terminate RFP No. 21-517: Operation and Maintenance of the Central Surrey Recycling and Waste Centre and direct staff to report back to the GVS&DD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, a contract will be awarded to Emterra for an approximate 8.5-year term, expiring on December 31, 2030, in the amount of up to \$38,700,000 (exclusive of taxes). The contract amount represents an estimated expenditure based on estimated material quantities received at the Central Surrey Recycling and Waste Centre over the contract term. The contract value

also accounts for estimated annual inflation adjustments to the proposed rates as defined under the terms of the draft contract. The expected contract value is more than was allocated in the Solid Waste Services five-year financial plan, but adjustments in other areas of the five-year plan will allow the contract to be entered into without affecting overall projected tipping fees identified in the plan.

CONCLUSION

Construction of the new Central Surrey Recycling and Waste Centre nearing completion. RFP No. 21-517 was issued to two shortlisted contractors for the operation and maintenance of the Central Surrey Recycling and Waste Centre and Emterra submitted the higher ranked (and lower cost) proposal. Staff recommend that the Board approve award and authorize the Commissioner and the Corporate Officer to execute a contract with Emterra for a total award of up to \$38,700,000 (exclusive of taxes). The contract is for an approximate 8.5-year term expiring on December 31, 2030.

49470436

To: Zero Waste Committee

From: Roy Moulder, Director, Procurement
Chris Allan, Director, Solid Waste Operations

Date: March 31, 2022 Meeting Date: April 8, 2022

Subject: **Amendment to Existing Sea to Sky Composting Inc. Contract to Process Yard Trimmings Received at the Central Surrey Recycling and Waste Centre**

RECOMMENDATION

That the GVS&DD Board:

- a) approve an amendment to Contract 21-215 Organics Management awarded to Sea to Sky Composting Inc. in the amount of \$828,000 (exclusive of taxes) for a total contract value of \$5,042,520 to process yard trimmings received at the Central Surrey Recycling and Waste Centre, effective from facility opening to the existing contract expiry on December 31, 2025; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendment should proceed.
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EXECUTIVE SUMMARY

The new Central Surrey Recycling and Waste Centre is anticipated to open in June 2022. Staff recommend that the Board approve and authorize the Commissioner and the Corporate Officer to execute an amendment to the existing Contract 21-215 Organics Management awarded to Sea to Sky Composting Inc. in the amount of \$828,000 (exclusive of taxes) to process yard trimmings received at the Central Surrey Recycling and Waste Centre. The total contract value following the amendment will be \$5,042,520. The proposed amendment would provide capacity balance between the two existing organics processors, Sea to Sky Composting Inc. (Sea to Sky) and Arrow Transport Systems Inc. (Arrow), by allocating approximately 4,500 annual tonnes of yard trimmings to Sea to Sky, further bolstering resiliency in the region's organics management system.

PURPOSE

The purpose of this report is to recommend the GVS&DD Board (the Board) approve an amendment to Contract 21-215 Organics Management awarded to Sea to Sky in the amount of \$828,000 (exclusive of taxes) to process yard trimmings received at the Central Surrey Recycling and Waste Centre.

BACKGROUND

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014* and the *Procurement and Real Property Contracting Authority Policy*, procurement contracts that exceed a value of \$5 million require the approval of the Board of Directors.

At the July 2021 Board meeting, the Board was advised that a contract was entered into with Sea to Sky to manage a portion of the organic material within the Metro Vancouver System. The Sea to Sky contract was in the amount of up to \$4,167,000 (exclusive of taxes) for a 4.5-year term expiring on

December 31, 2025. The contract included processing of approximately 6,000 tonnes per year of yard trimmings from the Langley and Maple Ridge Recycling and Waste Centres, and hauling and processing of up to 6,000 tonnes per year of single-family organics from the North Shore Recycling and Waste Centre.

This report is being brought forward to recommend amending the existing Contract 21-215 with Sea to Sky for processing yard trimmings received at the Central Surrey Recycling and Waste Centre.

AMENDMENT TO CONTRACT 21-215 ORGANICS MANAGEMENT

Organics received at Metro Vancouver's recycling and waste centres is primarily managed through three contracts, awarded following competitive procurements in 2020 and 2021:

- Arrow: Contract 20-015 for organics management at the Langley and Maple Ridge Recycling and Waste Centers – expiring December 31, 2025; and
- Arrow: Contract 20-016 for organics management at the North Shore Recycling and Waste Centre – expiring June 30, 2026.
- Sea to Sky: Contract 21-215 for organics management – expiring December 31, 2025

The unit rates in the Sea to Sky contract were based on rates provided in their submission to Request for Proposal No. 20-016. Entering into a contract with Sea to Sky provided community benefits in the Sea-to-Sky Corridor, and helps provide Metro Vancouver a robust and resilient organics management system through contracting with multiple organics processors.

2021 British Columbia Floods

The November 2021 floods that triggered a provincial state of emergency resulted in the closure of multiple highways throughout British Columbia. Arrow's processing facility near Princeton, BC was inaccessible and thus Arrow was unable to haul or process source separated organics from the North Shore Recycling and Waste Centre. The highway leading to Sea to Sky's processing facility near Pemberton, BC, was unaffected and Metro Vancouver was able to divert additional organics to Sea to Sky. Having two contractors with processing facilities located in different parts of the province provides system resiliency and flexibility. Metro Vancouver benefited from this flexibility during the flood event and was able to provide continuous organics management that would otherwise likely not be possible.

Yard Trimmings from the Central Surrey Recycling and Waste Centre

The construction of the Central Surrey Recycling and Waste Centre is nearing completion and the new facility is anticipated to be in operation in June 2022. A procurement process is underway to retain a qualified contractor for operation and maintenance of the new facility. As per the scope of services of the draft agreement for operation and maintenance of the Central Surrey Recycling and Waste Centre, the contractor operating the facility will collect and transport approximately 4,500 tonnes of yard trimmings per year to Sea to Sky's composting facility located in Pemberton, BC.

Sea to Sky has agreed to accept yard trimmings from the Central Surrey Recycling and Waste Centre at the existing contract rate of \$48/tonne for processing yard trimmings from Maple Ridge and Langley Recycling and Waste Centres. The total cost for processing yard trimmings from the Central

Surrey Recycling and Waste Centre over the remaining Sea to Sky contract term is anticipated to be up to \$828,000. The amendment cost is based on estimated 4,500 tonnes per year and subject to annual inflation adjustment as per the existing contract terms. Overall, the proposed amendment represents a good value to Metro Vancouver and will further increase resiliency in the region's organics management system.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) approve an amendment to Contract 21-215 Organics Management awarded to Sea to Sky Composting Inc. in the amount of \$828,000 (exclusive of taxes) for a total contract value of \$5,042,520 to process yard trimmings received at the Central Surrey Recycling and Waste Centre, effective from facility opening to the existing contract expiry on December 31, 2025; and
 - b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the amendment should proceed.
2. That the GVS&DD Board not approve amendment to Contract 21-215 Organics Management awarded to Sea to Sky Composting Inc. to process yard trimmings received at the Central Surrey Recycling and Waste Centre and direct staff to report back to the GVS&DD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, Contract 21-215 Organics Management awarded to Sea to Sky Composting Inc. will be amended for an additional \$828,000 (exclusive of taxes) to process yard trimmings received at the Central Surrey Recycling and Waste Centre. The amendment value is based on an estimated yard trimmings tonnage to be received at the Central Surrey Recycling and Waste Centre, with the payable amount dependent on the actual tonnages. The amendment value also accounts for estimated annual inflation adjustments to the processing rate, as per the existing contract terms. If approved, the amendment would result in a total revised contract value of up to \$5,042,520 over the existing contract term expiring December 31, 2025. The proposed amendment cost can be accommodated within the approved 2022 Solid Waste Operations budget and the Solid Waste Services five-year financial plan.

CONCLUSION

The Central Surrey Recycling and Waste Centre is anticipated to be in operation in June 2022. Sea to Sky has agreed to accept the yard trimmings received at the Central Surrey Recycling and Waste Centre at the existing contract rates. Staff recommend that the Board approve and authorize the Commissioner and the Corporate Officer to execute an amendment to the existing Contract 21-215 Organics Management awarded to Sea to Sky Composting Inc. in the amount of \$828,000 (exclusive of taxes) to process yard trimmings received at the Central Surrey Recycling and Waste Centre. The amendment would result in a total revised contract value of up to \$5,042,520 over the existing contract term expiring December 31, 2025.

To: Zero Waste Committee

From: Michelle Jones, Environmental Control Officer, Environmental Regulation and Enforcement, Parks and Environment

Date: March 15, 2022 Meeting Date: April 8, 2022

Subject: **Appointment of Solid Waste Manager, Deputy Solid Waste Manager, and Enforcement Officers**

RECOMMENDATION

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* and the *Environmental Management Act*:
 - i. rescind the appointments of Ray Robb as the solid waste manager, and of Kathy Preston as the deputy solid waste manager;
 - ii. appoint Metro Vancouver employee Kathy Preston as the solid waste manager, and Metro Vancouver employee Michelle Jones as the deputy solid waste manager;
 - iii. rescind the appointments of Toby Gritten, Dan Saunders, and Rob Kemp as officers; and
 - iv. appoint Metro Vancouver employee Muhammad Ali as an officer.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*:
 - i. rescind the appointments of Toby Gritten, Dan Saunders, and Rob Kemp; and
 - ii. appoint Metro Vancouver employee Muhammad Ali.

EXECUTIVE SUMMARY

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated solid waste manager and officers under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*, the *Environmental Management Act* and the *Offence Act*. Staff recommend that the GVS&DD Board appoint staff and rescind appointments accordingly.

PURPOSE

To appoint Metro Vancouver employees as the Board-designated solid waste manger, the Board-designated deputy solid waste manager, and as a Board-designated officer, and to rescind appointments of four former employees.

BACKGROUND

Metro Vancouver's Solid Waste Regulatory Program supports the goals of the *Integrated Solid Waste & Resource Management Plan* by regulating the management of municipal solid waste and recyclable material at privately operated facilities.

Employment status changes for Metro Vancouver environmental regulatory staff have resulted in a need to update staff appointments to ensure appropriate authority to advance solid waste management goals. The *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* grants authority to the Board-designated solid waste manager, deputy solid waste manager and officers.

ROLE OF THE SOLID WASTE MANAGER

The solid waste manager is the primary statutory decision maker in the administration of *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*. The solid waste manager's powers include the ability to issue licences and orders under this bylaw. The deputy solid waste manager may exercise all the powers given to the solid waste manager under this bylaw.

ROLE OF ENFORCEMENT OFFICERS

Officers may enter property, inspect works and obtain records and other information to promote compliance with the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*.

The *Offence Act* allows regional districts to appoint enforcement officers for the purpose of serving summons for bylaw violations. Officers, if appointed for that purpose, may serve a summons in respect of alleged offences under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*.

ALTERNATIVES

1. That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* and the *Environmental Management Act*:
 - i. rescind the appointments of Ray Robb as the solid waste manager, and of Kathy Preston as the deputy solid waste manager;
 - ii. appoint Metro Vancouver employee Kathy Preston as the solid waste manager, and Metro Vancouver employee Michelle Jones as the deputy solid waste manager;
 - iii. rescind the appointments of Toby Gritten, Dan Saunders, and Rob Kemp as officers; and
 - iv. appoint Metro Vancouver employee Muhammad Ali as an officer.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*:
 - i. rescind the appointments of Toby Gritten, Dan Saunders, and Rob Kemp; and
 - ii. appoint Metro Vancouver employee Muhammad Ali.

2. That the GVS&DD Board receive for information the report dated March 15, 2022, titled "Appointment of Solid Waste Manager, Deputy Solid Waste Manager, and Enforcement Officers" and provide alternative direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as the GVS&DD appointees are already on staff, and there are no expenditures for rescindments.

CONCLUSION

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated solid waste manager and officers under *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*, the *Environmental Management Act*, and the *Offence Act*. Staff recommend Alternative 1.

50447354

To: Zero Waste Committee

From: Sandy Young, Senior Engagement Specialist, Solid Waste Services

Date: March 30, 2022 Meeting Date: April 8, 2022

Subject: **Solid Waste Management Plan Update – Public/Technical Advisory Committee Applicant Evaluation Process**

RECOMMENDATION

That the GVS&DD Board receive for information the report dated March 30, 2022, titled “Solid Waste Management Plan Update – Public/Technical Advisory Committee Applicant Evaluation Process”.

EXECUTIVE SUMMARY

An updated solid waste management plan will guide our region’s policies and collective actions over the next decade and beyond. The Solid Waste Management Plan Public/Technical Advisory Committee (Public/Technical Advisory Committee) will be critical to the success of the development of the updated solid waste management plan. Metro Vancouver received 95 applications to participate in the Public/Technical Advisory Committee over a seven-week application period. Demographic information on age, gender identity, and language spoken most often at home, was collected to understand who participated in the application process. The review of applications was completed based on personal characteristics and sectors/interests approved by the GVS&DD Board (Board) in November 2021. The Independent Consultation and Engagement Panel (Panel) provided input on the evaluation process. Members of the Public/Technical Advisory Committee will be selected by the Zero Waste Committee and Board in closed meetings following a review of staff recommendations by the Panel.

PURPOSE

The purpose of this report is to provide an overview of applicant demographics and the evaluation process for the Public/Technical Advisory Committee applications.

BACKGROUND

In November 2021, the Board approved sectors/interests along with personal characteristics for evaluation of applicants to the Public/Technical Advisory Committee.

In February 2022, a report to the Zero Waste Committee outlined the approach and promotion for the call for applications for the Public/Technical Advisory Committee. This report provides demographic information of the applicants and describes the evaluation process for the Public/Technical Advisory Committee applicants.

PUBLIC/TECHNICAL ADVISORY COMMITTEE APPLICATIONS AND EVALUATION PROCESS

Applicant Demographics

The application form included demographics questions on age, gender identity, language spoken most often at home, and municipality, for the purpose of understanding who participated in the application process. Applicants were distributed across age ranges under 25 (7%), 25–34 (21%), 35–44 (25%), 45–54 (18%), 55–64 (20%), 65 or over (6%), and two did not answer the question. Youth (under 35) represented 28% of applicants. For gender identity, 54% identified as a man, 39% as a woman, and 7% did not answer the question. English is predominantly the language spoken most often at home by the majority of applicants (81%), followed by English and another language (8%). Three or fewer applicants speak either Spanish, Cantonese, or Farsi most often at home, and five applicants did not answer the question. The results for municipality are not included due to challenges in how the data was collected.

During the call for applications, staff reached out to 35 organizations in an effort to target recruitment of potential Public/Technical Advisory Committee members working on behalf of typically underrepresented or equity-denied communities, specifically youth, cultural, urban Indigenous, and the bidders' community. These communities were identified as underrepresented in the solid waste management plan pre-engagement, and specific organizations were identified with input from the Panel.

Evaluation Process

Metro Vancouver received 95 applications for the Public/Technical Advisory Committee through a call for applications from December 10, 2021 to January 31, 2022. Applicants were evaluated based on the desired personal qualities, perspectives and experience approved by the Board in November 2021:

- Demonstrates community/committee involvement and the ability to work collaboratively with others (e.g. openness to different/opposing views)
- Demonstrates personal commitment to zero waste, circular economy goals, sustainability, and climate action
- Demonstrates the ability to advance innovation
- Experienced with waste, waste reduction and recycling (i.e. lived experience, technical expertise, or both)
- Belongs to a community that is typically underrepresented (e.g. women, LGBTQ2S+, Indigenous persons, immigrants, visible minority, persons with disabilities, youth, etc.)
- Represents the interests/perspectives of a group of people/sector

A staff team developed a scoring rubric, reviewed the applications, and assigned scores to each open-ended response. Scores were recorded in an evaluation matrix. Applications were assessed solely on submitted application forms. Applications that were more complete enabled staff to provide more comprehensive evaluations.

Applicants were presented with the list of 19 sectors/interests approved by the Board in November 2021, and asked to specify all of the sectors/interests that they were representative of. Nearly all

applicants specified more than one sector/interest. The November 2021 Board report noted that not all sectors/interests would necessarily be represented on the Public/Technical Advisory Committee, and more than one individual could be selected to represent a sector/interest.

The sectors/interests specified by applicants were reviewed by staff as part of the evaluation process with staff determining whether the applicants matched the sectors/interests they selected. In some cases, applicants were added to sectors/interests based on information they provided in other sections of their applications, if they missed self-identifying those sectors/interests.

Some sectors/interests and/or subsectors were not selected and/or represented by applicants. Where sectors/interests are not included in the Public/Technical Advisory Committee, efforts will be made to engage those sectors/interests.

The number of Public/Technical Advisory Committee members was not specified to allow flexibility in determining the appropriate number of Public/Technical Advisory Committee members. The ultimate number of members will balance sector/interest representation, with creating a committee with a manageable number of participants to optimize engagement with members.

The Independent Consultation and Engagement Panel provided input on the evaluation process.

Committee Member Selection

As per the November 2021 Board report, Zero Waste Committee members will be the Chair and Vice Chair of the Public/Technical Advisory Committee. Staff recommendations for Public/Technical Advisory Committee members were reviewed by the Panel prior to consideration by the Zero Waste Committee and Board in closed meetings.

Next Steps

Following selection of the Public/Technical Advisory Committee members by the Zero Waste Committee and Board, the names of the individuals selected will be announced, and the first meeting will be scheduled. Meetings will be open to the public to observe. Meetings are expected to occur four to six times per year over the course of the expected two to three year solid waste management plan update process.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Funding for general meeting and secretariat expenses can be carried out within the approved Solid Waste Services budget.

CONCLUSION

As part of the development of an updated solid waste management plan, Metro Vancouver is convening individuals with relevant personal qualities and experience to sit on the Public/Technical Advisory Committee. Applications were received from 95 individuals. Demographic information collected during the application process provided insight into the characteristics of the applicant pool.

Staff recommendations for Public/Technical Advisory Committee members were reviewed by the Panel prior to consideration by the Zero Waste Committee and Board in closed meetings.

51294358

To: Liquid Waste Committee

From: Grant McGillivray, Environmental Control Officer, Environmental Regulation and Enforcement, Parks and Environment

Date: March 15, 2022 Meeting Date: April 13, 2022

Subject: **Appointment of Sewage Control Manager and Enforcement Officers**

RECOMMENDATION

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* and the *Environmental Management Act*:
 - i. rescind the appointments of former Metro Vancouver employee Ray Robb as a sewage control manager, and of Metro Vancouver employee Kathy Preston as a deputy sewage control manager;
 - ii. appoint Metro Vancouver employee Kathy Preston as a sewage control manager;
 - iii. rescind the appointments of former Metro Vancouver employees Toby Gritten, and Dan Saunders, and former City of Vancouver employee Ze Chen Liu as officers; and
 - iv. appoint Metro Vancouver employee Muhammad Ali as an officer.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
 - i. rescind the appointments of former Metro Vancouver employees Toby Gritten, and Dan Saunders, and former City of Vancouver employee Ze Chen Liu; and
 - ii. appoint Metro Vancouver employee Muhammad Ali.

EXECUTIVE SUMMARY

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated sewage control managers and officers under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*, the *Environmental Management Act* and the *Offence Act*. Staff recommend that the GVS&DD Board appoint staff and rescind appointments accordingly.

PURPOSE

To appoint and rescind appointments of Metro Vancouver and City of Vancouver employees as Board-designated sewage control managers and officers.

BACKGROUND

Metro Vancouver's Liquid Waste Regulatory Program supports the goals of the *Integrated Liquid Waste and Resource Management Plan* through regulation of the discharge of non-domestic wastes to the region's sanitary sewer systems.

Employment status changes for Metro Vancouver and City of Vancouver environmental regulatory staff have resulted in a need to update staff appointments to ensure appropriate authority to advance liquid waste management goals. Section 29 of the *Environmental Management Act* and the *Greater*

Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007 grants authority to Board-designated sewage control managers and officers.

ROLE OF THE SEWAGE CONTROL MANAGER

The sewage control manager has the same powers as a sewage control manager under the *Environmental Management Act* and is the primary statutory decision maker in the administration of *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007*. The sewage control manager's powers include the ability to issue permits, authorizations and orders under this bylaw.

ROLE OF MUNICIPAL SEWAGE CONTROL OFFICERS

Officers may enter property, inspect works, and obtain records and other information to promote compliance with the *Greater Vancouver Sewerage and Drainage District Liquid Waste Management bylaws*.

Metro Vancouver staff are responsible for the administration of the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* within the boundaries of the GVS&DD. Within the City of Vancouver, City staff have historically administered the Bylaw. This arrangement has been in effect since the Bylaw was first enacted in 1990. A formal agreement between Metro Vancouver and the City of Vancouver was established to ensure that delivery of source control services by the City serves the interests of the GVS&DD and its taxpayers.

The *Offence Act* allows regional districts to appoint enforcement officers for the purpose of serving summons for bylaw violations. Officers, if appointed for that purpose, may serve a summons in respect of alleged offences under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007*.

ALTERNATIVES

1. That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* and the *Environmental Management Act*:
 - i. rescind the appointments of former Metro Vancouver employee Ray Robb as a sewage control manager, and of Metro Vancouver employee Kathy Preston as a deputy sewage control manager;
 - ii. appoint Metro Vancouver employee Kathy Preston as a sewage control manager;
 - iii. rescind the appointments of former Metro Vancouver employees Toby Gritten, and Dan Saunders, and former City of Vancouver employee Ze Chen Liu as officers; and
 - iv. appoint Metro Vancouver employee Muhammad Ali as an officer.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
 - i. rescind the appointments of former Metro Vancouver employees Toby Gritten, and Dan Saunders, and former City of Vancouver employee Ze Chen Liu; and
 - ii. appoint Metro Vancouver employee Muhammad Ali.

2. That the GVS&DD Board receive for information the report dated March 15, 2022, titled "Appointment of Sewage Control Manager and Enforcement Officers" and provide alternative direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications as the GVS&DD appointees are already on staff, and there are no expenditures for rescindments.

CONCLUSION

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated sewage control manager and officers under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*, the *Environmental Management Act*, and the *Offence Act*. Staff recommend Alternative 1.

50426473

To: Liquid Waste Committee

From: Peter Navratil, General Manager, Liquid Waste Services
Brant Arnold-Smith, Program Manager, Security & Emergency Management

Date: March 11, 2022 Meeting Date: April 13, 2022

Subject: **Regional Public Works Mutual Aid Agreement**

RECOMMENDATION

That the GVS&DD Board authorize the Board Chair and Chief Administrative Officer to sign the new Regional Public Works Mutual Aid Agreement.

EXECUTIVE SUMMARY

A major emergency or other serious incident affecting one or more Local Authorities or Regional Authorities is more and more likely to affect the Metro Vancouver region given the impacts of climate change and the ever present seismic risk. The current GVRD Public Works Mutual Aid Agreement dated February 8, 2000 requires modernizing as several jurisdictions, such as Anmore, Belcarra, Bowen Island, Tsawwassen First Nation, Lions Bay, UBC/UEL, MVRD, GVS&DD and GVWD are not party to the agreement, and would like to be included. The new Regional Public Works Mutual Aid Agreement improves on the agreement from 2000 and is intended to set the terms and conditions for sharing resources, during a coordinated and supportive response.

The new Agreement has undergone extensive consultation through a number of municipal advisory committees, most notably, the Regional Administrators Advisory Committee, who unanimously endorsed the final version of the agreement. Over the next 6 months, Boards and Councils around the region will be given the opportunity to sign the agreement. Once completed, the February 8, 2000 agreement will be repealed.

Staff recommend that the GVS&DD become a signatory.

PURPOSE

The new Regional Public Works Mutual Aid Agreement's (Attachment 1) purpose is to allow for mutual support, aid and assistance to be provided by members to ensure that Public Works are maintained in the event of an emergency or other serious incident. Local Authorities are required under the *Local Authority Emergency Management Regulation* to identify the procedures by which emergency resources, including, without limitation, personnel, equipment and facilities, may be obtained from sources within or outside of the jurisdictional area for which the Local Authority has responsibility.

Resources are intended to be available in the event of a major emergency of such magnitude that it is likely to be beyond the capability of a single Local Authority or Regional Authority and requires the combined resources of several or all the Local Authorities and Regional Authorities in the Agreement. This Agreement shall not supplant, without mutual consent, existing agreements between the Parties

for the exchange or provision of resources on a reimbursable, exchange, or other basis.

BACKGROUND

The current GVRD Public Works Mutual Aid Agreement signed February 8, 2000 (Attachment 2) excludes a number of jurisdictions who would now like to participate. The recent events of the pandemic and extreme flooding in the fall of 2021, along with the ever present seismic risks in the region have highlighted the benefits of mutual aid.

The proposed new Agreement modernizes terms, improves indemnification clauses and opens the Agreement up to all Metro Vancouver members including the MVRD, GVWD and GVS&DD.

AGREEMENT PRINCIPLES

The Regional Public Works Mutual Agreement is designed with the following principles:

- Voluntary support based on each jurisdiction's situation
- Call your neighbours first
- Responders take direction from Requestors
- Costs will be based on Responders "rates of the day" with a 10% overhead allowance added
- All parties are expected to maintain sufficient insurance
- Provision included for Joinder Agreements

ADVISORY COMMITTEE ENGAGEMENT

Since the fall of 2021, staff have engaged with several advisory committees (each committee multiple times) including the Regional Emergency Planners Committee (REPC), the Regional Engineers Advisory Committee (REAC) and the Regional Administrators Advisory Committee (RAAC) to obtain their feedback and input on the proposed new Agreement.

Most of the advisory committees' comments focused on whether the agreement maintains 'task eligibility' with the Province, definitions within the agreement, whether or not to include overhead on costs and finally indemnification.

All of the comments have been taken into account and reviewed by in-house and external legal advice.

In the final briefing to RAAC, they voted unanimously to endorse the agreement.

LEGAL IMPLICATIONS

The local government Councils and Board of the Metro Vancouver Regional District (with respect to Electoral Area A) are "local authorities" within the meaning of the *Emergency Program Act*, [RSBC 1996] Chapter 111. Local Authorities are required under the *Local Authority Emergency Management Regulation* [B.C. Reg. 380/95] to identify the procedures by which emergency resources, including, without limitation, personnel, equipment and facilities may be obtained from sources within or outside of the jurisdictional area for which the Local Authority has responsibility.

The *Local Authority Emergency Management Regulation* [BC Reg. 380/95], states a Local Authority may enter into mutual aid agreements for resources and subsequent cost recovery outside of the jurisdictional area for which the Local Authority has responsibility.

The *Local Government Act* [RSBC 2015, Chapter 1], a board of a regional district has the statutory authority to enter into mutual aid agreements with a Local Authority.

The *Greater Vancouver Sewerage and Drainage District Act* [SBC 1956, Chapter 59] and the *Greater Vancouver Water District Act* [SBC 1924, Chapter 22], the GVS&DD and the GVWD, respectively, have the statutory authority to enter into mutual aid agreements with Local Authorities.

The *University Endowment Land Act* [RSBC 1996 Ch. 469], the Minister of Municipal Affairs has the authority to enter into agreements respecting the administration of the University Endowment Land.

ALTERNATIVES

1. That the GVS&DD Board authorize the Board Chair and Chief Administrative Officer to sign the new Regional Public Works Mutual Aid Agreement.
2. That the GVS&DD Board receive for information the report dated March 11, 2022 titled “Regional Public Works Mutual Aid Agreement” and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no additional financial implications associated with the agreement or its ongoing maintenance. This was accomplished by using each jurisdiction’s ‘rates of the day’ as a way to avoid annual updates to lists for labour, material and equipment rates. A key objective was to develop a simple, and easy to apply agreement that could be activated efficiently by any signatory.

CONCLUSION

Staff recommend Alternative 1, that the GVS&DD Board sign as a signatory to the new Regional Public Works Mutual Aid Agreement. The Agreement will allow for a coordinated and supportive response during a major emergency or other serious incident affecting one or more Local Authorities or Regional Authorities within the Metro Vancouver region.

Attachments

1. Regional Public Works Mutual Aid Agreement
2. GVRD Public Works Mutual Aid Agreement signed February 8, 2000

51295837

REGIONAL PUBLIC WORKS MUTUAL AID AGREEMENT

This Agreement is made as of the ____ day of _____ 2022,

AMONG:

- 1) Village of Anmore
- 2) Village of Belcarra
- 3) Bowen Island Municipality
- 4) City of Burnaby
- 5) City of Coquitlam
- 6) City of Delta
- 7) City of Langley
- 8) Township of Langley
- 9) Village of Lions Bay
- 10) City of Maple Ridge
- 11) City of New Westminster
- 12) City of North Vancouver
- 13) District of North Vancouver
- 14) City of Pitt Meadows
- 15) City of Port Coquitlam
- 16) City of Port Moody
- 17) City of Richmond
- 18) City of Surrey
- 19) Tsawwassen First Nation
- 20) City of Vancouver
- 21) District of West Vancouver
- 22) City of White Rock
- 23) Metro Vancouver Regional District (as to Electoral Area A)
- 24) Greater Vancouver Sewerage and Drainage District
- 25) Greater Vancouver Water District
- 26) Her Majesty the Queen in Right of the Province of British Columbia, as represented by the Minister of Municipal Affairs (as to the University Endowment Land)
- 27) University of British Columbia

WHEREAS:

- A. Capitalized terms used in these recitals and this Agreement have the meanings ascribed to them in Section 1.0;
- B. The local government councils and board of the Metro Vancouver Regional District (with respect to Electoral Area A) are “local authorities” within the meaning of the *Emergency Program Act*, [RSBC 1996] Chapter 111;
- C. Local Authorities are required under the *Local Authority Emergency Management Regulation* [B.C. Reg. 380/95] to identify the procedures by which emergency resources, including personnel, equipment and facilities may be obtained from sources within or outside of the jurisdictional area

for which the Local Authority has responsibility;

- D. A Major Emergency affecting one or more Local Authorities or Regional Authorities is likely to affect the Metro Vancouver region as a whole and as such, the Parties agree that it is in the best interests for the Parties to implement a coordinated and supportive response;
- E. Pursuant to the *Local Authority Emergency Management Regulation* [BC Reg. 380/95], a Local Authority may enter into mutual aid agreements for Resources and subsequent cost recovery outside of the jurisdictional area for which the Local Authority has responsibility;
- F. Pursuant to the *Local Government Act* [RSBC 2015, Chapter 1], a board of a regional district has the statutory authority to enter into mutual aid agreements with a Local Authority;
- G. Pursuant to the *Greater Vancouver Sewerage and Drainage District Act* [SBC 1956, Chapter 59] and the *Greater Vancouver Water District Act* [SBC 1924, Chapter 22], the GVS&DD and the GVWD, respectively, have the statutory authority to enter into mutual aid agreements with Local Authorities;
- H. Pursuant to the *University Endowment Land Act* [RSBC 1996 Ch. 469], the Minister of Municipal Affairs has the authority to enter into agreements respecting the administration of the University Endowment Land;
- I. Pursuant to the *University Act* [RSBC 1996 Ch. 468], the Board of Governors of the University of British Columbia has the authority to enter into agreements on behalf of the university; and
- J. The Parties desire to enter into this Agreement for the purposes of providing for mutual support, aid and assistance to, among other things, ensure that Public Works are maintained in the event of a Major Emergency.

NOW THEREFORE in consideration of the premises and of the sum of \$10.00 and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of the above signing Parties hereto covenant and agree with each other as follows:

1.0 Definitions

In this Agreement, unless something in the subject matter or context is inconsistent therewith, the capitalized terms herein will have the meanings set out below:

- (a) **“Agreement”** means this agreement and includes all recitals and schedules to this agreement;
- (b) **“Authorized Representative”** means the representative of the Local Authority or Regional Authority authorized by the municipal council, regional board, Minister of Municipal Affairs or Board of Governors of the University of British Columbia, as applicable, to coordinate, allocate, and prioritize assistance under the terms of this Agreement.
- (c) **“Computer System”** means any computer, hardware, software, communications system, electronic device, server, cloud, or microcontroller, including similar system or any configuration of the aforementioned and including any associated input, output, data

storage device, networking equipment or back up facility.

- (d) **“Cyber Attack”** means an attempt to disrupt, disable, destroy or maliciously control a Computer System and includes, without limitation, an attempt to destroy the integrity of data or to steal controlled information.
- (e) **“Disaster”** means a calamity that:
 - (i) is caused by accident, fire, explosion or technical failure or by the forces of nature; and
 - (ii) has resulted in serious harm to the health, safety or welfare of people, or in widespread damage to property.
- (f) **“Effective Date”** has the meaning given in Section 9.1;
- (g) **“Emergency”** means a present or imminent event or circumstance that:
 - (i) is caused by accident, fire, explosion, pandemic, technical failure or the forces of nature; and
 - (ii) requires prompt coordination of action or special regulation of persons or property to protect the health, safety or welfare of a person or to limit damage to property.
- (h) **“GVS&DD”** means the Greater Vancouver Sewerage and Drainage District;
- (i) **“GVWD”** means the Greater Vancouver Water District;
- (j) **“Joinder Agreement”** means an agreement substantially in the form attached hereto as Schedule “A”, pursuant to which a New Party agrees to join and be bound by the terms of this Agreement;
- (k) **“Local Authority”** means:
 - (i) for a municipality, the municipal council; and
 - (ii) for an electoral area in a regional district, the board of the regional district;

and for the purposes of this Agreement includes the following parties who are not are “local authorities” within the meaning of the *Emergency Program Act*, [RSBC 1996] Chapter 111:

 - (iii) for the University Endowment Lands, the Minister of Municipal Affairs; and
 - (iv) for the University of British Columbia, its Board of Governors.
- (l) **“Major Emergency”** means an Emergency, Disaster or Other Serious Incident that involves one or more Local Authorities or Regional Authorities and requires resources beyond the capability of one or more of the Local Authorities or Regional Authorities

involved.

- (m) **“New Party”** has the meaning given in Section 9.3 below.
- (n) **“Other Serious Incident”** means any sudden, unexpected, or unintended incident, other than a Disaster or Emergency, and including a Cyber Attack, for which a Local Authority or Regional Authority may require assistance to protect the health, safety or welfare of a person or to limit damage to Public Works or other property.
- (o) **“Parties”** means those parties who have signed this Agreement or a Joinder Agreement, and **“Party”** means any one of them.
- (p) **“Public Works”** means any work or property under the management or control of the Local Authority or Regional Authority, including but not limited drinking water, wastewater waste management services, transportation systems and networks and Computer Systems.
- (q) **“Regional Authority”** means the Board of the GVS&DD or the Board of the GVWD.
- (r) **“Requesting Authority”** means a Requesting Local Authority or Requesting Regional Authority, as the case may be.
- (s) **“Requesting Authority’s Personnel”** includes any elected officials, officers, employees or affiliated volunteers of a Requesting Authority.
- (t) **“Requesting Local Authority”** means a Local Authority under a Major Emergency situation that has, pursuant to this Agreement, requested assistance from another Local Authority or Regional Authority.
- (u) **“Requesting Regional Authority”** means a Regional Authority under a Major Emergency situation that has, pursuant to this Agreement, requested assistance from another Local Authority or Regional Authority.
- (v) **“Resources”** means a Local Authority’s personnel, equipment, facilities, services and materials that are available or potentially available for utilization to ensure that Public Works are maintained.
- (w) **“Responding Authority”** means a Responding Local Authority or Responding Regional Authority, as the case may be.
- (x) **“Responding Authority’s Personnel”** includes any elected officials, officers, employees or affiliated volunteers of a Responding Authority.
- (y) **“Responding Local Authority”** means a Local Authority that provides Resources to a Requesting Authority that has, pursuant to this Agreement, requested assistance to confront a Major Emergency.
- (z) **“Responding Regional Authority”** means a Regional Authority that provides Resources to a Requesting Authority that has, pursuant to this Agreement, requested assistance to

confront a Major Emergency.

- (aa) **“Standby Expenses”** means compensation paid or owing to an employee not scheduled for normal work but who is required to be immediately available for call-in work.

2.0 Intent of the Agreement

- 2.1 This Agreement is intended to guide the sharing of Resources amongst Local Authorities and Regional Authorities when assistance has been requested during Major Emergency situations for which the sharing of Resources is required.
- 2.2 Resources are intended to be available in the event of a Major Emergency of such magnitude that it is, or is likely to be, beyond the capability of a single Local Authority or Regional Authority and requires the combined Resources of several or all of the Local Authorities and Regional Authorities to this Agreement.

3.0 Scope of the Agreement

- 3.1 Except as set out in Section 12.1 below, this Agreement shall not supplant, without mutual consent, existing agreements between the Parties for the exchange or provision of Resources on a reimbursable, exchange, or other basis.
- 3.2 Any activation of this Agreement under Section 4.0 will clearly state that the request for Resources is being made under this Agreement.

4.0 Activation

- 4.1 In the event of a Major Emergency, the Authorized Representative designated by the Requesting Authority may activate this Agreement by making a request for Resources to the Authorized Representative of one or more Parties to this Agreement.
- 4.2 If the Requesting Authority is a Local Authority, such Requesting Local Authority shall first request Resources from their bordering Local Authorities, before requesting Resources from more distant Local Authorities or from Regional Authorities.
- 4.3 If the Requesting Authority is a Regional Authority, the Requesting Regional Authority shall first request Resources from those Local Authorities adjacent to the location of the Major Emergency before requesting Resources from more distant Local Authorities.
- 4.4 Sections 4.2 and 4.3 shall not restrict a Requesting Authority from accepting the first available Resources from any Local Authority.

5.0 Resource Requests and Inventory

- 5.1 Each Party agrees that, in the event of a Major Emergency, it will, upon receipt of a written request from a Requesting Party, furnish such Resources as are available, provided that doing so would not unreasonably diminish the capacity of the Responding Authority to provide any required Resources to its own jurisdictional area. For certainty, the extent of the assistance given will be at the discretion of the Authorized Representative of the Responding Authority, having regard to

its own local needs and situation at the time.

