

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

BOARD MEETING

Friday, March 31, 2023

9:00 am

28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia

Webstream available at <http://www.metrovancouver.org>

[Membership and Votes](#)

A G E N D A¹

A. ADOPTION OF THE AGENDA

1. March 31, 2023 Meeting Agenda

That the GVS&DD Board adopt the agenda for its meeting scheduled for March 31, 2023 as circulated.

B. ADOPTION OF THE MINUTES

1. February 24, 2023 Meeting Minutes

That the GVS&DD Board adopt the minutes for its meeting held February 24, 2023 as circulated.

pg. 5

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. CLIMATE ACTION COMMITTEE REPORTS

1.1 2023 Liquid Waste Sustainability Innovation Fund Application

That the GVS&DD Board approve the allocation from the Liquid Waste Sustainability Innovation Fund of \$625,000 over two years starting in 2023 for the Hydrogen System Integration at Lulu Island Wastewater Treatment Plant (Phase 1) project.

pg. 10

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

2. LIQUID WASTE COMMITTEE REPORTS

2.1 **Appointment of Deputy Sewage Control Manager and Enforcement Officers** pg. 15

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* and the *Environmental Management Act*:
 - i. appoint Metro Vancouver employee Riley Sziklai as a deputy sewage control manager;
 - ii. rescind the appointments of former Metro Vancouver employees Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens as officers; and
 - iii. appoint Metro Vancouver employees Mosi Aghbolaghy, Michael Goods, Jim Penrose, Jeffery Schmidt and Joanne Tunkiewicz as officers; and
 - iv. appoint City of Vancouver employee Bonny Brokenshire 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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens; and
 - ii. appoint Metro Vancouver employees Jeffery Schmidt and Joanne Tunkiewicz; and
 - iii. appoint City of Vancouver employee Bonny Brokenshire.

2.2 **Award of Contract Resulting from Request for Proposal No. 22-009: Supply and Installation of North Road Trunk Sewer No. 2 - Phase 2 Lougheed Highway to Clarke Road** pg. 18

That the GVS&DD Board:

- a) approve the award of a contract for an amount of \$7,947,758.20 (exclusive of taxes) to Clearway Construction Inc., resulting from Request for Proposal No. 22-009: Supply and Installation of North Road Trunk Sewer No. 2 Phase 2 Lougheed Highway to Clarke Road, 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.

2.3 **Award of Phase C3, Engineering Construction Services for RFP 14-230 for Installation of Gilbert Trunk Sewer No.2 Central Section** pg. 22

That the GVS&DD Board:

- a) approve the award of Phase C3, Engineering Construction Services, for an amount up to \$2,997,555 (exclusive of taxes) to the Phase A and B consultant, AECOM Canada Ltd, for the Installation of Gilbert Trunk Sewer No.2 Central Section, and
- b) authorize the Commissioner and Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

2.4 North Shore Wastewater Treatment Plant Project Early Works Agreement Extension *pg. 25*

That the GVS&DD Board:

- a) approve a change order to PCL Constructors Westcoast Inc. Pre-Construction Services and Early Works Agreements (PC21-457 and PC22-227) in an amount of up to \$85,000,000 (exclusive of taxes), 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 amendment should proceed.

3. ZERO WASTE COMMITTEE REPORTS

3.1 Appointment of Solid Waste Bylaw Enforcement Officers *pg. 28*

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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens as officers; and
 - ii. Appoint Metro Vancouver employees Mosi Aghbolaghy, Michael Goods, Jim Penrose, Jeffery Schmidt and Joanne Tunkiewicz as officers.
- 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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens; and
 - ii. Appoint Metro Vancouver employees Jeffery Schmidt and Joanne Tunkiewicz.

F. ITEMS REMOVED FROM THE CONSENT AGENDA

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

1. LIQUID WASTE COMMITTEE REPORTS

1.1 Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023 – Wet Weather Pricing *pg. 30*

That the GVS&DD Board:

- a) approve the amendments to the *Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014* as presented in the Attachment to the report dated March 9, 2023 titled “Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023 - Wet Weather Pricing”;
- b) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023*; and
- c) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023*.

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

I. OTHER BUSINESS

1. GVS&DD Board Committee Information Items and Delegation Summaries *pg. 44*

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 meeting scheduled for March 31, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

- 90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
- (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality; and
 - (g) litigation or potential litigation affecting the municipality.

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

M. ADJOURNMENT/CONCLUSION

That the GVS&DD Board adjourn/conclude its meeting of March 31, 2023.

**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 9:53 am on Friday, February 24, 2023, in the 28th Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

MEMBERS PRESENT:

Delta, Chair, Director George V. Harvie	Richmond, Director Bill McNulty
Anmore, Vice Chair, Director John McEwen	Richmond, Director Chak Au
Burnaby, Director Pietro Calendino	Surrey, Director Linda Annis
Burnaby, Director Sav Dhaliwal	Surrey, Director Harry Bains
Burnaby, Director Mike Hurley	Surrey, Director Gordon Hepner
Coquitlam, Director Craig Hodge	Surrey, Director Pardeep Kooner
Coquitlam, Director Teri Towner	Surrey, Director Brenda Locke
Delta, Director Dylan Kruger	Surrey, Director Rob Stutt
Electoral Area A, Director Jen McCutcheon	Vancouver, Director Rebecca Bligh*
Langley City, Director Paul Albrecht	Vancouver, Director Adriane Carr
Langley Township, Director Eric Woodward	Vancouver, Director Lisa Dominato
Langley Township, Director Steve Ferguson	Vancouver, Director Sarah Kirby-Yung*
Maple Ridge, Director Dan Ruimy	Vancouver, Director Mike Klassen
New Westminster, Director Patrick Johnstone	Vancouver, Director Ken Sim
North Vancouver City, Director Linda Buchanan	Vancouver, Director Lenny Zhou
North Vancouver District, Director Lisa Muri	West Vancouver, Director Mark Sager
Port Coquitlam, Director Brad West	White Rock, Director Megan Knight
Port Moody, Director Meghan Lahti	Commissioner Jerry W. Dobrovolny
Richmond, Director Malcolm Brodie	(Non-voting member)

MEMBERS ABSENT:

Pitt Meadows, Director Nicole MacDonald

STAFF PRESENT:

Dorothy Shermer, 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. February 24, 2023 Meeting Agenda

It was MOVED and SECONDED

That the GVS&DD Board adopt the agenda for its meeting scheduled for February 24, 2023 as circulated.

CARRIED

B. ADOPTION OF THE MINUTES

1. January 27, 2023 Meeting Minutes

It was MOVED and SECONDED

That the GVS&DD Board adopt the minutes for its meeting held January 27, 2023 as circulated.

CARRIED

2. February 3, 2023 Special Joint Meeting Minutes

It was MOVED and SECONDED

That the GVS&DD Board adopt the minutes for its special joint meeting held February 3, 2023 as circulated.

CARRIED

C. DELEGATIONS

No items presented.

D. INVITED PRESENTATIONS

No items presented.

E. CONSENT AGENDA

At the request of the 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:

- 1.1 Recommended Wet Weather Cost Apportionment Approach

It was MOVED and SECONDED

That the GVWD Board adopt the recommendations in the following items as presented in the February 24, 2023 GVS&DD Board Consent Agenda:

- 2.1 Award of Contract from RFP No. 22-186: Municipal Solid Waste Contingency Disposal Services

CARRIED

The items and recommendations referred to above are as follows:

2.1 Award of Contract from RFP No. 22-186: Municipal Solid Waste Contingency Disposal Services

Report dated February 2, 2023, from Paul Henderson, General Manager, Solid Waste Services, and George Kavouras, Acting Director, Procurement and Real Estate Services, providing the GVS&DD Board with the results of Request for Proposals No. 22-186: Municipal Solid Waste Contingency Disposal Services and recommending the award of three (3) separate contracts to (1) GFL Environmental Inc. in an amount up to \$47,330,000 (exclusive of taxes), (2) Republic Services in an amount up to \$44,720,000 (exclusive of taxes), and (3) Waste Management of Canada Corporation in an amount up to \$48,510,000 (exclusive of taxes).

