

# 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.



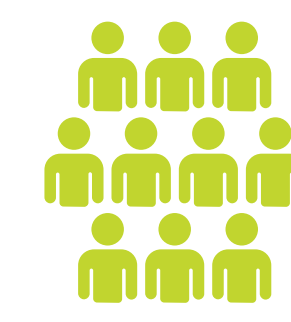
## AGING AND FAILING SYSTEMS

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.





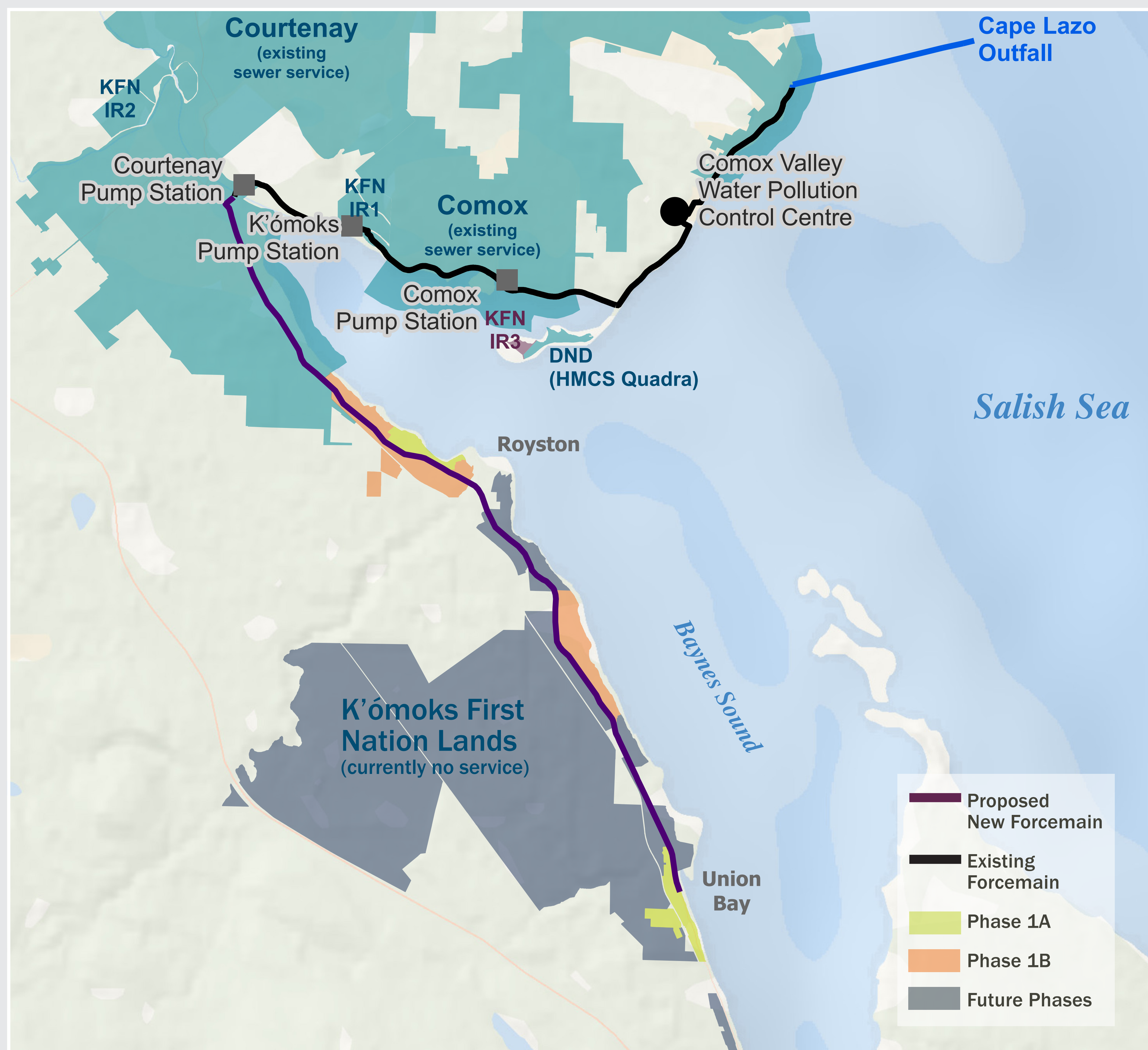
# NEW SEWER SERVICE & HOW IT WORKS

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

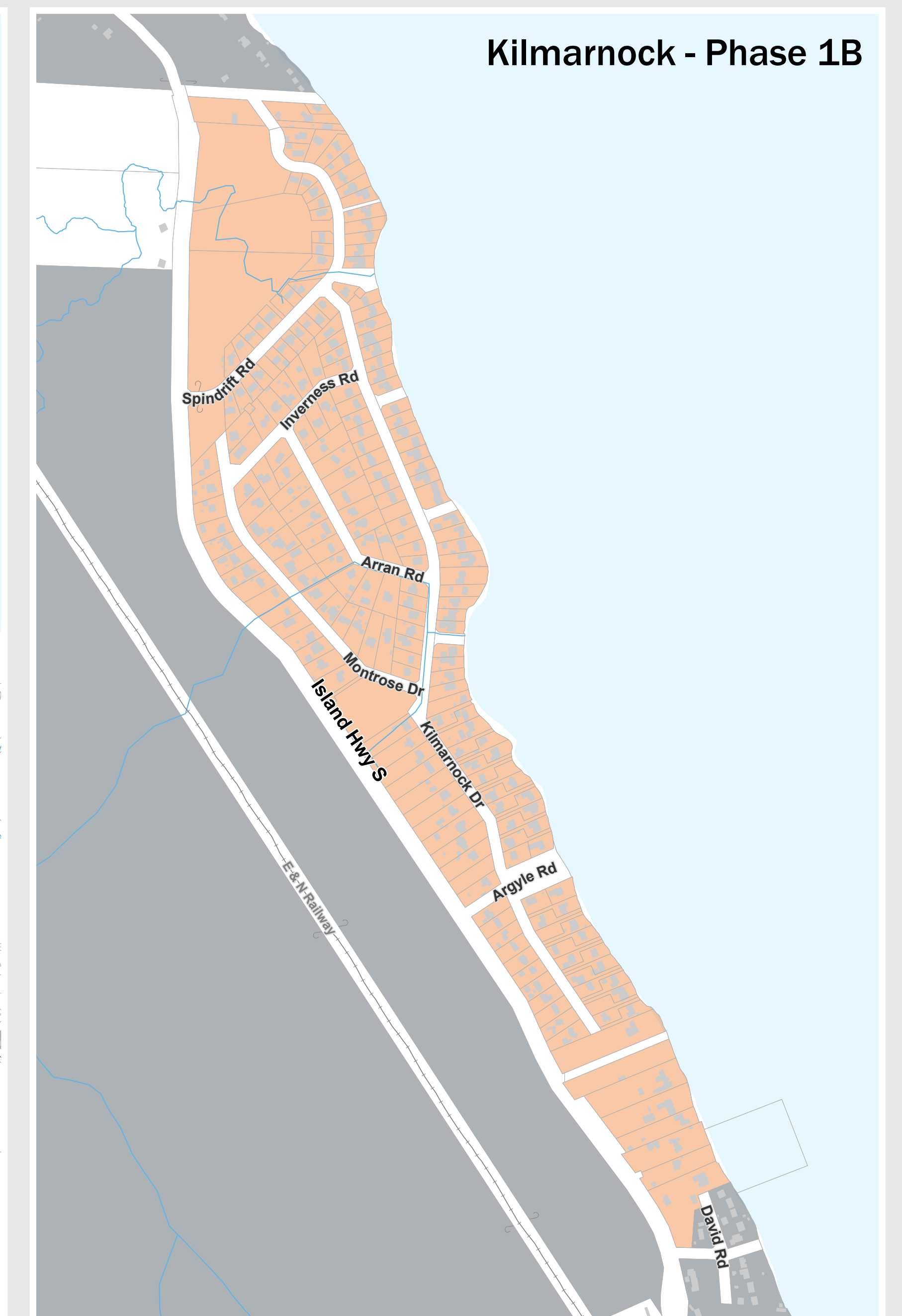


# A PHASED APPROACH

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.
- The CVRD is currently seeking more information from SD71 about the value of adding Royston Elementary School to Phase 1A.