- 5.2 The start date of the provision of Resources will be the date agreed to in writing by both the Requesting Authority and Responding Authority. The termination date for the provision of Resources will be determined by the Responding Authority and shall not exceed the end time of the Major Emergency, as agreed by the Responding Authority and Requesting Authority.
- 5.3 During a Major Emergency, all personnel from a Responding Authority shall report to and work under the direction of the Party within whose jurisdiction the Major Emergency is occurring, in cooperation with the Requesting Authority and any other Responding Authorities.
- 5.4 Each Party should maintain an inventory of Resources that may be made available in the event of a Major Emergency and share that inventory with its neighbouring Local Authorities and Regional Authorities.
- 5.5 If a request for Resources is made pursuant to this Agreement, the Requesting Party will, as necessary, make available to the Responding Authority:
 - (a) maps of its jurisdiction indicating the nearest and most suitable roads to enable responders to get to an emergency as quickly as possible, together with locations of water supplies and access thereto;
 - (b) applicable operating guidelines and communications protocols;
 - (c) a copy of the Requesting Authority's emergency plan; and
 - (d) names and contact information for the Requesting Authority's key personnel.

6.0 Reimbursement

- 6.1 The Requesting Authority will reimburse the Responding Authority for any actual costs incurred providing any Resources requested under this Agreement, plus a sum equal to 10% of those costs and expenses on account of the Responding Authority's overhead.
- 6.2 Without limiting the generality of Section 6.1, a Requesting Authority shall pay to the Responding Authority:
 - (a) Regular Time – Salaries, wages and other regular time employment expenses (including benefits and statutory deductions) of employees or affiliated volunteers, at the current prevailing rates of the Responding Authority.
 - (b) Overtime and Standby Expenses – Overtime employment expenses and Standby Expenses of employees or affiliated volunteers, at the current prevailing rates of the Responding Authority. There is no compensation for banked time of employees.
 - (c) Supplies and Materials – Value of supplies or other materials which are not returnable to the Responding Authority. All charges will be at current market rates or at rates otherwise agreed to. Supplies or materials may be replaced with like supplies or materials, if agreed to by the Responding Authority.

- (d) Equipment – Compensation for the use of equipment, vehicles, computers, or other hardware owned outright by the Responding Authority. Equipment reimbursement rates shall be at a rate agreed to by the Requesting Authority and Responding Authority for vehicles or other equipment. If a rate cannot be agreed, the rate will be at the British Columbia standard for equipment reimbursement, as represented by the Blue Book – BC Equipment Rental Rate Guide. The Requesting Authority shall be responsible for the operating costs of equipment provided, including costs of repairs required as a result of the Requesting Authority's use, while in its possession. For certainty, a Requesting Authority is not responsible for the costs of equipment repairs that would have been undertaken by the Responding Authority as a matter of routine repair or maintenance.
 - (e) Facilities – Compensation for the use of Responding Authority facilities. Reimbursement rates will be at the prevailing rate on the day the facility is rented, leased or otherwise made available to the Requesting Authority.
- 6.3 The Requesting Authority's obligation to reimburse the Responding Authority pursuant to this Agreement is irrespective of the Requesting Authority's entitlement to compensation or funding received from Emergency Management BC or any other funding agencies. Accordingly, the Requesting Authority will be responsible for any shortfall in any amounts payable by the Requesting Authority pursuant to this Agreement and any cost recovery by the Requesting Authority from Emergency Management BC or other funding agency.
 - 6.4 The Requesting Authority shall be responsible for any loss or damage to Resources used in the response and shall pay any expense incurred in the operation and maintenance thereof, as well as any expense incurred in the provision of a service or other expense in answering the request for assistance from the Requesting Authority. An itemized claim for loss and damage to the Responding Authority's equipment at the response scene shall be filed within thirty (30) days of such loss or damage occurring.
 - 6.5 All Resources noted in Subsections 6.2(d) and (e) provided to a Requesting Authority shall be returned in the same condition as when such Resources were delivered to the Requesting Authority. These Resources shall be deemed to be provided in good working order, unless otherwise noted by the Responding Authority at the time of delivery.
 - 6.6 The Requesting Authority will arrange for and pay for all costs associated with any necessary repairs or restoration of Resources prior to returning such Resources to the Responding Authority. For certainty, a Requesting Authority is not responsible for the costs of repairs or restoration that would have been undertaken by the Responding Authority as a matter of routine repair or maintenance.
 - 6.7 The Responding Authority will invoice the Requesting Authority detailing all costs incurred in providing Resources under this Agreement, including all overhead amounts referred to in Section 6.1. Payment of such invoices by the Requesting Authority is due in full sixty (60) days from the date of invoice, unless alternate arrangements have been made between the Requesting Authority and Responding Authority or the invoice is in dispute, as contemplated in Section 6.9.
 - 6.8 Payment by the Requesting Authority will be by cheque mailed to the Responding Authority's address, as detailed in the invoice, or if the Responding Authority and Requesting Authority mutually agree, payment may be transferred electronically to the Responding Authorities' bank

account, as stipulated by the Responding Authority.

- 6.9 If a dispute ensues with respect to an invoice issued by a Responding Authority pursuant to Section 6.7, the Parties to the dispute will use best efforts to resolve the dispute as soon as possible in accordance with the dispute resolution process provided in Section 10.0.
- 6.10 The Parties acknowledge and agree that they are each individually responsible for staying apprised of the financial guidelines and eligibility requirements of Emergency Management BC and any other funding agencies related to potential cost recovery that may be available from such agencies in respect of any Resources provided under this Agreement.

7.0 Insurance, Liability and Indemnity

- 7.1 The Parties agree to obtain and maintain sufficient insurance to meet any obligations or liabilities that may arise in connection with this Agreement. Notwithstanding the foregoing, the Parties acknowledge and agrees that they each may self-insure part or all of the risks, subject always to equivalent terms and conditions as though such policies were obtained from licensed commercial insurers.
- 7.2 Any required insurance coverage pursuant to this Agreement will be arranged prior to the acceptance of the request for Resources under this Agreement.
- 7.3 When rendering aid outside their jurisdictional area, all personnel and affiliated volunteers will retain the same powers, duties, rights, privileges and immunities, including any coverage under the *Worker's Compensation Act* that they receive when they are on duty in their home jurisdiction.
- 7.4 A Requesting Authority shall pay to the Responding Authority:
 - (a) the Workers' Compensation, death or disability benefits or any other form of compensation (including judgements, damages, costs, penalties and expenses) which the Responding Authority is legally obligated to pay to one of its employees or affiliated volunteers or the family or beneficiaries of such employees or volunteers by reason of the death or injury to an employee or volunteer while working on a Major Emergency on behalf of the Requesting Authority; and
 - (b) all legal fees and disbursements incurred by the Responding Authority to defend any demands, claims, suits or actions arising from, related to or caused by any death or injury to an employee or volunteer while working on a Major Emergency on behalf of the Requesting Authority.
- 7.5 The Requesting Authority shall in no way be deemed liable or responsible for the personal property of Responding Authority Personnel which may be lost, stolen, or damaged while performing their duties in responding under the terms of this Agreement.
- 7.6 No Party to this Agreement shall be liable in damages to another Party, nor to the owner of property within the geographic jurisdiction of the Requesting Authority or another Party for failing to respond to a request for assistance under this Agreement or for failing to render adequate assistance.

- 7.7 When Resources are provided by a Responding Authority to a Requesting Authority pursuant to this Agreement, the Requesting Authority shall release, indemnify and save harmless the Responding Authority and the Responding Authority's Personnel from and against all liabilities, claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) which may be made against the Responding Authority, or which the Responding Authority may suffer or incur, arising from, related to or caused by:
- (a) the provision of Resources by the Responding Authority to the Requesting Authority under this Agreement;
 - (b) the breach, violation, contravention or non-performance by the Requesting Authority of any of its obligations, agreements, covenants, conditions, representations, warranties or any other term of this Agreement; or
 - (c) the negligence or misconduct of the Requesting Authority's Personnel acting in the course of their duties pursuant to this Agreement,

except where such liabilities, claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) result from the negligence or misconduct of the Responding Authority's Personnel under this Agreement. The indemnities contemplated in this Section 7.7 will survive the termination or expiration of this Agreement or a Party's withdrawal from the Agreement pursuant to Section 9.2.

- 7.8 Subject to Section 7.7 above, the Responding Authority will not be liable or responsible in any way for all liabilities, claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) which may be made against the Requesting Authority, or which the Requesting Authority may suffer or incur, including any personal injury that may be sustained by the Requesting Authority's Personnel, or by any other person, or for any loss or damage or injury to, property belonging to or in the possession of the Requesting Authority or the Requesting Authority's Personnel or any other person, including any equipment, materials, supplies, motor or other vehicles, arising from, related to or caused by the provision of Resources by the Responding Authority to the Requesting Authority under this Agreement, unless such liabilities, claims, losses, suits, actions, judgments, demands, debts, accounts, damages, injuries, costs, penalties and expenses (including all legal fees and disbursements) result from the negligence or misconduct of the Responding Authority or the Responding Authority's Personnel while acting in the course of their duties pursuant to this Agreement.

8.0 Modification and Review

- 8.1 This Agreement may only be amended upon the written consent of all signing Parties.
- 8.2 This Agreement may be reviewed by the Parties:
- (a) every five years, starting from the Effective Date, to ensure that it remains up to date and relevant for all Parties; or
 - (b) any time upon the written request of any Party.

- 8.3 The master copy of this Agreement, together with any Joinder Agreements, will be held by the Metro Vancouver Regional District and will be made available electronically to all Parties upon request.

9.0 Effective Date, Term and Addition of Parties

- 9.1 This Agreement shall come into effect as soon as it has been executed by two Parties (the “**Effective Date**”).
- 9.2 Any one of the Parties hereto may withdraw from this Agreement by giving not less than thirty (30) days prior written notice to the other Parties, following which the Agreement shall continue in force between the remaining Parties.
- 9.3 A Governmental Authority may be added as a new party (a “**New Party**”) to this Agreement if such New Party executes and delivers to the Metro Vancouver Regional District a Joinder Agreement substantially in the form of Schedule “A” attached hereto. “**Governmental Authority**” means any federal, provincial, regional, municipal, local or other government, governmental or public department, authority, commission, council, board, bureau or agency.

10.0 Dispute Resolution

- 10.1 In the event of any dispute or material disagreement among two or more Parties regarding the interpretation or application of any provision of this Agreement, the Parties agree that:
- (a) the Parties, through their Authorized Representatives, will, in good faith, make all reasonable efforts to resolve the dispute by negotiation, during which time each Party will disclose to the other Party all relevant information relating to the dispute;
 - (b) if the dispute remains unresolved, the Parties will meet with a qualified mediator in a timely manner and attempt, in good faith, to further negotiate a resolution of such dispute; and
 - (c) if the mediator cannot resolve the dispute within 48 hours, then the dispute will, unless otherwise agreed by the Parties, either:
 - (i) be resolved in accordance with Division 3 of Part 9 of the *Community Charter*, [SBC 2003] Chapter 26; or
 - (ii) for any dispute involving a Party to which Division 3 of Part 9 of the *Community Charter*, [SBC 2003] Chapter 26 does not apply, be submitted to final and binding arbitration by a sole arbitrator appointed pursuant to the *Arbitration Act* (British Columbia).

11.0 Approvals

- 11.1 The Parties signify their approval of this Agreement by the signatures of their respective authorized representatives below.

12.0 General Provisions

12.1 **Schedules.** Schedule “A” is attached to and forms part of this Agreement.

12.2 Interpretation.

- (a) The words “include”, “includes” and “including” as used in this Agreement shall be deemed to be followed by the phrase “, without limitation,”.
- (b) The captions and headings contained in this Agreement are for convenience only and do not define or in any way limit or enlarge the scope or intent of any provision of this Agreement.

12.3 **Survival of Obligations.** All of the obligations of the Parties which expressly or by their nature survive termination or expiration of this Agreement, will continue in full force and effect subsequent to and notwithstanding such termination or expiration and until they are satisfied or by their nature expire.

12.4 **Amendment.** No amendment of this Agreement will be binding unless made in writing and executed by each of the Parties hereto.

12.5 **Entire Agreement.** This Agreement constitutes the entire agreement amongst the Parties with respect to the subject matter hereof and for certainty this Agreement supersedes the “Mutual Aid Agreement for Public Works Assistance” that was prepared by the Metro Vancouver Regional Engineers Advisory Committee in 2000 and entered into by participating Local Authorities.

12.6 **Governing Law.** This Agreement and any dispute arising out of or in connection with this Agreement will be governed exclusively in accordance with the laws of British Columbia and the laws of Canada applicable in British Columbia which will be deemed to be the proper law of this Agreement.

12.7 **Severability.** Each provision of this Agreement is intended to be severable and if any provision is determined by a court of competent jurisdiction to be illegal or invalid or unenforceable for any reason whatsoever, such provision shall be severed from this Agreement and will not affect the legality or enforceability of the remainder of any other provision of this Agreement.

12.8 **Time of Essence.** Time shall be of the essence of this Agreement.

12.9 **No Derogation.** The Parties acknowledge and agree that nothing contained or implied in this Agreement will be construed as limiting or prejudicing the rights and powers of any Party in the exercise of their respective functions pursuant to the *Local Government Act*, the *Community Charter*, the *Vancouver Charter* and the *Emergency Program Act*, as the case may be, or any other right or power under any public or private statutes, bylaws, orders or regulations, all of which may be fully exercised as if this Agreement had not been entered into.

12.10 **Assignment.** This Agreement shall not be assignable.

12.11 **Counterparts.** This Agreement may be executed in counterparts and returned by email with a PDF attachment, each of which when executed and delivered shall constitute an original and all of which together shall constitute one and the same Agreement.

IN WITNESS WHEREOF this Agreement has been executed and delivered by the Parties as of the day and year first above written.

Village of Anmore

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Village of Belcarra

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Bowen Island Municipality

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Burnaby

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Coquitlam

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Delta

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Langley

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Township of Langley

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Village of Lions Bay

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Maple Ridge

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of New Westminster

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of North Vancouver

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

District of North Vancouver

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Pitt Meadows

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Port Coquitlam

Per: _____
Authorized Signatory

Per: _____
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City of Port Moody

Per: _____
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City of Richmond

Per: _____
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City of Surrey

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Tsawwassen First Nation

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of Vancouver

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

District of West Vancouver

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

City of White Rock

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Metro Vancouver Regional District

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Greater Vancouver Sewer and Drainage District

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

Greater Vancouver Water District

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

**Her Majesty the Queen in Right of the Province of British Columbia, as represented by
the Minister of Municipal Affairs**

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

University of British Columbia

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

SCHEDULE "A"

JOINDER AGREEMENT

This Joinder Agreement is made as of the ____ day of _____.

Pursuant to and in accordance with Section 9.3 of the Regional Mutual Agreement for Major Emergencies made as of the ____ day of _____ (the "**Mutual Aid Agreement**") *[insert name of new party joining the Agreement]* hereby acknowledges and agrees that *[insert name of new party joining the Agreement]* has received and reviewed a complete copy of the Mutual Aid Agreement and shall be fully bound by, and subject to, all of the terms and conditions of the Mutual Aid Agreement as though it were an original party thereto.

[insert name of new party]

Per: _____
Authorized Signatory

Per: _____
Authorized Signatory

<h2>Appendix A</h2>

WHEREAS the Parties desire to enter into an Agreement whereby Public Works resources can be deployed to assist any Party during an emergency.

NOW THEREFORE THIS AGREEMENT WITNESSES THAT, in consideration of the mutual covenants and agreements herein contained and subject to the terms and conditions hereinafter set out, the Parties agree as follows:

1. In this Agreement, unless the context otherwise requires,
 - a) **“emergency”** means any present or imminent calamity or sudden or violent disturbance that in the opinion of the City Engineer cannot be brought under control by the use of the available local resources and that requires prompt co-ordination of action or special regulation of persons or property to protect the health, safety or welfare of people, or to limit property damage;
 - b) **“emergency resources”** means all persons, services, equipment and materials held by, or directly available to, the Public Works Services of a Party;
 - c) **“City Engineer”** means, for each Party, the senior municipal employee responsible for the Public Works Services of that Party or his delegate.
2. The procedure to be followed in requesting and rendering aid under this Agreement shall be governed by the following principles, namely:
 - a) A City Engineer will attempt to fully utilize the emergency resources of his bordering Parties before requesting emergency resources from more distance Parties except where special equipment is not available from the bordering Parties.
 - b) Where a City Engineer determines that an emergency exists, he shall request emergency resources from the appropriate Party.
 - c) A City Engineer who receives a request for emergency resources from another Party may determine the extent of and duration for which the emergency resource are available and thereupon such emergency resources, if any are available, shall be dispatched and utilized to control the emergency; but nothing in this Agreement shall be construed to require a City Engineer to dispatch emergency resources.
 - d) The Person in Charge of emergency resources sent to assist in an emergency shall remain in charge of those resources and control and direct those resources in co-operation with the requesting City Engineer.
3. The Parties agree to consult on a regular basis through their City Engineer on the best ways to achieve the optimum deployment of emergency resources to control emergencies.
4. When a Party provides emergency resources:

- a) the Party providing emergency resources may, within sixty days after so doing, render to the Party that requested emergency resources a correct account of the cost of the service.
 - b) the Party that requested emergency resources shall pay the account within thirty days after receiving it.
 - c) Payment for emergency services would be on a cost recovery basis without overhead or profit.
5. Any Party may terminate its rights and responsibilities under this Agreement by giving to the City Clerk of the other Parties, thirty days notice in writing of its intention to do so.
6. This Agreement is not intended to interfere with or supersede any existing written agreements between the parties.
7. Subject to paragraph 8, each party to this Agreement covenants and agrees that it will not initiate legal action or third party proceedings against any other party to this Agreement, based on provision or failure to provide emergency resources. In any action arising from the provision or failure to provide emergency resources, the municipality where the incident requiring emergency resources occurred, shall (a) defend the action on behalf of itself and any other parties to this Agreement who are defendants in the action, and (b) indemnify and save harmless the other parties for liabilities which may result.
8. Any claims as between the Parties to this Agreement arising out of gross or willful negligence in the provision or failure to provide emergency resources or any dispute arising respecting a Party's rights or obligations shall be referred to and finally resolved by arbitration under the rules of the British Columbia International Commercial Arbitration Centre and shall be administered in accordance with its "Procedures for Cases under the BCIAC Rules". Provided the arbitrator in this procedure is satisfied that the dispute arises from gross or willful negligence, the arbitrator has jurisdiction to provide relief against the indemnity in paragraph 7 and may allocate responsibility among the Parties in whatever manner the arbitrator deems appropriate.

For the purpose of Sections 7 and 8, "Party" includes any employee, contractor or volunteer of the Party.

9. Notices or other communications under this Agreement shall be sufficiently given if delivered to a City Engineer personally or left at the City Engineer's office or mailed to the following:

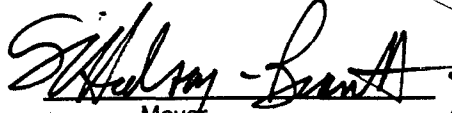
(List of Participating Agencies will be entered here as resolutions are received from Municipal Councils.)


IN WITNESS WHEREOF the Parties hereto have caused to be affixed their seals attested by the signatures of their respective officers duly authorized for such purpose.

The Corporate Seal of the Corporation of

CITY OF RICHMOND

Authorized signing Officers

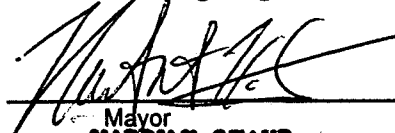

Mayor
GREG HALSEY-BRANDT

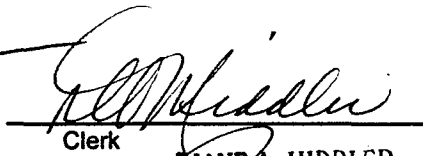

City Clerk J. RICHARD MCKENNA

The Corporate Seal of the Corporation of

CITY OF WHITE ROCK

Authorized signing Officers

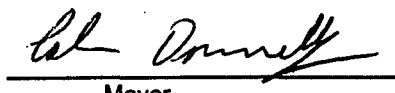

Mayor
HARDY K. STAUB
MAYOR



Clerk
DIANE A. MIDDLER
CITY CLERK

The Corporate Seal of the Corporation of

CITY OF NEW WESTMINSTER

Authorized signing Officers

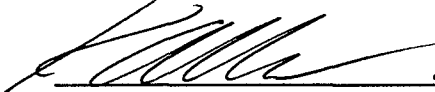

Mayor
CALVIN DONNELLY
ACTING MAYOR

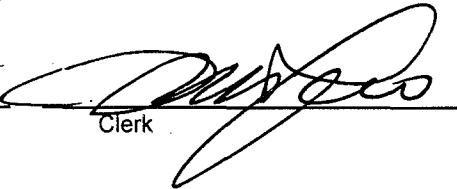

Clerk
SUSAN BROWN
CITY CLERK

The Corporate Seal of the Corporation of

THE TOWNSHIP OF LANGLEY

Authorized signing Officers

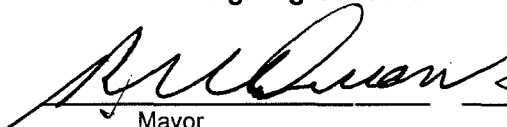

Mayor



Clerk

The Corporate Seal of the Corporation of

CITY OF VANCOUVER

Authorized signing Officers

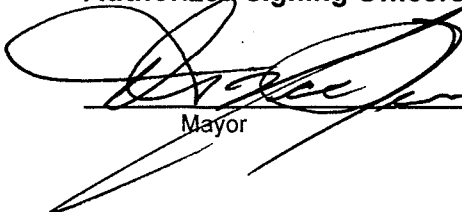

Mayor



Clerk

The Corporate Seal of the Corporation of

DISTRICT OF PITT MEADOWS

Authorized signing Officers

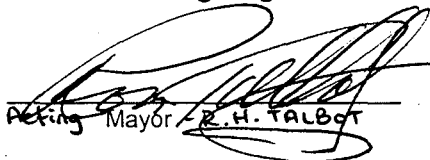


Mayor


Clerk

The Corporate Seal of the Corporation of

City of Port Coquitlam

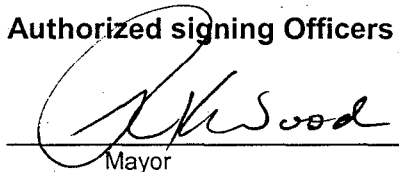
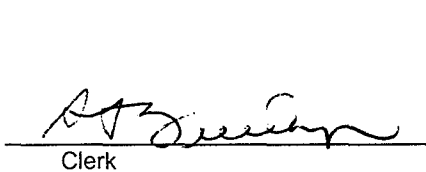
Authorized signing Officers

 Acting Mayor R.H. TALBOT  Clerk SUSAN RAUH, CMC, CITY CLERK

The Corporate Seal of the Corporation of

THE DISTRICT OF WEST VANCOUVER

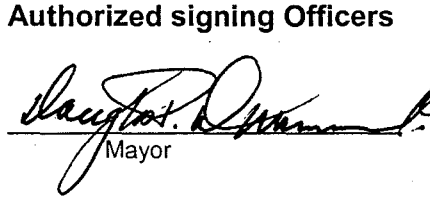
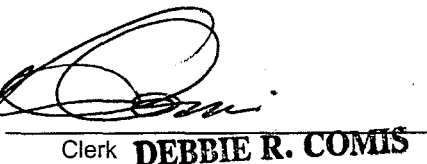
Authorized signing Officers

 Mayor K. Wood  Clerk

The Corporate Seal of the Corporation of

THE CITY OF BURNABY

Authorized signing Officers

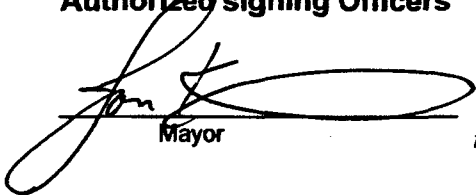
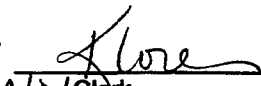
 Mayor  Clerk DEBBIE R. COMIS
City Clerk - Authorized Signatory

Public Works Mutual Aid Agreement
Lower Mainland Municipalities

The Corporate Seal of the Corporation of

The City of Coquitlam

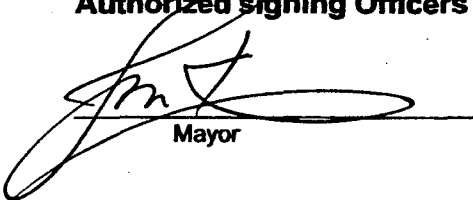

Authorized signing Officers

 Mayor  A/D Clerk

The Corporate Seal of the Corporation of

the City of Coquitlam

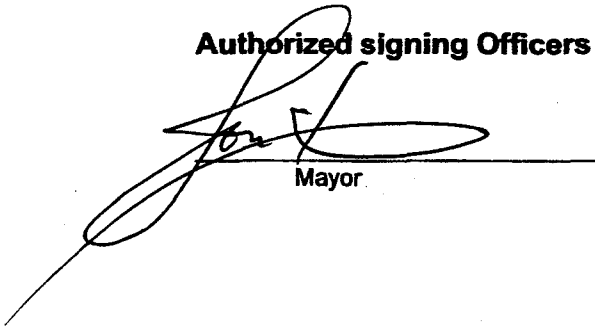

Authorized signing Officers

 Mayor  A/D Clerk

The Corporate Seal of the Corporation of

the City of Coquitlam

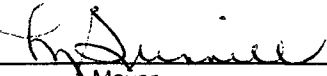
Authorized signing Officers

 Mayor  A/D Clerk

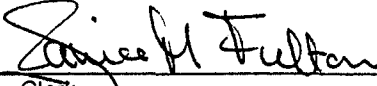
The Corporate Seal of the Corporation of

CITY OF LANGLEY

Authorized signing Officers



Mayor




Clerk

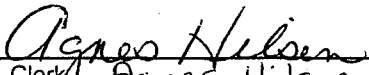
The Corporate Seal of the Corporation of

DISTRICT OF NORTH VANCOUVER

Authorized signing Officers



Mayor Don Bell

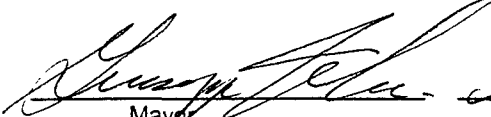


Clerk Agnes Hilsen

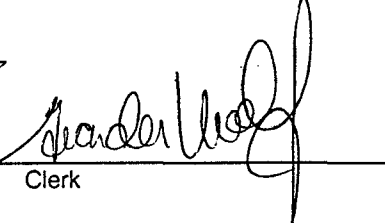
The Corporate Seal of the Corporation of

City of Port Moody

Authorized signing Officers



Mayor

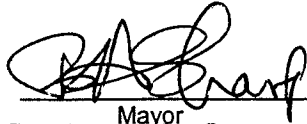


Clerk

The Corporate Seal of the Corporation of

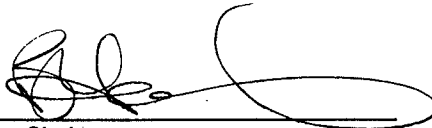
CITY OF NORTH VANCOUVER

Authorized signing Officers



Mayor

Barbara A. Sharp - Mayor



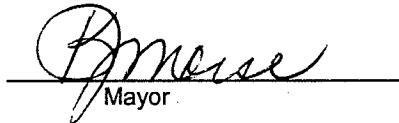
Clerk

Bruce Hawkshaw - Clerk

The Corporate Seal of the Corporation of

DISTRICT OF MAPLE RIDGE

Authorized signing Officers



Mayor

KATHLEEN J. MORSE
MAYOR



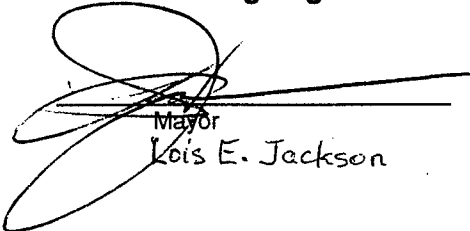
Clerk

TERENCE E. FRYER
MUNICIPAL CLERK

The Corporate Seal of the Corporation of

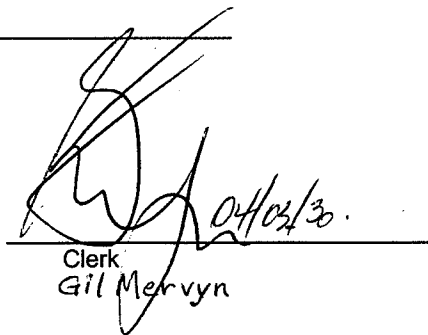
Delta

Authorized signing Officers



Mayor

Lois E. Jackson



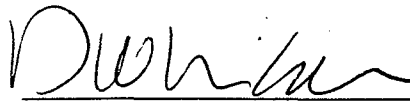
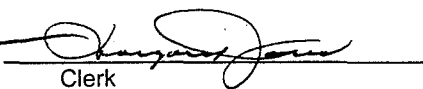
Clerk

Gil Mervyn

The Corporate Seal of the Corporation of

City of Surrey

Authorized signing Officers

 
Mayor Clerk

June 18, 2004

The Corporate Seal of the Corporation of

Authorized signing Officers

Mayor Clerk

The Corporate Seal of the Corporation of

Authorized signing Officers

Mayor Clerk

To: Liquid Waste Committee

From: Cheryl Nelms, General Manager, Project Delivery

Date: April 1, 2022

Meeting Date: April 13, 2022

Subject: **North Shore Wastewater Treatment Plant Project Update**

RECOMMENDATION

That the GVS&DD Board receive for information the report dated April 1, 2022, titled “North Shore Wastewater Treatment Plant Project Update”.

EXECUTIVE SUMMARY

Metro Vancouver has terminated its contract with Acciona Wastewater Solutions LP (Project Co) 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 is working with the general contractor PCL Constructors Westcoast Inc (PCL) to finalize construction and the design consultant AECOM to complete the design, to be the Engineer of Record, and to provide quality assurance services.

AECOM is proceeding with detailed design, and preparing “Issued for Construction” drawings which will be used in “Early Works Packages” for construction by PCL. PCL has signed the Pre-Construction Services Agreement and has taken responsibility for safety and security of the Project Site as of April 1, 2022 when it was transferred from Project Co. PCL is mobilizing resources for the construction management services contract and is commencing work toward developing a detailed Execution Plan, project schedule, and detailed cost estimate.

Project Co’s transition from the project is in progress, scheduled to be complete in late April 2022.

PURPOSE

The purpose of this report is to provide information to the Liquid Waste Committee and GVS&DD Board about the progress of the North Shore Wastewater Treatment Plant Project.

BACKGROUND

On January 20, 2022, the GVS&DD issued a notice of termination of the contract between GVS&DD and Project Co. Following termination of the contract, Metro Vancouver proceeded with work to engage an alternate general contractor and design consultant to deliver the project as quickly as possible and in the best interest of the region, with an intent to minimize costs and risks to the public.

The design and construction of the North Shore Wastewater Treatment Plant Project is partially complete. Completed construction includes ground improvement, approximately half of the superstructure structural concrete, and some in-street wastewater conveyance works.

Under the previous project delivery model, Project Co was responsible for the design, construction, commissioning, and process for performance for the plant. To help to expedite the project while also retaining the ability for competitive pricing of construction for the final delivery of the project, Metro Vancouver adjusted the project delivery model to retain a general contractor and a design consultant separately.

In accordance with this adjusted project delivery model, the project will be delivered in 2 phases: under Phase 1, the design consultant and the general contractor will work collaboratively with Metro Vancouver to advance the design and to develop a detailed execution plan, schedule and cost estimate to complete the project; Phase 2 will be the completion of all design, construction, and commissioning of the project.

DESIGN CONSULTANT SERVICES

Metro Vancouver staff have negotiated with AECOM to develop an amendment to their current “Owners Engineering” agreement allowing AECOM to assume all design responsibilities and obligations for the North Shore Wastewater Treatment Facility.

AECOM are in the process of building their team, familiarizing the team with the design completed by Project Co, and have started on detailed design of the structures on the critical path. It is anticipated that AECOM will be in a position to issue “Issued for Construction” drawings to support recommencement of construction works during Phase 1.

Having submitted all required documentation to the District of North Vancouver, AECOM is also now the Coordinating Registered Professional, the Discipline Engineer(s) of Record and Architect of Record, which are requirements of the BC Building Code.

GENERAL CONTRACTOR SERVICES

Following approval to award the Phase 1 contract to PCL by the GVS&DD Board February 25, 2022, Metro Vancouver entered into a formal agreement for construction management services with PCL in March 2022.

Transfer of the project site from Project Co to PCL occurred on April 1, 2022, whereby PCL assumes responsibility for site safety and security, environmental protection, limited maintenance on West 1st Street, dewatering operations, and site utilities.

In addition, Metro Vancouver is preparing the agreement necessary for issue of “Early Works Packages” to PCL. Early Works Packages will enable PCL to undertake specific construction work prior to Phase 2, to take advantage of the summer construction season and to deliver the project as quickly as possible and in the best interest of the region.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The current approved program budget for the North Shore Wastewater Treatment Plant Program is \$1.058B. The current approved budget for 2022 is \$267M. The project is working within the budget and current year cash flow.

As part of Phase 1, Metro Vancouver will work with AECOM and PCL to develop a plan to complete the project, including a revised project budget and schedule. The project will come to the Board in Q4 2022 with the revised project budget and schedule for approval.

CONCLUSION

Metro Vancouver has terminated its contract with Project Co 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 is working with the general contractor (PCL) to finalize construction and the design consultant (AECOM) to complete the design, to be the Engineer of Record, and to provide quality assurance services.

Design is underway by AECOM, and “Issued for Construction” drawings are being prepared which will be used to negotiate “Early Works Packages” upon commencement of PCL.

PCL has signed the Pre-Construction Services Agreement and has taken responsibility for safety and security of the Project Site as of April 1, 2022 when it was transferred from Project Co.

The project will come to the Board in Q4 2022 with the revised project budget and schedule for approval.

50459171

To: Liquid Waste Committee

From: Cheryl Nelms, General Manager, Project Delivery

Date: April 6, 2022 Meeting Date: April 13, 2022

Subject: **Iona Island Wastewater Treatment Plant – Cost Sharing of Ferguson Road Upgrades**

RECOMMENDATION

That the GVS&DD Board authorize the Commissioner to execute a Road Corridor Construction and Cost Sharing Agreement with Vancouver Airport Authority for upgrades to and realignment of Ferguson Road, as outlined in the report dated April 6, 2022, titled “Iona Island Wastewater Treatment Plant – Cost Sharing of Ferguson Road Upgrades”.

EXECUTIVE SUMMARY

Ferguson Road is the only vehicle access point to Iona Island and the Iona Island Wastewater Treatment Plant (IIWWTP). The road cannot accommodate expected IIWWTP construction traffic volumes due to poor pavement conditions and does not have separation of cyclists and pedestrians from vehicular traffic. It also does not meet servicing requirements for the construction of the upgraded plant. A realigned and upgraded western section of Ferguson Road is required to address the existing road condition, separation between different road users, and servicing issues. These upgrades are part of critical works needed prior to commencement of ground improvement work for the new IIWWTP. These upgrades are in alignment with Metro Vancouver’s Regional Recreation Greenway Network as outlined in the *Regional Growth Strategy*, City of Richmond’s *2041 Official Community Plan* mobility and access objectives, and TransLink’s *Regional Transportation Strategy* goals. The Ferguson Road upgrades will be delivered through Vancouver Airport Authority with Metro Vancouver responsible for 50% of the capital costs and 50% of the maintenance costs until commissioning of the new IIWWTP. Staff recommend that the Board authorize the Commissioner to execute a Road Corridor Construction and Cost Sharing Agreement with Vancouver Airport Authority as outlined in this report.

PURPOSE

To provide the Board with information about Metro Vancouver’s negotiations with Vancouver Airport Authority for the cost of Ferguson Road upgrades in relation to the Iona Island Wastewater Treatment Plant Upgrade Projects (the “Iona Island Projects”), and to request that the Board authorize the Commissioner to execute a Road Corridor Construction and Cost Sharing Agreement with Vancouver Airport Authority.

BACKGROUND

At its March 25, 2022 meeting, the GVS&DD Board approved the conceptual design for the Iona Island Wastewater Treatment Plant Upgrade Projects as developed through the project definition process and summarized in the report dated March 2, 2022 titled “Iona Island Wastewater Treatment Plant Upgrade Projects – Project Definition and Conceptual Design Approval (Stage Gate 1)” (Reference 1),

with an estimated cost of \$9.9 billion, including escalation and risk reserve, subject to further stage gate approvals.

The Iona Island Wastewater Treatment Plant (IIWWTP) is located across the Fraser River from Musqueam's primary reserve IR#2 and the Vancouver International Airport with only one vehicle connection via Ferguson Road on the Vancouver International Airport side of the river. Ferguson Road provides access to core airport-related land uses and developments including Canada Post, UPS, airport fuel facilities, and YVR construction contractor yards. The road is also a popular route for cyclists, recreational users, and visitors to Iona Beach Regional Park.

FERGUSON ROAD

The current Ferguson Road alignment is comprised of two distinct sections:

1. The eastern section which is approximately 2.1 km long and has a robust two lane road complete with center turning lane and cycling lanes up from Grauer Road to the Canada Post facility near McDonald Road; and



Figure 1: Ferguson Rd - Eastern Improved Section

2. The western portion which is approximately 1.8 km long and consists of two sub-standard vehicle lanes, no shoulders, poor asphalt conditions, significant cracking and potholes, and is bordered by deep drainage ditches.



Figure 2: Ferguson Rd - Western Unimproved Section

Metro Vancouver requires road upgrades because the existing western road section cannot accommodate the expected IIWWTP construction traffic volumes due to the poor road conditions and separation of pedestrians and cyclists. This is a fundamental requirement to ensure safe operations of the high construction traffic volumes and duration. Construction traffic to support

ground improvements are currently forecast to start in Q3 2024. Additionally, relocation of the existing IIWWTP water, communications, electrical, and gas service is required prior to commencing ground improvement construction. Metro Vancouver would need to seek land tenure rights to construct the improvements as large portions of Ferguson Road are located on federally owned lands.

