

# Comox Valley Regional District Sewer Extension South

Community Events – Summary Report  
February 2024



## Table of Contents

Executive Summary .....	2
Engagement Overview .....	3
1.1 Approach.....	3
1.2 Community Engagement Goals.....	5
1.3 Promotion .....	5
1.4 By the Numbers.....	6
1.5 Themes of Comments .....	6
Conclusion .....	9
Next Steps.....	9
Appendices .....	10

## Executive Summary

Phase 3 of engagement on the project had a primary focus to introduce the draft addendum report to the public. It kicked off in November 2023, with email outreach directly to project followers, sharing updates from the latest PACTAC meeting and the first 'What We Heard' report.

Community open houses were then held in January 2024. Project details had been refined since the June 2023 open houses, on components like collection system design and costs to homeowners – and it was time to share these updates. In particular, cost estimates were updated from conceptual design (Class D cost estimates) to preliminary design (Class C cost estimates).



The community events included in-person open houses in Royston and Union Bay, and a noon webinar via ZOOM. Staff and consultants were at the events to hear questions and comments from the public, and feedback forms were available in-person and online.

All event materials ([information boards](#), [webinar video](#) and [backgrounder](#)) were made available on the project page. Additionally, a [summary of the addendum report](#) was created to help simplify review of the report.

Between the three open houses, approximately 146 residents participated (118 in-person and 28 online). A variety of tools were used to invite residents to the events, including: direct mail letter, news release, social media posts, email and print ads. An [infosheet](#) summarizing project details was also mailed out with the invitation, and is available online.

Main themes from this round of engagement included:

- continued concerns about high costs for residents and questions about how costs are broken down per property
- residents are becoming familiar with project information; more certainty/understanding about which phase residents are located in and project boundaries
- general hope and support for the project's completion; encouragement to complete it as quickly as possible
- fewer questions/comments about overall project plans; more about specific details like pump station/pipe locations and connections to individual homes

This "What We Heard" report has been informed by the feedback gathered at these events as well as by phone and email. This report will be included as part of the final draft addendum that is submitted to the province.



# Engagement Overview

## 1.1 Approach

### November 2023

A Public and Technical Advisory Committee (PACTAC) meeting was held on November 22, 2023 to share the draft addendum report, provide a summary of public feedback from the June 2023 open houses and an update on project plans. A recording of this meeting, and the full addendum report, were posted to the CVRD's project page.

Following this meeting, the 'What We Heard' Summary Report, summarizing public feedback from June 2023, was posted to the engagement page, and an update was sent out to project followers and the project email list. The update included a notification that the engagement summary report was available, an overview of the PACTAC meeting and notice of the upcoming public open houses. Website content was also updated to reflect revised project timing.

### January 2024

In advance of sending open house invites, the project page was updated in early January to add a [summary of the draft addendum report](#). The invitation was then also used to drive residents to the engagement page to view the report summary.

Three community open houses ran in late January 2024. The events aimed to inform the community on:

- Summary of June 2023 'What We Heard' report & how public feedback informed project updates
- Updated project costs/costs to homeowners
- Collection system design updates
- Septic deferral program and septic maintenance program updates
- Overview of the draft addendum report to be submitted to the province
- Next steps for the project; including detailed timeline

The events included the following methods of approach:



#### In-Person Community Open Houses

- Thursday, January 25, 5:30 pm to 7:30 pm – Union Bay
- Wednesday, January 31, 3:00 pm to 5:00 pm – Royston

Options to attend an afternoon or evening session were offered to help increase the number of participants. Around six members of the project team were on hand to answer questions as well as two technical consultants. Elected

officials and members of the Public Advisory Committee were also in attendance. The events included:

- 15 information boards
- Handout on Annual Projected Tax and User Fee Increases for Royston and Union Bay
- Handout on the capital cost and capital improvements charge payment options
- Hard copies of the report summary
- Large map printouts highlighting phasing and grinder pump properties
- Feedback forms



### **ZOOM Webinar**

- Monday, January 29, 12:00 pm to 1:00 pm via ZOOM

Darry Monteith, Manager of Liquid Waste Planning, provided a 30-minute overview presentation summarizing the content of the information boards. James Warren, Chief Administrative Officer at the CVRD, Lucy Wiwcharuk, Chief Financial Officer at the CVRD, and Ron Frank of K'ómoks First Nation also presented. This was followed by a Q&A period for participants to pose questions to the project team. There were six panelists available to respond to questions.




### **Engagement Page Updates**

- Information from events posted to page (information boards, webinar recording, project backgrounders and infosheet)
- Feedback form added (open until February 16, 2024)
- 'Key Topics' revised to reflect project updates

## 1.2 Community Engagement Goals

This project is undergoing an LWMP addendum and the CVRD is required to demonstrate how feedback was incorporated into the final plan. Feedback compiled here will be included in the addendum report submitted to the province in Spring 2024.

The goal of the community events was to INFORM and collect feedback from the community. In addition, the November 22<sup>nd</sup> Public Advisory Committee meeting falls under COLLABORATE on the International Association of Public Participation (IAP2) spectrum for public engagement (see table below). For more details on the project background, please see previous summary reports.

Increasing level of public involvement in decision-making 				
INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Provide balanced and objective information to residents.	Obtain feedback on analysis, alternatives and/or decisions from residents	Work directly with residents to address concerns	Partner with residents to develop a preferred solution	Place final decision making in the hands of residents

## 1.3 Promotion

The following blend of tools was used to promote, inform and encourage participation from the community:



**Direct-Mail Letter:** A letter of invitation was distributed via Canada Post to over 900 Union Bay/Royston households. Also included in the letter was an [infosheet](#) providing an overview of project details.



**News Release:** A [news release](#) was distributed on January 11 to announce the open houses and webinar.



**Social Media Posts:** Promotional posts were posted to the CVRD's Facebook, Instagram + X accounts.



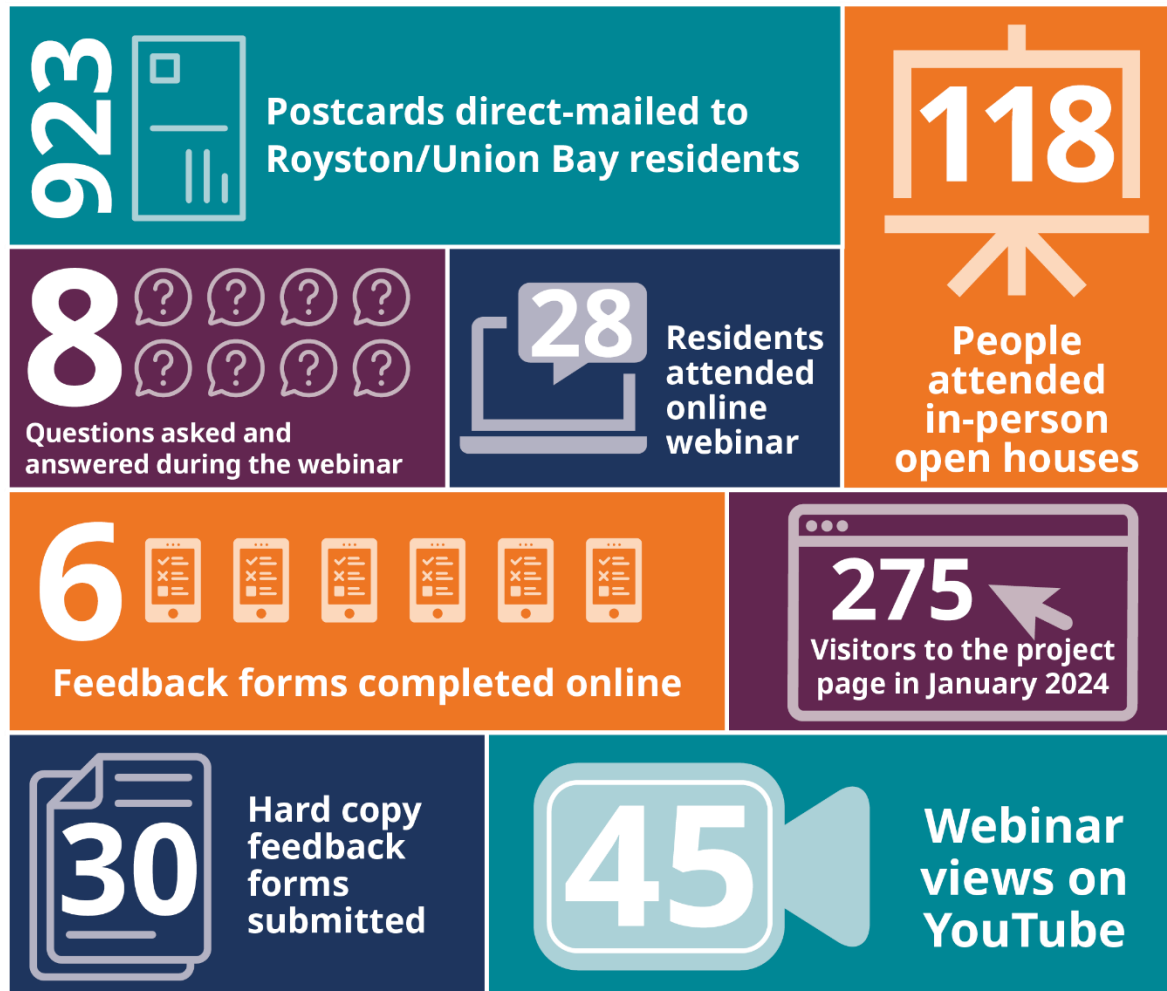
**Print Ad:** Ads ran in the January 10, 17 & 24 editions of the Comox Valley Record newspaper.



**Email:** A notice was distributed to the project email list, which includes 320 individuals who have signed up to receive project updates. It was also distributed to 47 followers of the engagement page.

## 1.4 By the Numbers

The numbers below highlight key data collected leading up to and from the events (until Feb. 16, 2024).



## 1.5 Themes of Comments

The themes of feedback listed below are compiled from five sources:

- feedback shared with staff members at in-person events
- questions posed by participants during online webinar
- feedback forms submitted at the events and online
- questions/comments submitted via phone and email
- questions posed to online Q&A

Themes are listed in order of interest/popularity.

