

Minutes of the meeting of the Sewer Extension South (SES) Liquid Waste Management Plan (LWMP) Addendum Joint Technical and Public Advisory Committee (TACPAC) held on December 12, 2022 in the CVRD Civic Room at 770 Harmston Avenue, Courtenay, and via Zoom conference commencing at 9:02 am

**PRESENT:**

A. Habkirk, Facilitator	Facilitator
R. Dyson, Chief Administrative Officer	CVRD
M. Rutten, General Manager of Engineering Services	CVRD
D. Monteith, Manager of Liquid Waste Planning	CVRD
V. Van Tongeren, Environmental Analyst	CVRD
C. Wile, Senior Manager of Strategic Initiatives	CVRD
A. Mullaly, General Manager of Planning and Development Services	CVRD
T. Trieu, Manager of Planning Services	CVRD
M. Briggs, Branch Assistant – Engineering Services	CVRD
I. Snyman	WSP
M. Levin	WSP
D. Silvester	Current Environmental
H. Sungaila	Current Environmental
C. Davidson, City of Courtenay	TAC
N. Clements, Island Health	TAC
E. Derby, Island Health (Alternate)	TAC
M. Mamoser, Ministry of Environment and Climate Change Strategy	TAC
L. Johnson, Ministry of Health	TAC
D. Arbour, Electoral Area A Director	PAC
I. Munro, Electoral Area A Alternate Director	PAC
M. Hewson, Association for Denman Island Marine Stewards	PAC
N. Prins, BC Shellfish Growers Association	PAC
C. Pierzchalski, Comox Valley Conservation Partnership	PAC
A. Gower, Comox Valley Chamber of Commerce	PAC
I. Heselgrave, School District No.71	PAC
N. Prince, Craigdarroch Resident Representative	PAC
R. Steinke, Craigdarroch Resident Representative	PAC
T. Donkers, Royston Resident Representative	PAC
K. Newman, Royston Resident Representative	PAC
J. Elliott, Union Bay Resident Representative	PAC
R. Lymburner, Union Bay Resident Representative	PAC

Item	Description	Owner
<b>3.1</b> 9:02- 9:03am	<b>Call to Order and Territorial Acknowledgement</b> The meeting was called to order at 9:02 am.  The CVRD acknowledged that the committee is meeting on and the proposed Sewer Extension South Project will be constructed and operated on the traditional unceded territory of the K'omoks First Nation.	<b>A. Habkirk</b>
<b>3.2</b> 9:03- 9:05am	<b>Welcome</b> The CVRD thanked the committee for their attendance.  The CVRD's consultants from Current Environmental introduced themselves to the committee.	<b>D. Monteith</b>
<b>3.3</b> 9:05- 9:11am	<b>Meeting #2: Meeting Minutes, Follow Up Items</b> MOTION: Adopt the minutes of the November 23, 2022 SES LWMP Addendum Joint TACPAC meeting. – I. Munro SECONDED: R. Steinke CARRIED UNANIMOUSLY  V. Van Tongeren addressed questions from the previous meeting. Staff will be providing an update to residents early in the new year. Alternate forcemain alignments such as crossing the estuary were considered during previous LWMP process, but estuary crossing was rejected by the steering committee due to risk of carrying raw wastewater under estuary. WSP investigated an alignment under the estuary and determined it would be far more costly. More information on catchment areas and boundaries, as well as connection of newer septic systems, will be provided at next meeting. Staff have investigated example in Langford where delayed connection for new systems was allowed.  Q: Environment risks were substantial for crossing and other options cheaper. Will additional studies be done, especially since Courtenay River siphon is at more environmentally sensitive area? A: Investigated capacity of siphon. Third pipe in place, but not yet used, that can provide capacity until 2060. Comment: Third pipe may be shown in drawings but not actually there. Recommend confirming presence of third pipe.	<b>A. Habkirk /            CVRD</b>
<b>3.4</b> 9:11- 9:52am	<b>Draft Environmental Impact Study</b> D. Silvester gave an overview of the Environmental Impact Study (EIS) and its objectives.  Investigated known contaminated sites, including possible sites for pump stations, and investigated low, medium, and high risk sites. 60 sites near alignment identified as possibly contaminated, with 9 designated high risk sites.  The committee broke for recess due to technical issues at 9:21 am and reconvened at 9:29 am.	<b>Current            Environmental</b>

	<p>Investigated potential contaminated sites near Royston pump station, including spill in the 90s on property across street that impacted adjoining properties and the roadway. Union Bay pump station is adjacent to coal sites, with some remediation occurring in the area. Site investigation recommended for all pump station sites. Unsure if investigation done on Union Bay Estates (UBE) roadway where trenching would occur.</p> <p>H. Sungaila gave an overview of environmentally sensitive areas. Investigated 13 possible ecological risks, including various bird and fish species, and four sensitive habitats within 100m around pump station and 30m around forcemain alignment. For Royston pump station, foreshore is considered Sensitive Ecosystem Inventory habitat, which will require mitigation efforts during construction.