



DATE: March 3, 2020

TO: Chair and Directors

Comox Strathcona Waste Management Board

FROM: Russell Dyson

Chief Administrative Officer

RE: Regional Organics Compost Project – March 2020

Supported by Russell Dyson Chief Administrative Officer

FILE: 5380-03

R. Dyson

Purpose

To provide an update on the Regional Organics Compost Project (the Project), and to recommend a targeted amendment of the Solid Waste Management Plan (SWMP) to include the location and capacity of the compost facility and transfer station.

Recommendation from the Chief Administrative Officer:

THAT following advice from the Ministry of Environment and Climate Change Strategy, the Comox Strathcona Waste Management Board initiate a targeted amendment of the Solid Waste Management Plan for the Comox Strathcona Waste Management service, to include the location and capacity of the compost facility at Block J in Campbell River and transfer station at the Comox Valley Waste Management Centre.

Executive Summary

This update summarizes the progress made regarding this project.

Ministry of Environment permits

Staff met with the Ministry of Environment and Climate Change Strategy (MoE) to review the organics project. The Project is supported by our current SWMP, however the location of the facilities were not known in 2012 when the plan was last updated. MoE has recommended that CSWM undertake a targeted amendment of the SWMP to include the location and capacity of the compost facility and transfer station.

A permit from the MoE will be required to operate the compost facility under the Organic Matter Recycling Regulation (OMRR). The first step is to submit a preliminary application, which has been undertaken on February 18, 2020. The next step is to meet with the Ministry to discuss the preliminary application and the requirements for approval.

Phase 1 of public engagement (planning and design) on this project is complete and a report from Tavola Strategy Group is attached as appendix A. Phase 2 of public engagement (presenting the design) is planned for fall 2020. These engagements will support the OMRR permit as well as the targeted amendment of the SWMP.

Competitive selection process summary

- Stage 1: Request For Qualifications (RFQ) for the processing facility
 - Three firms have been selected based on their experience in design, construction, and commissioning for similar facilities as well as their demonstrated understanding of the Project:
 - o Bird Construction Group Ltd.
 - o GFL Environmental Inc.
 - o Maple Reinders Constructors Ltd.
- Stage 2: Request For Proposals (RFP) for the processing facility
 - The RFP is scheduled to be issued the week of March 9, 2020 to the three selected companies from the above RFQ process.
 - Recommendation to the Board planned for June 2020.

Public engagement:

The public engagement for phase 1 (planning and design) occurred from January 9 through February 10. Highlights include:

- Online engagement 1,000 residents visited the online portal, 600 sought information to learn more about the Project and 541 surveys were completed.
 - o 93 per cent of online survey respondents indicated they are concerned about the environmental impact of landfilling food and yard waste.
 - o 96 per cent agreed a composting facility and collection program are needed.
 - o 90 per cent were happy, or had no concerns, with the mitigation measures proposed for managing odour, pests, groundwater, trees and wildlife and traffic at the site.
- In-person open houses were held in the City of Campbell River on January 30 and February 5 at the Maritime Heritage Centre. There were 48 attendees present, including interested members of the public, neighbours and stakeholders.
 - Residents from two neighbouring properties and representatives from the Campbell River Environmental Coalition opposed siting the project at Block J. Dust, air pollutants, noise, traffic, odours, pests and safety of groundwater were all identified as major concerns.
- Overall, support for a regional organics program is strong, with many residents wanting to learn more about when curbside pickup will be available, and how the program will be implemented.
- Residents from Campbell River had more concerns about potential impacts to neighbours, including odours, pests and water quality and monitoring than other communities.
- Water quality, odour, pests and carbon emissions ranked highest on the list of issues to be addressed within the design and operations of the facility.
- There is a strong desire overall to see consistent monitoring and evaluation of mitigation measures to ensure best practices are in place.
- A detailed report summarizing the feedback is attached as Appendix A.

Food and yard waste feedstock commitment

Letters to the four participating municipalities will be sent in early March explaining the change in location for the organics processing facility, as well as updated capital and operating cost estimates. Participating municipalities will be requested to confirm their commitment of feedstock to the facility before the end of May 2020.

