
Overview

On Wednesday January 18, 2017, the Comox Valley Regional District (CVRD) hosted an open house at the Comox Seniors' Association (d'Esterre House) to inform the public about the HMCS Quadra forcemain replacement project background and drivers. The information presented provided updates on expected activity in the coming months, and answered questions about the construction process - including how it will be funded. The session was also used to highlight the specialized drilling process to be employed for this project and the specific environmental protections that will safeguard the sensitive habitats that exist at the Spit.

The two-hour event was delivered with a casual, drop-in component followed by a 45-minute staff presentation and Q&A session. People were invited to ask questions and provide feedback in person and with feedback forms.

Approximately 70 people attended and 15 feedback forms were collected with attendees' comments and questions. In order to address the questions posed in those forms, this follow-up report has been drafted. Each question has been individually answered in the attached appendix – those questions have been grouped into general themes in order to make it easier for information on specific topics to be found.

Because the final construction details and dates for road closures aren't yet confirmed, some questions do not yet have answers. Those questions have been recorded and information will be shared as answers become available.

For more information and ongoing updates in the coming months, please refer to www.comoxvalleyrd.ca/hmcsquadra

Key Findings and Recommendations: Summary

A. Disruption of Croteau Beach Due to Proposed Route

The residents from Area B and the Croteau Beach neighbourhood have raised concerns that they are being unduly subjected to construction and disruptions in advance of the anticipated work for Comox No. 2 pump station. The decision to move the forcemain inland via the selected route – in particular along Docliddle Road - generated many of the comments received. CVRD staff explained that directional drilling was being considered for the project to reduce disruption during construction.

B. Assessment of All Options

Multiple questions were raised about the assessment of alternative options to the proposed route. Residents commented on the need for greater transparency regarding the studies and review that were undertaken and how the options were evaluated. CVRD staff explained that an on-site system was not pursued because of the seasonal variations of use and the public's general opposition to an outfall into Baynes Sound. Inserting a new pipe into the existing one was also not pursued because it would still leave a raw wastewater pipe in the estuary. Interest remained for more information on that assessment.

C. Perceived Connection to Comox No. 2 Pump Station

A perception exists that the driver for routing the HMCS forcemain inland along the selected route is to act as a 'justification' for the proposed Comox No. 2 pump station. The CVRD has made it clear that the roadway route of this pipe is required regardless of the Comox No. 2 project, and the proposed route to Beech Street is in recognition that the current plan is for the new pump station facility to be located there.

D. Environmental Concerns

Two environmental themes emerged from the open house:

- **Protection of wells:** Residents spoke to their concerns about a sewage pipe conveying untreated waste being routed near their properties, creating what they felt was a risk to their wells. An engineering consultant on hand explained the strength of the pipe and ongoing monitoring that would continue after construction.
- **Estuary health:** The decision to leave the pipe in the estuary generated questions about long-term ecological impacts, despite the explanation that the asbestos was not a risk in water (only harmful when airborne) and it was the removal of raw wastewater travelling in the pipe that was important to the long-term health of the estuary.

Individual Feedback

A total of 15 feedback forms were collected at the January 18, 2017 public open house hosted by the Comox Valley Regional District (CVRD). While a summary overview has been provided to respond to the topics generally, responses to the individual questions have been provided below.

Please note:

- Each question has been answered individually, which means feedback forms with multiple questions will find answers throughout this reference document.
- This document addresses only the questions posed in feedback/comment sheets. Statements of comment/opinion are available for review by sewage commission members and staff.
- Names/contact info has been removed to protect anonymity. Where requested, residents/public will be followed up with directly.

