

**DATE:** June 9, 2022

**FILE:** 5330-20/SESP

**TO:** Chair and Members  
Comox Valley Sewage Commission

**FROM:** James Warren  
Deputy Chief Administrative Officer

Supported by James Warren  
Deputy Chief Administrative Officer

*J. Warren*

**RE: Sewer Extension South LWMP Addendum Proposal**

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### **Purpose**

To introduce a proposal to further develop the Sewer Extension South Project via an addendum to the Comox Valley Sewerage Service (CVSS) Liquid Waste Management Plan (LWMP).

### **Recommendation from the Chief Administrative Officer:**

THAT the Sewage Commission support the development of the Sewer Extension South Project via an addendum to the Comox Valley Sewerage Service Liquid Waste Management Plan;

AND FURTHER THAT the Sewer Extension South Addendum joint public and technical advisory committee, once convened, be requested to appoint a member to the Comox Valley Sewerage Service Liquid Waste Management Plan Joint Technical and Public Advisory Committees;

AND FINALLY THAT the Electoral Area A Director be appointed to the Comox Valley Sewerage Service Liquid Waste Management Plan steering committee (Comox Valley Sewage Commission) for matters pertaining to the Sewer Extension South Addendum.

### **Executive Summary**

A regional approach to wastewater management and environmental protection will benefit the entire Comox Valley and is in alignment with each of the Comox Valley Regional District (CVRD) Board's strategic drivers. The Sewer Extension South Project is being developed in cooperation with K'ómoks First Nation (K'ómoks) as a key partner, supports environmental protection of Baynes Sound and sustainable development in Electoral Area A, and provides the most cost-effective solution for providing sewer service to the communities of Royston and Union Bay.

Engineering staff have been in regular contact with the provincial government to discuss options for advancing the Sewer Extension South Project. A recent letter from the Ministry of Environment and Climate Change Strategy (Appendix A) supports the proposed approach of developing and submitting an addendum to the CVSS LWMP.

This report is being provided to the Comox Valley Sewage Commission to introduce a proposal to further develop the Sewer Extension South Project via an addendum to the CVSS LWMP. A brief summary of the initiative follows.

- Prior to the 2016 South Sewer Project referendum, a nearly complete Stage 2 LWMP process resulted in the proposal to convey treated effluent from a south region wastewater treatment plant to the existing Cape Lazo outfall for discharge.
- Following the failed referendum, collaborative efforts between the Electoral Areas Services Committee (EASC), Comox Valley Sewage Commission and K'ómoks have resulted in

agreement by the Comox Valley Sewage Commission to accept untreated wastewater from Electoral Area A and K’ómoks.

- The proposed Sewer Extension South Project would see new infrastructure constructed to collect and convey wastewater from the south to CVSS infrastructure in Courtenay for treatment at the existing wastewater treatment plant in Lazo North (Electoral Area B).
- The CVSS LWMP process is well underway, with a Stage 1 and 2 report being finalized for submission to the province in summer 2022. CVSS focus has now shifted to design and construction of conveyance upgrades as identified through the LWMP and authorized through a summer 2021 Alternate Approval Process (AAP).
- Protection of local marine waters is a shared objective of the CVSS LWMP and the Sewer Extension South Project.
- Recent guidance from provincial Ministry of Environment and Climate Change Strategy suggests including consideration of south region sewer servicing within the CVSS LWMP would support a more holistic plan.
- To achieve this, a Sewer Extension South Addendum to the LWMP would be initiated in summer 2022, with a Stage 2 addendum report targeted for submission to the province in October 2023. Once approved, the Sewer Extension South Addendum would be included in the CVSS Stage 3 LWMP report, targeted for submission to the province in 2024.
- This timing is conducive to developing the Sewer Extension South Addendum while the CVSS LWMP Stage 1 and 2 report is being finalized and submitted for review by the province.