## 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.

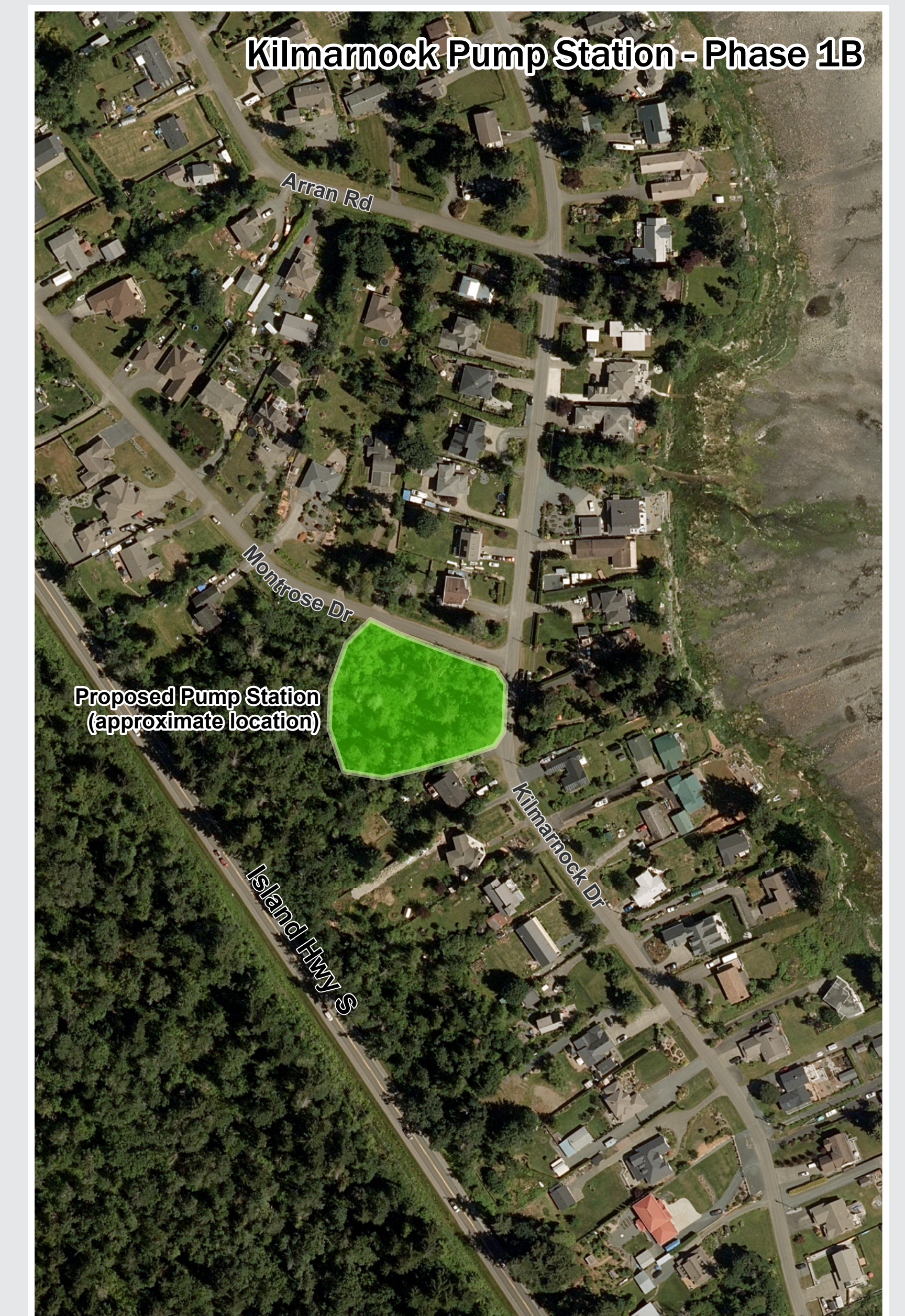


# PUMP STATIONS

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 two pump stations, with an additional pump station installed in Phase 1B.

## PHASE 1A: ROYSTON PUMP STATION

- Committees recommended a location for a single storey 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



## PHASE 1A UNION BAY AND PHASE 1B KILMARNOCK PUMP STATIONS

- 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.



# 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 after review of options.

### GRAVITY SYSTEM

- Wastewater would flow from homes by gravity to local pump stations.
- Most 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 an estimated 40 properties in Phase 1A where the wastewater plumbing exiting the home is lower than the sewer main in the fronting street.



To view your home on a detailed map and learn more about your connection, visit the 'map station' and ask questions to the project team.

## CHAMBER AND GRINDER PUMPS: HOMEOWNER RESPONSIBILITIES

**Installation and maintenance:** The property owner would be responsible for installation, operation and maintenance costs of these pumps.

**Replacement:** Grinder pumps will typically last 10 to 15 years prior to requiring repairs or replacement. Replacements costs are currently around \$3,000 (depending on model chosen).

**Annual costs:** In other areas, annual operating/maintenance costs are estimated to be \$40 to \$50 for a typical household.

