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.

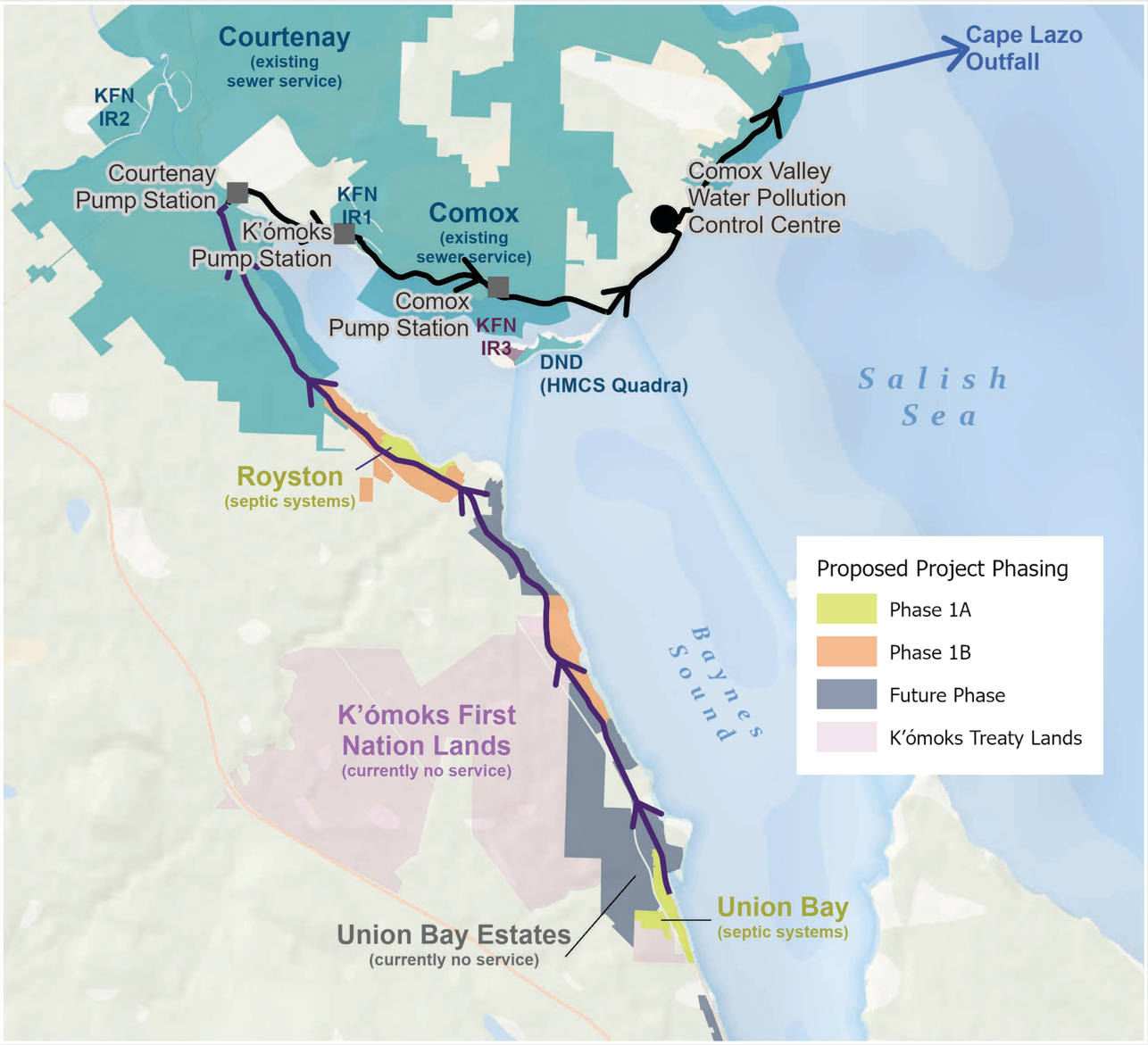
NEW SEWER SERVICE & HOW IT WORKS

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

Comox Valley
REGIONAL DISTRICT

comoxvalleyrd.ca

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:

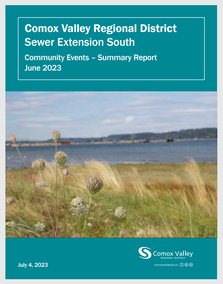
- Collection system design
- Costs
- Deferral program
- Proposed septic regulatory program

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**

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.