Prepared by:

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Environmental Analyst

Concurrence:

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***M. Rutten***

Marc Rutten, P.Eng.  
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**Government and Community Interests Distribution (Upon Agenda Publication)**

Electoral Areas Services Committee	✓
K’ómoks First Nation	✓

**Background/Current Situation**

The need for improved wastewater management for the south region of the Comox Valley has been a renewed topic of focus due to the impacts of a recent norovirus outbreak on the local shellfish aquaculture sector in Baynes Sound. Study work completed by a British Columbia Centre for Disease Control chaired working group following a previous norovirus outbreak in 2017 identified septic field seepage as one of several plausible sources for marine water contamination contributing to the presence of norovirus in cultured shellfish.

The communities along Baynes Sound, including Royston and Union Bay, rely on on-site septic systems for wastewater management. Planning for sewer servicing for the south region of the Comox Valley has a long history, with studies dating back forty years. In 2015, a nearly completed stage 2 Liquid Waste Management Plan for the south region identified discharge of treated effluent at Cape Lazo as the leading option for management of south region liquid waste. At the time, this option consisted of building a stand-alone wastewater treatment facility in the south region, and conveying effluent from this facility to the Cape Lazo outfall.

After a sewer service proposal based on this option failed to find the support of the electors in 2016, extensive collaboration between the EASC, Comox Valley Sewage Commission, K'ómoks and others has resulted in the current project concept whereby untreated wastewater from the south region would be conveyed into existing Comox Valley Sewerage Service infrastructure for treatment at the Comox Valley Water Pollution Control Centre (CVWPCC), and discharged at the Cape Lazo outfall. Efforts on several fronts continue to advance this proposal, which is now at a point where additional stakeholder, rightsholder and public input would be beneficial to refine the project concept.

Concurrent to these efforts, the CVSS is part way through a LWMP process, being executed as a combined Stage 1 and 2 process with consideration to three components of the service— conveyance, treatment, and resource recovery. Following a successful AAP process last year, work is now underway to upgrade or replace a significant portion of existing CVSS conveyance infrastructure, based upon the preferred conveyance option identified through the LWMP process. The final LWMP stage 1 and 2 report outlining the preferred options for conveyance, treatment and resource recovery is in development for submission to the province in summer 2022. The provincial review process is anticipated to take approximately one year.

In consideration of the future direction of the CVSS facilitated through the LWMP process, potential flows from the south region have been considered in order to estimate impacts of accepting these flows into the system based on a variety of south region population growth scenarios. A medium growth scenario with a 2060 south region population estimated at approximately 9,100 has been accommodated in the wastewater conveyance and treatment options included in the LWMP Stage 1 and 2 report being submitted to the province this summer. A site master planning process for the CVWPCC is also being developed with consideration of treatment capacity for future south region flows.

The Sewer Extension South Project and the CVSS LWMP Sewer System Conveyance Project share a common goal of preventing the potential release of untreated or partially treated wastewater into the waters of Baynes Sound. Given this alignment of goals, past LWMP efforts in the south region that identified the discharge of treated wastewater at Cape Lazo as the leading option, and the current status of the CVSS LWMP process, the timing is appropriate to consider advancing the Sewer Extension South Project through an addendum to the CVSS LWMP.

A draft schedule of Sewer Extension South Addendum tasks and timelines is attached as Schedule A. Per this schedule, a Sewer Extension South Addendum Stage 2 report could be submitted to the province in October 2023. Once approved, the Sewer Extension South addendum would be included in the CVSS Stage 3 LWMP report, targeted for submission to the province in 2024.

Pending June 2022 EASC and Sewage Commission approval to move the Sewer Extension South Project into the CVSS LWMP process via an addendum, next steps would include the following:

- Newsletter to Royston/Union Bay residents describing LWMP addendum process and next steps for public engagement.

- Recruit Sewer Extension South Addendum PAC/TAC members.
- Initiate First Nations Consultation.
- Appoint a Sewer Extension South Addendum PAC/TAC member to the CVSS LWMP TACPAC.
- Appoint the Electoral Area A Director to the Sewage Commission (CVSS LWMP Steering Committee) for matters relating to the Sewer Extension South addendum.