1. Disruption of Croteau Beach/Route

Questions	Answers
<p>a) Why <doesn't> the route continue on Hawkins down to the connection at Balmoral, Croteau, Hawkins and Torrence? Impacts less personal wells and mostly along public road. Easily connects to Town of Comox pipe.</p>	<p>The route parameters are determined by a combination of factors that include area topography, environmental constraints, terrain slopes to aid in sewage drainage and right of ways accessible to the CVRD. The proposed route would also allow for connection to the Comox No. 2 pump station if it proceeds to construction.</p>
<p>b) I have a 26' dug well (3' in dia) which is my source of water. This pipe will pass within 32' of this well. If my well is contaminated by failure, leakage, etc. I will have no recourse.</p> <ol style="list-style-type: none"> 1. Will there be testing wells put in so that leakage can be detected early? 2. Why was the community not consulted about the project so that a better solution could have been arrived at? ie: grey water system and composting toilets? Septic system for permanent staff and porta potties for summer cadets? 	<p>The safety of Area B resident's potable water is a priority for the CVRD. The forcemain is a welded pipe that will be wrapped as an additional layer of protection along areas that are in close proximity to wells.</p> <p>The development of a well monitoring network is currently underway for the collection of critical information on the groundwater within the area.</p> <p>HMCS Quadra has always participated in the Courtenay/Comox sewer service and maintaining a connection to the existing service is a priority for DND. The preliminary engineering analysis and discussions with project partners confirmed the roadway route as the leading option. Public participation in this case was focused on informing of the process.</p>

c) Why is the project not being given a long-term view into Croteau Beach residents' livelihoods, health, environments, water/wells and disruption of quality of life?	The CVRD uses a triple bottom line evaluation or "sustainability triangle" framework that considers environmental, social and economic factors in selecting project options.
d) Does the new pipe route run through KFN? Has consultation with KFN occurred?	Yes, KFN has been consulted on the project.
e) Does the pipe run through a KFN midden? Do they know that if it does?	There is a midden at the end of Croteau Beach Road. Any potential disruption to that area will have to follow provincial regulations, which includes involvement of local First Nations. Any mechanical operations within the archaeological site boundaries will be monitored by a qualified archaeologist.

2. Assessment of All Options

Questions	Answers
a) Why not use the existing sewer line to pull in the smaller line required and eliminate all the trenching, etc.?	As part of the initial option assessment completed in 2014, rehabilitation of the existing pipe by slip lining, relining or pipe bursting were all reviewed but were not considered further due to difficulties with construction and the escalated level of potential environmental and socio-economic impacts related to construction activities within the marine environment.
b) Why didn't the CVRD pursue a small bore on-site system, consisting of a tank & lift station onsite and effluent run off via 2" pipe into city – Comox system. Could have been run through existing pipe to Jane Place. Cost about \$250K, about a 1/3rd of projected cost.	See response to 2a.
c) Was Quadra having its own sewage treatment system considered as part of the initial assessment process?	HMCS Quadra has discharged to the regional service since the early eighties and continuing that service was a priority for all. High-level consideration of an on-site system though suggests it would not be a considerable option in this case because of the large seasonal variations in use at the facility, and the requirement for an outfall into Baynes Sound, which other consultation processes have made clear is unacceptable to the public.
d) Could you run a new pipe through the existing pipe rather than create a new route?	See response to 2a.

<p>e) What was the criteria for rating and selecting this option?</p>	<p>See response to 1c.</p>
<p>f) Ability of contractors to do the work was a factor – do you know there’s no one to run a pipe through the existing line?</p>	<p>See response 2a. As part of 2014 assessment work, project information was sent to three specialized contractors to obtain construction cost information and methodology. All three contractors declined to participate, citing the work as being too specialized or impractical due to the marine working environment and the uninterrupted length of host pipe.</p>
<p>g) There was information published that the pipe was running along Hawkins and tying into Croteau – but now it’s also running along Docliddle. Why the change in route? And why wasn’t that published in the paper?</p>	<p>A review of alternate routes was completed in January 2016 and was published as an appendix to a staff report in April 2016, within the report a preliminary route was depicted running along Hawkins and tying into Croteau. At such time, discussions with the Town of Comox on the initial tie-in and future transition to the Comox No.2 pump station were preliminary with additional work being required. Upon completion of additional work a staff report was published in September 2016 providing a project update and depicting the final route running along Docliddle.</p> <p>It wasn’t until such time that a route was finalized that the CVRD issued a news release on January 4, 2017 communicating the details of the planned inland route, which included Docliddle Road.</p>
<p>h) Wouldn’t it be easier/more cost effective to avoid running along Docliddle – more direct route?</p>	<p>Cost alone is not the only factor in evaluating infrastructure project options. See response to 1c.</p>
<p>i) What are the cost comparisons?</p>	<p>As part of the initial options assessment for replacement of the HMCS Quadra line, cost comparisons were completed in 2014. Updated costs comparing that of an overland route with a new marine crossing were completed by McElhanney in 2016.</p> <p>A link to this report can be found here.</p>
<p>j) Why not run a dedicated pipe directly to the treatment plant?</p>	<p>The cost to build a dedicated pipe from HMCS Quadra directly to the treatment plant is not an economically feasible option when considered in scope with the other available options.</p>

