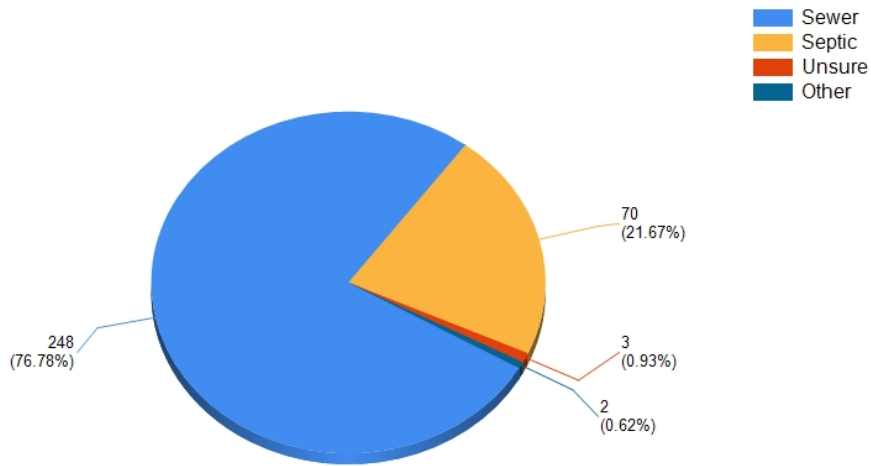


1a.) In which municipality is your primary residence? (319 Responses)

Option	Count	Percent
Central Saanich	4	1.3
Colwood	60	18.8
Esquimalt	93	29.2
Highlands	2	0.6
Juan De Fuca	1	0.3
Langford	40	12.5
North Saanich	1	0.3
Oak Bay	1	0.3
Saanich	24	7.5
Songhees Nation	4	1.3
Sooke	2	0.6
Victoria	32	10.0
View Royal	54	16.9
Other	1	0.3
Total:	319	100.0

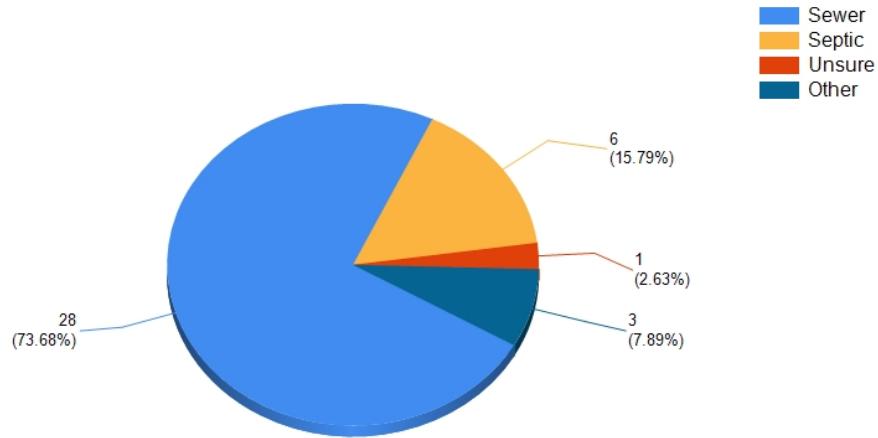
**1b.) Is your home on septic or sewer service?
(323 Responses)**



1c.) If you own property or a business in a municipality which is different from your primary residence please indicate where. (33 Responses)

Option	Count	Percent
Colwood	3	9.1
Esquimalt	5	15.2
Highlands	1	3.0
Langford	3	9.1
North Saanich	1	3.0
Oak Bay	1	3.0
Saanich	5	15.2
Victoria	9	27.3
Other	5	15.2
Total:	33	100.0

**1d.) Is your business or secondary property on septic or sewer service?
(38 Responses)**



2.) Please indicate which of the following three aspects of a sewage treatment facility are your first priority, second priority and third priority. Please note that you cannot assign the same priority level to more than one item. (319 Responses)

	1	2	3	Average Rating
Meet high environmental standards	146 (45.77%)	94 (29.47%)	73 (22.88%)	1.77
Keep costs low	103 (32.29%)	75 (23.51%)	131 (41.07%)	2.09
Build potential for resource recovery. e.g. affordable energy and reclaimed water	66 (20.69%)	142 (44.51%)	101 (31.66%)	2.11

3a.) Please indicate which features of a sewage treatment facility are most important to you. Choose ONLY 5 options from the list below that you consider most important. (308 Responses)

Option	Count	Percent
No odour	191	62.0
Hidden from sight	48	15.6
Minimize cost to taxpayers	185	60.1
Visually appealing	81	26.3
Noise reduction	75	24.4
Multi-use facility, commercial & residential	52	16.9
Minimize trucking traffic	86	27.9
Use treated water for toilet flushing, irrigation or to recharge groundwater	111	36.0
Use treated solids for things like compost, fuel sources or gasification	110	35.7
Resilient facility built to respond to climate change events	82	26.6
Recovery of heat energy	107	34.7
Reclaim water	84	27.3
Revenue generation	68	22.1
Removal of harmful materials	184	59.7
Total:	1464	

3b.) What other considerations do you think are important in developing a Westside sewage treatment solution? (206 Responses) – Answers categorized into 12 themes:

- Recovery of water from sewage, its costs and potential benefits
- Recovery of energy from sewage, its various forms, costs and potential benefits
- Integrating a sewage treatment/resource recovery centre into an existing community, its potential problems and benefits

- The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard
- Controlling capital costs, controlling operating costs and life cycle costing
- Criteria which should be considered when siting a wastewater treatment or resource recovery facility
- Publicly owned
- Public process and presentation of information
- Don't treat
- Timing of the project and extensions
- Vision for the future
- Additional Comments

Recovery of water from sewage, its costs and potential benefits
Re-use of water and solids as part of a revenue source to offset taxpayer dollars
I wanted to tick more above....it is important to treat waste so that water can be reclaimed and reused and solid waste can be used as well....but initially to find a spot to build facility....I think that is my choices above.
I am interested in the multi-use facility and reusing waste product in other ways. However the items I marked are most important to me
Implementing building requirements for blue pipes, tax incentives for resource recovery features - blue pipes for toilets, lawn watering
"Use treated water" is confusing. We should not use treated water for those purposes.
Alternative disposal solutions, source control. In 20 years I hope we are not still using good water to dispose of waste and that we can eliminate and or treat it at the source - in our homes and businesses.
nothing pumped back into the ocean-- piping miles to hartland then back in a pipeline makes no sense in a earthquake zone. To have a facility in view of all coming and going to harbour when everyone knows the fluids are still contaminated then pumped back is not treatment.

Recovery of energy from sewage, its various forms, costs and potential benefits
gasification of sludge
Biosolids should not disguised as compost. Dry and gasify biosolids or use as fuel (did not select the option given above, as these three were lumped together as one choice).
Gasification for treated solids Do not build on waterfront Use reclaimed water to create landscape features around facility
Best for environment Resource Recovery Built with future expansion in mind
The above covers all that interested in. Using solids for energy is more important than mixed use,

revenue generation is also important

gasification

It is vital that the facility be built taking into account climate change and that it does not rely on fossil fuels. Minimizing the use of fossil fuels in operations and maximizing the reuse of materials is critical. It is also important the processes used to not contribute to harming the environment or increasing CO2 and other emissions.

I could not check box 9 (second item in column two) for mixed end functions of treated solids in the presented option; otherwise, I would check this option for fuel source or gasification. Do NOT mix 'treated' sewage sludge – so-called, 'biosolids,' with sand, kitchen scraps, humus, or any other organic material to extend, dilute, disguise or create a so-called 'compost', 'compost product' any other product of mixed composition containing 'treated' sewage sludge. Such mixing is essentially diluting and reintroducing toxins, pharmaceuticals, heavy metals and substances of concern in the sludge for implied 'beneficial use' and potential land application – which is banned in the CRD.

No burning get everyone on board to co-operate use an area like allendal gravel pit as residential and sewage treatment - zoned commercial in Latiraia an(royal bay) use a treatment plant for heating irrigating houses and landscapes

Allow sludge application to land as is permitted by the Province

To not put solids on land. Also, to begin to require industry and hospitals/medical facilities to fully treat their own sewage, isolating drugs/chemicals and bacteria/viruses more effectively from the regular wastewater stream. Begin to require new subdivisions to also provide their own high level full treatment facility.

Integrating a sewage treatment\resource recovery centre into an existing community, its potential problems and benefits

One size does not fit all. Careful consideration must be given to residences on septic with not much likely hood in the near or most likely distant future to be hooked to a sewage system.. To pay for a service not received is detrimental to community cooperation. A fee for potential use in the future might be applied and later used as a credit for when time comes that a hookup is available and completed.

Multiuse but also helps attract business for economic development.

plan a facility that attracts attention as a plan for others to strive for. Like the building (songhees wellness centre) that we are in.

That the communities aim for excellence and truly consider the next 7 generations. Be innovative and collaborative, considering other possible community needs which could be co-located with such a regional facility.

Minimize trucking traffic, no odour and revenue generation.
Promoting and contributing to education, economic development, sustainability
Make it a unique showpiece for the region, something that everyone can take ownership of and say, "this is the only treatment facility like this in western Canada". Don't keep it hidden, WWTP around the world have taken on very aesthetically pleasing designs that incorporate well into commercial/residential environments.
Divert hospital and industrial waste through a separate recovery / recycling system to minimize heavy metals and harmful drugs / pathogens Would like system to discharge as little as possible into the ocean
For Colwood, include services for those on septic to gain their buy-in and support. Ensure all property owners in Colwood contribute financially to the project and not just folks on sewer.
Allow more people in Colwood to be connected the sewer at a more reasonable cost. Put the Facility in a non-residential area.
Letting people on good septic systems opt out at no cost treatment is not needed in all areas let the people who need sewers pay for it.
No trucking whatsoever!
Ability to "stand alone" in sewage treatment.
Either a concrete plan for connecting all residential properties in built up areas to the sewage system or some form of tax break for those that have to maintain their individual or common septic systems. This involves most houses on Triangle Mountain in Langford.
Combining with other commercial uses
Multiple uses of site (generates tax dollars to keep costs low)Community acceptance of facility(ies)- better yet, pride in this Openness to multiple solutions - different facilities in different parts of the region if that is what makes sense (not cookie cutter approach)Setting a high bar for environmental protection and recovery of resources
No odour Visually appealing Costs offset by revenue generated
Build a sewage treatment system that a community can be proud to have, that shows what can be done (reclamation of resources rather than dumping water and 'fuel' into the ocean) rather than doing things the old way, using generations old technology and attitudes. Partnership with a university for research and a lab environment would also be something to pursue to add learning value to the project.
The design of the facility, both from an aesthetic and resource recovery aspect, should entice residents to have it built in their community. Essentially, the facility should be designed and built in such a way as it does not decrease the value of a community but rather makes the community more livable. This will be the only way such a facility can be retrofitted into the current urban landscape.

Each community / municipality should be willing to accept facilities needed to treat its own wastewater. Our investment should be in treatment facilities, not in pipelines that carry waste to some other place for treatment.

The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard

use ONLY multiple, smaller Tertiary disinfected plants and only gasification to remove and destroy toxic chemicals, bugs, superbugs, plasmids with multi-drug resistance, micro plastics and micro-fibres, the costs won't be anywhere near what the defunct CRD McLoughlin Point was going to cost. The CRD lies must stop now.

Please think ahead. it is very likely that higher levels of treatment will be mandated in the next decade or two - if we build to a high standard now we won't have to spend lots to upgrade later.

Build a state of the art Tertiary treatment facility that is expandable, upgradeable and less than the cost of a secondary plant. It is frightening to hear Councillors supporting secondary treatment because they haven't done their research. Share the technology with the East-side gang (VOBS) showing that tertiary treatment's price tag is nothing to be afraid of ... and taxpayers will be pleased with the tertiary choice. Thank you for having the courage (CEVR) for using the RITE approach.

coliform counts down to safe levels

Show east side municipalities how to build tertiary plant that reclaims resources, is a multiple use facility, attractive and might break even over time. Must be owned , operated and maintained by west side. Build it quickly, carefully and something that west side is doing what it can to improve the environment.

Tertiary treatment has to be highest priority. Highest standard of treatment possible. Must look at option of linking in to Colwood's treatment plant (tertiary, already being built). Use of recovered (treated) water, heat, biosolids. Flexible design to accommodate changing needs of community. Do not overburden an already cash strapped public.

We need to deal with the emerging substances of microplastics, microfibers and superbugs. It is tertiary treatment and gasification that can do this. We are building for 50 years into the future, the standards of 2ndary are not relevant in view of what we now know is in our sewage and it will not deal with these substances. We must ensure we do not harm the land, water or air with our sewage process

Pick best option, secondary or tertiary treatment

Utilizing current best treatment technologies

tertiary

It should be an advanced tertiary treatment facility, something to show confidently to other

jurisdictions, something to be proud of; that is effective, environmentally compatible and has low operating cost - facilitated by 21st century technology, built all around the globe!

The planning must consider the implications beyond the next 15 years. It's going to be expensive so it should be done right ie tertiary treatment, and recovery of heat and water. Revenue generation would be a bonus. In the choices above I'm not sure of the distinction between "recover heat energy" and "use treated solids for things like compost, fuel sources or gasification" Likewise, the distinction between "reclaim water" and "use treated water for toilet flushing, irrigation or to recharge groundwater".

I believe we can completely solve the environmental problem and not just move it out of the ocean and transfer it to land. The question is two fold. First the water. This must be done to tertiary level to meet future regulations. I believe it can be done for the same cost or less than secondary level treatment. Plus, tertiary treated water can be sold to generate revenue. Probably not a lot at the beginning but we must be think out to the future, say a 100 year viewpoint. Consider that we aren't going to stop producing sewage in 30 years! Second is the solid residuals. They are different than 5 to 10 years ago. We now have anti-biotic resistant organisms in our world and they multiply in wet, warm, nutrient rich environments like sewage treatment. We now have micro-plastics from our cleaning and beauty products. We now have micro-fibres that slough off of our clothes in the laundry. Plus, there is hospital wastewater; leachate from Hartland Landfill; flame retardants; and a very long list of chemicals of concern. ALL these are concentrated in the solids. Bio-digesters convert about 50% of these residuals into energy. The rest needs to be disposed of in a way that doesn't get back into the environment. In my research I've only heard of one option. If there are more options then I'd like to hear about them. The option is gasification. This process converts over 95% of the solids into energy and the rest is inert ash. This process is the best not only for destroying the toxins but also for generating REVENUE. Let's see if we can make money. Maybe not at first but over the 50 to 100 year timespan we can. Think of the difference of \$15M/yr operating cost verse even \$5M/yr operating profit. Gasification is NOT incineration. Here is the analogy to describe gasification. Think of an extremely hot (250 C / 500 F) pizza oven. If you put a pizza in the oven and pull it out in time you get a great taste. But if you accidentally left it in the oven then what happens. It turns to small amount of ash. The rest is vaporized or gasified. If you put the pizza directly onto the fire it is burnt, or incinerated. A gasifier is three times hotter than a pizza oven (700 C / 1300 F) but it works the same way. Keep feeding it material and it converts it to gas and ash. The gas is used to feed the burner and generate heat and energy. Everything is done in a closed loop to keep the toxins inside until they are completely destroyed.

It is important to include a tertiary treatment after the preliminary, primary and secondary to make sure that all dangerous microbes are eliminated from the wastewater.

21. century technology tertiary treatment system with resource recovery as part of a region wide distributed, tax payer friendly, environmentally responsible and sound solution. It can be built as a

multi-use facility like Dockside green or a state-of-the-art solution like the facility in Sechelt, BC and /or Blaine. WA

Use the most up-to-date technology, Tertiary treatment such as the technology used at Dockside Green and through-out Europe. It is local, sustainable, and cost-effective. Nothing is trucked anywhere. And there is super-bug bacterial growth. DO NOT use the old and out-of-date technology proposed by the CRD thus far. Lets see more science and less personal investment when looking for a solution.