According to the provincial guide to LWMPs, they are most appropriate for areas where there is considerable growth or where there are known problems with existing infrastructure, both of which apply to the CVRD south region. Recent correspondence from provincial Ministry of Environment and Climate Change Strategy (Appendix A) suggests that including consideration of south region sewer servicing within the CVSS LWMP would support a more holistic plan. An approved LWMP will also provide the CVRD with the authority to move forward with the measures identified in the plan, and would qualify as public assent for grant funding, bylaw development and local area borrowing needed to fund the infrastructure identified by the plan.

### **Options**

The following options are identified:

1. Support the development of a LWMP addendum focussed on the expansion of sewer servicing to the CVRD's south region via the Sewer Extension South Project.
2. Request additional information or analysis in regards to development of the Sewer Extension South Project.

Converging factors such as potential grant funding, partner interest, and an urgent need to mitigate impacts to Baynes Sound support the need for sustained and timely efforts to advance the Sewer Extension South Project. Option 1 is therefore recommended.

### **Financial Factors**

The proposed LWMP addendum to include sewer servicing for the CVRD's south region would be funded via the Liquid Waste Management Planning service, function 340, and the Electoral Area A feasibility studies service, function 151.

To reflect the investments in existing CVSS infrastructure made by the CVSS's current participants, a financial contribution from Electoral Area A has been accepted by the Sewage Commission and is reflective of Electoral Area A's fair share of existing infrastructure.

Should service be extended south, CICC's will be collected from new properties brought into the service area, and DCC's will be collected from new properties created within the service area, by future subdivisions. DCC's and CICC's are intended to provide funds to pay the capital costs of providing, constructing, altering or expanding facilities to service directly or indirectly the development in respect of which the charges are imposed.

In addition to collection of CICC's/DCC's to offset capital costs, inclusion of Electoral Area A in the service will also result in more users for the system, which will help to dilute debt servicing and operational costs, and minimize increases to user rates. Staff analysis in 2020 indicated that going forward, should sewer service be extended south, under a medium growth scenario CVSS user rates would be approximately 10 per cent lower than currently expected.

**Strategic Considerations: Strategic Drivers and Regional Growth Strategy**

CVRD Board Strategic Drivers:							
Fiscal Responsibility	✓	Climate Crisis and Environmental Stewardship and Protection	✓	Community Partnerships	✓	Indigenous Relations	✓

A regional approach to wastewater management and environmental protection will benefit the entire Comox Valley and is in alignment with each of the CVRD Board’s strategic drivers. The Sewer Extension South Project is being developed in cooperation with K’ómoks as a key partner, supports environmental protection of Baynes Sound and sustainable development in Electoral Area A, and provides the most cost-effective solution for providing sewer service to the communities of Royston and Union Bay. Considering this project within the CVSS LWMP process is in alignment with all four strategic drivers.

CVRD Regional Growth Strategy Goals:							
Housing	✓	Ecosystems, Natural Areas and Parks	✓	Local economic development	✓	Transportation	✓
Infrastructure	✓	Food Systems	✓	Public Health & Safety	✓	Climate Change	✓

Union Bay is one of the three settlement nodes identified by the Regional Growth Strategy (RGS) to accommodate compact forms of development. MG Policy 1B-1 of the RGS states that growth in settlement nodes shall be accommodated through improvements to public infrastructure, including the provision of appropriate sewer services.

The three settlement nodes, settlement expansion areas (including Royston), and a portion of K’ómoks lands are considered in the RGS as Core Settlement Areas. Infrastructure Policy 5D-4 of the RGS states that the majority of growth should be focused in Core Settlement Areas where appropriate sewer servicing exists. Directing growth to these areas alleviates sprawl pressure within the surrounding rural settlement areas, and ensures that servicing costs will be spread over more users. Growth needs to be planned in accordance with the availability of public servicing and public servicing can be made financially viable by growth when it is directed to the core settlement areas. With or without growth in the settlement expansion areas (i.e. future municipal lands) and settlement nodes, sewage servicing has to be addressed to resolve existing public and environmental health impacts from septic systems.