### **1. Project costs/costs for residents:**

- Concerns about the high costs affecting homeowners, especially for single mothers and elderly residents
- Calls for more grants, options for deferral or financial relief
- Questions about the timeline and payment plans over the next few years; and when residents will start paying for the project
- Questions about breakdown of costs for residents, distinguishing between one-time costs and annual costs
- Clarifications that work on private property is the responsibility of the property owner
- Concerns about contractors charging a premium
- Concerns about pricing people out of homes
- Concerns about potential underestimation of costs, even from those who support the project
- Questions about partner commitment
- Several questions/interest about the option to pay all costs up front
- Concern about costs for subsequent phases being proportional to Phase 1A properties (grant dollars going to Phase 1A only)
- Suggestions for advance notice of upcoming costs

### **2. One-time costs/specific property-related questions:**

- Questions about the factors that influence variation in one-time costs from property to property
- Questions about planning for pipe installation, connections and decisions on access points for homes
- Concerns about complicated routing for connecting sewer lines
- Requests for information on how property updates in the next few years will align with the sewer hookup (i.e. landscaping, fences etc)
- Questions from residents interested in buying/selling properties located in Phases 1A/B (or building on empty lots); wondering about costs and options while waiting for sewer
- Suggestions for CVRD to offer a list of preferred contractors

### **3. Phasing/timing inquiries:**

- Questions about the timing of Phase 1B and residents keen to connect as soon as possible; why Phase 1A properties were selected
- Inquiries about future phases and when they will proceed
- Inquiries about timing to understand whether to invest in septic systems or wait for sewer



- Union Bay Estates: when it will proceed, whether they will pay fair share of costs and seeking reassurances that the developer will not benefit more than residents

#### **4. Grinder pumps:**

- Numerous questions about grinder pumps and when they would be required
- Concerns about the cost of grinder pumps and which properties will need them

#### **5. Pump stations: aesthetics and environmental concerns:**

- Concerns about pump stations detracting from natural beauty of the area; particularly in Royston
- Concerns about potential negative impacts to Royston neighborhood due to public amenities attracting unwanted activities (if included in design)
- Looking for more information on design, with a hope for local input
- Support to consider locations that are above coastal flood level
- Concerns about odour impacts if pump station located near private residences (Kilmarnock)
- Opposition to the proposed location of the Kilmarnock Pump Station; suggestion to move it further inside the park, away from properties
- Support for playground at Montrose Park, at site of proposed Kilmarnock station

#### **6. Community impact:**

- Calls for additional community projects during construction like:
  - a walking trail along Marine Drive built over the new gravity main
  - bike paths
  - expanding waterfront walking trail from Royston south
  - undergrounding power lines
- Questions about the forcemain location

#### **7. CVRD Septic Maintenance Program:**

- Uncertainty about the septic regulation program, including who it applies to, what is included/excluded and the role of oversight by the CVRD
- Questions about high-risk areas identified for mandatory inspection
- Some support for the program

#### **8. Decommissioning septic tanks:**

- Interest in repurposing old septic tanks for rainwater storage
- Questions about using old septic tanks as grinder pump chambers

#### **9. Septic systems:**

- Some inquiries about newer septic systems being exempt from the program
- Notice that Seaview Seniors' Village in Union Bay has had its septic system upgraded recently

## Conclusion

This round of public outreach was successful in re-engaging affected community members and driving home the project benefits, components and costs. While it introduced some updated information, much of it was repeated from the first round of public engagement and provided residents a second chance to fully absorb the details of this complicated project. The general consensus from staff attending the events was that there was less concern from the public about the plans and more understanding that it's moving ahead.

As at the last events, cost concerns remain the top issue, followed by questions about phasing and timing for future phases. With the changes to the collection system design, there was much more interest in understanding grinder pumps, including where they'll be required, costs and installation. Residents are beginning to turn their attention to the implementation of this project, and how it will affect them and the community assets that they use.

There was a mix of participants who had attended the last in-person events and those who had not; the CVRD is reaching 'new' residents in person, and continuing to engage informed residents via email and online. The comments/concerns collected at this stage are similar to those heard during the last round of engagement, providing the project team a solid foundation of public input.

## Next Steps

- **Spring 2024:** A draft report summarizing the proposed project and all public feedback will be considered by the Steering Committee. Then, the approved draft report will be forwarded to the province and the Sewer Extension South Project will become part of the overall Comox Valley Liquid Waste Management Plan (Regional Sewer Plan).
- **2025:** The final draft of the Regional Sewer Plan will be shared with the community before it is submitted to the province for final approval.
- **2026:** Estimated provincial approval of the plan.

# Appendices

Appendix 1 – Information Boards

Appendix 2 – Promotion Samples

Appendix 3 – Direct Mail Letter

Appendix 4 – Infosheet

Appendix 5 – Addendum Report Summary

Appendix 6 – Feedback Form

Appendix 7 – Feedback Form Responses

Appendix 8 – Backgrounders

# Appendix 1

## Information Boards

### WHY DO WE NEED A REGIONAL SEWER SERVICE?



#### POOR CONDITIONS

The ground conditions and high density of housing in the area create a greater risk for on-site septic systems to fail.



#### AGING AND FAILING SYSTEMS

About 60 per cent of the septic systems in Royston and 70 per cent in Union Bay are more than 25 years old, and many occupied properties do not have record of a permitted septic system at all.



#### RISK TO BAYNES SOUND

Baynes Sound produces 70 per cent of BC's cultured oysters – a prized feature of the Comox Valley that holds important cultural, economic, environmental and recreational value. Poorly functioning systems pose an environmental and public safety risk.



#### EXISTING HUB AND FUTURE GROWTH

The area has an existing population that would benefit from servicing – and once serviced can expect growth.



#### BENEFITS FOR RESIDENTS

Connecting to a regional sewer service will provide residents with high quality wastewater treatment, reduce regulatory hurdles and offer cost savings over the long-term.



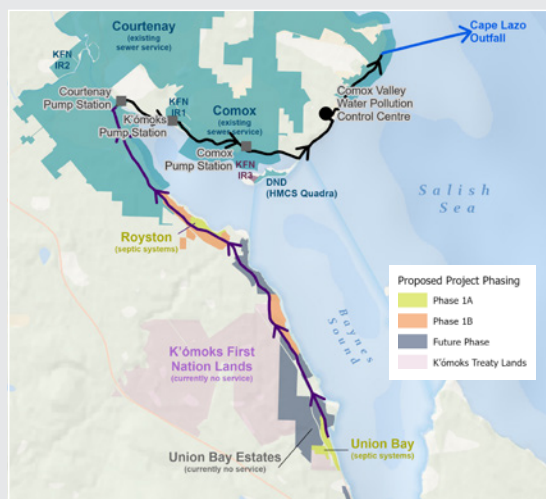
### NEW SEWER SERVICE & HOW IT WORKS

The Comox Valley Sewage Commission – which currently services 40,000 people in Courtenay, Comox and K'ómoks First Nation – has made an unprecedented decision by agreeing to receive wastewater from Area A.

#### REGIONAL SEWER SERVICE MAP

The expanded regional system would see the addition of these components:

- ▶ 13 km long forcemain, extending from Union Bay to the Courtenay Pump Station
- ▶ Neighbourhood collection systems and pump stations



#### HOW IT WILL WORK

In the new system, wastewater will travel this path:

1. From the home into neighbourhood collection systems
2. Pump stations will move wastewater through a new forcemain to the Courtenay River siphon
3. Wastewater is piped under the Courtenay River to the Courtenay Pump Station
4. Wastewater is combined with municipal flows and pumped to the Treatment Plant near Cape Lazo

# Appendix 1

## Information Boards

### WHAT WE HEARD & PROJECT UPDATES

#### ? WHY ARE WE HERE?

Public feedback and further investigatory work have resulted in updates to the Sewer Extension South Project that we are sharing with you today, including:

- Collection system design
- Costs
- Deferral program
- Proposed septic regulatory program

Please visit our stations for more details. Our project team is here to answer your questions and collect your feedback.

#### >> WHAT HAPPENS NEXT

The proposed Sewer Extension South Project will be considered by the province of BC as part of the Comox Valley Liquid Waste Management Plan (Regional Sewer Plan). Summarizing the feedback collected from the public is part of the province's reporting requirements.

#### ... WHAT WE HEARD



To read a summary of 'What We Heard' from the community at our June 2023 events, and how this information was used, visit [engagecomoxvalley.ca/sewerextension](https://engagecomoxvalley.ca/sewerextension)

#### TIMELINE

##### SEWER EXTENSION SOUTH

**Spring 2024:** A draft report summarizing the proposed project and all public feedback will be considered by the Steering Committee.

Next, the approved draft report will be forwarded to the province and the Sewer Extension South Project will become part of the Comox Valley Liquid Waste Management Plan (Regional Sewer Plan).

##### REGIONAL SEWER PLAN

**2025:** The final draft of the Regional Sewer Plan will be shared with the community before it is submitted to the province for final approval.

**2026:** Estimated provincial approval of the plan.

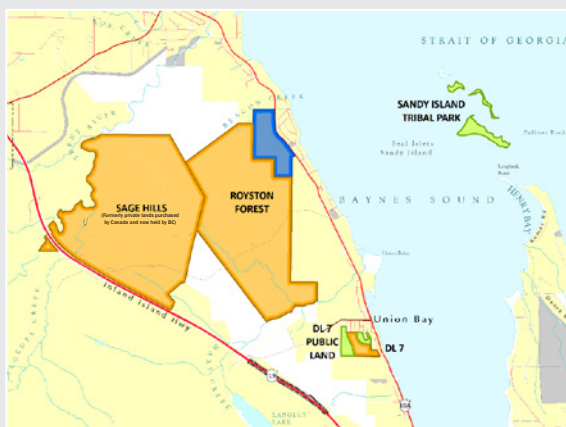
##### CONSTRUCTION

**2026/2027:** Estimated start of Phase 1A construction on the Sewer Extension South Project.

**2028:** Estimated Phase 1A project completion.

### K'ÓMOKS FIRST NATION AND RECONCILIATION

hchewcís; Hayuthela la xens: Moving Forward Together



- Agreement in Principle Lands (AIP)
- Agreement in Principle Lands (AIP) - Tribal Park or Public Land
- K'ómoks current fee simple land
- Fee simple land (not K'ómoks land)
- Park
- Other Crown land (white)

#### SOUTH TREATY LANDS - AGREEMENT IN PRINCIPLE

- The new regional system will include service to the K'ómoks First Nation Treaty Settlement Lands south of Courtenay, where further development is planned.
- Should the treaty be ratified, development and economic growth of these lands will be an important part of reconciliation. Bringing water and sewer service to these proposed parcels removes key barriers to development.
- The sewer extension project will also help ensure safe access to shellfish for the K'ómoks First Nation for food, social and ceremonial purposes, and support their aquaculture interests in Baynes Sound.

K'ómoks Treaty is intended to create jobs, promote investment and economic development, build housing, support tourism and encourage investments in infrastructure which will benefit the entire Comox Valley and surrounding area.





# Appendix 1

## Information Boards

### A PHASED APPROACH

Due to the scale of the project and to keep per property costs reasonable, sewer service will be implemented in phases. The maps below show the proposed boundaries for Phases 1A and 1B.

#### PHASE 1A

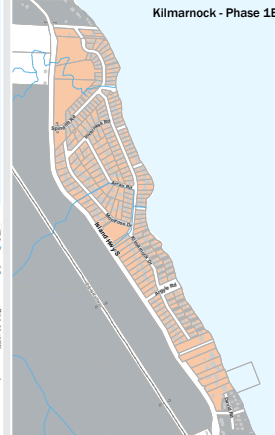
- Proposed to include 460 properties in the historic cores of Royston and Union Bay.
- These areas were selected because:
  - significant number of aging/at-risk systems
  - greatest environmental need due to lot size and density
  - most cost efficient to service
- Phase 1A will provide foundational infrastructure needed for connection of future phases, and all future connections will benefit from this work.
- Phase 1A will see use of the \$30 million provincial grant.



#### Royston - Phase 1A and Phase 1B



#### Kilmarnock - Phase 1B



#### PHASE 1B

- Phase 1B will expand servicing to additional portions of the Royston area as well as the Kilmarnock neighbourhood.