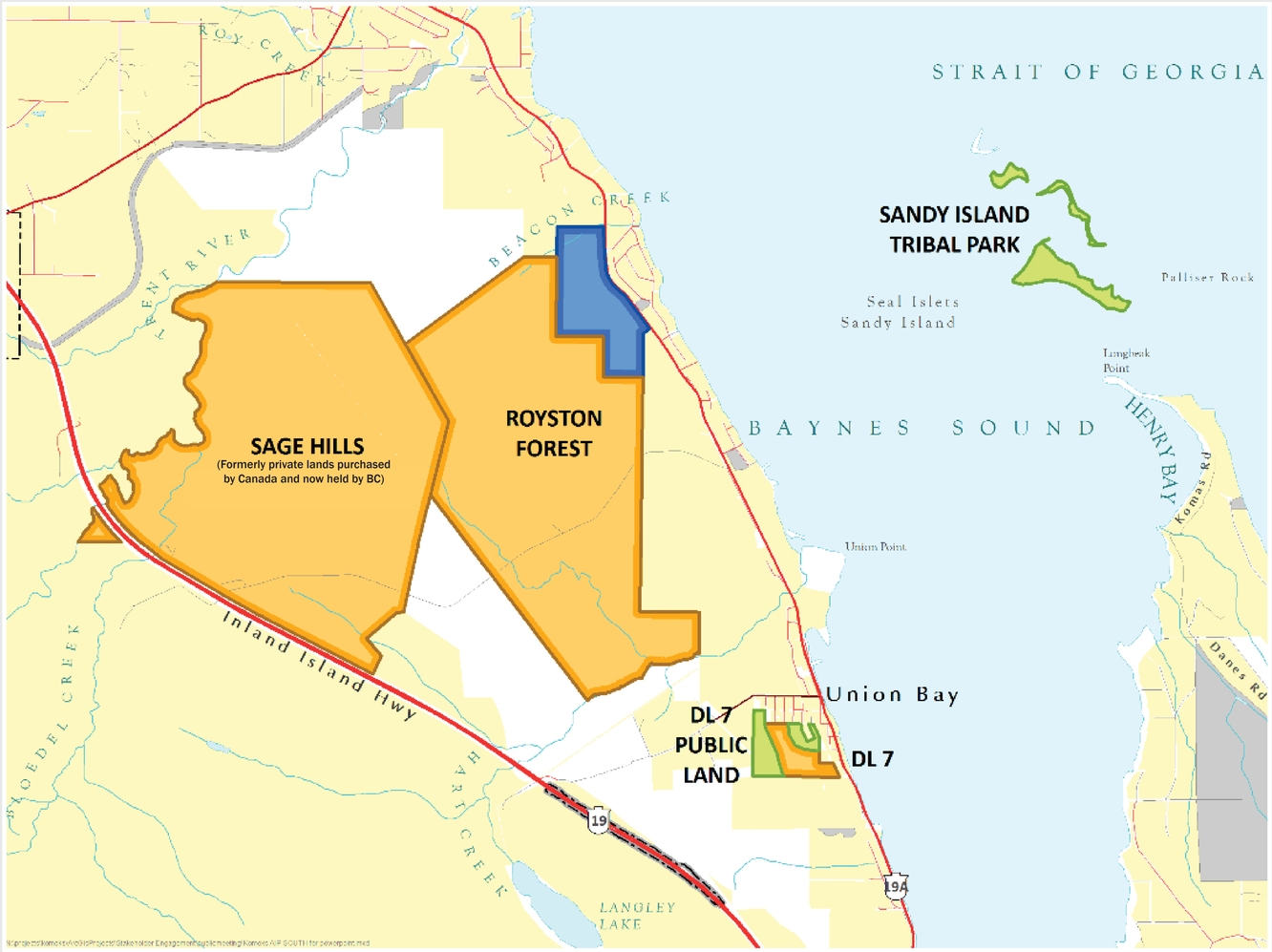
CONSTRUCTION

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

hɛhɛwčıs; 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.