Recommendation

That the GVS&DD Board:

- a) approve award of three (3) separate, five (5) year contracts, resulting from Request for Proposals No. 22-186: Municipal Solid Waste Contingency Disposal Services as follows:
 - i. GFL Environmental Inc. in the amount of up to \$47,330,000 (exclusive of taxes);
 - ii. Republic Services in the amount of up to \$44,720,000 (exclusive of taxes);
 - iii. Waste Management of Canada Corporation in the amount of up to \$48,510,000 (exclusive of taxes); and,
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the awards should proceed.

Adopted on Consent

F. ITEMS REMOVED FROM THE CONSENT AGENDA

1.1 Recommended Wet Weather Cost Apportionment Approach

Report dated January 30, 2023, from Paul Kadota, Director, Policy, Planning and Analysis, Liquid Waste Services, providing the GVS&DD Board with the recommended approach for wet weather cost apportionment and requesting direction to make commensurate adjustments to *Cost Apportionment Bylaw 283, 2014*.

Members were provided a presentation on the recommended wet weather cost apportionment approach, highlighting the principles of the recommended wet weather rate structure and allocations. Members commented on the impacts of the growing population on the infrastructure and highlighted the need to consider cost implications for municipalities.

Presentation material titled "Recommended Wet Weather Cost Apportionment Approach" is retained with the February 24, 2023 GVWD Board agenda.

It was MOVED and SECONDED

That the GVS&DD Board:

- a) direct staff to prepare amendments to *Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw 283, 2014* for its consideration in accordance with the key terms described in the report dated January 30, 2023, titled "Recommended Wet Weather Cost Apportionment Approach"; and
- b) initiate wet weather cost apportionment in the 2024 billing cycle to be implemented incrementally over ten years.

CARRIED

G. REPORTS NOT INCLUDED IN CONSENT AGENDA

No items presented.

H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN

No items presented.

I. OTHER BUSINESS

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

J. BUSINESS ARISING FROM DELEGATIONS

No items presented.

K. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED

That the GVSDD Board close its meeting scheduled for February 24, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

- 90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
- (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality.

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 meeting of February 24, 2023.

CARRIED

(Time: 10:16 am)

CERTIFIED CORRECT

Dorothy Shermer, Corporate Officer

George V. Harvie, Chair

58372502 FINAL

To: Climate Action Committee

From: Lillian Zaremba, Program Manager, Collaborative Innovations, Liquid Waste Services

Date: February 21, 2023 Meeting Date: March 9, 2023

Subject: **2023 Liquid Waste Sustainability Innovation Fund Application**

RECOMMENDATION

That the GVS&DD Board approve the allocation from the Liquid Waste Sustainability Innovation Fund of \$625,000 over two years starting in 2023 for the Hydrogen System Integration at Lulu Island Wastewater Treatment Plant (Phase 1) project.

EXECUTIVE SUMMARY

The Climate Action Committee is responsible for overseeing the Sustainability Innovation Funds, and for making all funding recommendations to the respective Boards. Staff assist the Climate Action Committee in reviewing and evaluating all proposals that are submitted for consideration. This report presents the Hydrogen System Integration at Lulu Island Wastewater Treatment Plant (Phase 1) project recommended for funding, totaling \$625,000 over two years, which will be funded through the Liquid Waste Sustainability Innovation Fund. The project aims to generate additional renewable natural gas and green hydrogen from wastewater, to decrease the use of fossil natural gas in the region.

PURPOSE

To present one project recommended for Sustainability Innovation Funding for the Climate Action Committee and the GVS&DD Board's consideration.

BACKGROUND

The Liquid Waste Sustainability Innovation Fund was created by the Board in 2004 to provide financial support to Liquid Waste Utility projects that contribute to the region's sustainability. The GVS&DD Board adopted the *Liquid Waste Sustainability Innovation Fund Policy* on June 27, 2014, with further amendments in 2016 and 2021, to guide the use and management of the Fund. The Policy describes a process of generating, submitting, evaluating and recommending proposals for funding each year.

The Climate Action Committee is responsible for overseeing the Fund, and for making all funding recommendations to the respective Boards. Staff assist the Climate Action Committee in reviewing and evaluating all proposals that are submitted for consideration.

LIQUID WASTE SUSTAINABILITY INNOVATION FUND POLICY

On an annual basis, Liquid Waste projects are submitted to an internal staff Steering Committee, representing a cross-section of the organization, to evaluate projects and initiatives based on the Fund's evaluation criteria. As defined in the policy, projects need to fulfill the following criteria:

- be overseen by the GVSⅅ

- be consistent with the authority and responsibility of the GVSⅅ
- be consistent with the objectives of the *Integrated Liquid Waste and Resource Management Plan* and/or the *Board Strategic Plan*;
- consider partnerships including, but not limited to, member jurisdictions, academic institutions, non-governmental organizations, and community groups;
- result in a positive contribution, in the form of tangible results and/or measurable benefits, to the sustainability of the region; and,
- demonstrate innovation and facilitate action.

On an annual basis the Climate Action Committee receives an update report on the projects supported by the Fund including the deliverables, outcomes, and the measurable benefits of these projects to the region’s sustainability. A summary of past projects can be found on the Sustainability Innovation Program website (see Reference).

2023 APPLICATION PROCESS

An internal call for proposals closed on November 4, 2022 and two proposals concerning Liquid Waste were considered by the cross-departmental Sustainability Innovation Fund Steering Committee, comprised of representatives from seven different departments within Metro Vancouver.

The Steering Committee evaluated the submissions and determined that one application strongly aligns with promoting regional sustainability and innovation. The project recommended for funding by the Steering Committee is listed in the table below with additional detail provided in the executive summary (see Attachment).

Recommended Allocation from the Liquid Waste Sustainability Innovation Fund		
Project Title	Year	Amount Requested
Hydrogen System Integration at Lulu Island Wastewater Treatment Plant Pilot (Phase 1)	2023-2024	\$625,000

ALTERNATIVES

1. That the GVS&DD Board approve the allocation from the Liquid Waste Sustainability Innovation Fund of \$625,000 over two years starting in 2023 for the Hydrogen System Integration at Lulu Island Wastewater Treatment Plant (Phase 1) project.
2. That the Climate Action Committee receive for information the report dated February 21, 2023, titled “2023 Liquid Waste Sustainability Innovation Fund Application” and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, \$625,000 for one project will be disbursed from the Liquid Waste Sustainability Innovation Fund over two years. The Fund has sufficient capacity to support Alternative 1.

The approved project will be incorporated into the applicable work plans and budgets.

CONCLUSION

The Liquid Waste Sustainability Innovation Fund was created by the Board in 2004 to provide financial support for Liquid Waste projects that contribute to the region's sustainability. The *Liquid Waste Sustainability Innovation Fund Policy* guides the use and management of the Fund and describes the process of generating, submitting, evaluating and recommending proposals for funding each year. The Climate Action Committee is responsible for overseeing the Fund, and for making all funding recommendations to the GVS&DD Board. Staff assist the Climate Action Committee in reviewing and evaluating all proposals that are submitted for consideration.

This report presents the Steering Committee's recommendation to fund the Hydrogen System Integration at Lulu Island Wastewater Treatment Plant (Phase 1) project.

Additional details of the project are provided in the attached executive summary. Staff recommend that the Climate Action Committee approve the Steering Committee's recommendations for funding the proposal and forward the recommendation to the GVS&DD Board for consideration. Staff recommendation is presented as Alternative 1.