#### FUTURE PHASES

- Future project phases will include smaller and/or lower density neighbourhoods where servicing is more expensive, including Gartley Point, Spence Road and Garvin Road.
- The timing of future phases is unknown at this time.

#### BOUNDARY CHANGES/PHASE ADJUSTMENTS

- The CVRD received multiple requests during the 2023 public engagement to consider minor boundary changes and phase adjustments. The CVRD is investigating and will consider these requests where they can be made with little to no overall increase to per property costs.

### COLLECTION SYSTEMS

A collection system is the system of pipes that collects wastewater from individual properties in a neighbourhood into one central location – a pump station. The pump station will then push the collected wastewater into the regional sewer forcemain, which will move the wastewater through Courtenay and Comox to the sewage treatment plant.

#### COLLECTION SYSTEM

A hybrid gravity/low pressure sewer system was selected as the preferred option.

#### GRAVITY SYSTEM

- Wastewater would flow from homes by gravity to local pump stations.
- A majority of properties in the service area would be serviced with a gravity connection.

#### LOW PRESSURE SEWER SYSTEM (GRINDER PUMPS)

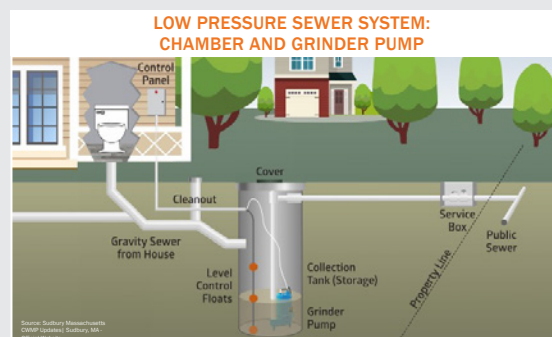
- Selected to minimize installation of infrastructure along the foreshore and limit excavation depths for sewer mains (deeper excavation increases cost).
- Involves installation of chambers with grinder pumps on some properties to push up to the gravity sewer main in the fronting street.
- Applies to approximately 30% of Phase 1A properties; generally those along the waterfront, or where the home is at a lower elevation than the fronting street.

#### CHAMBER AND GRINDER PUMPS: HOMEOWNER RESPONSIBILITIES

**Installation:** The property owner will be responsible for installation costs for LPS equipment (grinder pump, chamber and controls, approximately \$4,500).

**Operations and maintenance:** In other areas, annual operating/maintenance costs are in the \$40 to \$50 range for a typical household.

**Repairs and replacement:** If properly installed and maintained, grinder pumps will last 10 to 15 years or more before requiring repairs or replacement. Current costs for a replacement grinder pump are around \$1,200.

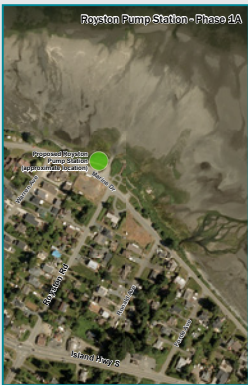


PUMP STATIONS

Wastewater will move through neighbourhood collection systems to the pump stations, which will pump wastewater into the regional forcemain and carry it to the sewage treatment plant. Phase 1A will see the installation of the Union Bay and Royston pump stations, with the Kilmarnock pump station installed in Phase 1B.

**ROYSTON PUMP STATION: PHASE 1A**

- Pump station building at the base of Royston Road on the Northwest corner of the Royston Road/Marine Drive intersection.
- Future planning will consider potential community amenity options (i.e. public washrooms, parking).
- Proposed location is in the coastal flood zone – there are ongoing discussions to mitigate potential impacts of coastal flooding. Alternative options under consideration include:
  - Small community kiosk/ underground pump station at proposed location, with a regional pump station located near Highway 19A
  - Kiosk at proposed location, with electrical equipment relocated outside of the flood zone up Royston Road
  - Construction of a flood-resilient pump station structure, with critical equipment installed above the flood construction level



**UNION BAY (PHASE 1A) AND KILMARNOCK (PHASE 1B) PUMP STATION**

- Location options are under consideration in the approximate highlighted area.

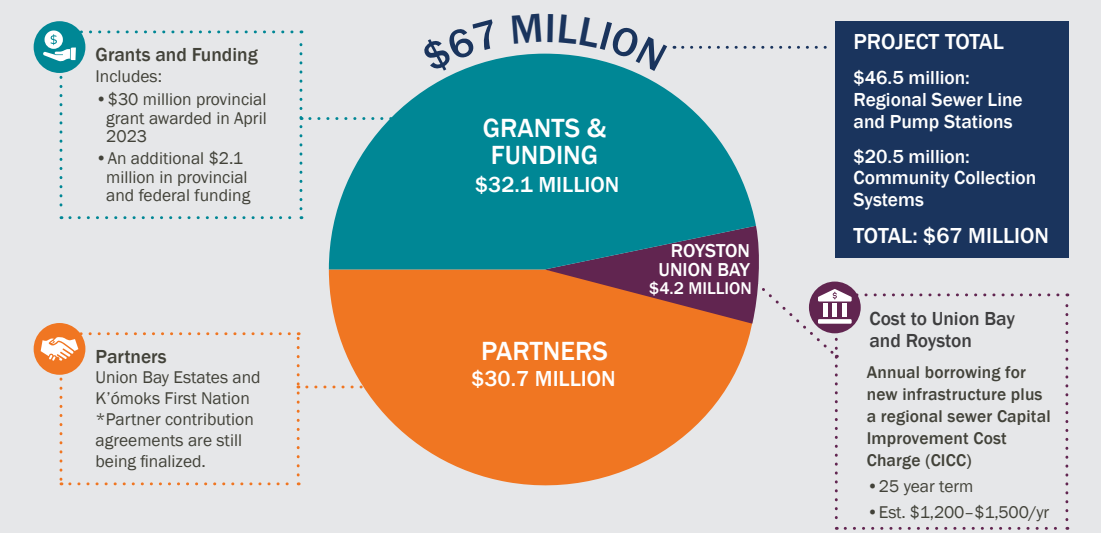
**i** Gravity Wastewater Collection System: Pump stations need to be located at low points so collected wastewater can flow to them by gravity.

**Public Input:** Pump station locations are still undergoing review/consideration and community input will be considered as these decisions are made.

PROJECT COSTS

Project design has been updated from the conceptual design (Class D cost estimates) presented to the community in June 2023. It is now at the preliminary design stage (Class C cost estimates).

Class C estimates resulted in a slight increase in overall project costs, but the CVRD has applied additional grant funds resulting in a \$200/year decrease in the annual cost of borrowing for residents. Final cost estimates will be available in 2026.



# Appendix 1

## Information Boards

### COSTS FOR RESIDENTS IN PHASE 1A

Cost estimates have been updated since June 2023. The result is a \$200/year decrease in the annual cost of borrowing for residents. One-time cost estimates and annual operating cost estimates remain the same. These estimates are based on Preliminary Design (Class C) with an expected accuracy of plus or minus 30%. Final cost estimates will be available in 2026/27.

#### ONE TIME COSTS: HOMEOWNERS

**ONE-TIME COST  
PER HOUSEHOLD**  
**\$3,500–\$12,500**



Connection from home  
to new pipe at road:  
**\$2,500–\$6,000\***

Decommissioning of septic system:  
**\$1,000–\$2,000**

Installation of LPS Equipment:  
**\$4,500\*\***

**TOTAL: \$3,500–\$12,500**

\*Depends on length of pipe required to reach home.  
\*\*Approximately 30% of homes will require LPS equipment.

#### About this cost

- Responsibility of homeowner
- Varies depending on property and current system
- Estimates are based on current market conditions
- One-time cost estimates remain similar for most households, however the cost range now includes estimated costs to install an LPS grinder pump if needed (est. \$4,500).

#### ANNUAL COSTS: PAYABLE TO CVRD

**ANNUAL COST  
PER HOUSEHOLD**  
**\$1,750–\$2,150**



Borrowing (25 years):  
**\$1,200–\$1,500**

Operations + Maintenance  
(ongoing):  
**\$550–\$650**

**TOTAL: \$1,750–\$2,150**



#### Where you'll see these charges:

**Borrowing:**  
**\$1,200–\$1,500**  
On Annual Provincial  
Property Tax Bill

**Operations +  
Maintenance**  
**\$140–\$165**  
On CVRD Quarterly Utility Bill



#### WE HEARD YOU:

The CVRD will provide an option to pay \$22,000 up front. Quarterly operations and maintenance costs will still apply.

### STAGES OF PROJECT DESIGN: GETTING TO THE FINAL COST

Wondering why costs change through the design process and how our team gets to the final project cost?

The answer is that cost estimates are refined through the evolution of project design. As engineers move through the stages of design, more detailed investigations are completed and costs become more accurate.

There are typically 5 stages in the engineering process: 1. Strategic, 2. Conceptual, 3. Preliminary Design, 4. Detailed Design and 5. Construction. Here's how these stages are rolling out for the project:

#### 2. CONCEPTUAL DESIGN, CLASS D COST ESTIMATES:

- June 2023: \$1,930–\$2,350/household
- Based on high-level information, with various assumptions made.

#### 3. PRELIMINARY DESIGN, CLASS C COST ESTIMATES:

- January 2024 (Draft Addendum): \$1,730–\$2,150/household
- Expected to be within plus or minus 30% of final costs
- Based on more accurate information, including LIDAR survey data, base mapping, hydraulic modeling etc.

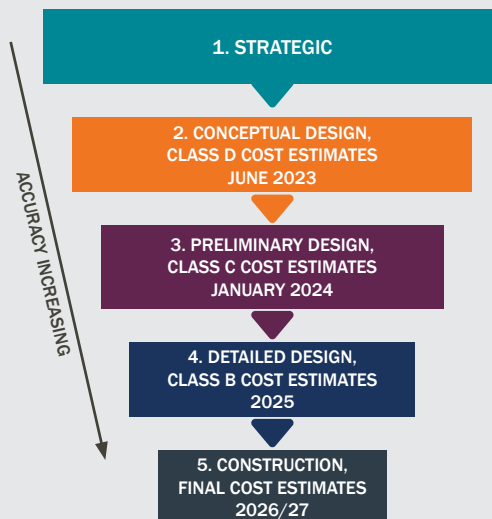
CURRENT STAGE

#### 4. DETAILED DESIGN, CLASS B COST ESTIMATES

- Will be available in 2025
- Expected to be within plus or minus 10-20% of final costs
- Based on field work including detailed survey, geotechnical, environmental and archaeological investigations.

#### 5. CONSTRUCTION, FINAL COST ESTIMATES

- Will be available in 2026/27, when Phase 1A work is expected to start



# Appendix 1

## Information Boards

### CVRD SEPTIC DEFERRAL PROGRAM

The proposed septic deferral program will allow homeowners to postpone sewer operating costs for 5 years, if they have a newly installed septic system.