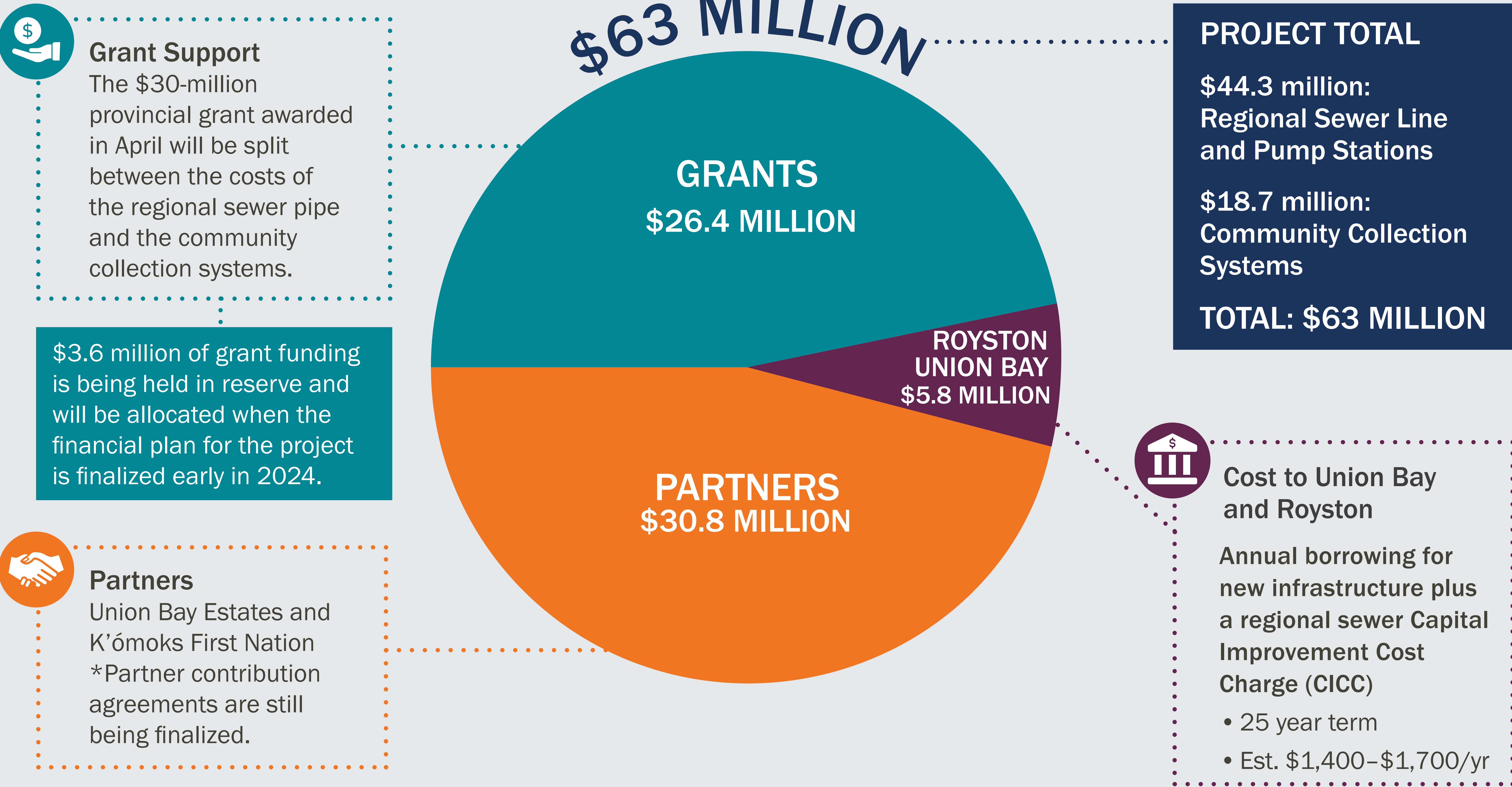
### LOW PRESSURE SEWER SYSTEM: CHAMBER AND GRINDER PUMP





# PROJECT COSTS

Extending sewer service to Royston and Union Bay is a significant project that is complex both in design and in funding. The good news is that the current proposed approach sees a large portion paid for by project partners and grants. See the below breakdown on project costs and costs to residents.





# COSTS FOR RESIDENTS

We know that one of the most important questions for residents is around the cost of a new service. There are two categories of costs anticipated: a) One-time costs which will vary from home-to-home and are the responsibility of the homeowner and b) Ongoing annual costs. See the below breakdown for more info.

## ONE TIME COSTS: HOMEOWNERS

ONE-TIME COST  
PER HOUSEHOLD  
**\$2,500–\$8,500**



Connection from home  
to new pipe at road:  
**\$1,500–\$6,500**

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

**TOTAL: \$2,500–\$8,500**

## ANNUAL COSTS: PAYABLE TO CVRD

ANNUAL COST  
PER HOUSEHOLD  
**\$1,930–\$2,350**


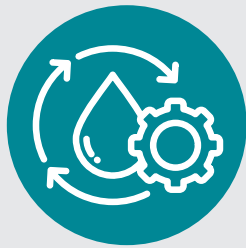




Borrowing (25 years):  
**\$1,400–\$1,700**

Operations + Maintenance  
(ongoing):  
**\$530–\$650**

**TOTAL: \$1,930–\$2,350**

### About this cost

-  Responsibility of homeowner
-  Varies depending on property and current system
-  Estimates are based on current market conditions