New Building Canada Fund (NBCF) grant scope change

On November 19, 2019, staff submitted a scope change request to the NBCF for siting the facility at Block J, and extending the timeline for substantial completion up to March 2022. The NBCF is reviewing the application and plans to send a response in March 2020.

Next steps and timing:

- Campbell River Waste Management Centre (CRWMC), Block J and Comox Valley Waste Management Centre site's geotechnical assessment, March 2020.
- CRWMC Block J groundwater assessment, 2020.
- RFPs, March to June 2020.
- Recommendation of contract award, June 25 2020.
- Design and permit review, July to November 2020.
- Phase 2 public engagement, fall 2020 presenting the design.
- Construction, January 2021 to September 2021.
- Phased in operation, September 2021 to April 2022.

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_ ,	Services	

Stakeholder Distribution (Upon Agenda Publication)

City of Campbell River	~
City of Courtenay	~
Town of Comox	~
Village of Cumberland	~

Appendix A – What we heard consultation summary report. Tavola, February 2020.



WHAT WE HEARD CONSULTATION SUMMARY REPORT

Comox Strathcona Waste Management Regional Organics Facility

March 2, 2020

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WHAT WE HEARD SUMMARY - February 2020 Comox Strathcona Waste Management Regional Organics Facility

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ABOUT THE PROJECT

Comox Strathcona Waste Management is planning a new regional composting facility for the Campbell River Waste Management Centre, enabling a phased introduction of organics collection for over 30,000 single family dwellings in Campbell River, Comox, Cumberland and Courtenay. The composting facility will be operational in fall 2021.

Organics, which includes food and yard waste, currently makes up about 30% of the total waste that is landfilled. A composting facility will divert these organics and extend the life of the landfill, which is a cost-effective approach for handling solid waste for the taxpayers.

When buried in a landfill, organic material also produces methane gas, a key contributor to global climate change. Composting organic waste is an important step to sustainably manage waste in the Comox Strathcona region, as it reduces the greenhouse gas emissions that would otherwise be associated with its decomposition. The composting facility will repurpose this organic material into a nutrient rich compost for agriculture and landscaping.

The overall project cost estimate is \$14.7 million with \$6.4 million to be funded by grants and the remaining \$8.3 million by reserves and tipping fees.

Comox Strathcona Waste Management is committed to designing a state-of-the-art facility that minimizes impacts to neighbours and the environment. The facility will meet stringent environmental and community standards, and exceed these standards wherever reasonable.

OVERVIEW OF CONSULTATION PROCESS

In January and February 2020, the CSWM offered a variety of opportunities for residents to learn more about what is planned, meet with project staff, and provide feedback to inform the design and operations of the facility. Residents could offer input through a survey (online and print) or in person at two public open houses.

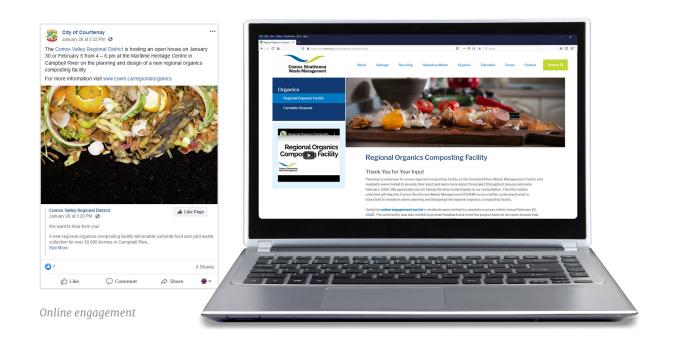
A number of communications activities were undertaken to raise awareness of the opportunities to learn more and provide feedback:

- A media release was distributed on Thursday, January 9, 2020
- More than 1,000 residents visited the interactive engagement portal at www.cswm.ca/regionalorganics which provided information about the project and consultation process.
 It included the location and times of open houses and was a portal for asking questions and participating in the online survey.
- Social media posts were shared on Twitter and Facebook and promoted throughout the process.
- · Print ads appeared in the Comox Valley Record
- Radio ads promoted the upcoming open houses and the website available to learn more.



