

# REPORT Engineering Services

**To**: Mayor Johnstone and Members of **Date**: March 17, 2025

Council

From: Lisa Leblanc File: 05.1035.10

Director, Engineering Services (Doc# 2663761)

**Item #**: 2025-89

Subject: Liquid Waste Management Plan Presentation for Members of GVS&DD

### **RECOMMENDATION**

1. THAT the updated Interim Draft Liquid Waste Management Plan, adopted at the November 29, 2024, GVS&DD Board meeting, be received for information.

2. THAT the final Liquid Waste Management Plan be approved for submission to the Ministry of Environment and Parks, following adoption by the GVS&DD Board.

# **PURPOSE**

To provide the City of New Westminster Council the updated Interim Draft Liquid Waste Management Plan (LWMP) adopted at the November 29, 2024, GVS&DD Board meeting and request support for the submission of the final plan to the Ministry of Environment and Parks following adoption by the GVS&DD Board.

# <u>SUMMARY</u>

Liquid waste management for the City of New Westminster as a member of the Greater Vancouver Sewerage and Drainage District (GVS&DD) is regulated by the Ministry of Environment and Parks through a regional liquid waste management plan (LWMP). The Province has directed Metro Vancouver to submit an LWMP on behalf of all GVS&DD member jurisdictions to be in compliance with Provincial regulations. The GVS&DD Board endorsed an updated Interim Draft Liquid Waste Management Plan for the region on November 29, 2024, and approved further consultations with municipal councils, First Nations councils, the public and stakeholders on the plan in 2025. The final updated

LWMP is scheduled for submission to the provincial Ministry of Environment and Parks in the fall of 2025.

City of New Westminster staff have worked with other member jurisdictions and Metro Vancouver to develop, review, and update commitments in the LWMP for member jurisdictions and Metro Vancouver. This plan reflects the priorities of communities across the region including participating First Nations, a Public Advisory Committee, as well as members of the public. The updated plan reflects a shift towards reducing demands on the system at the source, rather than building larger infrastructure to address the issues. Staff seek Council's support for the Interim Draft LWMP, with the intention of obtaining the GVS&DD Board's approval to submit the plan to the Province in late 2025. If there are substantive changes to the LWMP following finalization, these will be brought back to GVS&DD municipalities for consideration.

Metro Vancouver will present and discuss the interim draft LWMP to council at the March 17<sup>th</sup> council workshop meeting.

# **BACKGROUND**

#### DEVELOPMENT OF THE LIQUID WASTE MANAGEMENT PLAN

Over the past three years, as required by the Ministry of Environment and Parks, the GVS&DD and its members have engaged stakeholders and First Nations in updating the LWMP. The updated interim draft LWMP has been developed with extensive input from the Regional Engineers Advisory Committee, Liquid Waste Subcommittee and the Stormwater Interagency Liaison Group. This plan reflects the priorities of communities across the region who shared their perspectives during extensive engagement. It demonstrates Metro Vancouver and members' commitment to involve First Nations in wastewater management, and includes new actions developed in collaboration with First Nations. The focus has been on reducing system demands through measures such as green infrastructure and repairing leaky sewers, and continuing with sewer separation programs, that cause excess rainwater to enter sanitary systems.

The plan shifts away from expanding infrastructure to deal with *symptoms* of problems and towards addressing the *root causes* of system deficiencies. This shift can help consider system capacity to accommodate growth and defer major capital projects. The overall direction of the Plan has been well-received by the Liquid Waste Committee and GVS&DD Board, which approved proceeding with further consultations with First Nations and municipal councils in the last phase of engagement.

## REGULATORY REQUIREMENTS

Through a provision of the provincial Environmental Management Act, the Minister of Environment and Parks has directed Metro Vancouver to submit an LWMP on behalf of all GVS&DD member jurisdictions to be in compliance with Provincial regulations. The two primary objectives for LWMPs are to:

- 1. protect public health and the environment and
- 2. properly engage the public and First Nations.

The approved LWMP authorizes local governments, in accordance with operational certificates, to proceed with measures in the plan to ensure that the management, resource recovery and disposal of treated wastewater sufficiently protects public health and the environment.

Key issue areas for our LWMP are as follows:

- Wastewater treatment. The Province requires all Metro Vancouver wastewater treatment plants to provide secondary treatment at a minimum. The LWMP commits to upgrading the North Shore and Iona Island wastewater treatment plants to secondary treatment by 2030 and 2040, respectively.
- Combined sewer overflows. Provincial policy requires the elimination of all combined sewer overflow systems. The LWMP requires that combined sewer overflows be eliminated by 2050 in the Vancouver Sewerage Area and by 2075 in the Fraser Sewerage Area.
- Sanitary sewer overflows. Provincial policy requires reducing the volume of sanitary sewer overflows from storm or snowmelt events with a less than five-year return period, by an average of 10 per cent per year. Metro Vancouver and member jurisdictions are reducing sanitary sewer overflows through actions that keep rainwater and groundwater from entering the sanitary system (inflow and infiltration).