**Intergovernmental Factors**

K’ómoks First Nation continues to be strong project partners with significant current and future land holdings in the area. Regular dialogue continues to occur between the parties in regards to this initiative.

In accordance with Bylaw No. 615 being “Sewage Service Expansion Principles Bylaw No. 617, 2020,” whereby existing service participants are not to subsidize the addition of new participants, costs to develop the south region LWMP addendum will be provided through CVRD functions funded by Electoral Area A, as noted in the Financial Factors section of this report.

Engineering staff have also been in regular contact with the provincial government to discuss options for advancing the Sewer Extension South Project. A recent letter from the Ministry of Environment and Climate Change Strategy (Appendix A) supports the proposed approach of

developing and submitting an addendum to the CVSS LWMP. Discussions with provincial staff have indicated a high degree of support for considering and approving a Sewer Extension South addendum within the existing anticipated timelines for the CVSS LWMP.

A draft of this report was presented to the Sewage Management Advisory Committee on May 31. Committee members had a few questions regarding proposed area to be serviced, land use considerations and LWMP addendum funding sources that were addressed at the meeting.

### **Citizen/Public Relations**

Considerable public engagement is planned as part of the overall Sewer Extension South Project. Such engagement is guided by a public engagement strategy developed to keep the community informed of project progress and gather feedback on key topics such as service costs and boundaries, service delivery details and the approval process.

A revised public engagement strategy for the Sewer Extension South Addendum has been developed, and will be provided for consideration by the Electoral Areas Services Committee.

Attachments: Appendix A – May 2, 2022 MOE letter to CVRD supporting LWMP South Addendum

Schedule A – Draft CVSS LWMP South Addendum Task List and Schedule



May 2, 2022

**VIA EMAIL:** [mrutten@comoxvalleyrd.ca](mailto:mrutten@comoxvalleyrd.ca)

Mark Rutten, General Manager of Engineering Services  
Comox Valley Regional District  
770 Harmston Avenue  
Courtenay, BC V9N 0G8

Dear Mr. Rutten:

**Re: Sewer Extension South Project**

This is a follow-up to our meeting on April 28, 2022, discussing options for the Comox Valley Regional District (CVRD) to move forward with a new plan for wastewater management for the south region of Electoral Area A, representing Royston, Union Bay and K'ómoks South Lands.

I understand that the CVRD wishes to extend wastewater service from the Comox Valley Water Pollution Control Centre to Electoral Area A (*Environmental Management Act* authorization number 5856). As such, this will involve extending wastewater collection infrastructure and connecting existing onsite systems.

In addition, the CVRD is in the process of creating a Liquid Waste Management Plan (LWMP) for the area served by the Comox Valley Water Pollution Control Centre. I understand that a Stage 2 Report will soon be submitted to the Ministry for review and that the LWMP includes consideration of the service extension to Electoral Area A by including the resulting wastewater flow increases in the technical work completed to date. However, this planning process has not considered the infrastructure required to extend sewer services south nor included representation from Electoral Area A in the advisory committee.

As discussed, the LWMP process is designed to support communities in planning to accommodate existing and future growth with a strategy to ensure the management, resource recovery and disposal of treated municipal wastewater is sufficiently protective of public health and the environment. Given the known and potential growth in Electoral Area A and the importance of protecting Baynes Sound to all residents in the region, including the planning and consultation around the extension of servicing in the current LWMP process would support a more holistic plan.

I believe the timing is conducive to merging these two projects. Given the extensive work previously completed to consider options for wastewater treatment in Electoral Area A, it will be possible to add this option as an addendum to the Stage 2 Report after it's submitted to the Ministry for review and incorporate it into the Stage 3 Report. Please work with Ministry staff to define the scope of work and consultation needed.

The Ministry has long been concerned about the impact of on-site sewerage systems suspected of failing on the water quality in Baynes Sound, an area of significant recreational, cultural, and economic value for the K'ómoks First Nation, the local residents and the people of British Columbia including the most important shellfish aquaculture area in the province. We are encouraged to see the CVRD pursue a new option for addressing this challenge and protecting Baynes Sound. The current norovirus outbreak adds urgency to the work being considered.