</p> <p>70+ possible bird species (13 at risk), a variety of mammals, and 14 possible amphibian and reptile species (four at risk) identified in project area. Five active bald eagle nests in close proximity to alignment (two near Trent River), with potential for Great Blue Heron habitats in area. Ground survey not completed yet, but should be conducted when breeding year corresponds with construction.</p> <p>Nine possible at-risk vegetation species. Invasive species present near pump station locations, and will require special handling and disposal during construction.</p> <p>15 streams/ditches (nine fish-bearing) within project area. Not expecting interaction with stream channel during construction, but mitigation efforts necessary when working near watercourses.</p> <p>D. Silvester noted that the bird nesting window is March 15 to August 15 and the in-stream reduced risk window is June 15 to September 15 (no direct incursion expected), which may require DFO request for review or <i>Water Sustainability Act</i> Section 11 notification. <i>Contaminated Sites Regulation</i> requires Phase 2 assessment if contaminated materials moved off-site for disposal.</p> <p>Archaeological permits required from the province and K'ómoks First Nation. Anticipated impacts and overall risk considered low.</p> <p>Q: Are streams unlikely to be directly affected due to forcemain not being very deep in ground?  A: Required trenching will be relatively shallow compared to distance between road and culvert. Some maintenance may be required if culverts are damaged or at risk of collapse.</p> <p>Q: Remediation for UBE pump station location was done, but believe it was just covering it with dirt. When will testing be</p>	
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	<p>conducted in area to see what is actually there? Will residents be paying for work in UBE lands?  A: Method of sampling not yet determined, but recommending that it occur. Will be addressed once have more detailed design.</p> <p>Q: Has a similar study been done for archaeological impact?  A: Archaeological study completed in 2015, concluding most of the work will be done in heavily disturbed areas.  A: Is pump station #3 in middle of archaeological zone?  A: Yes.  Q: Is the archaeological report available?  A: Can be provided to the committee.</p>	
<p><b>3.6</b>  9:52:-  11:37am</p>	<p><b>CVRD Updates</b>  <b>Committee Process</b>  D. Monteith reiterated the LWMP process. Gave an overview of the committee structure and process for design making. Involves the TACPAC presenting recommendations to the SES Steering Committee (Electoral Areas Services Committee and Sewage Commission Chair), then decisions sent to Comox Valley Sewerage Service (CVSS) LWMP Steering Committee (Sewage Commission and Electoral Area A Director) and on to the CVRD Board.</p> <p>Goal of TACPAC Meeting #3 and #3.5 to provide recommendations to SES Steering Committee. SES Steering Committee will review recommendations and provide direction to proceed with draft addendum and consult First Nations and public. TACPAC Meeting #4 will review draft addendum and provide comments to be considered by SES Steering Committee and CVSS LWMP Steering Committee. Review addendum report at TACPAC Meeting #5 and direct to steering committees for review before submittal to province.</p> <p>Q: Will grant funding impact the process?  A: Recommend committee put forward considerations regarding grant funding. Should form resolutions that consider what if grant funding doesn't happen, but can also acknowledge that it may not be possible without grant funding.</p> <p><b>Sewer Service Structure</b>  Amendment to expand CVSS service area adopted in August 2022 to include portions of Electoral Area A. CVSS responsible for conveyance, treatment, and discharge, with Area A contributing to operations and maintenance.</p> <p>Q: Conveyance and pump stations become part of CVSS, but collection systems are separate services?  A: Yes.</p>	<p><b>CVRD</b></p>

	<p><b>Project Costs</b></p> <p>Q: Some areas may not see services for 5-10 years. Will they be paying for capital costs when there's no services available?</p> <p>A: Collection system infrastructure expected to be paid by area being serviced.</p> <p>Comment: Example of properties annexed into City of Courtenay who now pay higher taxes but haven't been provided with additional services.</p> <p>Response: Structure being contemplated would not see people paying before being provided service. Regional districts have service establishment option, which allows for only those participating in service to pay for service, rather than collected through broad-based tax.</p> <p>Q: Will grants and project partner contributions be applied only to the conveyance system or collection systems as well?</p> <p>A: Will discuss later.</p> <p>Currently have Class C cost estimate for conveyance infrastructure and Class D for local collection infrastructure. Applied for \$26.4M in grant funding, with decision expected in spring 2023. Provided an overview of Phase 1A and why the area was chosen for the initial phase to maximize the grant funding and address environmental risk.