-  Grinder pumps for applicable properties not included in estimate



### Where you'll see these charges:

**Borrowing:**  
**\$1,400–\$1,700**  
On Annual  
Provincial Property  
Tax Bill

**Operations +  
Maintenance**  
**\$165–\$180**  
On CVRD Quarterly  
Utility Bill



### WE WANT TO HEAR FROM YOU:

The CVRD is considering offering an option to pay some charges up front, all at once. Is this something that would be of interest? Visit our feedback table to let us know.



# COSTS: DEFERRALS

There are two programs that could provide financial relief to property owners in the community sewer service area.

## 1 CVRD SEPTIC DEFERRAL PROGRAM

### Eligible Properties:

- Properties with a **Type 2 or 3 septic system newer than five years** may qualify to delay connection to the community sewer by up to five years.

### ELIGIBLE COSTS FOR CVRD DEFERRAL



Operations + Maintenance  
**est. \$530-\$650 annually**

One-time Connection  
**\$1,500-\$6,500**

Septic Decommissioning  
**\$1,000-\$2,500**

## 2 PROVINCIAL PROPERTY TAX DEFERRAL

The property tax for project borrowing will be eligible for deferment under the **Province of BC's property tax deferment program**. For eligible owners, this could reduce the cost impact by **\$1,400-\$1,700** on your annual provincial tax bill.

Homeowners can apply for one of two provincial deferment programs:

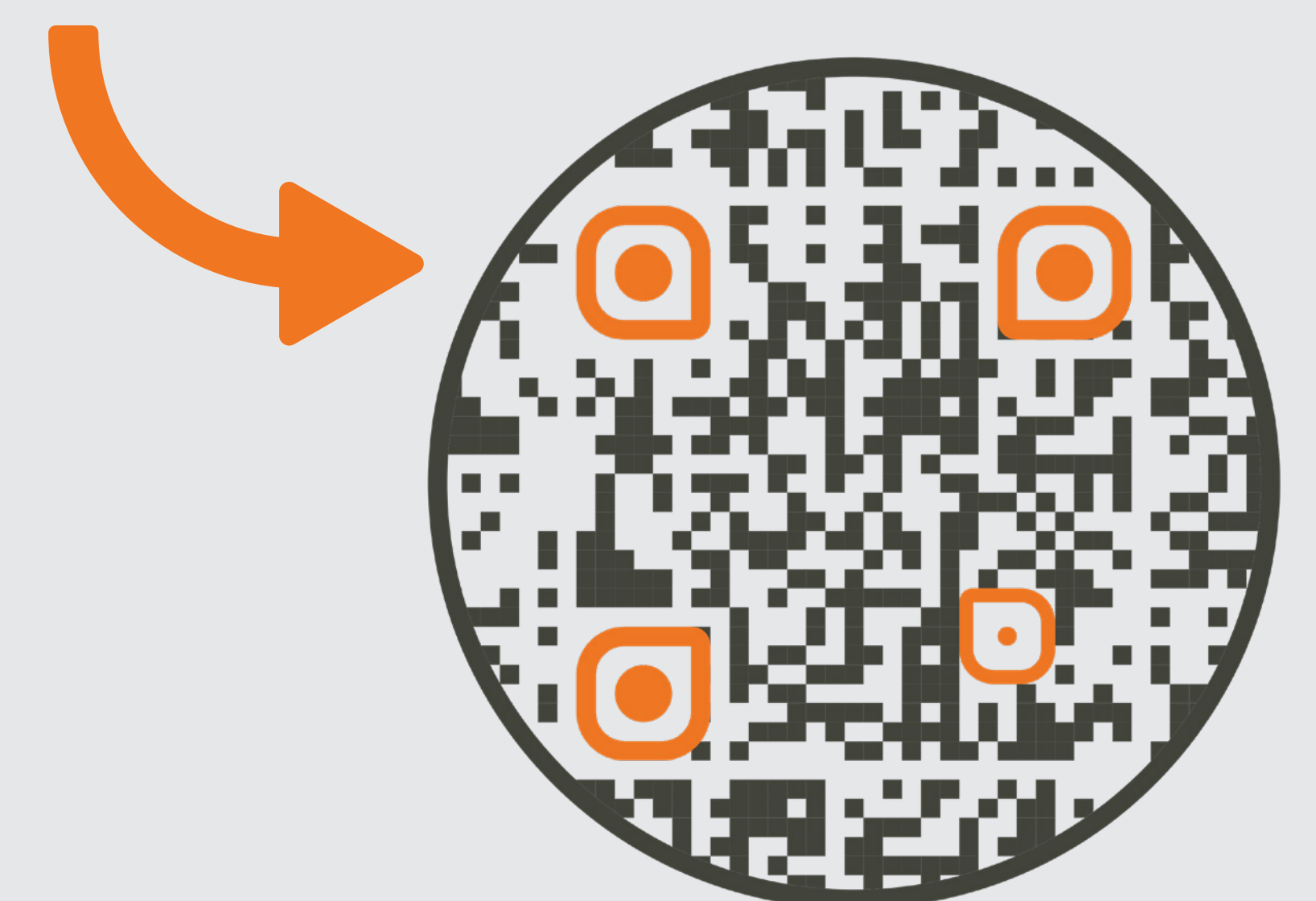
### 1. Regular program:

