

March 2014

Colwood Sewage Treatment Proposal FAQ

CALWMP = Core Area Liquid Waste Management Plan
CALWMC = Core Area Liquid Waste Management Committee
WWTP = Waste Water Treatment Plant
CRRC = Colwood Resource Recovery Plant

1. Will the Colwood proposal delay or alter the proposed CRD sewage treatment project?

No. The Seaterra Director, Albert Sweetnam, has been clear that the Colwood portion is so small that the change will not in any way alter the design of the WWTP, nor delay its progress. Colwood intends to be treating sewage well before the federal deadline (and likely before the McLoughlin plant is operational). Colwood's proposal is an addition to the overall sewage treatment plan that improves it rather than detracting from it.

2. Is Colwood trying to opt out of or leave the CRD?

No. Colwood is not opting out of any CRD services nor leaving the CALWMP.

Colwood is simply asking the Board to support an amendment to the CALWMP which will include the construction of a tertiary treatment plant on the Westshore at the same time as the downtown plant as did Amendment 7 of the CALWMP, approved in 2010. The significant difference between the Colwood amendment (Amendment 10) and Amendment 7 is that it (10) would be based on Colwood alone paying for all of the costs of the WestShore plant. Upon approval of the amendment Colwood would take on the financial obligations of constructing and operating the CRRC (WWTP) in the WestShore as a contractor to the CRD for the provision of this service. Colwood would provide firm guarantees to the CRD backed by the full resources of the City.

3. Will the Colwood proposal result in the other municipalities paying more money?

No, it will result in cost *savings* for others. In the immediate future, there will be a slight lift in contributions from participating municipalities – about 4.7% (or about \$16 annually per household). However, Colwood's approach eliminates a significant *future* cost. The current CALWMP calls for a second sewage treatment plant to be built in the 2030s for which additional taxation would likely start in about 2030 and end in about 2055. Colwood is offering to cover the entire cost and risk of this second plant and to expand it as necessary in the future. This will save the average homeowner in the participant municipalities about \$240 per year, or about \$5,750 per household overall.

In addition to avoiding the cost of the future WestShore plant, participating municipalities will gain an extra 4–5 years of life in the McLoughlin plant.



4. What about the funds that Colwood has contributed to the project thus far?

The funds that Colwood has contributed to this project, up to and including 2014, will remain with the CRD. Colwood is not seeking a share of the federal and provincial grants; these would also remain part of the Core Area budget.

5. Why is this approach best for Colwood?

Colwood has only a small percentage of properties (less than 30%) currently on sewers, but would take on a considerable amount of capacity in the McLoughlin plant to address future needs. For Colwood, it makes economic sense to build a modular system that is sized to meet the community's current needs, and can be easily expanded to accommodate growth as it occurs (a more "just-in-time approach"). Colwood also has some unique opportunities to treat sewage to tertiary level, and to recover heat and water from the process. These will provide revenue generation over the long term.

6. Will the Colwood proposal require any additional work on the part of Seaterra staff?

No. Colwood will undertake all the work required to obtain the CALWMP amendment and design and construct the Colwood Resource Recovery Plant (CRRC). CRD staff will be working to review the proposal and will oversee Colwood's work on the CALWMP amendment. Some staff time will be spent in reviewing and then monitoring the contract between Colwood and the CRD.

7. Does Colwood have the resources to build and operate the proposed CRRC (WWTP)?

Yes. Many municipalities smaller than Colwood build and operate their own sewage treatment plants. The small scale will allow Colwood to keep initial expenditures lower and increase its expenditures when and if the tax base expands as the population increases. Colwood will be exploring financial models to best meet the needs of our citizens.

8. Will the CRRC be privately owned and operated?

No. The CRRC will be owned by the City of Colwood and will be operated and maintained by City of Colwood employees who will be trained during the proving period of the plant.

9. What will happen to the treated effluent from the CRRC instead of an ocean outfall?

The CRRC will produce clean water that can be used for irrigation, toilet flushing and similar uses. Initially there will be large amounts of excess clean water which will be absorbed by the enormous gravel deposits in Colwood but as the City Centre is redeveloped most or all of the water will be reused.

10. What will happen to the biosolids from the CRRC?

The biosolids will be dried and compressed to produce very light, board-like sheets of material that can be easily transported for use as fuel in existing gasification plants, such as the one in Seattle.



11. Will the CRRC be safe from tsunamis and other natural disasters?

The CRRC will be high above ocean levels at Colwood City Centre and will be built into the ground except for one side. The CRRC will be built to post-disaster standards to ensure it survives any natural disaster. Multiple redundancies of equipment and power supply will ensure continuous operation.

12. Will the Ministry of the Environment approve Colwood's proposed methods of sewage treatment and disposal?

It will be Colwood's responsibility to obtain the necessary Ministry of the Environment approvals; first the CALWMP amendment and then the Operating Certificate for the CRRC. The Minister of the Environment's original letter called for this type of innovation and Colwood is offering to provide that at its own cost. Colwood has been examining this idea for a number of years now and is confident that approvals can be obtained and will do whatever is necessary to meet Ministry requirements.

13. Will other municipalities want their own amendments to the CALWMP if Colwood succeeds?

No other municipalities are known to have been looking into this possibility as Colwood has. Colwood's low number of sewer users creates a unique challenge with the main plants which will be built to suit the needs of more fully developed municipalities. The Westshore plant is in the current version of the CALWMP and only the date of construction is being changed. Other municipal plants would not have the support of the existing CALWMP. In addition, Colwood's unusual geology and geography and the fact that its town centre is at the beginning of an extensive redevelopment period give it exceptional opportunities for energy and water reuse.

14. Will Colwood be treating sewage from Langford?

Langford has clearly stated that it wants capacity in the CRD WWTP and is paying accordingly. In future, when the main plant gets close to capacity, Langford's capacity could be gradually accommodated through additions to the Colwood modular plant and removed from the main plant equally gradually. Colwood will commit, through its contract with the CRD, to providing this capacity as a contractor to the CRD at the same cost it charges its own citizens.