

**CAPITAL REGIONAL DISTRICT  
CORE AREA LIQUID WASTE MANAGEMENT PLAN**

**AMENDMENT NO. 12**

**SECTION 5**

(Modifies Section 5 in Amendment No. 8)

**MANAGEMENT OF INFILTRATION AND INFLOW AND CONTROL OF WASTEWATER  
OVERFLOWS**

**TYPE OF AMENDMENT: CRD INITIATED – MINOR**

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**PURPOSE**

The BC Ministry of Environment approved Amendment No. 8 of the Core Area Liquid Waste Management Plan (CALWMP) on August 25, 2010. Since that time, the District of Oak Bay has developed a plan for separating its combined sewer systems serving the Humber and Rutland catchment areas in the Uplands neighborhood that is supported by the community, Oak Bay Council and the CRD Board to implement as committed to in Amendment No. 8. The purpose of Amendment No. 12 is to incorporate the necessary changes into the CALWMP by modifying Table 5.5 in Section 5 of Amendment No. 8, without impacting any other commitments already included in the CALWMP.

**BACKGROUND**

The current individual Prioritized Order of Overflow Reduction Plans committed to by the participating municipalities are provided in Section 5 – Management of Infiltration and Inflow and Control of Wastewater Overflows of Amendment No. 8.

The District of Oak Bay proposes that its Prioritized Order of Oak Bay Overflow Reduction Plan (Table 5.5) be amended based on its publicly-supported September 2016 Uplands Combined Sewer Separation Plan.

The District of Oak Bay plan is to eliminate combined sewer overflows at the Humber and Rutland pump stations in stages by separating the storm water flows from the sanitary sewer flows into dedicated storm drain and sanitary sewer conveyance pipelines. This will be accomplished by incrementally installing a new storm drain that will progressively reduce the combined flows in the sanitary sewer as road catch basins and dwelling roof and perimeter drain flows are diverted to the new storm drain conveyance pipeline. Stage 1 of the plan will be completed by 2027 with the separation of the combined sewer flows in the Humber catchment area, at an estimated cost of \$5,285,000. Stage 2 will follow with the separation of the combined sewer flows in the Rutland Humber catchment area by 2047, at an estimated cost of \$9,815,000.

**Amendment to Table 5.5 Prioritized Order of Oak Bay Overflow Reduction Plan in Amendment No. 8**

Delete Table 5.5 in Section 5 of Amendment No. 8 and replaced with Table 5.5a revised as follows:

**Table 5.5a  
Prioritized Order of Oak Bay Overflow Reduction Plan**

Item No.	Work Name	Description	Estimated Year of Completion	Estimated Cost (\$2016) to Complete
1.	Uplands Sewer Separation Humber Catchment	Construction of new storm sewer	2027	\$5,285,000
2.	Uplands Sewer Separation Rutland Catchment	Construction of a new storm sewer	2047	\$9,815,000
3.	Oak Bay I&I Rehabilitation Projects	Continue with phased rehabilitation projects in various catchments	Annual	\$500,000
4.	CCTV Inspection	Video inspection of sewer mains	2025	\$80,000 annually
5.	Sewer System Maintenance	Maintenance to keep sewers clean and free of defects	Annual	\$240,000

The changes to Table 5.5 include:

- Item 1 has been separated into two items in Table 5.5a:
  - Item 1 – Uplands Sewer Separation – Humber Catchment
  - Item 2 – Uplands Sewer Separation – Rutland Catchment
- Item 2 has been expanded to include all Oak Bay I&I Rehabilitation Projects and is included as Item 3 in Table 5.5a.
- Items 3 and 6 have been completed and deleted from Table 5.5a.
- Items 5, 7 and 8 have been consolidated into Item 5 - Sewer System Maintenance in Table 5.5a.

**PUBLIC INVOLVEMENT AND ENGAGEMENT PROCESS**

**1. General**

The CRD continues to conduct a comprehensive public involvement and engagement program, including meetings with communities, community associations and open houses in the Core Area municipalities, to keep the public and stakeholders fully informed on all aspects of the CALWMP.

As required under the CALWMP, the proposed amendment was to be referred to the Technical and Community Advisory Committee (TCAC) for consideration and the members comments were received by the Core Area Liquid Waste Management Committee.

## **2. District of Oak Bay Uplands Combined Sewer Separation Public Consultation Process**

The District of Oak Bay conducted extensive public consultation and engagement on the merits and considerations of each combined sewer separation option over a two-month period at the end of 2015. Public feedback was collected at several open houses and through an online survey, and presented to Council as part of a project update at a dedicated Committee of the Whole meeting on February 2, 2016.

The public challenged some of the pre-design study's assumptions and offered constructive insight into the technical options. In response to public feedback, and to help Council narrow down the six technical options, it was determined that more information was necessary to inform a decision. Council asked the project team to undertake additional analysis and gather more information over a period of six months, with updates to Council and the public at Council meetings and Committees of the Whole through June 2016. The project team responded to the following Council inquiries:

- condition of and risks to Uplands tree canopy
- environmental impact of combined sewer overflows
- alternative methods of storm water management
- power requirements for residential pumps
- impact of minimizing requirement for residential pumps in Oak Bay
- use of attenuation tanks as an alternative to sewer separation
- assumptions on geotechnical conditions and cost implications
- use of existing easements
- conditions under which property owners must separate the sewers on private property
- archaeological implications
- alternative construction method, specifically trenchless technologies
- power outages and the implications for private pumps
- overflow data for the Humber and Rutland outfalls
- staging of project construction

The *Public Engagement Overview and Report on Survey Research* provide a comprehensive account of the public process carried out by the District of Oak Bay and are included in Appendix A - District of Oak Bay Submission for Proposed Amendment No. 12

Attachment: Appendix A - District of Oak Bay Submission for Proposed Amendment No. 12

### **AMENDMENT APPROVALS**

**Capital Regional District Board Approval**

**December 14 , 2016**

**Ministry of Environment Approval**