- 55 or older during current year
- A surviving spouse of any age
- A person with disabilities

### 2. Families with Children Program:

- Parent, stepparent or financially supporting a child under 18

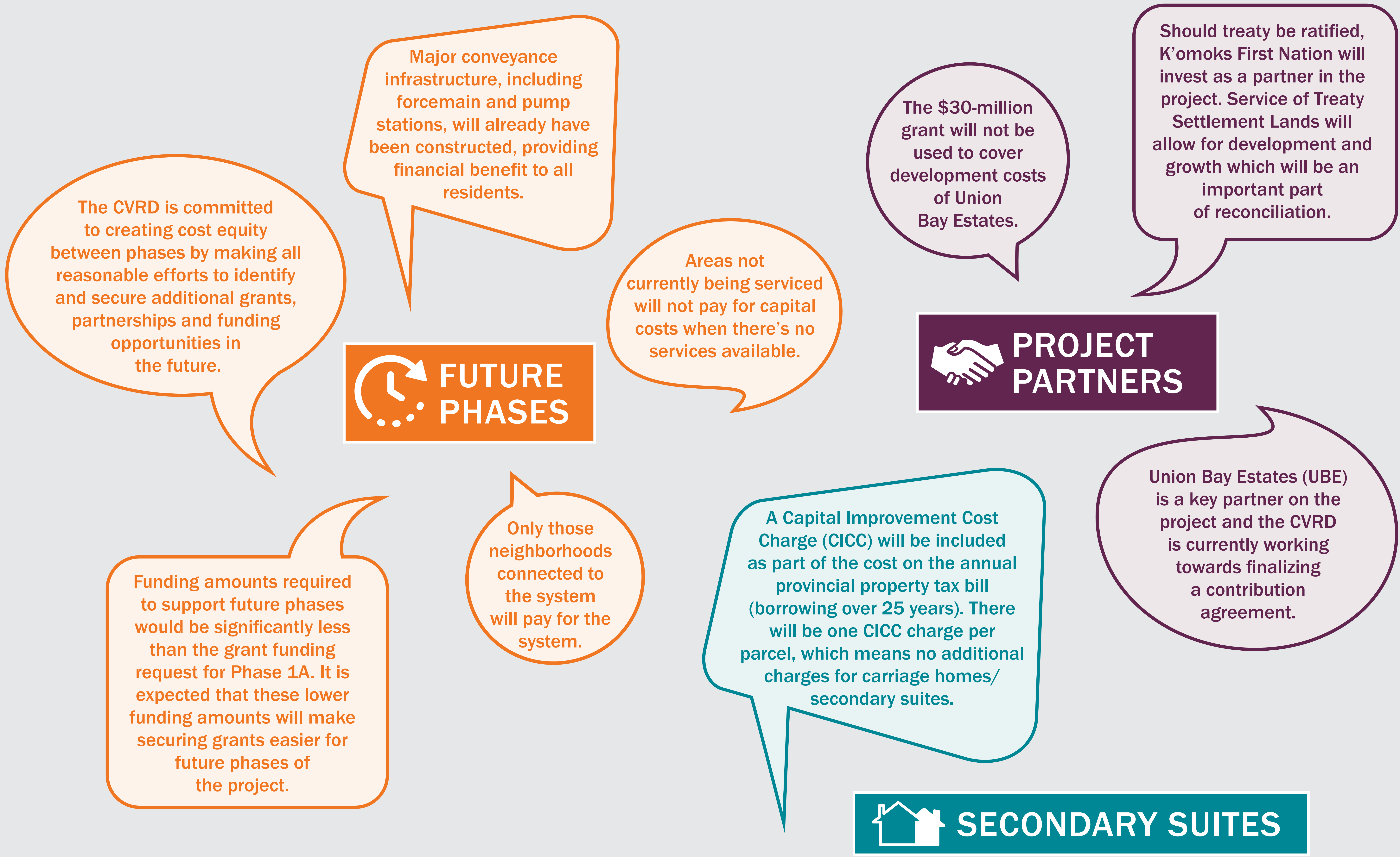
You must also meet applicant, property and equity qualifications to be eligible for these programs. **To learn more, scan the QR code:**



Homeowners that qualify for both the CVRD Septic Deferral program and the Province of BC's property tax deferment program could delay all costs related to the sewer project by up to five years.