Attachment

Liquid Waste Services Sustainability Innovation Fund – Executive Summary

Reference

Sustainability Innovation Program website: <http://www.metrovancouver.org/services/air-quality/sustainability-innovation-program/Pages/default.aspx>

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Sustainability Innovation Fund: Liquid Waste Services Executive Summary

Project Name: **Hydrogen System Integration at Lulu Island Wastewater Treatment Plant**

Amount Requested from Sustainability Innovation Fund: \$625,000 for Phase 1 (2023-2024)

Purpose:

The purpose of this project is to evaluate the technical feasibility of integrating a hydrogen system at the Lulu Island Wastewater Treatment Plant (WWTP). The entire system includes hydrogen production from wastewater by-products, hydrogen injection into wastewater digestion processes, and hydrogen blending. The hydrogen injection component builds on insights gained from a previous SIF project, Genomics Approach to Anaerobic Digestion Optimization, that discovered a particular microbial community can convert more carbon dioxide to methane when supplemented with hydrogen gas. The goal of the hydrogen system is to increase the renewable natural gas (RNG) content of biogas produced by wastewater treatment processes and produce green hydrogen to reduce fossil fuel usage in the natural gas grid.

Project Objectives:

The project consists of two phases with the intent to seek funding separately for each phase. This application is for Phase 1, which includes a feasibility study of hydrogen production and hydrogen blending, and a trial of hydrogen injection using external supplies of hydrogen and carbon dioxide to evaluate the increase in methane production. Phase 1 will take place over two years (2023-2024) with the following objectives:

- Design, construct and install the hydrogen injection system.
- Operate and evaluate the performance of the hydrogen injection system.
- Determine feasibility of onsite hydrogen production systems.

A positive assessment may lead to Phase 2, testing the entire hydrogen system integrated into the Lulu Island Pilot Digestion Optimization Facility. In Phase 2, the hydrogen injection system would use hydrogen provided from an onsite hydrogen production system and carbon dioxide provided from the Lulu Island WWTP Biogas Cleanup Facility.

Contributions to Regional Sustainability:

Due to the biological pathways being harnessed, methane produced by the hydrogen injection system with a green hydrogen source has a low carbon intensity. The enhanced production of RNG at WWTPs using this technology helps displace fossil natural gas, reduce regional greenhouse gas emissions, and generate revenue. In addition, the project will explore the production of hydrogen from by-products of existing wastewater treatment processes such as ammonia and waste carbon

dioxide from the biogas clean-up facility. Onsite hydrogen production from these waste streams offers the potential to sell excess hydrogen along with excess RNG, further contributing to the circular economy and generating revenue on two fronts.

Innovation Element:

The hydrogen injection system is a first-of-its-kind innovation that maximizes anaerobic digestion's biological potential to produce usable RNG, by activating naturally-occurring microbes called hydrogenotrophic methanogenic archaea. While the proof of concept has been tested at bench scale, this hydrogen injection system will be the first prototype developed in a wastewater treatment plant. The trial (Phase 1) and integrated pilot (Phase 2) are key next steps in scaling up the technology to leverage existing digesters and biogas cleanup facilities at WWTPs. The value proposition of generating green hydrogen from waste streams and using waste carbon dioxide to produce more RNG provides an opportunity for accelerating the transition to a low-carbon economy.

Tangible Benefits and Outcomes:

The hydrogen system increases RNG production at WWTPs and produces green hydrogen as tangible benefits. The outcomes of this project will enable Metro Vancouver to determine whether to move to the next step of piloting the fully integrated hydrogen system, and ultimately how to implement the hydrogen system at full scale in its facilities to produce additional RNG and green hydrogen in support of corporate and regional climate goals. The following are outcomes for Phase 1:

- Detailed design and construction of the trial hydrogen injection system.
- Testing and sampling program to evaluate system effectiveness, including the shift in the microbial community and the amount of additional RNG generated.
- Small-scale test of hydrogen production from ammonia.
- Business case and life-cycle analysis of financial and environmental benefits for full-scale implementation.
- Recommendations for Phase 2.

Members and other Partners:

Liquid Waste Services staff will lead the project, with collaboration among several divisions. A consulting engineering team will support design, construction and operation. Metro Vancouver will work with an external lab to perform DNA extraction and sequencing from sludge samples. Metro Vancouver will partner with the University of British Columbia Life Sciences Institute (LSI) Bioinformatics Facility to analyze the microbial DNA sequencing results.

To: Liquid Waste Committee

From: Kathy Preston, Director Environmental Regulation and Enforcement, Parks & Environment

Date: March 8, 2023 Meeting Date: March 15, 2023

Subject: **Appointment of Deputy 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. appoint Metro Vancouver employee Riley Sziklai as a deputy sewage control manager;
 - ii. rescind the appointments of former Metro Vancouver employees Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens as officers; and
 - iii. appoint Metro Vancouver employees Mosi Aghbolaghy, Michael Goods, Jim Penrose, Jeffery Schmidt and Joanne Tunkiewicz as officers; and
 - iv. appoint City of Vancouver employee Bonny Brokenshire 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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens; and
 - ii. appoint Metro Vancouver employees Jeffery Schmidt and Joanne Tunkiewicz; and
 - iii. appoint City of Vancouver employee Bonny Brokenshire.
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EXECUTIVE SUMMARY

Recent changes in staff have resulted in a need to update staff appointments as Greater Vancouver Sewerage and Drainage District (GVS&DD) Board-designated officers and a deputy sewage control manager and officers under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* (the 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 a Board-designated deputy sewage control manager 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 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* grant authority to Board-designated deputy sewage control managers and officers.

ROLE OF THE DEPUTY SEWAGE CONTROL MANAGER

A deputy sewage control manager has the same powers as the sewage control manager under the *Environmental Management Act* and is a statutory decision maker in the administration of *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007*. The deputy 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 GVS&DD liquid waste management bylaws within the boundaries of the GVS&DD. Within the City of Vancouver, City staff have historically administered these bylaws. 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 GVS&DD liquid waste management bylaws.

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. appoint Metro Vancouver employee Riley Sziklai as a deputy sewage control manager;
 - ii. rescind the appointments of former Metro Vancouver employees Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens as officers; and
 - iii. appoint Metro Vancouver employees Mosi Aghbolaghy, Michael Goods, Jim Penrose, Jeffery Schmidt and Joanne Tunkiewicz as officers; and
 - iv. appoint City of Vancouver employee Bonny Brokenshire 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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens; and
 - ii. appoint Metro Vancouver employees Jeffery Schmidt and Joanne Tunkiewicz; and
 - iii. appoint City of Vancouver employee Bonny Brokenshire.

2. That the GVS&DD Board receive for information the report dated March 8, 2023 titled “Appointment of Deputy 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 a GVS&DD Board-designated deputy 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.

57391996

To: Liquid Waste Committee

From: George Kavouras, Acting Director Procurement, Procurement and Real Estate Services
Colin Meldrum, Director Engineering Design and Construction, Liquid Waste Services

Date: March 8, 2023 Meeting Date: March 15, 2023

Subject: **Award of Contract Resulting from Request for Proposal No. 22-009: Supply and Installation of North Road Trunk Sewer No. 2 - Phase 2 Lougheed Highway to Clarke Road**

RECOMMENDATION

That the GVS&DD Board:

- a) approve the award of a contract for an amount of \$7,947,758.20 (exclusive of taxes) to Clearway Construction Inc., resulting from Request for Proposal No. 22-009: Supply and Installation of North Road Trunk Sewer No. 2 Phase 2 Lougheed Highway to Clarke Road, 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

A Request for Proposal (RFP) No. 22-009 was issued in October 2022 for supply and installation of North Road Trunk Sewer No. 2 Phase 2 Lougheed Highway to Clarke Road. Clearway Construction Inc. was identified as the highest ranked and lowest cost proponent. It is recommended that the GVS&DD Board authorize the award of a Contract for Supply and Installation of North Road Trunk Sewer No. 2 Phase 2 Lougheed Highway to Clarke Road, in an amount of \$7,947,758.20 (exclusive of taxes) to Clearway Construction Inc. and authorize the Commissioner and the Corporate Officer to execute the required documentation.