</p> <p>Q: Have we discussed later phases for areas in Royston?</p> <p>A: Timing not identified yet, but can discuss later.</p> <p>Q: Will outer areas join during or after Kilmarnock?</p> <p>A: Not determined yet.</p> <p>For properties connecting to CVSS, a Capital Improvement Cost Charge (CICC) is required for related upgrades to CVSS conveyance and treatment works. \$6,941 per unit for single family residential property, as defined in Bylaw No. 3008.</p> <p>Q: So any property within service area connecting to system would pay this fee?</p> <p>A: Yes. Same amount as paid through Development Cost Charges in the municipalities.</p> <p>Q: Would the CICC rate be paid for secondary dwellings too?</p> <p>A: Will investigate during break.</p> <p>Q: Are there alternate payment options other than one-time charge?</p> <p>A: Still evaluating options.</p> <p>Phase 1A with grant funding estimated to be \$0 per property for shared infrastructure (forcemain and pump stations), covered by</p>	
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	<p>project partners and grant funding. Without grant funding, would replace grant contribution with \$6.8M in borrowing and require an estimated \$13-17k per property for shared infrastructure.</p> <p>Q: Any consideration for parcel tax options? A: Options will be provided later in meeting.</p> <p>Q: Is \$13-17k in addition to CICC charge? A: Yes.</p> <p>Q: These charges don't include work required on each property? A: Yes.</p> <p>Q: So there are three components to be paid by property owners: contribution to CVSS (CICC), shared infrastructure, and on-site infrastructure? A: Yes, as well as collection infrastructure.</p> <p>Phase 1A with grant funding estimated to be \$13-17k per property for local collection infrastructure. Without grant funding, costs estimated to be \$41-45k per property for local collection infrastructure.</p> <p>On a per-year payment schedule, estimated to be \$900-1,200 per year for 25 years with grant funding, or \$3,900-4,200 per year for 25 years without grant funding. On-lot costs estimated at \$1,500-6,500 for connection from home to property line and \$1,000-2,000 to decommission septic system. Operation and maintenance costs estimated to be \$590 per year. Per property annual costs estimated to be \$1,430-1,850 per year with grant funding, or \$1,930-2,350 with CICC charges included. One-time costs estimated to be \$9,441 or higher with CICC, or \$2,500 or higher with CICC paid over time instead. Still evaluating payment options for CICC.</p> <p>Q: Why was a 25-year term for borrowing chosen when infrastructure has a closer to 100-year lifetime? Does this mean it's no longer on taxes after 25 years? A: Wouldn't be on taxes after term is up. Option to look at 30-year term, but don't believe terms longer than 30 years currently offered.</p> <p>Q: What does it cost if we don't do this? People likely to not like additional costs. Need to provide comparison of costs if properties stayed on septic, including costs if inspection and maintenance program implemented. A: Expect that once inspected, most older systems will need to be replaced. Could see \$25-50k cost for replacement, \$1-1.6k for annual inspection and maintenance, and \$200-300 for septic regulatory program annual parcel tax.</p>	
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	<p>Q: How can that be represented as an annual cost comparison? Average homeowner will want to see simple comparison of numbers.</p> <p>A: Benefit of public sewer service is the option to borrow over a long term and to distribute costs over many users, while septic system will place burden on individual property owners. Also need to consider asset life, with septic systems needing to be replaced over time.</p> <p>Q: What about next phases? May have very different charges per property for each phase, since grant funding may be different or absent. Should be able to include mechanism in place to ensure same charge for all users.</p> <p>A: Will be discussing costs for future phases at next meeting. Can look at different cost sharing structures, with or without grant funding.</p> <p>Comment: Need to consider the difficulty of keeping phase costs the same when some of them are 5-10 years away.</p> <p>Q: Why is UBE excluded from Phase 1A?</p> <p>A: UBE is responsible for the costs of their own infrastructure.</p> <p>First phase includes initial infrastructure that will include additional costs, such as the forcemain, while additional phases will require less infrastructure and likely see smaller grant amounts required. Can include language that adds principles in plan to help level costs for phases.</p> <p>Q: Everyone needs to know they're being treated fairly. Phase 1A said \$0 for shared infrastructure with grant funding. How will costs for future pump stations be addressed?</p> <p>A: Kilmarnock pump station will be considered regional infrastructure.</p> <p>Comment: Doesn't seem fair that a future phase may need to pay for pump station infrastructure when first phase may not.</p> <p>Comment: Do see fairness in that as phases join they pay for their pump station.</p> <p>Comment: First phase pays less and benefits from service.</p> <p>Parcel tax contemplated to cover borrowing costs, which is eligible for deferral.</p> <p>Q: These cost associated with the sewer connection that are eligible for deferral, does the province transfer the funds to the services?</p>	