Vancouver Airport Authority has plans to realign the western portion of the road through federally owned property to address safety concerns and to support future Vancouver Airport Authority land development in this area. Vancouver Airport Authority would have undertaken this upgrade in the future at its own cost; however, the timing of the Iona Island Projects requires these improvements at an earlier date.



Figure 3: Ferguson Road Alignment

Metro Vancouver has been in ongoing discussions with Vancouver Airport Authority about the realignment and upgrades of the western portion of Ferguson Road to meet the objectives of the Iona Island Projects and future Vancouver Airport Authority land development in the area. The realigned and upgraded Ferguson Road will address safety concerns and IIWWTP utility requirements by providing the following:

- Improved pavement structure to support heavy construction traffic;
- Cycling lanes on both sides of Ferguson Road;
- A 4.0m wide multi-use path on the north side of Ferguson Road;
- Turning lanes; and,
- Utility improvements to service the existing and upgraded IIWWTP

Vancouver Airport Authority has agreed to deliver the Ferguson Road upgrades to Metro Vancouver's benefit with construction starting in May 2022 and completing summer 2024. These upgrades are a critical safety and servicing component to the Iona Island Projects and must be completed to maintain the current project baseline schedule.

The Ferguson Road upgrades are in alignment with Metro Vancouver’s Regional Recreation Greenway Network as outlined in the *Regional Growth Strategy* (Reference 2), City of Richmond’s *2041 Official Community Plan* (Reference 3) mobility and access objectives, and TransLink’s *Regional Transportation Strategy* goals (Reference 4).

ALTERNATIVES

1. That the GVS&DD Board authorize the Commissioner to execute a Road Corridor Construction and Cost Sharing Agreement with Vancouver Airport Authority for upgrades to and realignment of Ferguson Road, as outlined in the report dated April 6, 2022, titled “Iona Island Wastewater Treatment Plant – Cost Sharing of Ferguson Road Upgrades”.
2. That the GVS&DD receive for information the report dated April 6, 2022, titled “Iona Island Wastewater Treatment Plant – Cost Sharing of Ferguson Road Upgrades”, and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

The Ferguson Road capital upgrades are estimated by the Airport Authority to be \$26 million. If the Board authorizes the Commissioner to execute a Ferguson Road upgrades cost sharing agreement with Vancouver Airport Authority, Metro Vancouver will be responsible for approximately 50% of these capital costs. Metro Vancouver will also be responsible for 50% of the costs for maintenance of Ferguson Road until the expected commissioning of the upgraded IIWWTP in 2035. Following commissioning of the IIWWTP, Metro Vancouver’s financial obligation for maintenance will cease. The Iona Island Projects capital estimate includes an adequate allowance for the construction and maintenance of the Ferguson Road upgrades.

OTHER IMPLICATIONS

If Metro Vancouver does not execute a Road Corridor Construction and Cost Sharing Agreement with Vancouver Airport Authority, there could be significant delays to the overall schedule of the Iona Island Projects which would result in a delay to the currently expected commissioning of the upgraded IIWWTP in 2035. As portions of these lands are federally owned, Metro Vancouver would still need to seek land tenure rights to construct road improvements.

CONCLUSION

Ferguson Road is the only vehicle access point to Iona Island and the existing poor road conditions, lack of separation between pedestrian and cyclists with vehicular traffic, or servicing meet the requirements for the construction of the new treatment plant. A realigned and upgraded Ferguson Road will address these concerns as well as demonstrate Metro Vancouver’s commitment to the Regional Recreation Greenway Network. These upgrades are part of critical work needed prior to starting ground improvements for the new treatment plant. Staff recommend authorizing the Commissioner to execute a Ferguson Road cost sharing agreement with Vancouver Airport Authority.

References

1. [“Iona Island Wastewater Treatment Plant Upgrade Projects – Project Definition and Conceptual Design Approval \(Stage Gate 1\)”](#), report dated March 2, 2022
2. [Metro 2040 \(Regional Growth Strategy\)](#)

3. [City of Richmond Bylaw 9000 \(2041 Official Community Plan\)](#)
4. [Transport 2050 \(Regional Transportation Strategy\)](#)

51510130

To: Liquid Waste Committee

From: Tom Sadleir, Program Manager, Community Engagement, External Relations
Brent Burton, Division Manager, Policy, Planning and Analysis, Liquid Waste Services

Date: March 23, 2022 Meeting Date: April 13, 2022

Subject: **Liquid Waste Management Plan Review and Update – Report on Phase 1**

RECOMMENDATION

That the GVS&DD Board authorize staff to proceed with the next phase of the engagement process to update the Liquid Waste Management Plan, as outlined in the report dated March 23, 2022, titled “Liquid Waste Management Plan Review and Update – Report on Phase 1”.

EXECUTIVE SUMMARY

Metro Vancouver began engagement activities for the Integrated Liquid Waste and Resource Management Plan review and update in July 2021. The first phase of engagement included reviewing the existing plan and seeking input on a vision and guiding principles for the next plan. Staff engaged Metro Vancouver’s technical advisory committees, the public, stakeholders, and Indigenous Nations and peoples. Some key themes that emerged during engagement interest in: improving local ecosystem health for recreational, agricultural, and Indigenous uses; being resilient to climate change; ensuring everyone has access to clean waterways, including future generations; and keeping rates affordable and fair. An engagement strategy has been developed to support the next phase of engagement, which includes developing goals, strategies, and actions for the updated plan. Staff will share the Phase 1 engagement results and Phase 2 engagement strategy with the Ministry of Environment and Climate Change Strategy for information before initiating Phase 2 engagement this spring.

PURPOSE

To provide the Board with the results of the first phase of engagement on the Liquid Waste Management Plan review and update and seek authorization to begin the next phase of engagement to develop draft goals, strategies, and actions for the updated plan.

BACKGROUND

Since mid-2020, staff have been meeting with member jurisdiction staff to identify early priorities for the plan review and update through presentations and workshops. On March 26, 2021, the Ministry of Environment and Climate Change Strategy approved the engagement-focused plan review and update strategy following approval by the GVS&DD Board at its meeting of October 2, 2020. Following receipt of this approval, staff initiated the first phase of the formal engagement process, which included reviewing the existing plan and identifying high-level priorities, including a new vision and guiding principles for the updated plan.

ENGAGEMENT PROCESS

Activities by Audience

Metro Vancouver engaged the following groups during the first phase:

Metro Vancouver Advisory Committees

In addition to providing updates at regular meetings, staff hosted two joint special meetings with the Regional Administrative Advisory Committee (RAAC) and Regional Engineers Advisory Committee (REAC) in July 2020 and October 2021. Staff presented to the Regional Finance Advisory Committee (RFAC) in October 2020 and November 2021.

Staff hosted technical workshops and meetings, and delivered presentations to the following groups:

- REAC Liquid Waste Subcommittee (REAC-LWSC): March 2020, July 2021, and February 2022
- Stormwater Interagency Liaison Group (SILG): May 2020, July 2020, September 2020, November 2020, January 2021, March 2021, May 2021, July 2021, and February 2022
- Environmental Monitoring Committee (EMC): April 2020, April 2021, and November 2021
- Combined Sewer Overflow Elimination Working Group (CSOEWG): November 2021 and February 2022
- Regional Planners Advisory Committee – Environment Subcommittee (RPAC-ENV): February 2021 and November 2021

Indigenous Nations and Peoples

The following were contacted about engagement opportunities for the plan update:

- | | | |
|------------------------------------|------------------------------|--|
| • Cowichan Tribes | • Penelakut Tribe | • St'at'imc Chiefs Council (Lillooet Tribal Council) |
| • Douglas Band (Xa'xtsa) | • Peters First Nation | • Stó:lō Nation |
| • Halalt First Nation | • Qayqayt First Nation | • Stó:lō Tribal Council |
| • Katzie First Nation | • Samahquam First Nation | • Stz'uminus First Nation |
| • Kwantlen First Nation | • Seabird Island Band | • Te'mexw Treaty Association |
| • Kwikwetlem First Nation | • Semiahmoo First Nation | • Tsartlip First Nation |
| • Lake Cowichan First Nation | • Shxw'ow'hamel First Nation | • Tsawout First Nation |
| • Lyackson First Nation | • Skatin Nations | • Tsawwassen First Nation |
| • Matsqui First Nation | • Skawahlook First Nation | • Tseycum First Nation |
| • Métis Nation of British Columbia | • Snaw-Naw-As First Nation | • Tsleil-Waututh Nation |
| • Musqueam Indian Band | • Soowahlie First Nation | • Vancouver Aboriginal Friendship Centre Society |
| • Pauquachin First Nation | • Squamish Nation | |

Tsleil-Waututh Nation, Musqueam Indian Band, and Kwikwetlem First Nation provided comments related to the overall direction of the plan update and have confirmed their interest in participating in the next phase of engagement. Cowichan Tribes also provided comments on the existing plan. Staff will continue to keep Indigenous Nations and peoples informed of upcoming engagement opportunities.

Liquid Waste Management Plan Public Advisory Committee

The Liquid Waste Management Plan Public Advisory Committee (PAC) includes nine community members who were appointed by the GVS&DD Board and bring a variety of perspectives to wastewater issues. The public advisory committee members participated in two meetings in fall 2021 and will continue to advise the project team during the plan update. They will make recommendations to the Liquid Waste Committee at the end of the next engagement phase.

Public

- Two online open houses (November 9 and 16, 2021), 50+ participants
- Online questionnaire (October 25 – November 30, 2021), 60 responses
- Booth and survey at Pacific National Exhibition (PNE) (August 2021), 1,500+ responses
- Students (presentations to Masters in Engineering Leadership students at the University of British Columbia and Metro Vancouver's Youth4Action Program)

A comprehensive report of the public engagement activities and results appear in Attachment 1: Phase 1 Public Engagement Summary.

COMMUNICATIONS

The following communication tools were used to raise awareness about the plan update, provide project updates, and encourage participation in engagement opportunities:

- Updates posted regularly to the project webpage (see Reference)
 - 3,280+ page views (July 2021 to February 2022)
 - 1,140+ page visits to project engagement portal (October 25 to November 30, 2021)
- Project video highlighting key topics and engagement opportunities
 - 360 online views
- 6 email updates and invitations to engagement opportunities provided via the project email subscription database
 - 970+ subscribers, as of February 2022
- 2 advertisements placed in the Vancouver Sun and Province newspapers
 - Promoted public advisory committee opportunity
- 22 social media posts about the project, 6,090+ comments, reactions, shares and clicks on Facebook, Instagram and Twitter

ENGAGEMENT RESULTS

The scope of the first phase of engagement was to review the existing plan and seek input on the overall direction for the next plan, including a draft vision and guiding principles. Staff developed a draft vision statement and concepts for guiding principles for input, which have been refined to reflect feedback from member jurisdiction staff, technical advisory committees, the public, and Indigenous Nations. The vision and principles could be further refined if necessary to reflect input from future engagement phases:

Vision Statement

Healthy Waters: For All. Forever.

"Healthy Waters": Protect the waters that sustain life and make this region a great place to be

"For All": Protect these waters for all life

"Forever": Protect these waters for generations to come

Concepts for Guiding Principles

All liquid waste management plans must hold paramount the protection of public and environmental health to be approvable, and this will be an overarching principle of the plan. Other principles which have been established include:

- Be resilient, innovative, and cost-effective: The plan will integrate opportunities to do things better and enhance resilience — all while striving for value and cost-effectiveness in everything we do.
- Collaborate openly and transparently with others: Opportunities will be included to openly share data and metrics on how we're doing and to work with others on key challenges including constituents of environmental concern and climate change.
- Embrace fairness and equity: The plan needs to progress social equity where opportunities arise — for example, in conversations as to where liquid waste facilities are located and how they are operated.
- Integrate reconciliation: Many past decisions (such as siting of wastewater treatment plants) haven't been made with adequate engagement with Indigenous Nations and peoples. Moving forward, there are many opportunities to do things better using liquid waste management as a pathway towards reconciliation.
- Be a good global citizen: There are many opportunities in the new plan for Metro Vancouver to demonstrate its global commitment — for example, by integrating targets for greenhouse gas mitigation.

Themes We Heard:

Overall, engagement participants were supportive of the high-level direction for the next plan. Online polling in workshops with member jurisdictions and the public indicated the majority of participants feel the draft vision and guiding principle concepts reflect their values for the next plan. Other key themes that emerged during engagement reflect a desire to:

- Improve local ecosystem health for recreational, agricultural, and Indigenous uses
- Be resilient to climate change
- Ensure everyone has access to clean waterways, including future generations
- Keep rates affordable and fair, and provide value for services
- Integrate improved performance metrics and streamline progress reporting to focus on key areas of interest and importance to the Ministry of Environment and Climate Change Strategy and the public
- Accelerate action on wet weather flows, including those originating on private property from inflow and infiltration (I&I), that lead to sewer overflows

The comments and questions raised by the public and Indigenous Nations during engagement and Metro Vancouver's responses to those issues appear in Attachment 2: Feedback – Response Table.

PHASE 2 – DEVELOPING GOALS, STRATEGIES AND ACTIONS

Metro Vancouver's next liquid waste management plan is proposed to follow a similar format as the current plan and the current draft Metro 2050 Regional Growth Strategy – vision, principles, goals, strategies and actions. Later this spring, staff plan to begin the second phase of the engagement program focusing on developing a range of detailed goals, strategies, and actions for the updated

plan. A preliminary framework for the second phase of engagement appears in Attachment 3: Phase 2 Engagement Strategy. Based on engagement to date and work done by the project team, the following topics have been identified for further engagement with members, the public, and Indigenous Nations and peoples, during the next phase:

- Wet weather flows and sanitary sewers
- Sewer separation and combined sewer overflow elimination
- Holistic stormwater management
- Treatment levels and resource recovery
- Affordability
- Measuring success

Staff will provide multiple and diverse opportunities for all interested and impacted people and organizations to share their ideas on each topic area through a series of workshops, meetings, and online questionnaires.

Once draft goals, strategies, and actions have been developed, they will be grouped into several scenarios, reflecting future pathways for the next plan ranging from meeting minimum regulatory requirements in the most cost-effective manner to international leadership on environmental action. At the conclusion of Phase 2, staff will request the GVS&DD Board to provide direction on which pathway to follow.

The Liquid Waste Management Plan Public Advisory Committee will also provide recommendations to the Liquid Waste Committee at the end of Phase 2.

ALTERNATIVES

1. That the GVS&DD Board authorize staff to proceed with the next phase of the engagement process to update the Liquid Waste Management Plan, as outlined in the report dated March 23, 2022, titled “Liquid Waste Management Plan Review and Update – Report on Phase 1”.
2. That the GVS&DD Board receive for information the report dated March 23, 2022, titled “Liquid Waste Management Plan Review and Update – Report on Phase 1”, and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

The costs of liquid waste management plan engagement are included in annual GVS&DD budgets.

CONCLUSION

Metro Vancouver began engagement activities for the Integrated Liquid Waste and Resource Management Plan review and update in July 2021. The first phase of engagement included reviewing the existing plan and seeking input on a vision and guiding principles for the next plan. Staff engaged technical advisory committees, the public, stakeholders, and Indigenous Nations and peoples. Based on engagement input, staff have identified several topics for further engagement during the next phase, as outlined in the Phase 2 engagement strategy. Staff will share the Phase 1 engagement results and Phase 2 engagement strategy with the Ministry of Environment and Climate Change Strategy for information before starting Phase 2 engagement this spring.

Attachments

1. Phase 1 Public Engagement Summary, dated March 16, 2022
2. Feedback – Response Table, dated March 10, 2022
3. Phase 2 Engagement Strategy, dated March 17, 2022

References

[Liquid Waste Management Plan Update webpage](#)

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Liquid Waste Management Plan Update

Phase 1 Public Engagement Summary Report

Acknowledgements

Thank you to everyone who provided input on the first phase of public engagement for the Liquid Waste Management Plan update. Metro Vancouver embraces collaboration and innovation to provide sustainable regional services, contributing to a livable and resilient region, and a healthy natural environment for current and future generations. The purpose of this first phase of engagement was to stimulate ideas and gather feedback on the direction for the next plan. The content developed will form the basis for the next engagement phase, which includes developing draft goals, strategies, and actions for the updated plan. We appreciate your time as well as the insights and comments you shared with us during this first phase. We invite you to participate in the second phase of engagement later in 2022.

About Metro Vancouver

Metro Vancouver is a federation of 21 municipalities, one electoral area, and one treaty First Nation that collaboratively plans for and delivers regional-scale services. Its core services are drinking water, wastewater treatment, and solid waste management. Metro Vancouver also regulates air quality, plans for urban growth, manages a regional parks system, and provides affordable housing. The regional district is governed by a Board of Directors of elected officials from each local authority.

4515 Central Blvd, Burnaby, BC, V5H 0C6
www.metrovancouver.org

March 2022



Fraser River - Northwest Langley Wastewater Treatment Plant

About the Liquid Waste Management Plan

We all create wastewater as part of our daily lives when we use our sinks, toilets, washing machines, and anything else that sends water into a drain. We also create it when we use water in our businesses and industries. How we manage and treat this wastewater, along with stormwater from rain and melting snow, plays an important role in protecting our public health and environment — including the oceans, rivers, and streams all around us.

Metro Vancouver and our members are part of a regional system that collects and treats over 1 billion litres of wastewater every day. The management of this regional system is guided by the **Liquid Waste Management Plan**.

Our current *Integrated Liquid Waste and Resource Management Plan*, approved by the provincial government in 2011, requires an update to:

- Continue protecting human health and the environment
- Integrate Indigenous perspectives
- Incorporate innovative technologies and new scientific developments
- Reflect societal priorities
- Align with other initiatives

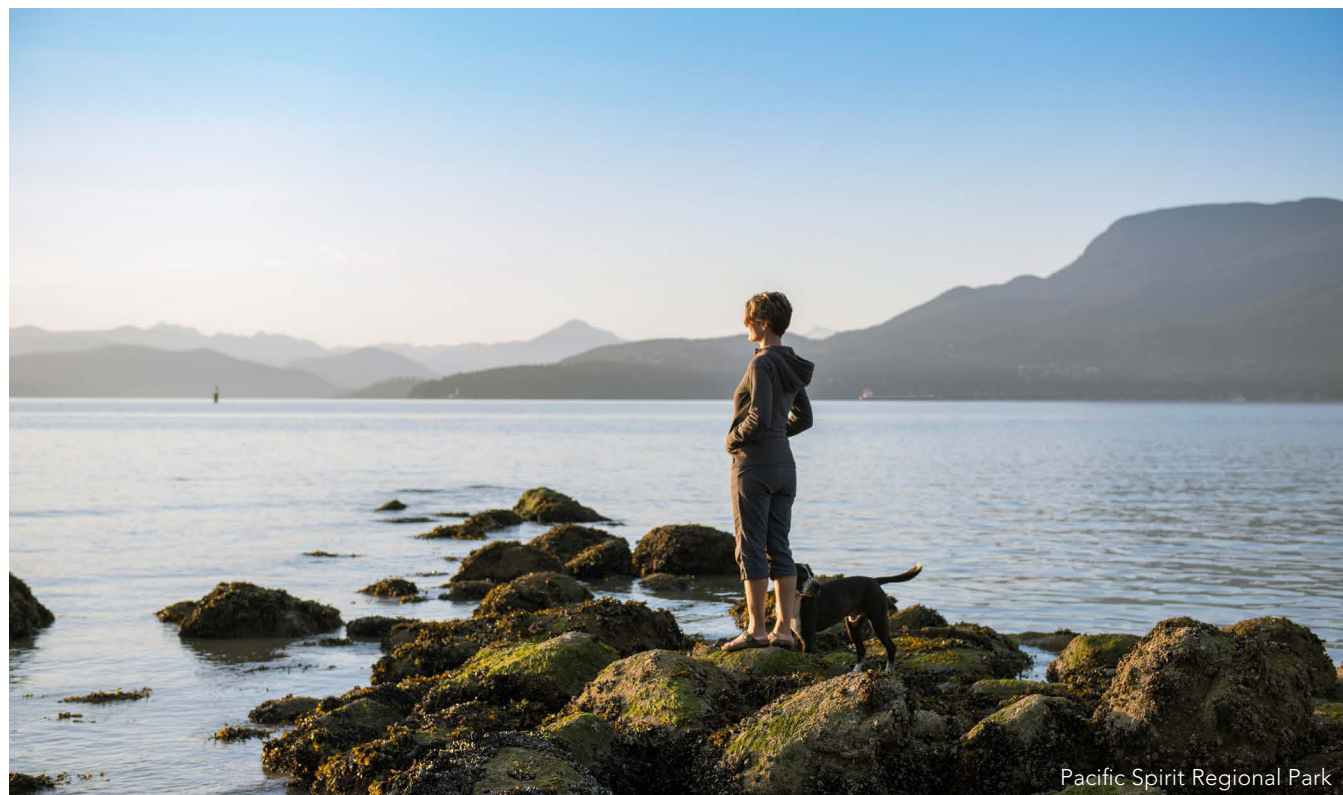
The next plan will address evolving challenges like climate change, sewer overflows, and contaminants in our environment – all while keeping costs as affordable as possible.

The plan update began in 2021 and is expected to take three years.

About the engagement program

The first phase of public engagement for the Liquid Waste Management Plan took place between October 25 and November 30, 2021. Due to the COVID-19 pandemic, the engagement was held online. During this time, we held two online open houses and received 60 responses to our online feedback form. We have summarized what we heard in this report and will use the feedback, along with input from member jurisdictions and Indigenous Nations and peoples, to inform the next engagement phase, which includes developing draft goals, strategies and actions for the updated plan.

Phase 1 – 2021	Phase 2 – 2022	Phase 3 – 2023	2023 – 2024
Vision and Guiding Principles	Goals, Strategies and Actions	Draft Plan	Plan Approval















Public Advisory Committee

In September 2021, Metro Vancouver established the Liquid Waste Management Plan Public Advisory Committee to provide expert knowledge and relevant experience to inform the update of the plan. The committee includes nine community members who bring a variety of perspectives to wastewater issues.

Committee members participated in two meetings in fall 2021 and will continue to advise the project team during the plan update. The committee will make recommendations to Metro Vancouver's Liquid Waste Committee after the second engagement phase.

WHAT WE DID

We conducted the following activities as part of the first phase of engagement:

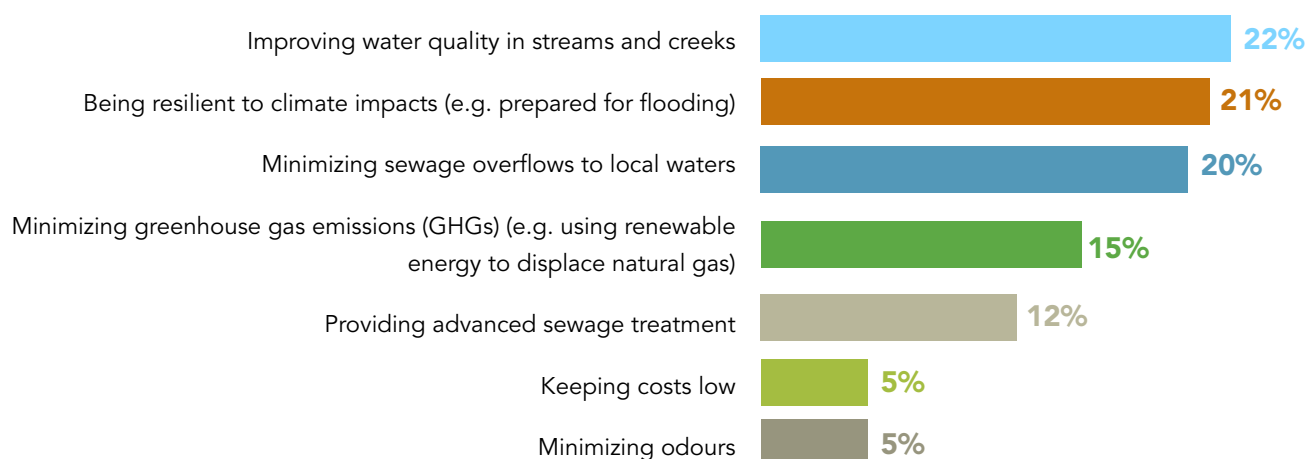
Outreach	
 3,287 visits to project webpage	 2 advertisements in the Vancouver Sun and Province newspapers
 updates sent to 970+ email subscribers	 22 social media posts 152,413 unique views 6,069 comments, reactions, shares and clicks
Engagement	
 1,140+ page visits to project engagement portal	
 360 views of project video	
 9 community members appointed to the Public Advisory Committee	
 2 online open houses	
 60 questionnaire responses	
 1,500 PNE survey responses about wastewater priorities	
 25 workshops and meetings with member jurisdictions, technical advisory committees, First Nations, and the plan's Public Advisory Committee	
 250+ comments and questions received via meetings, questionnaire and emails	

WHAT WE HEARD

Priorities for Wastewater Management in the Region

Questionnaire respondents were asked to share their priorities for wastewater management in the region. Most people indicated improving water quality and minimizing sewage overflows to local waters are most important to them.

What's important to you about wastewater management for the region? (pick a maximum of 3)



Summary of other priorities for wastewater management in the region:

- Including Indigenous Nations and peoples in the planning process
- Recovering energy and reusing water
- Using green infrastructure to absorb and filter stormwater
- Using source control to reduce chemicals, micro plastics and wipes from entering the wastewater system and environment
- Protecting marine and aquatic life as well as ecosystem health
- Providing employment opportunities and enhanced opportunities for apprenticeships and training
- Providing transparent and accessible water quality data
- Restoring lost creeks and streams
- Continuing to educate and engage the public about wastewater topics
- Maintaining beach and swimming access



Healthy Waters: For All. Forever.

Questionnaire respondents were asked to share what the draft vision statement for the updated plan, Healthy Waters: For All. Forever. means to them and provide their ideas to achieve this vision.

What does Healthy Waters. For All. Forever. mean to you?

Summary of responses:

- Waters are protected for recreational and agricultural purposes (e.g. swimmable, fishable, drinkable)
- Waters are protected for Indigenous uses
- Rivers, streams, aquifers, and oceans are clean for future generations
- Wildlife habitat and ecosystem health is maintained (e.g. focus on salmon and whale health)
- Sanitary sewage is treated at wastewater treatment plants and doesn't overflow to local waterways during rain events
- Pollutants are kept out of stormwater
- Water is reused (e.g. greywater, stormwater)
- Everyone has access to clean waterways
- Wastewater systems are resilient to climate change
- Pollution from industry and development is managed

Summary of ideas to achieve Healthy Waters. For All. Forever.:

- Ban toxic chemicals that end up in local waters
- Use green infrastructure to manage stormwater (e.g. use green spaces for stormwater infiltration, incentivize tree retention and planting on private property)
- Prioritize sewer upgrades to eliminate overflows
- Prevent illegal dumping
- Encourage member municipalities to capture, infiltrate, and treat stormwater. Ensure private and public developments have stormwater infiltration
- Collaborate with local First Nations to set objectives
- Encourage residents and businesses to do their part to protect the wastewater system and local waters
- Use public art to promote dialogue about wastewater topics
- Collaborate with industry to reduce contaminants (e.g. fashion industry to reduce microfibres)
- Invest in resilient wastewater infrastructure
- Reuse water wherever possible (e.g. grey water, stormwater)
- Use advanced wastewater treatment technologies
- Prevent industrial runoff
- Prepare for the impacts of climate change
- Encourage responsible development that respects waterways, including aquifers, and maintains tree canopy

Guiding Principles

The next plan will continue to protect the health of the region's people and environment. The following framework for principles is proposed to help guide us towards this. Questionnaire respondents were asked if some early concepts for principles reflect their values and aspirations for the next plan.

Principle 1: Innovate, strive for value and cost effectiveness, be resilient and adaptive to climate change

Summary of ideas:

- Prioritize protecting ecosystem and wildlife health over striving for cost effectiveness (e.g. keeping costs low now may cost the region more in the future)
- Take actions to implement important changes now
- Include full cost accounting rather than just the short term capital cost
- Include the value of ecosystem services gained / lost
- Invest in resilient systems with a long service life to prepare for climate change impacts (e.g. atmospheric rivers and flooding)
- Adapt to new and innovative technology
- Incorporate Indigenous ways of knowing
- Costs should be distributed equitably with some paying more towards costs
- Create off channel habitat so fish have some place to go in storm events
- Use green infrastructure and regulations to achieve climate resilience (e.g. set thresholds for impervious surfaces on a watershed scale, use forested and biodiverse areas for water absorption and filtration)

Collaborate closely with a range of organizations to achieve outcomes that are beneficial for all, share data on how we are doing openly and transparently, and align with other initiatives taking place in the region

Summary of ideas:

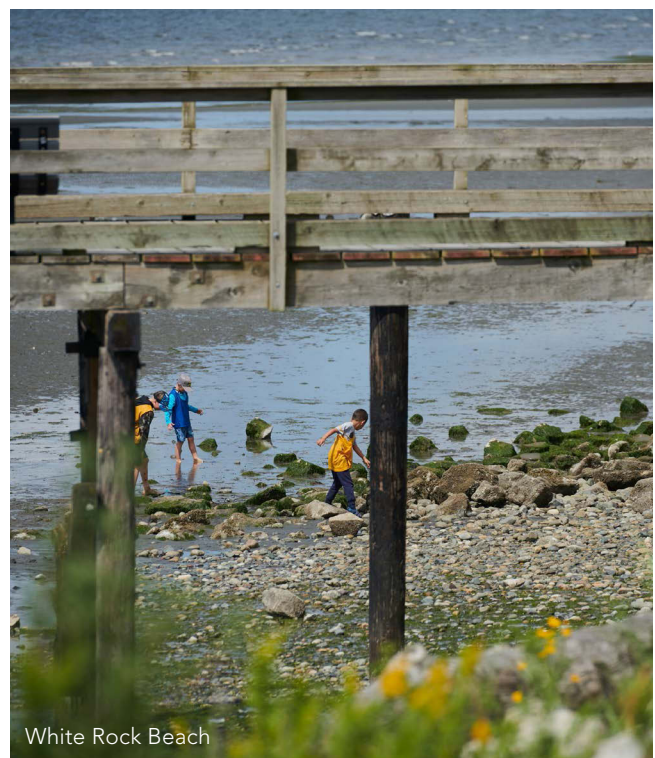
- Hold corporations to a higher standard of responsibility for water use and waste
- Consider habitat conservation and restoration opportunities and gains in biodiversity
- Prioritize public education, which is sometimes more important than “opinion collecting” because there is a lack of understanding about stormwater issues
- Create a legacy of diverse environmental stewardship leaders
- Ensure there is an adequate industrial / commercial land with access to the sewage system to improve and enhance the region’s long term employment options
- Encourage new sustainable industries to locate to the region
- Repair failing infrastructure
- Help stewardship groups connect with Metro Vancouver
- Take accountability for sewer overflows and collaborate with others to eliminate these events
- Provide real-time transparent data to inform decision making. Provide an open source database of information
- Align with Indigenous priorities (e.g. Burrard Inlet water quality objectives and the Shared Waters Initiative in Boundary Bay)

- Prioritize the needs of residents and businesses over developers
- Empower residents to develop solutions to issues in their neighbourhoods
- Provide opportunities for non-staff members to connect with politicians on local issues

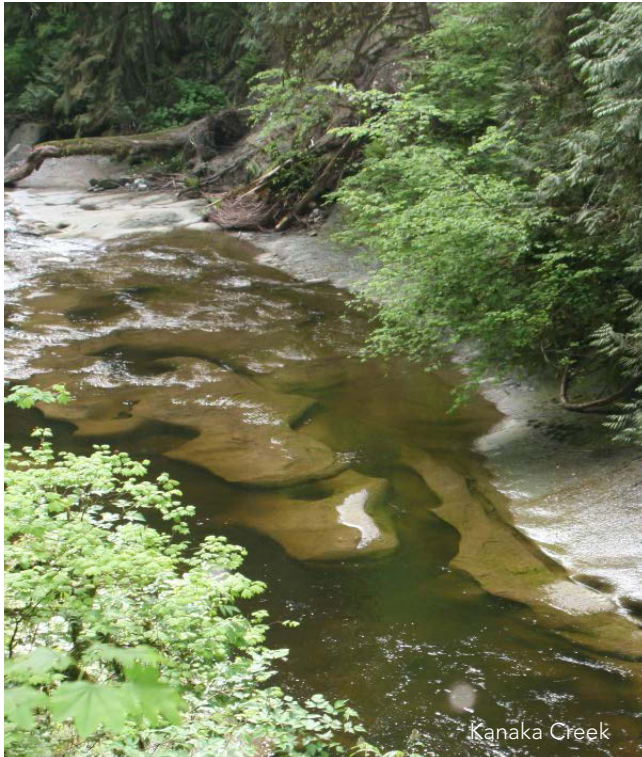
Integrate equity throughout, including fairness and justice, to address any barriers that may keep people from accessing wastewater services

Summary of ideas:

- Encourage all member municipalities to retain, enhance, and beautify green infrastructure (e.g. grass swales and ditches), which are sometimes located in lower income neighborhoods
- Include reconciliation with Indigenous Nations and peoples (e.g. include First Nations in objective-setting and co-leadership related to watershed health and protecting traditional shellfish sources)



White Rock Beach



Minimize greenhouse gas emissions and contributions of pollutants to the environment, including the ocean and our local rivers and streams

Summary of ideas:

- Integrate low-tech stormwater infiltration solutions (e.g. rain gardens) to reduce pollutants
- Increase renewals and reduce natural gas
- Use advanced and proven treatment technologies
- Invest in eliminating pollutants so we can have a healthy and lasting ecosystem.
- Clarify what is meant by "minimize"
- Hold industry accountable for their polluting products
- Maintain and restore riparian areas
- Strive for a net zero impact of effluents once leaving the treatment facility
- Collaborate with international and local researchers (e.g. microplastics)
- Re-arrange sequence to flow downhill: "including streams, rivers, and the ocean"
- Consider the climate impacts of urban sprawl and losses in biodiversity
- Increase water quality standards for stormwater to address pollution (e.g. pharmaceuticals and fecal bacteria).
- Require ongoing monitoring for adaptive management
- Consider the climate impacts of construction
- Make local beaches swimmable
- Make costs equitable (e.g. industry should pay more than residents)
- Address urgent drainage issues (e.g. Little Campbell River)
- Improve transparency around data sharing
- Provide meaningful opportunities for local residents to meet with government representatives during planning processes
- Address impacts of past decisions that were made without Indigenous Nation consultation (e.g. siting of Iona Island Wastewater Treatment Plant, the routing of the Highbury Interceptor, and the impacts of both on Musqueam Indian Band)

Aspirations for the Next Plan

Questionnaire respondents were asked to share their aspirations for the next plan. Here is a summary of the ideas:

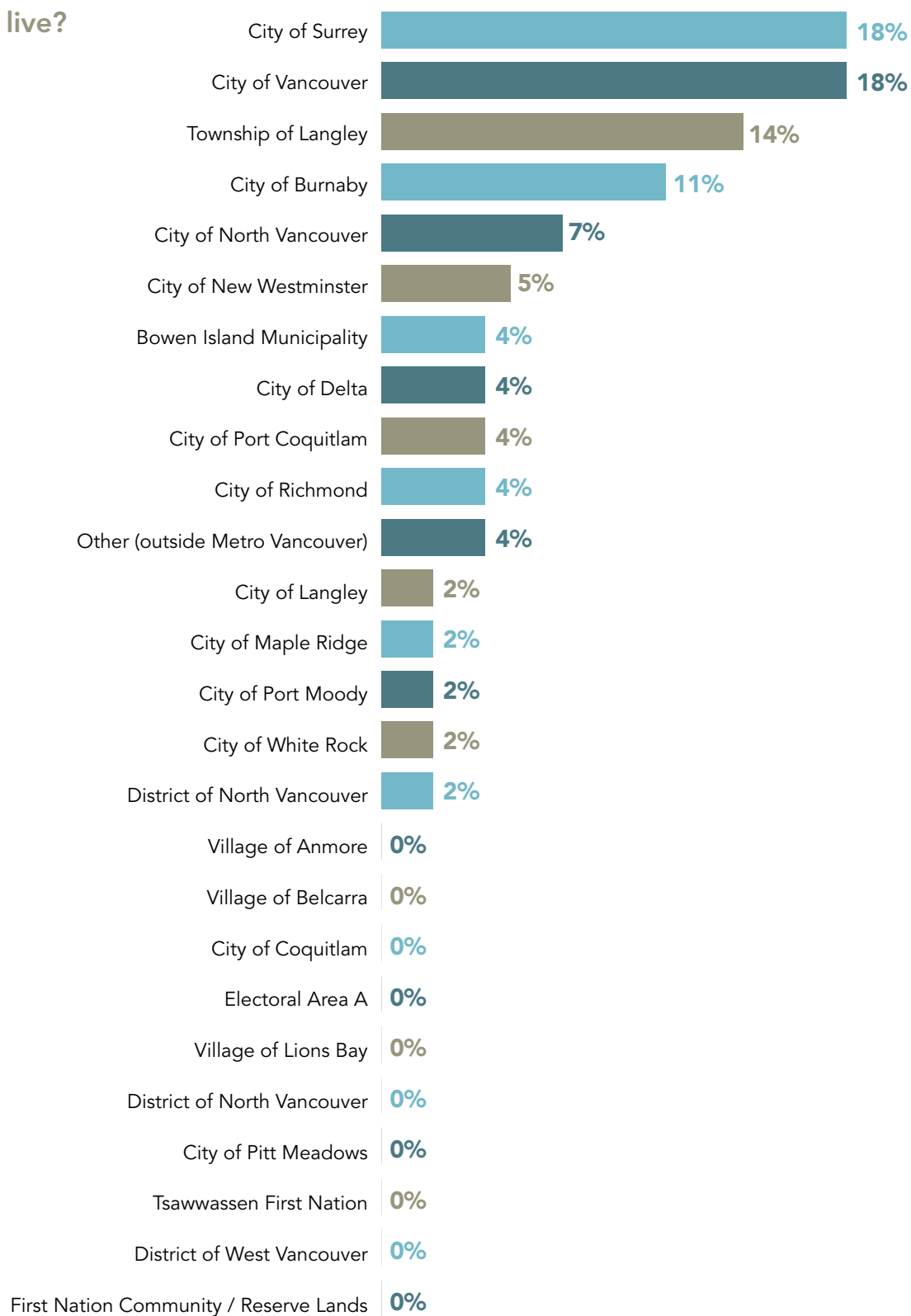
- Clean and healthy streams and creeks (e.g. actions that support salmon returns)
- Better public awareness about how individual actions can impact the wastewater system and environment (e.g. more education about microfibres)
- Community integration of wastewater infrastructure
- Effective and efficient wastewater treatment that is affordable for residents
- Reconciliation with First Nations
- Reflective of community input
- Accelerated repairs and upgrades to the wastewater system to eliminate sewer overflows
- Metro Vancouver becomes a world leader in wastewater management
- Advanced treatment technologies at all wastewater treatment plants
- Action oriented with concrete plans and metrics (address urgent needs first)
- Transparent reporting on plan progress including water quality and sewer overflow data
- Linkages to water conservation plans
- Green infrastructure and natural filtration systems to improve water quality and address flood risks
- Public education on stormwater management
- Resilient to climate change, including flood risks
- Collaboration opportunities, including public-private partnerships
- Linkages to other provincial and federal regulations
- Improved standards and regulations to keep harmful chemicals and pollutants out of the wastewater system and the environment



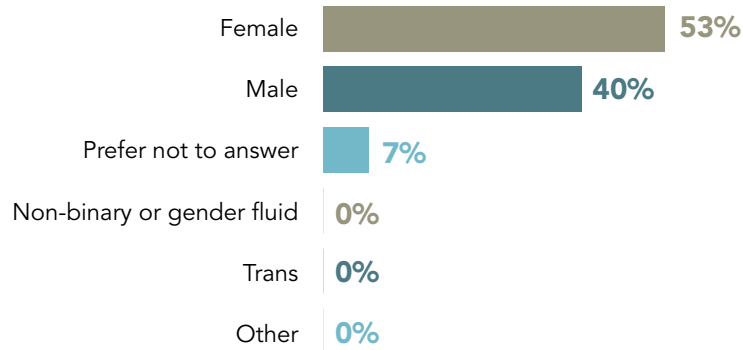
A heron in Burrard Inlet

Who provided feedback

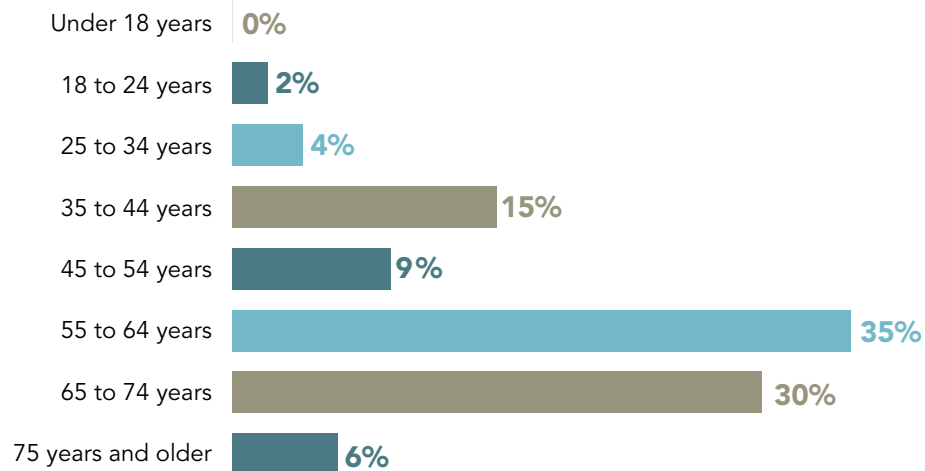
Where do you live?