PURPOSE

This report is to advise the GVS&DD Board of the results of RFP No. 22-009: Supply and Installation of North Road Trunk Sewer No. 2 Phase 2 Lougheed Highway to Clarke Road and to recommend award of the contract in an amount of \$7,947,758.20 to Clearway Construction Inc. (Clearway).

BACKGROUND

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

PROJECT DESCRIPTION

The existing North Road Trunk Sewer, located on North Road between Clarke Road and Brunette River is required to be upsized to accommodate the increasing wastewater flows from the catchment, due to population growth and ongoing developments in the City of Burnaby and the City

of Coquitlam. The sewer upgrade project called North Road Trunk Sewer No. 2 is divided into three phases:

- Phase 1A – the section between Brunette River and Lougheed Highway;
- Phase 1B – Burlington Northern Santa Fe (BNSF) Railway crossing south of Highway 1; and
- Phase 2 – the section between Lougheed Highway and Clarke Road.

Phase 1A was completed in 2020, and Phase 1B will be constructed subject to resolution of the property issues with BNSF Railway. The design of Phase 2 was completed and is the subject of this award.

EVALUATION

As a result of Request for Qualifications (RFQ) No. 22-008: Supply and Installation of North Road Trunk Sewer No. 2 Phase 2 Lougheed Highway to Clarke Road, six (6) experienced contractors were shortlisted and invited to respond to RFP No. 22-009. The RFP was issued in October 2022 and closed on December 21, 2022 with four (4) compliant submissions received, as shown in Table 1 below.

Table 1: Proponent Submission Pricing

Proponent	Proposed Fee (exclusive of taxes)
Clearway Construction Inc.	\$7,947,758.20
Hall Constructors	\$11,532,635.00
B&B Contracting (2012) Ltd	\$14,566,600.00
BEL Contracting	\$16,205,125.00

Proposals were evaluated based on a weighting of 50% technical and 50% financial criteria. The technical component of the proposals was evaluated by staff within Liquid Waste Services and supporting external consultants and the financial component was evaluated by staff within the Procurement Division.

Clearway succeeded in delivering the previous North Road Trunk Sewer No. 2 Phase 1A with acceptable quality of work, on time, and within budget. The majority of their proposed Phase 2 construction management staff are new to the project team; however, they are all experienced in the proposed type of sewer installation work. Their proposed subcontractors are known to MV with good experiences and references.

As allowed for within the competition documents, negotiations were conducted with Clearway, as the highest ranked proponent. The negotiations re-confirmed their commitments and strategies to address and tackle the foreseeable challenges with trench excavation, traffic management, and other site constraints on North Road. Also, Clearway thoroughly reviewed the work scope requirements and confirmed their clear understanding and accurate pricing, as given in the

proposal. The contract value after negotiations remains unchanged at \$7,947,758.20 (exclusive of taxes).

ALTERNATIVES

1. That the GVS&DD Board:
 - a) approve the award of a contract for an amount of up to \$7,947,758.20 (exclusive of taxes) to Clearway Construction Inc., resulting from Request for Proposal No. 22-009: Supply and Installation of North Road Trunk Sewer No. 2 Phase 2 Loughed Highway to Clarke Road, 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 Request for Proposal No. 22-009: Supply and Installation of North Road Trunk Sewer No. 2 Phase 2 Loughed Highway to Clarke Road and direct staff to report back to the GVS&DD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS

If the GVS&DD Board approves Alternative 1, a contract will be awarded to Clearway Construction Inc. in the amount of \$7,947,758.20 (exclusive of taxes) to complete Phase 2 section between Loughed Highway and Clarke Road. This amount is within the overall North Road Trunk Sewer No. 2 construction budget and higher than the engineer's estimate for the work by about \$1M.

The GVS&DD Board has the choice not to proceed with Alternative 1, but staff will need further direction in relation to completion of the project. Alternative 2 will result in a delay in construction of the Phase 2 section between Loughed Highway and Clarke Road which would potentially result in damage to the environment due to wastewater overflows from the undersized sewer system and incur higher construction costs in the future.

CONCLUSION

Request for Proposals No. 22-009 was issued in October 2022 for Supply and Installation of North Road Trunk Sewer No. 2 - Phase 2 Loughed Highway to Clarke Road. Clearway Construction Inc. was identified as the highest ranked and lowest cost proponent. It is therefore recommended that the GVS&DD Board authorize the award of a contract resulting from RFP No. 22-009 for the Supply and Installation of North Road Trunk Sewer No. 2 - Phase 2 Loughed Highway to Clarke Road, in an amount of \$7,947,758.20, to Clearway Construction Inc. and authorize the Commissioner and the Corporate Officer to execute the required documentation.

Attachment

North Road Sewer Upgrade

58096905



To: Liquid Waste Committee

From: George Kavouras, Acting Director Procurement, Procurement and Real Estate Services
Colin Meldrum, Director Engineering Design and Construction, Liquid Waste Services

Date: March 8, 2023 Meeting Date: March 15, 2023

Subject: **Award of Phase C3, Engineering Construction Services for RFP 14-230 for Installation of Gilbert Trunk Sewer No.2 Central Section**

RECOMMENDATION

That the GVS&DD Board:

- a) approve the award of Phase C3, Engineering Construction Services, for an amount up to \$2,997,555 (exclusive of taxes) to the Phase A and B consultant, AECOM Canada Ltd, for the Installation of Gilbert Trunk Sewer No.2 Central Section, 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

RFP 14-230 for consulting engineering services was awarded to AECOM Canada Ltd in May 2015 for design and construction of approximately 6.5km of the Gilbert Trunk Sewer No.2 (GTS2) in the City of Richmond. The project was split into three sections, North, South and Central. Construction of the North Section is complete. Construction of the South Section is underway. In October 2022, the GVS&DD Board awarded RFP 22-007 for Installation of the GTS2 Central Section to BD Hall Constructors.

The construction management services for the GTS2 Central Section are required to support the above noted construction contract. It is recommended that the GVS&DD Board authorize the Commissioner and the Corporate Officer to award Phase C3, Engineering Construction Services, for an amount up to \$2,997,555 (exclusive of taxes) to the Phase A and B consultant, AECOM Canada Ltd, for Engineering Construction Services for the GTS2 Central Section, bringing the total award to AECOM to date to \$10,822,323 for the project.

PURPOSE

This report is to request authorization by the GVS&DD Board to award Phase C3, Engineering Construction Services, in an amount of up to \$2,997,555 (exclusive of taxes), to the Phase A and B consultant, AECOM Canada Ltd. (AECOM), to support the Installation of the GTS2 Central Section.

BACKGROUND

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

This report is being brought forward to the Liquid Waste Committee to consider a recommendation to the GVS&DD Board to award Phase C3, Engineering Construction Services, for Installation of the GTS2 Central Section. The total award to date to AECOM for this project excluding this request is \$7,824,768.

PROJECT DESCRIPTION

The 10km long Gilbert Trunk Sewer that services the City of Richmond was found to be in a state of corrosion and in need of repair. A high level of maintenance is also required to address significant build-up of grease and dirt, which reduces the pipe capacity. In order to facilitate future repairs and efficient maintenance of the existing sewer, and to meet the long term capacity needs in the City of Richmond, it is necessary to construct the GTS2.

In May 2015, through a Request for Proposals (RFP 14-230), the consulting engineering services for 6.5km of the GTS2 was awarded to AECOM Canada Ltd. GTS2 was split into three Sections, North, South and Central . Construction of the North Section (1.8km long) was completed in December 2020. Construction of the South Section (2.2km long), previously awarded by the Board (RFP 22-006) is underway.