Controlling capital costs, controlling operating costs and life cycle costing

That we don't find a cheap up front solution, only to face ever increasing costs added on every 5 years. Facility on leased land, built / maintained by private industry etc. The taxpayers should own the land and it be a publicly run facility.

Do not lose the federal and provincial funding.

75% Cost should be born by actual users when and if they join the system.

I think finding a long term solution that will grow as the participating municipalities grow. Be fiscally responsible. The growing tax demands on citizens is growing yet gross family income is not growing at the same rate. Be smart with your decisions.

Build the cheapest plant, if any are built at all. As former Medical Health Officer Richard Stanwyck said, "how many people have gotten sick from our outfall? NONE!" Couldn't we spend a billion dollars in better ways, say, eliminate waiting times in our health system, and fix the McKenzie Interchange, and have change leftover! What a concept!

Making sure this project stays within budget and will be completed on time. We do not need any surprises for more monies. Project should be modern and very upgrade able for our futures

Has to be cheaper than centralized plant. Measure \$/MLD to build and annual operating cost/ML. There is no way you can achieve this will decentralized plant that have the same combined capacity of one larger plant.

Overall impact to tax payer (ie. should be equal or less than what was originally proposed by the CRD in their original plan), using proven technology with options for greater level of treatment as necessary/required by Province/Feds

I disagree with "minimize" cost but definitely look for reasonable cost (unlike SeaTerra), similarly for No odour. So much of what is south of the Malahat is "mixed" or contiguous industrial/residential siting is gong to be an issue but it must be negotiated and agreed upon based on consultation.

Consider economies of scale associated with participating in a centralized system.

Establish the budget and don't exceed it. Hold the Project Management company accountable for delivering on time and on budget.

keep costs down! Although reclaimed water and heat recovery are noble efforts the extra costs associated with the extra required infrastructure makes the up front costs much more. Exceed our treatment requirements where we can, but keep the costs down.

The development of a technology that we can be experts in, thus we can turn this into something that could be sold (the process or expertise) to other communities in North America. A way to make it pay for itself

ability to expand Low maintenance/upkeep expenses

Cost effective, easily expandable to allow for future growth

Get it done asap!!! The longer things wait the more it costs...

That costs, in part, be borne by all property owners whether they are hooked up to sewers, or not. This could be achieved through an increase in property taxes. Notwithstanding, the bulk of funding should still be borne by those property owners connected to sewers whose daily waste requires to be treated. Property owners on a Septic system, which is a highly efficient system that essentially will last 40-50 years, should not be forced to hook up to a sewer, just because a sewer line is available at the property line. Homeowners on Septic have already incurred great expense (\$20K-\$30K) in installing a Septic system that meets the CRD requirements, and thus have every expectation that they will be able to maximize the use of their individual system for as long as the Septic system remains properly functioning.

Low cost

Westside solutions need to be cost effective from both a capital and ongoing maintenance perspective. For me there is confusion in your last question regarding treating our sewage to "high environmental standards. If this means going well above provincial and federal treatment requirements it will mean increased costs for both the initial capital and the ongoing maintenance. As a home owner I don't want to be funding any more than I need to satisfy or moderately exceed regulations. Heat recover, water reclamation and gasification are fine for new self-contained developments, but integrating them into already existing communities is expensive and not cost effective unless there is considerable buy in from existing neighbourhoods, industry and local government. Again these come at great cost for both the capital and the ongoing operation and maintenance. I certainly would not want a local gasification plant in my neighbourhood

Do not make this a money maker. Keep contractors out of it. Remember the upstream users group? This is a governance concern.

Life cycle costs are critical. Future costs should be evaluated with a reasonable cost of money. About 5% is the municipal finance costs. We should use something higher say 6 or 7%.

costs must be clearly known, and budget realistic.

Reasonable property tax & utility Cost relief for residence most affected. Reuse of treated water for

irrigation ... parks & golf courses. Water returned to the environment should be in the open ocean of the Strait of Juan de Fuca.

keep costs reasonable through revenue offsets from heat and energy Use treated water; use treated solids this is the similar to heat recover and water reclamation the other items are largely site dependent and should be included as site items where and as needed

Low cost is most important, Secondary treatment is adequate The facility should try to be 200metres from residential homes

Criteria which should be considered when siting a wastewater treatment or resource recovery facility

obviously finding appropriate site or sites. Better communication/cooperation between municipalities, Oak bay included. Depending on how many sites we need one in each of the larger municipalities in an industrial / commercial area, have it visually appealing and cost efficient

Build to size as needed

Must meet approval of stakeholders and neighbors. No excessive pipeline to Hartland and back! Must be environmentally clean, safe, sustainable. No odour. Low noise. Traffic activity minimal.

Build facility outside of residential neighborhoods.

It should not be located on prime waterfront property. We have very limited vacant pieces of waterfront property so let us not waste it on sewage.

To be built away from residential areas

locate facility away from the ocean and make it compatible to the site specific location; generation revenue to offset costs is also important Most of the above are linked and important depending on location of plant

Find a site that does not increase the current projected costs and get on with it

Pick a site that can use as much existing piping infrastructure as possible to keep those costs down.

Impact on the residents in the area.

1 located to minimize impact of tsunamis and earth quakes2 located so that any overflow because of power failures or technical failures will be directed into the ocean in a high flow area so the overflow will affect inland waters, sensitive environments, populated areas,

cooperation with others; most of the un-ticked items are site specific and may or may not be important depending on location, the ticked items are more generic

Accommodate the future, choose the right location

That the biosolids processing facility is located next to the treatment plant.

put it in Esquimalt

Utilize existing infrastructure where possible
A first considerations should be centralization with expansion in mind as the Westshore region continues it's growth.
room to grow; a facility that is not at capacity when built and has space around for enlargement when necessary
All of the above features are important! Keep plant away from residential areas prefer to build underground develop plant as part of a new light or high tech industrial plant keep sewage trucks away from residential areas
If you use the gravel pit as your sewage treatment plant. Its the ideal site. it has just been sitting for over 25 years. you can also put some houses there to use the treated water and heat from it to heat the houses.
While public input is nice, no choice will please those who will be nearer to the site or sites. Location will disappoint but the project must proceed. Endless pandering just winds people up and while authorities dither, costs always rise. Also, project costs must (this is possible) be accurately forecast.
This is a built up urban area. Wherever the plant is located, it is going to be close to somebody's home. Therefore, minimizing any impacts such as noise, traffic or smell are of very high importance. Also, the plant must do a much better job than our current system (i.e. it must remove pharmaceuticals and heavy metals) - otherwise what's the point?
Location is important - minimize piping to and from facility and discharge; avoid hazardous zones - floodplains, tsunami and liquefaction zones
Build it on high ground - a distributed system where components can be replaced quickly... that has a back up system in case of tsunami, power failure or terrorist attack.
That the proposed site is large enough. that it will not require variance like McLoughlin would have. I applaud Esquimalt Council's refusal to be pressured.
Health and safety - Precautionary principle. No noxious gases or explosions risks near residents. No system that destroys property values of adjacent residential land is acceptable. If land values will be impacted, land should be expropriated or residents must be assured ahead of time of the budget and terms for compensation. Please no stress on people like was done to the viewfield neighbours ever again. No solids used on land because its not feasible to remove the antibiotics, micro plastics, hormones, and thousands of other compounds.
Plant should be near the water and close to existing infrastructure to reduce the cost of pumping wastewater to the plant.
keep as far away from residential homes
These facilities could potentially have a very negative long term impact on nearby homes (and their value) if they emit odours, are noisy, are subject to breakdown and need frequent maintenance. It is

most important that they will be best located where they will not impact homeowners. Opportunities to minimize cost are fine, but the key is not to impact homeowners, their property and its value due to plant noise or odours, etc. Other features that are cost beneficial are good to investigate, but must comply with the paragraph above

Don't build in a residential area. Build where there is open ocean with lots of current and waves to flush away the wastewater. Should not be an eyesore. Make sure that when the wastewater is flushed into the ocean that it is not harmful at all.

Must be in an appropriately zoned area where, if there is discharge, tidal movement is sufficient to remove waste. Also the plan must be acceptable to the community and within the local community plan.

Must be located in properly zoned area acceptable to the host community.

that more time is taken to look for a site away from our shoreline and housing. Land locked provinces don't have the luxury of water/ocean front to flush into. Our shoreline should be preserved. Also there is a lack of active current & waves in Thetis Cove that would be needed to flush away the remaining wastewater that is pumped into the ocean.

Do not approve of this site: should be 'near Hartland Landfill

Not in View Royal

For compatibility, must be away from waterfront/residential properties in urban areas. Currently zoned industrial areas should be considered as a starting point, even if costs may be greater.

A reasonable distance from homes

To be far away from housing & pristine waterfront.

Not to affect residential values in any way whatsoever! Water movement is also important - outflow must work.

Look for site that is away from housing. Do not place near the ocean or on water front property. This property has the highest value and is available to all of us for recreation. None of the communities involved will accept you using water front in their community. Learn from your experience with Esquimalt. When it is built it needs to be done in a way that does not lower property values in the community. Don't flush chemicals into the ocean to damage wildlife. Consider ways of earning money with the waste.

Utilizing existing sewage infrastructure

Maximise use of existing in-ground and above-ground infrastructure including the existing outfall facilities.

Use as much of the existing infrastructure as possible, like pumps and pipes.

geographically central, multi-community to save space and money

Re-use existing infrastructure like pipes as much as possible. Conserve energy - use gravity - as much as possible. Compost is a non-starter unless material to be composted has had all toxic and deleterious substances removed or rendered harmless. The use of gassification or similar process should be considered. Life cycle costs should also be considered, not just the upfront costs of building a facility and costs of operation. The wastewater treatment plan should consider population growth and future ability to use newer technology as they become available and shown to be of benefit to communities. The wastewater treatment plan for the Westside should include opportunities for merging and cooperation with the east side municipalities.

Publicly Owned

Cost effective for taxpayers - needs to be a solution for future growth factored/ Public utility - not a P3. Ability to have technology or facility adaptable to new technologies. Facilities should be in a N/S/E regions rather than 1 large facility

It must be publicly owned and operated. No privatization of waste management.

Ensure that any facility built is kept public, publicly owned, publicly run.

That the plant be run publicly not as a P3!

Keep the solution under full public ownership with a unionized workforce

Plant has to be own by the municipality. It has to be manage and operated by public management and workers. the solids produced has to be valorized and/or minimized. The type of plant chosed has to be efficient to treat all types of industrial waste water that is produced in the region.

Having a publicly owned and operated system.

That it be a public owned project so control remains local

Will only support a publically owned and operated facility.

Please ensure the facility is publicly operated. The last thing this region needs is an expensive and unaccountable P3. The CRD has already decided that this facility should be publicly operated. Please stick with that!

#1 - PUBLICLY OWNED AND OPERATED - Note this is first priority to me and the fact that it is not included in the priorities list shows how the survey is manipulated so you only receive certain responses that you would like to include in your report and final analysis.

Public process and presentation of information

I can't answer question 2 or 3a because the way the question is presented means that I can't control how my answer will be construed. ALL of these things are important. My highest priorities are: Removal of harmful materials is paramount. If we don't do the best job of that that technology allows, we shouldn't do it at all. We must avoid creating new harmful materials, i.e. antibiotic-resistant bacteria. Sewage systems are breeding grounds for antibiotic-resistant bacteria, so they must be destroyed from liquids and solids before they arrive at their final resting place. The system must be designed with cradle-to-grave energy use analysis, which includes energy used for conveyance of liquid and solid material. Lowest energy use is vital, for future operational costs and for carbon footprint. Facilities must be sited appropriately for their functions; no citizens or neighbourhoods should be expected to sacrifice their financial well-being and healthy living environment for the 'greater good", and then be told that is democracy. If degradation of the surrounding area(s) is unavoidable, it compensation for damages must be offered and accounted for in the cost estimates. Large very expensive infrastructure must not be built on seashore land vulnerable to sea level rise. It is critical to me, for reasons of energy use minimization, local control of our project, and democracy, that we have a Saanich Peninsula cradle-to-grave system; that we do not end up with a system that transports our waste elsewhere for someone else to deal with. The public of this region must keep control of the process, we must reap the benefits of the recovery of resources, and we must take responsibility the fate of all noxious by-products.

That it includes all of Victoria's residents. That is going to be the only way to build a successful water treatment facility.

Work with the larger communities to utilize economies of scale that are available by building a facility for all of the participating municipalities

I did not answer 3a for the following reasons. 1. The left column and the right column need to be separated in to Social concerns and Environmental concerns hence the need for two separate reviews...environmental and social. 2. I am in favour of gasification but strongly opposed to using treated solids as compost. How am I supposed to answer a question that prevents me from choosing between these very different outcomes? These choices should not be combined in the same question. 3. "Removal of harmful materials" One might ask what harmful materials. Secondary treatment might remove some harmful materials but would miss microplastics, pathogens and pharmaceuticals. If I check this box am I saying that secondary treatment is adequate?

The list provided is not logically organized. Toilet flushing requires complex and costly infrastructure to implement and should not be in the same item as recharge groundwater that could easily take advantage of surficial geology/gravel deposits in Colwood at much lower cost. Same issue for the item on solids. Multi-use facility should include recreational and institutional facilities. Is "mimimize trucking" for construction or for on-going operations? Is "minimize cost" the initial capital cost or the life cycle

cost? Explain how "use solids for fuel sources" is different from "recovery of heat energy". You have lots of work to do on this one!! Good luck.

The project is has a proper project charter, objectives, timelines and costs are identified and a private body is responsible for oversight that must report out monthly on where contractors and people involved are held responsible and penalized for slippage in timelines and not meeting project milestones. Transparent communications on spending, and that taxpayers are not asked for more money because their was no oversight of project timelines and objectives. For once I would like to see a project that finishes on time, on budget and delivers what they say they were going to complete without any extra costs to taxpayers. No excuses should be accepted i.e the brackets we ordered did not meet earthquake standards for pacific coast. There will be a six week delay.

Consult the public. Tell them what you heard. Develop a plan. Get final feedback from public. Finalize plan and timeline for completion. Stick to that plan and don't stray from it. Delays cost too much money.

Capacity, efficiency and resiliency. By moving to a sub-regional model we need to be mindful that there are sufficient resources to build and maintain the sewage treatment solution. In rushing to develop a better and more sustainable solution lets make sure the solution that is adopted is operationally sustainable.

As capital project should be initiated, the criteria for objectives must be very clearly defined, these include:1/. the minimum environmental standard for the treated effluent2/. the possible technologies to achieve the above3/. the business plan for the project, which includes a blend of capital costs and benefits over the long term of one technology over the others While I do not favour the best environment standard at all costs, there needs to be an analysis of what is the best solution to achieve all of the key components of a successful project While doing nothing seemed to have the support of many in the marine biology business, the latest news regarding the orca whale's plight seems to point a gun at ocean pollution. When the top of the food chain is in trouble, that means that the problem is from microbes, to krill, to salmon, to seals and finally to the orcas. So how are the microbes being harmed in the ocean, the same as they are harmed in fresh water systems which is the effects are way easier to monitor. I do not relish an increase in taxes, because my effluent stream will not be changed, I will still need to pay for the maintenance of my septic system but understand the need to help in sharing the cost of doing the correct thing for the environment. Would it not be great if we could gather bivalve shellfish along our waterways again as the natives did for millennia before settlements started discharging a pea soup of toxic pollutants into our waters? The original CRD plan was seriously flawed for many reasons, hopefully the Westside plan will be a vastly more appropriate way of getting the required job done.

Saanich should be involved, as they contribute a very SIGNIFICANT volume of sewage into the proposed system. 45% of the total sewage in the Northwest Trunk is from Saanich, and they're not part of the

group? Even Victoria has a 14% input, which is more than Langford, Colwood, View Royal, and Songhees.

Educate public/business/schools/governments to only put the 3 Ps (pee, poo, toilet paper) down toilet. Reduce waste flow at source and all its benefits.

Clear, concise, conversation, discussion, thought out ideas of what is possible, to build an inland facility that will accommodate a growing population and be possibly a state of the art technologically green legacy.

