

**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF WEDNESDAY, NOVEMBER 8, 2017**

SUBJECT **Core Area Liquid Waste Management Plan – Annual Programs Report**

ISSUE

To present a summary of the 2016 activities, results and accomplishments of the Core Area Liquid Waste Management Plan (the “Plan”), including trunk sewer and treatment system operations, maintenance, capital planning and, environmental monitoring and management.

BACKGROUND

The Capital Regional District (CRD) has the mandate to provide liquid waste management in the core area through the regional trunk sewer and treatment system. Under the *BC Environmental Management Act* and Municipal Wastewater Regulation, the Plan provides the framework for this service, which is implemented through a series of establishing bylaws and services. The core area system is also subject to monitoring and reporting requirements under the Wastewater Systems Effluent Regulations of the federal *Fisheries Act*.

The Plan was first approved in 2006. Since then, it has gone through 12 amendments. Every 3-5 years, the Plan is consolidated to include amendments to that date; consolidation was last done in 2011. Over the next 1-2 years, staff plan to consolidate the Plan up to and including Amendment No. 12, review and audit the Plan objectives and commitments, and revise the Plan with provincial, municipal and stakeholder input. Staff are also working to ensure all conditions have been met that were imposed by the BC Ministry of Environment when Plan amendments were conditionally approved.

There are 5 general objectives of the Plan:

- ensuring efficient and optimal operation and maintenance of liquid waste infrastructure
- reducing contaminants in the liquid waste infrastructure and the environment
- monitoring and assessing risks associated with the liquid waste infrastructure
- reporting out to satisfy provincial and federal regulatory requirements and inform stakeholders and the public
- planning and implementing liquid waste infrastructure upgrades

There are 10 programs that work to achieve Plan objectives:

- sewage treatment planning
- operations, maintenance and capital planning
- corrosion and odour control
- wastewater and marine environment monitoring
- source control
- harbours environmental action
- stormwater quality
- inflow and infiltration management
- trucked liquid waste management
- onsite wastewater management

The Core Area Liquid Waste Management Plan 2016 Annual Programs Report and the annual reports for the various programs are attached as appendices A to H.

ALTERNATIVES

Alternative 1

That the Core Area Liquid Waste Management Committee recommend to the CRD Board:

1. That the following annual reports be approved:
 - a) Core Area Liquid Waste Management Plan – 2016 Annual Programs Report
 - b) Macaulay and Clover Points Wastewater and Marine Environment Program – 2016 Annual Report
 - c) Regional Source Control Program – 2016 Annual Report
 - d) Esquimalt Lagoon Stewardship Initiative – 2016 Annual Report
 - e) Gorge Waterway Initiative – 2016 Annual Report
 - f) Core Area Stormwater Quality – 2016 Annual Report
 - g) Trucked Liquid Waste Program – 2016 Annual Report
 - h) Core Area Inflow & Infiltration Program – Annual Report 2016; and
2. That the annual reports fulfilling regulatory requirements be forwarded to the BC Ministry of Environment.

Alternative 2

That the Core Area Liquid Waste Management Committee direct staff to submit a revised report.

PUBLIC HEALTH AND ENVIRONMENTAL IMPLICATIONS

In 2016, similar to previous years, the wastewater discharged from both Clover and Macaulay outfalls occasionally exceeded provincial permit requirements: there were some exceedances of flow and effluent quality limits, and water quality guidelines occasionally were exceeded in the ocean around the outfalls. The wastewater discharge did meet the requirements of the federal Department of Fisheries Transitional Authorizations in 2016. However, these authorizations are temporary and expire on December 31, 2020, by which time the CRD must meet the more stringent effluent quality guidelines in the federal regulation.

For the stormwater system, ongoing monitoring determined that there has been a reduction in the number of high-rated discharges in recent years, despite the ongoing addition of new sources of contamination that arise as infrastructure ages and new developments and/or renovations have the potential to create stormwater-sewage cross-connections. The monitoring results are provided to local governments to aid their efforts to reduce contaminant inputs and identify infrastructure repairs.

Other actions that contributed to the protection of public health and the environment included: updated inflow and infiltration data for 108 catchments, a 91% compliance rate for Regional Source Control regulated businesses, along with environmental education and stewardship initiatives.

ECONOMIC IMPLICATIONS

Funding for the operation, maintenance and capital planning of the CRD's trunk sewer system is authorized under the Liquid Waste Management Core Area and Western Communities Service Establishment Bylaw No. 1, 1995 (Bylaw No. 2312).

Environmental reporting is a required component of the various services under the Plan. Funding for these reports is included in the budgets for these services, as authorized by various bylaws and Supplementary Letters Patent.

CONCLUSIONS

This is the sixth year of integrated reporting for the Plan programs focused on the management of liquid waste in the core area. Program staff continue to work collaboratively to ensure efficient system operation and that the management of liquid waste in the core area meets regulatory requirements, protects human health and the environment, and the information is communicated to the regulators, stakeholders and general public.

RECOMMENDATIONS

That the Core Area Liquid Waste Management recommend to the Capital Regional District Board:

1. That the following annual reports be approved:
 - a) Core Area Liquid Waste Management Plan – 2016 Annual Programs Report
 - b) Macaulay and Clover Points Wastewater and Marine Environment Program – 2016 Annual Report
 - c) Regional Source Control Program – 2016 Annual Report
 - d) Esquimalt Lagoon Stewardship Initiative – 2016 Annual Report
 - e) Gorge Waterway Initiative – 2016 Annual Report
 - f) Core Area Stormwater Quality – 2016 Annual Report
 - g) Trucked Liquid Waste Program – 2016 Annual Report
 - h) Inflow & Infiltration Management Program – 2016 Annual Summary; and
2. That the annual reports fulfilling regulatory requirements be forwarded to the BC Ministry of Environment.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

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Attachments: Appendix A – Core Area Liquid Waste Management Plan – 2016 Annual Programs Report
Appendix B – Macaulay and Clover Points Wastewater and Marine Environment Program – 2016 Annual Report
Appendix C – Regional Source Control Program – 2016 Annual Report
Appendix D – Esquimalt Lagoon Stewardship Initiative – 2016 Annual Report
Appendix E – Gorge Waterway Initiative – 2016 Annual Report
Appendix F – Core Area Stormwater Quality – 2016 Annual Report
Appendix G – Trucked Liquid Waste Program – 2016 Annual Report
Appendix H – Core Area Inflow & Infiltration Program – Annual Report 2016