RFP 22-007 for Installation of the GTS2 Central Section (2.5km long) was awarded by the GVS&DD Board in October 2022 to BD Hall Constructors. Construction is expected to commence in the spring of 2023. The Engineering Construction Services for the GTS2 Central Section now need to be awarded.

Engineering Construction Services were accounted for in the original RFP (14-230) for consulting engineering services with the number of hours stipulated Metro Vancouver staff. The hours provided at that time were for evaluation purposes only. Metro Vancouver staff requested AECOM to provide an updated proposal for Engineering Construction Services for each section (North, South and Central). The GVS&DD Board previously awarded Engineering Construction Services Phases C1 (North Section) and C2 (South Section) for amounts of \$1,323,390 and \$2,548,466 (exclusive of taxes) respectively. This request is for Phase C3, award for Engineering Construction Services for the GTS2 Central Section in the amount of up to \$2,997,555 (exclusive of taxes).

ALTERNATIVES

1. That the GVS&DD Board:
 - a) approve the award of Phase C3, Engineering Construction Services, for an amount up to \$2,997,555 (exclusive of taxes) to the Phase A and B consultant, AECOM Canada Ltd., for Installation of the Gilbert Trunk Sewer No.2 Central Section, 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 terminate the contract with AECOM resulting from Request for Proposals 14-230 Consulting Engineering Services for Design and Construction of the Gilbert Trunk Sewer No.2 Central Section and direct staff to report back to the GVS&DD Board with options for alternative course of action.

FINANCIAL IMPLICATIONS

The GVS&DD Board previously approved a project budget of \$169,650,000. There are enough funds in the budget to accommodate award of Phase C3, Engineering Construction Services, to AECOM Canada Ltd, in the amount of up to \$2,997,555.

If the GVS&DD Board approves Alternative 1, an amendment in the amount of \$2,997,555 (exclusive of taxes) will be added to the contract with AECOM Canada Ltd.

The GVS&DD Board has the choice not to proceed with Alternative 1 but staff will need further direction in relation to completion of the project. Alternative 2 will result in delay in Installation of the GTS2 Central Section and possibly delay claims by the GTS2 Central Section Installation contractor as any alternative approach will require time to engage a new consultant to provide the necessary Engineering Construction Services.

CONCLUSION

A Request for Proposals (14-230) was issued for consulting engineering services for the design and construction of 6.5km of the GTS2. Work was contemplated to be done in three sections (North, South and Central). AECOM Canada Ltd was the successful proponent.

It is recommended that the GVS&DD Board Award Phase C3, Engineering Construction Services, for an amount up to \$2,997,555 (exclusive of taxes) to the Phase A and B consultant, AECOM Canada Ltd., for the Installation of the GTS2 Central Section.

The GVS&DD Board previously awarded Phases C1 and C2, Engineering Construction Services, for the GTS2 North and South Sections in the amounts of \$1,323,390 and \$2,548,466 (exclusive of taxes) respectively to the Phase A and B consultant.

This request for Phase C3 award brings the total award to AECOM Canada Ltd., to \$10,822,323 (exclusive of taxes), for the design and construction of the 6.5km GTS2.

Staff recommend Alternative 1.

57813215

To: Liquid Waste Committee

From: Cheryl Nelms, General Manager, Project Delivery

Date: March 3, 2023 Meeting Date: March 15, 2023

Subject: **North Shore Wastewater Treatment Plant Project Early Works Agreement Extension**

RECOMMENDATION

That the GVS&DD Board:

- a) approve a change order to PCL Constructors Westcoast Inc. Pre-Construction Services and Early Works Agreements (PC21-457 and PC22-227) in an amount of up to \$85,000,000 (exclusive of taxes), 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 amendment should proceed.
-

EXECUTIVE SUMMARY

In January 2022, Metro Vancouver terminated its contract with Acciona Wastewater Solutions LP (Acciona/Project Co) to design, construct, finance, test, and commission the North Shore Wastewater Treatment Plant for material breach of the Project Agreement, which it failed to remedy.

Metro Vancouver has been working with a new construction manager, PCL Constructors Westcoast Inc. (PCL) to develop a plan to complete the project and complete some early works construction, and a design consultant, AECOM, to complete the design, be the Engineer of Record, and provide quality assurance services post-termination. PCL and AECOM have identified significant deficiencies in Project Co's design and construction, and, in some cases, more extensive deficiencies than originally anticipated. As a result, a substantial amount of effort to-date has been focused on identifying and repairing concrete deficiencies on structures built by Project Co, with less focus on advancing new construction. Additionally, related design delays have extended the timeline for the overall completion of Phase 1.

In order to address deficiencies and advance construction for structures on the critical path until Phase 2 is executed, staff recommend implementing a change order of \$85,000,000 to the current Pre-Construction Services and Early Works Agreements with PCL.

PURPOSE

This report is to request authorization by the GVS&DD Board for a change order to PCL, the construction manager for the North Shore Wastewater Treatment Plant, for the Pre-Construction Services and Early Works Agreements in the amount of up to \$85,000,000 (exclusive of taxes) to continue early works construction for structures on the critical path, including continuing with rectification of excessive deficiencies brought on by Project Co's design and construction.

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 Board of Directors.

BACKGROUND

Under the previous project delivery model, Project Co was responsible for the design, construction, commissioning, and process for performance for the plant.

Following termination of the Project Agreement with Project Co, a new construction manager, PCL, and new designer, AECOM, were brought on to help progress the project. 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 deliver the remainder of the project in two phases:

- 1) Within Phase 1, design delivery includes design due diligence review and advancement of the design, and construction delivery includes preconstruction services and early works construction. PCL and AECOM are working collaboratively with Metro Vancouver to advance the design and to develop a detailed execution plan, schedule, and cost estimate to complete the project.
- 2) Phase 2 will be the completion of all design, construction, and commissioning of the project.

PCL was awarded a Phase 1 contract by the GVS&DD Board at the February 25, 2022 Board Meeting, for early contractor involvement and construction management services estimated at \$40,000,000. At that time, PCL was authorized to commence Pre-Construction Services in the form of developing the project execution plan, schedule, and cost estimate to complete the project. In July 2022, PCL was further authorized to commence specific early works within this budget to ensure that construction of structures on the critical path could be advanced to minimize schedule impacts. The early works authorization included a concrete deficiency assessment and repair package, collaborating with AECOM to identify and repair concrete deficiencies in the work completed by Project Co.

CURRENT STATUS AND EARLY WORKS EXTENSION

During Phase 1 work, PCL and AECOM have identified significant additional concrete deficiencies and, in some cases, more extensive deficiencies than originally anticipated. The deficiency identification and required repair work is taking longer than anticipated due to the high number of deficiencies identified and the more challenging repair procedures required. Further, design due diligence reviews have identified that the design was not as advanced as reported by Project Co at the time of termination and that there are a number of non-compliances with the Project Agreement than anticipated. Because of Project Co's deficiencies, extensive constructability reviews between AECOM, PCL, and Metro Vancouver have been required to advance the design.

As a result of the substantial time and effort required by AECOM and PCL to date to address these deficiencies and progress the design and construction, the completion of Phase 1 work and development of the plan for Phase 2 has been delayed. In order to enable continued advancement

of concrete construction for the structures on the critical path and minimize future project schedule delays, the scope and duration of early works requires extension until Phase 2 is executed. This additional scope of work identified for early works includes advancing the structures up to a specific elevation, in most cases to the operator deck level. The work will allow PCL to progress the critical path of the project, as well as allow AECOM to continue overall plant design with the least amount of disruption. It is anticipated that the work will be included in the main construction contract once awarded in 2023 to allow for seamless transition.