Community input. Innovative technology. Build for future growth and enhancements. But really... if our current system of discharging primary treated sewage into the ocean works scientifically, then perhaps we need to work on the feds to reduce our hazard rating.

You need to first of all: establish principles. Here are my 5 principles. FIVE PRINCIPLES. 1. We cannot put toxins on the land. Or keep dumping them into the ocean. Zero toxins MEANS gasification--for hydro--with syngas scrubbers. And probably plasma gasification. Biodigesters do not remove toxins. 2. We need to recycle water. To 100% potable water-eventually. This means build the structure for tertiary now--DISTRIBUTED--with high enough quality to go into the aquifers from Day One. And, capable of an upgrade to potable over time. So we never need to build a second dam and treatment centre in the \$300,000,000 watershed we bought for that purpose. 3. Integrated waste stream. That is, build the Gasifier so it can deal with sludge AND all the NRW (non-recyclable waste) from the region. And things such as asbestos and old tires. 4. Capture toxins at source wherever possible: hospitals, plants or operations that use heavy metals must do their own capture. 5. Fix all I&I within five years. In the mean time: heavy fees for Oak Bay and others based on an estimate of all the extra storm water that flows into their sewage. Put meters in the pipes if necessary.

It should lead to policies that restrict the sale of products in the municipalities that are too small for most sewage treatment systems but which are toxic to the environment.

Don't treat

The federal law should be challenged in court.

Scientists have said that we have a unique situation here and that sewage treatment is not required. The sewage is sufficiently diluted by ocean water.

determine if it is actually needed.... Is the natural ebb and flow of the ocean sufficient enough as some academics suggest?

Is it needed? I don't think so.

there is no need for treatment. current system is adequate.

There is nothing wrong with the current waste system and if the Federal Government has decided, based on biased and inaccurate information, that this must be done... then they should pay for it.

pump it into the straight as is

This survey mistakenly presumes that we want or need to build a treatment plant and I don't think we should.

No need for land-based treatment here - maintain the existing ocean-outfall disposal.

Timing of the project and extensions

Time required to get the facility functional

That a decision be made soon with no more surveys

Timely implementation.

Construction timeline (i.e. get it done)

Get on with it!

Vision the Future

Room for growth. 50 year life.

1) Re: resilient facility - ideally not built in tsunami zones or on land that will "liquify"2) Concern re: removing as many solids/chemicals as possible so reduced trucking/landfill and increase use of potable water.

How long the centre would last and what plans would be in place to keep it up with changing technology.

- Should be able to be used for long term process and not short term. I.E more than 10-15 years.

1] Scalable - start with prioritized areas 'already' on sewer system, then bring on those still on septic tanks;2] Plant location - critical to future growth; comprehensive encompassing all elements listed above to include - recycling treated solids toward bio-fuel and compost which can sold to citizens;3]

multi-use for both commercial n residential.
Must be flexible and responsive to change - in technology, environment, ecology, able to be adapted as needs, knowledge and engineering solutions are found and developed in the future. must have minimal impact on local environment. not just people but flora and fauna.
flexible to changing technology
The facilities must be resilient to survive a variety of risks (not just climate change). Risks must be analysed carefully and mitigations must be in place.
That it last for a long, long, long time (build something for the future - not something from the past).
Consider future planning needs, population growth, water shortage, breakdown of sewerage infrastructure delivering to the plant.
expandable to meet community growth.low maintenance and ease of operation.
to be built with expansion for a growing community (extra capacity).
High level of quality in the design, structure and equipment used in the Plant. Long equipment life, equipment redundancy and ease of maintenance.
The most important aspect is a system that is highly effective and efficient with capacity for population growth in the Western Communities.
That it be scaleable should the population continue to grow and that it use proven techniques.
There needs to be a 100 year plan to include: revenue generation, climate change, and kitchen and garden waste re-purposing.
modern resource recovery technology longevity earthquake proof
1} should be built for future residences. 2}all systems should be laid out showing all advantages and disadvantages with the costs that each residence would have to pay.
That it uses modern, forward thinking, environmentally friendly and cost effective technology. The previous crd plan didn't have that as a consideration in its plan.
Scalable - build now what is needed within a horizon of 10 to 20 years; build scalability toward 40, 60, 80 year horizon. Funding strategy with partnership of CRD, Province n Federal government which matches the scalable model. Secure funding agreement with all three parties through revenue generation, property taxes or special grants.
That it have the potential for future growth - for population growth as well as growth as technologies

are developed - therefore, there should be room for overall and increased development as needs also grow within this particular region - can it be duplicated as the communities also grow and needs are increased - to develop more plants of the same technology with shared resource recovery...

A design that can accommodate an increasing population, especially in the Westshore.

Additional Comments
All are important!
Part of a distributed system. I think a one giant plant model is not the way to go... it would be a single point of failure.
We're better than Kolkata
Imagination, creativity, and innovativeness
The other nine choices in above question.
Stop NYBYism; make decision and get on with it!!!!
Get a decision made and start building. This process has taken too long already.
All the others listed above.
use or disposal of solids. No double charging for those of us with septic systems!
Low profile; remove harmful materials; economic.
The ones I did not check in question 3a.
Sewage treatment is only one third of the issue. Sewage collection systems and treated effluent disposal also need to be considered at the same time as treatment to determine the optimal solution .
Don't exclude possibility of original CRD design, possibly with alternate site to McLoughlin, if cost favourable.
In Q3a - I might have selected Noise Reduction but don't know how loud any noise might be. Like a fan, or a jack hammer?
It is difficult to choose only 5. Many of the items should be a given so I have not selected them (no odour, visually appealing, noise reduction etc., minimize truck traffic). I have selected items that I consider to represent bigger picture issues.
Construction with LEED certified design and materials and integrate with landscape if possible.
backup plan in case of failure. Full cost accounting such that costs of capital, operations, and maintenance are included when comparing technologies - their benefits and risks. Continue public engagement and consultation. Integrated Resource Management should be considered to defray overall costs. Gassification of biosolids is important to detoxify and manage microplastics and other potentially

harmful substances in sewage. My tax dollars used in the treatment of wastewater must be spent efficiently and effectively. Seaterra should be abolished. Other uses of gassification should be considered as well. Abolish "silo thinking".

Would like it to be a LEED building/facility

Put zero toxins onto the land, capture all toxins at source if possible, ensure storm sewers are not carrying toxins, ensure that it satisfies the highest standards to prevent any environmental pollution, ensure that any water released does not pollute groundwater

The entire CRD should NOT be serviced by one facility. One facility for the entire westside may be acceptable.

4a.) Please indicate which of the following methods you would support for handling treated water? (312 Responses)

	I would support this method	I would not support this method	I am unsure about this method
Dispose treated water through an ocean outfall	176 (56.41%)	74 (23.72%)	47 (15.06%)
Dispose treated water into the ground (where ground is suitable and Ministry approves)	125 (40.06%)	83 (26.60%)	85 (27.24%)
Dispose treated water into freshwater lakes and streams	52 (16.67%)	171 (54.81%)	69 (22.12%)
Reuse treated water for toilet flushing and other low contact uses	224 (71.79%)	36 (11.54%)	42 (13.46%)
Reuse treated water for irrigation	252 (80.77%)	21 (6.73%)	32 (10.26%)

4b.) Would you support any other methods of handling treated water? Please list them below. (93 Responses) Answers categorized into 8 themes:

- Recovery of water from sewage, its costs and potential benefits
- Recovery of energy from sewage, its various forms, costs and potential benefits
- The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard

- Controlling capital costs, controlling operating costs and life cycle costing
- Criteria which should be considered when siting a wastewater treatment or resource recovery facility
- Water disposal
- Don't treat
- Additional comments

Recovery of water from sewage, its costs and potential benefits
Sell it.
The water should be used to replace "fresh" water for irrigation or water features in surrounding community (fountains, etc.)
Could treated water be used in commercial uses such as car washes or laundry facilities?
Good luck finding (financially realistic) markets for reclaimed water!
we should not be wasting water
Exploring and leveraging new and emerging approaches for transforming treated water into safe reusable water.
All sewage needs to be reused in some way. Never put back into lakes or the ocean.
No, it just adds costs to the whole boondoggle. This type of recycling would force duplicate water mains to be built, leaving the existing water system alone as safe, potable water. No need to EXCESSIVELY spend, spend, spend, on niche systems.
would need more info on this....also how would it work for plumbing on every home to use this water for flushing....sounds expensive to change every home for this.
Treated water can be used on boulevards, allotment gardens, parks, fire fighting, wetlands, fountains, asphalt coolant (when summer temperatures cause pavement bubbles) and estuary ponds. It might even help reduce algae blooms and mosquitoes if recirculated to lakes.
No, flushing treated water out to the ocean is a waste (period)
Reuse of treated water must be cost effective
Wash municipal and provincial vehicles ie police cars, fire trucks, ambulances, garbage trucks, building instead of using municipal water which probably has a cost to taxpayers.
Irrigation for agriculture; farm lands, livestock or farm animals, water recovery so that none is sent out to the ocean - support for spawning grounds that have been threatened by lack of rain water...heat recovery for large industries including use for whatever plant is built - there should complete removal of all toxins so that all resources are usable.
Car washing pay stations and Public Works power-washing and equipment cleaning.. Street cleaning.

We live in a wet climate unlike southern California, Texas or Florida. Reuse of treated effluent on any economically viable scale is unrealistic. How much water do you think that we could realistically use for flushing toilets. Brightwater spent \$25million for a reuse water system for 1 golf course. Let's not repeat the same mistake.

to reuse treated water other than disposal would be incredibly expensive

hydro potential?

street cleaning, ice rinks, recycling plants

put in lake if uncontaminated. Use for irrigation for homes and farms Sell water to other districts for watering their farms and homes Also use the gravel pit as the site

I would prefer reusing waste water effluent to be re-use but a complete new distribution network would probably have to be built...

Industrial use

If doable, hydro-electric generation

Last two methods only if they could be done in a cost effective manner.

Industrial usage if available.

Water is a resource and we should not waste it. Climate change is happening and we are getting drier summers. We can benefit from reuse and we can benefit from water to ground to recharge aquifers

Environmentally/nature/wildlife friendly methods

must have tertiary treatment to remove pharmaceuticals. treated water could be used in heating buildings Treated water could be shipped by tanker cars or E&N line for added resource recovery up island.

landscaping around facility (eg. ponds and wetlands)

use in fountains around city. Demonstrate our re-use of the resource treated to be a non-harmful state. Use for park playground or golf course irrigation - show that treated water is benign.

I would support reuse of wastewater as long as the cost is low enough and a solid business case can be made. Nobody is going to buy treated water if it costs more than what we currently pay.

Purify and re-use ensuring all harmful elements have been removed.

Use of water in industrial/manufacturing processes.

Treated water should not be disposed in any way that could potentially harm the environment or the oceans. Reclaimed water can be used industrially as well.

Re: irrigation - to support roof top gardens in the development and other gardens around the site.

Recycle all the water so that it is used for resident use, build it so that it can be upgraded to produce potable water, this will be needed with climate change concerns. 100% of the water should be

reclaimed and reused

Recovery of energy from sewage, its various forms, costs and potential benefits

use for heating pools

capture energy - small in stream power plants?

The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard

All depends on clarity of the water being disposed of!

ANSWERS ABOVE DEPEND ON TERTIARY TREATMENT OF WATER If water was treated to TERTIARY or above that standard I would favour discharge via ocean outfall, into ground, into freshwater, reuse for toilets and reuse for irrigation. All of the above for TERTIARY-PLUS reclaimed water

purification so it can be used for drinking///that, make it potable, as San Diego is doing.

The above 4a is a loaded question, It depends on how it is treated. If it is tertiary filtered followed by advanced oxidation and disinfection, it is suitable for any of the above, however if it is secondary effluent, it is NOT suitable for any of the above.

These depend on how treated the water is. If you remove heavy metals and drugs (antibiotics, estrogen-progestin) then its fine in fresh water streams and irrigation. That tertiary treatment is expensive so might not happen. Unless you built a wetland filtration system.

Treated water has not been defined in your survey questions. My responses are based on treated water rendered harmless for all toxic and deleterious substances (or removed) such as pharmaceuticals and metabolites including antibiotics, contaminants of emerging concern, microplastics of any kind, pesticides and fertilizers, bacteria, viruses, fungi, spores, etc

Answer 4a) options do not distinguish whether 'treated water' is to secondary or tertiary level with substances of concern, heavy metals, flame retardants, PCBs, micro-plastics, endocrine disruptors are removed for biosolid fuel stock and incinerated or gasified.

I only support 'disposing treated water through an ocean outfall' if it had been treated to a tertiary level.

This question is misleading because the degree of treatment is not specified. Water treated to a lower/secondary standard still containing contaminants of emerging concern can be discharge to the ocean, but higher levels of treatment are required for the other disposal options.

Dispose of "properly" treated water through an ocean outfall.

A lot depends on your definition of treated water. If heavy metals are not removed, the water is not

suitable for irrigation or discharge into lakes and streams.

It depends on what level of treated water we are talking about. If the water is treated to the highest standard possible, it is possible for it to be actually drinkable! Seems like secondary treatment is still the only option on the table, and that is simply not good enough.

Difficult to answer this as I do not know what 'treatment' is proposed. If chlorination - none of approve would be suitable. Poor question

Must be tertiary

The method of discharge depends on the level of treatment. I support a tertiary level of treatment. With tertiary level treatment, all of these disposal options could be considered.

Do not support any method of disposal which would contaminate ground water, lakes and streams or the ocean - unless the treatment can make the water potable. We have to be very careful what we do with it and where we allow it to go!

Provided there is tertiary treatment with microplastic and other sig. pollutants dealt with I'm not overly concerned with how the water is disposed of.

My first concern is the remove of toxins and chemicals of concern. The water must be clean enough to nearly drink before discharge to the environment. Next is cost vs revenue potential. People will pay more for property near attractive water features. This increases property values which increases property taxes. Other sources of revenue include hospital washing, golf course irrigation; etc. When all these avenues have been considered then look to replenish or balancing out the local wetlands and water courses that have been disrupted due to development. When this has been considered then dispose of this water in near shore outfalls.

"Treated water" was not defined above. My definition of treated water would be the result of tertiary treatment including disinfection and UV. The water should be non-toxic and almost at the level of drinking water in order for irrigation purposes. If water was treated to this level, then I could support the last four methods. Treated water should NOT be disposed through an ocean outfall - this water can be re-used IF processed to the tertiary level status.

The standard of water quality is critical to answer this question. If it is safe to drink, then almost anything is possible, however if it has toxicity, then maybe none of the above are suitable. The idea of using this water for toilet flushing seems like it would be very costly and require duplicate piping and therefore not cost beneficial.

I favor methods that perform tertiary treatment in situ (in place). This minimizes investment in in-ground pipes and makes water re-use possible and economical.

My answer depends on if the treated water retains chemicals in it. These need to be removed so as not to damage the environment!

You need to plan to treat it to the potable level.

Above methods supported only if tertiary treated not secondary. Looking to the future we should no longer be dumping untreated or secondary treated liquid or solids in water or on land too many toxins. We also need to capture toxins at source wherever possible

Question 4a.) support is predicated on tertiary level sewage treatment, not secondary.

I have marked 'unsure' for most of 4a) because there was no description of how the water would have been treated. I would only favour any of these for handling treated water if it had had tertiary treatment.

Controlling capital costs, controlling operating costs and life cycle costing

We don't really have enough information to answer this question. Is the reuse of water the most important in an area that receives as annual rainfall as we do? What is the cost benefit for implementing water recovery, perhaps the investment cost and ongoing maintenance makes this an undesirable component of the project. Some facts would assist in providing an opinion.

As long as they meet today's and tomorrow's environmental standards. In addition the method used must be viable and feasible for the taxpayers.