Print Ad

Comox Strathcona Waste Management Regional Organics Facility







Information pieces available at the event

Open Houses

Two drop-in style open houses provided opportunity for the community to learn more, ask questions of staff, and provide feedback about the project. The open houses were held on Thursday, January 30, 2020, and Wednesday, February 5, 2020, from 4 p.m. – 6 p.m. at the Maritime Heritage Museum in Campbell River.

45 people attended, with most indicating they were from the Campbell River area. Residents from three neighbouring properties and representatives from the Campbell River Environmental Committee, Recycling BC and Coast Waste Management Association attended.

Backgrounders, Frequently Asked Questions and informational and interactive display boards were available at the open house. Print surveys were also available. A multi-disciplinary team of staff and consultants was on-hand to answer questions.







Comox Strathcona Waste Management Regional Organics Facility

Information on a variety of topics, including the 15 display panels noted below, were shared at the open house and online. The display panels are available as Appendix E.

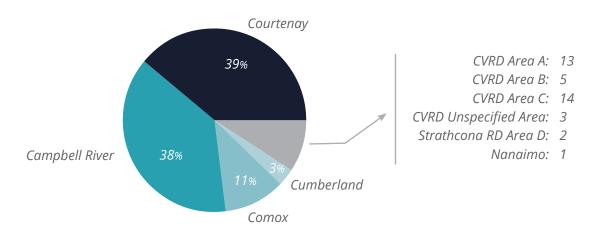
- 1) Tell Us About You
- 2) Overview
- 3) Managing Solid Waste in the CSWM Service Area
- 4) Where the New Facility will be Located
- 5) Benefits of Composting
- 6) Organic Materials that will be Accepted
- 7) Road to Regional Organics
- 8) How It Will be Funded

- 9) Public Engagement
- 10) Community Benefits
- 11) Topics of Importance
- 12) Mitigating Impacts Through Design & Operations
- 13) Mitigating Impacts
- 14) Mitigating Impacts
- 15) Communication Preferences

Survey

A survey was available from Thursday, January 9, 2020, – Monday, February 10, 2020, through **www.cswm.ca/regionalorganics** online and print. 549 residents responded to the survey.

Of the 549 respondents to the survey, 39% were from Courtenay, 38% from Campbell River, 11% from Comox and 3% from Cumberland. The remaining respondents were from CVRD Area A, CVRD Area B, CVRD Area C, General CVRD, Strathcona RD Area D, and Nanaimo.



81% of the respondents currently receive municipally supplied garbage and recycling services.

WHAT WE HEARD OVERALL

In early 2020, communications and consultation occurred to raise awareness of the planned regional organics facility and to seek input on the design and operations of the facility. 549 people responded to the survey and 45 people attended two open houses, providing input on top of mind issues, communications preferences and mitigation measures that could be considered within the design and operations.

A number of strong themes emerged:

- Overall, survey respondents were very supportive of a regional facility and collection program, and are concerned about the environmental impacts of landfilling food and yard waste. 93% of respondents indicated they are concerned about the environmental impact of landfilling organic waste and 96% feel a regional organics composting facility and collection program are needed.
- The greatest perceived benefits of composting are: reducing waste going into the landfill, repurposing waste into nutrient-rich soil, and reducing greenhouse gases.
- The top concerns expressed related to a regional composting facility are related to groundwater, odour and pests.
- Residents felt the top issues to be addressed within the design and operations of the facility are: water quality, odour, and carbon emissions. Comparatively, visual disturbance, lighting and traffic were significantly lower in terms of issues of importance.
- When asked whether respondents in the survey were happy with the mitigation measures for managing odour, pests, groundwater, trees and wildlife, and traffic, over 90% indicated they are happy with what is proposed, or have no concerns.
- Neighbours from two adjacent parties and one stakeholder group are strongly opposed to the siting of the facility at Block J.
- Residents from Campbell River had more concerns and questions about potential impacts to neighbours, including odours, pests and water quality and monitoring, than other communities.
- There is a strong desire to see consistent monitoring and evaluation of mitigation measures to ensure best practices are in place.
- A variety of questions and comments were posed wondering how the collection program will work, e.g. bins, compostable bags, what items will be included etc. There was also interest expressed for multi-family building participation within the program.
- When asked how best to communicate with residents about composting and waste
 management in future, survey respondents indicated the top methods (in order) were the
 local newspaper, the CVRD Facebook page, the CSWM website, local radio and electronic
 newsletter. CVRD Twitter was rated considerably low in terms of communications
 preference. Open house attendees also noted the local newspaper as the preferred method,
 followed by open houses.

