

Staff report

In-camera

Note: This report was made public by the Sewage Commission on May 15, 2018

DATE: May 11, 2018

TO: Chair and Members

Comox Valley Sewage Commission

FROM: Russell Dyson

Chief Administrative Officer

RE: Area A Wastewater Servicing Proposal

Supported by Russell Dyson Chief Administrative Officer

FILE: 5330-20/SSP

R. Dyson

Purpose

To obtain support in principle from the Comox Valley Sewage Commission to receive wastewater from defined areas within Baynes Sound-Denman/Hornby Islands (Electoral Area A), subject to conditions outlined in this report which will be analyzed and reported back to the Commission.

Recommendations from the Chief Administrative Officer:

THAT the Comox Valley Sewage Commission support in principle receipt of wastewater from those defined areas within Baynes Sound-Denman/Hornby Islands (Electoral Area A) identified in the staff report dated May 11, 2018, subject to the satisfactory resolution of further service negotiations on matters related to governance, terms of service, financial impact and regulatory considerations;

AND FURTHER THAT the impact of accepting wastewater from Electoral Area A be evaluated through Stage One of the Comox Valley Sewage Service Liquid Waste Management Plan (LWMP);

AND FURTHER THAT staff be directed to report back to the Comox Valley Sewage Commission with detailed analysis on governance, terms of service, financial impact and regulatory considerations to support a final decision on provision of service to Electoral Area A and incorporation of Electoral Area A flows into Stage Two and Three of the LWMP.

AND FINALLY THAT all costs associated with the related analysis and planning be borne by Electoral Area A.

Executive Summary

- There remains a need to address failing onsite sewage systems in Royston and Union Bay.
- Capital Improvement Cost Charges (CICC) from existing Electoral Area A residents
 would provide an immediate \$5 million contribution to the expansion and upgrade of
 CVSS infrastructure, and KFN and Kensington development would provide an ongoing,
 long term significant source of income to the CVSS.
- Inclusion of the Electoral Area A flows in the upcoming CVSS Liquid Waste Management Planning (LWMP) process would provide a timely mechanism for assessment of the impacts and sizing of the conveyance infrastructure.
- The K'ómoks First Nation (KFN) and Kensington Union Bay Properties Ltd. (Kensington) have expressed interest in partnering on a sewer solution for the area.
- KFN support is crucial to the success of the Comox Valley Water Treatment Project and Comox Valley Sewage Service (CVSS) sewer conveyance planning process. Sewer

servicing for the KFN's development lands in the south is likely crucial to ensuring that support is provided.

- A partnership with the CVSS, to treat Electoral Area A wastewater flows at the Comox Valley Water Pollution Control Centre (CVWPCC), has the potential to deliver an optimal wastewater management solution for the region.
- Collaboration between the CVSS, existing Electoral Area A residents, the KFN and Kensington could provide potential cost savings to all prospective partners through improved efficiencies and economies of scale.
- The program end date for the 2012 Gas Tax General Strategic Priorities Fund (GSPF) grant, allocated to the South Sewer Project (SSP), is approaching. A formal scope change request is required to determine if GSPF funds can be retained and used towards this alternative proposal. A formal scope change request will require a Comox Valley Regional District (CVRD) Board resolution supporting the proposal.
- CVRD staff will compete a detailed analysis on governance, terms of service, financial impacts and regulatory considerations to support a final decision on provision of service to Electoral Area A.

This report is to be in-camera because it involves municipal service negotiations and related discussions that are at their preliminary stages and could harm the interests of the municipality if held in public pursuant to Section 90 of the Community Charter (Bill 14, 2003).

Prepared by:	Concurrence:	Concurrence:	
D. Monteith	K. La Rose	M. Rutten	
Darry Monteith Engineering Analyst	Kris La Rose, P.Eng. Senior Manager of Water/Wastewater Services	Marc Rutten, P.Eng. General Manager of Engineering Services	
Stakeholder Distribution (U	pon Agenda Publication)		

ctanenoider Distribution (epon ingeneau i asneation)	
K`ómoks First Nation	

K'ómoks First Nation	✓
Kensington Union Bay Properties	~

Background/Current Situation

The CVSS primarily services the Town of Comox (Comox) and City of Courtenay (Courtenay) along with providing service to the Department of National Defence and KFN. The service has been operational since the early 1980's and includes sewage interception, treatment and disposal.

