

**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE  
MEETING OF WEDNESDAY, JULY 23, 2025**

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**SUBJECT**     Liquid Waste Management Plan – Amendment No. 13 Inflow and Infiltration

**ISSUE SUMMARY**

The Core Area Liquid Waste Management Plan (CALWMP) requires an amendment to address updated inflow and infiltration requirements. Staff have prepared Amendment No. 13 to the CALWMP for submission to the Province of British Columbia Ministry of Environment and Parks.

**BACKGROUND**

Liquid waste management plans allow the Capital Regional District (CRD) and local governments to develop community-specific solutions for the management of liquid waste, stormwater and environmental protection in accordance with the BC *Environmental Management Act*. The current CALWMP was originally approved by the Province in 2003 and was last updated with Amendment No. 12 in 2018. The CRD is updating components of the plan and formed a Technical and Community Advisory Committee (TCAC) in October 2023 to assist the Core Area Liquid Waste Management Committee (CALWMC) and the CRD Board, regarding amendments to the CALWMP. As part of the TCAC process, Kerr Wood Leidal Associates Ltd. (KWL) reviewed options regarding proposed amendments to CALWMP Section 5 (Management of Infiltration and Inflow and Control of Wastewater Overflows (Appendix A)) and worked with staff and the TCAC to make recommendations in a report (Appendix B).

At the February 13, 2024 TCAC meeting, the committee reviewed and provided final comments on the proposed new Section 5 of the CALWMP and the KWL report, expressing their support for both. The agenda and minutes from that meeting were subsequently received for information by the CALWMC at their June 26, 2024 meeting.

xwsepsum Nation (Esquimalt) and Songhees Nation were contacted and offered an opportunity to participate in the TCAC, as well as review and comment on this material (as participants in the CALWMP).

Staff began public engagement in October 2024 to get feedback on the proposed amendment over four weeks, which included print ads, social media posts and the Get Involved website. The proposed amendment was also referred to core area municipal engineering staff for internal discussions at the municipal level; and sent directly to First Nations listed in the Province of British Columbia First Nation Consultation Areas database.

Consultation is now complete, and staff are ready to prepare the amendment package for submission to the provincial regulator. The results of consultation are summarized in Appendix C.

**ALTERNATIVES**

*Alternative 1*

The Core Area Liquid Waste Management Committee recommends to the Capital Regional District Board:

That Amendment No. 13 to the Core Area Liquid Waste Management Plan be submitted to the Province of British Columbia Ministry of Environment and Parks for approval.

*Alternative 2*

That this report be referred back to staff for additional information.

**IMPLICATIONS**

*Environmental & Climate Implications*

The Municipal Wastewater Regulation stipulates that sanitary sewer overflows must not occur, unless during a storm with a greater than five-year return period. The Clover Point long outfall is the only location in the core area that does not meet this requirement and (using a conservative model) is predicted to overflow for approximately 60 hours per year during the eight largest winter storm events. In the three complete winters since completion of all core area wastewater project upgrades (2022-2025), overflows at Clover Point have averaged approximately 12 hours per winter. These overflows consist of highly dilute sewage mixed with rainwater, are generally short in duration, and are predicted to represent a negligible risk to the receiving marine environment.

The goal of updating the CALWMP is to replace the current commitment to reduce Inflow and Infiltration (I&I) to less than four times the average dry weather flow by 2030. The proposed approach of reducing and eliminating Clover Point long outfall overflows during sub-five-year storm events is intended to be a practical solution that meets provincial environmental protection requirements.

*Regulatory Implications*

An amendment to the CALWMP to address management of I&I satisfies a provincial regulatory requirement as a condition of the provincial approval of Amendment No. 12.

The key updated CRD commitments are to:

- complete a study assessing the impacts of storm event overflows from the Clover Point long outfall
- assess storage and treatment options to reduce overflows caused by I&I at the Clover Point long outfall
- create a mass balance model/tool to assess, document and improve the effectiveness of the CRD and municipal asset management plans for eliminating overflows at the Clover Point long outfall by 2045

The key updated plan participant commitments are to:

- prepare drainage improvement strategies for those areas where building foundation drains are unable to connect to the storm drainage system
- implement a new or update an existing sewer bylaw to require the replacement of private laterals (a major contributor to I&I) that have exceeded their service life, if sanitary municipal sewer flows exceed allotted flows from Bylaw No. 4304

*Financial Implications*

Major improvements to the core area marine wastewater discharges were completed in 2020,

with \$775 million in projects delivered through the Core Area Wastewater Treatment Project. That work did not fully address the commitments in Section 5 of the CALWMP. A 2021 estimate of the cost to achieve the current CALWMP commitment “*to reduce I&I through conveyance system upgrades sufficiently to reduce maximum daily wet weather flows to less than four times the average dry weather flow by 2030*” was \$260 million (Class “C” estimate). During planning for the Core Area Wastewater Treatment Project, the CRD also obtained a cost estimate of \$100 million for installing a wet weather wastewater treatment plant at Clover Point. Staff anticipate that the updated cost estimates for both options would be significantly higher in 2025.

### **CONCLUSION**

As a condition of the Ministry of Environment and Parks approval of Amendment No. 12 on June 20, 2018, the Capital Regional District is required to update inflow and infiltration commitments in the Core Area Liquid Waste Management Plan.

Staff undertook a public engagement process to solicit feedback from First Nations, municipal staff, and the public regarding proposed changes to the Core Area Liquid Waste Management Plan Section 5 - Management of Infiltration and Inflow and Control of Wastewater Overflows. Staff have prepared Amendment No. 13 with a proposed commitment to reduce and eliminate wastewater overflows, which is intended to be a practical solution that meets provincial environmental protection requirements.

### **RECOMMENDATION**

The Core Area Liquid Waste Management Committee recommends to the Capital Regional District Board:

That Amendment No. 13 to the Core Area Liquid Waste Management Plan be submitted to the Province of British Columbia Ministry of Environment and Parks for approval.

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| Submitted by: | Glenn Harris, Ph.D., R.P.Bio., Acting General Manager, Parks, Recreation & Environmental Services |
| Concurrence:  | Alicia Fraser, P. Eng., General Manager, Integrated Water Services                                |
| Concurrence:  | Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer, GM Finance & IT                            |
| Concurrence:  | Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer                                       |

### **ATTACHMENTS**

Appendix A: Core Area Liquid Waste Management Plan, Amendment No. 13

Appendix B: Review of Core Area LWMP Section 5, Management of I&I and Control of Wastewater Overflows, Final Report Version 2, Kerr Wood Leidal (February 28, 2024)

Appendix C: Engagement Summary - Liquid Waste Management Plan Amendment (June 2025)