What is your gender?



What is your age?



What's Next

Metro Vancouver will consider feedback received during the first phase of engagement to inform the next engagement phase, which includes developing draft goals, strategies and actions for the updated plan. Engagement highlights and notable project updates will be posted on the project website. Opportunities will be provided to provide additional input during the second phase of engagement, which is anticipated for fall 2022.

To stay informed of future opportunities to provide your feedback, sign up for project updates at metrovancover.org (Search "Liquid Waste Management Plan")

CONTACT US

Metro Vancouver Information Centre:

604-432-6200

(Monday to Friday from 8:00 am to 4:30 pm)

Email: lwmp@metrovancover.org

Website: metrovancover.org and search "Liquid Waste Management Plan"

Comment Details				Metro Vancouver
ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
Affordability				
1	Healthy Waters Webinar Webinar Participants Nov 9, 2021	Nov 9, 2021	Will you be considering household metering?	MV will soon be initiating its Drinking Water Management Plan review and update. Residential water metering will be considered through that process - however, each municipality can make its decision on whether it will be required.
2	Healthy Waters Webinar Webinar Participants Nov 9, 2021	Nov 9, 2021	How are the district’s efforts financed and how do they relate to me as a homeowner? How is the LWMP paid for and how does that relate to property taxes?	As a regional utility, GVS&DD is required to develop and submit the LWMP to meet regulatory requirements to the Province. The plan is funded under the GVS&DD levy. The services provided by GVS&DD form the bulk of the levy and a number of large infrastructure projects are funded through the levy or other mechanisms such as development cost charges.
3	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Would the regulations against polluting the environment not be the goal to address challenges, rather than the cost?	We prioritize public health and the environment, and the LWMP must hold that paramount in order for it to be approved by the Province. We also recognize this is an expensive region to live and work in and there are a number of costs coming up, including significant treatment plant upgrades. We also need to be sensitive to the affordability challenges of residents and businesses.
4	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	The Committee should take into consideration what “affordable” means in regard to the elimination of CSOs.	Separation was selected in this region to allow for an affordable pathway towards elimination as these combined sewers reach the end of their useful life. It also aligned with local factors such as high volumes of winter rainfall, rapid site redevelopment on private property allowing for private-side separation, etc.
Climate Change				
5	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	What is the plan for the co-generation projects (using biogas as a resource to provide heat and electricity) to be implemented, in both the short- and long-term?	We are committed to evaluating and beneficially using resources like biogas. MV already uses biogas at its facilities to meet its own heating needs, and has additional capacity most of the year. Excess biogas can be used for co-generation, cleaned up and used as renewable natural gas throughout the region, or used to dry biosolids, creating another clean energy source. Co-generating infrastructure is in place or planned at three of our WWTPs (Iona Island, Annacis Island, and planned for the new North Shore plant). A renewable natural gas facility is in place at the Lulu Island plant. We continue to evaluate opportunities from a financial, environmental, and social perspective, as guided by the LWMP and the Board Strategic Plan, with intent to continue achieving the most beneficial uses of this resource for the region. More information is available on the MV website by searching "Turning wastewater into energy".
6	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	What is the plan to protect existing plants from risk of future environmental changes due to greenhouse gasses, like rising sea levels in the future?	We all have a role in addressing climate change. We need to actively protect our infrastructure. Much of the infrastructure we have is located at low elevation and close to the sea, making it inherently vulnerable to sea level rise. We need to use a combination of actions for new builds (e.g. hard and soft infrastructure), and reduce the energy of the waves. Increasing intensity of rain and atmospheric rivers is also a challenge.
7	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Is it practical to use waste heat from the sewage plant to heat surrounding buildings?	Examples include the Neighbourhood Energy Utility and work at the North Shore Wastewater Treatment Plant. This is also being explored at the new Iona Island Wastewater Treatment Plant.
8	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	The Intergovernmental Panel on Climate Change (IPCC) Report should be reviewed to consider potential climate-related impacts.	MV strives to keep climate scenarios current as science evolves. As one example, a major consulting report was completed in 2019 which identifies future precipitation intensities for a range of future scenarios.
9	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	How are risk and resilience being considered? How is sea level rise being considered? Are different aspects of risk being considered? Are seismic risks considered? Anything posing a risk to the liquid waste system is something to be incorporated in the plan update.	These risks may be addressed through a scenario-planning approach; a similar approach was used for a regional long-term water strategy available on the MV website.

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
10	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about atmospheric depositions.	Liquid Waste Services environmental management programs are designed to assess potential impact of discharges from liquid waste infrastructure and do not include characterization of atmospheric depositions.
Engagement and Collaboration				
11	Healthy Waters Webinar Webinar Participants Nov 9, 2021	Nov 9, 2021	Where could MV have been more equitable in past LWMP engagements and how will MV improve going forward?	Historically, a number of MV facilities were built in close proximity to First Nation communities without meaningful engagement. MV is now collaborating with those First Nations as we upgrade these facilities. The actions in the existing Liquid Waste Management Plan are not reflective of the deeper integration of First Nation considerations that we hope to address in the next plan.
12	Healthy Waters Webinar Webinar Participants Nov 9, 2021	Nov 9, 2021	I am trying to be more aware of how my actions affect the wastewater system and the environment by the clothes I buy and chemicals that filter down the drain. How can I do better?	We all have a role to play through source control. There are a number of MV public education campaigns available on our website to help protect public health and the environment.
13	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Once the new LWMP is complete, what is the timeline to implement the new plan?	The timeline for implementation is partially dependent on the Province. Before we receive the Minister's approval of the plan, we require sign off from member jurisdictions and the GVS&DD Board. Once the plan is approved by the Minister, we will begin implementation. We expect that the approved plan will be in effect for at least eight years.
14	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	Education and engagement with the public on the importance of water and the notion that it is a resource to cherish, value and protect is paramount.	Comment noted.
General				
15	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Any enforcement plans to stop illegal sewage dumping?	The existing plan outlines a variety of actions to reduce sewage overflows as quickly as possible, and these actions will be strengthened in the new plan submitted to the Province.
16	Survey - MV Booth at the Pacific National Exhibition (PNE) PNE attendees Aug 1, 2021	Aug 1, 2021	The most important issues identified for wastewater management include: minimizing sewage overflows to local waters, improving water quality in streams and creeks, and minimizing greenhouse gas emissions (GHGs).	Priorities noted. Additional opportunities for the public to comment on these topics will be provided during Phase 2 engagement.
Green Infrastructure				
17	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Are there any plans to integrate green infrastructure recommendations into the plan, (e.g. green roofs, rain gardens, increased permeable surfaces)? If so, will they be recommendations or enforced for the municipalities?	We have a number of green infrastructure initiatives that were included in the last plan, and are expecting more in the next plan. In general, that is managed at the municipal level and MV plays a supportive role. There may be additional actions in the plan around green infrastructure; some of those actions are MV actions and some are municipal actions. We want to make sure the municipalities have flexibility to be able to implement solutions that make sense in their communities.
18	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	How are regular industrial customers motivated by incentives to upgrade their existing water treatment for better results, and extract bio products for sustainability?	Our industrial customers are regulated through various bylaws. We also have programs to work with them to encourage upgrades to existing systems. We are open to hearing their ideas during the plan update.
19	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Are there any incentives to encourage compost toilets in the Lower Mainland?	There are no ongoing initiatives at the regional level, however, we are supportive of building designs that require less water and put less stress on the sewer system. It is currently driven by the private sector and is something we want to work with the industry and members to encourage wherever it makes sense.

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
20	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	In terms of affordability, Portland conducted an experiment to infiltrate as much stormwater as it could in order to keep a combined sewer system. It saved money and added green infrastructure to the city. This could be a potential way to handle parts of the MV system. Since implementing its “Rain City Strategy”, the City of Vancouver is considering alternative infiltration options (aka green infrastructure) to address CSOs.	Retaining a combined system will not eliminate CSOs and does risk ongoing CSOs, especially if the capacity of green infrastructure gets overwhelmed during extended periods of wet weather.
21	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about MV's role in green infrastructure and contaminants	In the next LWMP, there may be opportunities to better emphasize the importance of reducing contaminants at the upstream source, such as with producers of consumer products, rather than through publicly-funded works (e.g., tire manufacturers changing the formulation of tires to reduce the use of harmful chemical contaminants that can be washed into stormwater as the tires degrade). MV has hired Deltares from the Netherlands, who are a global leader in green infrastructure and will be guiding MV in 2022 on how best to apply green infrastructure in our region. Properly maintained GI facilities can be used to reduce contaminant discharge in downstream stormwater systems.
Innovation				
22	Healthy Waters Webinar Webinar Participants Nov 9, 2021	Nov 9, 2021	Are there plans for improved/expanded technology in the new plan?	Three wastewater treatment plants currently under review will be upgraded, or are being considered for upgrade, to tertiary treatment, which goes above and beyond regulatory requirements. MV will look for opportunities to incorporate innovative technology wherever it makes sense.
Plan linkages and alignment				
23	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	Will the plan link to Metro 2050 regarding containment boundaries and other liquid waste considerations?	There are general, high-level liquid waste considerations already integrated into the draft Metro 2050 – for example, on infrastructure needs to support regional growth needs. If new information was identified through the LWMP process that was substantive enough, then amendment of Metro 2050 could be considered if appropriate; otherwise they would be addressed in the next version of the plan cycle.
Reconciliation				
24	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	Many Indigenous Nations are more connected to water than the average Canadian, which compels us to consider the added investment to protect the more vulnerable communities that value clean water more than the average Canadian. It may be a meaningful way to contribute to reconciliation.	The actions in the existing LWMP are not reflective of the deeper integration of First Nation considerations that we hope to address in the next plan. During the plan update, we will work to understand priorities and desired outcomes of Indigenous Nations and peoples across the region for wastewater management.
25	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	Affordability and accessibility are linked. Many Indigenous communities do not have the same accessibility to water as others. It is important to keep in mind that there are a broad range of communities that do not have the accessibility and infrastructure that others do.	See above.
Resource recovery				
26	Email Van-Port Sterilizers Ltd Oct 15, 2021	Oct 15, 2021	What is the problem your politicians and engineers have with any discussions regarding reclaiming wastewater for selling into identified markets? What is the problem they have with hydraulically compressing and injecting emissions into reclaim pipelines: What is the problem they have with understanding industrial sterilization technologies and their role in waste-to-energy systems and large scale production of artificial soils from wastes?	Reclaimed water from wastewater facilities is an example of a resource that can be beneficially used in many different ways, such as sewer flushing and watering trees and parks. MV, guided by its Liquid Waste Management Plan and Board Strategic Plan, is exploring how best to beneficially use this resource. Staff are developing a Reclaimed Water Policy that will provide guidelines on evaluating potential reclaimed wastewater projects with public and private partners.
Sewer separation and CSO elimination				

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
27	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Will there be opportunities to consider whether Combined Sewer separation can be finalized on an accelerated timeline?	Those long-term dates for CSO elimination were established with asset management in mind, recognizing that some older cities in North America have combined systems and need time to affordably replace those sewers. The current LWMP requires CSO elimination. We are open to all potential solutions and feedback to help ensure combined sewer overflows are eliminated as quickly as possible.
28	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about sewer separation in the region.	There has been no change in direction from the Ministry of Environment and Climate Change Strategy regarding elimination of CSOs by the established deadlines of 2050 and 2075. Municipalities are being encouraged to accelerate their processes. Burnaby is nearing complete separation in significant parts of their municipality.
29	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about MV's real-time sewer overflow map.	MV plans to begin real-time CSO public notification in 2022, which will complement the real-time sanitary sewer overflow (SSO) and treatment plant incident notification started in 2020.
30	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	MV, working with its members, should speed up its updating processes for GIS data on sewer separation.	Comment noted. Metro Vancouver is working with its combined members to encourage developing updated digital information on sewer separation status.
31	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Single family developments in North Delta are required to have 40% of the property as open space to incorporate green space; however, as more developments are multi-family, there are no required setbacks – this problem goes hand in hand with CSOs.	Although Delta itself is not a combined community, retention of green space in new development is encouraged where it makes sense for improved stormwater management and CSO reduction.
32	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	Combined sewer overflows are a large issue and can be expensive to control. What is the frequency and magnitude of the overflows? What is the proposed approach to handle the overflows?	CSOs currently occur regularly during wet weather and are being addressed primarily through sewer separation (i.e. into separated storm and sanitary systems). This aligns with the approved LWMP and provincial regulation. A sewer separation approach leading to CSO elimination was selected to allow for affordable, phased replacement of combined systems as these facilities reach the end of their useful life. In the Vancouver Sewerage Area, the approved deadline to eliminate CSOs is 2050; in the Fraser Sewerage Area, it is 2075. Burnaby is nearing completion of its sewer separation program in significant parts of its system.
Source control				
33	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	An efficient way to implement source control is by regulating harmful substances on a national scale through the federal Chemicals Management Program (CMP).	Metro Vancouver has been, and continues to participate in the CMP initiatives, as appropriate.
Stormwater management				
34	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Should storm water remain on the property or be placed down storm drains?	Private property owners can do their part to minimize stormwater from entering the sewer system (e.g. infiltration on site and disconnection of downspouts).
35	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	How does the current enthusiasm for building deep in-ground basements with perimeter pumping impact: a) stormwater volumes and b) the safety and effectiveness of infiltrating roof runoff on site?	We are careful to offer reminders to disconnect roof leaders etc. only where it makes sense to do so and complies with local requirements. We would encourage residents to connect with their local building inspectors as appropriate.
36	Healthy Waters Webinar Webinar Participants Nov 16, 2021	Nov 16, 2021	Is there a formal mechanism in place for GVS&DD and Metro Parks to coordinate with each other for stormwater infiltration into Metro Parks? Is there an opportunity for stormwater to be used as a water source for parks and environmental/public amenities?	We definitely consider opportunities to use stormwater for non-potable water uses in parks where it makes sense. We are also exploring reclaimed water opportunities at the wastewater treatment plants. These measures can help reduce demand on potable water supplies.
37	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	A stormwater fee with a steep graduation based on percentage of tree canopy cover on properties could be proposed to financially incentivize property owners to add tree canopy.	ISMPs are led by member jurisdictions and MV has a regional coordinating high level role. MV hopes to improve financial incentives for improved stormwater management in the updated plan
38	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	The stormwater tax base on tree canopy cover could be developed region wide as some municipalities do not have the financial capabilities to determine the tree canopy coverage for all property owners.	Comment noted.

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
39	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	With respect to ISMPs, has there been any analysis/investigation into how that has rolled out?	The PAC may consider inviting MV's Environmental Management and Quality Control division to present on ISMPs completed to date and lessons learned.
40	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	Most municipalities with in-ground basements pump water to street level to connect with the storm system.	Comment noted. If not managed properly, this can cause inflow and infiltration challenges.
41	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about impacts of atmospheric river event in November 2021 and stormwater infiltration.	Recent atmospheric rivers mainly affected already separated sewer areas of the region in the south. MV and its members have considered increased stormwater infiltration where it makes sense, which subtracts a portion of the stormwater out of CSOs; however, the nature of the soils in combined areas in the region does not always allow for much absorption.
42	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	MV parks could be locations for storm sewers to be daylighted.	Comment noted.
Treatment levels				
43	PAC Kick-Off Meeting Summary PAC Members Nov 5, 2021	Nov 5, 2021	Are wastewater treatment facilities treating to the tertiary level?	MV is required to move towards secondary treatment for all wastewater treatment plants. Three facilities currently perform secondary treatment, two perform primary treatment, and three plants ready for renewal are planning for moving towards tertiary treatment. MV is considering a standardized approach across the region in future.
Water quality				
44	Email from Stand.earth Stand.earth Sep 27, 2021	Sep 27, 2021	The LWMP does not address liquid waste from vessels directly, nor does it list a relationship with the Vancouver Fraser Port Authority to accept liquid waste. Including liquid waste from vessels would prevent millions of litres of sewage and greywater from being dumped as pollution off the coast of BC, and instead capture the waste as a resource. The LWMP is a well placed policy to capture this liquid waste stream and support a healthier Salish Sea.	MV responded to this comment as part of the 2019-2020 Biennial Report engagement process. In general, most port and vessel activities are federally regulated and are outside of MV's authority and mandate. However, through the review and update of the LWMP, MV will explore opportunities to work with other levels of government, including those responsible for port and vessel activities, to develop new integrated solutions that better protect and enhance the quality of waters throughout the region.
45	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about environmental monitoring in Boundary Bay.	The Ministry of Environment and Climate Change Strategy approved MV to place monitoring in Boundary Bay on hold; however, if a proposed task force for holistic environmental management in the region with the federal and provincial governments and First Nations is established, Boundary Bay will be included.
46	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about water quality trends in the Fraser River.	Regarding water quality trends and impacts of polluted floodwaters upstream in the Fraser River, ambient monitoring programs have not observed large temporal changes.
47	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about sediment quality.	Sediment effect surveys are conducted in the vicinity of the outfalls to assess quantity and potential impact of substances that may have accumulated in sediments over time.
Wet weather flows				
48	PAC Meeting #2 Summary PAC Members Dec 14, 2021	Dec 14, 2021	Question about water sampling near SSOs	When SSOs take place, water samples are collected from the receiving water body as soon as possible.

Integrated Liquid Waste and Resource Management Plan - Review and Update
Indigenous Feedback / Response Table - Phase 1

Comment Details				Metro Vancouver
ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
	Engagement and collaboration			
1	Letter from Tsleil-Waututh Nation Oct 29, 2021	Oct 29, 2021	Tsleil-Waututh Nation has a sacred obligation to steward the water, land, air and resources of our ancestral territory. This stewardship obligation includes the responsibility to maintain and restore conditions that provide the environmental, cultural, spiritual and economic foundation for the Nation to thrive. As such, Tsleil-Waututh Nation is seeking a proactive approach to improving water quality by reaching out to Metro Vancouver to collaborate in developing and updating the ILWRMP.	MV invites Tsleil-Waututh Nation to participate in a variety of engagement activities such as participating in meetings and technical workshops, as outlined in the scope of work dated January 20, 2022.
2	Letter from Tsleil-Waututh Nation Oct 29, 2021	Oct 29, 2021	As Metro Vancouver is aware, technical staff of Tsleil-Waututh Nation is involved in various ongoing initiatives aimed at restoring the health of Burrard Inlet. Tsleil-Waututh Nation is seeking the opportunity to not only review and comment on the draft ILWRMP, but also contribute to technical committees and working groups involved in the ILWRMP update.	MV invites Tsleil-Waututh Nation to participate in a variety of engagement activities such as participating in meetings and technical workshops, as outlined in the scope of work dated January 20, 2022.
3	Letter from Tsleil-Waututh Nation Oct 29, 2021	Oct 29, 2021	Tsleil-Waututh Nation requires capacity funding to be involved and provide meaningful feedback and expertise on the updated ILWRMP.	MV invites Tsleil-Waututh Nation to participate in a variety of engagement activities such as participating in meetings and technical workshops, as outlined in the scope of work dated January 20, 2022.
4	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	<p>RE: Metro Vancouver’s Integrated Liquid Waste and Resource Management Plan (“the Project”), dated October 28th, 2021.</p> <p>Stakeholder Coordination: Page 6 of the plan states that First Nations rights must be taken into account during the planning process. It is no longer sufficient to consider First Nations a stakeholder whose rights should be considered, but rather a governing body with decision-making authority aiming to co-manage resources in partnership with neighbouring municipalities and regional governments.</p> <p>Arguably, this sentence should read: First Nation Governments have constitutional rights and therefore must be considered an equal decision-making authority throughout the planning process. The protection of Indigenous rights as outlined in UNDRIP and DRIPA legislation in Canada depends upon the role of First Nations in resource management, which includes liquid waste management planning.</p>	The existing LWMP is not representative of the deeper integration of First Nations' considerations we hope to include in the updated plan. As we await clarity and guidance from the Province on the implementation of UNDRIP/DRIPA in British Columbia, the regional district is pursuing a number of objectives to strengthen relationships with First Nations, by exploring new pathways to reconciliation, such as increased engagement, dialogue, and collaboration between Metro Vancouver and First Nations in the region.
5	Email from Musqueam Indian Band Nov 17, 2021	Nov 17, 2021	Priority areas for Musqueam would be of course environmental protection, and ensuring resiliency of the system given the ongoing effects of the climate crisis. As for engagement, at this time Musqueam does not feel the need to meet about this plan specifically, however, would be interested in setting up a recurring meeting with Metro Vancouver as a way to discuss all of the referrals sent to our team on an ongoing basis. Please let me know if that sounds like something would be possible and we can work on setting up a standing time.	Comment noted and appreciated. Our Indigenous Relations group will be reaching out to discuss a recurring meeting.

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
6	Email from Musqueam Indian Band Oct 22, 2021	Oct 22, 2021	A desire for more collaboration with First Nations particularly where opportunities for innovation and revenue generating are concerned	MV responded to this comment as part of the engagement process on the 2019-2020 Biennial Report. The Biennial report provides an update on specific actions identified in the 2011 Integrated Liquid Waste and Resource Management Plan. These actions are not reflective of the deeper integration of First Nation considerations that we hope to address in the next plan. During the plan update, we will work to understand priorities and desired outcomes of Indigenous Nations and peoples across the region for wastewater management.
7	Email from Cowichan Tribes - 2011 LWMP Aug 16, 2020	Aug 16, 2020	Is the Annacis Island Sustainability Academy in operations yet?	The Annacis Research Centre, at the Annacis island WWTP, is operational and includes laboratory facilities and meetings spaces.
8	Email from Cowichan Tribes - 2011 LWMP Aug 12, 2020	Aug 12, 2020	We were under the assumption that FREMP had been disbanded, is this not the case?	MV has developed a Burrard Inlet Environmental Action Program (BIEAP) and Fraser River Estuary Management Program (FREMP) revitalization proposal. If successful, it will encompass numerous existing initiatives in the region. It is meant to ensure coordinated environmental management, information sharing and increased efficiency of regulatory processes, and provide everyone with access to innovation and research. We expect it would result in efficient and cost-effective management of resources and increased public awareness of environmental management issues in the region.
9	Email from Matsqui First Nation Dec 10, 2020	Dec 10, 2020	In the future for the updates Matsqui First Nation would like to know about any potential impacts and records of impacts and actions. Matsqui is not available for day to day participations for the management plan but would like a first nations clause within the plan for contact and impact records, however the referral officer is interested in receiving the draft and final management plan for review and comment/questions.	MV invites Matsqui First Nation to participate in a variety of engagement activities such as reviewing draft documents, as outlined in the scope of work dated January 20, 2022. We will continue to share information with Matsqui for review and comment through all phases of the plan's development.
General				
10	MV-KFN Technical Working Group Meeting Feb 8, 2022	Feb 8, 2022	Strong support for the vision statement, "Healthy Waters: For All. For ever".	Comment noted.
Measuring success				
11	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP Performance Measures: The Performance Measures listed on page 32 are thorough; however, we believe that response time should be included for Goal 1: Protect public health and the environment. We often hear of workers arriving to Stoney Creek far too late to mitigate impacts of sewerage overflows, sometimes leaving sanitary materials strewn across roads and walkways for several days before they are cleared.	Comment noted regarding need for rapid operational response when overflows do occur.
12	Email from Tsleil-Waututh Nation re: Metro 2050 Engagement Dec 9, 2021	Dec 9, 2021	TWN is pleased to see "no net loss" in this policy, however, no net loss typically results in a loss. For example, Burrard Inlet and Indian Arm are already at a loss. TWN requests Metro Vancouver necessitate a policy of "net-gain", rather than a policy of "no net loss".	Comment noted.
Plan linkages and alignment				

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
13	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP Sustainability Planning: Goal 3 on page 5 stresses the importance of pursuing opportunities for positive synergies with other management systems. Please ensure that liquid waste management works in synergy with sustainability plans developed for the region, for example, the City of Coquitlam's Environmental Sustainability Plan (ESP). It is our belief that liquid waste must always be managed in a way that prioritizes environmental impact mitigation, particularly those elements in line with Indigenous values (e.g., fisheries resources). We recommend including the City of Coquitlam's ESP in linkages presented on Page 11. In fact, it may be beneficial to have a "Linking with Regional Municipalities" section that could be used as a reference for municipal initiatives associated with liquid waste management.	We confirm that protection of the public and environment will be a key overarching goal of the new plan.
Resource recovery				
14	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP Liquid Waste as a Renewable Resource: The Nation is supportive of recycling liquid wastes and believes that there are several opportunities to salvage wastewater from energy operations. For example, the Coquitlam River Dam has resulted in an 80% reduction in flow to the Coquitlam River. Wastewater produced from BC Hydro facilities in the upper watershed could be redirected into the Coquitlam River to help alleviate some of the flow, sedimentation, and flooding issues that the waterway and kwikwəł'əm face.	Comment noted - opportunities to reclaim wastewater will be considered in the new plan. As noted, this can have significant environmental benefits.
Sewer separation and CSO elimination				
15	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP c. Combined Sewer Overflows: On page 14, the report states that efforts are being made to reduce combined sewer overflows. We would be interested in knowing what portion of sewerage infrastructure is combined, versus what has been replaced with separate sanitary and storm sewers since this measure was implemented. Further, Strategy 1.2 on page 17 lists Burnaby, New Westminster, and Vancouver as the only municipalities with goals to separate the remaining combined sewers. The City of Coquitlam and the City of Port Coquitlam are of particular interest to the Nation; please confirm that these municipalities have either been fully upgraded or will be the focus of overflow-related upgrades in future.	Combined members (Burnaby, New Westminster and Vancouver) are primarily responsible for identifying "what portion of sewage infrastructure is combined versus what has been replaced with separate sanitary and storm sewers since the measure was implemented". Information as published in biennial reports is available on MV's website by searching "Liquid Waste Management Plan". Coquitlam and Port Coquitlam are not combined communities.
Stormwater management				
16	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP Cross-jurisdictional Wastewater Management: The Nation is interested in understanding the role of Metro Vancouver in managing municipal Integrated Stormwater Management Plans (ISMPs), particularly for instances in which development in one municipality is impacting the waterways of another. The Stoney Creek Environmental Committee (SCEC) has gone to great lengths to find the party responsible for monitoring water quality in Stoney Creek, Burnaby, in an effort to further understand sewerage spills so that fish kills can be mitigated. Cross-jurisdictional authority may be a limitation of the current management system.	Although MV plays a supportive and coordinating role through the Stormwater Interagency Liaison Group, member jurisdictions are generally responsible for their own ISMPs. MV has a more substantive role only in a few legally-defined cross boundary drainage areas. Maps are available on MV's website by searching "Urban Drainage Management".

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
17	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP Incentivizing Wastewater Management: On page 15 it states that, in order to reduce liquid wastes at their source (Strategy 1.1), Metro Vancouver must focus on inflow, infiltration, and rainwater management. Are there opportunities for Metro Vancouver or municipal governments to provide incentives for businesses or households to implement stormwater controls such as infiltration gardens or retaining ponds? The Nation would be interested in understanding the process by which rooftop gardens can be implemented into building designs so that water can be recycled for non-potable uses such as flushing toilets. This would save potable water, help reduce direct runoff of contaminated stormwater, and reduce the total input into liquid waste infrastructure. Might “complementary initiatives” (page 16) include incentives discussed above?	Opportunities for incentives for improved stormwater management and water reuse will be explored in the new plan. As noted, these actions can improve water quality and reduce demand for potable water. In general, these actions would fall within the purview of the member jurisdictions although MV may play a supportive and coordinating role.
18	Email from Cowichan Tribes - 2011 LWMP Aug 12, 2020	Aug 12, 2020	Cowichan Tribes always advocates for stormwater management plans at a watershed level; managing a watershed holistically along watershed boundaries as opposed to arbitrary jurisdictional boundaries helps ensure the health of watersheds.	Comment noted. Through ISMPs, "whole watershed" thinking is encouraged.
19	Email from Cowichan Tribes - 2011 LWMP Aug 12, 2020	Aug 12, 2020	Where possible Metro Vancouver should also strive to support and facilitate the re-establishment of historical side channels and streams as part of stormwater management	Comment noted "Daylighting" lost streams is encouraged where it make sense.
Treatment levels				
20	Email from Musqueam Indian Band Oct 22, 2021	Oct 22, 2021	Under the existing plan, a biennial progress report must be sent to the Ministry. The following feedback was received on the 2019/2020 Biennial Report: Musqueam Indian Band: Concerns regarding pollution from the Iona Island Wastewater Treatment Plant	MV responded to this comment as part of the engagement process on the 2019-2020 Biennial Report. The Iona Island Wastewater Treatment Plant is the largest plant in the region based on flows to the plant. It is also a primary treatment plant and as such uses technology and approaches that are now considered outdated. The upgraded plant design concept includes tertiary treatment, as do all options currently being evaluated. Together with a suite of ecological restoration projects, the plant upgrade will improve water quality in the Fraser River estuary and in the Salish Sea.
21	Email from Cowichan Tribes - 2011 LWMP Aug 12, 2020	Aug 12, 2020	Is there any way to provide incentives for existing marinas to build such [pleasure craft pump out] facilities?	Comment noted. Opportunities for improved marina servicing will be explored.
Water quality				
22	Letter from Tsleil-Waututh Nation Oct 29, 2021	Oct 29, 2021	The LWMP update is important to achieving Tsleil-Waututh Nation’s recovery objectives in the Burrard Inlet Action Plan and the Burrard Inlet Water Quality Objectives. One e of Tsleil-Waututh’s key goals is to restore and improve water quality within Burrard Inlet and the wider consultation territory. The current water quality conditions in the Burrard Inlet are degraded and at ecological loss as a result of the cumulative impacts of industry and development. The water quality protection mechanisms outlined by the ILWRMP must beenhanced to obtain Tsleil-Waututh Nation’s goal of improving water quality in the consultation territory.	MV's Environmental Management and Quality Control division has been involved in the Tsleil-Waututh Nation and Province’s work on the review of Burrard Inlet Water Quality Objectives for a number of years. We plan to engage closely with a range of partners during the LWMP update to better understand and address the collective impacts of contaminant loading from a range of sources on these waters - including the Tsleil-Waututh Nation and their strong ancestral interest in restoring the health of Burrard Inlet.

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
23	Email from Tsleil-Waututh Nation re: Metro 2050 Engagement Dec 9, 2021	Dec 9, 2021	Include collaboration with First Nations to incorporate Indigenous science and holistic understanding of our region's water quality conditions and goals. Please consult and include the Burrard Inlet Water Quality Objectives (https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/water-quality-objectives/south-coast-region-water-quality-objectives/burrard-inlet-water-quality-objectives) and the Burrard Inlet Action Plan (https://twnsacredtrust.ca/burrard-inlet-action-plan/).	Opportunities to incorporate Indigenous ways of knowing will be incorporated into the new plan. Water quality objectives, including those noted for Burrard Inlet, will be reviewed through plan development.
24	Email from Tsleil-Waututh Nation re: Metro 2050 Engagement Dec 9, 2021	Dec 9, 2021	TWN is working on the Burrard Inlet Water Quality Objectives and regional water quality thresholds, including mapping sewer outfalls; this work extensively assesses contaminants of concern. TWN would be open to further discussing this shared objective with Metro Vancouver.	We welcome the opportunity to learn from Tsleil-Waututh Nation on shared objectives related to water quality.
25	Email from Cowichan Tribes - 2011 LWMP Aug 12, 2020	Aug 12, 2020	How does this ILWRMP affect land use decisions and provincial initiatives related to the impact of agriculture on local water quality and quantity?	Through the ILWRMP, municipalities have certain commitments to complete Integrated Stormwater Management Plans (ISMPs) that support alignment of land use with water quality.
26	MV-KFN Technical Working Group Meeting Feb 8, 2022	Feb 8, 2022	Request for water quality measurements, specifically what Metro Vancouver monitors, how we track them, and where we measure them from	We have monitoring programs that include measurements in the water column, sediment and biota such as benthic invertebrates and fish in the Fraser River, Burrard Inlet and the Strait of Georgia. The various monitoring programs conducted are to understand the potential for effects and evaluate the long-term trends from MV discharges in the regional water bodies, including from wastewater treatment plants and sewer overflows. Some of these programs occur annually and some less frequently. Summary reports of program reviews of these monitoring programs in each water body are available on the MV website.
Wet weather flows				
27	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	<p>RE: 2011 LWMP</p> <p>Public Health and Environmental Protection: Pages 13 to 20 outline the key management areas which support the protection of public health and the environment. We feel that there are situations in which the current management framework is failing in its ability to meet this goal. For instance:</p> <p>a. Coordination of Infrastructure Capacity and Urban Development: Wastewater infrastructure near Stoney Creek is overcapacity and often leaks sewerage and other toxic materials into local waterways. The most recent fish kill (July 2021) resulted in a minimum of 300 deceased salmonid fry. Despite this being a regular occurrence, multiple housing developments are under construction which with further stress these outdated systems. It is our view that this goal is not being met and that sewerage systems must be updated prior to the construction of new housing to avoid these situations in future.</p>	We confirm that protection of the public and environment will be a key overarching goal of the new plan. There will be new actions in the plan to better manage wet weather sewage overflows.