The SSP was a CVRD initiative, in partnership with the KFN, to provide wastewater collection, conveyance and treatment to the communities of Royston and Union Bay. A brief project chronology is included in Appendix A.

Continuing impacts from failing septic systems in Royston and Union Bay present ongoing environmental and human health concerns. A wastewater solution still needs to be found which protects the natural environment and provides cost effective wastewater treatment for residents.

Investigations into alternative solutions have identified a partnership with the CVSS as the most viable option for treating wastewater from these defined areas within Electoral Area A. The concept of a new outfall into Baynes Sound was not supported through the SSP planning process and is no longer thought to be a viable option for this area.

While the SSP did not receive the necessary support to proceed as planned, there are a number of influencing factors that have advanced since the referendum in 2016:

- Kensington has recently relaunched their development project in Union Bay with a goal of beginning construction by summer 2019.
- The KFN are currently engaged in Stage 5, Negotiations to Finalize Treaty, of the treaty negotiations process with a provincial target to complete this process by the end of 2018. A sewer solution for the south region will be required for KFN to proceed with their development plans for the area.
- The CVSS has an extensive list of upcoming capital projects that will require long-term borrowing to complete. A large contribution of CICCs from Electoral Area A would reduce future CVSS debt requirements.
- The Village of Cumberland (Village) has selected a stand-alone wastewater solution through their LWMP process. The Village will be applying for senior government infrastructure funding for this project as opportunities become available with a goal of constructing the treatment upgrades in 2020.
- A recent outbreak of norovirus has been linked to the consumption of BC oysters sourced from south and central Baynes Sound. This follows a similar norovirus outbreak which occurred in late 2016 and early 2017. While the precise sources of contamination have not been identified, human sewage is currently believed to be the most plausible cause of contamination. Given the importance of the industry to the region, such health concerns may bring a higher level of awareness for the need to implement improved wastewater management in the south region.

The KFN and Kensington have an interest in partnering on a wastewater solution for the area in order to provide long-term, safe, reliable and cost effective sewage treatment for their development lands south of Courtenay. A letter of support from each partner has been included in Appendix B and C.

Collaboration between the CVSS, existing Electoral Area A residents, the KFN and Kensington could provide potential cost savings to all prospective partners through improved efficiencies and economies of scale.

KFN support is crucial to the success of the Comox Valley Water Treatment Project and CVSS sewer conveyance planning process. Sewer servicing for the KFN's development lands in the south is likely crucial to ensuring that support is provided.

Project Proposal

It is proposed that wastewater from these defined areas within Electoral Area A be conveyed overland through a new regional forcemain to the Courtenay River siphon and onwards to the CVWPCC for treatment and discharge to the environment. This proposal does not include the use of any Courtenay or Comox infrastructure, only regional CVSS infrastructure.

Installation of a new regional line from south Courtenay to the siphon could provide opportunities for Courtenay to avoid upsizing or renewing existing wastewater conveyance in that corridor. A new regional line may also assist in providing cost effective servicing to those 109 properties included in the 2013 boundary extension in south Courtenay.

Required upgrades include:

- A new 5.4 kilometer forcemain from Royston to the Courtenay River siphon which would be built and paid for by Electoral Area A but regionally owned, operated and maintained after construction.
- A new collection system to collect and convey wastewater from Electoral Area A to the new regional forcemain. This infrastructure would be owned, operated and maintained by Electoral Area A participants.

Initial areas to be serviced include:

- SSP phase one service areas, including:
 - o Pump Station 2, Royston core approximately 408 properties;
 - o Pump Station 7, Union Bay core approximately 314 properties;
- Kensington development lands;
- KFN development lands.

Technical Implications to the CVSS (Courtenay/Comox)

Allowing Electoral Area A to utilize regional infrastructure and treat their wastewater at the CVWPCC would have implications to the CVSS. Potential implications are discussed briefly below and in the financial and legal sections of this report.

Sewerage System Capacity

Many parts of the CVSS are at or nearing capacity and significant capital upgrades have been incorporated into the 10-year capital plan for 2017-2026 to help address the current capacity constraints of the system. These upgrades include expansion to the CVWPCC to increase capacity and effluent quality, expansion at the compost facility to increase capacity, and construction of new conveyance infrastructure required to decommission the forcemain along Willemar Bluffs and provide increased capacity at the Jane Place and Courtenay pump stations. The condition and capacity of the Courtenay River siphon was recently assessed and found to be in good condition with adequate capacity to accommodate growth.