K’ómoks First Nation

To learn more about the K’ómoks Treaty process visit: www.komoks.ca/treaty

Comox Valley REGIONAL DISTRICT

comoxvalleyrd.ca

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.

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.

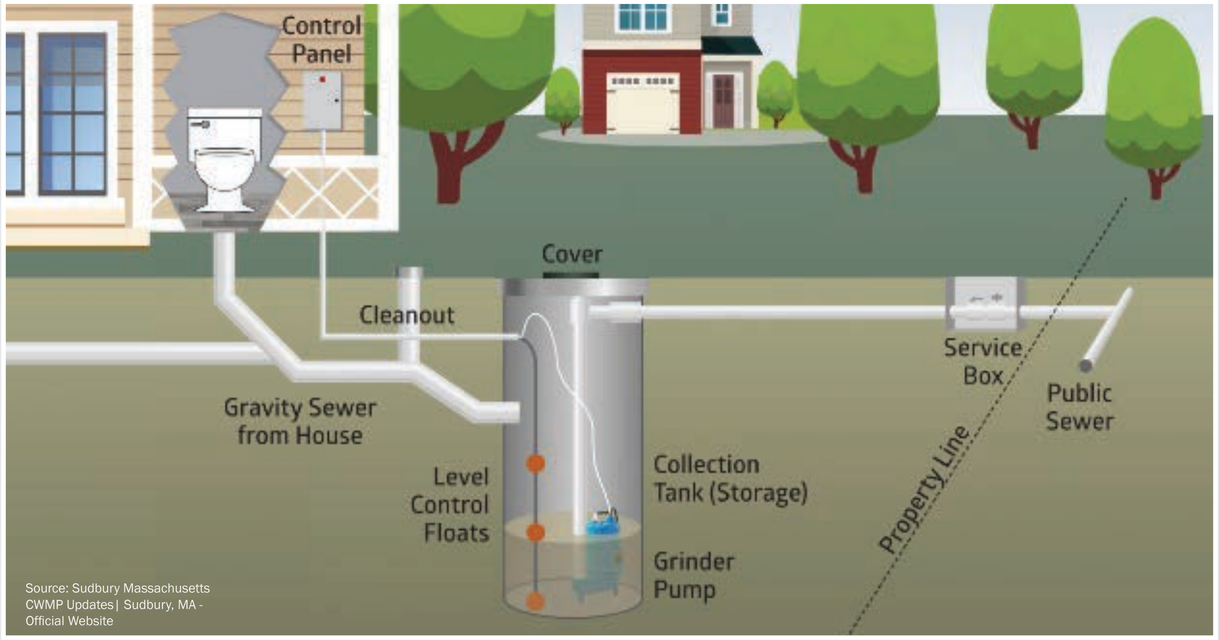
CHAMBER AND GRINDER PUMPS: HOMEOWNER RESPONSIBILITES

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.

LOW PRESSURE SEWER SYSTEM: CHAMBER AND GRINDER PUMP



Source: Sudbury Massachusetts CWMP Updates| Sudbury, MA - Official Website

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.