ID	Source	Date	Comments/Information Requests	Metro Vancouver Response
28	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP b. Sanitary Sewer Overflows: There are elimination strategies in place for infiltration management; however, the plan does not mention the potential for exfiltration caused by development and water table fluctuations in the summer. The E-Coli levels in Stoney Creek exceed recommended values during the drier months, likely due to internal vs external pressure differences in the sewerage infrastructure. Evidence suggests that sewerage enters the creek both directly from culverts and through groundwater reserves.	As above. In addition, we confirm that protection of the public and environment will be a key overarching goal of the new plan. There will be new actions in the plan to better management wet weather sewage overflows.
29	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP Wastewater Monitoring Programs: Strategy 1.3 on page 18 mentions the potential use of ongoing monitoring and assessment programs to identify and reduce environmental impacts associated with liquid waste management. The most recent fish kill at Stoney Creek highlights the need for a monitoring program in the Stoney Creek Watershed, a concern that has been raised previously by the SCEC to all levels of government. Given the distribution of the Stoney Creek Watershed across multiple jurisdictions, we argue that it is the responsibility of Metro Vancouver to coordinate monitoring through the SCEC so that problem areas can be identified, and sewerage systems can be upgraded accordingly to account for future housing developments.	Illicit discharges to the municipal stormwater system have been identified as the cause of the recent unfortunate fish mortalities in Stoney Creek. The focus of actions to manage this source of contaminants must be on the stormwater system and related management plans. Under the LWMP, municipalities develop and implement Integrated Stormwater Management Plans which include education and monitoring programs for local waterways. MV supports these actions through coordinating the development of frameworks (Adaptive Management Framework for Stormwater) and templates that municipalities can use to develop stormwater management plans; occasional studies to help municipalities with the management of these plans; and a process for municipalities to report on performance of the stormwater management plans through the LWMP Biennial reports. Metro Vancouver also coordinates the Stormwater Interagency Liaison Group to promote shared learning amongst the GVS&DD member jurisdictions, including improved coordination of monitoring.
30	Letter from Kwikwetlem First Nation Nov 22, 2021	Nov 22, 2021	RE: 2011 LWMP Contingency Planning: Page 20 states that municipalities will work with Metro Vancouver to develop and implement contingency plans to minimize impacts of unavoidable sanitary sewer overflows resulting from extreme weather. Though we agree that contingency planning is necessary, it is preferred that governments prepare for extreme weather events well in advance by integrating climate change implications (e.g., increased frequency and severity of fires and flooding) into infrastructure planning.	Comment noted. Resiliency to a changing climate will be emphasized throughout the plan.

Liquid Waste Management Plan Update – Phase 2

Engagement Plan – Summary

March 17, 2022

Overview

Metro Vancouver is reviewing and updating its Liquid Waste Management Plan. The current Integrated Liquid Waste and Resource Management Plan, approved by the provincial government in 2011, established the coordinated approach for wastewater management in the Metro Vancouver region. It sets out goals, strategies, and actions for Metro Vancouver and member jurisdictions that help ensure the protection of public health and the environment, while using wastewater as a resource and minimizing treatment costs. The existing plan requires an update for reasons including to:

- Continue protecting human health and the environment
- Integrate Indigenous perspectives
- Incorporate innovative technologies and new scientific developments
- Reflect societal priorities
- Align with other initiatives

The plan update began in 2021 and is expected to take three years. It is being supported by an engagement program that was approved by the Ministry of Environment and Climate Change Strategy on March 26, 2021 following approval by the GVS&DD Board at its meeting of October 2, 2020. The engagement program is divided into four phases. Phase 1 is concluding and Phase 2 is anticipated to begin in spring 2022 following authorization from the Liquid Waste Committee and GVS&DD Board:

Develop Vision and Guiding Principles	Develop Goals, Strategies, and Actions	Draft Plan	Obtain Approvals
2021	2022	2023	2024

Each phase of engagement will involve tailored engagement with member jurisdictions, Indigenous Nations, and stakeholders, as well as a public engagement period open to people and organizations interested in the plan update. While Indigenous peoples will be invited to participate in all public engagement activities, Metro Vancouver has developed a separate engagement strategy that outlines a government-to-government engagement approach with Indigenous Nations and peoples whose territories include all or part of the Metro Vancouver region.

An engagement summary report issued at the end of this phase will reflect how input received has informed the goals, strategies, and actions of the updated plan.

Engagement Objectives

1. Facilitate a process of reciprocal learning where engagement participants can share their knowledge and experiences and learn about the benefits and challenges of the wastewater system
2. Strengthen and build collaborative relationships with members, Indigenous Nations, and other organizations
3. Understand perspectives, priorities and desired outcomes of engagement participants across the region for wastewater management, and foster an environment where a wide range of voices and perspectives are shared
4. Support informed engagement and share engagement outcomes

5. Raise awareness about Metro Vancouver’s role in wastewater management in the region

Engagement Approach

During the second phase of engagement, Metro Vancouver is looking for input on:

- A broad range of specific goals, strategies, and actions for the updated plan. Discussion topics will include:
 - Wet weather flows and sanitary sewers
 - Sewer separation and combined sewer overflow elimination
 - Holistic stormwater management
 - Treatment levels and resource recovery
 - Affordability
 - Measuring success
- Direction of preferred scenario reflecting future pathways for the next plan (scenarios will range from meeting minimum regulatory requirements in the most cost-effective manner to international leadership on environmental action)

Audiences

Metro Vancouver is committed to engaging individuals and organizations who may be impacted by or have an interest in the plan update. The provincially approved Liquid Waste Management Plan Review and Update Strategy includes a list of the organizations that will be contacted during engagement. During Phase 1, Metro Vancouver invited the following people and organizations to share their ideas about the plan update:

- Government and regulatory agencies, including Indigenous Nations and peoples, provincial and federal governments, member jurisdictions, adjacent regional districts, crown corporations and health authorities
- Commercial, institutional and industrial wastewater generators, and owners/operators of private liquid waste collection, processing and treatment businesses
- Industry and business associations, professional associations and academic institutions
- Community, environmental and non-profit groups, NGOs, youth and students, and urban Indigenous peoples
- Metro Vancouver residents

Metro Vancouver will continue to keep these groups informed about progress on the plan update and engagement opportunities during all project phases. There are currently 970+ email subscribers in the project database who will continue to receive regular updates.

Engagement Activities

An overview of Metro Vancouver’s communications and engagement activities for the second phase of engagement on the plan update are provided below. Since the project will be delivered in phases, engagement activities will be made available for each of the subsequent project phases.

Tactic	Timing
Inform audiences that draft discussion papers are published to inform the development of goals strategies and actions. Outline the purpose and options for providing comments.	Members and Indigenous Nations, May
<ul style="list-style-type: none"> • Invite members and Indigenous Nations to participate in technical workshops on each discussion paper topic 	Public, September

<ul style="list-style-type: none"> • Publish an engaging web resource to house: <ul style="list-style-type: none"> ○ Discussion papers on key topics for the plan update ○ Highlight major actions ○ Engaging introductory video on each topic ○ Options for providing comment • Correspondence to stakeholder audience to include: <ul style="list-style-type: none"> ○ Link to web resource ○ Link to introductory videos ○ Invitation to join the public comment period ○ Invitation for a meeting with staff ○ Request and options for providing feedback • Promote information to broader audience via: <ul style="list-style-type: none"> ○ Social media ○ Email updates ○ Paid advertising (radio, online community papers) 	
<p>Seek input on discussion paper topics through a technical workshop series with member jurisdiction staff, Indigenous Nations and staff technical advisory committee members</p> <ul style="list-style-type: none"> • Technical workshop 1: Wet weather management • Technical workshop 2: Holistic stormwater management • Technical workshop 3: Wastewater treatment levels and resource recovery • REAC and RAAC workshops to discuss all topic areas 	<p>Technical workshops, May – July</p> <p>REAC workshop, July</p> <p>RAAC workshop, November</p>
<p>Seek advice on plan direction, including the draft goals, strategies and actions from the Public Advisory Committee</p>	<p>Meetings scheduled in April, May, June and November</p>
<p>Seek input and clarify information</p> <ul style="list-style-type: none"> • Host a public comment period to seek input on the draft <i>goals, strategies and actions</i> <ul style="list-style-type: none"> ○ Online open house (in-person engagement opportunities will be considered based on developments regarding COVID-19) ○ Online questionnaire • Offer to meet with: <ul style="list-style-type: none"> ○ other governments, including First Nations ○ specific sectors and organizations ○ other relevant audiences • Respond to email queries to project email and moderate social media 	<p>Online public comment period, October</p> <p>Virtual meetings, schedule as requested</p> <p>Respond to queries and moderate social media, ongoing</p>
<p>Compile feedback</p> <ul style="list-style-type: none"> • Collect and review feedback 	<p>November</p>
<p>Analyze/ incorporate feedback into draft goals, strategies and actions</p>	<p>December – Early 2023</p>
<p>Seek Liquid Waste Committee and GVS&DD Board direction on path to adopt for new plan</p> <ul style="list-style-type: none"> • Include summary of engagement and input, and how feedback was considered • Public Advisory Committee recommendations presented to Liquid Waste Committee 	<p>Early 2023</p>

Communication Tools

The basic project communication tools are listed below and will be updated as the project progresses. Each phase of public engagement is supported by a comprehensive communications plan outlined in a separate document, with the objective of ensuring the general public is invited to provide input.

Type	Tactic	Date
Overall Materials	Video series	May – July
	Webpage	Updated, as required
	Project discussion papers	May – July
Outreach	Social posts	September – October
	Email updates / invitations	May – November

Regulatory Process

Liquid waste management plans are enabled under the *Environmental Management Act*. Liquid waste management plans must include comprehensive public and First Nation review and consultation for all aspects of the development, amendment, and final content of a waste management plan. The liquid waste management plan is approved by the GVS&DD Board and its member councils for submission to the Minister of Environment and Climate Change Strategy for approval. Although the existing plan was originally intended to be reviewed after eight years, Metro Vancouver requested and was granted an extension of the plan's comprehensive review cycle, subject to the completion of seven conditions by October 30, 2020. On March 26, 2021, the Ministry of Environment and Climate Change Strategy approved the engagement-focused plan review and update strategy following approval by the GVS&DD Board at its meeting of October 2, 2020. Following receipt of this approval, staff initiated the first phase of the formal engagement process.

Before approving an updated plan, the Minister must be satisfied that there has been adequate public and First Nations engagement. Following municipal and Board endorsement, Metro Vancouver will submit an engagement summary report and draft updated plan to the Minister for review.

To: Liquid Waste Committee

From: Cheryl Nelms, General Manager, Project Delivery
Roy Moulder, Director, Procurement, Procurement and Real Estate Services

Date: April 1, 2022 Meeting Date: April 13, 2022

Subject: **Award of Contract Resulting from RFP No. 21-283: Program Management Consulting Services for the Iona Island Wastewater Treatment Plant Projects**

RECOMMENDATION

That the GVS&DD Board:

- a) approve the award of contract resulting from Request for Proposal No. 21-283: Program Management Consulting Services for the Iona Island Wastewater Treatment Plant Projects to Stantec Consulting Ltd., in an amount of up to \$99,500,000 (exclusive of taxes) over five years, subject to final review by the Commissioner; and
- b) authorize the Commissioner and Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

EXECUTIVE SUMMARY

The Iona Island Wastewater Treatment Plant (IIWWTP) Program is the largest capital project ever undertaken by Metro Vancouver and will be managed by a team of consultants and Metro Vancouver staff from the Project Delivery department. Metro Vancouver will be retaining the services of a Program Management Consultant that has the experience and depth of resources to successfully deliver a program of the scale and complexity of the IIWWTP Program.

As a result of Request for Qualifications (RFQ) No. 21-282, three (3) qualified consulting firms were shortlisted and invited to respond to RFP No. 21-283 for the provision of program management consulting services over five (5) years. Stantec Consulting Ltd. (Stantec) was identified as offering the strongest technical proposal meeting the program requirements with the second lowest fee. Based on the evaluation of proposals, it is recommended to award a contract to Stantec in the amount of up to \$99,500,000 (exclusive of taxes) for the initial five years of the project. The approved 2022 Capital Budget included a total of \$1.044 Billion for the five years from 2022 to 2026, which provides sufficient funds for the forecast expenditures for this period, including the services of the Program Management Consultant.

PURPOSE

This report is to advise the GVS&DD Board of the results of the Request for Proposal (RFP) No. 21-283: Program Management Consulting services for the IIWWTP Program, and to recommend award of contract to Stantec Consulting Ltd. (Stantec) in an amount of up to \$99,500,000 (exclusive of taxes) for five years.

BACKGROUND

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014* (Bylaw) and the *Procurement and Real Property Contracting Authority Policy* (Policy), procurement contracts which exceed a value of \$5 million require the approval of the GVS&DD Board of Directors.

This report is being brought forward to the Liquid Waste Committee to consider a recommendation to the GVS&DD Board to authorize the award of a contract Program Management Consulting Services for the IIWWTP Program to Stantec Consulting Ltd.

PROJECT DESCRIPTION

The IIWWTP Upgrades is the largest capital program ever undertaken by Metro Vancouver, with a capital cost estimate of \$9.9 billion and completion currently scheduled for 2038 with secondary treatment commissioning in 2035, that will be delivered under the overall direction of the Project Delivery department. In the recognition of the scale and complexity, the Program will be managed by a dedicated Iona project team with support of the Program Management Consultant.

As the selected Program Management Consultant (PMC), Stantec will provide a team of resources with a variety of experience and expertise delivering a broad range of program management and technical services. The PMC will be integrated with Metro Vancouver staff working together to oversee the development and implementation of the Program.

Program Management Consulting (PMC) Services

The PMC will be working with Metro Vancouver in dedicated teams undertaking a variety of management and technical functions, including:

- Program mobilization and initiation
- Program leadership
- Project management
- Communications and engagement
- Permitting, approvals, and land tenure
- Technical integration and design management
- Program controls
- Commercial and contract management
- Construction administration
- Environmental management and assurance
- Commissioning and operations integration
- Resource planning and mobilization
- As requested enabling and technical support services.

The IIWWTP Program completion is estimated at 2038. However, given the scale and duration of the program, the contract for PMC services will be awarded for an initial five-year period beginning in May 2022 and ending in April 2027. Metro Vancouver may also enter into negotiations with the same team to extend these services for subsequent two-year periods as defined in RFP No. 21-283. Given the scale of the IIWWTP Program, the option to extend the Program Management Consultant services would require GVS&DD Board approval prior to proceeding with this approach.

Procurement and Evaluation Process

An extensive procurement and evaluation process was undertaken to select a PMC with the breadth and depth of experience and expertise to provide the broad range of services anticipated to support the successful achievement of the program goals. Activities undertaken as part of the procurement process included:

- The preliminary IWWTP delivery strategy recommendations prepared as part of the Project Definition Report (PDR) by Mott MacDonald and Ernst & Young in Q4 2020, which included a formal market engagement process.
- Interviews and virtual meetings with current large water and wastewater program leaders in Canada, USA, and Singapore in Q1 2021; several of whom are using the support of a PMC to assist the Owner in managing complex multi-year programs.
- A further market engagement process specifically for PMC services on Iona Island WWTP was undertaken in Q2 2021.
- A request for qualifications (RFQ) process undertaken in Q3 2021 for which 5 submissions were received. Metro Vancouver short-listed three respondents. The three short-listed respondents were:
 - AECOM Canada Ltd.
 - CH2M Hill Canada Limited
 - Stantec Consulting Ltd
- A request for proposal (RFP) process for the three short-listed firms was undertaken in Q4 2021 and Q1 2022.

To support the rigor of the process and evaluation, Metro Vancouver engaged an independent fairness monitor who was involved in the market engagement, as well as the RFQ, and RFP processes, including the evaluation of all submissions.

Proposals were evaluated based on 65% technical and 35% Financial. Considerations in the evaluation included:

- Qualifications and experience of the firm
- Qualifications and experience of the proposed team members for key roles
- Demonstrated approach to select areas of PMC services and proposed approach and work plan for mobilization/initiation
- First Nations economic opportunities
- Hourly rates and total estimated price (RFP only)

The RFP closed on January 26, 2022 and the three short-listed consulting firms submitting proposals. See table 1 for their fee summary.

Table 1: Fee Summary

Proponent	Proposed Fee (exclusive of taxes)
AECOM Canada Ltd.	\$97,517,203
CH2M Hill Canada Limited	\$112,949,170
Stantec Consulting Ltd.	\$99,507,012

The submission from Stantec was identified as the highest ranked, offering the technically strongest and second lowest fee proposal. Stantec’s proposal demonstrated a substantial amount of experience with projects of similar scale including the successful program management of the Capital Region District wastewater program. Several members of the proposed leadership team are based locally and have worked together on other large-scale wastewater treatment plant projects. Stantec demonstrated a strong understanding of the key program considerations, including the development of a thorough work plan for the program mobilization and initiation phases. 75-80% of the anticipated resources are proposed to be provided locally, with no sub-consultants proposed which will offer the project team with a single-point of accountability for all program related requirements.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) approve the award of contract resulting from Request for Proposal No. 21-283: Program Management Consulting Services for the Iona Island Wastewater Treatment Plant Projects to Stantec Consulting Ltd., in an amount of up to \$99,500,000 (exclusive of taxes) over five years, subject to final review by the Commissioner; and
 - b) authorize the Commissioner and Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.
2. That the GVS&DD Board receive for information the report dated April 1, 2022, titled “Award of Contract Resulting from RFP No. 21-283: Program Management Consulting Services for the Iona Island Wastewater Treatment Plant Program”, and direct staff to respond back to the Board with an alternate course of action.

FINANCIAL IMPLICATIONS

If the GVS&DD Board approves Alternative 1, a contract will be awarded to Stantec Consulting Ltd., in the amount of up to \$99,500,000 (exclusive of taxes).

As outlined in the March 25, 2022 report to the GVS&DD Board the total capital cost estimate for the Iona Island WWTP Program is \$9.9B, including escalation and risk reserve. The costs for Program Management Consulting services are included in this estimate as part of the *Owner’s Costs* in accordance with Metro Vancouver’s Best Practice Project Cost Estimating Framework. Table 2 below shows the forecast cash flow from the March 25, 2022 report together with the estimated expenditures for Program Management Consulting services during this period.

Table 2: Estimated Capital Cost Cash Flow Forecast (\$millions excluding financing costs)

	2022	2023	2024	2025	2026	2027	TOTAL
Total IIWWTP Forecast Capital Expenditures	29	59	125	300	296	362	\$1,171
Forecast PMC Expenditures for RFP 21-283	9.5	17.8	20.8	22.0	22.7	6.7	\$99.5
	33%	30%	17%	7%	8%	2%	8%

As indicated, the Program Management Consulting services are initially a relatively large component of the total annual expenditure during the next few years but the percentage of total costs decrease once design and construction cash flows ramp up (noting that major construction costs for the WWTP components only start in 2028).

The approved 2022 Capital Plan included a total of \$1.044 Billion for the five years from 2022 to 2026, which provides sufficient funds for the forecast expenditures for this period, including the services of the Program Management Consultant.

CONCLUSION

The IIWWTP Program will be managed by a dedicated project team that is part of the Project Delivery department. Metro Vancouver will be retaining the services of a Program Management Consultant that has the experience and depth of resources to successfully deliver a program of the scale and complexity of the IIWWTP Program.

An extensive procurement and evaluation process was undertaken to select a PMC with the breadth and depth of experience and expertise to provide the broad range of services anticipated. This process included a market sounding, followed by a request for qualifications and request for proposals all of which was overseen by an independent fairness monitor.

It is recommended that the GVS&DD Board authorize the Commissioner and Corporate Officer to award the contract resulting from RFP No. 21-283 Program Management Consulting Services for the Iona Island Wastewater Treatment Plant Projects to Stantec Consulting Ltd. in an amount of up to \$99,500,000 (exclusive of taxes).

49359044

To: Performance and Audit Committee

From: Linda Sabatini, Acting Director, Financial Operations

Date: April 7, 2022

Meeting Date: April 14, 2022

Subject: **Audited 2021 Financial Statements**

RECOMMENDATION

That the MVRD Board approve the Audited 2021 Consolidated Financial Statements for the Metro Vancouver Regional District;

That the GVS&DD Board approve the Audited 2021 Financial Statements for the Greater Vancouver Sewerage and Drainage District;

That the GVWD Board approve the Audited 2021 Financial Statements for the Greater Vancouver Water District;

That the MVHC Board approve the Audited 2021 Financial Statements for the Metro Vancouver Housing Corporation.

EXECUTIVE SUMMARY

Although we have encountered unprecedented global conditions, the 2021 Audited Financial Statements illustrate that Metro Vancouver entered this period in a strong financial position with excellent liquidity and solid reserves.

The financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards ("PSAS") and have received an unqualified audit opinion by the external auditors, BDO Canada LLP Chartered Professional Accountants. The statements presented are currently draft and will be finalized upon approval by the Board on April 29, 2022.

PURPOSE

To present, for approval, the Audited 2021 Financial Statements for the Metro Vancouver Districts and the Metro Vancouver Housing Corporation.

BACKGROUND

Legislation requires that annual Audited Financial Statements be prepared for the Metro Vancouver Districts and Metro Vancouver Housing Corporation and presented at a public meeting of the Board of Directors. The Audited Financial Statements for 2021 have been prepared by management in accordance with Canadian Public Sector Accounting Standards ("PSAS") and have received an unqualified audit opinion by the external auditors, BDO Canada LLP Chartered Professional Accountants. The statements presented are currently draft and will be finalized upon approval by the Board on April 29, 2022.

2021 FINANCIAL STATEMENT HIGHLIGHTS

Under PSAS regulations, governments are required to present four statements with explanatory notes - Statement of Financial Position (Exhibit A), Statement of Operations (Exhibit B), Statement of Net Debt (Exhibit C) and Statement of Cash Flows (Exhibit D). It is important to note that there are differences between the presentation in these financial statements and the annual Metro Vancouver budget, which is prepared to determine the annual revenue requirements to meet expenditure obligations. These differences are outlined in note 16 of the consolidated statements.

The complete set of 2021 Audited Financial Statements is attached. These are presented for the Boards' approval and include:

- Audited 2021 Consolidated Financial Statements for the Metro Vancouver Regional District
- Audited 2021 Financial Statements for the Greater Vancouver Sewerage and Drainage District
- Audited 2021 Financial Statements for the Greater Vancouver Water District
- Audited 2021 Financial Statements for the Metro Vancouver Housing Corporation

The consolidated financial statements combine the accounts of the Metro Vancouver Regional District, Greater Vancouver Sewerage and Drainage District, Greater Vancouver Water District and the Metro Vancouver Housing Corporation.

Two statements, the *Summarized Consolidated Statement of Financial Position (Appendix 1)* and the *Consolidated Statement of Operations (Appendix 2)*, similar to the Balance Sheet and Income Statement in private organizations, are the foundation of the audited statements. They contain three key indicators, the accumulated surplus, annual surplus and net debt.

The *Summarized Statement of Financial Position (Appendix 1)* contains two of the indicators, the net debt and the accumulated surplus. The net debt position represents the amount by which the Districts' liabilities exceed the financial assets. Although the amount appears as unfavourable, the vast majority of the organization's liabilities are long-term debt which is repayable over several years. The organization's financial assets are more than sufficient to offset the amount of short-term obligations. The current ratio which is current assets divided by current liabilities and is a measure of an organization's liquidity is 3.2 to 1. A ratio of 2 to 1 is considered to be a measure of favourable liquidity. The net debt position increased by \$198.0 million, while the increase in tangible capital assets was \$633.0 million. This indicates that more of the District's investment in capital infrastructure is being funded through operations and reserves than debt.

The next indicator, also presented in the *Summarized Statement of Financial Position (Appendix 1)* is the accumulated surplus. Commonly thought of as "Net Worth" in private organizations, the District's accumulated surplus is favourable at \$5.9 billion, which indicates that the organization owns (Financial and Non-Financial Assets) more than it owes (Liabilities). This reflects the member municipalities' net investment in the District's consolidated entity. It comprises reserve balances of \$394.8 million and the investment in tangible capital assets (assets less debt owing) of \$5.5 billion.

The accumulated surplus increased by \$435.1 million in 2021 which represents the annual surplus for the year, the final indicator. The annual surplus is calculated as the difference between

revenues and expenses and detailed in Consolidated Statement of Operations (Appendix 2). For PSAS purposes, annual surplus does not include contributions to and from reserves, capital contributions or principal payments on long-term debt.

Additional explanations pertaining to the *Summarized Consolidated Statement of Financial Position (Appendix 1)* and the *Consolidated Statement of Operations (Appendix 2)* are included in the *2021 Financial Statement Highlights (Appendix 3)* and in a separate report titled “5.3 2021 Financial Results Year-End”.

ALTERNATIVES

These financial statements are a statutory requirement prepared in accordance to specific accounting principles. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications relative to the approval of the Audited 2021 Financial Statements.

SUMMARY / CONCLUSION

The financial statements are part of the legislated reporting requirements for 2021 and staff recommends their approval. As noted in the Auditor’s Report, it is the Auditor’s opinion that these Financial Statements present fairly the financial position of the Metro Vancouver Districts and the Metro Vancouver Housing Corporation as of December 31, 2021, and the results of their financial activities and changes in their financial position for the year then ended in accordance with Canadian Public Sector Accounting Standards.

Attachments:

- Appendix 1 - Summarized Consolidated Statement of Financial Position
- Appendix 2 - Consolidated Statement of Operations
- Appendix 3 - Management Discussion and Analysis - 2021 Financial Statement Highlights
- Attachment 1 - Metro Vancouver Districts and Metro Vancouver Housing Corporation Financial Statements for the year ended December 31, 2021

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METRO VANCOUVER REGIONAL DISTRICT

Summarized Consolidated Statement of Financial Position

Year ended December 31, 2021

(in thousands of dollars)

	2021	2020
Financial Assets		
Cash, cash equivalents and investments	\$ 1,027,885	\$ 688,902
Accounts receivable	193,051	150,627
Debt reserve fund		
Total debt reserve fund	64,388	59,442
Less Debt reserve fund, member municipalities and Translink	(35,179)	(35,603)
Debt reserve fund, Metro Vancouver Districts	29,209	23,839
	1,250,145	863,369
Liabilities		
Accounts payable and other liabilities	384,234	294,806
Less accrued interest on debt (included in debt below)	(23,429)	(22,098)
Accounts payable and other liabilities	360,805	272,708
Deferred revenue and refundable deposits	341,016	311,451
Debt, Translink and member municipalities		
Debt, net of sinking fund	1,083,106	990,009
Accrued interest on debt	11,034	10,790
	1,094,140	1,000,799
Due from Translink and member municipalities	(1,094,140)	(1,000,799)
	-	-
Debt, Metro Vancouver		
Debt, net of sinking funds	1,851,489	1,385,445
Accrued interest on debt	12,395	11,309
	1,863,884	1,396,754
	2,565,705	1,980,912
Net Debt	(1,315,560)	(1,117,543)
Non-Financial Assets		
Tangible capital assets	7,172,479	6,539,503
Prepays and inventories	24,723	24,624
	7,197,202	6,564,127
Accumulated Surplus (Equity)	\$ 5,881,642	\$ 5,446,584
Accumulated Surplus (Equity), beginning of year	\$ 5,446,584	\$ 4,888,771
Revenue	1,080,455	1,162,441
Expenses	645,397	604,628
Annual surplus	435,058	557,813
Accumulated Surplus (Equity), end of year	\$ 5,881,642	\$ 5,446,584
Accumulated Surplus (Equity) consists of		
Reserves	\$ 394,831	\$ 325,079
Non-financial assets (net of debt and capital funds)	5,486,811	5,121,505
	\$ 5,881,642	\$ 5,446,584

METRO VANCOUVER REGIONAL DISTRICT

Consolidated Statement of Operations

Year ended December 31, 2021

(in thousands of dollars)

	2021 Budget	2021 Actual	2020 Actual
Revenue			
MVRD property tax requisitions	\$ 82,714	\$ 82,714	\$ 73,528
Metered sale of water	316,341	319,989	297,781
Sewerage and drainage levy	288,226	288,226	274,237
Tipping fees	108,517	112,610	100,880
Housing property rentals	41,303	42,416	41,607
BODTSS industrial charges	11,756	12,157	11,568
Development cost charges	88,145	42,204	81,653
Electricity sales	6,240	5,779	5,309
Grants and other contributions	263,811	76,174	184,641
User fees, recoveries and other revenue	26,619	37,124	33,425
Sinking fund and interest income	28,940	32,840	29,734
Sinking fund income, members and TransLink	28,698	28,222	28,078
	1,291,310	1,080,455	1,162,441
Expenses			
Sewer operations	229,598	199,788	191,431
Waste disposal, recycling and regulatory services	111,370	103,102	95,274
Water operations	151,627	146,841	139,227
Housing rental operations	38,890	33,682	27,211
Regional parks	36,440	33,747	29,670
General government services	5,674	5,376	5,221
Air quality	11,178	9,198	9,374
Regional employers services	2,856	2,378	2,459
911 emergency telephone system	4,543	4,452	4,364
Regional planning	3,797	2,809	3,128
Housing planning and policy	1,490	1,020	881
Invest Vancouver	1,500	1,526	206
Electoral areas	436	423	515
Regional global positioning system	304	221	204
Sasamat volunteer fire department	849	238	195
Regional emergency management	218	67	125
Corporate costs	64,440	55,343	51,473
Building operations	16,851	16,964	15,592
Sinking fund income attributed to members and TransLink	28,698	28,222	28,078
	710,759	645,397	604,628
Annual surplus	580,551	435,058	557,813
Accumulated surplus, beginning of year	5,446,584	5,446,584	4,888,771
Accumulated surplus, end of year	\$ 6,027,135	\$ 5,881,642	\$ 5,446,584

Management Discussion and Analysis – 2021 Financial Statement Highlights

Summarized Consolidated Statement of Financial Position

The purpose of the *Consolidated Statement of Financial Position (Appendix 1)* is to present the organization's assets, liabilities, net debt position and accumulated surplus or equity position. The accumulated surplus could also be interpreted as the net worth of the organization.

Relevant explanations pertaining to the Summarized Consolidated Statement of Financial Position are as follows:

Accumulated Surplus The key performance indicator on Statement of Financial Position is the Accumulated Surplus. The accumulated surplus for the District is favourable at \$5.9 billion, which indicates that the organization owns (Financial and Non-Financial Assets) more than it owes (Liabilities). This amount is often referred to in private organizations as "Net Worth", and reflects the member municipalities' net investment in the District's consolidated entity. It comprises reserve balances of \$394.8 million and the investment in tangible capital assets (assets less debt owing) of \$5.5 billion.

The accumulated surplus increased by \$435.1 million in 2021 which represents the annual surplus for the year, calculated as the difference between revenues and expenses and detailed in Appendix 2. For PSAS purposes, annual surplus does not include contributions to and from reserves, capital contributions or principal payments on long-term debt.

Financial Assets

Cash, Cash Equivalents and Investments Cash, cash equivalents and investments consist of cash and both long and short-term investments. The 2021 balance was significantly higher than 2020 as a result of lower than expected capital spending for utility infrastructure projects that are funded from grants and reserves held in cash and investments.

Accounts Receivable Accounts receivable are amounts due through the normal course of District business and are net of any allowance for doubtful accounts, which is negligible. The balance at December 31, 2021 comprises mainly of tipping fees due from commercial solid waste haulers, development cost charge (DCC) income, industrial sewer charges from commercial customers and payments due from our member municipalities for water sales. The 2021 receivable is higher than 2020 as it includes a \$38 million grant claim receivable at year end from the Province for eligible costs relating to the North Shore Waste Water Treatment Plant project.

Financial Assets (continued)

<i>Debt Reserve Fund</i>	<p>The debt reserve fund represents the amount required, under agreement with the Municipal Finance Authority (MFA), as security for debt service obligations related to MFA debentures issued to the Districts and its members. This represents 1% of the debenture issues. These amounts are refundable, with interest, upon debenture maturity. This balance fluctuates upward with new debt issues and downward as issues mature. The total debt reserve fund balance can be segregated into two components:</p> <ol style="list-style-type: none">1) Member Municipalities and Translink (\$35.2 million). This amount is related to debt service obligations for these organizations and is fully refundable to them. Therefore, it has no impact on Metro Vancouver's financial position.2) Metro Vancouver (\$29.2 million). This amount is related to debt incurred to fund infrastructure projects in GVWD and GVS&DD.
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Liabilities

<i>Accounts Payable and Other Liabilities</i>	<p>Accounts payable and other liabilities consists of amounts owing:</p> <ul style="list-style-type: none">• to suppliers for goods received and services rendered, primarily those relating to capital projects;• to employees for future benefits which represent the potential payments to employees of entitled benefits, such as banked vacation;• to MFA and mortgage providers for interest accrued on debt; and• for the District's share of landfill closure and post closure costs at the Vancouver and Cache Creek landfills.
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The increase of \$88.1 million is mainly a result of \$96.0 million more in trade payables and construction holdbacks due to timing of payments; offset by decreases payments made in 2021 for collective bargaining settlements of \$7.0 million and contaminated site remediation work of \$2.1 million paid.

<i>Deferred Revenue and Refundable Deposits</i>	<p>Deferred revenue and refundable deposits include:</p> <ul style="list-style-type: none">• \$258.6 million of restricted funds raised through the collection of development cost charges (DCCs), which will be used to fund future liquid waste growth capital projects;• \$69.7 million for the Provincial grant associated with the construction of the new North Shore Wastewater Treatment plant;• \$3.4 million of restricted funds in MVHC which will be used for the replacement of equipment and specified building components and to offset future operating deficits in specific programs;• \$6.4 million in security deposits in MVHC and Regional Parks; and• \$2.9 million from miscellaneous deferred grants and revenues in other programs.
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The increase of deferred revenue for the year of \$29.6 million is largely from the reduction DCCs and grant application funding in 2021, due to capital project delays. In 2020, \$42 million of DCCs was directly applied to project funding.

Liabilities (continued)

Debt Debt, net of sinking funds reflects the amount of long term borrowing outstanding at the end of 2021. Sinking funds consist of principal payments made over the term of the debt issue. These payments are invested which along with the interest earned will offset the debt repayment at maturity.

TransLink and Member Municipalities The debt owing to MFA for TransLink and member municipalities reflects borrowing on behalf of these entities to fund major capital projects. The amount is completely offset reflecting the fact that these entities are responsible for the debt. Therefore, the impact on Metro Vancouver's financial position is nil.

Overall debt for these entities increased by \$93.3 million. New long-term borrowing during the year was \$179.6 million relating to debt borrowed on behalf of the Surrey (\$150.6 million) and Maple Ridge (\$29 million). This increase is offset by debt and sinking fund payments of \$58.3 million and sinking fund interest earned of \$28.0 million. In addition, there was \$72.1 million in debt maturities with an equal offsetting amount of sinking fund retirements.

Metro Vancouver The debt owing on behalf of the Metro Vancouver Districts and Metro Vancouver Housing Corporation reflects borrowing to fund major infrastructure projects. The net amount owing for Metro Vancouver at the end of 2021 is \$1.9 billion. To put this in context, Metro Vancouver has tangible capital assets of \$7.2 billion and an investment in non-financial assets (assets less debt owing) of \$5.5 billion.

The debt increased by \$467.1 million. New long-term borrowing during the year was \$600.0 million (\$370.0 million for GVS&DD and \$230.0 million for GVWD). This increase is offset by debt and sinking fund payments of \$108.2 million and sinking fund interest earned of \$24.7 million. In addition, there was \$70.0 million in debt maturities with an equal offsetting amount of sinking fund retirements.

Net Debt The net debt position indicates the amount by which the organizations' liabilities exceed the financial assets. Although the amount appears as unfavourable, the vast majority of the organization's liabilities are long-term debt which is repayable over several years. The organization's financial assets are more than sufficient to offset the amount of short-term obligations. The current ratio which is current assets divided by current liabilities and is a measure of an organization's liquidity is 3.2 to 1. A ratio of 2 to 1 is considered to be a measure of favourable liquidity.

The net debt position increased by \$198.0 million, while the increase in tangible capital assets was \$633.0 million. This indicates that more of the District's investment in capital infrastructure is being funded through operations and reserves than debt.

Non-Financial Assets Non-financial assets represent the value of tangible capital assets, inventories of supplies held by the organization, the prepaid portion of land leases on housing properties, and prepaid expenses for items such as insurance.

The Tangible Capital Assets balance represents the historical cost of the asset less accumulated amortization. The increase in 2021 is the direct result of the capital expenditures made during the year, the majority of which were for water and sewer infrastructure projects.

Consolidated Statement of Operations

The *Consolidated Statement of Operations (Appendix 2)* identifies the results of the organization's financial activities for the year by presenting revenues less expenses, which is the annual surplus. This statement consolidates the revenues and expenses of the Districts and MVHC.

The annual surplus of \$435.1 million serves as the 2021 addition to the organization's overall accumulated surplus position or net worth of \$5.9 billion. The accumulated surplus in this statement is also articulated in the *Summarized Consolidated Statement of Financial Position and Equity (Appendix 1)*.

As noted above, the annual surplus as presented under PSAS is different from the annual surplus as determined in the context of the annual budget, which is \$47.2 million. The primary difference is that the PSAS framework excludes contributions to and from reserves as well as capital contributions and principal payments on long-term debt. These excluded items form a significant part of the annual approved budget. A reconciliation of the PSAS surplus to the budgeted surplus is provided in a separate report titled "5.3 2021 Financial Results Year-End".

Relevant explanations pertaining to the Consolidated Statement of Operations are as follows:

Revenue

Metered Sale of Water Metered water sales for 2021 were higher than budget and prior year due to 0.7% more consumption than anticipated.

Tipping Fees Tipping fee revenues in Solid Waste were higher than budgeted and prior year due to greater than expected waste flows during 2021.

Development Cost Charges Development cost charges (DCCs) applied against growth capital project are lower than budget due to delays in capital spending. This resulted in a reduced direct application of DCCs to project funding in 2021. In 2020, \$42 million of DCCs was directly applied to project funding.