Staff recommend a change order in the amount of \$85,000,000 to extend the Early Works Agreement and continue to advance construction for the structures on the critical path.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) approve a change order to PCL Constructors Westcoast Inc. Pre-Construction Services and Early Works Agreements (PC21-457 and PC22-227) in an amount of up to \$85,000,000 (exclusive of taxes), 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 amendment should proceed.
2. That the GVS&DD Board not authorize the change order to PCL Constructors Westcoast Inc. Pre-Construction Services and Early Works Agreements to extend the scope and duration of Early Works, and direct staff to report back to the GVS&DD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS

The current approved budget for the North Shore Wastewater Treatment Plant Program is \$1.058B. This program budget is an overall budget inclusive of construction of the treatment plant, the conveyance project, and preliminary design for decommissioning of Lions Gate Wastewater Treatment Plant. The current approved project budget and current year cash flow can accommodate the requested change order to the PCL contract.

If the GVS&DD Board approves Alternative 1, the contract with PCL will be amended by Change Order in the amount of up to \$85,000,000 (exclusive of taxes) to allow the completion of the concrete deficiency repairs and to add additional early works scope to mitigate schedule risk.

CONCLUSION

Metro Vancouver continues to work collaboratively with the new contractor, PCL, and the new designer, AECOM, to develop design and construction definition, and a new plan to complete the project. Due to the expected level of effort required to overcome deficiencies in the design and construction undertaken by Project Co and the resulting extended time to complete Phase 1 work for the project, it is recommended that GVS&DD proceed with a change order to PCL's contract by an amount of up to \$85,000,000 (exclusive of taxes), to expand the early works scope and complete concrete deficiency repairs.

To: Zero Waste Committee

From: Kathy Preston, Director Environmental Regulation and Enforcement
Parks and Environment Department

Date: February 27, 2023 Meeting Date: March 16, 2023

Subject: **Appointment of Solid Waste Bylaw 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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens as officers; and
 - ii. Appoint Metro Vancouver employees Mosi Aghbolaghy, Michael Goods, Jim Penrose, Jeffery Schmidt and Joanne Tunkiewicz as officers.
 - 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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens; and
 - ii. Appoint Metro Vancouver employees Jeffery Schmidt and Joanne Tunkiewicz.
-

EXECUTIVE SUMMARY

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated 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 five Metro Vancouver employees as Board-designated officers, 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 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 Board-designated officers.

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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens as officers; and
 - ii. Appoint Metro Vancouver employees Mosi Aghbolaghy, Michael Goods, Jim Penrose, Jeffery Schmidt and Joanne Tunkiewicz as officers.
 - 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 Doreen Cheng, Manjit Dhillon, Marlene Fuhrmann, and Peter Hagens; and
 - ii. Appoint Metro Vancouver employees Jeffery Schmidt and Joanne Tunkiewicz.
2. That the GVS&DD Board receive for information the report dated February 27, 2023, titled "Appointment of Enforcement Officers" and provided alternative direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications anticipated as the GVS&DD appointees are already employed by Metro Vancouver and there are no costs associated with rescindments.

CONCLUSION

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated 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 adopt Alternative 1.

57391999

To: Liquid Waste Committee

From: Rick Gallilee, Director, Support Services & Strategic Initiatives, Liquid Waste Services

Date: March 9, 2023 Meeting Date: March 15, 2023

Subject: **Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023 - Wet Weather Pricing**

RECOMMENDATION

That the GVS&DD Board:

- a) approve the amendments to the *Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014* as presented in the Attachment to the report dated March 9, 2023 titled “Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023 - Wet Weather Pricing”;
 - b) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023*; and
 - c) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023*.
-

EXECUTIVE SUMMARY

At its February 24, 2023 meeting, the GVS&DD Board directed staff to prepare amendments to the *GVS&DD Cost Apportionment Bylaw 283, 2014* to incent action on excessive inflow and infiltration through wet weather based apportionment of GVS&DD costs. Proposed amendments to the bylaw have been prepared in accordance with the key terms presented to the Board, and are proposed for adoption by the Board.

PURPOSE

To provide the GVS&DD Board for consideration, proposed amendments to the *GVS&DD Cost Apportionment Bylaw 283, 2014* to implement the wet weather pricing strategy as directed by the Board on February 24, 2023.

BACKGROUND

At its February 24, 2023 meeting, the GVS&DD Board received a report providing recommendations for a wet weather cost apportionment approach and directed staff to prepare amendments to the *GVS&DD Cost Apportionment Bylaw 283, 2014*.

That the GVS&DD Board:

- a) *direct staff to prepare amendments to Cost Apportionment Bylaw 283, 2014 for its consideration in accordance with the key terms described in the report dated January 30, 2023, titled “Recommended Wet Weather Cost Apportionment Approach”; and*
- b) *initiate wet weather cost apportionment in the 2024 billing cycle to be implemented incrementally over ten years.*

PROPOSED AMENDMENTS TO BYLAW 283

The proposed amendments introduce the gradual application of the apportionment of non-growth costs to GVS&DD members within each sewerage area (with the exception of the Lulu Island West Sewerage Area) on the basis of wet weather flows. Apportionment of costs for GVS&DD services among the sewerage areas is unchanged as is the apportionment for growth related costs.

The proposed amendments align with the key terms described in the report to the Board dated January 30, 2023, titled "Recommended Wet Weather Cost Apportionment Approach". Additional amendments are proposed to provide clarity, ensure consistent language is used throughout the bylaw and to remove redundant sections.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) approve the amendments to the *Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014* as presented in the Attachment to the report dated March 9, 2023 titled "Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023 - Wet Weather Pricing";
 - b) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023*; and
 - c) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023*.
2. That the GVS&DD Board receive for information the report dated March 9, 2023 titled "Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023 - Wet Weather Pricing" and provide alternate direction to staff.

FINANCIAL IMPLICATIONS

The proposed amendments do not affect the overall cost of GVS&DD services. This will only result in adjustments to the apportionment of costs among members within sewerage areas, University Endowment Lands and University of British Columbia in order to incentivize action to manage wet weather performance of municipal and private infrastructure.

CONCLUSION

Metro Vancouver is proposing changes to the apportionment of costs within a sewerage area to provide GVS&DD members, University Endowment Lands and University of British Columbia a meaningful incentive to manage wet weather flows. Proposed amendments of the *GVS&DD Cost Apportionment Bylaw 283, 2014* have been prepared as directed by the GVS&DD Board. These amendments align with the recommended approach presented to the Board in February 2023. Staff recommend Alternative 1.

Attachment

Greater Vancouver Sewerage and Drainage District Cost Apportionment Amendment Bylaw No. 362, 2023 (56331616)

References

1. [“Recommended Wet Weather Cost Apportionment Approach”](#), report dated January 30, 2023
2. [Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014 - Unofficial Consolidation](#)

56689906

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
BYLAW NO. 362, 2023
A Bylaw to Amend Greater Vancouver Sewerage and Drainage District
Cost Apportionment Bylaw No. 283, 2014

WHEREAS:

- A. the Board of Directors of the Greater Vancouver Sewerage and Drainage District adopted “Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014” on March 28, 2014;
- B. “Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014” sets out the method of apportioning annual sewerage and drainage expenditures among the member municipalities, as permitted by section 55(4) of the Greater Vancouver Sewerage and Drainage District Act; and
- C. the Board of Directors of the Greater Vancouver Sewerage and Drainage District wishes to amend the “Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014”.

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 Cost Apportionment Amendment Bylaw No. 362, 2023”.