Criteria which should be considered when siting a wastewater treatment or resource recovery facility

site specific location selection will aid in recovery but may have to off load where not cost effective or as others have done else where created natural bio flora water treatment sites. Minimize costly new piping recommended. My disposal support depends on level of treatment as it stands now I do not support the disposals listed

When I think of how big a septic field is required for a single home I can't comprehend how big of a field or piece of ground would be required to accommodate a ground recharge system. Also during the winter the ground table is significantly higher leaving even less capacity. Even if some treated water could be used for flushing toilets or irrigating golf courses (I don't think anyone would be comfortable with it on their back lawn) it would only be a small portion and seasonal. No matter where treatment plant/plants are located the best way to handle treated water will be an ocean outfall.

Not just 1 big plant but multiple small facilities.

Don't treat

The federal law should be challenged in court.

Current science indicates that the waste need not be treated to any extent. Please continue with the

current system. We have the healthiest ecosystem off the south coast because of it, not inspite of it.

Whatever decision is agreed upon should entail not require a great deal of pumping, again unlike Seaterra with its up the hill and down again scheme. Since I actually do not believe that the science rules against the current outfall solution I would most like to see that model retained.

Water disposal

Yes, I'd support discharging treated (UV and peroxide) water into appropriate wetlands, for natural filtration before it returns to groundwater.

Re disposal through an ocean outfall. I could support this in wet weather times, and for emergency backup. Re disposal into the ground, lakes and stream, and irrigation - I would support these methods IF treatment was to tertiary levels, and absolutely NOT support this for secondary effluent.

Dispose the treated water into artificial (man made) estuary before being discharged into the ocean.

if level of treatment is equivalent to tertiary then freshwater and ground water outlets are possible.

As someone with a background in environmental sustainability I fully support solutions with a strong environmental outcome. However, I think we need to consider what solutions are technologically and economically feasible in the local context. I have a hard time understanding why we would be considering groundwater and freshwater disposal when we are next to the ocean - a huge volume of non-potable water that is best suited as a disposal source. Is it really a good use of time to be considering these other options? Secondly, though in principle I support use of treated water for irrigation etc. please run the numbers and consider a) the financial cost of freshwater supply and b) the demand/supply for water in our region. I think you will find that water re-use is more economically viable in areas where there is less supply, and higher cost of water. I'd encourage the group to look at the unique factors of our environmental and economic context; this will help weed out those options that could make great sense in other regions, but don't make sense in our case.

Allow the tertiary treated water to filter through Royal Bay sand and return to ground water

release into wetlands

While it is similar to item three above, I would propose that the water could be used to start flushing Esquimalt Lagoon which has been contaminated for many sources for countless years: 1/. cross-contaminated storm sewers 2/. water foul excrement 3/. poorly performing septic systems in the area.

In a perfect world - into ground and filtered naturally to streams and lakes

Ocean out flow

Reuse or release of treated water must meet sound environmental and health guidelines.

Additional comments
More knowledge is required. Not sure this is asked the best way.
Reduce quantity of treated water to maximum by improved use and control of stormwater.
Once again I would like to see the different systems that are available with all of the advantages and disadvantages of each system. I would also like to see what today's costs are for each system. I don't think that I could make any decisions without all of the facts. I believe that any system should allow enough capacity for any growth over the next 50 years. If the sewage treatment plant is to be built with any time less than the 50 years, there should be an estimate of the future costs to increase the capacity.
to gold or platinum LEED standards
not sure
I'm sure there are many many many ideas that could be gleaned from others. We don't need to reinvent the wheel.
http://www.sciencedirect.com/science/article/pii/S1319562X12000332 http://www.sswm.info/content/anaerobic-digestion-large-scale
Strengthen upstream control of contaminants
I would support continuing the methods used and focus on bylaws to prohibit the sale and use of products that are harmful to the planet, without treatment. Time for a shift in consciousness. Garbage in= garbage out. Let's stop letting people put garbage in.
Would like to explore options that are effective in other communities

5a.) Please indicate which of the following methods you would support for handling treated solids. (313 Responses)

	I would support this method	I would not support this method	I am unsure about this method
Build a sewage treatment facility that will also process the solids	262 (83.71%)	21 (6.71%)	25 (7.99%)
Construct a pipe to send solids to another location	64 (20.45%)	166 (53.04%)	70 (22.36%)
Transport dried solids to another location by truck, train, boat or other method	63 (20.13%)	167 (53.35%)	65 (20.77%)

Compost solids into nutrient rich product for use or sale	204 (65.18%)	56 (17.89%)	45 (14.38%)
Dry solids into pellets or products that can be used or sold as fuel	216 (69.01%)	33 (10.54%)	53 (16.93%)
Process solids through gasification or other methods	168 (53.67%)	41 (13.10%)	90 (28.75%)

5b.) Would you support any other methods of handling treated solids? Please list them below.
 (85 Responses) – Answers categorized into 6 themes:

- Recovery of energy from sewage, its various forms, costs and potential benefits
- Integrating a sewage treatment\resource recovery centre into an existing community, its potential problems and benefits
- The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard
- Controlling capital costs, controlling operating costs and life cycle costing
- Criteria which should be considered when siting a wastewater treatment or resource recovery facility
- Other/Not enough information to respond

Recovery of energy/resources from sewage, its various forms, costs and potential benefits
Gasification. Energy reclamation
This question is ambiguous because you do not say what "treated" means. However, it is clear from the research, that even tertiary treatment can still leave behind some major toxins. The best way to deal with this is via gasification. A treatment unit should be less than \$50 million and one should be more than sufficient to deal with all five communities.
We are not currently allowed to sell solids - why is this an option?
I cannot answer these questions without more information about what kind of treatment is being proposed. If we have a distributed system, it would likely be less expensive to have a single biosolids gasifier, or possibly 2, for the region. There are too many unknown chemicals in municipal sewage that cannot be taken out by even the best source control program, and it is not suitable for application as fertilizer. Anaerobic digestion is a bad solution; facilities are large and very expensive to build, difficult to site without imposing unreasonable impacts on surrounding land. They are a breeding ground for antibiotic resistant bacteria. Piping watered biosolids is a bad idea, it will require a significant energy input long into the future. Solids can be screened out and dewatered in presses at wastewater sites, so that much smaller mass and volume is left to be trucked. There are no solutions that will have zero energy required for transport of solids, so we must pick the solution with the smallest energy

requirement. That means the solids travel in the lightest possible state (dewatered) and the least possible distance. This also means that any transport of solids off the peninsula is not acceptable. Gasification is the option that reduces the volume of the solids down enough that we can landfill them on the peninsula. Gasification also best captures heat resources, and best destroys harmful materials in the solids.

There's a better chance of sustainable reuse of solids than the liquids! Lift the regional ban on land application of biosolids, but limit application to non-food crops.

Exploring and leveraging new and emerging approaches for transforming treated solids into safe reusable products.

There have been 13 gasification plant for biosolids built worldwide. Today, none of these facilities are still operating and over \$1billion has been wasted. The last biosolids operating in Florida closed this year...another sismal failure. Gasification works well for wood waste (like Dockside Green) but does not work for biosolids

Would blocks of treated solids be permitted to be shipped (tax free) to help fertilize and generate crops/foliage in third world countries?Can the solids be used as insulation in barns or drygoods warehouses?

'Biosolids', or whatever you call sewage sludge, is a concentration of the worst substances of concern in the treatment process. Obfuscating words, attempting to skirt this fact, will not protect human and environmental health. Sewage sludge-solids-biosolids-dried solids, composting, or mixing them with humus or other organic materials to dilute or disguise them, will not make them any safer for some indeterminate 'beneficial' use; nor can you claim any sole, or exclusive beneficial use " such as making and selling a 'nutrient rich product' (presumably for land application " which is banned in the CRD) without accompanying deleterious impacts, wherever they end up being applied. It is still sewage sludge. The use of the little word, 'or' in these response choices, automatically muddies the facts, makes the resulting survey tally misleading, and misinforms participants. I hope this was not intentional.

NO

properly treated solids that are ecologically and bacterially sound the by-product being both an environmentally and potentially economic asset.

Again the question is misleading. There are different methods to treat solids - gasification could be okay but not anaerobic digestion depending on where the plant is located - within an urban area or remote location. A pipe to send solids depends on how far and how high it goes, hence what the perpetual pumping cost will be. Compost or dry solids could be okay if all the contaminants of emerging concern were removed so they are not released into the soil or atmosphere.

As long as all toxins are removed, there should be no limits as to how solids can be used - whether to fertilize farmland or other source they can be used without harm to the environment.

There have been 13 gasification plants for sewage solids built around the world and all have failed.

Why are you even taking about this option?
the reuse of the bio solids is still a very controversial topic. it's a good idea but there is still tremendous resistance
Allow them to be exported to third world countries for fuel, fertilizer or further processing providing they will not contaminate someone else's environment. Must be monitored and certifiably safe. All companies involved must be insured and post a bond in case of contamination or spill and they will pay for remediation ... Not the taxpayer.
Use plants and fish to help clean out the solids and chemicals to help clean it out. It will not help if you use more chemicals to break it down that makes that water not usable.
yes if environmentally friend and take toxins and micro plastics out and is useful
Tertiary treatment of solids to remove pharmaceuticals, heavy metals, and other toxins. Use the 'leftovers' for compost/mulch in local parks, sell the compost as mulch, etc or even offer a free bag or two to the public - after all it is our waste! Use any revenues gained to contribute to cost of tertiary treatment.
Treating of solids to process into pellets woud have to be determinded by healthy use of by product. Is there a market and can product be produced that is free of chemical or medical contaminants.
Anaerobic co-digestion with food waste, followed by gasification of waste sludge.
gasification is a process that will make the emerging substances inert while providing benefit to the community, and neutralizing the effect for the environment
treated solids for sale to other countriescould treated solids be used in river flood control?could treated solids be used for heating or insulation of buildings?
No
Do not use on land applications
The solution must end within CRD. No trasportation of biosolids. Gasification!! oppose building a system that puts us as a community at the mercy of the biosolids inducsty. We lose control of the costs and of responsible end fate and of the carbon footprint of transport.
Provide at cost or wholesale price to lacial farmers to keep their operations viable.
Dispose at hartland
Gasification doesn't seem like a good idea to me. It looks alot like just burning the waste and there would need to be such care made to ensure it doesn't release toxins into the environment. Things go wrong too often to risk that.
I do not support land application of class A biosolids. There is no robust market for biosolids as a fuel. We must look seriously at gasification and opportunities of integrating our solid and liquid waste streams. The CRD has very serious solid waste challenges ahead of us and we should not take a siloed

approach. Please take an integrated and long term approach.
compact or mix with cement as a building product?
Piping "solids" is hard work - prefer that the solids be dried for transport for use or be combusted for energy on site if possible
If solids can be made to create heat without emissions, that would be a good solution.
I've explained before why I believe gasification is important for the environment and revenue generation. I want to learn more about this solution and where these units can be located. I strongly believe we need resiliency in our systems so we need more than one unit!
I am disappointed that "solids" has not been defined. I answered the questions above assuming that the lowest cost processing would be done. I would want to see "solids" defined as non-toxic with removal of microplastics, pharmaceuticals, hormones, all heavy metals, PCBs, ALL Substances of Emerging Concern.
I do not support methods that increase greenhouse gasses.
Concerned about any methods which exacerbate greenhouse gas emissions
I would support a method that kept the solids away from our oceans/shorelines
Pump the treated solids into the ocean as fish food
I support methods that leave little or no solids but rather gasify them for gas sale or use.
- to treat the water and solid materials to a high degree so that water and solids can be re-used and recycled - Reduce # of trucks as much as possible / or use pipe to transport...?
Learn from our neighbouring provinces... not Alberta as it is apparent there that \$ rules and the environment comes last. But there are provinces who don't have the luxury of a lake or ocean to dump into. Seek out the methods that are successful that they are using.
Gasification is the only method that will remove toxins.
pipe infrastructure most expensive item. We should be encouraging dockside green type of technology in all major housing and business developments such as Eagle Creek as part of development. I am unsure about the other items because they are location dependent and the proposal is based on secondary treatment which I do not support
Apply sludge to the land as is permitted by the Province

Integrating a sewage treatment\resource recovery centre into an existing community, its potential problems and benefits
Educate people to reduce at source only 3 Ps down toilet

The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum

(secondary) standard
Is it safe to dump this into the ocean?
Don't create the problem in the first place - don't switch to land-based treatment. Pay attention to the science, which says our current system is environmentally friendly and sustainable.
present system okay

Controlling capital costs, controlling operating costs and life cycle costing
No, it all ADDS COSTS to the system, which, as we see with the CRD and the way it runs the water system, is a WASTEFUL, EXPENSIVE endeavour, IRRESPONSIBLE to the taxpayers.
Really difficult to answer this question with little knowledge of technology or costs.
Available methods must meet test of reasonable cost vs. achievable benefits.
Composting solids, drying solids and processing solids through gasification all require infrastructure that must be cost effective while still considering there will be by-products of these processes that will also need to be dealt with.
Whatever methods are used it must be viable and feasible to the taxpayers and with the ultimate goal of 100% recycling of the material in a fashion that can benefit the environment and perhaps create some revenue generation
any method that produces revenue and reduces or eliminates any cost to taxpayers.
The means of treating the solids will once again be bases on the costs of each method.
Best state of the art plant that is cost effective
Cost benefit analysis needed to decided which is teh best way to handle treatment of solids
the items above do not give an adequate variety of options to be useful. on all of the first three items, yes, I support the transport of solids.However, the question could be where to. And I do not support public money being used for processing solids when it is economically viable for a private enterprise to do this and be profitable. If these solids could be sold to these enterprises, it would help defray operating costs, as would the sale of treated effluent water.
Low cost methods should be considered

Criteria which should be considered when siting a wastewater treatment or resource recovery facility
The facility that treats solids PROVIDED there is NO odour or noise for the adjacent properties. LOADED biased question... "nutrient rich" could also have trace harmful elements.
Partnership opportunities need to explored in tandem with planning
I AM NOT SURE ABOUT A SEWAGE TREATMENT PLANT THAT WILL ALSO PROCESS SOLIDS BECAUSE THIS IS

PLANT SIZE, SITE, LOCATION AND TREATMENT DEPENDENT. IN FACT THAT APPLIES TO MOST OF THE ABOVE ?. IF THE PLANT WAS SMALL TRUCKING WOULD BE CHEAPER THAN PIPES
I think ultimately the most important thing here is that whatever decision you make you are ensuring it makes the most financial sense across all parts of the region. If constructing a pipe - need to ensure facility close to bio-solids facility otherwise cost of piping will be large. You can not think of this project as a silo project and need to ensure all details are worked on together.
I would NOT support transport via truck!!
the answer to the first item depends on location
We need many small and local treatment facilities - not just one for the Westside.
What is the volume of solids and how many truck movements etc. are we looking at in practice? How would the transportation movements compare with existing traffic in the region for construction etc.?
Any solution that doesn't export the issue, suching as trucking or a pipeline.
I would support gasification only if it where 1 our 2 plants located as far away as possible from neighbourhoods.
For 5a. My supporting pipe or trucking of solids would depend on distance.
As noted earlier, the key thing is to ensure there is no negative impact on homeowners near the location(s) selected. No noise, no smell, no undesired truck transport, etc. Options that meet this type of criteria are likely acceptable
This property should not be used for handling treated solids choose a site away from valuable resources and place in an isolative area.
Treated solid processing should be in an industrial area.

Other/Not enough information to respond
The federal law should be challenged in court.
Like the previous question we don't really have enough information to adequately answer this question. These are big topics, did the initial research cover these options? What were the results from that research? What is the cost benefit for implementing each of the methods above perhaps the investment cost and ongoing maintenance makes these an undesirable component of the project. Some facts would assist in providing an opinion.
No you have offered enough choices for everyone and more will allow for more confusion
I guess I need more understanding on handling treated solids....the open houses for the public are very good and we need more as more info becomes available
I do not have enough knowledge about these processes to have an opinion. I would hope that we would be give more info on all processes in order to make a more informed decision. However,

printed information made available to all residents would be best, rather than just town hall meetings.

You do understand that the average person does not have the expertise to answer this type of complex questions.

Do more research. This is an extremely limited list of options.

not sure

Don't know!