#### YOU COULD BE ELIGIBLE IF:

- You have a Type 2 or 3 septic system aged less than 5 years at the time of the required sewer connection (around 2028 for Phase 1A)

#### YOU COULD DEFER THESE COSTS:

- Sewer operating costs: est. \$550 to \$650/year
- Private property connection expenses and septic decommissioning costs: est. \$3,500 - \$12,500

The deferral period proposed is 5 years or until the property is sold.



#### PROVINCIAL PROPERTY TAX DEFERRAL

The CVRD's septic deferral program does not include deferral of borrowing costs on your annual provincial property tax bill: est. \$1,200-\$1,500.

This could be pursued through provincial property tax deferral.

To learn more, scan the QR code:



### SOUTH SERVICES COST IMPACTS FOR ROYSTON/UNION BAY

Royston/Union Bay residents can expect additional residential property tax and user rate increases in the coming years – and we want you to be prepared for what's to come.

These increases are in response to the needs of these communities and will deliver on foundational community services.

New projects that will result in annual tax escalation by 2027 are expected to include:



#### UNION BAY

- Fire Hall Improvements: Plans for a multi-community hall. Tax requisitions are increased in future years to support enhanced service and properly build reserves for future replacement: **\$180**
- Utility Water Rate Review: Replace aging water system infrastructure: **\$275**

**TOTAL: \$455**



#### UNION BAY/ROYSTON:

- Sewer Extension South (Phase 1A properties): Capital: **\$1,200-\$1,500**  
Operating: **\$550-\$650**
- Recreation Facilities: Improvements/major refurbishments to aging facilities: **\$60**
- Enhanced Garbage Collection: This service may expand in January 2025 to include an organics program: **\$100**

**TOTAL: \$1,910-\$2,310**



#### ROYSTON:

- Water Extension South: Installation of water transmission main to service properties in south Courtenay and Electoral Area A with water from the Comox Valley Water System: **\$340**
- Utility Water Rate Review: Replace aging water system infrastructure: **\$350**

**TOTAL: \$690**

#### WHAT THIS MEANS FOR YOU

- The CVRD aims to stagger delivery of new services to have gradual increases over time layered within the financial plan.
- The CVRD is planning increased communication to affected households well in advance, to help residents prepare for managing added expenses.



Please take home a copy of the 'South Services Projected Tax Escalation Backgrounder' for more detailed information on expected cost increases.



# Appendix 1

## Information Boards

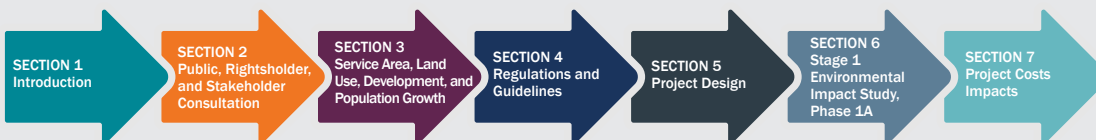
### DRAFT LWMP ADDENDUM REPORT: OVERVIEW

The Sewer Extension South Project will be reviewed as part of the Regional Sewer Plan. A report summarizing the project planning work to date will be submitted to the province in spring 2024. Upon provincial review, this addendum will be included as part of the Regional Sewer Plan that is expected to receive provincial approval in 2026.

#### GOALS OF THE PLANNING PROCESS



#### WHAT THE REPORT INCLUDES



Looking for more details? Find a complete summary of the draft report on the project webpage at [engagecomoxvalley.ca/sewerextension](https://engagecomoxvalley.ca/sewerextension) or take one home today.

### CVRD SEPTIC MAINTENANCE PROGRAM

The Sewer Extension South LWMP addendum includes language supporting a septic mandatory maintenance program for the plan area.

#### PURPOSE OF THE PROGRAM



The program would help ensure septic systems are properly operated and maintained in accordance with Sewerage System Regulation requirements.



It would include mandatory inspections in 'high-risk' areas and mandatory pump-outs in all areas.



#### REGION-WIDE PROGRAM

There is also support from the Electoral Areas Services Committee for a region-wide septic mandatory maintenance program. For a septic regulatory program to move forward, the CVRD requires BC Cabinet approval. Next steps include:

##### Spring 2024:

CVRD to complete public engagement, to support the Order in Council request

##### Summer 2024:

Order in Council request submitted to the province

##### 2025

Assent vote or Alternate Approval Process

##### 2026

Program startup

This program has been included in the draft addendum and therefore, if approved by the province, could apply specifically to the plan area, even if the region-wide program does not proceed.



# Appendix 1

## Information Boards

### SHARE YOUR FEEDBACK

Thank you for attending today. Your input is important to us and will be collected and reported out to the Province as part of the Liquid Waste Management Plan addendum process.

#### TWO WAYS TO SUBMIT YOUR FEEDBACK



Complete and submit a feedback form here



Fill the feedback form out online

#### STAY UP TO DATE AT [www.engagemoxvalley.ca/sewerextension](http://www.engagemoxvalley.ca/sewerextension)



Register to receive project updates



Get access to the latest news and events



Ask a question of our project team



## Appendix 2

### Promotion Samples

**Comox Valley RD** @comoxvalleyrd · Jan 24

ATTN: Royston & Union Bay Residents: Join us in-person TOMORROW at the Union Bay Hall at 5:30 pm to learn about updates to Sewer Extension South Project planning.  
Get all the project details at: [engagecomoxvalley.ca/sewerextension](http://engagecomoxvalley.ca/sewerextension)  
#ComoxValleyRD #SewerExtensionSouth


**Sewer Extension South Community Event**  
Union Bay Community Hall,  
5401 Island Hwy S  
January 25, 2024 | 5:30 pm to 7:30 pm



**Comox Valley Regional District - Local Government**  
January 31 at 6:01 AM · 🌐

📍 Royston & Union Bay: Today's the day! Drop in to an open house at Fallen Alders Hall (3595 Royston Rd) to get the latest about plans for the Sewer Extension South Project. Staff will be on hand from 3:00 pm to 5:00 pm to answer questions and share project updates. Can't make it in-person? Watch for the webinar presentation at [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)  
#ComoxValleyRD #SewerExtensionSouth


**Sewer Extension South Community Event**  
Fallen Alders Hall  
Tonight | 3:00 pm to 5:00 pm



**Sewer Extension South Community Events**

comoxvalleyrd Are you a Royston/Union Bay resident looking to learn more about plans for community sewer? Mark your calendar! We're hosting an online webinar to share updates on the Sewer Extension South Project:  
📅 Monday, January 29  
🕒 12:00 pm to 1:00 pm  
📍 Pre-register at [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)  
We hope to see you there!  
#ComoxValleyRD #SewerExtensionSouth

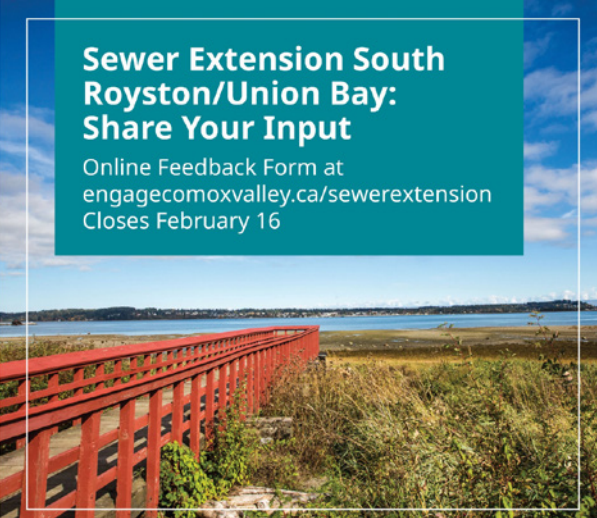
2 likes  
January 26



**Comox Valley Regional District - Local Government**  
February 15 at 12:01 PM · 🌐

📢 Don't flush away your thoughts on sewer plans for Royston/Union Bay – share them with us!  
📄 The online feedback form closes tomorrow. Have your say now at: [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)  
#ComoxValleyRD #SewerExtensionSouth

**Sewer Extension South Royston/Union Bay: Share Your Input**  
Online Feedback Form at [engagecomoxvalley.ca/sewerextension](http://engagecomoxvalley.ca/sewerextension) Closes February 16



## Appendix 3

### Direct Mail Letter

**Office of the Chief Administrative Officer**

770 Harmston Avenue, Courtenay, BC V9N 0G8  
Tel: 250-334-6000 Fax: 250-334-4358  
Toll free: 1-800-331-6007  
[www.comoxvalleyrd.ca](http://www.comoxvalleyrd.ca)



File: 5330-20/SESP

January 9, 2024

Owner  
Address 1  
Address 2

Dear Homeowner/Resident:

**Re: Sewer Extension South Project: Come Learn About Updates to Plans**

The Comox Valley Regional District (CVRD) is sharing updated information about plans for sewer service in Royston/Union Bay at three events in January:

**In-Person Open Houses (drop-in anytime):**

- **Thursday, January 25**, 5:30 pm to 7:30 pm, Union Bay Community Hall, 5401 Island Hwy S, Union Bay
- **Wednesday, January 31**, 3:00 pm to 5:00 pm, Fallen Alders Hall, 3595 Royston Rd, Royston

**Online Webinar:**

- **Monday, January 29**, 12:00 noon to 1:00 pm
- To register visit: [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)

In-person events are drop-in style and the webinar will include a presentation followed by an online Q&A. All events will share the same information and we invite you to attend the session that best fits your schedule.

An infosheet describing the latest project updates at a high level is attached for your information. You can also view a summary of the report that will be submitted to the province this spring as part of the Comox Valley Liquid Waste Management Plan (regional sewer plan). This is available at [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension) along with other important information about the project.

*The Comox Valley Regional District respectfully acknowledges the land on which it operates is on the unceded traditional territory of the K'ómoks First Nation, the traditional keepers of this land.*

## Appendix 3

### Direct Mail Letter

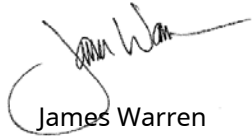
Page 2

If you're unable to attend a session, watch the Engage Comox Valley site for updates following the events, including a recording of the online presentation, and the opportunity to submit a feedback form.

We hope to see you at an event—and thank you for your continued engagement on this project.

Questions? Comments? Please contact us at 250-334-6000 or email:  
[communications@comoxvalleyrd.ca](mailto:communications@comoxvalleyrd.ca).

Sincerely,



James Warren  
Chief Administrative Officer

*Comox Valley Regional District*

# SEWER EXTENSION SOUTH PROJECT

## Bringing Critical Wastewater Management Services to Royston and Union Bay

The proposed Sewer Extension South Project will move wastewater from homes and businesses in Union Bay and Royston through a new sewer pipe where it will connect to the Comox Valley Sewer Service, creating a regional approach for the treatment of wastewater.

This infosheet will provide you with all the up-to-date details on the project. To learn more, visit the project webpage at [engagecomoxvalley.ca/sewerextension](https://engagecomoxvalley.ca/sewerextension).

### PROJECT PHASING

This project will be delivered in multiple phases: Phase 1A, Phase 1B & Future Phases.