# COSTS: FREQUENTLY ASKED QUESTIONS





# SEPTIC REGULATORY PROGRAM

The CVRD is currently seeking provincial guidance on options to enact a septic regulatory bylaw and establish a septic maintenance service for Electoral Areas A, B and C.

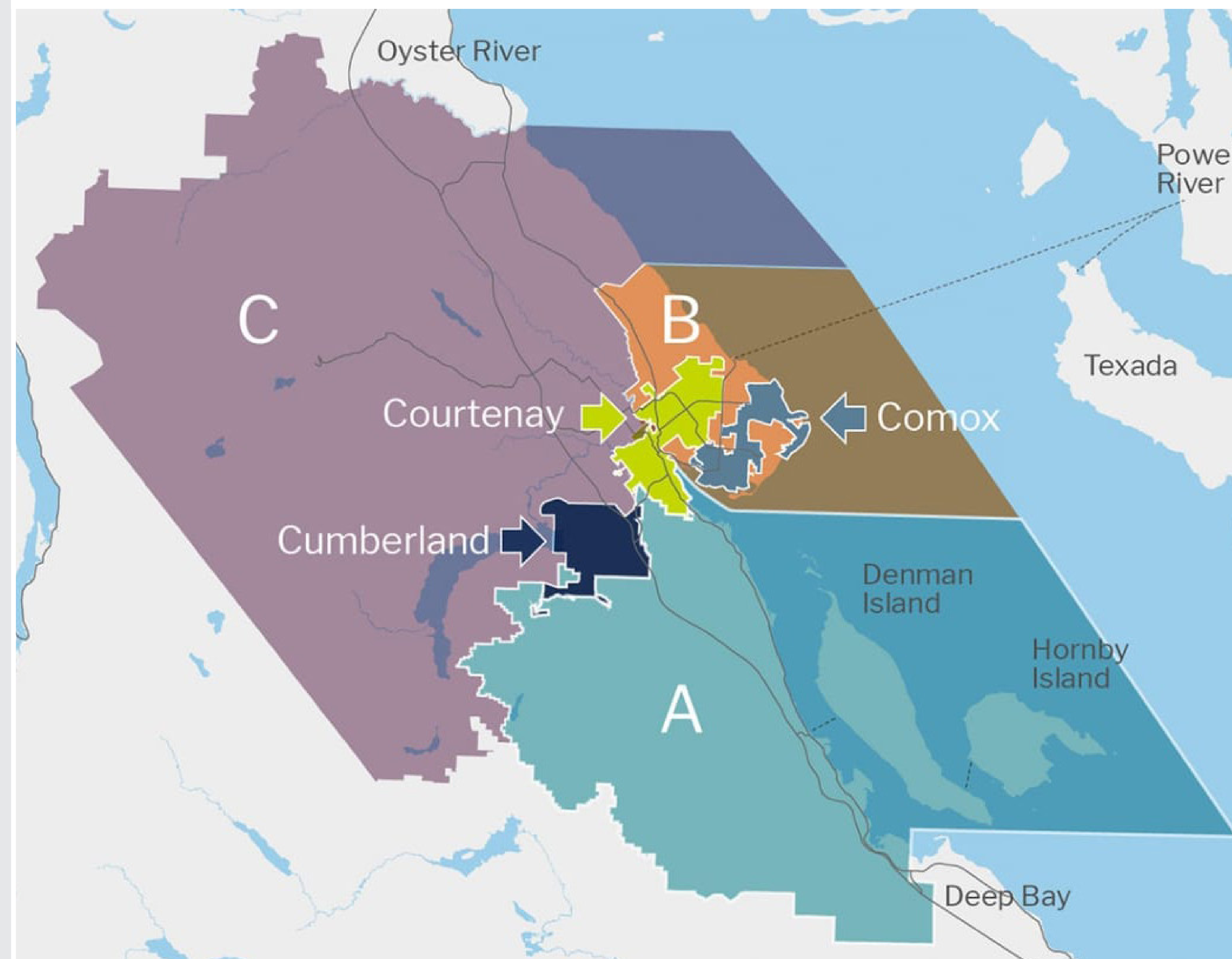
## WHY?

A regulatory bylaw would help ensure septic systems in the electoral areas are properly operated and maintained in accordance with Sewerage System Regulation requirements.

## WHAT?

This new service could introduce required maintenance, including septic inspections, pump outs and enforcement measures.

## CVRD ELECTORAL AREAS



## HOW?

The proposed regulatory plan uses a risk-based approach tailored to the level of environmental and public health risk associated with septic systems, with electoral area neighborhoods at higher risk prioritized for additional regulatory measures.

## WHEN?

A phased roll-out over five years has been proposed with an initial focus on highest priority areas.



## NEXT STEPS

The Electoral Areas Services Committee is currently considering further information on the proposed septic regulatory program, options to initiate it and provincial guidance on the process.



# SEPTIC VS. SEWER

Connecting to the Comox Valley Sewer Service would reduce the environmental and health risks posed by aging septic systems, plus provide a number of other benefits to homeowners.