If you have any questions, please contact Melanie Mamoser at 250-739-8328 or [melanie.mamoser@gov.bc.ca](mailto:melanie.mamoser@gov.bc.ca).

Yours truly,



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Liz Archibald  
Municipal Liquid Waste Section Head  
Ministry of Environment and Climate Change Strategy



**DRAFT**  
**Task List and Schedule**  
**Comox Valley Sewer System LWMP**  
**Sewer Extension South Addendum**

Phase	Task	Meeting	Date	Deliverables
Plan Initiation	Initiate LWMP Addendum Process	Electoral Areas Services Committee (EASC) – South Steering Committee  Comox Valley Sewage Commission – CVSS LWMP Steering Committee  CVRD Board	June 2022	<ul style="list-style-type: none"> <li>Staff report to EASC, Sewage Commission <i>Recommendation to move sewer extension south project under CVSS LWMP</i></li> </ul>
	PAC/TAC recruitment	N/A	June - August 2022	<ul style="list-style-type: none"> <li>June newsletter to residents, social media, advertisements in local paper</li> </ul>
	Initiate First Nations consultation	N/A	June 2022	<ul style="list-style-type: none"> <li>Letter to K’ómoks First Nation</li> <li>Letter to other First Nations with interests in the vicinity of the proposed project</li> </ul>
Phase One	Public Consultation Phase 1	Direct mail newsletter #1	<b>COMPLETE</b> May 2020	<ul style="list-style-type: none"> <li>Direct mail out to 951 residents</li> <li><a href="#">Online information</a> <i>New project webpage established</i></li> </ul>
		Public open house #1	<b>COMPLETE</b> -Webinar Nov. 30 2021 -In-person Dec. 2 2021	<ul style="list-style-type: none"> <li>Direct mail out to 951 residents</li> <li><a href="#">Online information</a></li> <li><a href="#">Open house info boards</a></li> <li>Q&amp;A library</li> </ul>
		Direct mail newsletter #2	June 2022	<ul style="list-style-type: none"> <li>Direct mail out to 951 residents <i>Project Newsletter – announce and describe LWMP addendum process, call for south PAC/TAC members, next steps for engagement, online maps</i></li> </ul>

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**Task List and Schedule**  
**Comox Valley Sewer System LWMP**  
**Sewer Extension South Addendum**

	Background review: LWMP South Addendum Process, Prior Investigations, Basis of Design	TAC/PAC meeting #1	September 2022	<ul style="list-style-type: none"> <li>• Meeting agenda</li> <li>• Meeting facilitation slides</li> <li>• Discussion paper 1: <i>LWMP objectives and process</i></li> <li>• Discussion paper 2: <i>Summary of past work</i></li> <li>• Discussion paper 3: <i>South wastewater flows and loads, treatment objectives, CVSS LWMP</i></li> </ul>
	First Nations Consultation Phase 1	KFN Chief and Council meeting #1	September 2022	<ul style="list-style-type: none"> <li>• Briefing Note and presentation slides</li> </ul>
<b>Phase Two</b>	Review of Sewer Extension South Project Proposal and Phasing; Review of Collection System Options; Review of Pump Station Design and Siting Options; Stage 1 Environmental Impact Study (EIS)	TAC/PAC meeting #2	October 2022	<ul style="list-style-type: none"> <li>• Meeting agenda</li> <li>• Meeting facilitation slides</li> <li>• Discussion paper 1: <i>SESP design, costs, phasing considerations</i></li> <li>• Discussion paper 2: <i>Collection system options, cost comparison</i></li> <li>• Discussion paper 3: <i>Pump station design and siting options, cost comparison</i></li> <li>• Draft Stage 1 EIS</li> </ul>
	Evaluation and Selection of Preferred Collection Options; Phasing	TAC/PAC meeting #3	November 2022	<ul style="list-style-type: none"> <li>• Meeting agenda</li> <li>• Meeting facilitation slides</li> <li>• Discussion paper 1: <i>Summary of options, decision matrix</i></li> </ul>
		South Steering Committee (EASC) meeting #1	January 2023	<ul style="list-style-type: none"> <li>• Staff Report to Steering Committee (EASC)</li> </ul>