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	<p>A: Yes, province will contribute to service to make up for deferral. Property owner will owe to province rather than the service.</p> <p>Q: What portion of costs are eligible for deferral? A: Borrowing costs for capital infrastructure.</p>	
<p><b>3.5</b> 10:37- 10:56am</p>	<p><b>Break</b> The committee broke for recess at 10:37 am and resumed its session at 10:56 am.</p>	
<p><b>3.7</b> 10:56- 11:57am</p>	<p><b>Committee Process / Questions</b> A. Habkirk discussed the motion process with the committee.</p> <p><b>Costs</b> D. Monteith requested any questions or comments regarding costs. What considerations regarding funding support would the TACPAC like to see included in the plan? Will be discussing more on costs of future phases at next meeting.</p> <p>Q: Is Plan B septic system inspections? Q: Yes, that is what was put forward at last meeting. Presenting language on option is something that can be considered by the committee.</p> <p>Q: Is there an option for both sewer and septic? Most people think cost of septic is zero as long as no maintenance required. Septic enforcement may seem like a threat and people might not think it is a reality. A: CRD does have active enforcement. Q: If both sewer and septic are options, wouldn't that imply inspections required for those remaining on septic? Wouldn't staying on septic also not be possible since connection to sewer is still required to ensure costs are still equitable? A: Septic inspection may serve as holdover for those neighborhoods joining in later phases. Q: So wouldn't be septic maintenance program for Phase 1A but would be implemented for later phases? A: Staff can investigate further.</p> <p>Comment: Inspections should be conducted or organized by CVRD or Island Health (IH), since a Registered Onsite Wastewater Practitioner would benefit from additional work to replace a failing system.</p> <p>Q: Is CICC a one-time payment or paid over time? A: Both options proposed during last project.</p> <p>Comment: Would be useful to know what the one-time upfront cost would be.</p>	<p><b>A. Habkirk / CVRD</b></p>

	<p>Comment: No matter what option goes forward, a service for septic inspection and maintenance should be implemented.</p> <p>Comment: Committee should direct staff through motions to prepare analyses and information to help make key decisions at end of next meeting.</p> <p>MOTION: That staff prepare an analysis showing the estimated costs per connection by implementation phase, presuming no further grants and no further contributions from partner organizations, and further that staff present options and recommendations with respect to creating equitable costs per connection across all phases. – I. Munro  SECONDED: R. Lymburner  Further discussion was requested by the committee.</p> <p>Q: Can staff provide minutes and terms of reference?  A: Should be included in agendas, but can distribute later.</p> <p>Q: In regards to equitable costs, different areas and different phases will have different costs. Are we proposing that phases that may cost less to connect will be subsidizing phases with higher costs?  A: Yes, intention of motion is to make costs equal. From homeowners' perspective, they are using the system the same way as everyone else, so why would their costs be higher than others. Costs per property shouldn't be determined by circumstances such as geography or grant availability.</p> <p>Q: How do we define fair? Do we define it by geographical terms or timing? Need to reach consensus on definition.  A: Staff should propose options and recommendations on what should be considered equitable. Example of equitable could be property assessment, water taken into house, pay the same as neighbor, etc.</p> <p>Q: How do you obtain that degree of equitableness when the service isn't already established? How do you fund the project and maintain the same costs from now compared to 10 years later?  A: Staff can investigate other regional districts.</p> <p>Comment: Motion asks staff to prepare analysis and propose recommendation at next meeting so the committee can consider the options.</p> <p>Q: Has the assumption been that the cost would be attributed on a parcel basis rather than assessment basis.  A: Assumptions have been based on per parcel basis.</p>	