6.) These innovative sewage treatment and resource recovery facilities in other areas have demonstrated many community benefits. What benefits would you like to see if a facility was built in your community? (225 Responses) – Answers categorized into 7 themes:

- Recovery of water from sewage, costs and potential benefits
- Recovery of energy from sewage, its various forms, costs and potential benefits
- Integrating a sewage treatment\resource recovery centre into an existing community, its potential problems and benefits
- The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard
- Controlling capital costs, controlling operating costs and life cycle costing
- Criteria which should be considered when siting a wastewater treatment or resource recovery facility
- Other

Recovery of water from sewage, its costs and potential benefits

Bio solids recovery, Fresh water recovery, Toxin elimination

Reclaimed water for flushing toilets and watering lawns. Biosolids for fertilizers

No solids from the waste stream to be put back on the land or water. 100% reclamation and reuse of the water into toilets. Reclaimed water to exceed potable water standards. Capture all toxins at source. Ensure toxins do not go into storm sewers.

Reuse of heat. Production of water that could be reused for at least irrigation and aquifer replenishment and ideally, for drinking. Removal from the waste stream of all toxins and superbugs. If water is to be put back into the ocean, it should be, at the very least, at the level of toxin-free and usable for golf-course irrigation.

Reclaimed water for landscaping of site, heating/cooling, irrigation, recovery of heat energy, greenspace/meeting space

<p>It would be great to see a simple no odour project that can produce usable water and remove harmful material. Everything else should be secondary. If there were benefits such as resource recovery without added costs then fine.</p>
<p>Water reuse, maximum resource recovery, community destination / asset, removal of microplastics, pathogens and pharmaceuticals</p>
<p>summertime irrigation water heat and biogas recovery - connection to district heating system sludge used or exported for fertilizer and/or sludge dried down and incinerated for power production</p>
<p>Tertiary Treatment, reclaimed water used for irrigation, street sweeping or other public type use, biosolids used for fertilizer.</p>
<p>Reclaim water for landscaping/irrigation Recover heat Recycle solids as fertilizer for agriculture use Blend in with neighbourhood</p>
<p>It would be nice to see there be some way to make use of the reclaimed water and biosolids either for city use or for residential use. If the final design of the building involved some kind of community facility (depending on location), that would also be useful.</p>
<p>Use the treated water for playing fields, street sweeping, golf course. This needs to be a TERTIARY facility, not a secondary treatment facility.</p>
<p>water re-use, bio solids re-use, heat recovery, irrigation</p>
<p>Reclaimed water for flushing toilets and irrigation Bio solids used for fertilizer for agriculture and forestry</p>
<p>Heard Sooke is a problematic treatment plant? Reclamation/purple pipe is not feasible unless you have small distributed plants, and new infrastructure to build around them. Not something that will happen in the CRD.</p>
<p>low water consumption costs provided all water is recycled by one means or another Heat recovery</p>
<p>use of water/ use of heat for irrigation do not truck solids, pipe fluids or dump into ocean.</p>
<p>Reclaim water and waste by treating and reusing Reduce environmental impact</p>
<p>Biosolids composted for landscaping, soil amendment Biosolids recycled as fertilizer for agriculture and forestry Recover heat from effluent to heat public buildings Reclaimed water for landscaping, heating/cooling, irrigation and toilet-flushing for public lands/buildings</p>
<p>Reclaim water and solids to reduce costs for irrigation and compost for agriculture</p>
<p>Water reclamation and tertiary treatment are a must</p>

The treated water used for irrigation is of importance to me. I'd like to see the energy recovered and used to power public facilities. I'd like to see a facility built that has tertiary treatment even if it costs more than the already projected cost. I need to be proud of our facility.

opportunity for integration with housing commercial etc (like dockside) use of reclaimed water to create water features good architecture design no noise or odour thought given to service trucks etc.

resource recovery - water and energy

#2 Dockside Green - tertiary treatment and reclaimed water... use of water re: toilets... and drinking water. use of biosolids as safe soil supplement #3 Blain Washington - the look of this facility #8 Brightwater - recovery and recycling of plant resources. use of biosolids in facility and landscaping. use of reclaimed water for landscaping irrigation.

Recovery of energy from sewage, its various forms, costs and potential benefits

Reclaimed water for facilities nearby. Fertilizer for sale agriculture/forestry/landscaping. Heat recovery for resource facilities near by. Educational facility upon completion. Unobtrusive, low or nil odor.

1) addresses the current purification needs of the community 2) is supportive of resource recovery 3) is able to incorporate up-to-date processes 4) is attractive or mainly out of view of communities 5) is addressing other resource needs - eg- roads, air pollution.

Reclamation of heat for public and private buildings, reclamation of tertiary effluent water for watering parks and other public lands during drought, revenue from sales of summer water to non-public land, recharge of groundwater (tertiary effluent only) during drought, recovery of heat and fuel from gasification.

Advanced treatment - use of reclaimed water for irrigation or to feed back into the groundwater biosolids treatment close to WWTP heat recovery - back to WWTP or nearby recreational centre (or similar facility)

reuse, for heat, plant watering, farm watering, or any reasonable benefit, do not dump. If the above wastewater treatment plants are the gold standard then why would CRD try and build a plant on a fixed, small piece of land like Macaulay point, that is why no one has any confidence in the planners.

Recovered heat be used to heat a local institution ie the hospital

Renewable, reusable energy and non-invasive to the environment (ie. not smelly) and not using more energy (ie. trucks) to waste energy/resources to manage

Maximum practical recovery and reuse of resources in the sewage with allowance for further

improvements built in. Use the recovered energy and water to foster economic development by providing low cost resources to truly sustainable developments. Minimize the escape of deleterious material (e.g., heavy metals pharmaceuticals) to the environment.

Resource recovery (heat and biogas)

Heat recovery and use in facility such as a pool or district energy system (esquimalt village) would provide a real benefit. I'd encourage options that avoid and reduce greenhouse gas emissions to the extent possible. Also, I would recommend pursuing high-levels of energy efficiency and considering whether the additional costs of high LEED standards (e.g. platinum) warrant the additional cost versus a lower rating (e.g. silver, gold) but with a very high standard for energy efficiency and reduced GHGs.

generat electricity

Heat recovery

energy production

Heat recovery and recovery/recycling of other resources, biosolid generation, LEED certification

The benefits that may be realistic really depend on where the facility is located. Heat recovery is nice..

environmentally sustainable and self-generating design for heat/power/water

energy ie heating for residential and community buildings, water for irrigation,

Maximum recovery of resources

heat loop system is a nice idea. perhaps a lower cost for those with the sewage treatment facility in thier community. I think the CRD should revisit it's policy on Landuse of Biosolids.

bio-gas to heat operations where it makes sense to do so, water reclamation where feasible, site to blend with neighbourhood, methane benefits. Anything else would be a bonus.

1. An opportunity to use either biogas or syngas to heat community buildings or water (e. Saanich Peninsula)2. The treatment plant is either built in such a way (possibly underground), so that there is a park or other recreational area available for the community to use.

Heat recovery, limited discharge to environment, water reuse.

Full resource recovery removal/ distruction of pharmaceutucals, chemicals, microplastics (combustion)Est'd net operating costs are minimized as much as possible. Given our area constraints, a site that fits inot the community.

resource recovery
Resource recovery. "Green" operation - don't transport byproducts
Tertiary treatment Recovery and recycling of plant resources Heat recovery Reuse of solids Reuse of water
Maximal energy recovery. Water treated to tertiary levels and reused. Attractive water features. Small physical foot print. Minimal odour. Resiliency through distribution of services avoid one point of failure. Build just what we need now and add later when population grows OR not if we fix the I&I problems and stop treating rainwater.
Energy reclamation through gasification. All the toxins, harmful biological organisms destroyed through gasification. Water reclamation.

Integrating a sewage treatment\resource recovery centre into an existing community, its potential problems and benefits
If built in the "right" location have it become a source of information activities and community use. If the facility is built to do what a treatment plant is to do does not necessarily mean it has to look like a factory and be isolated. Visual appearance / multi use, environmenatally dynamc and safe. what would be the argument with a facility like that?
a. use the latest in technology that allows energy and recycling benefits; b. use the least amount of land in the most integrative style; c. not reliant on transportation of waste to and from site by vehicles; d. utilize the ocean where possible as part of the plan; e. most cost efficient; f. decentralized plan over megaproject
In all honesty, I do not believe there is a real tangible benefit for the residents of a neighborhood where a sewage treatment plant is built. However, as a society we must accept responsibility and return treated water back into the environment as clean as reasonably possible.
FIRST, PRESENT AND FUTURE DEVELOPMENTS IN THE COMMUNITY SHOULD FOLLOW DOCKSIDE GREEN'S EXAMPLE THAT WOULD KEEP THE SCALE OF PLANTS DOWN.HEAT AND WATER USED IN THE COMMUNITY EG. RECREATION FACILITIES AND PARKS
Small area for Community use in the plant
Treatment plant infrastructure should be designed such that it includes or incorporates commercial, residential and recreational facilities either adjacent or integrated.

Resource recovery to offset operating costs. Economic benefits of complementary development - maximize land use. There should be multiple facilities to provide back-up services should one fail. Amenities to the host community should be considered. Public Art.

It should be a multipurpose tertiary facility that could include housing/commercial/recreation activity built outside of a tsunami zone. It must remove toxic chemicals, pharmaceuticals and micro plastics that are harming marine environments. It should remain under municipal control and be built by local companies. Local staff should monitor and maintain the facility with wage/benefits caps for staff and management. Foreign builders may be retained during construction or advice.

tertiary treatment, site location benefits full recovery of water and energy, site blends in to community and integrated into community recreation facilities & parks, a community gathering place with water features such as bird ponds and gardens

tertiary treatment, use of reclaimed water, bio-solids, bio-gas, heat or other resources to run the plant or surrounding business or municipal street cleaning, located in non-residential area, surrounded by trees/hidden

Any of these multi use sites are of interest. Ones that allow public interaction through green space or housing or meeting spaces are of interest.

I don't need community benefits for hosting a treatment plant, beyond using LEED construction and water/heat reclamation as much as is feasible. Every municipality has their share of regional infrastructure and I see no reason why it should be any different for a treatment plant.

Any benefit that will enhance the location and community it is in, eg, if near a park - some public toilets, change rooms, exercise facilities; if near a multi-use complex - meeting rooms, mini-library/gallery, outreach program centre.

As has been shown, a facility can be incorporated in a multi-use community based facility - ie: Dockside Green - created a water recovery system that provides lovely gardens - the technologies used provide the best in environment protection -

Must use state of the art tertiary technology that generates the most beneficial advantage to west side over a period of time. Must be estetically appealing, any noise and odor remains within an enclosed facility. Contamination must be cleaned up immediately and public must be informed within minutes. Heat and electricity generated must be returned to nearest facility and they must pay for recovered resources with the goal of breaking even and profitability in the future. No multinational ownership where profits leave the municipalities.

If cost/benefit supports it, attractive local plants with combined uses, similar to Village Green

multi use - Business or playing fields

#8, #4, #2 designs. Tertiary treatment, built to a very high environmental standard (LEED Platinum). Has to be built according to existing population and realistic population growth estimates. No more dumping in the ocean. Reuse all resources that result from treatment (gases, biosolids, treated water) to heat the facility, provide compost for parks, greenspaces, use by the public, and water for household use, or use in parks, greenspaces, etc. Potable water should not be 'disposed of' - need to either get people drinking it, or use it in households, businesses, parks, wetlands, etc. Make the facility appealing to the community - trails, interpretive signs, library, etc. Don't "hide it" - this is a great opportunity to educate, inform and integrate it as an actual feature/amenity to the communities it serves. Could offer school programs, composting demonstrations, wetland/stream complexes (habitat enhancement for birds, butterflies, bees, fish). Make it a gem - something that people really are proud of!

Facility a visible "showplace", tertiary treatment (will keep Port Angeles placated), bio-gas to drive plant, bio-solids for fertilizer, water re-introduced into water table.

Creation of green space/public use area/park/playing fields Maximize resource recovery options from biosolids to heat recovery

utilization of by products - park land possibility, energy reclamation

Recovery of resources visually appealing (or hidden) Inclusion of education

Plants should reflect new technologies, which allow beneficial reuse and energy recovery. Facility can include research and educational opportunities:-Training for wastewater technology programs-Training for utility operators-education of school children on waste treatment and disposal-Research with UBC/UVic/UofA etc.

multi purpose facility that includes commercial retail shops and housing Must be enclosed - no odor, no noise, and must not contaminate the area Built by local contractors, managed by local municipalities Must have warning system "immediately" in case of failure.

make plant architecturally and aesthetically pleasing as some are.

An integrated waste treatment facility that recovers the resources to be used for heating, irrigation and grey water within a building or community project that includes residences and retail/commercial spaces.

Tertiary treatment, LEED certified, reclaimed water for irrigation, green spaces, golf courses and street cleaning, bio-gas for heating operations, bio-solids composted

Green space, parks, visually appealing, no noise.

LEED certified. Educational facility, public parks, walkways etc. Use of reclaimed water and solids used for practical purposes eg. heat; watering options eg. lawns, golf courses, car washing etc. Compost and manure in order to save/repay the operating costs. Enough talk - lets get on with it. an open responsive system for the 21st century which can be adapted in the future. Please!

Not industrial looking. I like the idea of public space, ponds, paths. Reusing the water on site like the examples above.

biosolids composted and sold on site site designed to blend with neighbourhood reclaimed water used for flushing toilets recovered heat used to heat building and ??

To take advantage of resource recovery, this plant will need to be retrofitted into an urban area, so it must be built in such a way as to blend in or fit with its surroundings (i.e. Dockside Green). The plant should provide resources (heat, water for irrigation, gas for electrical generation). It should also make the community as livable as it was before it was built or, if it is designed properly, or a more livable community. This can be achieved by an architectural design/functionality that will attract people. I think you can do this by having a pleasing design together with the ability to have businesses (restaurants, retail) that will attract people. Don't restrict yourself in what designs are contemplated!

I like 1) energy conservation and reuse options, 2) the incorporation of green space and 3) aesthetically pleasing construction (Olympia, Wa)

Tertiary treatment with recovery and reuse of heat and biosolids. Reclamation of water for irrigation and toilets. A facility that is aesthetically sensitive with public space and opportunity for public education..

Highest levels of odour containment and noise abatement. Esthetically pleasing. Property taxes paid to the municipality. Amenities of benefit to the community e.g. playing fields, community meeting spaces, public art. Re-use of resources generated from processing. Reduction in traffic - parking issues, and speeding!

Criteria which should be considered when siting a wastewater treatment or resource recovery facility

Building used to attract high tech industry.

Heat recovery to serve any nearby facilities, water reclamation for landscaping, etc., innovation in not hiding the facility, but instead creating a destination for education and cultural change.

1) resource recovery for local uses 2) attractive building with multiple use facility attached 3) resource recovery to generate income to offset costs

Encourage the support of the community through onsite, ongoing, public education, tours of the facility, outdoor infographics (e.g. Dockside Green); municipal ownership and vested interest through community investment funding.

As many of the most beneficial, cost efficient and environmentally sound features of all the above projects. As well as, educational and community features.

Efficiencies in design to minimize sprawl and maximize results. Perfect opportunity to reduce - recycle - reuse a product and ultimately enhance our environment

I would suggest that all of these options appear nice because they focus on only the positives. What about the negatives of these sites? Which facility is the most odor free? Which facility is located in an industrial setting? Which facility has generated the most complaints from neighbouring residents or businesses? Too many unknowns to decide if my choice of benefits has unintended consequences.

highest level of treatment currently possible, done as carbon neutrally as possible (lets not make more environmental problems by treating our sewage than putting it raw into the ocean), safe in an earthquake zone, treating storm drain water too

A combination of features like Brightwater Facility, LOTT and Dockside Green

This is a densely populated community. It cannot accommodate a sewage treatment and recovery facility. Almost all successful facilities are in areas of low/no density, with the only reason people are living in the vicinity being because they CHOSE to live there. No matter what kind of facility is chosen in cannot be set down in the middle of a town or city.

Heat recovery, parkland, reclaimed water use. Closest to the example of dockside green.