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

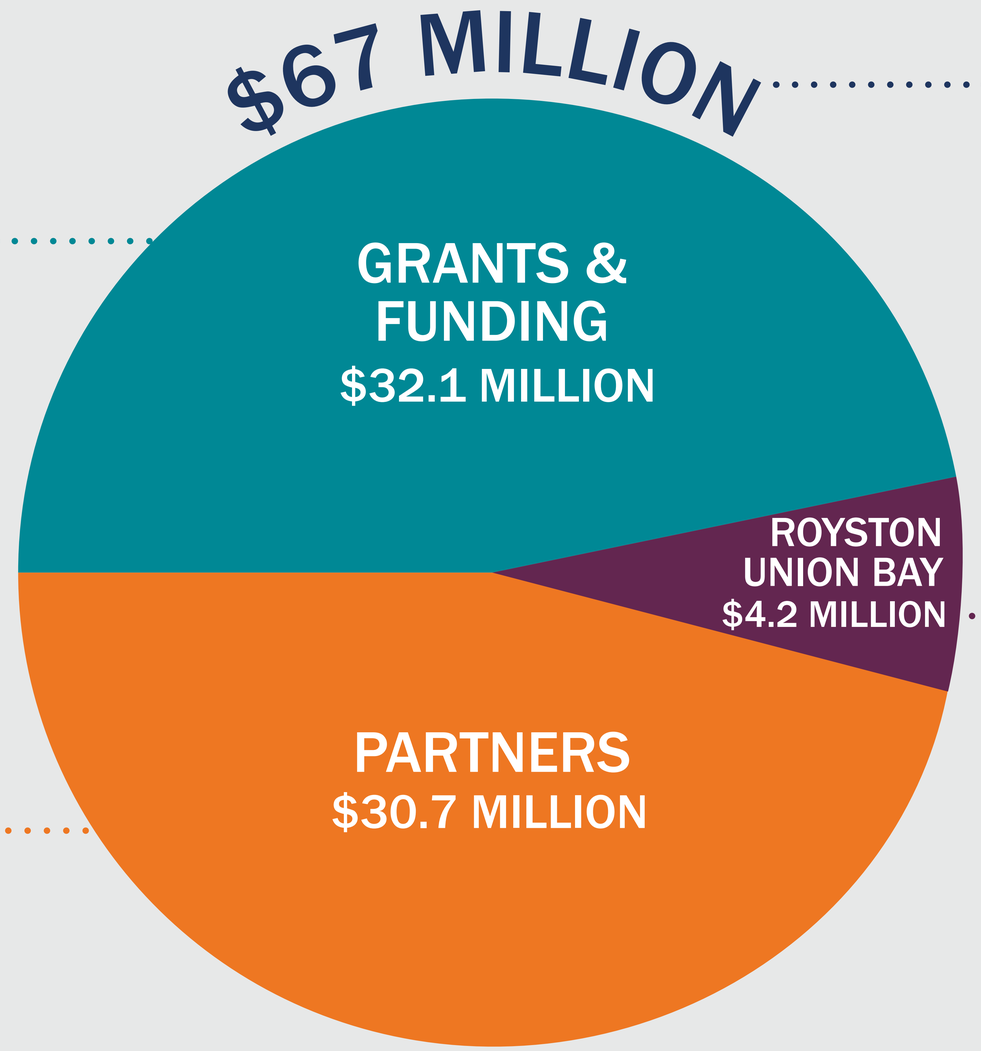
Public Input: Pump station locations are still undergoing review/consideration and community input will be considered as these decisions are made.

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.

Grants and Funding
Includes:
- $30 million provincial grant awarded in April 2023
- An additional $2.1 million in provincial and federal funding



PROJECT TOTAL

$46.5 million: Regional Sewer Line and Pump Stations

$20.5 million: Community Collection Systems

TOTAL: $67 MILLION

Partners
Union Bay Estates and K'ómoks First Nation
*Partner contribution agreements are still being finalized.