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	<p>Comment: Resolution is asking to develop options, so essentially provide information.</p> <p>Q: Would phases be defined by catchment areas in motion? A: Yes, motion can be reworded to use catchment areas.</p> <p>MOTION: That staff prepare an analysis showing the estimated costs per connection by catchment area, presuming no further grants and no further contributions from partner organizations, and further that staff present options and recommendations with respect to creating equitable costs per connection across all catchment areas. – I. Munro SECONDED: R. Lymburner CARRIED UNANIMOUSLY.</p> <p>Comment: Will still need comparison of costs for septic maintenance program.</p> <p>Q: Are we asking CVRD and IH to investigate systems of all properties in proposed area? A: No, but to draft potential proposed bylaw and propose costs for septic regulation service. Would like to see analysis of costs for sewer and septic. Q: So suggesting comparing costs of septic system to sewer system over 25-year period? Costs for sewer would decrease after borrowing paid off, so maybe 50-year window better. A: Yes, if that sounds reasonable.</p> <p>Q: What is the estimated life of a properly maintained Type 2/3 septic system? A: Staff have been using 25-year life span for septic systems. 25 years is a common standard for IH, although some systems may fail after 10 years and others may fail after 40 years.</p> <p>Comment: Analysis of each community's failing septic systems should be brought back to committee.</p> <p>The committee was asked to consider the following questions: Are there other issues that can be considered in analysis? What happens if nothing is done? What about properties where septic is not ideal or possible? Does the committee want to consider these other options or explore consequences of doing nothing?</p> <p>Q: Isn't the intention of the committee that doing nothing isn't an option?</p> <p>Comment: Committee should consider motion to support a septic inspection program regardless of outcome of sewer. Would this only apply to Area A or have implications for Area B and C?</p>	
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	<p>Response: Would be helpful to consider a motion for implementation of septic maintenance service at next meeting.</p> <p>Q: Understood that enforcement was complaint based, so how will septic inspection and maintenance program be implemented? A: Proposed system wouldn't be complaint based but inspections would occur in regular intervals.</p> <p>Q: If you live in the next phase but your system fails, is the owner expected to pay for a new system when they have to connect to sewer in the near future? How can we implement a bylaw that accounts for this? Comment: We're requesting bylaw to see what it looks like, not to implement bylaw yet. Response: Bylaw doesn't need to be drafted, just the key points. Doesn't need to be adopted at this point. Up to staff to draft up bylaw and committee can consider language.</p> <p>Comment: Proposed service area is only one-third of south. Bylaw will still be required for area not in service area. Response: What the TACPAC can contemplate is restricted to the proposed service area. Could still bring forward similar bylaw to Electoral Areas Services Committee for whole area.</p> <p>MOTION: That staff prepare an analysis of the estimated "all in" annual costs of the sewer compared to the estimated "all in" estimated annual costs of a septic inspection, maintenance and enforcement bylaw. – I. Munro SECONDED: R. Steinke CARRIED UNANIMOUSLY</p> <p>Q: Capital costs of forcemain and pump stations are reliant on project partners. Is there are feeling of how it will be received by the project partners? A: Proposed costs have been discussed with project partners. Q: Has timing been considered as well, so not provided 10 years down the road? A: Yes.</p> <p>Comment: Low Pressure Sewer (LPS) system is less flexible and reliable, and more expensive. Don't get choice on type of system, since determined by geography. LPS should be made as equitable as possible. Potential for CVRD to supply pumps and cover costs for pump maintenance</p> <p>Q: What do other jurisdictions do in these cases where there is LPS and gravity? A: Generally property owner looks after infrastructure on property. As for costs, still investigating.</p>	