Recovery of heat and water for other uses in community. make facility pleasing to the eye

gold or platinum LEED rated plant that fits a compact site about 10 acres as part of a light industrial park serviced by colwood langford and maybe view royal and esquimalt. Industrial land is in short supply and can be sold by the city once serviced. jobs too!

Low Odour/ Low profile/ Resource recovery

That the facility be expandable to accommodate future growth. This would ensure that costs for the initial plant would not be exorbitant to those presently requiring sewage treatment, while ensuring the plant can meet future requirements based upon 5-10 year plans. Over building for a capacity that may not be realized would not be prudent.

Re-use of water and solids is a good idea. It needs to blend in with the neighbourhood and must have

no odours and minimal noise. One facility for all processing of water and solids seems best as it reduces truck traffic or the need to build a pipeline.

I think there are potential benefits available from all of the facilities mentioned, but identifying them without actual plant locations is difficult. Greater Victoria doesn't have an abundance of available real-estate to accommodate a large sprawling treatment facility. The location will also dictate whether water reclamation and heat recovery are financially viable.

Reuse and recycle everything can in one place.

Site designed to blend with neighbourhood.

Environmentally friendly, earthquake consideration, no odor, no noise, no truck traffic, least amount of solids/chemicals 3 Ps at toilet source, small footprint, long term effective for our grandchildren, cost effective

start small, use heat and some reclaimed water locally. Once it is shown to be viable this can be expanded

urban integration into mixed usewater re-useenergy generation

Combine ALL the best elements shown in all the above treatment plants and make it scalable for growth in the Westshore community looking forward for 100 years.

The benefits are secondary to the impact of sewage treatment on the homeowners nearby. No noise, smell or undesired truck traffic is critical and should be major factors in site selection. If the site is selected this way, then the benefits should be easily determined on a cost benefit basis or dictated by government requirements.

Most of the descriptors for each example facility are simply features of a facility, not necessarily benefits. In my view benefits are things like human health and environmental protection, compliance with legal requirements, resource recovery, reuse and recycling, protection of local esthetics, reasonable cost, local community acceptance, etc. I would like to support all these and more.

Would only support a facility in the community if it were located in currently zoned industrial areas, away from waterfront/residential areas. Benefits afforded by new technological approaches as shown in the examples can still be realized and with little real or perceived adverse impacts on community residents.

First that there is no noise or odors coming from the treatment process. That it is not on ocean front but away from the water by at least a kilometer. I disagree with biosolids going into Harland landfill in the Sooke plan. Use of biosolids for fertilizer and water for irrigation, landscaping. I would like to see the

treatment plant in a rural area where there is space to create trails, water features and recreation activities in nature. ie in Langford they have installed exercise equipment along a trail for the community to use. If you beautify the area around the treatment plant it will be viewed as an asset to a community.

The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard

looking to the future we need an integrated waste stream solution, a distributed tertiary with a quality that permits distribution and provides future potability and profitability facilities should be designed with specific principles and location of sites should recognize all construction disturbance items and repair eg odour, trucking, noise, visual requirements including landscaping and so forth. Creation of green space and water parks as sites permit should be encouraged. Natural capital should be included in long term life cycle assessments

Tertiary treatment. Reclaimed water to exceed potable standards for reuse. Distributed smaller treatment plants. Could be in any neighbourhood. Heat recovery. Local treatment and reuse of biosolids. LEED Gold or higher certified.

Tertiary treated sewage: Reclaim water, heat, methane, electricity. Dried sludge for safe disposal. Integrated site for public use and enjoyment

If secondary treatment is chosen, build it like SNS, at a cost of 20M for 37,000 people, it shouldn't cost more than 200M to treat for 10 times than number of people. Add a gasifier for the dewatered solids. Even at a cost of \$100 M its still massively cheaper than the 783M craziness that is Seaterra. For 300M, if the governments pay 2/3, we can afford the other 100M in the CRD, especially split between east and westsides

tertiary treatment; revenue from reclaimed water, solids & heat; integrate into neighbourhood - visitor & education centre; scalable - increase capacity as community grows

Tertiary treatment facility, low visibility or odour, recycled biosolids

Not all of the projects above are particularly innovative. Yes, they include some resource recovery, but at least two are conventional secondary treatment. Resource recovery by itself is not innovative. It has been around for a LONG time. Resource recovery is possible with conventional secondary treatment. You do not need to spend tonnes of money for advanced treatment to realize resource recovery.

Tertiary treatment; decentralized; wastewater recovery, treatment and diversion to aquifer.
Treat sewage to a reasonable level 10:10 BOD/SS, recover and reuse biogas, recover phosphorous, recover biosolids for agricultural beneficial use. Anything beyond this is wasting money.
tertiary treatment using heat recovery while utilizing the treated solids for sale as an economic asset or for municipal compost for turf upkeep in parks.
advanced treatment plant,biosolids recycled,reclaimed water used, tertiary treatment,public access and use of the grounds
The requirements are simple. Treat the sewage and do it in a environmentally friendly way. If we can recover some of the solids as fertilizer or for compost purposes that would be great. Reclaimed water would be a plus. Taking along a pool, a library or a boardroom is not a must.
Tertiary treatment or high level treatment, heat and water recovery.
Tertiary treatment, Methane Treatment, Removal of harmful materials
Secondary treatment plantSome sort of solids reductionNighbourhood friendlyVisually appealingAffordable
Tertiary - reuse of effluent, save water - save money on aquisition of watershed landGasificatrion - reduces amount and toxicity of emissions in comparison to incineration- plus reclaimed energy syngas to sell- plus local control of end products which is responsible and will be cost effective in the long term.
Serious look at largest environmental benefit for tax payer dollars. Want to deal with emerging contaminants if possible (microplastics,microfibres,pharmaceuticals). Tertiary treatment with large emphasis on resource recovery (heat, water). No land application of biosolids (note even class A) - perhaps gasification. Leed standards, community space of some sort, pleasing aesthetics, public art. Other benefits would be site specific. The host community should definitely achieve benefits from hosting the project. Bottom line, this should be designed to be a community assest - not a liability. All of the planners should think like this is going next to their house.

Controlling capital costs, controlling operating costs and life cycle costing
Minimal cost to taxpayer because there will be no measurable benefit to the marine environment for spending all this money. You can built a Cadillac plant if you want but is it necessary atall? The Marine Scientists and Public Health Officials do not think so.
The science has shown that there is no net benefit to the community therefore build it as cheaply as

possible and do as little harm as possible.
Operational Cost Savings, Funding through amenity packages for local community, Effective Wastewater treatment.
minimal cost to taxpayers
cost effective build and operations. resource recovery. cheapest per user build that meets tomorrows standards
Be sustainable for future generations.practical, technically friendly,environmentally friendly, be a productive, efficient operation for all future generations, and affordable for all, not just the wealthy
None, meet the regulations and provide the lowest cost option to taxpayers
I'm not an engineer so I "can't say" What I do want is maximum logical/feasible/economical real world "reuse" and as small a carbon footprint as technically feasible. That means no wasting fuel burning things, or pumping them around on the one hand, no delightful design features that produce things that can't or won't be consumed (I like the concept of beneficial heat recovery but there has to be an actual logical customer, not just a hypothetical one.
Resource recovery incl. water and bio-solids, possible heat recovery, tax friendly and environmental responsible solution.
Lowest capital and operating costs
The benefit of not costing hundreds of millions of dollars. This project should mimic dockside and Henderson facilities. ANY benefit should benefit all taxpayers not a particular group ie.golfers, farmers and ranchers.
the costs to build these plants are shown but what revenues do they generate? Need to consider the net cost not just the upfront build costs.Recycling bio-solids, assuming there is a local market, is good.LEED certified not critical - last step to obtain certification can be \$\$.
Case studies #4 and #8 would be ideal. High cost but built for future population growth
Revenue generation, ability to expand capacity, using the most up to date technically available. To exceed the LEED levels. Set the example or benchmark for other Communities in North America.
Small cost effective and suitable for the site
Some form of revenue generation from reclamation that will help to cover costs as construction always has overruns and infrastructure costs and their maintenance are ongoing.

Costs maybe cheaper to taxpayer. We need value for our tax dollars
Public amenities are great but high cost to taxpayers is a concern.
Low impact; Sustainable; Cost-effective; Future Scalable.
Low cost is important. Secondary treatment is adequate.
Low cost - secondary treatment is adequate
Low cost for existing users. Build an adaptable treatment system that can be expanded. Future development would carry the cost of all expansion. Existing septic tank systems could remain as primary treatment functions. No mandatory requirement for mechanical sewer system hookup
If I had to, I would choose Dockside, only bcz it's in our community and we can visualize it. And whatever is most cost effective for our community.
These plants show that enhanced recovery is very expensive. Simple processing ponds are affordable. I think that we should build to meet regulated standards and put as much money as possible to allow for further enhancements for when regulations change. The benefit I want is low taxes.
-Cheap-Simple-Meets regulariry req'ts
No trucking of solids. Revenue generating uses. Reuse as much as possible
no more pollutants in the ocean. reasonable cost
Revenue generation
Lower cost - supplementary use - park land etc.

Other
1) Jobs 2) Green Space 3) Water feature 4) Interpretive centre
For me, #1 Calgary, Alberta and #8 Snohomish plants provide the benefits I would like to see built. They cover all the bases for an effective waste water treatment solution.
Dockside Green Membrane option and reuse of treated effluent option

The federal law should be challenged in court.

I'd like to have one like No. 6 in North Saanich in town centre in Exquimalt to help power the Rec Centre's pool heating and/or a residential/commercial multistory building that it is located under.

What a cat's breakfast of alternatives. Is this deliberately designed to confuse people? Why is Sechelt not here? Why is Whistler not here? Why are the facts about Docksider wrong?

Some of these facilities are NOT innovative, no secondary or percolating activated sludge facility are innovative. Furthermore, there is misleading information on Docksider Green. That facility is not built to serve 300 residents, that is misinformation or I should say a lie. Docksider green is built to serve 5000 people, so at this side, we would need 28 docksider greens for 350,000 people. However 8 plants with 25 megalitres/day each costing 50 million can do the job. The benefits of a plant to be built in my community would have to be tertiary with advanced oxidation followed by gasification of the sludge so that I feel we are actually doing something safe and environmentally sound for our tax money. Secondary treatment and dumping of the effluent into the ocean is NOT safe and neither is using the sludge in a anaerobic biodigesters. Reuse of the reclaimed water is also a benefit to the community in whatever form is feasible. Furthermore, discharge of excess tertiary treated and advanced disinfected water into the ocean or aquifer is another environmental benefit.

Jobs

I am personally not a fan of Docksider due to smell and constant problems - not working properly. Plan for growth as westside municipalities are the fastest growing areas in region.

It's too bad they don't live near the ocean where sewage can be pumped straight into the sea for wonderful environmental benefits.

A feasible and affordable mix of the 8 example solutions provided.

I don't want one anywhere near my house.

The majority of those listed appear to provide most of the sewage treatment and resource recovery facilities benefits.

it is amazing how nice some of these plants look....we want quality for sure and something that shows off Victoria area as leader in this area.

Blaine, Washington and Henderson, Nevada seem to show cost/benefit. Again, however, there just isn't enough info here. Before making decisions, as a taxpayer I would like much more detailed info. There is nothing here that lists pros and cons.

Have experts do an evaluation of all of the above and have them tell us what benefits can best serve our community. Again to complex a project for the average person to provide direction on such a complex project.

What is being described above is simply the outcome. I believe what is most important is; how are we going to get there? what are the compromises? how much is this going to cost us? is there going to be any revenue generation? what will be the plants life expectancy? how much will it cost to operate annually? how many jobs will it create? Given that the average taxpayer is not an expert on the subject and our opinions are mostly based on what is being portrayed in the media, whether it's good or bad, I strongly believe the waste water committee should consult with The professionals and from there provide the taxpayers the pros and cons of each options. This way we would be in a better position to make an informed decision on our future.

Provide local jobs

Some form of compensation for a site in lieu of taxes particularly if the site is regional or sub-regional (west side as a sound geographically based solution)

I like #6

Local ownership and employment

#2 Dockside

Whatever the benefits are I would like them to be stay local.

I like the Saanich peninsula model.

I don't see it as a benefit but a responsibility

Prefer a combination of slide 4 and 8 for a target population of 250,000.

Saanich Peninsula. Passed this location thousands of times. Never knew it was there. Never drove by with any fowl smells. Perfect!

LESS SEPTIC TANKS BY 2020!! Just build it! stop studing and do it. This is for colwood not CRD.

The Olympia WA solutionThe Snonomish county

I would very much like have seen the Sechelt facility being offered as a possibility, and was very puzzled

as to its exclusion. that facility is similar in size to what Colwood would need, population-wise. It is also an attractive building that has been instrumental in the increase in the selling price for homes across the street from it. And the technology is what I would consider leading edge, but very simple, very resilient to upsets and proven successful in dozens of plants in Europe, as it is a Hungarian company who markets the technology.

5 and 9 and not an option for me.# 3, 4 are interesting solutions (high quality effluents are crucial, valorization of wastes too. have to be uv equipped)#7 is a great way to treat waste water in biological process. But some industries can be harmful to that kind of treatment. So some research must be done about the type of industrial activities in the area.

A clean conscience on the need to minimize our growing environmental impact. Clover Point is a disgrace.

Snohomish County, no P3s!

I would support all solutions.

no odor, no toxic wastes.....use solids for ?????

Expanded (based on current and future population projections)versions of Dockside Green or Saanich Peninsula Plants

The above plants range in cost from about 14.50 per person served (Henderson Nevada) to \$10,000 per person served (Dockside). I couldn't support spending significantly on upgraded sewage treatment without a comparison of what other benefits the community could achieve (solving homelessness, transit options etc) for the same amount of money.

Most of the above in the examples in other areas...

Partly depends upon the site(s) available. need more info but hope for tertiary treatment

Something similar to dockside greenbuilt with future expansion in mind.

I liked # 2 (dockside),4 (LOTT),5 (Edmonds),6 (Saanich)

I support multiple treatment plant. In the event of the overdue major earthquake if one plant was all we had for the whole city and it was taken out by a tsunami there would be no sewage for the whole region!

The sorts of amenities that Esquimalt was requiring as a condition of approving a plant there.

Love these. I live 400 m from Viewfield and while I strongly objected to the Anaerobic digesters being placed there, I would have supposed a Dockside Green style building with residences, shops, maybe a

farmer's market...

It could be a showcase project like the Lighthouse Point facility in Blaine, WA or an advanced tertiary facility like the one in Sechelt, BC.

The 9 examples show that design is a function of the assumptions made in context. I don't have a preference until the assumptions inherent in "our" context are clear.

I think the one at Saanich Peninsula would be a good fit for Langford

Again, we don't need a sewage treatment plant in anyone's neighbourhood. If this gets railroaded through, lets put it in the construction company CEO's back yard.

Do not want a facility in my community!!!

None of the above examples mention whether people living close by are bothered by the smell. That would be a concern to me if the plant were in my neighbourhood. A lot of the above mentioned points are features rather than benefits. Obviously any local facility would need approval by the people living close to it.

I DO NOT want to see sewage treatment plant built in my community.

Leed

I do not support this project in my area. Not in my back yard!

same as Dockside Green and Sooke

Heard some of the current plants invermere

Firstly we just have indicated that treatment plant was not practical on viewfield and mcCloughlin point. However I am not opposed to have individual processing plants in each community if financially practical and affordable.

I don't want any kind of sewage treatment in my neighbourhood.

I don't want it adjacent to our small community - it would destroy residential value if it was built in Thetis Cove area..

#4

8.) Do you have any additional comments or suggestions for developing plans for sewage treatment and water/energy recovery? (171 responses) Answers categorized into 11 themes:

- Recovery of water from sewage, its costs and potential benefits
- Recovery of energy from sewage, its various forms, costs and potential benefits
- Integrating a sewage treatment/resource recovery centre into an existing community, its potential problems and benefits
- The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard
- Controlling capital costs, controlling operating costs and life cycle costing
- Criteria which should be considered when siting a wastewater treatment or resource recovery facility
- Public process and presentation of information
- Do we need wastewater treatment?
- Timing of the project and extensions
- Public vs Private Ownership
- Additional Comments

Recovery of water from sewage, its costs and potential benefits

Plan ahead for water recovery, to relieve demand on our drinking water. It makes no sense to flush toilets or wash cars with drinking water, especially when more of the world is experiencing record droughts.