Amendment of Bylaw

- 2. “Greater Vancouver Sewerage and Drainage District Cost Apportionment Bylaw No. 283, 2014” (the “Bylaw”) is hereby amended as follows:
 - (a) the definition “**Combined Sewer Member Municipality**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Combined Sewer Member Municipality**” means, for the purposes of allocation of costs within a sewerage area, the City of Vancouver and the City of New Westminster;
 - (b) The definition “**Dry Weather Flow**” in section 1 of the Bylaw is deleted and replaced as follows:

“**Dry Weather Flow**” in respect of any 12-month period means:
 - (i) for a Sewerage Area, the 25th percentile of the average daily flow of wastewater, as determined by the Corporation, measured at whichever (one or more) of the Corporation’s five wastewater treatment plants

(being Annacis Island, Iona Island, Lions Gate, Lulu Island and Northwest Langley) providing service to that Sewerage Area;

- (ii) for a member municipality of the Fraser Sewerage Area for the purposes of section 7.10, the 25th percentile of the average daily flow of wastewater discharged from that member municipality as measured at the flow metering stations for that member municipality, or where there is insufficient data from flow metering stations, as determined by the Corporation, based on (A) temporary flow monitoring from mobile meters, (B) data from pump stations or, (C) such other data deemed appropriate by the Corporation for making such determination;

- (c) the definition “**Dry Weather Share**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Dry Weather Share**” means a part of the Total Non-Growth Costs for a Sewerage Area (except for Lulu Island West Sewerage Area), as defined in section 7A.1;

- (d) the definition “**Industrial Flow**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Industrial Flow**” in respect of any 12-month period, for a Sewerage Area, any member municipality thereof, the University Endowment Lands or the University of British Columbia, means the average daily flow of wastewater discharged within the Sewerage Area, the member municipality, the University Endowment Lands or the University of British Columbia during such 12-month period under an Industrial Permit or Industrial Permits, as determined by the Corporation;

- (e) the definition “**Industrial Flows**” in section 1 of the Bylaw is deleted;

- (f) the definition “**Total Non-Growth Costs**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Total Non-Growth Costs**”, for any 12-month period, means the costs identified in section 7 as the Total Non-Growth Costs for each Sewerage Area;

- (g) the definition “**UBC Wet Weather Flow**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**UBC Wet Weather Flow**” in respect of any 12-month period means the 75th percentile of the average daily flow of wastewater discharged from the university site, as determined by the Corporation, and based upon:

- (i) flow monitoring meters for the University of British Columbia, and
 - (ii) such other data deemed relevant by the Corporation for making such determination;
- (h) the definition “**UEL Wet Weather Flow**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**UEL Wet Weather Flow**” in respect of any 12-month period means the 75th percentile of the average daily flow of wastewater discharged from the University Endowment Lands, as determined by the Corporation, and based upon:

- (i) temporary flow monitoring by mobile flow meters for the University Endowment Lands, and
 - (ii) such other data deemed relevant by the Corporation for making such determination;
- (i) in the definition “**University Endowment Lands**” delete the word “and” that appears after the semicolon;

- (j) the definition “**Wastewater**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Wastewater**” has the same definition as that found in the *Wastewater Systems Effluent Regulations*, SOR/2012-139;

- (k) the definition “**Wet Weather Flow**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Wet Weather Flow**” in respect of any 12- month period means:

- (i) for a Sewerage Area, the 75th percentile of the average daily flow of wastewater, as determined by the Corporation, measured at whichever (one or more) of the Corporation’s five wastewater treatment plants (being Annacis Island, Iona Island, Lions Gate, Lulu Island and Northwest Langley) providing service to that Sewerage Area;
- (ii) for a Combined Sewer Member Municipality, the 60th percentile of the average daily flow of wastewater discharged from that member municipality as measured at the flow metering stations for that member municipality, or where there is insufficient data from flow metering stations, as determined by the Corporation, based on (A) temporary flow monitoring from mobile meters, (B) data from pump

stations or, (C) such other data deemed appropriate by the Corporation for making such determination;

(iii) for all other member municipalities, the 75th percentile of the average daily flow of wastewater discharged from that member municipality as measured at the flow metering stations for that member municipality, or where there is insufficient data from flow metering stations, as determined by the Corporation, based on (A) temporary flow monitoring from mobile meters, (B) data from pump stations or, (C) such other data deemed appropriate by the Corporation for making such determination;

(l) the definition “**Wet Weather Share**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Wet Weather Share**” means a part of the Total Non-Growth Costs for a Sewerage Area (except Lulu Island West Sewerage Area), as defined in section 7A.1; and

(m) the definition “**Wet Weather Share Method of Apportionment**” is added to the definitions in section 1 of the Bylaw in alphabetic order as follows:

“**Wet Weather Share Method of Apportionment**” means that each member municipality within the Sewerage Area must pay X per cent of the Wet Weather Share for the Sewerage Area, where X is calculated as follows:

$$X = \frac{100\% \text{ Wet Weather Flow for the member municipality} - 100\% \text{ Industrial Flow for the member municipality}}{100\% \text{ Wet Weather Flow for the Sewerage Area} - 100\% \text{ Industrial Flow for the Sewerage Area}}$$

(where flows are calculated for the five-year period ending June 30 of the previous year).

(n) section 5.2 of the Bylaw is deleted and replaced as follows:

5.2 For the purpose of section 7.2(b), all Assessed Values will be reduced by an amount equal to the Industrial Assessed Value within each relevant area for Industrial Permits (Permittees).

(o) Section 7A is added as follows:

7A. Total Non-Growth Costs for Sewerage Areas to be Divided into Two Amounts to be Further Apportioned

7A.1 The Total Non-Growth Costs for each of the Sewerage Areas except Lulu Island West Sewerage Area, will be divided into two amounts for each Sewerage Area, as follows:

- (a) A “Dry Weather Share,” which is the amount of Total Non-Growth Costs for a Sewerage Area that is calculated using the percentage set out in Column 2 of Table 7A.1 opposite the applicable year of calculation set out in Column 1 of Table 7A.1; and
- (b) A “Wet Weather Share,” which is the amount of Total Non-Growth Costs for a Sewerage Area that is calculated using the percentage set out in Column 3 of Table 7A.1 opposite the applicable year of calculation set out in Column 1 of Table 7A.1,

except that, starting in 2033 and for every year following, the Total Non-Growth Costs for every Sewerage Area except Lulu Island West Sewerage Area will be 100% Wet Weather Share for the purposes of further apportionment, as set out in Table 7A.1.

Table 7A.1

Column 1	Column 2	Column 3
Year	Dry Weather Share	Wet Weather Share
2024	90%	10%
2025	80%	20%
2026	70%	30%
2027	60%	40%
2028	50%	50%
2029	40%	60%
2030	30%	70%
2031	20%	80%
2032	10%	90%
2033 and Beyond	0%	100%

7A.2 The Total Non-Growth Costs for Lulu Island West Sewerage Area, and the Total Non-Growth Costs (as divided into Dry Weather Share and Wet Weather Share

amounts) for every other Sewerage Area will respectively be further apportioned in accordance with section 7.

(p) Section 7.1 of the Bylaw is deleted and replaced as follows:

7.1 Except as otherwise provided in this bylaw, the total of:

- (a) the portion of the Regional Share apportioned to the Vancouver Sewerage Area under section 6.1;
- (b) the Sewerage Area Share apportioned to the Vancouver Sewerage Area under section 6.2;
- (c) the Tier I Non-Growth Component apportioned to the Vancouver Sewerage Area under section 6.3; and
- (d) all other costs apportioned to the Vancouver Sewerage Area pursuant to section 9,

will be the Total Non-Growth Costs for the Vancouver Sewerage Area.