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**Task List and Schedule**  
**Comox Valley Sewer System LWMP**  
**Sewer Extension South Addendum**

	First Nations Consultation Phase 2	KFN Chief and Council meeting #2	November 2022	<ul style="list-style-type: none"> <li>Briefing note and presentation slides</li> </ul>
	Public Consultation Phase 2	Direct mail newsletter #4	December 2022	TBD
		Open House #2	January 2023	TBD
<b>Phase Three</b>	Development of Draft South Addendum, Stage 1 Environmental Impact Study (EIS)	N/A	January – April 2023	<ul style="list-style-type: none"> <li>Draft South Region Addendum to Stage 2 CVSS LWMP</li> <li>Draft Stage 1 EIS</li> </ul>
	Review Draft South Addendum, Stage 1 Environmental Impact Study (EIS)	TAC/PAC meeting #4	May 2023	<ul style="list-style-type: none"> <li>Meeting agenda</li> <li>Meeting facilitation slides</li> <li>Draft South Region Addendum to Stage 2 CVSS LWMP</li> <li>Draft Stage 1 EIS</li> </ul>
		South Steering Committee (EASC) meeting #2	May 2023	<ul style="list-style-type: none"> <li>Staff Report to South Steering Committee (EASC)</li> </ul>
		CVSS LWMP Steering Committee (Sewage Commission) meeting #1	May 2023	<ul style="list-style-type: none"> <li>Staff report to CVSS LWMP Steering Committee (Sewage Commission)</li> </ul>
	First Nations Consultation Phase 3	KFN Chief and Council meeting #3	May 2023	<ul style="list-style-type: none"> <li>Briefing note and presentation slides</li> </ul>
Public Consultation Phase 3	Direct mail newsletter #5	June 2023	TBD	
	Open House #3	June 2023	TBD	

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**Task List and Schedule**  
**Comox Valley Sewer System LWMP**  
**Sewer Extension South Addendum**

<b>Phase Four</b>	Development of Final South Addendum, Stage 1 Environmental Impact Study (EIS)	N/A	May – August 2023	<ul style="list-style-type: none"> <li>• South Region Addendum to Stage 2 CVSS LWMP</li> <li>• Stage 1 EIS</li> </ul>
	Public Consultation Phase 4 – Final Report	N/A	May – August 2023	<ul style="list-style-type: none"> <li>• Summary Report - Public Consultation</li> </ul>
	Review & Approve South Addendum, Stage 1 Environmental Impact Study (EIS)	TAC/PAC meeting #5	September 2023	<ul style="list-style-type: none"> <li>• Meeting agenda</li> <li>• Meeting facilitation slides</li> <li>• South Region Addendum to Stage 2 CVSS LWMP</li> <li>• Stage 1 EIS</li> <li>• Final Report on Public Consultation</li> </ul>
		South Steering Committee (EASC) meeting #3	September 2023	<ul style="list-style-type: none"> <li>• Staff Report to South Steering Committee (EASC)</li> </ul>
		CVSS LWMP Steering Committee (Sewage Commission) meeting #2	September 2023	<ul style="list-style-type: none"> <li>• Staff report to CVSS LWMP Steering Committee (Sewage Commission)</li> </ul>
	First Nations Consultation Phase 4	KFN Chief and Council meeting #4	September 2023	<ul style="list-style-type: none"> <li>• Briefing note and presentation slides</li> </ul>
Submit Package to Ministry of Environment and Climate Change Strategy	Meeting with MOE to Review	October 2023	<ul style="list-style-type: none"> <li>• South Region Addendum to Stage 2 CVSS LWMP</li> <li>• Stage 1 EIS</li> <li>• Summary Report - Public Consultation</li> </ul>	