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	<p>Comment: 20-year system up-island with neighbourhood with grinder pumps and there is dispute about who pays for pump replacement.</p> <p>Comment: Should follow concept of polluter pays.</p> <p>Q: Will there be further investigation and resolution on LPS issue? A: Will have more fulsome discussion on collection systems later in meeting, and can discuss including private property infrastructure in shared costs.</p> <p>Comment: Would be for mandated unique private infrastructure such as the LPS grinder pump, not connection from house to property line.</p> <p>Response: Recommendation on LPS systems and costs could be suggested as policy.</p> <p>Comment: Not questioning use of LPS, just to make costs equitable.</p> <p>Q: Is there not an existing system in valley? What is used in those systems? A: Believe the municipal collection systems are primarily gravity based, but would need to investigate further if there is LPS.</p> <p>Q: So the costs would fall on the homeowner to maintain their systems? A: Yes.</p> <p><b>Committee Process</b></p> <p>A. Habkirk reviewed the committee process for the TACPAC. The committees work according to their terms of reference and act as a joint committee unless otherwise specified. Decisions are to be made by consensus, balancing project needs and community wants.</p> <p>Seeking impressions and preferences on options at today's meeting, with clear direction provided at next meeting.</p> <p>Q: Constraints mentioned geology and geography. Hasn't a geological assessment been done already? A: Desktop analyses done so far, but deeper investigation to occur as part of more detailed design.</p> <p>Comment: Not sure what a resolution by the committee would look like. Response: Provided example of input being requested (ex. Does the TACPAC have any considerations regarding the forcemain alignment?).</p> <p>Input was requested from the committee on the proposed forcemain alignment.</p>	
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	<p>Q: How do you fold value engineering into the committee decision-making process?</p> <p>A: Discussed value management at last meeting. Potential cost savings identified and will be brought back before committee. Seeking input from committee based on the information they have so far.</p> <p>Comment: Comfortable with the forcemain alignment using existing corridors and process will be done properly.</p> <p>Q: Can the committee share the information presented today with the public?</p> <p>A: Yes, it is a public meeting, so members may share information with the public. Open houses will be hosted in Spring.</p>	
<b>3.8</b> 11:57am- 12:34pm	<p><b>Lunch</b></p> <p>The committee broke for lunch at 11:57 am and reconvened at 12:34 pm.</p>	
<b>3.9</b> 12:34- 1:55pm	<p><b>Committee Process / Questions Continued</b></p> <p>A. Habkirk and D. Monteith reviewed the committee process.</p> <p>D. Monteith provided questions to be considered by the committee for the forcemain, pump stations, collection system, phasing, and costing.</p> <p>Forcemain: Does the TACPAC have any considerations regarding the forcemain alignment?</p> <p>Pump Stations: Which of the pump station designs does the TACPAC prefer? Which pump station location is preferred? Can consider locations outside coastal flood zone, but will limit use of gravity system.</p> <p>Collection System: Which of the collection options does the TACPAC prefer? Is there support for LPS for properties along foreshore? Are there other applications for LPS that should be considered?</p> <p>Phasing: Does the TACPAC support Phase 1A as proposed? Would the TACPAC like to develop criteria to assist in determining timing of future phases? Criteria could include partnership opportunities, grant funding potential, environmental need, property owner petitions, etc.</p> <p>Project Costs: TACPAC comments regarding costs? What considerations regarding funding support would the TACPAC like to see included in the plan?</p> <p>Q: CVSS LWMP had process of weighted scores in a matrix. Will that be utilized here?</p>	<b>A. Habkirk / CVRD</b>

	<p>A: For forcemain, only one option evaluated, so just requesting comments. Pump stations may require use of matrix. Can use matrix in situations where there are alternatives.  Comment: Agree that matrix not needed for forcemain, since only one logical option, but would like matrix for others.  Response: Have considered using matrix and weighting from CVSS LWMP as basis.</p> <p><b>Forcemain</b>  A. Habkirk requested any comments or concerns regarding the proposed forcemain alignment.</p> <p>Comment: Pump stations in Royston in recreational area. Ideally shouldn't be in such a highly used area.  Response: Will address pump stations later in process.</p> <p>MOTION: The committee supports in principle the forcemain alignment as recommended by the CVRD's engineering consultant, WSP. – T. Donkers  SECONDED: I. Munro  CARRIED UNANIMOUSLY</p> <p><b>Pump Stations</b>  D. Monteith presented the questions asked of the committee regarding the pump station designs and locations.</p> <p>Q: Are these questions applicable by each individual pump station?  Could one be a building and another a kiosk?  A: Yes.</p> <p>A sample matrix for the pump stations was shared with the committee. The committee agreed that the use of a matrix would be helpful, and can work through the matrix and develop scoring at the next meeting. The matrix will be shared in advance of the next meeting.</p> <p>Q: How is the percentage calculated for each component total?  A: All totals together would be 100 per cent, with weighting for each component.</p> <p>The committee performed a test run with the sample matrix, considering how the committee would weight the categories at a high level.</p> <p>Q: How is the environmental component being calculated? Seems to only show restoration and enhancement.  A: Could add additional goals to each component if needed. Idea that mitigation efforts would be applied across the board, so not included.</p>	