Approved LWMPs become enforceable under the Act. The Ministry of Environment and Parks requires LWMPs to be developed by local governments in consultation with the community, First Nations and interested parties. The previous LWMP for Metro Vancouver and member municipalities was approved by the Province in 2011.

#### DISCUSSION

## **SUMMARY OF LWMP UPDATES**

The updated LWMP identifies goals, strategies and actions for Metro Vancouver and its member jurisdictions for liquid waste services that are critical to protecting public health and the environment. Actions in the plan are categorized into the following topic areas:

- 1. System Resilience
- 3. Sanitary Sewer Overflows
- 5. Rainwater Management
- 7. Biosolids
- 9. Environmental Management
- 2. Demand Reduction and Source Control
- 4. Combined Sewer Overflows
- 6. Wastewater Treatment
- 8. Circular Water Economy

Many actions are continuing from the previous 2011 LWMP, however, they have been adapted to better reflect input from First Nations, enhance liquid waste system resilience, and improve affordability.

Some new and notable actions in this updated plan include:

- Create master sewer servicing plans to accommodate growth and urban development (Action 1.3)
- Provide incentives to homeowners for replacing private sewer laterals (Action 5.4)
- Review and adjust wet weather sewer pricing (Action 6.4)
- Implement system operational changes to minimize sanitary sewage in combined sewer overflows (Action 8.8)
- Remove flows from creeks, lakes, and underground streams from combined sewers (Action 9.6)
- Involve First Nations in watershed planning (Action 10.2)
- Dedicate municipal budget to rainwater management (Action 11.1)
- Build a regional biosolids dryer (Action 15.2)

There will also be a streamlined plan update and annual reporting process that will allow for easier monitoring of progress on actions, improved accountability, and reduced level of effort for member jurisdictions.

This plan responds to the challenges facing our region – climate change, population growth, affordability, and the impacts of urban development. Many actions focus on reducing the amount of excess rainwater entering the system to avoid costly and unnecessary upsizing of major infrastructure in the future. These actions shift expenditures from Metro Vancouver to member jurisdictions, residents, and businesses, while resulting in a much lower total cost for the region to protect human health and the environment.

#### IMPLICATIONS FOR MEMBER JURISDICTIONS

The shift to address leaky pipes and reduce inputs to the system upstream of the wastewater treatment plants will require additional effort at the municipal level, and Metro Vancouver is dedicated to supporting those efforts. When all 19 member jurisdictions do their part upstream, this has a multiplier effect downstream. It will ultimately reduce and defer the need for major capital expenditures, help to avoid over-building at wastewater treatment plants, and reduce costs for member municipalities over the long term.

Some areas in the LWMP that require continued resourcing support from City of New Westminster include:

- The development of Master Sewer Servicing Plans;
- Asset management planning including:
  - o incentives for replacement of private sewer laterals;
- Rainwater/Stormwater Management including:
  - Integrated Watershed Management Plans;

- o Facilitation of First Nations involvement in plan development;
- Dedicated municipal budget to rainwater management;
- Sanitary sewer overflow prevention; and,
- Combined sewer separation programs.

While many of these actions were already included in previous LWMPs, the updated LWMP renews and increases member jurisdiction and Metro Vancouver commitments to making more progress on actions that will have the most impact on reducing inputs to the system upstream. This will improve the efficiency of the liquid waste system and reduce the costs of managing liquid waste overall. If there are substantive changes to the LWMP following finalization, these will be brought back to GVS&DD municipalities for consideration.

## **OPTIONS**

- 1. THAT the updated Interim Draft Liquid Waste Management Plan, adopted at the November 29, 2024, GVS&DD Board meeting, be received for information.
- 2. THAT the final Liquid Waste Management Plan be approved for submission to the Ministry of Environment and Parks, following adoption by the GVS&DD Board
- 3. THAT Council provide staff with alternate direction.

Staff recommend Options 1 and 2.

# **CONCLUSION**

Following the adoption of the updated Interim Draft Liquid Waste Management Plan at the November 29, 2024, GVS&DD Board Meeting, we are sharing the Draft Plan with Council and seeking support for submission of the final Plan to the Ministry of Environment and Parks following adoption by the GVS&DD Board.

The Interim Draft Liquid Waste Management Plan is included (Attachment 1) for information.

# **ATTACHMENTS**

Attachment 1 - Interim Draft Liquid Waste Management Plan (November 2024)

## <u>APPROVALS</u>

This report was prepared by: David Lee, Manager Infrastructure Planning

This report was reviewed by: Kwaku Agyare-Manu, Deputy Director Engineering Services

This report was approved by:

Lisa Leblanc, Director Engineering & Deputy CAO Lisa Spitale, Chief Administrative Officer