- PHASE 1A

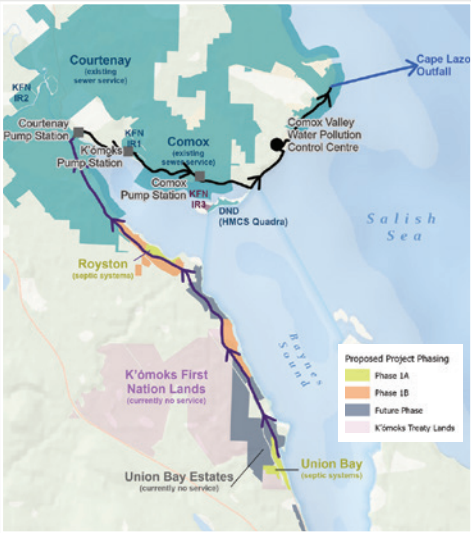
Proposed to include 460 properties in the historic cores of Royston and Union Bay. This phase will build the core infrastructure for other neighbourhoods to connect in subsequent phases.
- PHASE 1B

Will expand servicing to additional portions of the Royston area as well as the Kilmarnock neighbourhood.

#### FUTURE PHASES

Will include smaller and/or lower density neighbourhoods where servicing is more expensive, including Gartley Point, Spence Road and Garvin Road. The timing of future phases is unknown at this time.

Union Bay Estates and K'ómoks First Nation Treaty Settlement Lands will connect to the system as these lands are developed. Timing is to be determined and K'ómoks participation is dependent on the ratification of treaty.



### TIMELINE

This project will be considered by the Province of BC as part of a Liquid Waste Management Plan for the Comox Valley. Here are the steps along the way:



**February/March 2024:** A draft report summarizing the proposed project and all public feedback will be considered by the Steering Committee.

Next, the approved draft report will be forwarded to the province and the Sewer Extension South Project will become part of the Comox Valley Liquid Waste Management Plan (Regional Sewer Plan).

**2025:** The final draft of the Regional Sewer Plan will be shared with the community before it is submitted to the province for final approval.

**2026:** Estimated provincial approval of the plan.

**2026/2027:** Estimated start of Phase 1A construction on the Sewer Extension South Project.

**2028:** Estimated Phase 1A project completion.



# Appendix 4

## Infosheet

### COLLECTION SYSTEM

A hybrid gravity/low pressure sewer system has been selected for this project. This means wastewater will be collected from your home in one of two ways:

#### GRAVITY SYSTEM

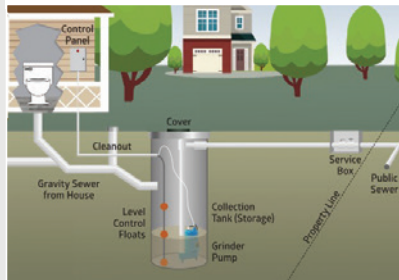
Wastewater would flow from homes by gravity to local pump stations.

#### LOW PRESSURE SEWER SYSTEM (LPS GRINDER PUMPS)

Involves installation of chambers with grinder pumps on some properties to push up to the gravity sewer main in the fronting street.

There have been updates to the collection system design that will result in fewer private property crossings but will require an increased number of properties to install LPS grinder pumps.

#### LOW PRESSURE SEWER SYSTEM: CHAMBER AND GRINDER PUMP



### PHASE 1A BREAKDOWN

**Royston**  
152 properties

Gravity connections: **80%**

LPS connections: **20%**

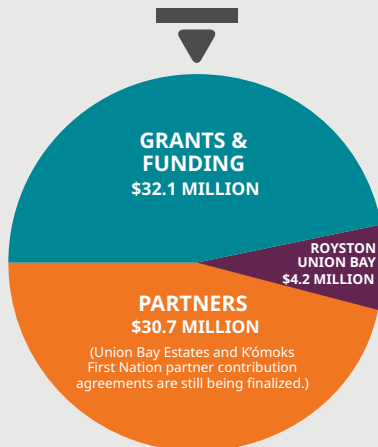
**Union Bay**  
311 properties

Gravity connections: **65%**

LPS connections: **35%**

### PHASE 1A COST ESTIMATES

#### PROJECT FUNDING SOURCES \$67 MILLION



#### ANNUAL COST PER HOUSEHOLD \$1,750-\$2,150



Borrowing (25 years):  
**\$1,200-\$1,500**

Operations + Maintenance (ongoing):  
**\$550-\$650**

#### ONE-TIME COST PER HOUSEHOLD \$3,500-\$12,500



Connection:  
**\$2,500 - \$6,000\***

Septic decommissioning:  
**\$1,000 - \$2,000**

Installation of LPS equipment:  
**\$4,500\*\***

\*depends on distance from home to road and extent of landscaping, driveways, etc

\*\*Approximately 30% of properties will require LPS equipment



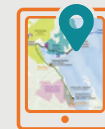
#### Why is there a range of costs?

These estimates are based on 'Class C' cost estimates - they aren't specific yet because the design isn't finished. They will be further refined as the design is confirmed.

'Class B' cost estimates (expected to be within 10-20% of final costs) will be available in 2025.

Final cost estimates will be available in 2026/2027, when Phase 1A work is expected to start.

EXPLORE  
MORE



Visit an interactive map at  
[www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)  
to find your house and confirm your phase.

Learn more at [comoxvalleyrd.ca/sewerextension](http://comoxvalleyrd.ca/sewerextension)  
Phone: 250-334-6000  
Email: [communications@comoxvalleyrd.ca](mailto:communications@comoxvalleyrd.ca)

**Comox Valley**  
REGIONAL DISTRICT  
[comoxvalleyrd.ca](http://comoxvalleyrd.ca)

# Comox Valley Regional District Sewer Extension South

Draft Addendum – Summary Report  
January 2024



Appendix 5

Addendum Report Summary

Table of Contents

1. Introduction.....	2
2. Public, Rightsholder, and Stakeholder Consultation .....	3
3. Service Area, Land Use, Development and Population Growth .....	5
4. Regulations And Guidelines.....	5
5. Project Design .....	6
6. Environmental Impact Study .....	9
7. Cost Impacts.....	10

#### 1. Introduction

##### Project Background/History

The Electoral Area A communities of Royston, Union Bay, and surrounding neighbourhoods, border the waters of Baynes Sound. Baynes Sound produces 70% of BC's cultured oysters and holds important cultural, economic, environmental and recreational value. There is no centralized sewage collection system in the area – privately owned onsite septic systems are used instead. These systems have a history of failures with the potential to negatively impact the environment and public health.

In 2014, a Stage 1 and 2 Liquid Waste Management Plan (LWMP) for the south region was initiated and plans for a new sewer collection system and south wastewater treatment facility were developed. The LWMP process was paused in 2015, and in 2016 after an unsuccessful referendum on the project, it became evident that a new approach was needed.

A regional approach to wastewater management is now being developed in cooperation with K'ómoks First Nation as a key partner, which provides for long-term, safe and cost-effective sewage treatment for Royston and Union Bay. In 2020, the Sewage Commission supported recommendations to receive wastewater flows from portions of Electoral Area A into the existing Comox Valley sewer system, eliminating the need for a separate wastewater treatment facility in the south. This new regional system will also serve Union Bay Estates and K'ómoks First Nation Treaty Settlement Lands, should treaty be ratified.

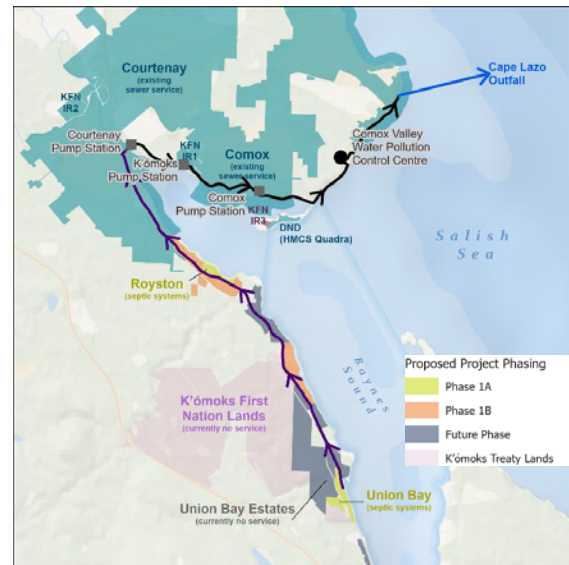
##### Overview of Addendum Process

The LWMP addendum summarizes the work completed to date for the Sewer Extension South Project, which will connect communities in the south to the regional sewer system. The LWMP is a three-stage planning process and this addendum will be attached to the Comox Valley Sewerage Service Stage 1 and 2 LWMP already reviewed by the province.

The addendum will be submitted to the province for review in 2024 and the project will then be included in Stage 3 of the Comox Valley Sewerage Service LWMP.

The following tasks were completed during Stage 1 and Stage 2 of the addendum:

- review background information, including past studies, record drawings and GIS;



- define south region plan area, regulatory requirements and design criteria;
- evaluate conveyance and collection system options and develop conceptual design and cost estimates;
- develop system overview and phasing;
- develop preliminary design and associated Class C cost estimates;
- hold technical and public advisory (PACTAC) and Steering Committee meetings at strategic points to present materials and obtain committee feedback and input;
- complete public engagement to obtain input from the community at large; and
- First Nations consultation.

## 2. Public, Rightsholder, and Stakeholder Consultation

The addendum includes a comprehensive consultation plan for the project. Here is a summary of the consultation involved to date, including public, First Nations and advisory committee consultation.

### Public and Technical Advisory Committee (PACTAC) Meetings

The public and technical advisory committees were established in September 2022 to provide technical and public input to the addendum process. A total of five combined PACTAC meetings were held at regular intervals throughout the planning process with a sixth meeting planned for early 2024 to review the final draft addendum report.



For a summary of these meetings, please see the [full report](#).

### Consultation with the K'ómoks First Nation

The CVRD acknowledges that Indigenous peoples are entitled to safe access to shellfish for food, social and ceremonial purposes and to protect the productive capacity of their lands (as per Article 29 of United Nations Declaration on the Rights of Indigenous Peoples) and that this right is threatened by the existing environmental risk in Baynes Sound.

K'ómoks First Nation (K'ómoks) has expressed concern about the health of Baynes Sound and related environmental and economic impacts, including its aquaculture businesses and planned future development of their south treaty settlement lands. Should treaty be ratified, K'ómoks treaty settlement lands will be connected to the regional sewer system.

Some consultation steps completed to date include:

- **2020:** Discussions about a regional solution for sewer as part of consultation for the Comox Valley Sewer Conveyance Project and Comox Valley Sewer Service LWMP.



## Appendix 5

### Addendum Report Summary

- **February 2021:** K'ómoks and the CVRD ratified a Community Benefit Agreement to support upgrades to the sewer line that crosses through IR#1 and extend sewer services to K'ómoks treaty settlement lands.
- **2021-2023:** K'ómoks and the CVRD confirmed their partnership through a provincial grant application. In April 2023, \$30 million in funding was awarded.
- **June 2023:** CVRD and Treaty team staff attended community information sessions.
- **Ongoing:** CVRD and K'ómoks continue to meet at the elected official and staff level to move the project forward. Next steps will include establishing a formal partnership agreement.