## SEWER SERVICE

- Option to borrow over a 25 year term and to distribute costs over many users
- Reduced property maintenance responsibilities; skilled operators manage the system 24/7
- Provides the ability to use portions of the property that are currently occupied by septic system components
- Increased property values
- \$30-million grant for the project



### SAMPLE COMMUNITY SEWER COSTS

#### UPFRONT COSTS\*

Connection from house to sewer main  
**\$1,500–\$6,500**

Septic system decommissioning  
**\$1,000–\$2,000**

\*estimates based on current market conditions

#### ONGOING (annual costs)

Borrowing (25-year term)  
**\$1,400–\$1,700**

Operations + maintenance  
**\$530–\$650**

**AVERAGE EXPENDITURE PER YEAR**  
(based on 50-year time frame) **\$2,000**

## SEPTIC SYSTEMS

- Septic systems place the cost/maintenance burden on individual property owners
- Septic systems need to be replaced over time
- Failing systems pose a risk to environmental and public health
- Without appropriate servicing, it may not be possible for continued land development, resulting in potential regulatory changes such as:
  - Restrictions on adding secondary dwelling units, and/or revised zoning that better considers the area’s on-site wastewater treatment capacity



### SAMPLE PRIVATE SEPTIC SYSTEM COSTS\*\*

#### UPFRONT COSTS

Installation of new Type 2 system  
**\$25,000 (years 1 & 26)**

\*\*estimates only – costs could be higher for more complex Type 2&3 systems

#### ONGOING (annual costs)

New septic maintenance property tax  
**\$250 per year**

Maintenance  
**\$500 per year**

Pump out  
**\$600 every three years**

**AVERAGE EXPENDITURE PER YEAR**  
(based on 50-year time frame) **\$3,060**



# THE PLANNING PROCESS

In June 2022, planning for the project was rolled into the long-term plan for the Comox Valley Sewer Service in order to create a truly regional approach. As a result, the project is undergoing a Liquid Waste Management Plan (LWMP) addendum to obtain borrowing approval.

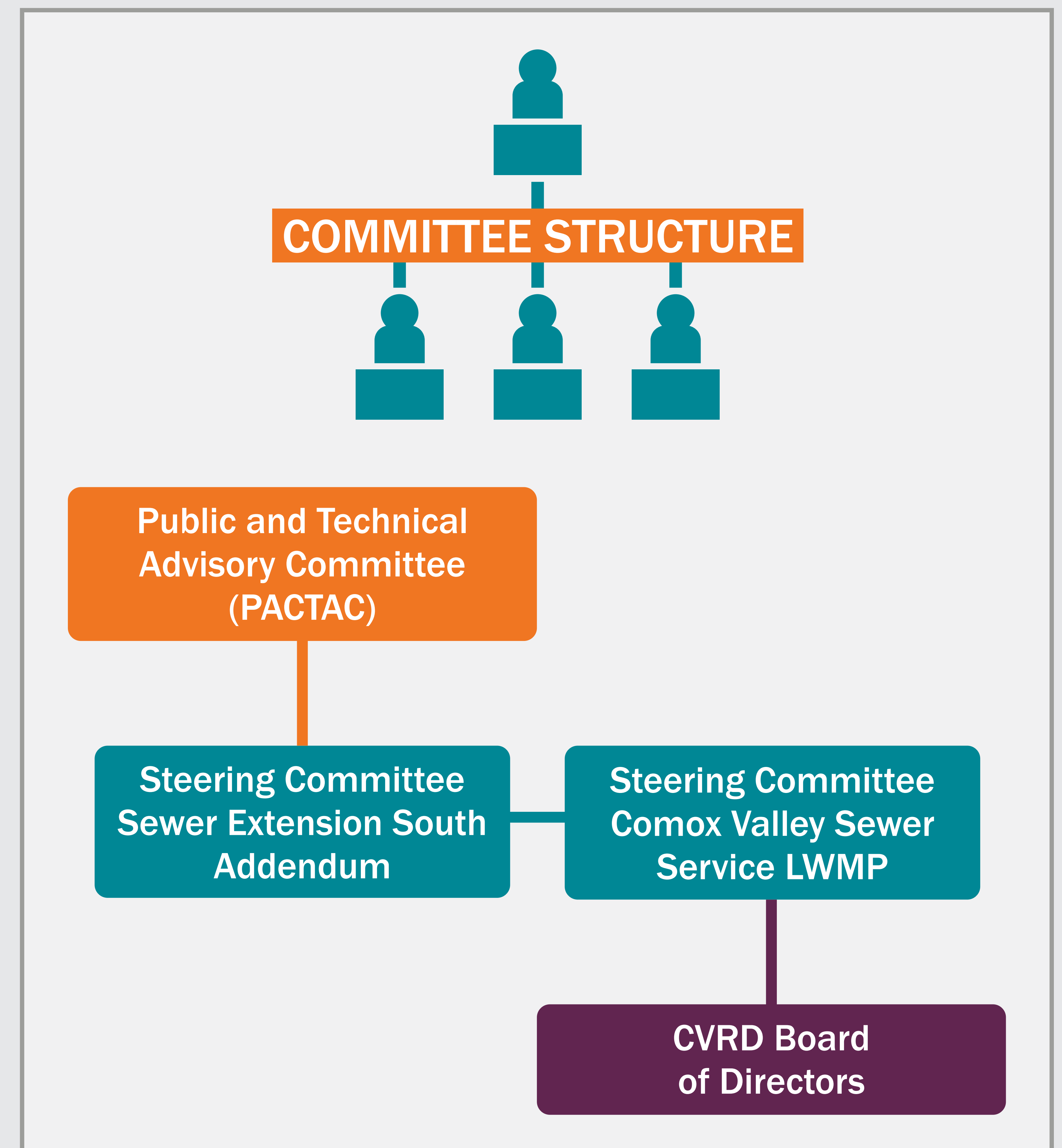
Provincial approval of a LWMP gives local government the ability to borrow for projects included in the plan. This means no referendum or AAP is required to move the approved plan forward.