Estimated Electoral Area A wastewater flows, based on the SSP phase one service area, would account for approximately four per cent of the CVWPCC total flows and would not significantly affect the timing or scope of capacity driven upgrades.

The unincorporated area of Union Bay, including Kensington development lands, has been designated as a growth node in the Comox Valley Regional Growth Strategy (RGS) and could potentially see large future increases in population and consequently wastewater flows. Similarly KFN has significant development plans for their treaty settlement lands south of Courtenay. Further analysis would be required to develop an approach for managing these potential future flows from Electoral Area A. Inclusion of the Electoral Area A flows in the upcoming CVSS LWMP process would provide a timely mechanism for assessment of the impacts and sizing of the conveyance infrastructure.

Sewerage Quality

The quality of sewage received from Electoral Area A would have to be monitored and regulated. The fees and charges bylaw for the service currently includes a schedule outlining prohibited wastes and septage tipping procedures. Refining these requirements and including language surrounding sewage quality would help to insure the quality of sewage received from Electoral Area A. It is expected that sewage quality would normally be high as the area is largely residential with limited commercial development. Industrial uses are minimal.

Governance

The CVSS was established under Bylaw No. 2541 being the "Comox Valley Sewage Service Establishment Bylaw No.2541, 2003". Decision making under this bylaw includes representation from Courtenay, Comox and the Department of National Defense. Providing sewerage services to Electoral Area A would likely require a change in governance with decision making abilities for the service extended to Electoral Area A, and potentially to KFN. A contract or servicing arrangement is not likely to be possible as Electoral Area A and the CVSS are entities of the same organization and cannot enter into an agreement with each other. Additional legal work would be completed, as well as a review of the separate governance study work already underway, to recommend an optimal governance system for future participants.

Next Steps

External funding is extremely important for any infrastructure solution for the area, particularly as the collection costs associated with any centralized treatment or conveyance system are high and largely fixed.

The Union of BC Municipalities (UBCM) support for retention of the \$15 million GSPF grant allocated to the SSP in 2013 will be an important factor in project viability. During preliminary consultation, UBCM staff identified some concerns with the change in project scope and its ability to meet the 2012 funding threshold if re-evaluated during a formal scope change review. Regional collaboration will improve the likelihood of a scope change request being approved.

UBCM staff have indicated that this process should be initiated as soon as possible given the upcoming September 2018 program completion date for the 2012 GSPF program. A formal scope change request will require a CVRD Board resolution supporting the proposal.

The following next steps are proposed to meet these program requirements:

- Support in principle from the Comox Valley Sewage Commission to treat Electoral Area A wastewater at the CVWPCC.
- A meeting with UBCM staff to present the proposal and discuss requirements for the scope change request.
- CVRD Board support in principle for the proposal.
- Submission of the scope change request to UBCM.

In parallel to this process, CVRD staff will compete a detailed analysis on governance, terms of service, financial impacts and regulatory considerations to support a final decision on provision of service to Electoral Area A.

Policy Analysis

At their April 19, 2017 meeting, the South Sewer Select Committee passed the following motions: THAT preliminary support be requested from the Sewage Commission to conduct further analysis on a south sewer service option for partnering with the Comox Valley Sewage Service;

AND FURTHER THAT subject to receipt of preliminary support from the Sewage Commission the board rise and report.

At their February 20, 2018 meeting, the Comox Valley Sewage Commission passed the following motion:

THAT the matter of the potential inclusion of the areas south of Courtenay in the Comox Valley Sewerage Service be referred to staff to provide a report at a future meeting of the Comox Valley Sewage Commission.

Options

- 1. Support in principle the proposal to treat Electoral Area A wastewater flows at the CVWPCC.
- 2. Do not support the proposal.

Given the ongoing need to address the impacts from failing septic systems in Royston and Union Bay and the benefits to all prospective parties through this partnership opportunity, staff are recommending option one.

Financial Factors

CICCs and an increase in the number of service participants would benefit the CVSS by lowering municipal requisition amounts and providing reserve contributions. CICCs and development cost charges (DCC) for the CVSS have recently been updated to reflect the revised project list, which includes approximately \$48 million in capital improvements to the system, within the 10-year capital plan for 2017-2026.

Participation in the CVSS would require payment of the updated CICC charge. The single family residential charge under Bylaw No.3008 being the "Comox Valley Sewerage System Capital Improvement Cost Charge Bylaw No.3008, 2007" is \$6,941 per unit. This could provide for an estimated \$5 million contribution from existing Electoral Area A residents, and an ongoing, long term significant source of income as lots are developed by KFN and Kensington.