#### Public Consultation

Public consultation has been planned at all critical steps in the LWMP addendum process, to ensure the community can help determine the plan ahead as it is created. The engagement plan for the addendum process involves phases, including:

##### PHASE 1: PROJECT INITIATION + FUNDING ANNOUNCEMENT

- Residents advised of LWMP addendum process, public advisory committee formed and provincial grant funding announced via news release

##### PHASE 2: PHASING, COLLECTION SYSTEMS, PUMP STATIONS

- Kick-off of online engagement hub and first public events to introduce project planning to date

##### PHASE 3: DEVELOPMENT OF DRAFT ADDENDUM

- Additional public events, informing community of updates, next steps and sharing the draft addendum

#### Other First Nation Consultation

In addition to K'ómoks, 13 First Nations identify land and/or marine territory in all, or parts of Courtenay, Comox, Royston, Union Bay and Baynes Sound (Fanny Bay, Denman Island and Hornby Island).

The CVRD identified a consultation timeline for the Sewer Extension South Project from summer 2022 to winter 2023 to meet with interested Nations (either with Staff or Chief and Council as advised) and to engage with the community if requested.



To read more about the Public and First Nation consultation process and view a timeline of activities, see the [full report](#).

### 3. Service Area, Land Use, Development and Population Growth

The addendum identifies the specific areas to be serviced by regional sewer and anticipates future land use and populations within these areas. Here is a brief summary of these details, with full projection tables available in the report.

#### Service Area

The service area for the Sewer Extension South project includes the following areas:

- Royston
- Gartley Point
- Kilmarnock
- Union Bay
- New development areas (Union Bay Estates and K'ómoks First Nation Treaty Settlement Lands)

#### Development and Official Community Plans

It is necessary to project future land use within the plan area to properly plan for wastewater facilities. This section of the report highlights the three land use designations in the south region area:

- Settlement nodes
- Settlement expansion areas
- Rural settlement areas

#### Population Projections

As a forward-looking planning document, an LWMP is intended to anticipate a community's future liquid waste management needs. As a key input into this work, it is necessary to consider potential future growth and development within the community and translate this into population projections.



To view a map illustrating land use designations for the project area, see the [full report](#).

### 4. Regulations And Guidelines

The addendum includes a review of regulations and guidelines that could influence the delivery of current and future services, and suggests introduction of new ones where needed – these are summarized below.

#### Guidelines for I&I Reduction

Inflow and Infiltration (I&I) into the sewer collection system can substantially increase the volume of wastewater arriving at treatment facilities. I&I varies depending on weather, soil moisture, groundwater levels and the duration and intensity of storm events.

The project proposes new collection systems, which will initially contribute minimal I&I to the system. I&I is a larger concern for older collection systems as sewer pipes and manholes develop defects such as cracks and leaking joints over time. As the proposed system ages, proactive policies should be adopted to help address I&I.



To read all recommended policies and regulations [see the full report](#).

#### Septic Systems

This section of the report highlights:

- Risks of failing septic systems & how septic systems are regulated in BC
- Importance of septic system maintenance and requirements of the Sewerage System Regulation
- Typical lifespan of septic systems and the three types of septic systems
- Details of studies indicating failing septic systems in Royston/Union Bay
- Reasons for failing systems in these areas
- Feasibility study concluded that continued use of septic systems was not considered a suitable long-term wastewater management option for the area
- Comparison of septic system costs vs costs to construct the sewer project; over a 50-year timeframe, septic costs averaged just over \$3,000 per year compared to sewer costs of approx. \$2,000 per year

#### Septic Regulatory Bylaw

There is currently no formalized CVRD mandatory septic maintenance bylaw for on site septic systems. The CVRD commits to exploring the development of a bylaw for septic system maintenance within the plan area, to be put in place in future phase neighborhoods and in Phase 1A/1B neighborhoods if sewer servicing does not proceed as planned. The CVRD also intends to explore implementation of the septic maintenance bylaw in other electoral area neighborhoods outside the addendum plan area.

### 5. Project Design

In the proposed design, wastewater will be collected from neighborhoods in the Royston and Union Bay area through new sewer collection systems to seven neighbourhood pump stations. It will then be pumped to the existing Courtenay River Siphon and conveyed to the Comox Valley Water Pollution Control Centre (sewage treatment plant).

This report highlights Phase 1A/B preliminary design for pump stations, forcemains and collection systems, including:

- Three pump stations: Royston Pump Station (PS#1), Kilarnock Pump Station (PS#3) and Union Bay Pump Station (PS#6)

- Forcemain connecting these pump stations to the Courtenay River Siphon
- Three local collection systems located in Royston, Kilmarnock and Union Bay

#### Flows, Organic Loads and Projections

This section of the report highlights the catchment areas for each of the proposed seven neighbourhood pump stations and a regional pump station. It also summarizes, with a table, each pump station catchment population, area and projected flow. Additionally, it anticipates the projected organic loads of the south region to the Comox Valley Water Pollution Control Centre, based on historical data.

#### Phasing and Catchment Selection

While this addendum focuses primarily on the proposed Phases 1A and 1B, there are four main phases planned for the Sewer Extension South Project:

- **Phase 1A:** includes PS #1 & PS #6 catchments (Royston historic core & Union Bay existing developed area and future new development areas)
- **Phase 1B:** includes PS #3 catchment (Kilmarnock North existing developed area and future new developments)
- **Future phase:** includes a regional pump station
- **Ultimate build-out phase:** includes PS #2, 4, 5 & 7 catchments

These phases were selected based on technical, environmental and financial considerations. Phase 1A areas have the highest dwelling density with a significant proportion of properties that have decades-old septic systems. The future phase and ultimate build out phase will vary according to master planning and the availability of funding.

#### Local Collection Systems

Seven different collection system options were evaluated for this project. A hybrid gravity sewer – low pressure sewer (LPS) system (with grinder pumps) was identified as the preferred approach. This is because it offers the most benefits for costs, technical aspects and environmental protection.

The majority of the service connections are expected to be gravity, however, there are some properties that will utilize grinder pumps to connect to the system.

- **Gravity Sewer:** Wastewater from each source (normally a home) is conveyed through a building sewer to a collection main. Where gravity flow from a building to the collection main is not possible, grinder pumps are used.
- **Low Pressure Sewer:** Each connection point uses a grinder pump to transport wastewater from a building to the collection main. The grinder pump is located on private property, owned by each property owner, who would be responsible for this infrastructure. Homeowners also are

responsible for the operation and maintenance cost of the system on their property, e.g., pumping energy.

This section of the report shares maps of the collection system alignment for each pump station. It also highlights pipe sizes, utility easements and locations of low pressure forcemains etc.

#### Pump Stations

There are two pump stations proposed for Phase 1A in Royston and Union Bay, and a third to be located in the Kilmarnock area for Phase 1B. All three pump stations are included in this planning phase but only those in Phase 1A will move forward with construction.

Committees have recommended the Royston Pump Station be installed on the Northwest corner of the Royston Road/Marine Drive intersection. This location is within the coastal flood zone, and three options to mitigate impacts of this are included in the full report.

Future plans for the Royston Pump Station may include potential community amenity options like public washrooms and parking.

The exact locations are still under consideration for the Union Bay Pump Station and the Kilmarnock Pump station. See the full report for maps indicating the areas under consideration.

#### Forcemain

The Highway 19A forcemain consists of two proposed sections in Phase 1A:

- North Royston Forcemain
- South Royston Forcemain

The proposed route is along Highway 19A and starts with a collection system for Union Bay along with a local pump station that will move sewage from this community into the regional sewer line. Sewage will then move through a second pump station that will also collect sewage from Royston, before it is pumped to the existing Courtenay River Siphon on the west side of the Puntledge River.

The siphon discharges on the east side of the Puntledge River into the existing Courtenay Pump Station for conveyance through the sewer conveyance line that runs through K'ómoks IR#1 and the Town of Comox to the Comox Valley Water Pollution Control Centre (sewage treatment plant). It is assumed that the proposed forcemains will be constructed within the BC Ministry of Transportation and Infrastructure (MOTI) road right of way and therefore no private property acquisition is required. As the alignment is along a provincial secondary highway, MOTI approvals will be required.

The full report also highlights an alternative alignment along the E&N railway corridor that may be considered for some sections of the sewer line as design

work progresses. The report also provides a map showing plans for Phase 1B forcemain alignment.



To see how wastewater will move through the new regional sewer pipe and find out more about how the catchment system and local pump stations will work, view the maps and process flow diagrams in the [full report](#).

#### 6. Environmental Impact Study

A draft Stage 1 Environmental Impact Study (EIS) for construction of Phase 1A of the project was completed by Current Environmental Ltd. in November 2022. Revisions to include Phase 1B are underway for inclusion in the final draft of the addendum report.

The primary objectives of the EIS were to:

- describe Environmentally Sensitive Areas (ESAs) in the project vicinity
- complete a screening level review of existing contaminated sites information to identify Areas of Potential Environmental Concern (APECs)
- summarize cultural resources associated with the project, including potential areas of conflict with known archaeological sites

The EIS also investigated potential adverse impacts to environmental, social and cultural components resulting from construction and operation of the project, and recommended mitigation strategies to avoid or minimize potential impacts.

The conclusion of the overall environmental impact study is that with over 98% of the permanent project footprint located within existing road systems, construction and operation of the project is expected to have less than significant residual effects to environmental, social and cultural valued components.

##### Environmentally Sensitive Areas (ESAs)

Background information was first collected on ESAs in the project area. ESAs located within 30m of the proposed forcemain alignment, and within 100m of the proposed pump station locations were considered to be at risk. Site visits were then conducted in October 2022 and September 2023, and the entire alignment was reviewed.

This study work identified environmental risks such as: at-risk ecological communities, sensitive habitats, wildlife trees with high bird nesting potential, protected riparian area setbacks, species at risk and watercourses with fish presence all within or intersecting the impacted area.



The Environmental Impact Study identifies mitigation measures and can be found in the [full report](#).



#### Contaminated Sites Assessment

There was also a review for potential issues that may arise with exposure/handling of soils or groundwater during construction. Nine areas of potential environmental concern located within 100m of the project alignment were identified as 'high-risk'. A well prepared, measured and safety-oriented approach will be taken during any activities that will disturb soils/groundwater in these areas. The results of this review and any further study work will be considered in the final stages of project planning.

#### Archaeological Sites Assessment

An Archaeological Overview Assessment (AOA) and Preliminary Field Reconnaissance were completed in 2015 and reconsidered in 2022, identifying seven archaeological sites in potential conflict with the proposed site alignment. Archaeological due diligence for the project will be serviced through a K'ómoks First Nation Cultural Heritage Investigation Permit and concurrent *Heritage Conservation Act* Site Alteration Permits and Heritage Investigation Permits.

### 7. Cost Impacts

The addendum includes a complete breakdown of estimates for total capital project costs and per household costs.

#### Class 'C' Cost Estimates for Phases 1A & 1B

At the preliminary design stage of projects, a Class "C" cost estimate is prepared. Preliminary design is when the project has, for the most part, been developed but additional changes/additions are still being made. The Class "C" cost estimate has a 30% contingency to account for any unforeseen changes in detailed design.