(q) Section 7.2 of the Bylaw is deleted and replaced as follows:

7.2 The Dry Weather Share for the Vancouver Sewerage Area will be further apportioned as follows:

- (a) First, as a special apportionment for the Vancouver Sewerage Area:
 - (i) The amount to be apportioned to the University Endowment Lands in respect of the University Endowment Lands will be equal to that portion of the Dry Weather Share for the Vancouver Sewerage Area that the UEL Dry Weather Flow bears to 100% of the Dry Weather Flow for the Vancouver Sewerage Area less 100% of the Industrial Flow for the Vancouver Sewerage Area, during the 12-month period ending June 30 of the immediately preceding year; and
 - (ii) The amount to be apportioned to the University of British Columbia in respect of the university site will be equal to that portion of the Dry Weather Share for the Vancouver Sewerage Area that the UBC Dry Weather Flow bears to 100% of the Dry Weather Flow for the Vancouver Sewerage Area less 100% of the Industrial Flow for the Vancouver Sewerage Area, during the 12-month period ending June 30 of the immediately preceding year; and

(b) Second, after deduction of the special apportionments in section 7.2(a), the remaining costs of the Dry Weather Share will be further apportioned among the member municipalities within the Vancouver Sewerage Area in the same proportion that the Assessed Value (as adjusted in accordance with section 5.2) of the lands of each member municipality within the Vancouver Sewerage Area bears to the Assessed Value (as adjusted in accordance with section 5.2) of all lands within the Vancouver Sewerage Area.

(r) Section 7.3 of the Bylaw is deleted and replaced as follows:

7.3 The Wet Weather Share for the Vancouver Sewerage Area will be further apportioned among the member municipalities within the Vancouver Sewerage Area in accordance with the Wet Weather Share Method of Apportionment, and among University Endowment Lands (UEL) and University of British Columbia (UBC), as follows:

(a) As a special apportionment for Vancouver Sewerage Area,

(i) University Endowment Lands (UEL) must pay Y percent of the Wet Weather Share for the Vancouver Sewerage Area, where Y is calculated as follows:

$$Y = \frac{100\% \text{ UEL Wet Weather Flow} - 100\% \text{ Industrial Flow for UEL}}{100\% \text{ Wet Weather Flow for the Sewerage Area} - 100\% \text{ Industrial Flow for the Sewerage Area}}$$

(where flows are calculated for the five-year period ending June 30 of the previous year); and

(ii) University of British Columbia (UBC) must pay Z percent of the Wet Weather Share for the Vancouver Sewerage Area, where Z is calculated as follows:

$$Z = \frac{100\% \text{ UBC Wet Weather Flow} - 100\% \text{ Industrial Flow for UBC}}{100\% \text{ Wet Weather Flow for the Sewerage Area} - 100\% \text{ Industrial Flow for the Sewerage Area}}$$

(where flows are calculated for the five-year period ending June 30 of the previous year).

(s) Section 7.4 of the Bylaw is deleted and replaced as follows:

7.4 Except as otherwise provided in this bylaw, the total of:

- (a) the portion of the Regional Share apportioned to the Lulu Island West Sewerage Area under section 6.1;
- (b) the Sewerage Area Share apportioned to the Lulu Island West Sewerage Area under section 6.2;
- (c) the Tier I Non-Growth Component apportioned to the Lulu Island West Sewerage Area under section 6.3; and
- (d) all other costs apportioned to the Lulu Island West Sewerage Area pursuant to section 9,

will be the Total Non-Growth Costs for the Lulu Island West Sewerage Area and will be further apportioned entirely to the City of Richmond, being the sole member municipality within that Sewerage Area.

(t) Section 7.5 is added as follows:

7.5 Except as otherwise provided in this bylaw, the total of:

- (a) the portion of the Regional Share apportioned to the North Shore Sewerage Area under section 6.1;
- (b) the Sewerage Area Share apportioned to the North Shore Sewerage Area under section 6.2;
- (c) the Tier I Non-Growth Component apportioned to the North Shore Sewerage Area under section 6.3; and
- (d) all other costs apportioned to the North Shore Sewerage Area pursuant to section 9,

will be the Total Non-Growth Costs for the North Shore Sewerage Area.

(u) Section 7.6 is added as follows:

7.6 The Dry Weather Share for the North Shore Sewerage Area will be further apportioned among the member municipalities within the North Shore Sewerage Area as follows:

The Corporation of the District of West Vancouver	30%
The Corporation of the District of North Vancouver	45%
City of North Vancouver	25%

(v) Section 7.7 is added as follows:

7.7 The Wet Weather Share for the North Shore Sewerage Area will be further apportioned among the member municipalities within the North Shore Sewerage Area in accordance with the Wet Weather Share Method of Apportionment.

(w) Section 7.8 is added as follows:

7.8 Except as otherwise provided in this bylaw, the total of:

- (a) the portion of the Regional Share apportioned to the Fraser Sewerage Area under section 6.1;
- (b) the Sewerage Area Share apportioned to the Fraser Sewerage Area under section 6.2;
- (c) the Tier I Non-Growth Component apportioned to the Fraser Sewerage Area under section 6.3; and
- (d) all other costs apportioned to the Fraser Sewerage Area pursuant to section 9,

will first be subject to a special apportionment for Fraser Sewerage Area in accordance with section 7.9, and second, after deduction of the special apportionments in section 7.9, the remaining costs will be the Total Non-Growth Costs for the Fraser Sewerage Area and will be further apportioned in accordance with section 7.10 and 7.11.

(x) Section 7.9 is added as follows:

7.9 As a special apportionment for the Fraser Sewerage Area, the amount to be apportioned to the Village of Anmore in respect of Anmore Green Estates and Eagle Mountain Middle School will be equal to that portion of the Tier I Non-Growth Component, Tier II Non-Growth Component and Tier III Non-Growth Component Costs apportioned to the Fraser Sewerage Area that are attributable to Village of Anmore Flow.

(y) Section 7.10 is added as follows:

7.10 The Dry Weather Share for the Fraser Sewerage Area will be further apportioned among the member municipalities within the Fraser Sewerage Area, such that each municipality must pay X percent of the Dry Weather Share for the Fraser Sewerage Area, where X is calculated as follows:

$$X = \frac{100\% \text{ Dry Weather Flow for the member municipality} - 100\% \text{ Industrial Flow for the member municipality}}{100\% \text{ Dry Weather Flow for the Fraser Sewerage Area} - 100\% \text{ Industrial Flow for the Fraser Sewerage Area}}$$

(where flows are calculated for the five-year period ending June 30 of the previous year).

(z) Section 7.11 is added as follows:

7.11 The Wet Weather Share for the Fraser Sewerage Area will be further apportioned among the member municipalities within the Fraser Sewerage Area in accordance with the Wet Weather Share Method of Apportionment.

(aa) The entirety of section 8A of the Bylaw is deleted.

(bb) The entirety of section 8 of the Bylaw is deleted.

(cc) All references to the phrase “12 month”, and the phrase “twelve month” in the Bylaw are deleted and replaced with the phrase “12-month”;

(dd) All references to the phrase “average daily flows” in the Bylaw are deleted and replaced with the phrase “average daily flow”;

(ee) All references to the phrase “sewage and wastewater” in the Bylaw are deleted and replaced with the phrase “wastewater”;

(ff) All references to the phrase “on the basis set out in sections 7 and 8” are deleted and replaced with the phrase “on the basis set out in section 7”;

(gg) All references to the phrase “section 804.2 of the *Local Government Act*” are deleted and replaced with the phrase “section 383 of the *Local Government Act*”;

(hh) All references to the phrase “*Wastewater Systems Effluent Regulations* SOR/2012-139, as amended from time to time” are deleted and replaced with the phrase “*Wastewater Systems Effluent Regulations* SOR/2012-139”.

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

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

George V. Harvie, Chair

Dorothy Shermer, Corporate Officer

COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES

Greater Vancouver Sewerage and Drainage District
Board Meeting Date – Friday, March 31, 2023

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](#).

Liquid Waste Committee – March 15, 2023*Delegations:*

No delegations presented

Information Items:

5.2 2022 "Our Ocean Thanks You" Campaign Results

Zero Waste Committee – March 16, 2023*Delegation Summaries:*

No delegations presented

Information Items:

- 5.1 Jurisdictional Scan of Recycling Statistics and Methodologies
- 5.2 Single-Use Item Reduction Regulatory Scan
- 5.3 2022 Create Memories Not Garbage Campaign Results

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