If we can exceed the required regulations and add a little water reclamation and heat recovery within a reasonable budget all the better, but these extras should not be what directs the final required treatment outcome.

Recovery of energy from sewage, its various forms, costs and potential benefits

Gasification should be a real option for treating biosolids.

Give the community the benefits not only from the resource recovery but also possible monetary benefit.

Biosolids can be further processed to produce biogas oil and biochar free of organic contaminants of concern- biochar is a good long-term source of nutrients for plants and soil carbon sink. The technology exists- should be considered as an option for biosolids processing

apply gasification and biodigesters to recover as many resources as possible.

My biggest issue in terms of environmental benefit - tertiary and gasification – best

Secondary is worse than our current system because all treatment systems provide a breeding ground

for antibiotic resistant bacteria. Only tertiary effluent is clear enough to treat properly and with lower energy cost. Only gasification destroys that ARB in the sludge.

World phosphorus supply is declining. Phosphorus is needed for fertilizer. Urine is high in phosphorus, nitrogen, potassium and is a valuable commodity to be factored into cost and resource recovery. Humanure is used for soil amendment around the world, and has been so for millennia. Humanure is different from sludge: which is a concentration of the worst byproducts of big system treatment processes, resulting from our mixing human excretions with grey-water "detergents, household cleaning chemicals, etc. Pilot test location specific, household waste treatment "waterless and urine-separation toilets, incineration toilets, and humanure composting. Pilot test a district humanure and urine collection system to a community gasification/ biochar/phosphorus processing facility.

Personally, I feel that too many people when confronted by the aspect of sewage treatment see only the primary economic picture. They see what they view as a very large economic figure and fail to see that while the initial cost is economically more costly, that the by-product is a dry pellet-like ecologically and bacterially sound medium with coliform counts down to safe levels; a product which has a myriad of both home and agricultural applications in exchange for an ongoing financial re-numeration; alias the on-going generation of revenue. And besides, with the continuing increase in population the only thing that will happen is that the quantity of the by-product being produced will be an ongoing increase in volumes of solids to be properly treated. Furthermore this will generate more revenue.

Siting of and Integrating a sewage treatment\resource recovery centre into an existing community, its potential problems and benefits

Each community should deal with their own waste water no big mega projects we need to leave livable and affordable communities for our grandchildren and great grand children

Why isn't Oak Bay involved? I think the best place for a complete plant that does the whole process is at the Empty Gravel site in Metchosin. One pipe and do it properly the first time. Recover everything nothing out to sea.

Proposed sites must include the Government of Canada land adjacent to the existing MacAulay Point wastewater outfall facilities commonly referred to as the "DND land". These lands belong to the Government of Canada, not DND. There is considerable precedence for use of Government of Canada such as the numerous long term lease concept with the various Canadian airport authorities including the Victoria International Airport and/or arrangements with First Nation organizations and even the existing arrangements for the existing MacAulay wastewater outfall facility.

Potential sites should be made known as early as possible.

Any community that gets a treatment plant located in their municipality should get more out of it or pay less for it than other communities/municipalities that use it. (eg reclaimed water gets used in the plant first, the municipality where it is located second or waste water treatment rates for that area are lower than other areas, or extra capital improvements where the plant is located like information centre or bike paths... - whatever that community believes is most appropriate compensation).

Keep it away from peoples homes

As communities expand, sewage treatment plants should be expanded as well - to meet with the growth and the plants use technology whereby the communities benefit from the sewage treatment technology

I don't believe its in anyone's bests interest to have 10 or 12 treatment plants spread out across the region be it the Westside group the Eastside group or a combined group. I know I wouldn't want one in my neighbourhood and I think that would be backed up by others if you started approaching established neighbourhoods with plans for smaller treatment facilities.

I could see a couple of treatment plants Westside/Eastside, but I think a single facility would be the most cost effective solution.

I have been a supporter of the McLoughlin treatment plant as it made sense to me.

The Esquimalt site that was proposed for CRD plant was too small and needed variances, however it is at or near the end of the sewage collection system and at or near an Ocean outfall. The cost savings of this site may be significant if a smaller plant is proposed (ie Westside rather than full CRD and all other options should be costed against this one.

I liked the old plan. It made a lot of sense to me and seemed to have most of what we require in a sewage treatment facility. Now that doesn't look like it is going to happen and I think that is too bad. To be honest I don't really understand what the fuss was all about. We need to treat sewage. Why can't people just let the professionals do their jobs and get this done?

A better approach would be to design a plant that would be a benefit to any community, not one that would reduce its livability. This can be achieved through: 1) Architecture that is pleasing and comfortable; 2) Functionality beyond simple a sewage plant - i.e. other businesses and activities that will attract people and 3) Financial and environmental benefits from resources recovered from the sewage stream. If a plant can be designed to meet these simple criteria, why wouldn't any community not want to have one within its boundaries?

No one municipality should be required to assume the responsibility of hosting sewage treatment for the region. A distributed system where each municipality treats their own sewage is preferred. Maybe those municipalities who have issues with stormwater drainage in their sewer systems will have to take

some responsibility for their own infrastructure.

It seems to me that Macaulay Point was an excellent choice since the land is not close to permanent residents and is already unsightly as well as in an area where there is adequate tidal movement.

I choose to live in View Royal for the enjoyment of this beautiful area. I am not interested in this project being located where it is proposed.

the site in View Royal would ruin our area including property values: smell, traffic increase etc.

Choose the right location, keep the public informed, choose the best treatment process, don't put too much emphasis on energy recovery, plan for the future and control the costs.

Keep earthquakes, tsunami, tailing pond breaches and other disasters in mind.

Criteria which should be considered when siting a wastewater treatment or resource recovery facility

Put plant underground, control noise, smell and truck traffic, put plant away from residential areas!

small footprint complete package on site ie. no trucking out, pipelines or outflows

don't place it in a tsunami zone

Have many back up plans in place in case of terrorists, earthquake, financial collapse, or climate change overtaking the system.

I think that the site(s) location is one of the most critical items to finalize. It is critical to take steps to minimize the impacts on any nearby property owners.

Would like a site chosen that has as much "open" ocean as possible. (no coves or bays) Don't build in a large residential area that would be compromised by having the plant near it. Look at other areas that are not by the ocean, lakes or rivers. Look inland. I understand that you've only looked at land by the hospital. Look at other areas as well. There's undeveloped inland that could be used.

Please try and keep the facility away from our coves and oceans.

Do not build plant in developed (residential) area.

There must be a suitable place for this, away from where people live & away from where we enjoy the ocean!

You cannot build something like this in or immediately adjacent to a residential community where the

facility is your view. It would destroy value and impair homeowner's ability to sell or buy property forever.

I would like an overview of the process and results of the Esquimalt facility that was turned down. What type of facility and why it was rejected.

Open and transparent communications, no hidden agendas, proactive versus reactive management of project, accountability, all issues raised should be addressed and residents concerns should be heard and what ever outcome of where facility will be built that those residents who are directly impacted will be financially compensated for any negative result on their property or sale of their house because of how close they may be to situated to new facility i.e. reduced property taxes. Parking needs to be considered when building this facility, residential streets are already restricted and limited.

Please choose a location where it generates the most benefits to the local community. Insist on not impeding main traffic flow during construction. Do not allow for overly generous pay scales, no bonuses and contracts must be backed by a no cost guarantee that there will be no hidden charges for 5 years after completion. There must be a money back guarantee that it will perform as per agreement.

Any alternative needs to be compared to the cost of McLoughlin.

Build a plant that can be expanded as needed.

If you can make a system that produces no odour then placing it near residences should not be considered.

I think mayor issues are:1) reduced impacts on local community 2) ensure "benefits" - ie. use if reclaimed water for irrigation - make sure these benefits are part of the design. Where possible ensure community itself benefits from the treatment plant 3) ensure built on a safe site (eg. not land that will liquify during an earthquake 4) use highest level of treatment possible to increase recyclable product and reduce amount in landfill.

All the facilities must be resilient: they must be designed to withstand all foreseen risks. Redundancy of components is a necessary condition for resilience but redundancy is not sufficient. For example, the Halifax facility included redundant back-up generators but the load on one of them was too great so it failed. We need redundancy PLUS robust components.

I'm sceptical that you can find enough sites for a (financially realistic) decentralized system. I would prefer that you look for an alternative centralized site upon which the proposed McLoughlin plant could be built, ideally along with a biosolids/resource recovery facility. I would also have no issue or concerns if McLoughlin was put back on the table.

The advantages and disadvantages of treating to a higher (tertiary) standard or the minimum (secondary) standard

There are many newer facilities with tertiary treatment and resource recovery in operation and there are very capable engineering firms in the region - so in my opinion we should 'tap' into these resources!

Do not plan for anything less than tertiary treatment due to: superbugs, chemicals, pharmaceuticals, and micro plastics ending up in local marine environment.

Important to build in capacity for a) expansion b) advances in removal of pharmaceuticals and other toxins. Looking for strong innovative green solutions.

This sewage treatment plant should aim for the highest standards that are presently available. Tertiary treatment to potable water standards and zero discharge of solids and water should be implemented.

Each municipality should compare a tertiary treatment facility that is in operation and see if they might build the same ... on public land.

Cost/benefit analysis should be considered for heat, water, energy and bio-solids marketing. Geothermal, solar, methane and water flow energy production should be in the calculation.

Every municipality should include a small tertiary design to capture some of the energy that is wasted. Any municipality that is not prepared to incorporate tertiary treatment must designate an area within their own boundary, where sewage contaminated debris will be dumped after the next large earthquake.

Yes, forget about water/energy recovery and build a sewage treatment plant. The notion that these things make money is a supposition with no solid foundation. Stop wasting taxpayers money already and build the approved plan. A LWMP trumps zoning!

We need tertiary treatment. It is completely ridiculous to spend hundreds of millions of dollars just to get secondary only and still be polluting the ocean and not using water and biosolids (still dumping heavy metals, pharmaceuticals, etc and not recapturing/reusing energy from gases, biosolids, etc). We need a total re-think of this project. Look at partnering with Colwood, or somehow linking into their tertiary treatment model. Go for the highest environmental standards. Look at cost recovery through use of gases (heating, power), and biosolids (compost, fertilizer). Make this a project people can feel proud of, that is an asset to the communities it serves - education centre, library, habitat and wildlife enhancement through parks/ponds/streams/trails. Thank you.

We really have to plan for a very long-term facility in a self-sustaining community. It would be worth spending far more on a facility that pays for itself by recovering resources. This makes both

environmental and economic sense.

GET CONSENSUS ON FIRST PRINCIPLES BEFORE JUMPING INTO THE DETAIL. FIVE PRINCIPLES. 1. We cannot put toxins on the land. Or keep dumping them into the ocean. Zero toxins MEANS gasification--for hydro--with syngas scrubbers. And probably plasma gasification. Biodigesters do not remove toxins. 2. We need to recycle water. To 100% potable water-eventually. This means build the structure for tertiary now--DISTRIBUTED--with high enough quality to go into the aquifers from Day One. And, capable of an upgrade to potable over time. So we never need to built a second dam and treatment centre in the \$300,000,000 watershed we bought for that purpose. 3. Integrated waste stream. That is, build the Gasifier so it can deal with sludge AND all the NRW (non-recyclable waste) from the region. And things such as asbestos and old tires. 4. Capture toxins at source wherever possible: hospitals, plants or operations that use heavy metals must do their own capture. 5. Fix all I&I within five years. In the mean time: heavy fees for Oak Bay and others based on an estimate of all the extra storm water that flows into their sewage. Put meters in the pipes if necessary.

all regional storm water issues should be addressed immediately. all regional future development should include tertiary treatment to grey water stage design with nature and natural capital in mind, restoration of natural capital costs big when it is ignored

Controlling capital costs, controlling operating costs and life cycle costing

Don't let the Seaterra team continue with this project, they'll ramp up the costs too much.

I am concerned about the cost of any system that we select. Many residents are struggling with the costs of taxation from all levels of government. We cannot afford the "Cadillac" system. I am already paying increased taxes for a system that has not even been designed, let alone built and operating. I am seriously thinking of moving north of the Malahat to avoid paying for the costs of this project. Unfortunately I am not alone in my thinking.

Costs should be made known as early as possible and be upfront.

like to have full life cycle costing including natural capital benefits

In minimizing cost the cost should be calculated over 50 years. This will be difficult with the unknown cost of energy and of carbon emissions in the future and the unknown value of the recovered resources. Energy cost unknowns can be minimized by using solar panels and batteries. This combination can also be used to decrease or eliminate reliance on diesel generators in power outages.

Recognize that having a more than one treatment plant is almost guaranteed to be more expensive, and be more inefficient, than having a single centralized plant. I anticipate total costs of west and east

side treatment of over a billion dollars. These costs should be shared evenly across the service area. Staff costs, transportation costs, land costs and construction costs will all be greater than they would have been at the McCauley Pt location if more than one plant is built. If we're going to spend that much on plants, let's get as much resource recovery as we can out of the process and not hear any whining about smell, solids incineration, etc.

I recognize that the opportunity for the CRD's lowest cost option of a central plant no longer seems feasible, but I certainly hope that this "Westside Solution" will be as cost effective as possible and completed in the time frame according to the Federal regulations. I also hope that it will be completed using proven technology, so that there are less risks than attempting to use a "new and innovative" technology that hasn't been tested and scaled properly to accommodate our growing population.

Keep the costs down.

Feel a critical part is how CRD is going to split the provincial/federal grant money between Westside Solutions and the group presenting Victoria, Saanich and Oak Bay. Lack of grant money will handicap any recommendations from Westside as tax payers aren't able to support a capital rich project with high operating costs.

get \$\$ contributions from Federal Provincial, CRD and Western municipalities so that Colwood can share the capital costs and operating costs.

For our household cost is the most important factor for this project.

As a tax paying home owner I will feel I haven't been heard if I see a bigger increase in my tax contribution than I would have if the McLoughlin option had been approved including the benefit of both the federal and provincial funding grants.

One treatment plant makes economic sense both for capital costs and maintenance costs.

Priority #1 for me is what is it going to cost to build a sewage treatment facility, what will be the annual operating cost, what will be the financial impact on property owners and how will it be calculated.

Watch the cost. A plant treating all of Victoria is almost certainly cheaper. I would not pay much of a premium for a west side solution. Do not inflate cost and complexity by resource recovery. Energy costs are speculative. We are talking about five small municipalities with limited technical resources and an over extended staff. We should not consider anything but proven technology. Let Toronto or Calgary develop new concepts. We do not have the staff skills to manage much complexity.

Limit the salaries of all concerned... back to equivalent pay and benefits of private sector. Train people to operate the systems.

find and reward those for implimenting new available ideas... via tax credits

Put a "cap" on all municipal salaries to allow the CRD to remain sustainable.

Upgrade the technology as soon as it is proven to make the system financially successful

Good luck in meeting funding deadlines.

I think my final decision would largely be based on cost.

Taxpayer will be willing to pay if the treatment system has real environmental and health benefits at reasonable cost.

Public process and presentation of information

There must be mountains of existing data and information to draw resource information from.. Science must lead the way and be accepted. Not touchy feely emotion that drives much of this issue.

Great examples of treatment facilities shown. The ones that are not in the middle of a residential area, are visually appealing and serve the environment well would be what I could go for. Like the project lighthouse in Washington okay.

Go slowly in engaging the public and listen to their ideas.

Thank you for the opportunity of providing input even though I live in Victoria.*** It is a huge challenge for all of us in the CRD moving forward. Mutual respect, collaboration and strategic (out of the box creative thinking) will be necessary to find solutions for today, tomorrow and into the future (for our kids to carry).