Legal Factors

Supplementary letters patent for the CVSS were amended in 1982 to include defined areas of Electoral Area A, Lazo North (Electoral Area B), and Puntledge Black Creek (Electoral Area C) within the sewage service function for the purpose of imposing DCCs within those defined areas. The Board has never adopted a bylaw defining any areas within the electoral areas for participation in the service.

An amendment to Bylaw No.2541 being the "Comox Valley Sewage Service Establishment Bylaw No.2541, 2003" will likely be required to change the boundaries of the existing service area to include defined areas within Electoral Area A. With this option, careful considerations will need to be given to potential changes to the governance structure of the CVSS.

The provision of sewage conveyance, treatment and disposal services to KFN lands could alternatively be provided through a memorandum of understanding or service contract. This option would need to be explored in more detail.

A local service area for sewage collection will need to be established for participating areas within Electoral Area A. This would be a traditional local service area under the CVRD's Electoral Areas Services Committee, similar to the many water local service areas that already exist.

Regional Growth Strategy Implications

Union Bay is one of the three settlement nodes identified by the RGS to accommodate compact forms of development. A community sewer system would allow growth and development in the area. Adequate servicing, particularly in the Union Bay region, will be necessary to ensure the implementation of the RGS.

There has been concern in the past that the inclusion of rural participants in the CVSS could facilitate undesirable densification outside of municipal boundaries. However implementation of the

RGS and Rural Comox Valley Official Community Plan over the past several years has limited densification to settlement nodes such as Union Bay. Development outside of these areas is constrained by a four hectare minimum lot size for subdivision.

Intergovernmental Factors

The area that is proposed to be serviced falls entirely within the traditional territories of the KFN. The KFN continue to be strong project partners with significant land holdings in the area and maintain representation on the South Sewer Select Committee.

The CVSS is governed by the Comox Valley Sewage Commission whose membership includes representatives from Comox, Courtenay and the Department of National Defence. Support from the Comox Valley Sewage Commission is required if Electoral Area A wastewater flows are to be treated at the CVWPCC.

Interdepartmental Involvement

Engineering Services staff will work closely with staff from Legislative Services and Financial Services as this option is developed in more detail.

Citizen/Public Relations

The CVRD recognizes and fully respects the 2016 SSP referendum results and will ensure that a proper public engagement process continues as this option is further developed.

Public consultation during the south region LWMP and SSP development has shown that Electoral Area A residents are aware of the wastewater challenges in the area and understand that a solution still needs to be found which protects the natural environment and provides cost effective wastewater treatment. Many Electoral Area A residents are supportive of affordable, centralized wastewater treatment.

The inclusion of the Electoral Area A wastewater flows in the upcoming CVSS LWMP process would allow for public consultation with CVSS participants on this proposal.

Attachments: Appendix A - "Royston/Union Bay Wastewater Management Chronology"

Appendix B – "Kensington Union Bay Properties Ltd. letter of support,

March 12, 2018"

Appendix C – "K'ómoks First Nation letter of support, April 27, 2018

Royston/Union Bay Wastewater Management Brief Project Chronology (2013-2016)