Class C cost estimates have been completed for Phases 1A and 1B, including forcemains, collection systems and pump stations. Cost ranges are presented to account for multiple pump station design and configuration options still under development:

- Phase 1A: \$64,848,000 – \$66,816,000
- Phase 1B: \$25,105,000 – \$25,541,000

#### Cost Impacts to Residents

Property owners are expected to pay the cost of connecting to the service, as well as a share of costs for constructing, operating and maintaining the sewer system. There are two categories of costs associated with the service connections:

1. One-time costs which will vary from home to home; and
2. Ongoing annual costs.

Grant funding and partner contributions towards the cost of shared conveyance infrastructure will reduce the overall cost impact to property owners in the plan area.

## Appendix 5

### Addendum Report Summary

Phase 1A property owner costs are estimated as follows:

Cost per household	
One-time costs	
Connection from home to new pipe at property line	\$1,500 – \$9,500
Decommissioning of septic system	\$1,000 – \$2,000
<b>Total</b>	<b>\$2,500 – \$11,500*</b>
Annual Costs	
Borrowing (25 years)	\$1,200 – \$1,500
Operations + Maintenance (ongoing)	\$530 – \$650
<b>Total</b>	<b>\$1,730 – \$2,150</b>

***\*One-time costs have been updated to a range of \$3,500-\$12,500, the upper range of which includes LPS equipment where required. This will be reflected in the next draft of the report.***

Phase 1B property owner cost impacts will be calculated at a further stage of project planning as external funding sources and timelines are established.

In order to maintain fairness between Phase 1A and future project phases, the CVRD is committed to create as much equity between system participants and neighbours as possible. The CVRD will make all reasonable efforts to identify and secure additional grants, partnerships and funding opportunities to help create equitable costs per household between all phases of the project.



For a complete breakdown of costs for the proposed project [view the full report](#).

For more information about the Sewer Extension South Project and to view all related documents visit: [www.engagecomovalleyrd.ca/sewerextension](http://www.engagecomovalleyrd.ca/sewerextension)

## Appendix 6

### Feedback Form



Welcome and thank you for attending the Sewer Extension South Project Update. Once complete, please submit this form, which will be shared with the project team for consideration. Information collected will be summarized and shared with the province as part of the community consultation report.

#### Feedback Form

1. Did you attend our last round of open houses in June 2023?

☐ Yes    ☐ No

2. What community do you live/own property in?

---

3. Please visit the map station and find the location of your property.

Check One:

- |   |  |
|---|--|
| <input type="checkbox"/> I am located in Phase 1A       | <input type="checkbox"/> I am located in an electoral area outside of the proposed project area.         |
| <input type="checkbox"/> I am located in Phase 1B       |  |
| <input type="checkbox"/> I am located in a Future Phase | <input type="checkbox"/> I am located within the municipal boundaries of Courtenay, Comox or Cumberland. |

Do you have any comments regarding the proposed boundaries?

---

---

---

4. If you are located in Phase 1A, do you have a Type 2 or 3 septic system that will be less than 5 years at the time of required sewer connection (approximately 2028)?

☐ Yes    ☐ No

\*If yes, you could be eligible for the CVRD's deferral program. Please ensure you visit the Septic Deferral Program board for more information.

## Appendix 6

### Feedback Form



5. Please visit the 'Pump Station Location' board: Share any comments related to the design of the proposed pump stations in Royston, Union Bay and Kilmarnock.

---

---

---

---

6. Please visit the 'Costs for Residents' board: Do you have any comments related to the current one-time and annual cost estimates (expected accuracy of plus or minus 30%)?

\*Note: Final cost estimates will be presented to the community in 2026/27)

---

---

---

---

7. Comments/questions about the draft addendum that will be considered by the province as part of the regional sewer plan for the Comox Valley?

\*Report available in hard copy or by visiting: [engagecomoxvalley.ca/sewerextension](http://engagecomoxvalley.ca/sewerextension)

---

---

---

---

## Appendix 6

### Feedback Form



8. Please share any other questions/comments you would like the project team to consider as planning progresses.

---

---

---

---

RESPONSES CAN BE ANONYMOUS: Please share your information below if you would like to receive future email updates or would like a follow up on a question above.

Name: \_\_\_\_\_

Email/Phone: \_\_\_\_\_

If you take this comment form home with you, please return it before February 16, 2024 via email ([communications@comoxvalleyrd.ca](mailto:communications@comoxvalleyrd.ca)), or drop-off to the Comox Valley Regional District office, 770 Harmston Ave, Courtenay BC.

The personal information collected on this form is collected pursuant to Section 26 (c) of the *Freedom of Information and Protection of Privacy Act* and will be used solely for responding to any questions and/or comments you may have regarding the Sewer Extension South Project. A summary of comments/questions, with name & contact information of the submitters removed, will be shared with the advisory and steering committees. No personal data will be retained by CVRD once data is collected. Should you have any questions about the collection and use of this information, please contact Christianne Wile, Senior Manager of Strategic Initiatives, by emailing [communications@comoxvalleyrd.ca](mailto:communications@comoxvalleyrd.ca) or by calling 250-334-6000.

### Feedback Form Responses

#### **Feedback Form: Responses**

##### **1. Did you attend our last round of open houses in June 2023?**

Yes: 24

No: 9

##### **2. What community do you live/own property in?**

Union Bay: 9

Royston: 16

Kilmarnock: 5

Craigdarroch: 1

Courtenay: 1

Spindrift: 1

##### **3. Please visit the map station and find the location of your property. Check one:**

Phase 1A: 18

Phase 1B: 13

Future Phase: 3

Electoral area outside of the proposed project area: 0

Within the municipal boundaries of Courtenay, Comox or Cumberland: 1

##### **Do you have any comments regarding the proposed boundaries? (9 responses)**

- Would like to see Royston done at the same time
- Glad to be in the first phase!
- Expand to shorter timeline
- How will you pay the \$12,500 to put in? Can you use old septic tanks? What size tank can you put in?
- I am concerned that Spence Road will not be connected until some unknown future date. The area has many older septic systems already failing, judging by the smells.
- I understand from attending the open houses why the boundaries are as they are however, I am disappointed that our home property is not included in the 1A phase. I am also concerned that Union Bay development is considered "future phase" when they intend to start development sooner than later.



### Feedback Form Responses

- I am worried about the impact this will have on my property as I am located on the edge of phase 1B and wonder where the main line will run from the highway and into Spindrift subdivision which is right beside me.
- No. I do wish we could be in 1A. We are on Laurel Dr.
- I have concerns about the proposed location of the pump station in the Kilmarnock neighbourhood.

**4. If you are located in Phase 1A, do you have a Type 2 or 3 septic system that will be less than 5 years at the time of required sewer connection (approximately 2028)?**

Yes: 0

No: 26

**5. Please share any thoughts you have for the project team about the design of the proposed pump stations located in Royston, Union Bay and Kilmarnock. (22 responses)**

- Pump stations should not be an eyesore to the areas
- Excellent presentation
- Having public amenities will have a negative impact on the neighbourhood. We already have issues with parties and overnight campers here. Washrooms, picnic tables etc will exacerbate these problems.
- Impact by floodwater. How to keep sewage from escaping? I understand it is a low pressure gravity feed so the lowest point is perfect. Glad clever engineers are on it.
- Not wanting pump station. Close to boat launch. A washroom may attract homeless (not a good idea)
- Good to hear that the Montrose (Park) pump station will take the community's hopes for a park into consideration
- It's a good location
- Will the construction impact the coal hills & increase release of this into water/surrounding area?
- In Union Bay is pump station being built on solid ground? Every year storms create receding of coal hills.
- No concerns personally but residents immediately adjacent to the proposed site will be significantly impacted
- Location is ok. Not much shared on design of the station. I'm sure it will be constructed with input from local Royston residents.
- When in doubt increase resilience to pump station failure. Royston collector pump station needs to be above coastal flood level.
- How many pump stations will be there be in Union Bay?
- We live on lower Royston Road and are a young family. We use the beach, pier and

### Feedback Form Responses

waterfront on a daily basis. We look forward to a solution for the Royston pump house that has minimal impact on the recreational space here. We look forward to solutions that are family-friendly and nature design-inspired. A play or climbing space would be wonderful, as would a fresh water shower.

- The Marine Dr walkway/beach front is most precious asset of the area. Establishment of a pump station is concerning. Avoiding a structure too large/obtrusive should be a priority. Can it be buried? Partially buried?
- Designated at Montrose/Kilmarnock. Needs to be deeper in the woods, as much as possible and sheltered by trees to be less visible from the road. Entrance to be from Kilmarnock.
- No concerns regarding location of pump stations
- Union Bay Pump Station – Coal Hill Location – will this affect recreational use of this area that was considered a green space? Royston Pump Station – adjacent to boat launch area – will this affect recreational use of the green space + picnic area?
- Kilmarnock – why not across highway?
- They are fine to me.
- The proposed location for the Royston pump station will be disruptive to the neighborhood. Noise from the operation could disrupt sleep and peaceful enjoyment of the area. Having public washrooms and other facilities will attract illegal overnight camping, which is already a problem. An industrial structure will mar the natural aesthetic of the area.
- I am very concerned about the proposed location of the pump station in Kilmarnock. The park is a large area and it should be possible to locate the station so that it is not close to any properties. Instead, the drawing indicates that the pump station may be located along the edge of the park within a stones throw of multiple properties. When the sewer system comes online, people may wish to build carriage near the edge of their properties and they do not want a loud and smelly pump station so close to their residences.

**6. Do you have any comments related to the current one-time and annual cost estimates (expected accuracy of plus or minus 30%)? (21 responses)**

- Taxes just keep eating out of a pensioners income!!
- Excellent presentation
- These costs are too high for many homeowners. This is an unfair burden. People will be forced to sell their homes or defer necessary maintenance to afford this.
- Single mom – very expensive!
- I think that the current uncertainty economically speaking is a foolish time to invest in large capital projects. This is a significant ask without allowing residents to vote on this proposal. I think that Union Bay Estates should have to commit to

## Appendix 7

### Feedback Form Responses

their original proposal.

- This will effectively double our tax and utility obligations. A lot of elderly residents are going to have trouble or be pushed out altogether.
- Glad costs have decreased slightly – curious if this trend continues as project planning does
- What borrowing options are there for single-person residents who cannot afford this expense?
- I suspect the costs are under-estimated. Connection arrangements are left to the homeowner and there will be high demand for contractors thus they will charge what people are willing to pay.
- The costs are a lot. I appreciate the need for contingency planning & appreciate the transparency on costs. It would be great to tap into more grants if possible!!
- A small fraction of property value appreciation over last few years. This should not be an issue. Perhaps an option for deferral for hardship cases.
- In three years how will you pay for system, will there be a loan held by province to put in system to house?
- As much advance notice as possible will help us account for costs. Thank you for the positive, proactive communication to date.
- Including property taxes after all the deductions (C category) would be \$10,000 annually. Then there is the house insurance and god help if there are major home repairs like a new roof etc. Then there is the Poly B pipe the Regional District recommend be used in homes in the 1990s that is susceptible to bursting.
- Costs look reasonable. My main concern is that those costs will go up in the future by the time we get connected.
- I believe this is a fair cost for homeowners considering the scope of this project and the need to protect the environment. I only wish our road (Spence Road) was included in 1A or 1B at this time as these proposed costs are quite reasonable and will only go up in price in the future.
- Seems like a lot to ask homeowners to pay for when this sewer is mainly for development of Union Bay Estates and the development of the newly acquired Komox First Nation land received through treaty
- I would prefer to pay a one-time cost.
- Far to high for many homeowners in the area who may be “property rich” but cash poor. It’s unfair to force unreasonable costs on to people for a service they may not want or need when it may result in forcing home sales or preventing necessary property maintenance. Property developers may benefit from this project but those without a lot of cash on hand will suffer.
- Seems expensive relative to operating septic.
- How will we know if we require LPS?