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	<p>Comment: Technical aspects include environmental aspects, so some overlap.</p> <p>Comment: Some technical aspects are pretty much required, such as resilience to natural disasters and seasonal impact. Response: More for comparing impact that various options will have on aspects.</p> <p>Comment: Don't recall costs being very different for pump station options, so that should impact scale given to affordability.</p> <p>Comment: Should base percentage on what the public would consider most important.</p> <p>Q: Are we talking about all pump stations or certain ones? A: Only Phase 1A at this time.</p> <p>Comment: Cost difference between pump stations is about \$1M. Response: \$1M is for cost difference between Royston and Union Bay pump stations. The difference between building and kiosk option is closer to \$100k.</p> <p>A. Habkirk requested comments from the committee on any preferences for above ground or below ground pump stations.</p> <p>Comment: Above ground is more affordable to build and maintain, safer for operators, and has options for public amenities. Can be designed to not look like pump station.</p> <p>Comment: Preference depends on location. Above ground is safer from operational standpoint. Kiosk more likely to be vandalized or damaged.</p> <p>I. Snyman clarified that both options would have submersible pumps. Above ground has everything contained within building, while below ground does not have everything enclosed.</p> <p>Q: Is there difference in operator safety for these two options? A: Both require confined space entry for pumps, so little difference. Can be designed to minimize differences.</p> <p>Q: Will one option be quieter than the other? A: Generator will be largest contributor of noise. Enclosing in building will dampen impact of noise. Q: A significant difference? A: Not that much of a difference, since both will have acoustic hoods to dampen noise.</p>	
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	<p>Q: Wouldn't the system operate automatically with only operator intervention required when necessary?</p> <p>A: All pump stations require regular maintenance. Don't need 24/7 presence of operator, but need to visit regularly.</p> <p>Q: Beyond the washrooms, are there any other public amenities that could be provided? Public parking? Any other options that could be provided, or would lessen visual impact such as landscaping? Neighbourhoods likely want kids' facility.</p> <p>A: This is type of input being sought from committee, and encouraged to suggest ideas.</p> <p>Q: What is the difference for planned maintenance activity (access, frequency, etc.)? How will access to the wet wells be impacted? How often would access to confined spaces be needed?</p> <p>A: For both pump station option, there would be no difference since above ground would have access available to pull pump. Should only need to pull pumps every few months. For confined space, may be needed annually to perform visual inspection, but not part of regular maintenance.</p> <p>Comment: Overcomplicating decision-making process. Differences in resilience are minimal, so if they perform the same, should go for cheaper option and then consider public amenities and environmental impact.</p> <p>Response: Functionality and environmental impact is mostly the same. Kiosk may have slighter shorter lifespan due to exposed components. Quicker to build kiosk, but factored into costing.</p> <p>Comment: Decision seems highly knowledge based. Should be providing weighting for components and then consultant can provide recommendation.</p> <p>Q: Why include certain aspects in matrix if all options provide same impact? Could remove identical operational and environmental components.</p> <p>A: Can remove options that seem the same and then focus on those deemed more important, such as costs and social benefits.</p> <p>The committee requested that the proposed site visuals be shown while discussing the pump stations. The site plans for the Royston pump station were shared.</p> <p>I. Snyman advised the committee that the costs were \$1.4M for the building and \$1.1M for the kiosk, so \$300k more for building.</p> <p>Q: Are we deciding between the two locations as well?</p> <p>A: Yes.</p>	