## PUBLIC ENGAGEMENT

- The CVRD must demonstrate the community's contribution to the planning process and how public feedback was incorporated into the final plan.
- A public advisory committee (PAC) including seven representatives from three different communities has been formed to inform this process.
- They have been considering information from technical experts and the project team, providing feedback and guidance.
- Community members will have an opportunity to review and comment on the final draft addendum later this Fall.
- This feedback will then be considered by the PAC and incorporated into the final report.

## DECISION-MAKING

- All feedback collected at these events today will be shared with committees for their consideration (see structure at right).
- All final decisions will go to the CVRD Board.





# PROJECT PLANNING TIMELINE

## COMOX VALLEY SEWER SERVICE LIQUID WASTE MANAGEMENT PLAN (LWMP)



## SEWER EXTENSION SOUTH LWMP ADDENDUM PROCESS



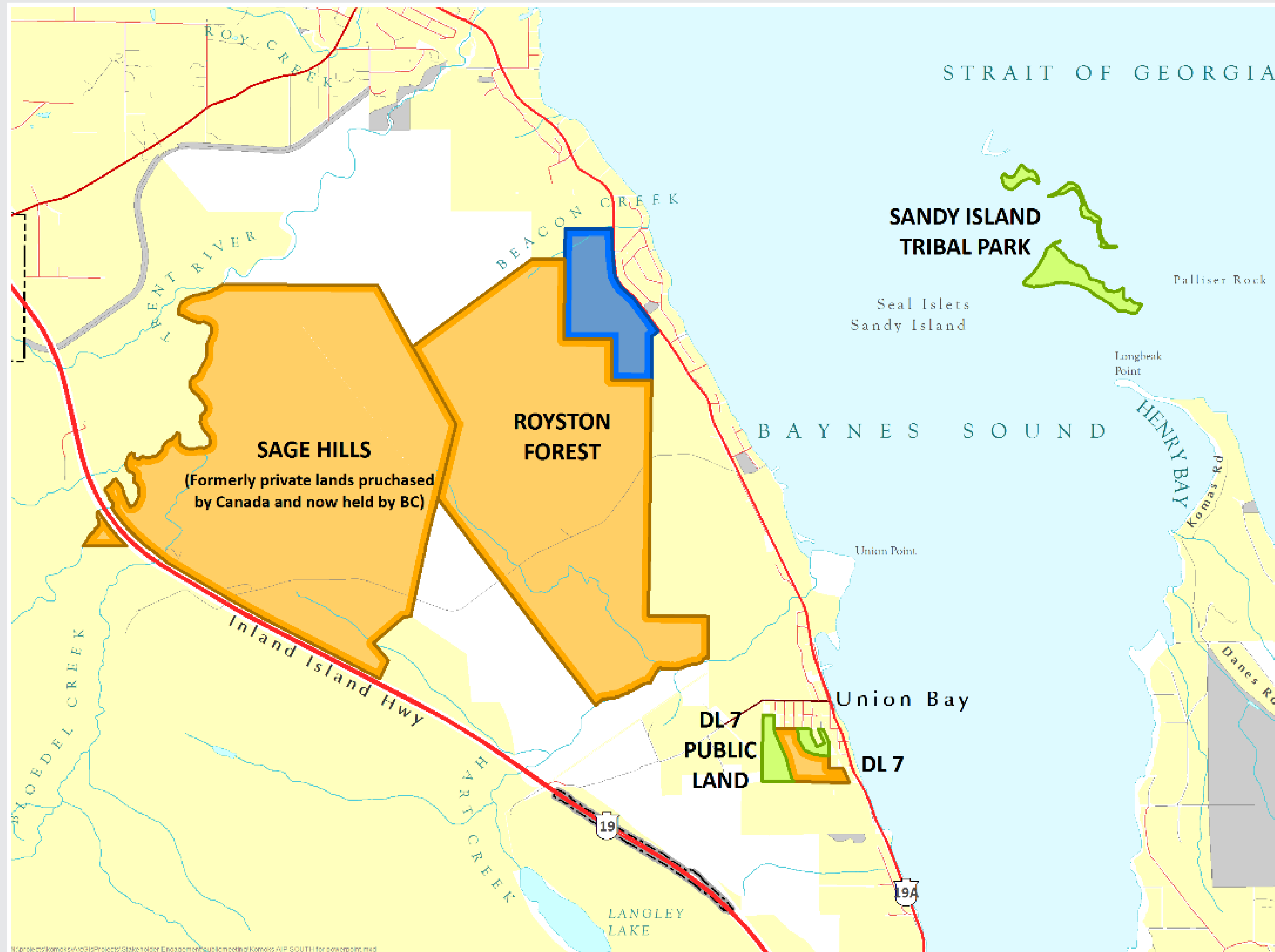
## NEXT STEPS





# K'ÓMOKS FIRST NATION AND RECONCILIATION

həhewčis; Hayuthela la xens: Moving Forward Together



## 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.





# 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](http://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

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#### 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.

#### 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](mailto: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

**Darryl Monteith**  
Manager of Liquid Waste Planning  
[communications@comoxvalleyrd.ca](mailto: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](#)

#### PROJECT NEWS

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 >](#)



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

#### Contact Us

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

 CVRD Communications  
250-334-6000

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

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