Cost to Union Bay and Royston

Annual borrowing for new infrastructure plus a regional sewer Capital Improvement Cost Charge (CICC)
- 25 year term
- Est. $1,200–$1,500/yr

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:

CURRENT STAGE

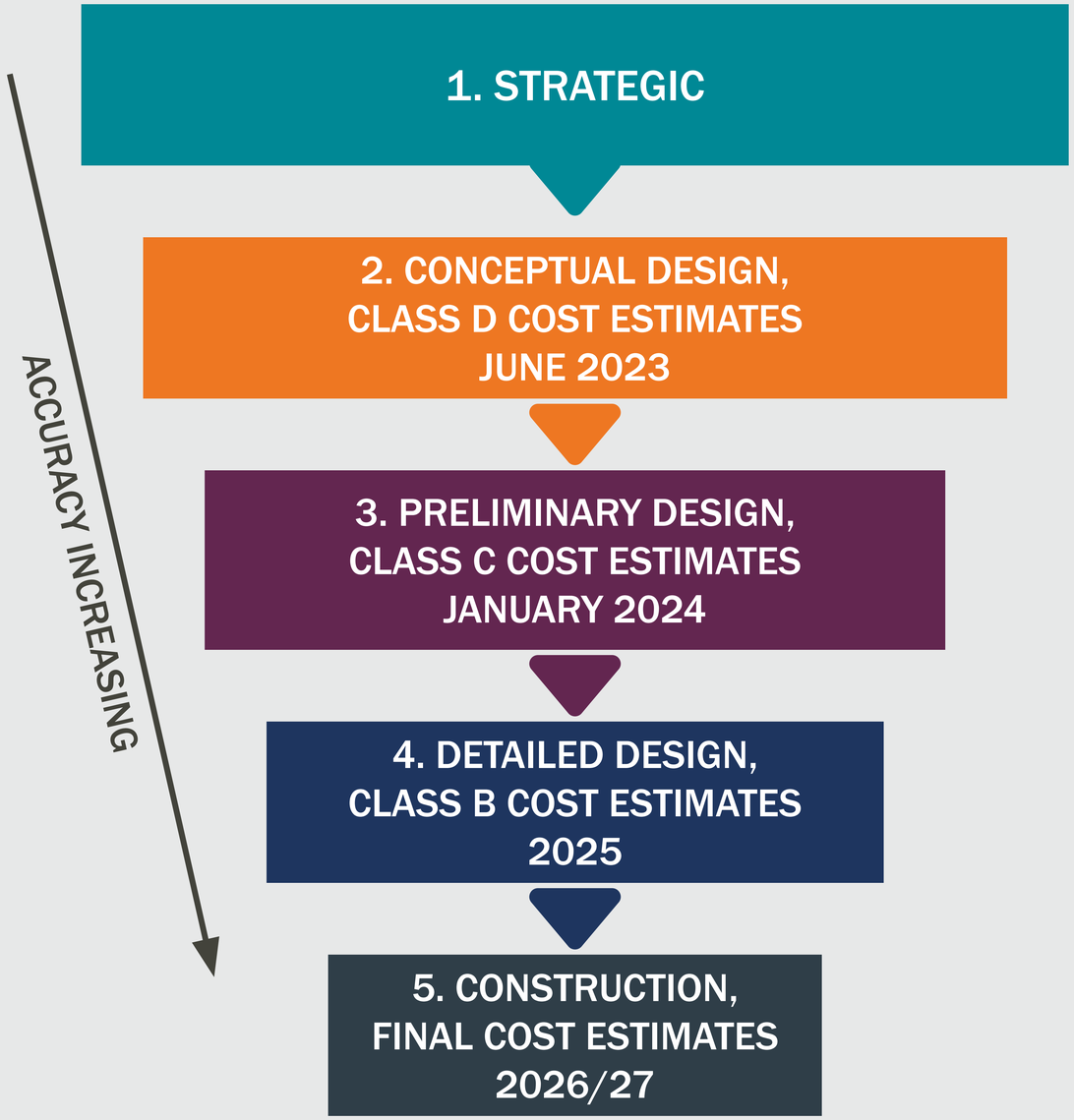
- January 2024 (Draft Addendum): $1,730-$2,150/household
- Expected to be within plus or minus 30% of final costs
- Based on more accurate information, including LIDAR survey data, base mapping, hydraulic modeling etc.