Revenue (continued)

<i>Housing Property Rentals</i>	Property rentals in the Housing Corporation were \$1.1 million higher than budget and \$0.8 million higher prior year as rental assistance subsidies were lower than anticipated. The vacancy rate was higher than expected for 2021 as limitations due to COVID-19 resulted in slower than expected unit turnovers.
<i>BODTSS Industrial Charges</i>	BODTSS industrial charges were slightly higher than anticipated and higher than the prior year due to higher discharge than was anticipated.
<i>Electricity Sales</i>	Electricity sales related to Solid Waste Operations were slightly lower than anticipated due to lower electricity production from unplanned maintenance and downtime of the turbine.
<i>Grants and Other Contributions</i>	Grants and other contributions of \$76.2 million are from GVS&DD capital projects (\$61.0 million), Parks land contribution (\$11.0 million), the COVID-19 British Columbia Restart grant (\$1.3 million), grants-in-lieu of taxes (\$1.0 million), and MVHC's subsidies and contributions (\$1.9 million). Grants are significantly lower than budget and prior year due to less spending on the North Shore Wastewater Treatment project and therefore less grant application than anticipated. In addition, the prior year included \$6.7 million from funds received for Heather Place redevelopment project.
<i>User fees, Recoveries and Other Revenue</i>	User fees, recoveries and other revenue are amounts collected from Metro Vancouver's various functions, including property and facility rentals, parking and user fees, regulatory permits, trucked liquid waste fees, source control fees and cost sharing income. The amount is \$10.5 million higher than anticipated due to unplanned revenue from cost sharing income for capital projects in GVWD of \$8.3 million; higher parking revenue in Parks of \$.6 million and higher other revenue from property rentals and leases of \$1.6 million.
<i>Sinking fund and Interest Income</i>	Sinking fund and interest income are funds earned on Metro Vancouver's sinking funds for debt and income earned on its investment portfolio balance. The income is higher than anticipated and the prior year due to delays in capital spending resulting in a higher than expected average investment balances for the year.
<i>Sinking Fund Income, Members and TransLink</i>	Sinking fund income, members and TransLink is income earned on sinking funds for debt incurred on behalf of these organizations. This income, although recognized in the Financial Statements, is income attributed to the other organizations. There is an offsetting item under expenses, so the net impact to Metro Vancouver is nil.

Expenses

<i>Liquid Waste Services</i>	Expenses for Liquid Waste services were \$29.8 million lower than budget primarily due to deferral and cancellation of some projects in minor capital, residuals, and research and innovation, resulting in lower than anticipated in consulting and contracting expenses of \$17.9 million and other operating costs (materials, supplies, utilities and permits) of \$3.9 million. Staff vacancies, where recruitment efforts continue, attributed to \$2.0 million in lower costs. In addition, due to delays in capital spending, amortization of capital assets was \$2.7 million lower than anticipated and interest costs on debt were \$0.5 million lower budget.
<i>Solid Waste Services</i>	Expenditures in Solid Waste services were lower than budget by \$8.2 million primarily due to lower costs related to City of Vancouver facilities (\$1.7 million), lower tonnage throughput at the Waste-to-Energy Facility (\$1.4 million), new lower cost contracts for organics and disposal ban inspections (\$1.2 million), timing of the opening the new United Boulevard Recycling and Waste Centre (\$1.0 million), decreased bottom ash disposal costs due to beneficial use (\$0.8 million) and other miscellaneous operational costs of (\$2.1 million).
<i>Water Services</i>	Water services were comparable to prior year but lower than budget by \$4.8 million due to delays in Sustainability Innovation Fund (SIF) project work, equipment purchases, corrosion control implementation and easement acquisitions. Staff vacancies where recruitment efforts continue contributed to \$3.2 million in lower expenditures.
<i>Housing Rental Operations</i>	Housing expenditures were \$5.2 million lower than budget mainly due to lower than anticipated costs for utilities, permits and taxes (\$2.3 million). In addition, delays in larger building envelope projects resulted in lower than expected costs of \$2.9 million.
<i>Regional Parks</i>	Regional Parks expenses were \$2.7 million lower than budget primarily as a result of lower than anticipated consulting and contract services as a result of delays in hiring contractors and changes to project timelines. The 2021 expenditures were higher than prior year, as 2020 saw reduced program offerings, event cancellations and filming disruptions due to the COVID-19 pandemic.
<i>General Government Services</i>	General government services were \$300,000 lower as projects and initiatives were delayed due to COVID-19. The program expenditures are in line with the prior year.

Expenses (continued)

<i>Air Quality</i>	Air Quality expenditures were \$2.0 million lower than budget and \$200,000 lower than prior year primarily as a result of unspent consulting and legal fees due to delays in climate policy and extensions for regulation development.
<i>Regional Employers Services</i>	Expenditures in Regional Employers Services were \$760 thousand lower than anticipated due to staff vacancies and lower consulting costs as a result of limited activity due to COVID-19 pandemic. The expenditures are in line with 2020.
<i>911 Emergency Telephone System</i>	E911 expenditures were slightly lower than budget for the year primarily due to translation costs being lower than anticipated. The expenditures are comparable to the prior year.
<i>Regional Planning</i>	Regional Planning ended the year slightly under budget and lower than prior year primarily due to staff vacancies and lower than planned consulting expenditures due to project delays.
<i>Housing Planning and Policy</i>	Housing Planning and Policy was lower than budget mainly due to consulting projects related to SIF funding delayed. Expenditures were higher than prior year due to fewer staff vacancies in 2021 versus 2020.
<i>Invest Vancouver</i>	Invest Vancouver was slightly higher than budget due to staffing structural changes and external resource requirements. Expenditures were significantly higher than 2020 due to staff vacancies in the prior year as the function was being established.
<i>Electoral Areas</i>	Electoral Areas expenditures were slightly lower than budget due to lower consulting expenditures than anticipated. Expenditures were lower than 2020 as the prior year included higher program spending that was offset by one-time grant revenue.
<i>Regional Global Positioning System (RGPS)</i>	The RGPS program was underspend by \$80 thousand due to lower than expected equipment and consulting costs. The amount spent in 2021 was slightly higher than 2020 expenditures.
<i>Sasamat Volunteer Fire Department</i>	The Sasamat Volunteer Fire expenditures were significantly lower than budget as a result of procurement delays for a new fire truck budgeted at \$600 thousand. It is anticipated the equipment will be delivered in 2022.
<i>Regional Emergency Management</i>	Regional Emergency Management's expenditures for 2021 were significantly lower than anticipated mainly due to COVID restrictions and difficulties in hiring staff.

Expenses (continued)

<i>Corporate Program Costs</i>	Corporate Program Costs represent expenditures for centralized services such as Finance, Human Resources, External Relations, Corporate Services, Legal and Indigenous Relations. Expenditures for the programs were lower than budget mainly due to labour underspends as a result of staff vacancies and underspends on travel, training and tuition as a result of COVID-19.
<i>Building Operations</i>	Building Operations shows expenditures slightly higher than budget by \$110 thousand due to higher than anticipated repairs and maintenance, including cleaning and janitorial to address COVID-19 protocols. Although expenses are over budget, the overall program had a surplus of \$98,000 as revenues were also higher than anticipated.

**METRO VANCOUVER DISTRICTS
AND METRO VANCOUVER HOUSING CORPORATION
(OPERATING AS METRO VANCOUVER)**

Financial Statements

Year ended December 31, 2021

April 7, 2022

Financial Statements of

**GREATER VANCOUVER SEWERAGE
AND DRAINAGE DISTRICT**

Year ended December 31, 2021

April 8, 2022

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

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December 31, 2021

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Statement of Cash Flows	D
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METRO VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

MANAGEMENT REPORT

The Financial Statements contained in this report have been prepared by management in accordance with Canadian public sector accounting standards. The integrity and objectivity of these statements are management's responsibility. Management is responsible for all the statements and schedules, and for ensuring that this information is consistent, where appropriate, with the information contained in the financial statements.

Management is also responsible for implementing and maintaining a system of internal controls to provide reasonable assurance that reliable financial information is produced.

The Greater Vancouver Sewerage and Drainage District's Board of Directors is responsible for approving the financial statements and for ensuring that management fulfills its responsibilities for financial reporting and internal control and exercises this responsibility through the Performance and Audit Committee of the Board.

The external auditors, BDO Canada LLP, conduct an independent examination, in accordance with Canadian Auditing Standards, and express their opinion on the financial statements. Their examination does not relate to the other schedules and statements required by the *Financial Information Act*. The Independent Auditor's Report outlines the scope of the audit for the year ended December 31, 2021.

On behalf of Greater Vancouver Sewerage and Drainage District.

Dean Rear, Chief Financial Officer

Date: April 29, 2022

Independent Auditor's Report

To the Members of the Board of Directors of the Greater Vancouver Sewerage and Drainage District

Opinion

We have audited the financial statements of the Greater Vancouver Sewerage and Drainage District (the "District"), which comprise the Statement of Financial Position as at December 31, 2021, and the Statements of Operations, Change in Net Debt and Cash Flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the District as at December 31, 2021, and the results of its operations, change in net debt and cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the District in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the District's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the District or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the District's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the District's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the District to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Vancouver, British Columbia

DATE

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit A

Statement of Financial Position

Year ended December 31, 2021

	2021	2020
Financial Assets		
Accounts receivable	\$ 139,016,130	\$ 85,458,193
Due from Metro Vancouver Regional District	630,865,561	509,626,566
Debt reserve fund (note 2)	13,562,273	9,811,757
	783,443,964	604,896,516
Liabilities		
Accounts payable and accrued liabilities (note 3)	228,313,571	155,777,532
Landfill closure and post-closure liability (note 4)	32,906,686	32,163,774
Deferred revenue and refundable deposits (note 5)	329,169,804	302,785,287
Debt (net of sinking funds) (note 6)	1,094,984,832	779,446,548
	1,685,374,893	1,270,173,141
Net Debt	(901,930,929)	(665,276,625)
Non-Financial Assets		
Tangible capital assets (note 7)	3,204,067,696	2,769,560,076
Inventories of supplies	6,582,165	5,704,961
Prepaid expenses	2,428,408	3,069,828
	3,213,078,269	2,778,334,865
Accumulated surplus (note 8)	\$ 2,311,147,340	\$ 2,113,058,240

Contractual obligations and rights (note 9)

Contingencies (note 10)

COVID-19 (note 13)

Subsequent Event (note 14)

The accompanying notes are an integral part of these financial statements.

Chief Financial Officer

Board Chair

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit B

Statement of Operations

Year ended December 31, 2021

	2021 Budget (note 11)	2021 Actual	2020 Actual
Revenue (note 12)			
Sewerage and drainage levy	\$ 288,225,540	\$ 288,225,540	\$ 274,237,112
Tipping fees	108,516,645	112,609,847	100,880,183
BODTSS Industrial Charges	11,756,424	12,157,191	11,567,862
Development cost charges (note 5)	88,145,119	42,204,285	81,652,979
Electricity sales	6,239,530	5,778,816	5,308,843
User fees, recoveries and other	7,718,634	9,467,977	9,022,842
Sinking fund, debt retirement and interest income	7,490,471	6,579,921	5,775,306
Grants and other contributions (note 5)	251,931,864	61,062,379	173,535,810
	770,024,227	538,085,956	661,980,937
Expenses (note 12)			
Liquid waste services	256,642,850	232,019,605	219,696,797
Solid waste services	116,109,558	107,977,251	99,964,857
	372,752,408	339,996,856	319,661,654
Annual surplus	397,271,819	198,089,100	342,319,283
Accumulated surplus, beginning of year	2,113,058,240	2,113,058,240	1,770,738,957
Accumulated surplus, end of year	\$ 2,510,330,059	\$ 2,311,147,340	\$ 2,113,058,240

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit C

Statement of Change in Net Debt

Year ended December 31, 2021

	2021 Budget (note 11)	2021 Actual	2020 Actual
Annual surplus	\$ 397,271,819	\$ 198,089,100	\$ 342,319,283
Change in tangible capital assets:			
Acquisition of tangible capital assets	(1,030,778,000)	(466,984,864)	(617,326,606)
Amortization of tangible capital assets	35,014,719	32,477,244	30,005,732
	(995,763,281)	(434,507,620)	(587,320,874)
Change in other non-financial assets:			
Acquisition of prepaid expenses	-	(2,428,408)	(3,069,828)
Use of prepaid expenses	-	3,069,828	3,114,824
Acquisition of inventories of supplies	-	(6,582,165)	(5,704,961)
Consumption of inventories of supplies	-	5,704,961	4,637,990
	-	(235,784)	(1,021,975)
Changes in net debt	(598,491,462)	(236,654,304)	(246,023,566)
Net debt, beginning of year	(665,276,625)	(665,276,625)	(419,253,059)
Net debt, end of year	\$ (1,263,768,087)	\$ (901,930,929)	\$ (665,276,625)

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Exhibit D

Statement of Cash Flows

Year ended December 31, 2021

	2021	2020
Cash provided by (used in):		
Operating transactions:		
Annual surplus	\$ 198,089,100	\$ 342,319,283
Items not involving cash:		
Amortization	32,477,244	30,005,732
Sinking fund income	(5,014,043)	(3,671,561)
Debt reserve fund income	(206,272)	(183,941)
Change in landfill closure and post-closure liability	742,912	(874,232)
Change in non-cash assets and liabilities:		
Accounts receivable	(53,557,937)	(4,448,307)
Prepaid expenses	641,420	44,996
Accounts payable and accrued liabilities	72,536,039	(6,722,326)
Deferred revenue	26,384,517	(79,618,522)
Inventories of supplies	(877,204)	(1,066,971)
Net change in cash from operating transactions	271,215,776	275,784,151
Capital transactions:		
Acquisition of tangible capital assets	(466,984,864)	(617,326,606)
Net change in cash from capital transactions	(466,984,864)	(617,326,606)
Financing transactions:		
Due from Metro Vancouver Regional District	(121,238,995)	186,586,507
Debenture debt issued	370,000,000	195,000,000
Debt reserve fund issuance	(3,700,001)	(1,950,000)
Debt reserve fund maturity	155,757	-
Sinking fund payments	(49,447,673)	(38,171,706)
Debenture debt maturity	(10,000,000)	-
Sinking fund retirement	10,000,000	-
Net change in cash from financing transactions	195,769,088	341,464,801
Net change in cash and cash equivalents	-	(77,654)
Cash and cash equivalents, beginning of year	-	77,654
Cash and cash equivalents, end of year	\$ -	\$ -

The accompanying notes are an integral part of these financial statements.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 1
Year ended December 31, 2021

1. Significant Accounting Policies

The Greater Vancouver Sewerage and Drainage District (the “District”) was established by an Act of the same name in 1956. Its two primary responsibilities are the collection, treatment and discharge of liquid waste for the municipalities of the Metro Vancouver Regional District (“MVRD”), and the disposal of solid waste both for the municipalities of the MVRD and the public.

The District owns and operates a number of wastewater treatment plants and a related collection network connected to the municipal collection systems, and several solid waste facilities including a waste to energy facility. Its Board of Directors comprises the same councilors and mayors as appointed to the MVRD Board by the participating municipalities. The member municipalities under the Act are jointly and severally liable for its debts.

The District’s financial statements are prepared by management in accordance with Canadian public sector accounting standards. Significant accounting policies adopted by the District are as follows:

Basis of Accounting The District follows the accrual method of accounting for revenues and expenses. Revenues are recognized in the year in which they are earned and measurable. Expenses are recognized as they are incurred and measurable as a result of receipt of goods or services and/or the legal obligation to pay.

Government Transfers Government transfers are recognized as revenue in the financial statements when the transfer is authorized and any eligibility criteria are met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability. The transfer of revenue is initially deferred and then recognized in the statement of operations as the stipulation liabilities are settled.

When the District is deemed the transferor, the transfer expense is recognized when the recipient is authorized and has met the eligibility criteria.

Deferred Revenue Deferred revenue represents development cost charges and a Provincial grant which have been collected, but for which the related services or obligations have yet to be performed. These amounts will be recognized as revenue in the fiscal year the services are performed or obligations and stipulations have been met.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 2
Year ended December 31, 2021

1. Significant Accounting Policies (continued)

Sinking Fund, Debt Retirement and Interest Income

Interest income is reported as revenue in the period earned. When required, based on external restrictions, interest income earned on deferred revenue is added to and forms part of the deferred revenue balance and is recognized into income when related stipulations are met. Any surpluses received from upon debt retirement are recorded in the year received.

Cash and Investments

In order to improve cash management, Metro Vancouver Districts accumulate cash and investment transactions in pooled accounts held by the MVRD. GVS&DD's cash is therefore presented as due from Metro Vancouver Regional District. Investments held by the MVRD consist of bonds issued by governments and Canadian chartered banks, money market instruments and term deposits. Interest earned on GVS&DD's fund balances is included in the amount owing from MVRD and is recorded as interest income in the Statement of Operations.

Employee Future Benefits

Employees who provide services for the District are employees of the MVRD. Employee related costs are allocated by the MVRD to the District based on services rendered. These costs are shown as expenses in the financial statements and are included in amounts owing from MVRD.

Post-employment benefits of the MVRD, including accumulated banked sick and vacation pay, retirement severance and Worker's Compensation top-up benefits for employees pursuant to certain policies and union agreements, are actuarially determined based on service and best estimates of retirement ages and expected future salary and wage increases. The obligation under these benefit plans is allocated to the District based on projected benefits as the employees render services necessary to earn the future benefits and included in amounts owing to MVRD.

Landfill Closure and Post-Closure Liability

The estimated present value of landfill closure and post-closure costs is recognized as a liability. This liability is recognized based on estimated future expenses, including estimated inflation discounted to the current date and accrued based on the proportion of the total capacity of the landfill used as of the date of the statement of financial position. The change in this estimated liability during the year is recorded as an expense in operations. These estimates are reviewed and adjusted annually and any changes are recorded on a prospective basis.

Non-Financial Assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They generally have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 3
Year ended December 31, 2021

1. Significant Accounting Policies (continued)

Non-Financial Assets (continued)

Tangible Capital Assets

Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development or betterment of the asset. The cost, less residual value, of the tangible capital assets, except land, is amortized over their estimated useful lives. All assets are amortized on a straight line basis as follows:

Asset	Useful Life – Years
Infrastructure	
Interceptors and trunk sewers, drainage	100
Wastewater treatment, pumping stations	50
Solid Waste – incinerators, transfer stations	30
Solid Waste – landfills	25 - 30
Information technology systems and networks	5
Machinery, Equipment, Furniture and Fixtures	5 - 20

a. Annual amortization:

Annual amortization begins when the asset is put into service and is expensed over its useful life. Assets under construction are transferred to the appropriate asset class and are amortized from the date the asset is put into productive use.

b. Contributions of tangible capital assets:

Contributions of tangible capital assets are recorded at their fair value at the date of receipt and as contribution revenue.

c. Interest capitalization:

The District does not capitalize interest costs associated with the acquisition or construction of a tangible capital asset.

Inventories of Supplies

Inventories of supplies held for consumption are recorded on a first-in-first-out basis.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 4
Year ended December 31, 2021

1. Significant Accounting Policies (continued)

Revenue Recognition

Tipping fees, levies, electricity sales, permits, user fees and other revenue are recognized as revenue on an accrual basis according to the usage and rates approved and set by the Board in various fees and charges bylaws.

Segmented Information

A segment is defined as a distinguishable activity or group of activities of a government for which it is appropriate to separately report financial information to achieve the objectives of the standard. Definitions of the District's segments and their related financial information are presented in note 12.

Liability for Contaminated Sites

A liability for remediation of a contaminated site is recognized when the site is no longer in productive use and the following criteria are satisfied: an environmental standard exists; contamination exceeds the standard; the District is either directly responsible or has accepted responsibility for remediation; it is expected that future economic benefits will be given up and a reasonable estimate of the liability can be made. Liabilities for contaminated sites are reported in accounts payable and accrued liabilities (note 3).

Use of Estimates

The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts in the financial statements and the disclosure of contingent liabilities. These estimates and assumptions are based on management's best information and judgment and may differ from actual results. Adjustments, if any, will be reflected in the financial statements in the period that the change in estimate is made, as well as in the period of settlement if the amount is different.

Significant areas requiring the use of management's judgment relate to the determination of landfill closure and post closure liability, contaminated sites liabilities, the estimate of accruals for projects in progress, amortization rates and useful lives of tangible capital assets, the assessment of the impairment of tangible capital assets and work in progress, and the assessment of the outcome of contingent liabilities.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 5
Year ended December 31, 2021

2. Debt Reserve Fund

The Municipal Finance Authority of British Columbia ("MFA") provides financing for regional districts and member municipalities. The MFA is required to establish a Debt Reserve Fund for each debenture issue equal to one-half the average annual installment of principal and interest. The debt reserve fund is comprised of cash deposits equal to 1% of the principal amount borrowed and a non-interest bearing demand note for the remaining requirement. Cash deposits held by the MFA are payable with interest to the ultimate borrower when the final obligations under the respective loan agreements have been made.

If, at any time, the District has insufficient funds to meet payments due on its obligations to the MFA, the payments will be made from the debt reserve fund. The demand notes are callable only if there are additional requirements to be met to maintain the level of the debt reserve fund. At December 31, 2021, \$39,493,543 (2020 - \$28,407,748) in callable demand notes were outstanding and have not been recorded in the statement of financial position.

3. Accounts Payable and Accrued Liabilities

	2021	2020
Trade accounts	\$ 182,682,467	\$ 91,353,577
Construction holdbacks	38,907,540	55,960,742
Accrued interest on debt	6,423,564	5,784,008
Contaminated Sites (a)	300,000	2,679,205
	\$ 228,313,571	\$ 155,777,532

(a) The District accrued \$2,679,205 in 2020 for work to be undertaken to remediate contaminated soils for two of its properties. As at December 31 2021, \$300,000 of the work remains to be completed in 2022.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 6
Year ended December 31, 2021

4. Landfill Closure and Post-Closure Liability

The District is responsible for its share of closure and post-closure costs at landfill sites as detailed below.

- a) The Vancouver landfill is located in Delta, BC. In accordance with an agreement with the City of Vancouver, the District is responsible for its proportionate share of the closure and post-closure liability based on usage. The present value of the District's estimated future liability for these expenses is recognized as the landfill site's capacity is used and is as follows:

	2021	2020
Landfill closure and post closure liability	\$ 32,906,686	\$ 32,163,774

The closure and post-closure liability and annual expense is calculated based on the ratio of actual utilization to total expected utilization of the site's capacity at the date of closure. It is based on estimates and assumptions with respect to events extending over the remaining life of the Vancouver landfill, including provisions contained in Metro Vancouver's Integrated Solid Waste and Resource Management Plan. The significant estimates and assumptions adopted in measuring the District's share of the closure and post-closure liability are as follows:

	2021	2020
Current actual utilization (in tonnes)	22,521,439	21,795,042
Expected utilization at closure (in tonnes)	28,219,409	27,987,102
Expected remaining capacity (in tonnes)	5,697,970	6,192,060
Permitted capacity (in tonnes)	33,039,183	33,039,183
Future costs	\$ 197,188,990	\$ 203,768,190
Present value of future costs	\$ 115,933,724	\$ 120,497,328
Proportionate share of liability	35.57%	34.28%
Utilization of total capacity, end of year	79.81%	77.88%
Discount rate	2.73%	2.68%
Expected post-closure period	30 years	30 years
Expected closure date	December 31, 2037	December 31, 2037

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 7
Year ended December 31, 2021

4. Landfill Closure and Post-Closure Liability (continued)

- b) The Cache Creek landfill is located in the Village of Cache Creek, BC. The landfill permit obligates the Village of Cache Creek and a third party service provider to undertake closure and post-closure activities. The District, in accordance with an agreement with the Village, was required to contribute quarterly to a trust fund, held with the Province of British Columbia, to a Post Closure Maintenance and Repair Fund at rates consistent with the operational certificate for the landfill. The agreement indemnifies the Village for any post closure liabilities not covered by this fund. At December 31, 2021, the amortized book value of the trust was \$16,261,510 (2020 - \$15,519,407), which approximates the post-closure liability.

The Cache Creek landfill was closed December 2016. The actual utilization at closure was 10,318,780 tonnes and the permitted capacity was 10,371,594 tonnes. The post-closure period is expected to be 30 years. The present value of District's estimated future post-closure liability is sufficiently funded by the trust.

5. Deferred Revenue and Refundable Deposits

Deferred revenue consists of the following:

	2021	2020
Development cost charges (a)	\$ 258,633,515	\$ 213,143,056
Provincial grant to fund capital expenditures (b)	69,074,393	88,525,295
Refundable deposits	1,461,896	1,116,936
Total	\$ 329,169,804	\$ 302,785,287

- a) The GVS&DD Act restricts the District to applying money raised from development cost charges to funding sewer capital projects, including the repayment of debt raised to fund such projects. The balance of these amounts is included in deferred revenue until spent on approved purposes.
- b) In 2017, the District received a grant from the Province of British Columbia in the amount of \$193,000,000 for future costs associated with the construction of the new North Shore Wastewater Treatment Plant Facility. During 2021, \$20,488,722 (2020 – \$67,970,020) was applied against the project and recognized as revenue. Interest earned on unspent funds in the amount of \$1,037,820 (2020 - \$2,861,912) has been recognized as grant revenue in the year.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 8
Year ended December 31, 2021

5. Deferred Revenue and Refundable Deposits (continued)

Continuity of deferred revenue is as follows:

	2021	2020
Balance, beginning of year	\$ 302,785,287	\$ 382,403,809
Development cost charges received	85,104,514	62,871,244
Interest earned	3,628,051	7,193,822
Change in refundable deposits	344,959	(60,589)
Amounts spent and recognized as revenue	(62,693,007)	(149,622,999)
Change in deferred revenue	41,804,896	(79,618,522)
Balance, end of year	\$ 329,169,804	\$ 302,785,287

6. Debt

- a) All borrowings for the District are obtained from MFA by the MVRD on the District's behalf, although the District maintains the right to finance debt without MFA involvement.

Debt, debentures or other security issued by the District is a direct, joint and several obligation and liability of the District and each and every member municipality.

Debt servicing requirements comprising sinking fund contributions, serial repayments and interest are funded as incurred by revenue earned during the year.

- b) Debt (net of sinking funds) reported on the statement of financial position comprises the following and includes varying maturities up to 2036 with interest rates ranging from 1.28% to 4.20%.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 9
Year ended December 31, 2021

6. Debt (continued)

Issue number	Interest rate - %	Maturity Date	Debentures authorized to be issued	Debenture debt outstanding	
				2021	2020
99	1.75	October 19, 2021	\$ 10,000,000	\$ -	\$ 10,000,000
104	2.90	November 20, 2023	15,000,000	15,000,000	15,000,000
106	2.25	October 13, 2024	20,000,000	20,000,000	20,000,000
116	1.47-4.2	April 4, 2026	20,000,000	20,000,000	20,000,000
118	3.40	April 11, 2027	20,000,000	20,000,000	20,000,000
139	2.10	October 5, 2031	55,000,000	55,000,000	55,000,000
141	2.80	April 7, 2032	50,000,000	50,000,000	50,000,000
142	3.15	October 4, 2032	50,000,000	50,000,000	50,000,000
145	3.15	April 23, 2033	120,000,000	120,000,000	120,000,000
146	3.20	September 19, 2033	270,000,000	270,000,000	270,000,000
147	2.66	April 9, 2034	40,000,000	40,000,000	40,000,000
149	2.24	October 9, 2034	46,000,000	46,000,000	46,000,000
150	1.99	April 9, 2035	125,000,000	125,000,000	125,000,000
151	1.28	June 1, 2035	70,000,000	70,000,000	70,000,000
154	2.41	May 28, 2036	370,000,000	370,000,000	-
Total debt			\$ 1,281,000,000	\$ 1,271,000,000	\$ 911,000,000
Less sinking funds				(176,015,168)	(131,553,452)
Total net debt				\$ 1,094,984,832	\$ 779,446,548

c) Sinking fund installments due within the next five years and thereafter are as follows:

2022	\$ 70,418,495
2023	70,418,495
2024	69,669,379
2025	68,670,558
2026	68,670,558
Thereafter	547,256,704
Total payments	895,104,189
Estimated sinking fund income	199,880,643
Total net debt	\$ 1,094,984,832

e) Sinking fund installments are invested by the MFA and earn income that, together with principal payments, are expected to be sufficient to retire the sinking fund debt at maturity. For sinking fund agreements, the MFA has established either a normal sinking fund or a capital repayment equalization fund.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 10
Year ended December 31, 2021

7. Tangible Capital Assets

Year ended December 31, 2021

	Cost		Balance at December 31, 2021	Accumulated Amortization		Balance at December 31, 2021	Net book value December 31, 2021
	Balance at December 31, 2020	Additions (Net of Transfers)		Balance at December 31, 2020	Amortization Expense		
Land	\$ 116,049,774	\$ 46,822,000	\$ 162,871,774	\$ -	\$ -	\$ -	\$ 162,871,774
Infrastructure							
Utilities	1,614,856,918	547,539,049	2,162,395,967	670,090,806	31,992,381	702,083,187	1,460,312,780
Information technology	6,256,159	-	6,256,159	6,256,159	-	6,256,159	-
Machinery, equipment, furniture & fixtures	8,798,644	19,051	8,817,695	7,389,879	484,863	7,874,742	942,953
Construction in progress	1,707,335,425	(127,395,236)	1,579,940,189	-	-	-	1,579,940,189
	\$ 3,453,296,920	\$ 466,984,864	\$ 3,920,281,784	\$ 683,736,844	\$ 32,477,244	\$ 716,214,088	\$ 3,204,067,696

Write-offs and disposals in 2021 were \$nil (2020 - \$nil).

Construction in progress includes \$495.7 million (2020 - \$363.9 million) related to the North Shore Wastewater Treatment Plant (note 10).

Year ended December 31, 2020

	Balance at December 31, 2019	Additions	Balance at December 31, 2020	Balance at December 31, 2019	Amortization Expense	Balance at December 31, 2020	Net book value December 31, 2020
Land	\$ 89,789,774	\$ 26,260,000	\$ 116,049,774	\$ -	\$ -	\$ -	\$ 116,049,774
Infrastructure							
Utilities	1,534,830,034	80,026,884	1,614,856,918	640,547,423	29,543,383	670,090,806	944,766,112
Information technology	6,256,159	-	6,256,159	6,256,159	-	6,256,159	-
Machinery, equipment, furniture & fixtures	8,310,141	488,503	8,798,644	6,927,530	462,349	7,389,879	1,408,765
Construction in progress	1,196,784,206	510,551,219	1,707,335,425	-	-	-	1,707,335,425
	\$ 2,835,970,314	\$ 617,326,606	\$ 3,453,296,920	\$ 653,731,112	\$ 30,005,732	\$ 683,736,844	\$ 2,769,560,076

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 11
Year ended December 31, 2021

8. Accumulated Surplus

Accumulated surplus consists of individual fund surplus and reserves as follows:

	2021	2020
Reserves	\$ 158,922,150	\$ 123,885,687
Capital fund balance	43,142,326	(940,975)
Investment in tangible capital assets	2,109,082,864	1,990,113,528
Total	\$ 2,311,147,340	\$ 2,113,058,240

Capital fund balance represents the future expected level of funding required or accumulated.

Continuity of reserves is as follows:

	December 31, 2020	Interest	Annual Operating Surplus	Transfers (to)/from Reserves	Contributions from/ (to) operations	December 31, 2021
Operating Reserves						
Liquid Waste Services	\$ 22,019,279	\$ 258,636	\$ 10,677,197	\$ -	\$ -	\$ 32,955,112
Solid Waste Services	21,599,526	253,705	17,360,239	-	-	39,213,470
	\$ 43,618,805	\$ 512,341	\$ 28,037,436	\$ -	\$ -	\$ 72,168,582
Discretionary Reserves						
Biosolids Inventory	14,907,329	175,100	-	4,946,933	-	20,029,362
Liquid Waste General Debt Reserve Fund	2,098,699	24,651	-	-	-	2,123,350
Lions Gate Contingency	1,472,871	17,300	-	-	-	1,490,171
Drainage General	5,230,475	61,436	-	-	-	5,291,911
Solid Waste General	26,352,855	209,521	-	-	-	26,562,376
Landfill Post-Closure	11,176,002	131,272	-	-	-	11,307,274
	\$ 61,238,231	\$ 619,280	\$ -	\$ 4,946,933	\$ -	\$ 66,804,444
Statutory Reserves						
Liquid Waste Laboratory Equipment	500,262	6,399	-	101,285	-	607,946
Liquid Waste Services Sustainability Innovation Fund	18,528,389	221,586	-	1,127,000	(535,797)	19,341,178
	\$ 19,028,651	\$ 227,985	\$ -	\$ 1,228,285	\$ (535,797)	\$ 19,949,124
Total Reserves	\$ 123,885,687	\$ 1,359,606	\$ 28,037,436	\$ 6,175,218	\$ (535,797)	\$ 158,922,150

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 12
Year ended December 31, 2021

8. Accumulated Surplus (continued)

Investment in tangible capital assets is calculated as follows:

	2021	2020
Tangible capital assets	\$ 3,204,067,696	\$ 2,769,560,076
Amounts financed by:		
Long-term debt	(1,094,984,832)	(779,446,548)
	2,109,082,864	1,990,113,528
Change in the investment in tangible capital assets		
Acquisition of tangible capital assets	466,984,864	617,326,606
Amortization of tangible capital assets	(32,477,244)	(30,005,732)
	434,507,620	587,320,874
Less funding of tangible capital assets through debt		
Sinking fund debt maturity	10,000,000	-
Sinking fund and debt retirement	(49,447,673)	(38,171,706)
Sinking fund and debt retirement income	(5,014,043)	(3,671,561)
Debenture debt issued	370,000,000	195,000,000
Debenture debt maturity	(10,000,000)	-
	315,538,284	153,156,733
Change in investment in tangible capital assets	118,969,336	434,164,141
Investment in tangible capital assets, beginning of year	1,990,113,528	1,555,949,387
Investment in tangible capital assets, end of year	\$ 2,109,082,864	\$ 1,990,113,528

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 13
Year ended December 31, 2021

9. Contractual Obligations and Rights

a) Contractual Obligations

- i) As of December 31, 2021 the District had the following commitments outstanding related to capital projects in progress:

	2021	2020
Authorized for outstanding projects	\$ 4,040,767,000	\$ 3,534,847,000
Expended at December 31	(2,283,628,886)	(1,828,131,080)
Commitment remaining	\$ 1,757,138,115	\$ 1,706,715,920

- ii) The District is committed under lease and rights-of-way agreements to make minimum annual payments. These agreements have varying terms, including two agreements, with annual payments of \$451,000 to perpetuity, with adjustments annually for CPI.

	Amount
2022	\$ 1,880,621
2023	1,911,752
2024	1,943,505
2025	1,975,894
2026	2,008,930
2027 - 2031	10,563,786
Total	\$ 20,284,488

b) Contractual Rights

The District is party to lease agreements that are anticipated to provide it with future revenues. These agreements are with third parties with varying terms to 2026. Amounts anticipated to be received over the future years are as follows:

	Amount
2022	\$ 1,382,042
2023	1,312,287
2024	1,114,883
2025	710,899
2026	651,657
Total	\$ 5,171,768

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 14
Year ended December 31, 2021

10. Contingencies

Lawsuits

As at December 31, 2021, there were various lawsuits pending against the District arising in the ordinary course of business. The District has retained legal counsel to defend against these lawsuits. Where the outcomes or amounts cannot be reasonably determined, no liability has been recorded. None of these lawsuits are anticipated to result in a material loss to the District. Management is of the opinion that losses, if any, in connection with these lawsuits can be sufficiently funded by reserve funds or covered by insurance. Any expected losses will be accrued and recorded as expenses at the time they are considered likely and amounts are reasonably determinable.

Self Insurance Reserve

A self insurance reserve has been established within the MVRD to cover losses resulting from uninsured liability exposures of the District, other Metro Vancouver Districts and the MVHC.

Each year a review is undertaken to determine if it would be beneficial to purchase additional liability insurance. The District, other Metro Vancouver Districts and the MVHC transfer amounts to the reserve depending on the reserve's adequacy to cover retained liability risk.

An estimate is made for all costs of investigating and settlement of claims annually and an adjustment is made to the fund to maintain an adequate balance to cover potential losses in excess of recorded liabilities. These estimates are changed as additional information becomes known during the course of claims settlement. Any likely losses would be expensed at the time the losses are known and the amounts are reasonably determinable.

Debt Reserve Fund

The MFA is required to establish a Debt Reserve Fund for each debenture which is comprised of cash deposits and a non-interest bearing demand note (refer to note 2).

First Nations Negotiations

The District is currently involved in negotiations with First Nations regarding compensation for the use of their land on which the District's assets reside. The compensation associated with these negotiations cannot be reasonably determined at this times and therefore no liabilities have been recorded at December 31, 2021.

Letters of Credit

At December 31, 2021, the District is the named beneficiary of \$60.37 million (\$76.78 million – 2020) of irrevocable letters of credits from financial institutions related to construction projects and Solid Waste operations. These letters of credit are available under circumstances in which the service provider does not fulfil its obligation to the District and therefore the amount is not recorded as assets.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 15
Year ended December 31, 2021

10. Contingencies (continued)

North Shore Wastewater Treatment Plant

The District is building a new tertiary wastewater treatment plant on a former industrial site in North Vancouver, to replace the primary-only Lions Gate Wastewater Treatment Plant. The deadline for completion of the project under federal regulation was December 31, 2020. On October 15, 2021, the District served notice to terminate its contract with the vendor hired to design, build and commission the future North Shore Wastewater Treatment Plant, having determined that the vendor was in breach of contract. As of December 31, 2021, the District has paid \$309.5 million, net of GST rebates, to the vendor for work completed, which has been recorded as construction in progress (note 7). Subsequent to year-end, the District drew on an irrevocable letter of credit posted by the vendor. Also subsequent to year-end, the vendor commenced legal action by filing a claim against the District in excess of \$250 million. The District intends to file a defence to the action together with a counter-claim against the vendor. The District is proceeding with the selection of a new contractor and designer to deliver the project. At December 31, 2021, the outcome of any legal proceedings related to the terminated contract and the potential consequences of not meeting the current deadline under the federal regulation is undeterminable.

Due to the nature of the contractual payments made to date under the terminated contract, the outstanding litigation and uncertainty surrounding the value of the new contract for completion of the project, the amount recorded as work in progress on the project represents management's best estimate. This amount may be subject to material change as new information becomes available.