k) Can you guarantee the road along Goose Spit won't erode - we'd be in the same situation?	The CVRD, as part of the agreement with HMCS Quadra/DND will provide ongoing maintenance of this infrastructure.
l) Is future Goose Spit road maintenance part of the project – was that part of the original assessment?	See response to 2g.
m) What will be the future impact on the beach if you're always repairing/maintaining the road and pipe – how will that impact the environmental sensitivity of the park, moths etc.?	Protection of project site's sensitive habits is a priority for the CVRD and will be taken into consideration in future maintenance work at Goose Spit Regional Park. The pipe will require little attention as it will be protected beneath the roadway.
n) Do you know where all the wells are in the area? If you don't know, why don't you?	See response to 1b.

3. Perceived Connection to Comox No. 2 Pump Station

Questions	Answers
a) Isn't it disingenuous to say this project would proceed exactly the same way if Comox 2 wasn't a project influence?	Regardless of the Comox No. 2 project, the HMCS Quadra Forcemain Replacement project needs to proceed to remove the risk to the estuary. Locating the pipe through the Beech Street site has been selected because of the proposed new pump station, but removing the pipe from the estuary and aligning it along Hawkins Road, connecting to the Comox sewer collection system would remain the selected approach regardless of pump station plans.
b) Is there an agenda to get this through to advance the Comox No. 2 project?	See response to 3a.

4. Environmental Concerns

Questions	Answers
a) What will happen to the old pipe?	The existing pipe will be flushed prior to abandonment, filled with controlled density fill, capped and left undisturbed in the estuary. This will prevent disrupting and/or damaging habitat unnecessarily, and the pipe as is, without raw wastewater running in it, poses low risk.

b) The asbestos breaking down in the estuary isn't an environmental factor?	Asbestos is a concern when it is released into the air. The pipe once flushed and capped doesn't pose an environmental concern to be left in the water. It is the environmental risk of raw wastewater in the aging pipe that is being removed.
c) Will the existing old, asbestos pipe in the estuary be removed? How will this be done to minimize asbestos and other contaminants entering the marine environment?	See responses to 4a and 4b.
d) What is happening to the old pipe once the new line is in place?	See response to 4a.
e) What depth will the pipe be drilled down into the ground?	Horizontal direction drilling requires a minimum depth of cover to ensure proper installation of the pipe. The depth of pipe will vary with the existing ground cover in the area, however the majority of pipe will be placed at a depth of 1.8 metres.
f) What is the distance required between sewage and potable water lines? Does this project meet the standards for separation?	The project will meet the vertical (0.5 metre) and horizontal (3 metre) separation requirements between sewage and potable water lines.
g) You're a professional engineer – would you state this project is totally safe? Have you submitted anything that indicates you have concerns with this project?	This project conforms to professional engineering standards. Issues of public safety are addressed throughout the project, from planning to execution. The CVRD Engineering Department is confident in the results of its studies and planning.
h) How do you feel as a professional engineer about this project?	See response to 4g.
i) Why are some pipes considered okay in the estuary and others not (ie: proposed pipe for South Sewer Project)? Why so much inconsistency in determining what does and what doesn't pose an environmental risk?	The proposed pipe for the South Sewer Project would have been carrying highly-treated effluent that posed no risk to the environment.
j) How are you going to stop the sea rising and damaging the Spit/this pipe?	The CVRD will provide ongoing operation and maintenance of this forcemain taking into consideration future environmental impacts as necessary.

<p>k) How do you monitor the integrity of the pipe over its lifetime? How can you tell if it is leaking?</p>	<p>The CVRD will follow Provincial and Federal wastewater regulatory requirements and industry standards to measure and monitor the integrity of the pipe over its lifetime.</p> <p>Tests with water or low-pressure air are used to detect leaks.</p>
<p>l) How do you wrap a well?</p>	<p>Plumbing pipes running from wells to houses are commonly wrapped with insulation to prevent freezing in cooler climates.</p>