- The Royston/Union Bay area is known to have poor soils, a high water table, high density, and small lots, many with no reserve area for a replacement septic field.
- Most of the homes in Royston and Union Bay were built before the BC Sewage Disposal Regulation of 1985. As a result, the septic systems in this area were built without analysis of the soils, proper designs, sewage permits, or checks by health inspectors.
- Failing onsite sewage systems in Royston and Union Bay, combined with the ecological and economic value of Baynes Sound and the surrounding environment have advanced liquid waste planning initiatives in these communities.
- A considerable body of planning and engineering work has been completed to evaluate wastewater management alternatives for the area.
- In 2013, \$15 million from the Gas Tax Strategic Priorities Fund (SPF) was allocated towards construction of a collection system and water resource recovery facility for the area in partnership with the Village of Cumberland (Cumberland) and the K'ómoks First Nation (KFN).
- Following the allocation of SPF funding, the Comox Valley Regional District (CVRD) initiated a Liquid Waste Management Plan (LWMP) for the south region which included significant consultation with the community and stakeholders.
- Through an evaluation of options, the LWMP focused on the implementation of the South Sewer Project (SSP), which included construction of a new collection system, treatment facility, and conveyance infrastructure which would transport treated effluent to the CVRD's regional Comox Valley Water Pollution Control Centre for discharge through the existing outfall off Cape Lazo.
- The concept of a new outfall into Baynes Sound was not supported by the LWMP Public and Technical Advisory Committees. This lack of support for a Baynes Sound outfall had significant financial impact on the project.
- In November 2015 Cumberland withdrew from the proposed project reducing the number of households participating from approximately 2,200 to 930. This also had a significant financial impact on the project.
- Following Cumberland's withdrawal, the CVRD in partnership with the KFN decided to continue pursuing a community sewer solution for the south region.
- The KFN decided to contribute approximately \$5.4M towards the project in return for a share in connections for their future development in the area.
- Due to the high cost of the SSP, the CVRD and KFN pursued additional funding through the P3 Canada Fund in order to increase overall project affordability.
- In order to meet P3 Canada Fund program timelines, the LWMP process was abandoned prior to completion and a referendum was held in June, 2016 which sought elector consent to establish the required service establishment and loan authorization bylaws as well as to enter into a partnering agreement to deliver the project as a public private partnership.
- The CVRD saw significant opposition from the Canadian Union of Public Employees National during the lead up to the referendum due to the P3 model being proposed.
- On June 18, 2016 residents and home owners of the proposed service area voted against the project.
- While the referendum failed to achieve elector approval the need for a wastewater management solution remains.
- The CVRD recognizes and fully respects the 2016 referendum results and will ensure that a proper public engagement process continues as alternative solutions are further developed.



March 12, 2018

Mr. Mark Rutten Comox Valley Regional District 600 Comox Road Courtenay, B.C. V9N 3P6

Dear Mark:

Please accept this letter as our continued interest in furthering our discussions on the "Big Pipe" concept of moving raw sewerage from our Kensington Development in Union Bay to the Brent Road Treatment Plant.

We feel the moving of the effluent to Brent Road for treatment is the probably the most cost-effective way to handle this issue provided everyone participates.

Additionally, the multitude of failing septic systems in Union Bay and the protection of the Baynes Sound waters for the Shellfish industry are of utmost importance to our development.

We understand your challenge in getting agreement from all concerned regarding your Sewerage Master Plan.

We look forward to working with you in this regard.

Yours sincerely

Brian A. McMahon Vice President

Kensington Union Bay Properties



3330 Comox Road, Courtenay BC V9N 3P8 Tel: (250) 339-4545 Fax: (250) 339-7053

April 27, 2018

CVRD 600 Comox Road Courtenay, BC V9N 3P6

Dear Chair Jolliffe,

RE: LETTER OF SUPPORT FOR CVRD FOR SOUTH SEWER PROJECT

The K'ómoks First Nation has worked in partnership with the CVRD on the South Sewer Project for several years. This partnership began in 2012 with the successful application for \$15 million in grant funding aimed at providing safe, reliable and cost effective sewer treatment to lands south of the City of Courtenay. The KFN worked closely with CVRD to develop a stand-alone wastewater treatment plant and outfall for the area. Unfortunately the project was not able to identify a viable outfall location in Baynes Sound due to aquaculture and environmental interests including those of KFN. An outfall in Baynes Sound is not likely to ever be an acceptable method of discharging treated wastewater. This in turn escalated project costs which contributed to a failed elector accent process in the summer of 2016 thereby halting the project.

The KFN owns several fee simple parcels in the Royston and Union Bay area and have also secured rights to additional lands through the treaty settlement process. A safe and reliable, long-term sewer solution continues to be an extremely high priority for all of these southern lands.

Working with CVRD staff over the past several months, KFN has come to support a alterative project concept which would see raw waste water pumped to and treated at the Comox Valley Water Pollution Control Centre. This concept provides both a cost effective solution for the South Sewer Project as well as an influx of funds for the CVRD's existing waste water treatment service through the payment of capital improvement cost charges. The concept negates the need for a local outfall and provides safe, reliable, long term and cost effective sewer treatment as communities in the region continue to grow. We understand that support of the CVRD's sewage commission for use of the Brent Road treatment facility is essential to the success of this concept.

The K'ómoks First Nation is strongly committed to working in continued partnership with the CVRD towards implementation of a South Sewer Solution for all. It is our belief that this alternative will provide long-term, viable wastewater treatment to the area for years to come. We look forward to working with the CVRD to support and fund this alternative concept through detailed future project development.

Yours truly,

Tina McLean, Band Administrator