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	<p>Q: The southern option seems close to Roy Creek. Is there an impact?</p> <p>A: It shouldn't be close enough to the creek to impact it.</p> <p>Q: What is the difference in reliance between the above ground and below ground options?</p> <p>A: Very few operational differences. Building may be more effective in resisting weather events. Pumps and valves not impacted, but electrical components will be influenced. Can put on second story, but then visual impact.</p> <p>Comment: Kiosk would be more impacted by vandalism.</p> <p>Comment: Preference for building since area is marine environment. Can provide washrooms for operators and public. Operators can store tools in building. Can elevate the electrical components in the building to mitigate risks.</p> <p>Q: Has climatic event frequencies been modeled when considering options?</p> <p>A: Looked at most recent coastal flooding map, which looks at 200-year event.</p> <p>Comment: Pump stations tend to only have problems during poor weather, so building would be better for operators.</p> <p>Comment: When working on the matrixes for the CVSS LWMP, TAC only dealt with technical aspects and PAC only dealt with public aspects. Should we consider similar approach for this TACPAC?</p> <p>Comment: If cost difference is just 0.2 per cent of the total costs, preference should be given to above ground due to additional social benefits.</p> <p>Comment: Option A (building) in northern Royston location preferred due to proximity to picnic benches and public amenities, and to keep all activity in one area.</p> <p>Comment: Northern location is across from empty lot that is unlikely to be developed due to prior history of contamination.</p> <p>Comment: Residents will want to see modelling. Response: Staff can prepare architectural drawings once a preferred option is decided.</p> <p>Comment: Should consider additional public amenities, such as playground.</p>	
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	<p>MOTION: The committee recommends Option A (above ground) for the Royston pump station. – I. Munro          SECONDED: J. Elliot          CARRIED UNANIMOUSLY</p> <p>Comment: Pump station be further from the barbeque pit.</p> <p>Comment: Pump station should be near public area to provide washrooms or other amenities.</p> <p>Q: Are there options to locate pump station west of the highway?          A: Can look into it at committee recommendation, but need to consider impacts on collection system, such as additional use of LPS.</p> <p>Q: Was there concern from others about the location?          A: Current proposed location allows for gravity collection system, while westward location may require small pump station on Marine Dr to collect wastewater. LPS wouldn't be enough to convey to highway.</p> <p>Q: Would it be more expensive or cheaper to have pump station west of highway.          A: Westward location would increase costs. Typically want pump station at low point of land.</p> <p>Comment: Ideally don't want to add more LPS or extra pump stations, so lower site is preferred.</p> <p>Q: Would a westward pump station improve resilience of system?          A: Regional pump station proposed near highway, which will have all pump stations connected to it. Royston pump station will eventually only be for Royston.</p> <p>MOTION: The committee recommends locating the Royston pump station in the proposed northerly location. – I. Munro          SECONDED: T. Donkers          CARRIED UNANIMOUSLY</p> <p><b>Collection System</b></p> <p>D. Monteith requested comments on the collection system from the committee to consider at the next meeting.</p> <p>Comment: Would like to know where LPS would be considered. Would be helpful to be shown on a map.</p> <p>Q: Would like more information on infrastructure along foreshore. What type of infrastructure would be installed? Would it only be for gravity system?          A: Foreshore construction would only be needed for properties along foreshore if using gravity system.</p>	
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	<p>Q: Is that feasible? Not a lot of land in front of properties along shore.</p> <p>A: Would be very challenging to install.</p> <p><b>Phasing</b></p> <p>A. Habkirk asked the committee if there was any additional information on phasing requested for next meeting.</p> <p>Comment: Would like to better understand how Phase 1A was chosen. Understood that strategy was to maximize the grant funding per household. Should it be to minimize the cost per household?</p> <p>Response: Can provide cost per household if Phase 1A scope was expanded.</p>	
<b>3.10</b> 1:55- 1:56pm	<b>Meeting #4 Preview</b> D. Monteith shared a slide detailing the items to be discussed at the next meeting.	<b>D. Monteith</b>
<b>3.11</b> 1:56- 1:56pm	<b>Roundtable</b> A. Habkirk requested that if the committee requires any additional information before the next meeting, that it be requested beforehand.	<b>A. Habkirk</b>
<b>3.12</b> 1:56pm	<b>Adjournment</b> The meeting adjourned at 1:56 pm.	<b>A. Habkirk</b>

**GENERAL:**

The next SES LWMP Addendum Joint PACTAC meeting will be held on February 6, 2023 commencing at 9:00 am in the CVRD Civic Room at 770 Harmston Avenue, Courtenay, and via Zoom conference.

**TERMINATION:**

The meeting terminated at 1:56 pm.