There should be a referendum similar to 1992 to ask the people if they want to pay for sewage treatment or not. The Local Government Act and the Regional District Liabilities Regulation do not prohibit a referendum on sewage treatment, only that "elector approval is not required" for the management of municipal liquid waste. If federal jurisdiction over oil tanker traffic can be challenged, then so can the federal law on sewage treatment.

Looking forward to next steps

This survey scratched the surface of the issue. paints a rosy picture of innovation, and leaves alot of unanswered questions. It's a start I suppose, but the clock is ticking. If it were so great, we should just stay with CRD's proposal and avoid all this additional cost and analysis.

More regional public open houses/meetings. Stakeholders must be consulted and involved. Thank-you!

You should be involving Saanich in these discussions. See page 25 in the report from 2010 available at: https://www.crd.bc.ca/docs/default-source/seattera-pdf/funding-business-cases/2010_buscase_abusinesscaseforprovincial-funding_cawtp_march-2010.pdf?sfvrsn=2ofr one illustration of how much of Saanich is served by a main line that ends up in Esquimalt (via Vic West)

I have mentioned my concerns in the other questions, but my most serious concern is that this survey is once again promoting elements of the failed CRD plan by presenting misleading information. In other words, it is starting on the wrong path right out of the door.

I think the way this survey was set up was unhelpful in that it often asked me to limit or prioritize my concerns. The problems that CRD has had so far with sewage planning all stem from this "either/or" approach. The problem has to be solved holistically. Not "Cheapest option" vs "best treatment", but "What is the best solution, accounting for ALL the concerns and considerations?"

Petition the federal and provincial governments to cancel the entire absurd idea and develop a long term strategy that truly addresses this problem as the population grows and existing infrastructure deteriorates.

Please open your discussion to include all opinions, even those that are not "the current flavour" but are based on actual science and reality.

Keep up the excellent work! Thank you for the opportunity to engage! And I look forward to updates and further opportunities to engage through this website which I learned about through the TimesColonist site.

After years and years of discussion and bickering please get on with it. Thank you

Evaluation and assessment of various possibilities should be adequately compared - apples to apples - in an easy to understand format.

Much more information so we can attempt to educate ourselves before providing input.

Have the expert develop a few options (only the viable options), then go to the public with them. Otherwise this exercise will only get bogged down in too much public discussion.

I would like to see more interaction with the public or public communication about how to access information. I think the communication has been poor unless fairly close to the subject or those involved. This closetted approach has wasted much time in backing up before being able to go forward. I believe there should be a lesson learned from that and updates in the local news, flyers to residents or an effort to create emailed updates (maybe through website sign up) should be a priority this time

around. Thank you.

As you were well aware any decision made with this project will be controversial there's no way that everybody can be satisfied. I believe the committee must take a firm and fair approach, and provide taxpayers all the possible options and outcomes of what is being proposed. Once this has been completed and the public has had a chance to weigh in, then the committee will have to stand firm and make a decision and not let a minority of unsatisfied resident overrule the project. I guess what I'm trying to say here, everybody wants to be environmentally friendly and treat our wastewater, however no one wants a treatment plant in their backyard, unfortunately given our densely populated geography, and fragile ecosystem in the greater Victoria / westshore there's no way this can without upsetting a few.

Encourage innovation; check out all options to do better than the minimum legal requirement; combine good ideas from one concept and combine with those from another. Have a several design charrettes during the process to coalesce different concepts and carry them forward - don't eliminate something too early.

Glad this is being done at the local level, good idea reaching out for input electronically, as not everyone can attend open houses.

I don't see anything in this survey that leads to solutions. This seems to be a rehash of the original issue. Instead of the whole of the CRD pushing a "solution" on residents it's now a sub committee setting up to do the same thing. The one thing heard loud and clear on this issue was that this was not the community in which to build a sewage treatment plant and that residents (in the whole of the CRD) want a more technologically advanced solution (ie. do some REAL research) than any proposed or considered currently.

This survey is certainly biased to decentralized treatment with higher than needed treatment to meet regulatory requirements. No questions about whether the people that are paying would prefer 1 centralized regional treatment plant. The old adage that "it is easy to spend someone else's money."

Continual public forums to solicit a cross-section of views.

Although I plan on attending one of the upcoming community meeting in order to obtain additional information, progress on these initiatives should be posted to a single website in order to ensure residents have the ability to remain fully aware of how the project is progressing. Perhaps, after attending one of the information meetings, I will become a more active participant.

Plan the public meetings for a weeknight or a weekend. It would be helpful to know these meetings will not be municipality specific. Anyone can attend any of the forums and get same info. Geographic information showing potential siting and areas.

Get the right team involved! CRD has been spending money for 20+ years trying to avoid secondary treatment, rather than planning for it. That's why we are where we are now. Long range planning is critical, rather than their typical last minute reaction/panic. Amalgamation is critical, as there are just too many independent players to make anything work properly.

Hopefully, world-renown experts were consulted for options -- additionally, the latest scientific research papers in industrial-scale wastewater treatment.
<http://www.waterworld.com/articles/iww/print/volume-10/issue-4/feature-editorial/using-natural-systems.html>

An excellent open house and good to see existing innovation treatment facilities. Lets have a tour of local sites.need to compare apples to apples. Congrats to our mayor and new council for championing a future - oriented, environmentally sound vision.

Just keep talking to residents first! Such a relief to be able to work with you to make this work instead of being asked to comment on a plan that was created without public input.

I appreciate these early efforts of meaningful consultation. Please KEEP IT UP!! I have indicated preferences, but really I am interested in most aspects of the planning. I want the best sewage plan that will put the region in the best position for the future. I am happy to see that the process at the CRD is also being opened up to examining technologies. Thanks!

Thanks for exploring options and CONSULTING!

Thank you SO MUCH for hosting the open houses. When it comes to sewage treatment, most of us want to do whatever we need to, to keep our environment healthy, but we also want to get the "most bang for our buck". I think it is prudent to design a facility that will do us for many years to come.

Thanks for the opportunity but lets do it! Take a systems approach - plan, implement, evaluate, adapts and replan. 21 centruy thinking. flushing the toilet into the sea was 18th century thinking by Mr. Thomas Cooper in England. Thanks

1. Invite the designer/s of the three "best" developed treatment plants [suited to our needs] and do a best practices/benchmarking consultation with all key stakeholders and contributors. 2. Design and develop a strategic framework through a consultative engagement process to move the Westside Solutions forward. 3. Within this framework, design n develop performance criteria and measurement system to ensure all the priorities, decisions and actions have both quality and quantity measures, results and outcomes. The final set of performance measures will be used to report out progress and performance of the final Sewage Treatment system back to the public, municipal and federal government as part of its performance management system. 4. Additionally, design and develop a business case which includes revenue generator criteria as the Sewage Treatment Plant recycles water,

waste solids for compost and bio-fuel products. Thank you for the opportunity of providing input to the Westside Solution.

Don't move forward with planning this until there has been a regional referendum on the subject after an informed debate led by scientific experts, not potential investors and construction contractors who stand to profit heavily from another unnecessary public mega project.

Congratulations on this consultation process. You've accomplished a lot and I can see you are working towards informing the public. I have just one concern about this survey and material and that was the bias towards "beneficial biosolids". The world of sewage treatment has changed since the introduction of flame retardants, micro-plastics, micro-fibers, and superbugs. These didn't exist in the quantities they do now in sewage. So the old way of thinking that the nutrients can be used in some way needs to be balanced by consideration of this new information. In the next phase I hope we add some material that helps people be aware of this side of the story. We'll work towards giving people the information they need to help make a decision that is good for the region and our future.

just to keep public engaged and informed like this

The CRD Director Nils Jensen and all other CRD Directors must attend all sewage meetings (unless ill). They must attend all meetings when there is a vote or motion regarding sewage. Miss three ... position will be automatically replaced by another Councillor. All future votes for CRD Chairman must have a scrutineer to verify transparency of the voting process. All CRD Directors must take a tour of Dockside Green to understand the tertiary treatment potential benefits.

Saanich's Hartland Waste facility will not be accepting sewage contaminated waste due to lack of planning for raw sewage ruptures. Oak Bay - Check your Liability Insurance. Thank you Colwood and Esquimalt for demonstrating leadership and an open inclusion of public ideas.

The Technical and Community Advisory Committee (TCAC) to the Core Area Liquid Waste Management Committee (CALWMC) recently passed a motion recommending CALWMC ask the Province for a deadline extension to 2020 so as to align with the Federal deadline. I hope this is pursued.

And fire Albert Sweetnam, immediately. A million dollar mistake for a non-existent project.

We have been given information on capacities, costs and resources recovered by these various alternatives. What about the toxic air pollution? The air pollution from these land-based treatment plants is completely ignored, while the proponents of sewage treatment howl about insignificant concentrations of pollutants present in the sewage dumped into the ocean. That is hypocritical.

Good luck with developing a wastewater treatment system that is more cost effective than a centralized system. Glad I don't live in one of the Westside communities - wastewater treatment is going to cost

those taxpayers significantly more.

pls do not let a few outspoken individuals prevent the process from contining again. Thanks for the time!

Add street names to the CRD map of existing infrastructure so people can get a handle on reading that map

Completely take the idea of an ocean outfall out of the equation. Thank you for the open house. Hopefully you will have support from the community to get this done!

In order:1/. I think the political hurdles need to be defined 2/. Suitable partners need to see if their criteria are a good match, my greatest interest is in seeing if Colwood and Langford can connect 3/. If 2/. is a go, then the site almost picks itself, Colwood Park-&-Ride. 4/. Choose a technology and initiate the project train of events

It would have been nice to have a comments section with your questions as the questions are narrow in scope.

The previous path taken by the CRD in trying to site a sewage treatment plant was based on using perceived legislation to force a poorly designed plant on residents that did not see the proposed design as adding value to their community or to the region. Not even money, in the form of deferred taxes, etc., would force them to take it.

I live in Vic West, which shares with Esquimalt the trunk line to the Macaulay Point outfall. My natural affinity is with Westside Solutions. Don't let the eastside group waylay me and spend exorbitant sums to ship my wastewater across the upper harbour to Clover Point. Drop Seaterra right now. It would spend hundreds of millions for pipelines and very little for actual sewage treatment.

Don't consider the exclusive partnership of these 5 communities +CRD as carved in stone. Maybe Saanich or Highlands should/could be involved.

Timing of the project and extensions

Get the job done!

Get off the loony already and start treating your poop (from a neighbor across the strait directly south of Victoria)

Lets get the work done now and stop talking about it. Every day we do not address this very important environmental issue is another day we continue to damage our environment.

Needs to be done asap. Has been dragging on forever. Citizens need to get their heads out of you know where and support your endeavours. Suck up all their bitching and move forward. waiting only drive costs up. The longer people procrastinate the more we are all going to pay. We are retired and really cannot wait years for this project to happen. Your presentation was welcomed. Thanks a bunch

Get on with it asap since you are polluting our ocean.

Build a treatment system in time to meet the 2020 deadline.

Stop the silly bickering now - enough money has already been wasted in red tape - just build the thing and get on with it!

The longer we wait the more tax dollars it will eventually end up costing residents

Lets get going on this!!!!

Stop studying. Just do it. this has been talked about for over 30 years. Stop talking and just do it. For every year that this has gone on it means it just gets more and more expensive!

Move ahead sooner rather than later. It is well established in business that a quicker decision contains no more mistakes than one made after prolonged consideration.

get it done!

Start date should be expedited

Get moving on it quickly. Really appreciate the opportunity for public input. Also appreciate the cooperation of the Westside Communities!

Let's get on with it. Select the proper site once and for all that meets all the requirement and make sure that CRD is held accountable for their actions which they obviously were not for the viewfield fiasco.

We need to get on with it. Every year we procrastinate on this the costs escalate significantly.

Soon!! And without the horrible inter-municipality mud-slinging we've seen so far.

Project should be expedited and not pumped into the ocean

This is a very difficult project. As a member of the community who has no expertise what so ever about sewage treatment. The only comment I have for the various municipality is put the egoes aside and get on with it.

Let's get this going!! :)

Do we need sewage treatment?

Can you prove that current sewage treatment is harmful to the environment?

Don't create the problem in the first place - don't switch to land-based treatment. Pay attention to the science, which says our current system is environmentally friendly and sustainable.

Its a waste of money. We have a system that works, doesn't harm anybody or anything, and is only being considered due to politics, and politicians without a backbone, that can't stand up and protect the taxpayer

status quo as per science. elect a new government, change the policy, and save our money.

Listen to what scientists have said about our need for sewage treatment. I understand that we have a unique situation here and treatment is not required.

I'm still not convinced of the necessity for this huge treatment system, distributed or otherwise. The project remains viable only as a result of a politically correct response from the highest levels of government. Logic still evades project practicality.

Fast decision making, timely approval process and properly managed projects!

Just remember that the Regulators could be challenged by having a Judicial review of the Federal Regulations. Marine Scientists and Public Health Officials have presented very credible evidence which could be provided to a court of review.

Let us do this as local residents. We have been "forced" by our federal and/or provincial government to abandon our current scientifically vetted outfalls. OK, let's make something for us now and for the future as well.

Public vs Private Ownership

NOT P3

Keep the project under public control and capitalize on the 2/3 subsidy from federal and provincial government.

I would be more involved if you assured taxpayers that any facility built would be a publicly owned and publicly operated facility. Where the civic operators are accountable to the public

Only that I would like this project to be publically owned and operated.

This survey was not sufficient in that it did not ask residents whether or not they confirm their previous

support for public operation of this facility. Please ensure it is an accountable, publicly operated facility...not a P3

Like I said before, management and operation has to be done by public workers. Keep it public to be sure to have high standards.

Let more local business (or at least BC) instead of multinationals. Keep it entirely public, no P3

We must ensure that whatever solution is chosen that it remains in the public domain, NO P3s'

Additional Comments

encouraging businesses and government buildings to use rainwater in toilets

Needed. Necessary. Will be expensive but so beneficial for all. Must maximize effective processing with positive uses for end products. Climate change is too late to divert so thinking must be innovative and on cutting edge for diminishing environmental impacts. Create more public awareness.

not at this time

A single plant for the Core areas is a bad idea - at least 2 preferably more sites should be considered. Wastewater and biosolids processing should occur on the same site. Trucking of construction materials should be minimized for the health of residents.

Insured pedestrians, bikes, mobile scooters and Rapid Transit buses should only be permitted to ride above the pipeline routes.

Safety from harmful chemicals or untreated sewage is paramount. There must be contingency funds built into the funding to ensure third party environmental impact studies are done at reasonable intervals (clean air, proper function...) and clean up or repair costs are planned for and built up over time (budgeted in from the beginning).

best wishes

build it to last 200 years

Just a word of thanks for engaging the public on this very important issue

not at this time

Include other sources of renewable energy within confines on sewage treatment property / infrastructure.

not at this time.

What is going to be done for the large hole on Wale Road also the unfinished building by Colwood corners. It makes us look like a good place to rob and get support but leave Colwood with the cost for it to be finished or filled in.

Must consider where septic tanks are the best option and build to service those who must be on sewers only. Keep it small and local to minimize costs.

Yes, how are you going to charge taxpayers on septic systems for a sewage treatment system they can't use? Septic users are paying twice...once for their septic system and again for sewage treatment. Install mainline sewage extension lines.

None at present

Lets do what is best for Colwood. More action less talking. Cost effectiveness. Due consideration of neighbourhood and community values.

Not at this time.

Again, there are many solutions...a weighted scale might work here...

I know our Mayor Barb will do what's best for us as I trust her passion for her community.

I hope you will consider including me for more in-depth discussions on this important topic. Thank you

Lots, but I'll wait for when we begin the process of discussion.

As always.

Re Q7. I am interested in learning more about the topics but don't think I have any particular insight or knowledge to add.

De-centralized treatment is the way to go.

Let's build a long-term solution that benefits us the tax payers and the environment and also keep in mind that water is a very precious commodity.

Question: if Langford decided to go it alone, would ocean discharge via Goldstream into Finlayson Arm be an option?

good work westside.

GOOD LUCK TO US ALL!

Thanks to those that dedicate themselves to this project.