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



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:

Comox Valley
REGIONAL DISTRICT

comoxvalleyrd.ca

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.

DRAFT LWMP ADDENDUM REPORT: OVERVIEW

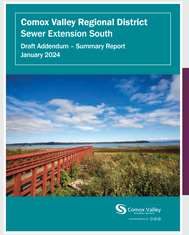
The Sewer Extension South Project will be reviewed as part of the Regional Sewer Plan. A report summarizing the project planning work to date will be submitted to the province in spring 2024. Upon provincial review, this addendum will be included as part of the Regional Sewer Plan that is expected to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

GOALS OF THE PLANNING PROCESS

- Develop a long-term plan for community wastewater infrastructure
- Consider community growth and development
- Protect public health & the environment
- Complete comprehensive consultation

WHAT THE REPORT INCLUDES

- **SECTION 1** Introduction
- **SECTION 2** Public, Rightsholder, and Stakeholder Consultation
- **SECTION 3** Service Area, Land Use, Development, and Population Growth
- **SECTION 4** Regulations and Guidelines
- **SECTION 5** Project Design
- **SECTION 6** Stage 1 Environmental Impact Study, Phase 1A
- **SECTION 7** Project Costs Impacts



Looking for more details? Find a complete summary of the draft report on the project webpage at 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.

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

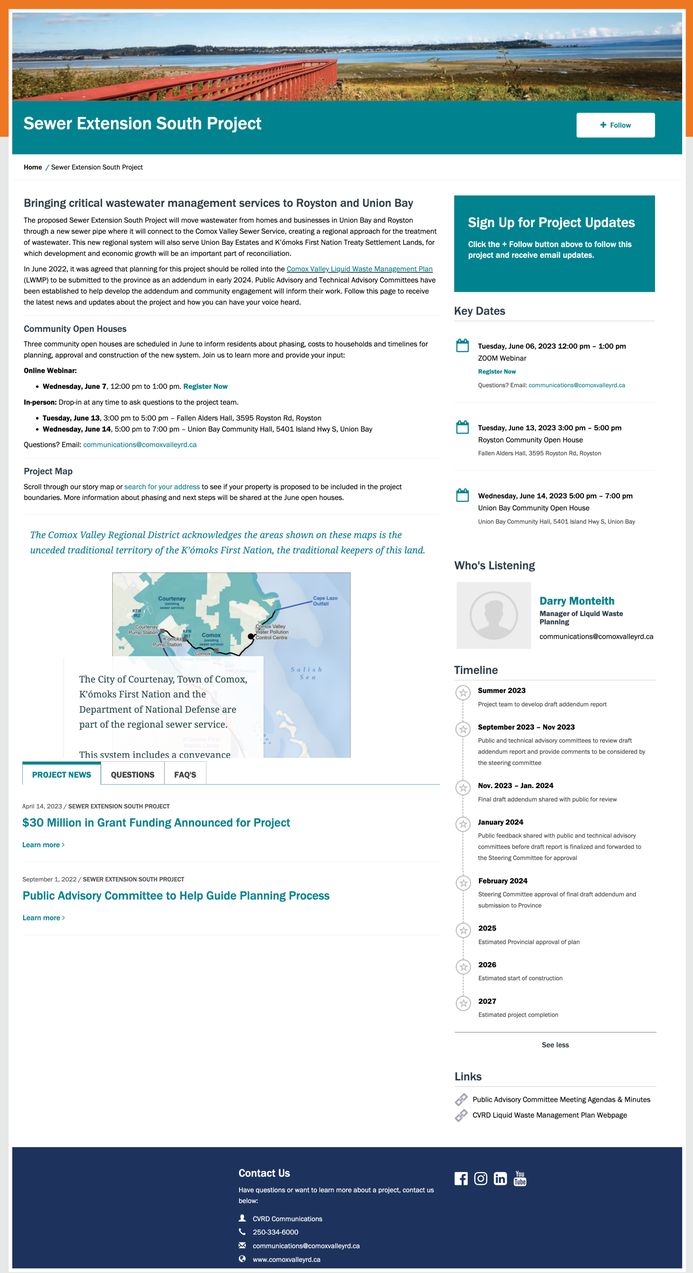
Fill the feedback form out online

STAY UP TO DATE AT www.engagecomoxvalley.ca/sewerextension

Register to receive project updates

Get access to the latest news and events

Ask a question of our project team



Sewer Extension South Project

+ Follow

Home / 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 new regional system will also serve Union Bay Estates and K'ómoks First Nation Treaty Settlement Lands, for which development and economic growth will be an important part of reconciliation.