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 16
Year ended December 31, 2021

11. Budget Information

The annual budget presented in these financial statements is based upon the 2021 operating and capital budgets approved by the District's Board in October 2020, with additional approval in November 2021 for adjustments to the budget as a result of the 2020 fiscal year end results. The budget is based on operational and capital expenditure requirements and their associated funding. Amortization is a non-cash item that is not funded for budget purposes. Also, contributions to or from reserves and debt principal repayments are removed from the approved budget for financial statement presentation. The schedule below reconciles the approved budget to the budget figures reported in these financial statements. Capital expenditures of \$1,030,778,000 were included in the capital budget approved by the Board.

	2021 Budget
Budgeted annual surplus per Exhibit B - Statement of Operations	\$ 397,271,819
Additional transfers from reserves, approved by Board	1,049,675
Adjusted annual surplus, based on October approved budget	398,321,494
Items not included in the approved operating budget	
Capital development cost charge revenue	(45,000,000)
Capital grants and contributions	(251,931,864)
Amortization of tangible capital assets	35,014,719
Sinking and debt retirement fund income	(5,450,233)
Reserve interest	(2,040,238)
Items included in the budget but not in financial statements	
Debt principal payments	(49,447,674)
Transfers to capital	(80,068,136)
Transfers from reserves	601,932
Annual surplus per approved budget	\$ -

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 17
Year ended December 31, 2021

12. Segmented Information and Expenses by Object

The District's primary responsibilities are the collection, treatment and discharge of liquid waste for the municipalities of the MVRD and the disposal of solid waste both for the municipalities of the MVRD and the public. For management reporting purposes, the District's operations and activities are organized and reported by these two primary areas of service.

The information reported in the segmented information does not include \$9,052,489 (2020 - \$8,696,015) of salaries and benefits directly attributable to the construction of tangible capital assets which have been included in the cost of tangible capital assets in the Statement of Financial Position.

The services disclosed in the Segmented Information are as follows:

Liquid Waste Services

The Liquid Waste Services is responsible for the collection, treatment and discharge of liquid waste for member municipalities. It operates a number of wastewater treatment plants and a related collection network connected to the member municipalities' systems.

Solid Waste Services

The Solid Waste Services is responsible for the disposal of solid waste both for the member municipalities and the public. It owns and operates several solid waste facilities including a waste to energy facility.

	2021 Total Budget	Liquid Waste Services	Solid Waste Services	2021 Total Actual	2020 Total Actual
Revenue					
Sewerage and drainage levy	\$ 288,225,540	\$ 288,225,540	\$ -	\$ 288,225,540	\$ 274,237,112
Tipping fees	108,516,645	-	112,609,847	112,609,847	100,880,183
BODTSS Industrial Charges	11,756,424	12,157,191	-	12,157,191	11,567,862
Development cost charges	88,145,119	42,204,285	-	42,204,285	81,652,979
Electricity sales	6,239,530	-	5,778,816	5,778,816	5,308,843
User fees, recoveries and other	7,718,634	4,755,037	4,712,940	9,467,977	9,022,842
Sinking fund, debt retirement and interest income	7,490,471	5,821,143	758,778	6,579,921	5,775,306
Grants and contributions	251,931,864	61,062,379	-	61,062,379	173,535,810
	770,024,227	414,225,575	123,860,381	538,085,956	661,980,937
Expenses					
Salaries and benefits	69,974,171	61,566,341	6,087,815	67,654,156	67,315,251
Consulting, contracted and professional services	135,473,864	32,482,076	78,139,266	110,621,342	107,034,380
Asset repairs and maintenance	12,584,523	11,988,365	645,658	12,634,023	12,774,295
Materials and supplies	17,002,733	16,123,425	63,668	16,187,093	16,842,584
Utilities, permits and taxes	16,860,760	15,461,979	421,160	15,883,139	17,522,824
Corporate costs	37,262,082	32,232,100	4,875,176	37,107,276	31,866,164
Other	18,049,960	8,095,764	9,681,671	17,777,435	14,422,331
Amortization of tangible capital assets	35,014,719	26,685,646	5,791,598	32,477,244	30,005,732
Interest on long-term debt	30,529,596	27,383,909	2,271,239	29,655,148	21,878,093
	372,752,408	232,019,605	107,977,251	339,996,856	319,661,654
Annual surplus (deficit)	\$ 397,271,819	\$ 182,205,970	\$ 15,883,130	\$ 198,089,100	\$ 342,319,283

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Notes to Financial Statements, page 18
Year ended December 31, 2021

13. COVID-19 Pandemic

The COVID-19 global pandemic, declared in 2020, continued to impact the global economy in 2021. Throughout the pandemic, the Corporation delivered key services to the Metro Vancouver region in line with its mandate. Management continues to monitor the impacts of the pandemic on taxpayers, suppliers and other third party business associates that could impact the timing and amounts realized on the Corporation's assets and ability to provide services to the region. However, to date, the pandemic has not materially impacted revenue streams, expenses, cash flows or caused significant asset impairments.

14. Subsequent Event

In January 2022, the District drew on an irrevocable letter of credit in the amount of \$50.0 million as a result of the cancellation of a vendor contract for the North Shore Wastewater Treatment Plant. This amount is included in the \$60.37 million disclosed in note 10.

To: MVRD/GVS&DD/GVWD/MVHC Board

From: Cheryl Nelms, General Manager, Project Delivery
Dean Rear, Chief Financial Officer

Date: April 19, 2022 Meeting Date: April 29, 2022

Subject: **Asset Management and Long Term Financial Planning**

RECOMMENDATION

That the MVRD/GVS&DD/GVWD/MVHC Board direct staff to provide context for decision making by completing long-range plans for major 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.

EXECUTIVE SUMMARY

At the March 25, 2022 GVS&DD Board meeting, the GVS&DD Board referred a following motion to staff related to asset management and long range plans. Metro Vancouver has long-standing asset management practices, and is currently in a new cycle of asset management continuous improvement that will include the addition of a long term financial plan that will provide the Board with enhanced context for decision making. Asset management and long-range planning currently includes data collection, asset condition monitoring and reporting, strategic plans, management plans, and long-range plans. Staff are rolling out updated state of the asset reports, updating long-range management plans, and developing a long-term financial plan. The long-term financial plan will consider what financial resources are required to keep assets in a state of good repair, meet MVRD/GVS&DD/GVWD/MVHC policy objectives, meet regulatory requirements, meet increased demand for services as a result of population growth, and adapt to resiliency requirements.

PURPOSE

To provide the MVRD/GVS&DD/GVWD/MVHC Board an overview of the current asset management and financial planning practices at Metro Vancouver, and how they are being integrated into work to create a long-term financial plan that will support the board in decision making for major projects.

BACKGROUND

At the March 25, 2022 GVS&DD Board meeting, the GVS&DD Board referred the following motion to staff for review of the required elements of this undertaking:

Direct staff to provide context for the [Iona Wastewater Treatment Plant] 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.

This report provides an overarching context of current practices on asset management and continuous improvement work underway that will help the Board to make informed decisions for major projects.

The original motion refers to both liquid waste and water. The proposed motion has been adapted so that it can be considered for the MVRD/GVS&DD/GVWD/MVHC Board and provide flexibility to the time range for long term planning.

ASSET MANAGEMENT AND FINANCIAL PLANNING

With significant infrastructure projects underway and on the horizon, Metro Vancouver has been making adjustments to practices and policies to better prepare for the upcoming work and prioritize projects in an environment of competing risks associated with funding and the ongoing provision of services.

As part of Metro Vancouver's regular and ongoing asset management and financial planning practices, Metro Vancouver produces:

- State of the asset reports,
- Facility asset management plans,
- Long-range management plans,
- Strategic plans, and
- Financial plans

Key drivers that inform Metro Vancouver's planning for asset management and financial planning include: keeping existing assets in a state of good repair, meeting regulatory requirements, accommodating population growth, improving resiliency, and meeting MVRD/GVS&DD/GVWD/MVHC policy objectives (see table 1).

Table 1: Drivers that inform service planning, asset management, and financial planning



State of the Asset Reports and Asset Management Plans

Metro Vancouver has active asset management and capital planning processes that have been in place for decades. In a culture of continuous improvement, we are working to improve these and create greater clarity, consistency, and transparency across the organization.

In 2018 and 2019, the MVRD/GVS&DD/GVWD/MVHC Board approved new asset management policies. Additionally, asset management plans exist throughout the organization to support specific assets.

Updated state of the asset reports for the service areas have been produced including housing (2018) and parks (2021), and are updated regularly. New state of the assets reports for liquid waste and water are complete and are planned to be delivered to the Committees and Board in May 2022. Existing water and liquid waste assets are generally in a state of good repair, and are not considered to be a significant driver of costs associated with the capital plan.

State of the assets reports give the organization an understanding of:

- The existing infrastructure (inventory)
- The state of that infrastructure (to determine when it is projected to require replacement)
- Valuation (estimate of cost to replace)
- Financial forecast of long-term investment needs to retain existing assets in a state of good repair

Growth, Resiliency, Policy Objectives, and Regulatory Requirements

The majority of Metro Vancouver's capital needs are driven by:

- Population growth in the region
- Resiliency needs (e.g. seismic upgrades)
- Regulatory requirements (e.g. increased level of treatment required for wastewater)
- Board policy objectives

Metro Vancouver identifies projects that address the above drivers through long-range plans, which exist for all service areas. These plans, in coordination with state of the asset reports and data, help inform annual budgets, anticipated expenditures, and funding projections. Work to update management plans has recently been completed or is underway (eg. Housing 10-Year Plan (2019), Regional Parks Plan (underway), Liquid Waste Management Plan (underway), Solid Waste Management Plan (underway), Drinking Water Management Plan (underway)). These plans identify significant capital projects.

Capital Planning and Long Term Financial Planning

Financial planning is informed by the Board Strategic Plan, the management plans, and the state of the asset reports. In 2017, Metro Vancouver established the development of five-year financial plans ("5-Year Outlook") in addition to its detailed annual plan. The 5-Year Outlook also highlights significant capital projects by year.

Currently, Metro Vancouver is developing a long term financial plan that considers the state of the assets and what they require on the operating side as well as the long-range plans and projects that need to be completed to address growth, regulatory requirements, and resiliency needs. An overview of the planning process for delivering the new long term financial plan was presented to the Finance Committee on February 10, 2022 (see Appendix 1).

2022 Reporting and Engagement

Key reports and engagement activities that will be coming forward to the Board in 2022 and 2023 related to asset management and the long term financial plan include:

- April – Board Budget Workshop
- May – State of the Assets: Liquid Waste – to Liquid Waste Cttee and Board (REAC - April 1)
- May – State of the Assets: Water – to Water Committee and Board (REAC - April 1)
- July – Corporate Asset Management Strategy to REAC/RFAC/Board
- April/July/Oct – Updates on Major Infrastructure Projects and Programs – to REAC and Board Committees
- October – Board Budget Workshop
- A long-term financial plan (Early 2023)

ALTERNATIVES

1. That the MVRD/GVS&DD/GVWD/MVHC Board direct staff to provide context for decision making by completing long-range plans for major 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.
2. That the MVRD/GVS&DD/GVWD/MVHC receive for information the report dated April 18, 2022, titled “Asset Management and Long Term Financial Planning” and provide staff with alternate direction.

FINANCIAL IMPLICATIONS

This is an information report. No financial implications are presented.

CONCLUSION

At the March 25, 2022 GVS&DD Board meeting, the GVS&DD Board referred the following motion to staff for review. The motion requested that staff complete long-range plans for major 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.

With significant infrastructure projects underway and on the horizon, Metro Vancouver has been making adjustments to practices and policies to better prepare for the upcoming work and prioritize projects in an environment of competing risks associated with funding and the ongoing provision of services. This work includes continued work on long-range plans and asset management reports, and will include a new long term financial plan that will be rolled out in 2023.

Appendix

- a. [Metro Vancouver Long Term Financial Planning – Report – February 10, 2022](#)
- b. [Metro Vancouver Long Term Financial Planning – Presentation – February 10, 2022](#)

References: MVRD

1. [Board Policy: Asset Management for Regional Parks](#)
2. [Board Policy: Asset Management for Corporate Facilities and Equipment](#)
3. [Regional Parks State of Building Assets Report \(2020 and 2021\) and State of Built and Natural Assets Report \(2021\)](#)
4. [Regional Parks Plan \(2016\)](#)
5. [DRAFT - Regional Parks Plan Update \(in progress\)](#)

References: GVS&DD

1. [Board Policy: Asset Management for Liquid Waste Services](#)
2. [Board Policy: Asset Management for Solid Waste Services](#)
3. [Integrated Liquid Waste and Resource Management Plan \(2010\)](#)
4. [Integrated Solid Waste and Resource Management Plan \(2010\)](#)

References: GVWD

6. [Board Policy: Asset Management for Water Services](#)
7. [Drinking Water Management Plan \(2011\)](#)
8. [Water Supply Outlook 2120 \(2019\)](#)

References: MVHC

9. [Board Policy: Asset Management for Housing Corporation](#)
10. 2018 State of Assets (updated annually)
11. [Metro Vancouver Housing 10-Year Plan \(2019\)](#)
12. [Metro Vancouver Housing Redevelopment Plan \(2020\)](#)

To: Zero Waste Committee

From: Allen Jensen, Senior Project Engineer, Solid Waste Services

Date: March 31, 2022 Meeting Date: April 8, 2022

Subject: **GVS&DD Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022**

RECOMMENDATION

That the GVS&DD Board

- a) approve the following amendments to the Tipping Fee Bylaw effective June 1, 2022:
 - i. remove references to the Coquitlam Recycling and Waste Centre;
 - ii. set the minimum fee for Central Surrey Recycling and Waste Centre at \$15 per load including transaction fee; and
 - iii. establish a rate of \$130 per tonne for residuals from construction and demolition waste processing facilities.
 - b) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022*; and
 - c) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022*.
-

EXECUTIVE SUMMARY

The *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017* (Tipping Fee Bylaw) sets rates and requirements at Metro Vancouver solid waste facilities. This report proposes updates to the Tipping Fee Bylaw to remove reference to the now closed Coquitlam Recycling and Waste Centre, align peak hours rates at Central Surrey Recycling and Waste Centre with Langley and Maple Ridge recycling and waste centres, and establish a rate of \$130 per tonne for residuals from construction and demolition waste processing at Metro Vancouver solid waste facilities. Changes will be effective June 1, 2022.

PURPOSE

To seek Board approval to amend the Tipping Fee Bylaw.

BACKGROUND

The current Tipping Fee Bylaw is a consolidation of *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017* and a series of subsequent amendment bylaws. This report proposes updates to the Tipping Fee Bylaw.

TIPPING FEE BYLAW CHANGES

The proposed changes to the Tipping Fee Bylaw are described below.

Removal of References to Coquitlam Recycling and Waste Centre

With the opening of the United Boulevard Recycling and Waste Centre and closure of the Coquitlam Recycling and Waste Centre, it is no longer necessary to reference the Coquitlam Recycling and Waste Centre in the Tipping Fee Bylaw. Accordingly, it is proposed that the list of solid waste facilities in Schedule "A" and facility rates listed in Table 1 and Table 3 in Schedule "B" be revised to remove references to the Coquitlam Recycling and Waste Centre.

Minimum Fees for Central Surrey Recycling and Waste Centre

North Shore, United Boulevard, and North Surrey recycling and waste centres have minimum fees for garbage and used gypsum of \$25 per load (including \$5 transaction fee) Monday-Friday 10:00 a.m. to 2:00 p.m. to encourage users with small loads to come outside of peak times. Encouraging users with small loads to come outside peak times helps minimize congestion at these facilities. Central Surrey will operate on the same basis as Langley and Maple Ridge recycling and waste centres only accepting small, manually unloaded vehicles. On this basis, it is rationale to set minimum fees for Central Surrey on the same basis as Langley and Maple Ridge recycling and waste centres at \$15 per load including the transaction fee of \$5.

Construction and Demolition Processing Residual Waste

To align with the City of Vancouver's Solid Waste Bylaw No. 8417, a new rate at \$130 per tonne is proposed for residual waste received from construction and demolition waste processing facilities. Residual waste is the non-recyclable residuals after recovering materials such as wood, metals, glass and plastics from construction and demolition waste. \$130 per tonne is consistent with Metro Vancouver's average cost of processing garbage. Construction and demolition processing residual waste comes only in large loads and as such it is reasonable to charge a rate based on Metro Vancouver's average processing costs.

The regional solid waste system has historically seen large variation in quantities of construction and demolition material processing facility residuals received, which makes planning for contingency disposal requirements challenging. Setting the rate at \$130 per tonne is expected to reduce variability in quantities of the material.

ALTERNATIVES

1. That the GVS&DD Board
 - a) approve the following amendments to the Tipping Fee Bylaw effective June 1, 2022:
 - i. remove references to the Coquitlam Recycling and Waste Centre;
 - ii. set the minimum fee for Central Surrey Recycling and Waste Centre at \$15 per load including transaction fee; and
 - iii. establish a rate of \$130 per tonne for residuals from construction and demolition waste processing facilities.
 - b) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022*; and
 - c) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022*.

2. That the GVS&DD Board receive the report dated March 31, 2022, titled “*GVS&DD Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022*” and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, changes described in this report will take effect June 1, 2022, with notification to solid waste system users following approval of the bylaw. Setting the tipping fee for construction and demolition waste processing facility residuals at the average cost of garbage disposal will ensure cost recovery for the material and allow optimization of contingency disposal planning.

If the Board does not approve Alternative 1, the current Tipping Fee Bylaw provisions will remain in place.

CONCLUSION

Tipping Fee Bylaw updates are required due the closure of the Coquitlam Recycling and Waste Centre, which has been replaced by the United Boulevard Recycling and Waste Centre, the opening of Central Surrey Recycling and Waste Centre, and to set a tipping fee for construction and demolition waste processing facility residuals. Staff recommend Alternative 1, that the Board approve amending the Tipping Fee Bylaw.

Attachments

1. GVS&DD Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw 354, 2022 – Amends Bylaw 306, 2017
2. Blackline Version Proposed Changes to GVS&DD Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017

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**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BYLAW NO. 354, 2022**

A Bylaw to amend Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017

WHEREAS:

- A. The Greater Vancouver Sewerage and Drainage District (the "GVS&DD") Board (the "Board") adopted the "Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017", as amended, a Bylaw to establish a scale of fees, levies and charges for services rendered by the GVS&DD and for the use of any of the GVS&DD's waste disposal facilities; and
- B. The Board wishes to amend the "Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017".

NOW THEREFORE the Board of the Greater Vancouver Sewerage and Drainage District enacts as follows:

Citation

- 1. The official citation of this bylaw is "Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Amendment Bylaw No. 354, 2022".

Effective Date

- 2. This bylaw comes into force and takes effect on June 1, 2022.

Amendment of Bylaw

- 3. "Greater Vancouver Sewerage and Drainage District Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017" is hereby amended as follows:

(a) In section 3.1 the following definitions are hereby added in alphabetical order:

"Construction and Demolition Processing Residual Waste" means Refuse that remains after Construction and Demolition Waste has been processed by a Private Construction and Demolition Waste Processing Facility to recover materials such as wood, metals, glass and plastics;

"Private Construction and Demolition Waste Processing Facility" means a facility that holds a valid and subsisting licence to receive Construction and Demolition Waste pursuant to *Greater Vancouver Sewerage and Drainage District Solid Waste and Recyclable Material Regulatory Bylaw 181, 1996*, as amended or replaced from time to time;

- (b) In section 3.1 the definition of “Tipping Fee” is hereby deleted and replaced with the following:

"Tipping Fee" means the fee charged by the GVS&DD for disposing of Garbage, Construction and Demolition Processing Residual Waste or Special Handle Waste at a Solid Waste Facility, as set out in Table 1 of Schedule "B" of this Bylaw, and which includes the Disposal Rate and the Generator Levy;

- (c) In section 3.1 the definition of “Transaction Fee” is hereby deleted and replaced with the following:

"Transaction Fee" means the fee charged by the GVS&DD, in addition to the Tipping Fee, for all Loads of Garbage or Construction and Demolition Processing Residual Waste disposed of at a Solid Waste Facility, all Loads of Special Handle Waste disposed of at the Waste-to-Energy Facility and all Loads of Gypsum dropped off at designated Recycling Areas, as set out in Table 2 of Schedule "B" of this Bylaw;

- (d) Section 5.3 is hereby added, and the current sections 5.3 to 5.22, and all references to those sections, are re-numbered accordingly:

5.3 Every person who disposes of Construction and Demolition Processing Residual Waste at a Solid Waste Facility must pay the applicable Tipping Fee specified in Table 1 of Schedule "B" of this Bylaw and the Transaction Fee specified in Table 2 of Schedule "B" of this Bylaw.

- (e) Schedule “A” is hereby deleted and replaced with Schedule “A” that is attached to and forms part of this bylaw.
- (f) Table 1 of Schedule “B” is hereby deleted and replaced with Table 1 of Schedule “B” that is attached to and forms part of this bylaw.
- (g) Table 2 of Schedule “B” is hereby deleted and replaced with Table 2 of Schedule “B” that is attached to and forms part of this bylaw.
- (h) Table 3 of Schedule “B” is hereby deleted and replaced with Table 3 of Schedule “B” that is attached to and forms part of this bylaw.

Read a first, second and third time this _____ day of _____, _____.

Passed and finally adopted this _____ day of _____, _____.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer

Schedule A

SOLID WASTE FACILITIES

- Central Surrey Recycling and Waste Centre located at 6711 – 154 Street, Surrey
- Langley Recycling and Waste Centre located at 1070 272 Street, Langley
- Maple Ridge Recycling and Waste Centre located at 10092 236 Street, Maple Ridge
- North Shore Recycling and Waste Centre located at 30 Riverside Drive, North Vancouver
- North Surrey Recycling and Waste Centre located at 9770 192 Street, Surrey
- United Boulevard Recycling and Waste Centre located at 995 United Boulevard, Coquitlam
- Waste-to-Energy Facility located at 5150 Riverbend Drive, Burnaby

Schedule B

**Table 1-Tipping Fees for Garbage, Construction and Demolition Processing Residual Waste and Special Handle Waste
(including the Generator Levy and the Disposal Rate)**

	Net Weight	North Shore Recycling and Waste Centre ¹	North Surrey Recycling and Waste Centre ¹	United Boulevard Recycling and Waste Centre ¹	Central Surrey Recycling and Waste Centre ¹	Maple Ridge Recycling and Waste Centre ¹	Langley Recycling and Waste Centre ¹	Waste-to-Energy Facility ¹
Municipal Garbage	All Loads	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne
All Garbage other than Municipal Garbage	0 to .99 tonnes	\$155/tonne ²	\$155/tonne ²	\$155/tonne ²	\$155/tonne ²	\$155/tonne ³	\$155/tonne ²	\$155/tonne ²
	1.0 to 7.99 tonnes	\$133/tonne ⁴	\$133/tonne ⁴	\$133/tonne ⁴	\$133/tonne ⁴	\$133/tonne ⁵	\$133/tonne ⁴	\$133/tonne ⁴
	8.0 tonnes or more	\$107/tonne	\$107/tonne	\$107/tonne	Not accepted.	Not accepted.	Not accepted.	\$107/tonne
Construction and Demolition Processing Residual Waste	All Loads	\$130/tonne	\$130/tonne	\$130/tonne	Not accepted.	Not accepted.	Not accepted.	\$130/tonne
Minimum Tipping Fee for Garbage and Construction and Demolition Processing Residual Waste (as applicable)	Minimum Tipping Fee during Peak Hours	\$20/Load	\$20/Load	\$20/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load
	Minimum Tipping Fee outside of Peak Hours	\$10/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load
Special Handle Waste	All Loads	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	\$255/tonne \$50 minimum.

¹All Loads originating from Maple Ridge will be assessed an additional fee of \$4/tonne.

²To a maximum of \$133 per Load.

³To a maximum of \$137 per Load.

⁴To a maximum of \$856 per Load.

⁵To a maximum of \$888 per Load.

Schedule B

Table 2 – Transaction Fee

Each Load of Garbage or Construction and Demolition Processing Residual Waste disposed of at a Solid Waste Facility, each Load of Special Handle Waste disposed of at the Waste-to-Energy Facility, and each Load of Gypsum dropped off at a designated Recycling Area	\$5/Load
--	----------

Schedule B

Table 3 – Recycling Fees for materials dropped off in designated Recycling Areas

	North Shore Recycling and Waste Centre	North Surrey Recycling and Waste Centre	United Boulevard Recycling and Waste Centre	Central Surrey Recycling and Waste Centre	Maple Ridge Recycling and Waste Centre	Langley Recycling and Waste Centre	Waste-to-Energy Facility
Municipal Organics	\$108/tonne, \$10 minimum	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.
Source-Separated Organic Waste	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	Not accepted.
Green Waste	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	Not accepted.
Clean Wood	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum.	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum.	Not accepted.
Gypsum – New: less than ½ tonne	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	Not accepted.
Gypsum – Used: less than ½ tonne	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	Not accepted.
Mattresses	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	Not accepted.

3.0 Definitions

3.1 In this Bylaw:

"Agricultural Waste" means Refuse that originates from an agricultural operation as defined pursuant to the *Agricultural Waste Control Regulation*, B.C. Reg. 131/1992, adopted pursuant to the *Environmental Management Act*, and includes manure, used mushroom medium and agricultural vegetation waste;

"Banned Materials" means Hazardous and Operational Impact Materials, Recyclable Materials or Product Stewardship Materials;

"Board" means the board of directors of the Greater Vancouver Sewerage and Drainage District;

"Clean Wood" means Municipal Solid Waste that comprises solid wood, lumber or pallets:

- (i) that does not contain any glues or resins;
- (ii) that is unpainted, unstained and untreated; and
- (iii) that may or may not be pierced with nails or other metal fasteners;

"Construction and Demolition Processing Residual Waste" means Refuse that remains after Construction and Demolition Waste has been processed by a Private Construction and Demolition Waste Processing Facility to recover materials such as wood, metals, glass and plastics;

Replaced by Bylaw 350, 2021.

"Construction and Demolition Waste" means Refuse that originates from demolition or construction sources that has not been handled or managed with waste from other sources;

"Contaminated Recyclable Paper" means Recyclable Paper that has been contaminated with grease, oil, food residue or other material;

"Corrugated Cardboard" means Recyclable Paper that consists of a fluted corrugated sheet and one or two flat linerboards;

"Delta Garbage" means all Garbage originating from within the territorial boundaries of the Corporation of Delta, except Delta Residential Drop-off Garbage;

"Delta Residential Drop-off Garbage" means Garbage brought to a Vancouver Disposal Site by residential customers who reside in Delta;

Added by Bylaw 308, 2017

"Disposal Rate" is the difference between the Tipping Fee and the Generator Levy, and is

Consolidation of Greater Vancouver Sewerage and Drainage Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306

"Personal Hygiene Products" means personal care products such as diapers, feminine hygiene products and incontinence products;

"Private Construction and Demolition Waste Processing Facility" means a facility that holds a valid and subsisting licence to receive Construction and Demolition Waste pursuant to *Greater Vancouver Sewerage and Drainage District Solid Waste and Recyclable Material Regulatory Bylaw 181, 1996*, as amended or replaced from time to time;

"Product Stewardship Materials" means the classes of Refuse listed in Schedule "E";

Added by Bylaw 312, 2018

"Qualified Private Facility" means a facility that:

- (i) manages Mixed Municipal Solid Waste;
- (ii) reduces the total weight of incoming Mixed Municipal Solid Waste by at least 25%, calculated monthly, as a result of resource recovery or the production of fuel at the facility, provided always that any material delivered to a landfill, including material used for roads or for alternative daily cover, is included in the calculation as waste disposed from the facility; and
- (iii) operates in full compliance with all applicable laws, including holding a valid and subsisting license to manage Mixed Municipal Solid Waste pursuant to *Greater Vancouver Sewerage and Drainage District Solid Waste and Recyclable Material Regulatory Bylaw 181, 1996*, as amended or replaced from time to time;

"Quarter" means, within any calendar year, the three month period from January 1 to March 31, April 1 to June 30, July 1 to September 30, or October 1 to December 31;

"Recyclable Materials" means the classes of Refuse listed in Schedule "D";

Replaced by Bylaw 323, 2018

"Recyclable Paper" means Municipal Solid Waste manufactured from thin sheets from wood pulp or other fibrous substances that may be converted into reusable materials and includes newspapers and inserts, magazines, telephone directories, catalogues, office papers, envelopes, boxboard, paper bags and mail, but excludes photographic paper, carbon paper, tissue paper, paper napkins or towels, paper that is adhered to plastic or metal;

"Recycling Area" means those parts of a Solid Waste Facility or Vancouver Disposal Site designated for Green Waste, Source-Separated Organic Waste, Clean Wood, Gypsum, Mattresses and the specific materials, substances and objects that comprise Recyclable Materials and Product Stewardship Materials;

Replaced by Bylaw 350, 2021

"Recycling Fee" the recycling fee charged by the GVS&DD for Green Waste, Municipal Organics, Source-Separated Organic Waste, Clean Wood, Gypsum, Mattresses and the specific materials, substances and objects that comprise Recyclable Materials dropped off in the designated Recycling Area at a Solid Waste Facility, as set out in Table 3 of Schedule "B" of this Bylaw;

"Recycling Regulation" means the *Recycling Regulation*, B.C. Reg. 449/2004 adopted pursuant to the *Environmental Management Act*;

"Refuse" means discarded or abandoned materials, substances or objects;

"Regional Services Rate" means the fee charged by the GVS&DD for solid waste management related services that the GVS&DD provides for the benefit of the entire area of the GVS&DD including, but not limited to, system analysis and planning, regulation and enforcement, demolition, land clearing and construction waste management, recycling and sustainability initiatives and administration;

"Snow Flocked or Frosted Tree" means a natural tree that has received an application of a substance that looks like artificial snow.

Amended by Bylaw 350, 2021.

"Solid Waste Facility" means any of the Municipal Solid Waste disposal facilities listed in Schedule "A";

"Source-Separated Organic Waste" means unpackaged Food Waste, Green Waste, Clean Wood, Recyclable Paper that has been soiled by or comingled with food residue, or carbon paper, tissue paper, paper napkins or towels or paper that is covered or infused with wax, or any combination thereof and does not contain more than 0.05% (by wet weight) of any other type of Refuse;

Added by Bylaw 308, 2017. Replaced by Bylaw 312, 2018

"Source-Separated Recyclable Material" means EMA Recyclable Material that has been separated from Municipal Solid Waste by the waste generator at the point of generation for the purposes of recycling;

Replaced by Bylaw 330, 2020

"Special Handle Waste" means Out of Region Waste, International Waste and Municipal Solid Waste that requires immediate destruction or is designated for product destruction by a regulatory agency;

"Surcharge" means the amount charged by the GVS&DD, in addition to the applicable Tipping Fee, for disposing of Banned Materials at a Solid Waste Facility, as set out in Table 4 of Schedule "B" of this Bylaw;

Replaced by Bylaw 306, 2017

"Tipping Fee" means the fee charged by the GVS&DD for disposing of Garbage,

Construction and Demolition Processing Residual Waste or Special Handle Waste at Solid Waste Facility, as set out in Table 1 of Schedule "B" of this Bylaw, and which includes the Disposal Rate and the Generator Levy;

"Toxic Plants" means Devil's Club (*Oplopanax Horridus*), Giant Hogweed (*Heracleum Mantegazzianum*) and Spurge Laurel (*Daphne Laureola*).

"Transaction Fee" means the fee charged by the GVS&DD, in addition to the Tipping Fee, for all Loads of Garbage or Construction and Demolition Processing Residual Waste disposed of at Solid Waste Facilities, all Loads of Special Handle Waste disposed of at the Waste-to-Energy Facility and all Loads of Gypsum dropped off at designated Recycling Areas, as set out in Table 2 of Schedule "B" of this Bylaw;

"Unsecured Load" means a Load that is not tied and covered or otherwise secured to prevent any of the Load escaping from the vehicle;

"Vancouver Disposal Site" means either of the following Municipal Solid Waste disposal facilities that are owned or operated by the City of Vancouver:

- (i) Vancouver Landfill located at 5400 72nd Street, Delta; and
- (ii) Vancouver South Transfer Station, Recycling Depot and Yard Trimmings Drop-off located at 377 West Kent Avenue North, Vancouver; and

"Vancouver Garbage" means all Garbage that originates from within the territorial boundaries of the City of Vancouver.

Added by Bylaw 308, 2017

"Waste Hauler" has the same meaning as in the Act.

"Weight Only Ticket" means a document provided at the scale house that records only the weight of the particular Load brought to a Solid Waste Facility.

4.0 Restrictions and Prohibitions

- 4.1 No person shall dispose of anything at a Solid Waste Facility except in accordance with this Bylaw.

Replaced by Bylaw 336, 2020

- 4.2 No person shall dispose of Municipal Solid Waste at a Solid Waste Facility unless it originates from within the geographic area of the MVRD.

Replaced by Bylaw 336, 2020

- 4.3 Despite section 4.2, acceptance at a Solid Waste Facility of Out of Region Waste and International Waste may be approved:

GVS&DD must pay the Generator Levy in the amount of \$54/tonne with respect to all Municipal Solid Waste that that person generates as follows:

- (a) to the GVS&DD at a Solid Waste Facility in accordance with section 5.2;
- (b) to the City of Vancouver at a Vancouver Disposal Site as part of the applicable tipping fee at that site; or
- (c) to a Waste Hauler that picks up their Municipal Solid Waste.

Replaced by Bylaw 350, 2021

5.2 Unless otherwise permitted pursuant to a written agreement between a municipality and the GVS&DD, every person who disposes of Municipal Solid Waste at a Solid Waste Facility must pay to the GVS&DD:

- (a) the applicable Tipping Fees set out in Table 1 of Schedule "B";
- (b) the Transaction Fee set out in Table 2 of Schedule "B";
- (c) the applicable Recycling Fees set out in Table 3 of Schedule "B"; and
- (d) the applicable Surcharges set out in Table 4 of Schedule "B",

and all such fees and charges must be paid before the person leaves the Solid Waste Facility.

5.3 Every person who disposes of Construction and Demolition Processing Residual Waste at a Solid Waste Facility must pay the applicable Tipping Fee specified in Table 1 of Schedule "B" of this Bylaw and the Transaction Fee specified in Table 2 of Schedule "B" of this Bylaw.

5.43 Every person who disposes of Special Handle Waste at the Waste-to-Energy Facility must pay the applicable Tipping Fee specified in Table 1 of Schedule "B" of this Bylaw and the Transaction Fee specified in Table 2 of Schedule "B" of this Bylaw.

Replaced by Bylaw 350, 2021.

5.54 Unless otherwise permitted pursuant to a written agreement between a municipality and the GVS&DD, every person who drops off a Load of Municipal Organics, Source-Separated Organic Waste, Green Waste, Clean Wood, Gypsum or Mattresses at a designated Recycling Area must pay the applicable Recycling Fee specified in Table 3 of Schedule "B" of this Bylaw.

5.65 If a person attends a Solid Waste Facility with a Load that contains any combination of Source-Separated Organic Waste, Green Waste, Food Waste, Clean Wood, Gypsum, Mattresses, other Recyclable Materials and/or other Municipal Solid Waste and the person chooses not to weigh-out after dropping off each part of the Load at the designated Recycling Areas, then the person must pay to the GVS&DD the Tipping Fee for the entire Load that is based on the highest fee payable for any part of the Load, in the amounts set out in Schedule "B" of this Bylaw, together with any applicable Surcharges.

- ~~5.76~~ Every person who disposes of a Load at a Solid Waste Facility that contains a quantity of Recyclable Materials other than Food Waste or Expanded Polystyrene Packaging that exceeds either 5% of the total weight of the Load or 5% of the total volume of the Load must pay a Surcharge in the amount set out in Table 4 of Schedule "B" of this Bylaw.
- ~~5.87~~ Every person who disposes of a Load at a Solid Waste Facility that contains Contaminated Recyclable Paper that exceeds either 5% of the total weight of the Load or 5% of the total volume of the Load must pay a Surcharge in the amounts set out in Table 4 of Schedule "B" of this Bylaw.
- ~~5.98~~ Every person who disposes of a Load at a Solid Waste Facility that contains Expanded Polystyrene Packaging that exceeds either 20% of the total weight of the Load or 20% of the total volume of the Load must pay a Surcharge in the amounts set out in Table 4 of Schedule "B" of this Bylaw.
- ~~5.109~~ Every person who disposes of a Load at a Solid Waste Facility that contains Food Waste that exceeds either 25% of the total weight of the Load or 25% of the total volume of the Load must pay a Surcharge in the amounts set out in Table 4 of Schedule "B" of this Bylaw.

Replaced by Bylaw 350, 2021

- ~~5.1110~~ Every person who drops off a Load of Municipal Organics or Source-Separated Organic Waste at a designated Recycling Area that contains more than 0.05% (by wet weight) of any other type of Refuse must pay a Surcharge in the amount set out in Table 4 of Schedule "B" of this Bylaw.
- ~~5.1211~~ Every person who disposes of a Load at a Solid Waste Facility that contains any Hazardous and Operational Impact Materials or Product Stewardship Materials must pay a Surcharge in the amount set out in Table 4 of Schedule "B" of this Bylaw, plus the costs of remediation and clean up.
- ~~5.1312~~ Every person who enters a Solid Waste Facility with an Unsecured Load must pay a Surcharge in the amount set out in Table 4 of Schedule "B" of this Bylaw.
- ~~5.1413~~ Special Handle Waste is exempt from all Surcharges, but if a Load of Special Handle Waste contains any Hazardous and Operational Impact Materials, it will be subject to the costs of remediation and clean-up.
- ~~5.1514~~ Where a single Load is subject to multiple Surcharges, the Surcharge with the highest value will apply for the weight of the entire Load.
- ~~5.1615~~ Despite anything else in this Bylaw, in advance of any person transporting a single Load or multiple Loads to a Solid Waste Facility, the Manager may, at his or her discretion, waive any Surcharge or Surcharges or a portion thereof for a specified period and for specified classes of persons.