### Feedback Form Responses

#### **7. Comments/questions about the draft addendum report that will be considered by the province as part of the regional sewer plan for the Comox Valley? (5 responses)**

- I am concerned that Union Bay Estates development is scheduled for “Future Phase”. I am sure they will be pressuring to sell the developed lots before then and do not want them to dumping effluent, even treated, into Hart Creek. That creek already goes dry in summer and there will be no dilution. It would be wrong to use our drinking water supply to dilute sewage.
- I had a brief look at the report and wonder if Hart Creek was identified as an E.S.A. My concern is whether Union Bay Estates will be allowed to discharge (treated) sewage into this seasonal creek as a temporary use permit and how this will affect the waters and marine environment between the outlet of Hart Creek and Denman Island where the ability to flush this water is hindered. I would like to know what is being planned for Union Bay Estates specifically & if they will connect to the sewer extension project with any development?
- It seems wrong to push this through by giving away treaty land and then forcing the sewer through when it was voted down twice by residents. This whole sewer is for future development by Union Bay Estates and the KFN, if they want it make them pay for it.
- Fails to offer options for financial relief or other alternatives to residents who can't afford this project or are not willing to alter their property.
- I do not support the project as is. The residents of Curtis Road will attest to the fact that the CVRD has not been able to manage odour problems in their neighbourhood. These pump stations that are being brought into our neighbourhood could introduce odour problems where none exist today. Pump stations are being proposed in locations that are far too close to residential lots. Ideally, the entire project would be covered by a blanket archeological assessment - including the required digging on private lots.

#### **8. Please share any other questions/comments you would like the project team to consider as planning progresses. (23 responses)**

- Should this not proceed, or outside of this area, septic systems should require regular reporting to municipality/region as to ongoing effectiveness & safety, with mandatory repairs as necessary
- Please consider extending the Royston Seaside Trail along Marine Drive as you cover over the new sewer piping along the water side of the road.
- 1A would be happy to have pipe go at the bottom of my property (between Royston Rd & Warren Rd). Also, please consider our septic tank to be used to collect water for gardens. We need environmental positives 😊 Especially now that our snow melt is running & melting now.

## Appendix 7

### Feedback Form Responses

- The high fecal count that triggered the Baynes Sound shellfish closure was caused by sea lions living on the water sample collection float in Deep Bay. No other closures have been needed with multiple atmospheric river events.
- At the trenching and covering point, please incorporate a cycling surface along the main routes paralleling Baynes Sound.
- I would like to see the digging for the pipe be combined with other beneficial work for the communities such as making a safer bike path and any other beneficial work such as putting hydro wires underground in some areas or expanding the waterfront walking trail from Royston south (Royston seawalk trail etc)
- I want to keep my in-ground tanks for water catchment, only used for gardening, saves demand during restrictions
- What happens if the partners change their minds about contributing? When will planning be done for where the big pipe will be installed? Who decides access points for homes? \*We are 'pro' this project and hope that the timeline is closer to 2026/2027 than 2028!
- I look forward to it all coming together possibly in my lifetime
- It's been a long time coming! Wishing it progresses locally & provincially
- Many properties will have complicated routing for the connecting line which will present significant challenges to homeowners and the contractors running the line
- Increase redundancies to avoid large spills
- Please put more in online if possible. Thanks to all for all input from your staff.
- Will there be an incentive program to encourage homeowners to recycle/reuse septic system components that are under 5 years old?
- We will be making landscaping/outbuilding decisions over the next few years. We want to be confident that they will work with sewer hookup (ex location of hook up at road/location of grinder pump if needed). Please share as soon as possible some of the things we need to keep in mind over the next few years of property updates we'll be making. Perhaps a list of things we'll be responsible for (ex: determining if we need grinder pump/ideal location).
- Can we use our existing septic tanks (cleaned out of course) to collect greywater?
- Seaview village on 4<sup>th</sup> has just had an upgrade to septic system including new tanks.
- Our present septic system is over 30 years old and although it still functions well, I am concerned it may have to be replaced before our area is connected to sewer at some "future phase" date. Will we be compensated if we have to put out that expense, then sewers come along shortly after?
- I am concerned that future phases will be "forgotten" once 1A & 1B phases are



## Appendix 7

### Feedback Form Responses

completed and that these other neighbourhoods will not see the sewer extension in a reasonable time. In our Spence Rd neighbourhood, there are several ocean front properties with failing septics (smell, pooling water) which are contributing in a negative way to the health of the environment + ocean. Also, I am sure other neighbourhoods have the same concerns with older septics. I am also concerned with the delay of the Future Phases that folks in these neighbourhoods will be financially burdened if they have to replace their septics and then pay again to hook up to the sewer extension when it comes. This would make what is best for the environment very unpopular and a hard sell. I hope that funding sources will continue to be sought out so that Future Phases can indeed become part of the sewer extension project and not be shelved and forgotten. Keep the momentum going please. Lastly I would like to thank all of you for your hard work and ongoing efforts with this project that is so crucially important for the health of the ocean environment. All your hard work is appreciated. Thank you to each and every one of you.

- If we paid the \$25,000 and decided to move in 5 years, do we get any of that money back? The costs will be hard on fixed income and low-income homes.
- Share the planned routes of the sewer mains in both Phase 1A and 1B ASAP, as I'm sure they are mostly planned out already.
- All looks good to me. Let's get this thing going. It will be good for our estuary. No referendum. It would be voted down as people do not like change, especially when it comes with costs, even if those costs are deferred or lower than replacing a septic system.
- Please be realistic about how individual households can afford this. Is this really benefiting the community or property developers? Offer alternatives for those who prefer to keep their septic systems and don't wish to ruin their landscaping.

## Appendix 8

### Backgrounders



## Capital Cost and Capital Improvement Charge Payment Options

January 2024

The Comox Valley Regional District (CVRD) recognized early in the project that the cost to the property owners is significant and made it a priority to minimize the impact and keep affordability as a key consideration during the planning stages. Just as each property is unique, each household will have access to different financial resources.

### Options To Consider

The capital cost and capital improvement charge for the residents' portion of the sewer line is \$4.2 million, or approximately \$22,000 per property. This works out to an annual cost of \$1,200 - \$1,500 per year over 25 years to be paid through a parcel tax.

**The CVRD is also considering an option for residents that wish to pay the full amount up front and we would like to hear if this would be of interest to you.**

Two of the most important questions to ask before getting into the advantages and disadvantages of each option are:

- Do I have the funds available to pay up front?
- If I pay upfront and an emergency situation (unplanned household repair, reduction in personal income, medical problem, etc), crops up, will I still have the resources necessary to maintain my current needs?

Below is a breakdown of advantages and disadvantages for the two options.

#### Option 1: Pay the capital cost and capital improvement charge upfront

Advantages	Disadvantages
Save on the financing interest expense.	The payment is a "sunk cost" If you move out of the property, the up-front payment might not be recoverable from a purchaser.
Avoid having to plan for community sewer as an annual expense.	Cannot switch alternatives once the payment has been made.
The up-front payment could give an advantage when selling your property as it will not have the additional parcel tax attached to the property tax invoice.	The "cash" could have been used for other investments or expenditures.
Minimize the future impact of tax rates increases by not having the additional parcel tax included with the annual property tax invoice .	Local Governments can borrow at excellent interest rates.
	The up-front payment is not eligible to defer under the BC Property Tax Deferment program.

### Learn More

Website: [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)

You can also phone 250-334-6000

or email [communications@comoxvalleyrd.ca](mailto:communications@comoxvalleyrd.ca)

## Appendix 8

### Backgrounders

#### Capital Cost and Capital Improvement Charge Payment Options

June 2023

##### Option 2: Finance the capital cost and capital improvement charge over 25 years

Advantages	Disadvantages
Fits better into a household budget. Easier to manage expenditures and save.	The interest expense portion of the loan adds to the overall cost.
Share the cost proportionally between this household and the next if you move.	Cannot switch alternatives once the financing agreement is signed. The term is locked for the entirety.
You could invest the amount of the up-front payment and possibly make a better rate of return than I will pay annually for the parcel tax.	The parcel tax could be a negative selling feature when selling the property.
Local Governments can borrow at excellent interest rates – better than banks and credit unions.	A lender or financial institution could have other programs or financing arrangements that fit your lifestyle better.
The parcel tax is eligible to defer under the BC Property Tax Deferment Program.	

#### Submit Your Feedback



Complete and submit a feedback form here



Fill the feedback form out online at [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)

#### Learn More

Website: [www.engagecomoxvalley.ca/sewerextension](http://www.engagecomoxvalley.ca/sewerextension)

You can also phone 250-334-6000

or email [communications@comoxvalleyrd.ca](mailto:communications@comoxvalleyrd.ca)



[comoxvalleyrd.ca](http://comoxvalleyrd.ca)   

## Appendix 8

### Backgrounders



#### Annual Projected Tax and User Fee Increases for Royston and Union Bay

2023 Total Charges	Royston		Union Bay	
	Tax	User Rate	Tax	User Rate
Common Services (tax)	\$833		\$833	
Unique Services (tax)	257		825	
Royston Fire (Courtenay Levy)	170			
Water Service	200		510	
Utility Rate Fees (existing service)		710		964
<b>2023 Total Charges</b>	<b>\$2,170</b>		<b>\$3,132</b>	

2027 Total Charges	Royston		Union Bay	
	Tax	User Rate	Tax	User Rate
Common Services (tax)	\$900		\$900	
Unique Services (tax)	280		1030	
Royston Fire (Courtenay Levy)	170			
Water Service	350		710	
Water Extension South	340			
Recreation Facilities	60		60	
Utility Rate Fees (existing service)		935		1,066
Enhanced Garbage Collection Service		100		100
<b>2027 Total Charges</b>	<b>\$3,135</b>		<b>\$3,866</b>	

Phase 1A Sewer Extension South Future (2027) charges	Royston (152 Households)		Union Bay (311 Households)	
	Tax	User Rate	Tax	User Rate
Sewer Extension South (2025 estimated start) (household connection cost, financed with debt and spread across 25 years)	\$1,500		\$1,500	
Sewer Extension South (2026 estimated start) (maintenance and operations)		650		650
<b>Total Annual Projected Cost</b>	<b>\$2,150</b>		<b>\$2,150</b>	
<b>Overall Annual Impact including Sewer</b>	<b>\$5,285</b>		<b>\$6,016</b>	

**Note:** One-time costs are estimated between \$3,500 to \$12,500 depending on the current septic system and the elevation, size and characteristics of property.

Rates as per October 13, 2023 staff report considered by the Electoral Areas Services Committee on October 16, 2023