In June 2022, it was agreed that planning for this project should be rolled into the Comox Valley Liquid Waste Management Plan (LWMP) to be submitted to the province as an addendum in early 2024. Public Advisory and Technical Advisory Committees have been established to help develop the addendum and community engagement will inform their work. Follow this page to receive the latest news and updates about the project and how you can have your voice heard.

Community Open Houses

Three community open houses are scheduled in June to inform residents about phasing, costs to households and timelines for planning, approval and construction of the new system. Join us to learn more and provide your input:

Online Webinar:

- **Wednesday, June 7**, 12:00 pm to 1:00 pm. **Register Now**

In-person: Drop-in at any time to ask questions to the project team.

- **Tuesday, June 13**, 3:00 pm to 5:00 pm – Fallen Alders Hall, 3595 Royston Rd, Royston
- **Wednesday, June 14**, 5:00 pm to 7:00 pm – Union Bay Community Hall, 5401 Island Hwy S, Union Bay

Questions? Email: communications@comoxvalleyrd.ca

Project Map

Scroll through our story map or search for your address to see if your property is proposed to be included in the project boundaries. More information about phasing and next steps will be shared at the June open houses.

The Comox Valley Regional District acknowledges the areas shown on these maps is the unceded traditional territory of the K'ómoks First Nation, the traditional keepers of this land.

The City of Courtenay, Town of Comox, K'ómoks First Nation and the Department of National Defense are part of the regional sewer service.

This system includes a conveyance

PROJECT NEWS | QUESTIONS | FAQ'S

April 14, 2023 / SEWER EXTENSION SOUTH PROJECT

$30 Million in Grant Funding Announced for Project

Learn more ›

September 1, 2022 / SEWER EXTENSION SOUTH PROJECT

Public Advisory Committee to Help Guide Planning Process

Learn more ›

Sign Up for Project Updates

Click the + Follow button above to follow this project and receive email updates.

Key Dates

Tuesday, June 06, 2023 12:00 pm – 1:00 pm
ZOOM Webinar
Register Now
Questions? Email: communications@comoxvalleyrd.ca

Tuesday, June 13, 2023 3:00 pm – 5:00 pm
Royston Community Open House
Fallen Alders Hall, 3595 Royston Rd, Royston

Wednesday, June 14, 2023 5:00 pm – 7:00 pm
Union Bay Community Open House
Union Bay Community Hall, 5401 Island Hwy S, Union Bay

Who's Listening

Darry Monteith
Manager of Liquid Waste Planning
communications@comoxvalleyrd.ca

Timeline

Summer 2023
Project team to develop draft addendum report

September 2023 – Nov 2023
Public and technical advisory committees to review draft addendum report and provide comments to be considered by the steering committee

Nov. 2023 – Jan. 2024
Final draft addendum shared with public for review

January 2024
Public feedback shared with public and technical advisory committees before draft report is finalized and forwarded to the Steering Committee for approval

February 2024
Steering Committee approval of final draft addendum and submission to Province

2025
Estimated Provincial approval of plan

2026
Estimated start of construction

2027
Estimated project completion

See less

Links

Public Advisory Committee Meeting Agendas & Minutes
CVRD Liquid Waste Management Plan Webpage

Contact Us

Have questions or want to learn more about a project, contact us below:

CVRD Communications
250-334-6000
communications@comoxvalleyrd.ca
www.comoxvalleyrd.ca