~~5.1716~~ Despite anything else in this Bylaw, the Manager may, at his or her discretion, waive all fees and charges for a Load delivered to a Solid Waste Facility by a non-profit or volunteer group resulting from a community clean-up project, provided that:

Replaced by Bylaw 335, 2020

- (a) the community clean-up project is conducted within the geographic area of any MVRD member municipalities;
- (b) the community clean-up project involves collecting Noxious Weeds, litter or abandoned waste from the natural environment from any of the following publicly owned areas:
 - (i) green space, such as natural areas, recreational parks or playgrounds;
 - (ii) roads;
 - (iii) marine shorelines and harbours;
 - (iv) lakes, ponds, rivers, creeks, streams or other natural waterways.
- (c) the Load does not contain Recyclable Materials or Hazardous and Operational Impact Materials;
- (d) the Manager receives an advance written request from the non-profit or volunteer group prior to the date the community clean-up project is to be held;
- (e) the Manager confirms in writing to the non-profit or volunteer group that fees and charges otherwise payable under this Bylaw will be waived; and
- (f) the non-profit or volunteer group brings the Manager's written confirmation to the Solid Waste Facility at the time of disposal.

~~5.1817~~ The weigh scales at Solid Waste Facilities weigh to the nearest 0.005 tonnes. For those customers who do not have a customer charge account, as described in Schedule "F", the total amount payable to GVS&DD is rounded to the nearest dollar.

~~5.1918~~ Every person who enters a Solid Waste Facility to obtain a Weight Only Ticket must pay a fee of \$15 per ticket.

~~5.2019~~ Every person who disposes of a Load at the Waste-to-Energy Facility that is made up of at least 85% by weight of metals will receive a credit of \$25 per tonne on exiting the scale house at the Waste-to-Energy Facility.

~~5.2120~~ Despite section 5.1 of this Bylaw, any person may apply to the GVS&DD for a customer charge

account in accordance with Schedule "F" to this Bylaw.

5.2221 In the event the weigh scale system at a Solid Waste Facility is not functioning for any reason, at his or her discretion the Manager may:

- (a) close the Solid Waste Facility until the weigh scale system is functioning; or
- (b) permit a person to dispose of a single Load at the Solid Waste Facility subject to the following:
 - (i) the Load must not measure more than 0.5 cubic metres in volume; and
 - (ii) the minimum Tipping Fee set out in Table 1 of Schedule "B" of this Bylaw, plus the Transaction Fee, will be charged for the Load.

5.2322 In the event that a customer enters the Solid Waste Facility with a rental vehicle, out-of-province or dealer licence plate, or previously left without payment then a \$50 deposit is required on entry to the Solid Waste Facility.

6.0 Regional Services Rate

6.1 The Regional Services Rate is set at an amount equal to 6% of the Tipping Fee for Municipal Garbage, as specified in Table 1 of Schedule "B". The Regional Services Rate is included in all Tipping Fees.

6.2 Every Quarter, the City of Vancouver must record:

- (a) the total tonnage of Garbage;
- (b) the tonnage of Vancouver Garbage and Delta Garbage; and
- (c) the tonnage of Delta Residential Drop-off Garbage,

that is disposed of at the Vancouver Disposal Sites during that Quarter and provide such information to GVS&DD and the Corporation of Delta within 30 days of the end of the Quarter.

6.3 Every Quarter GVS&DD will invoice the City of Vancouver for an amount equal to the Regional Services Rate for every tonne of Vancouver Garbage and Delta Residential Drop-off Garbage disposed of at the Vancouver Disposal Sites during the previous Quarter, and the City of Vancouver must remit payment to GVS&DD within 30 days of the date of such invoice.

6.4 Every Quarter GVS&DD will invoice the Corporation of Delta for an amount equal to the Regional Services Rate for every tonne of Delta Garbage disposed of at the Vancouver

SCHEDULE "A"

SOLID WASTE FACILITIES

- Central Surrey Recycling and Waste Centre located at 6711 – 154 Street, Surrey
- ~~Coquitlam Recycling and Waste Centre located at 1200 United Boulevard, Coquitlam~~
- Langley Recycling and Waste Centre located at 1070 272 Street, Langley
- Maple Ridge Recycling and Waste Centre located at 10092 236 Street, Maple Ridge
- North Shore Recycling and Waste Centre located at 30 Riverside Drive, North Vancouver
- North Surrey Recycling and Waste Centre located at 9770 192 Street, Surrey
- United Boulevard Recycling and Waste Centre at 995 United Boulevard, Coquitlam
- Waste-to-Energy Facility located at 5150 Riverbend Drive, Burnaby

SCHEDULE "B"

TIPPING FEES, TRANSACTION FEE, RECYCLING FEES AND SURCHARGES

Amended by Bylaw 350, 2021

**Table 1-Tipping Fees for Garbage and Special Handle Waste
(including the Generator Levy and the Disposal Rate)**

Replaced by Bylaw 350, 2021, **effective January 1, 2022**

	Net Weight	NorthShore Recycling and Waste Centre ¹	North Surrey Recycling and Waste Centre ¹	Coequitlam Recycling and Waste Centre¹	United Boulevard Recycling and Waste Centre ¹	Central Surrey Recycling and Waste Centre ¹	Maple Ridge Recycling and Waste Centre ¹	Langley Recycling and Waste Centre ¹	Waste-to- Energy Facility ¹
Municipal Garbage	All Loads	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne	\$121/tonne
All Garbage other than Municipal Garbage	0 to .99 tonnes 1.0 to 7.99 tonnes 8.0 tonnes or more	\$155/tonne ² \$133/tonne ⁴ \$107/tonne	\$155/tonne ² \$133/tonne ⁴ \$107/tonne	\$155/tonne² \$133/tonne⁴ \$107/tonne	\$155/tonne ² \$133/tonne ⁴ \$107/tonne	\$155/tonne ^{3,2} \$133/tonne ^{5,4} Not accepted.	\$155/tonne ³ \$133/tonne ⁵ Not accepted.	\$155/tonne ² \$133/tonne ⁴ Not accepted.	\$155/tonne ² \$133/tonne ⁴ \$107/tonne
<u>Construction and Demolition Processing Residual Waste</u>	<u>All Loads</u>	<u>\$130/tonne</u>	<u>\$130/tonne</u>		<u>\$130/tonne</u>	<u>Not accepted.</u>	<u>Not accepted.</u>	<u>Not accepted.</u>	<u>\$130/tonne</u>
Minimum Tipping Fee for Garbage and Construction and Demolition Processing Residual Waste (as applicable)	Minimum Tipping Fee during Peak Hours	\$20/Load	\$20/Load	\$20/Load	\$20/Load	\$1020/Load	\$10/Load	\$10/Load	\$10/Load
	Minimum Tipping Fee outside of Peak Hours	\$10/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load	\$10/Load
Special Handle Waste	All Loads	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	\$255/tonne, \$50 minimum.

¹All Loads originating from Maple Ridge will be assessed an additional fee of \$4/tonne.

²To a maximum of \$133 per Load.

³ To a maximum of \$137 per Load.

⁴ To a maximum of \$856 per Load.

⁵ To a maximum of \$888 per Load.

Amended by Bylaw 350, 2021, **effective January 1, 2022**

Table 2 – Transaction Fee

Each Load of Garbage <u>or Construction and Demolition Processing Residual Waste</u> disposed of at any Solid Waste Facility, each Load of Special Handle Waste disposed of at the Waste-to-Energy Facility, and each Load of Gypsum dropped off at a designated Recycling Area	\$5/Load
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Table 3 – Recycling Fees for materials dropped off in designated Recycling Areas

Replaced by Bylaw 350, 2021, effective January 1, 2022.

	North Shore Recycling and Waste Centre	North Surrey Recycling and Waste Centre	Coquitlam Recycling and Waste Centre	United Boulevard Recycling and Waste Centre	Central Surrey Recycling and Waste Centre	Maple Ridge Recycling and Waste Centre	Langley Recycling and Waste Centre	Waste-to-Energy Facility
Municipal Organics	\$108/tonne, \$10 minimum	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.	Not accepted.
Source- Separated Organic Waste	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	Not accepted.
Green Waste	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	Not accepted.
Clean Wood	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum.	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum	\$102/tonne, \$10 minimum.	Not accepted.
Gypsum – New: less than ½ tonne	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	\$150/tonne, \$10 minimum	Not accepted.
Gypsum – Used: less than ½ tonne	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	\$200/tonne, \$10 minimum	Not accepted.
Mattresses	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	\$15 per Mattress	Not accepted.

Table 4 - Surcharges

Replaced by Bylaw 350, 2021, effective January 1, 2022

Loads containing Recyclable Materials other than Food Waste or Expanded Polystyrene Packaging that exceeds either 5% of the total weight of the Load or 5% of the total volume of the Load (section 5. 76)	50% of the applicable Tipping Fee
Loads containing Contaminated Recyclable Paper that exceeds either 5% of the total weight of the Load or 5% of the total volume of the Load (section 5. 87)	50% of the applicable Tipping Fee
Loads containing Expanded Polystyrene Packaging that exceeds either 20% of the total weight of the Load or 20% of the total volume of the Load (section 5. 98)	100% of the applicable Tipping Fee
Loads containing Food Waste that exceeds either 25% of the total weight of the Load or 25% of the total volume of the Load (section 5. 109)	50% of the applicable Tipping Fee
Loads of Municipal Organics or Source-Separated Organic Waste containing more than 0.05% (by wet weight) of any other type of Refuse (section 5. 1140)	\$50 per Load
Loads containing any Hazardous and Operational Impact Materials or Product Stewardship Materials (section 5. 1244)	\$66 per Load plus any remediation or clean-up costs
Unsecured Loads (section 5. 1342)	50% of the applicable Tipping Fee to a maximum of \$50.00

To: Liquid Waste Committee

From: Mark Wellman, Senior Engineer, Policy, Planning and Analysis, Liquid Waste Services

Date: March 23, 2022 Meeting Date: April 13, 2022

Subject: ***Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022 – Vancouver Sewerage Area and Fraser Sewerage Area Map Administrative Correction***

RECOMMENDATION

That the GVS&DD Board:

- a) give first, second and third reading to the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022*; and,
 - b) pass, and finally adopt the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022*.
-

EXECUTIVE SUMMARY

Properties receiving sewerage services within the GVS&DD must be located in one of four regional sewerage areas. Staff recently identified 179 properties along the Vancouver Sewerage Area (VSA) and Fraser Sewerage Area (FSA) border that were shown in the incorrect sewerage area on the GVS&DD sewerage area maps. Some properties shown on the VSA map were contributing sewage to the FSA whereas some properties shown on the FSA map were contributing sewage to the VSA. Working with staff from the Cities of Burnaby and Vancouver, GVS&DD staff have proposed an amendment to the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 310, 2018* to correct the sewerage area maps and show these properties in the appropriate sewerage area. There will not be any change to the annual sewer charges for the property owners.

PURPOSE

To seek GVS&DD Board approval to amend the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018* to reallocate a number of subject properties to either the Vancouver Sewerage Area (VSA) or the Fraser Sewerage Area (FSA) as appropriate.

BACKGROUND

Metro Vancouver provides sewer services to its member jurisdictions. Properties requesting regional sewer services must be located in one of the GVS&DD's designated sewerage areas. Sewerage area boundaries are fixed by the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw, No. 310, 2018* (Bylaw).

A recent review of properties along the boundary of the VSA and the FSA identified 179 properties (as listed in Attachment 1) shown incorrectly on the GVS&DD sewerage area maps. Some properties

shown on the VSA map were connected to the FSA while some properties shown on the FSA map were connected to the VSA.

Many of the identified properties appear to have been included in the incorrect sewerage areas for decades or more, likely as a result of historic mapping inaccuracies and sewer connection errors. The advent of more accurate geospatial and modelling techniques has allowed these mapping errors to be identified and corrected. Metro Vancouver will continue to work with member jurisdictions to ensure properties are shown in the correct sewerage areas.

ADMINISTRATIVE CORRECTION OF THE FSA AND VSA MAPS

Sewerage area boundaries are occasionally amended through an amending bylaw and in accordance with Sections 31 and 32 of the *GVS&DD Act*, typically at the request of a GVS&DD member. As this bylaw amendment is being sought to correct a historical mapping error, the process is being initiated by the GVS&DD with the support of the Cities of Burnaby and Vancouver.

No infrastructure changes are required on the identified properties. This is purely an administrative correction to ensure VSA and FSA properties are correctly identified on the bylaw maps.

Municipal Support

The Cities of Vancouver and Burnaby support the proposed map corrections (Attachments 2 & 3). Should the proposed changes to the bylaw be approved, updated maps will be provided to all VSA and FSA jurisdictions.

ALTERNATIVES

No alternatives are provided as this is a required administrative correction.

FINANCIAL IMPLICATIONS

The financial impacts of these changes to the VSA and FSA maps will be negligible for the Sewer function's annual budget levies. There will not be any change to the annual sewer charges for the property owners.

CONCLUSION

A recent review of properties along the boundary between the Vancouver Sewerage Area (VSA) and the Fraser Sewerage Area (FSA) identified a number of properties shown incorrectly on the GVS&DD sewerage area maps. Some properties shown on the VSA map were contributing sewage to the FSA while some properties shown on the FSA map were contributing sewage to the VSA. Working with staff from Burnaby and Vancouver, GVS&DD staff have proposed an amendment to the VSA and FSA maps to reflect the correct situation.

Attachments

1. *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022*
2. Letter of Support – City of Vancouver – *Vancouver and Fraser Sewerage Area Boundary Changes*, dated, September 14, 2021

3. Letter of Support – City of Burnaby – *Adjustment to VSA/FSA Boundary*, dated, September 16, 2021

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**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BYLAW NO. 351, 2022**

A Bylaw to Amend the "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018"

WHEREAS:

- A. the Board of Directors of the Greater Vancouver Sewerage and Drainage District has adopted "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018", to fix the boundaries of GVS&DD Sewerage and Drainage Areas; and
- B. the Board of the Greater Vancouver Sewerage and Drainage District wishes to amend "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018";

NOW THEREFORE the Board of the Greater Vancouver Sewerage and Drainage District enacts as follows:

- 1. This bylaw may be cited as "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 351, 2022".
- 2. "Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Bylaw No. 310, 2018" is amended as follows:
 - a. by removing from the Vancouver Sewerage Area, and by adding to the Fraser Sewerage Area, the following 110 properties:

	Address	Municipality	PID or Strata Plan Number
1.	5509 HASTINGS ST	Burnaby	002-427-419
2.	120 ELLESMERE AV N	Burnaby	004-194-977
3.	116 ELLESMERE AV N	Burnaby	007-062-451
4.	130 ELLESMERE AV N	Burnaby	001-666-495
5.	4782 GEORGIA ST	Burnaby	002-529-441
6.	4751 UNION ST	Burnaby	012-118-893
7.	4757 UNION ST	Burnaby	003-009-637
8.	4873 WESTLAWN DR	Burnaby	010-150-625
9.	4889 WESTLAWN DR	Burnaby	002-661-683
10.	4881 WESTLAWN DR	Burnaby	001-381-202
11.	4876 WESTLAWN DR	Burnaby	002-428-237
12.	4871 FAIRLAWN DR	Burnaby	010-473-955
13.	4822 RIDGELAWN DR	Burnaby	010-063-366
14.	4872 RIDGELAWN DR	Burnaby	003-206-602

15.	4832 RIDGELAWN DR	Burnaby	010-036-261
16.	4802 RIDGELAWN DR	Burnaby	010-063-358
17.	4882 RIDGELAWN DR	Burnaby	002-764-644
18.	4852 RIDGELAWN DR	Burnaby	010-063-391
19.	4862 RIDGELAWN DR	Burnaby	002-939-479
20.	4842 RIDGELAWN DR	Burnaby	010-063-382
21.	4701 RIDGELAWN DR	Burnaby	002-580-527
22.	4711 RIDGELAWN DR	Burnaby	010-063-081
23.	4721 RIDGELAWN DR	Burnaby	000-659-100
24.	4731 RIDGELAWN DR	Burnaby	003-323-871
25.	4741 RIDGELAWN DR	Burnaby	002-532-743
26.	4751 RIDGELAWN DR	Burnaby	003-237-087
27.	4761 RIDGELAWN DR	Burnaby	002-874-504
28.	4771 RIDGELAWN DR	Burnaby	010-063-102
29.	4781 RIDGELAWN DR	Burnaby	002-580-683
30.	4791 RIDGELAWN DR	Burnaby	010-063-137
31.	4797 RIDGELAWN DR	Burnaby	002-622-742
32.	4801 RIDGELAWN DR	Burnaby	003-142-418
33.	4821 RIDGELAWN DR	Burnaby	000-790-231
34.	4831 RIDGELAWN DR	Burnaby	003-077-381
35.	4841 RIDGELAWN DR	Burnaby	002-581-248
36.	4851 RIDGELAWN DR	Burnaby	010-063-170
37.	4861 RIDGELAWN DR	Burnaby	010-063-188
38.	4871 RIDGELAWN DR	Burnaby	002-766-183
39.	4881 RIDGELAWN DR	Burnaby	010-063-218
40.	4891 RIDGELAWN DR	Burnaby	002-544-580
41.	4748 BRENTLAWN DR	Burnaby	003-393-224
42.	4708 BRENTLAWN DR	Burnaby	003-087-166
43.	4724 BRENTLAWN DR	Burnaby	009-855-998
44.	4716 BRENTLAWN DR	Burnaby	003-285-294
45.	2127 ALPHA AV	Burnaby	002-753-944
46.	2127 ALPHA AV	Burnaby	002-753-944
47.	2150 ALPHA AV	Burnaby	003-166-341
48.	2421 ALPHA AV	Burnaby	002-599-341
49.	2460 ALPHA AV	Burnaby	002-839-431
50.	4612 DAWSON ST	Burnaby	010-995-498
51.	2223 ALPHA AV	Burnaby	003-379-884
52.	2375 ALPHA AV	Burnaby	010-995-528
53.	4554 DAWSON ST	Burnaby	001-491-083
54.	2040 ALPHA AV	Burnaby	003-408-094
55.	2140 ALPHA AV	Burnaby	010-995-447
56.	2242 ALPHA AV	Burnaby	010-995-510
57.	4612 LOUGHEED HY	Burnaby	028-582-365
58.	2318 ALPHA AV	Burnaby	002-981-840

59.	3867 SPRUCE ST	Burnaby	002-622-556
60.	3861 SPRUCE ST	Burnaby	002-642-841
61.	4868 SMITH AV	Burnaby	002-465-752
62.	4855 SMITH AV	Burnaby	004-627-652
63.	4856 SMITH AV	Burnaby	003-395-537
64.	3793 PRICE ST	Burnaby	003-120-660
65.	5004 CHESHAM AV	Burnaby	003-790-169
66.	5010 CHESHAM AV	Burnaby	003-790-193
67.	4025 BRANDON ST	Burnaby	002-663-066
68.	4035 BURKE ST	Burnaby	005-698-758
69.	4063 BURKE ST	Burnaby	012-134-392
70.	4041 BURKE ST	Burnaby	005-698-774
71.	4053 BURKE ST	Burnaby	024-609-153
72.	4059 BURKE ST	Burnaby	024-609-161
73.	5191 PATTERSON AV	Burnaby	025-504-096
74.	5177 PATTERSON AV	Burnaby	024-210-706
75.	5328 BARKER AV	Burnaby	023-114-690
76.	5310 CARLETON CT	Burnaby	003-223-868
77.	5312 PATTERSON AV	Burnaby	025-773-381
78.	5364 PATTERSON AV	Burnaby	002-571-471
79.	5312 CARLETON CT	Burnaby	009-984-585
80.	5346 BARKER AV	Burnaby	004-835-093
81.	5308 CARLETON CT	Burnaby	003-361-250
82.	5356 BARKER AV	Burnaby	004-835-085
83.	5338 PATTERSON AV	Burnaby	023-962-496
84.	5315 BARKER AV	Burnaby	002-483-521
85.	5318 BARKER AV	Burnaby	023-114-703
86.	5366 BARKER AV	Burnaby	007-266-421
87.	5325 HALLEY AV	Burnaby	001-649-370
88.	5383 HALLEY AV	Burnaby	011-390-212
89.	5695 CHAFFEY AV	Burnaby	013-481-762
90.	4389 GRANGE ST	Burnaby	010-868-119
91.	4625 GRANGE ST	Burnaby	001-326-155
92.	4769 HAZEL ST	Burnaby	007-349-149
93.	4758 GRANGE ST	Burnaby	017-228-603
94.	6838 JUBILEE AV	Burnaby	002-897-717
95.	6830 FREDERICK AV	Burnaby	005-476-658
96.	6870 FREDERICK AV	Burnaby	002-627-183
97.	6859 DOW AV	Burnaby	002-740-206
98.	4379 IMPERIAL ST	Burnaby	003-014-215
99.	4134 MAYWOOD ST	Burnaby	001-881-485
100.	4850 PARKER ST	Burnaby	002-742-454
101.	4870 PARKER ST	Burnaby	003-234-827
102.	1001 DELTA AV	Burnaby	011-078-286

103.	4860 PARKER ST	Burnaby	010-482-199
104.	4880 PARKER ST	Burnaby	003-082-334
105.	4830 PARKER ST	Burnaby	010-482-253
106.	4840 PARKER ST	Burnaby	010-482-202
107.	4362 MAYWOOD ST	Burnaby	006-658-750
108.	6716 SILVER AV	Burnaby	003-191-940
109.	3095 ROSEMONT DR	Vancouver	009-124-331
110.	6501 CHAMBORD PL	Vancouver	VAS 2576

- b. by removing from the Fraser Sewerage Area, and by adding to the Vancouver Sewerage Area, the following 69 properties:

	Address	Municipality	PID or Strata Plan Number
1.	366 HOWARD AV	Burnaby	002-804-069
2.	4896 FAIRLAWN DR	Burnaby	001-732-641
3.	4881 SOUTHLAWN DR	Burnaby	001-831-500
4.	4450 STILL CREEK DR	Burnaby	026-817-063
5.	3700 GILMORE WY	Burnaby	024-289-281
6.	3680 GILMORE WY	Burnaby	019-179-740
7.	3755 WILLINGDON AV	Burnaby	002-542-242
8.	4078 SPRUCE ST	Burnaby	028-200-080
9.	4064 SPRUCE ST	Burnaby	004-519-922
10.	4090 SPRUCE ST	Burnaby	002-639-386
11.	4096 SPRUCE ST	Burnaby	004-519-931
12.	4212 MACDONALD AV	Burnaby	003-377-172
13.	4054 SPRUCE ST	Burnaby	004-519-914
14.	4086 SPRUCE ST	Burnaby	000-838-705
15.	3905 FOREST ST	Burnaby	009-466-487
16.	3855 SPRUCE ST	Burnaby	011-947-659
17.	3839 SPRUCE ST	Burnaby	018-716-989
18.	3845 SPRUCE ST	Burnaby	018-716-997
19.	5005 CHESHAM AV	Burnaby	001-816-233
20.	5050 INMAN AV	Burnaby	002-647-761
21.	4643 GRANGE ST	Burnaby	002-882-833
22.	4566 IMPERIAL ST	Burnaby	002-926-989
23.	4560 IMPERIAL ST	Burnaby	003-416-887
24.	6828 DOW AV	Burnaby	018-250-548
25.	4520 IMPERIAL ST	Burnaby	015-177-963
26.	4522 IMPERIAL ST	Burnaby	015-177-971
27.	4518 IMPERIAL ST	Burnaby	018-250-581
28.	4382 IMPERIAL ST	Burnaby	003-228-380
29.	4386 IMPERIAL ST	Burnaby	003-245-543
30.	4394 IMPERIAL ST	Burnaby	002-792-486

31.	6875 DUNBLANE AV	Burnaby	029-769-043
32.	4830 BOUNDARY RD	Burnaby	002-051-257
33.	4567 LOUGHEED HY	Burnaby	029-182-549
34.	2350 WILLINGDON AV	Burnaby	002-305-712
35.	2533 E KENT AVE N	Vancouver	007-763-859
36.	2428 SE MARINE DR	Vancouver	017-856-523
37.	2408 SE MARINE DR	Vancouver	017-900-107
38.	8428 ELLIOTT ST	Vancouver	018-235-221
39.	8488 ELLIOTT ST	Vancouver	016-681-274
40.	2455 E KENT AVE N	Vancouver	017-051-207
41.	2450 SE MARINE DR	Vancouver	009-066-217
42.	2508 SE MARINE DR	Vancouver	007-197-306
43.	2516 SE MARINE DR	Vancouver	007-185-979
44.	2526 SE MARINE DR	Vancouver	028-151-445
45.	2538 SE MARINE DR	Vancouver	017-990-092
46.	2546 SE MARINE DR	Vancouver	017-509-211
47.	2550 SE MARINE DR	Vancouver	017-330-831
48.	2560 SE MARINE DR	Vancouver	017-335-094
49.	2570 SE MARINE DR	Vancouver	017-378-893
50.	2597 E KENT AVE N	Vancouver	017-153-166
51.	2593 E KENT AVE N	Vancouver	017-127-939
52.	2573 E KENT AVE N	Vancouver	007-743-637
53.	2563 E KENT AVE N	Vancouver	027-523-756
54.	2557 E KENT AVE N	Vancouver	007-743-611
55.	2545 E KENT AVE N	Vancouver	007-763-875
56.	2541 E KENT AVE N	Vancouver	007-763-867
57.	2491 E KENT AVE N	Vancouver	018-157-360
58.	2495 E KENT AVE N	Vancouver	018-157-343
59.	2471 E KENT AVE N	Vancouver	018-988-083
60.	2477 E KENT AVE N	Vancouver	018-988-024
61.	2480 SE MARINE DR	Vancouver	029-584-469
62.	2580 SE MARINE DR	Vancouver	018-490-204
63.	2515 E KENT AVE N	Vancouver	018-558-526
64.	2505 E KENT AVE N	Vancouver	018-559-191
65.	3598 E KENT AVE N	Vancouver	025-094-505
66.	2582 E KENT AVE S	Vancouver	014-496-577
67.	2550 E KENT AVE S	Vancouver	014-496-917
68.	3090 EAST 54TH AVE	Vancouver	009-127-666
69.	3110 EAST 54TH AVE	Vancouver	006-675-026

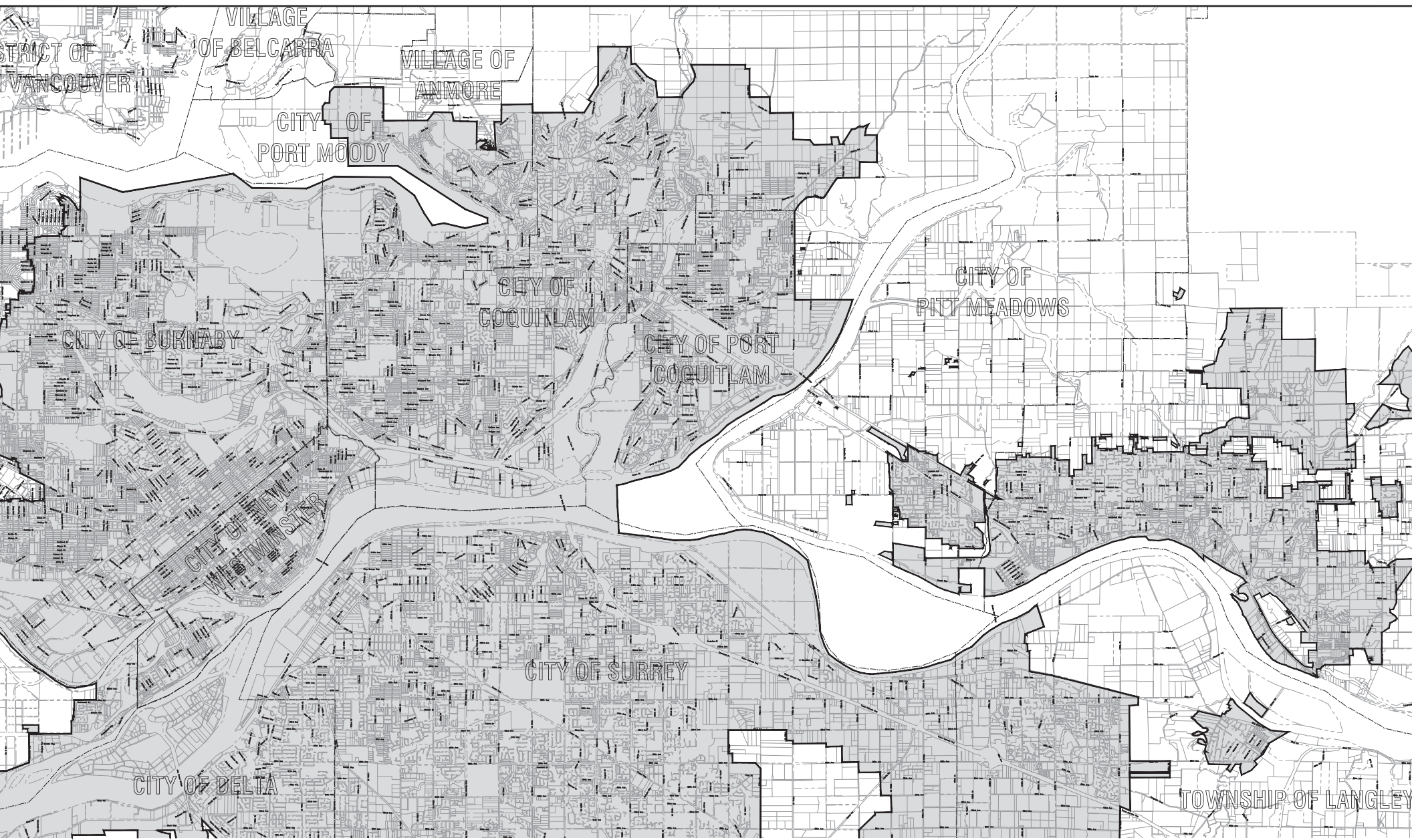
- c. by replacing Schedule "A" of Bylaw 310, 2018, as amended, with the attached Schedule "A", forming part of this bylaw, containing Drawing Number S-3200 Sheet 1 titled "Greater Vancouver Sewerage and Drainage District Plan of Fraser Sewerage Area North Portion" dated Feb 1, 2022 to show the boundaries of the Fraser Sewerage Area, as amended, and
- d. by replacing Schedule "C" of Bylaw 310, 2018, as amended, with the attached Schedule "C", forming part of this bylaw, containing Drawing Number S-3200 Sheet 3 titled "Greater Vancouver Sewerage and Drainage District Plan of Vancouver Sewerage Area" dated Feb 1, 2022 to show the boundaries of the Vancouver Sewerage Area, as amended.

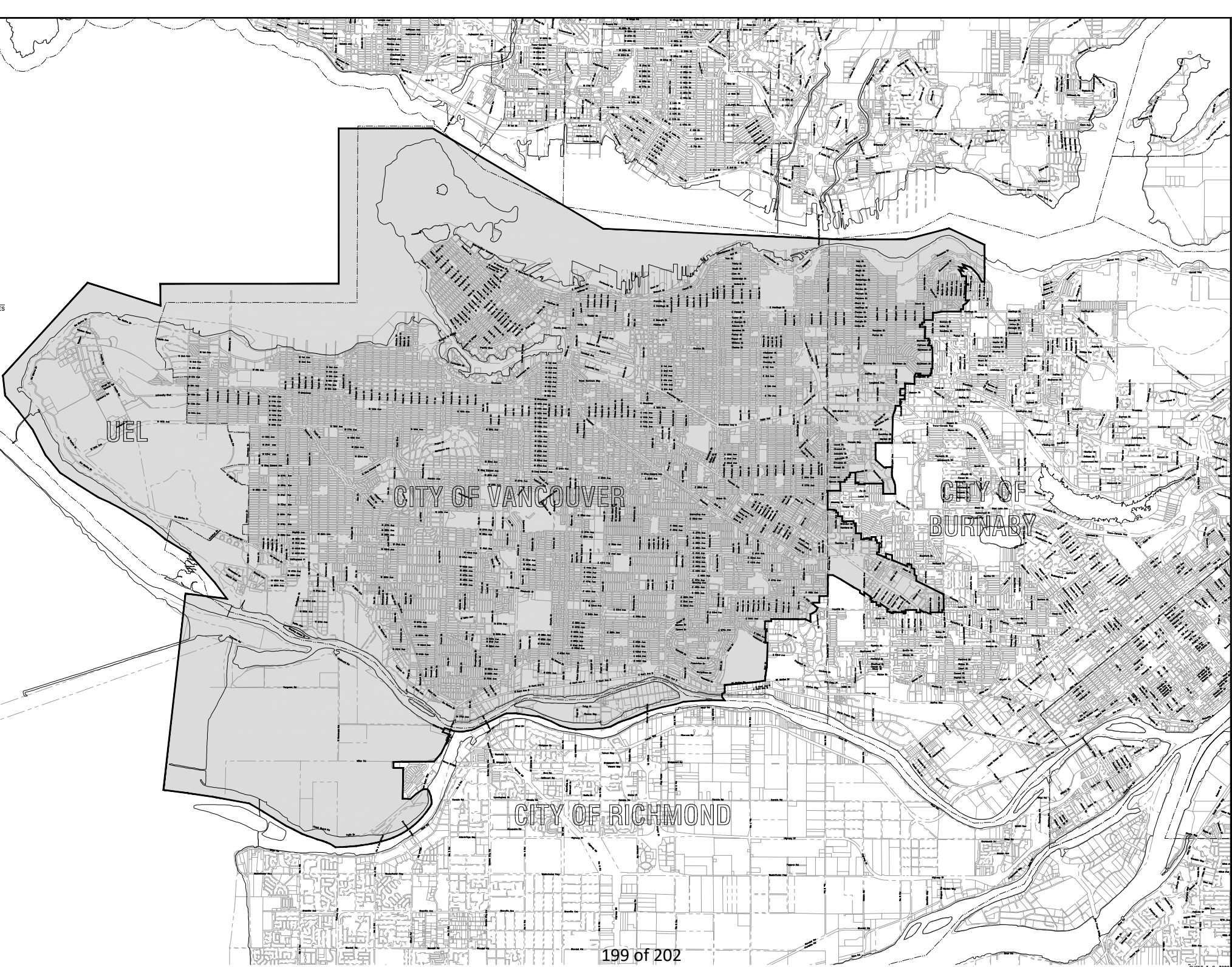
Read a first, second and third time this _____ day of _____, _____.

Passed and finally adopted this _____ day of _____, _____.

Sav Dhaliwal, Chair

Chris Plagnol, Corporate Officer







September 14, 2021

Paul Kadota
Director Policy Planning and Analysis
Liquid Waste Services
Metro Vancouver
Via email to paul.kadota@metrovancover.org

Dear Mr. Kadota,

RE: Vancouver and Fraser Sewerage Area Boundary Changes

Metro Vancouver, working with City of Vancouver and City of Burnaby staff, recently conducted a review of the VSA/FSA boundary alignment to ensure that properties shown on the Metro Vancouver GIS mapping system were contributing sewage to the appropriate sewerage area. The review identified a number of properties that were historically identified in one sewerage area, but in fact were contributing sewage to the other sewerage area.

To correct the mis-identified properties, we understand that Metro Vancouver is required to complete an administrative correction of the FSA and VSA maps to show these properties in the correct sewerage area. To complete the process, the GVS&DD Board will be asked to amend the Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Bylaw No. 318 to reflect the correct alignment.

City of Vancouver staff support the proposed changes and confirm that the proposed realignment of the FSA and VSA boundary accurately reflects the current boundary alignment within Vancouver.

Yours truly,

A handwritten signature in black ink, appearing to read "Jimmy".

Jimmy Zammar, M.A.Sc., M.Sc., PMP
Director, Urban Watersheds, Sewers & Drainage
Engineering Services, City of Vancouver
604-871-6880
jimmy.zammar@vancouver.ca

cc: Mark Wellman, Metro Vancouver



Engineering Department

2021 September 16

Paul Kadota
 Director of Policy, Planning & Analysis (PPA), Liquid Waste Services
 Metro Vancouver
 Metrotown III, 4730 Kingsway
 Burnaby BC V5H 0C6

Mr. Kadota:

RE: ADJUSTMENT TO FSA/VSA BOUNDARY

City of Burnaby staff, working with City of Vancouver and Metro Vancouver staff, recently conducted a review of the VSA/FSA boundary alignment to ensure that properties shown on the Metro Vancouver GIS mapping system were contributing sewage to the appropriate sewerage area. The review identified a number of properties that were historically identified in one sewerage area, but in fact were contributing sewage to the other sewerage area.

To correct the misidentified properties, we understand that Metro Vancouver is required to complete an administrative correction of the FSA and VSA maps to show these properties in the correct sewerage area. To complete the process, the GVS & DD Board will be asked to amend the Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Bylaw No. 318 to reflect the correct alignment.

City of Burnaby staff support the proposed changes and confirm that the proposed realignment of the FSA and VSA boundary accurately reflects the current contributions to the sewerage areas.

Sincerely,

Simone Rousseau, P.Eng., M.Eng.
 Manager, Infrastructure

RLP/jv

Copied to: Brent Burton, Division Manager, PPA, Liquid Waste, Metro Vancouver
 Mark Wellman, Senior Engineer, PPA, Liquid Waste, Metro Vancouver
 May Phang, Asst Director, Engineering Infrastructure & Development, City of Burnaby

COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES

Greater Vancouver Sewerage and Drainage District
Board Meeting Date – Friday, April 29, 2022

This information item, listing recent information received by committee, is provided for the GVS&DD Board's information. Please access a complete PDF package [here](#).

Zero Waste Committee – April 8, 2022*Delegation Summaries:*

No delegations presented

Information Items:

- 5.4 Solid Waste Services Capital Program Expenditure Update as of December 31, 2021
- 5.7 2021 Holiday Waste "Create Memories, Not Garbage" Campaign Results

Liquid Waste Committee – April 13, 2022*Delegation Summaries:*

No delegations presented

Information Items:

- 5.3 Liquid Waste Services Capital Program Expenditure Update as at December 31, 2021
- 5.4 Project Delivery Capital Portfolio Update

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