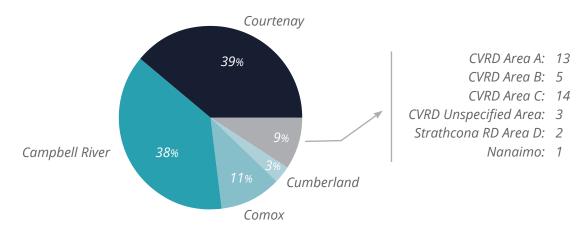
NEXT STEPS

This What We Heard report will be provided to proponents to inform the facility design and shared with the CSWM board in March 2020. For more information about the project as it progresses, visit: www.cswm.ca/regionalorganics

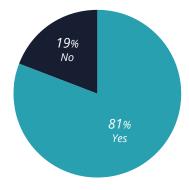
APPENDIX A

Survey Results - What Was Heard By Question

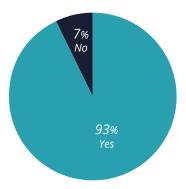
1. Which municipality do you live in?



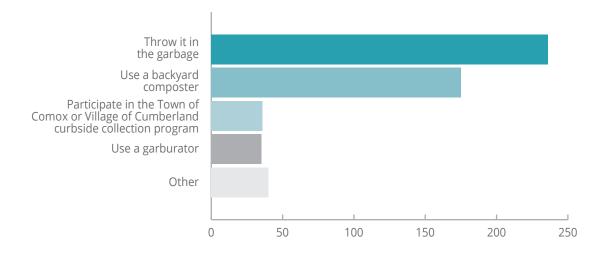
2. Do you currently have municipally supplied curbside garbage and recycling pick-up in your neighbourhood?



3. Are you concerned about the environmental impact of throwing food and yard waste in the landfill?



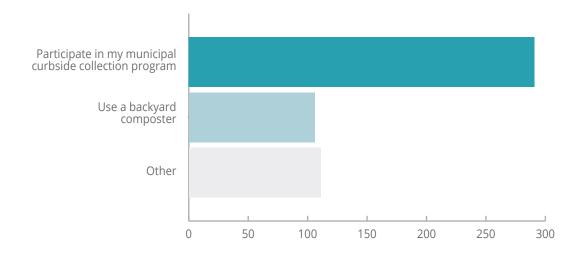
4. What do you currently do with your food waste?



Other:

- Feed it to chickens or other livestock
- Take it somewhere else for processing
 (E.g. either to a facility or to a friend who has a backyard composter)

5. What do you currently do with your yard waste?



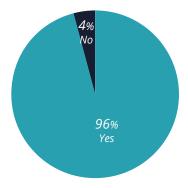
Other:

- Burn it
- Throw it in the garbage
- Some who live in apartments commented they didn't know what happened to it after the building landscaper takes it away

Comox Strathcona Waste Management Regional Organics Facility

A new regional composting facility will process food and yard waste from 30,000 single family homes in Campbell River, Comox, Cumberland, and Courtenay, starting in 2021.

- ✓ Diverting organics from the garbage helps extend the life of regional landfills, reducing the cost and environmental impact of creating new landfills.
- ✓ Decomposing food and yard waste produces methane gas, a key contributor to greenhouse gas emissions and climate change. Removing organics from the waste stream is an important step in reducing our environmental footprint.
- ✓ The composting facility will re-purpose food and yard waste into a nutrient rich compost for agriculture and landscaping. Healthy soil reduces the need for chemical fertilizers, unnatural methods of soil enrichment, and the use of pesticides.
- 6. Based on this description, do you think a regional organics composting facility and collection program are needed?



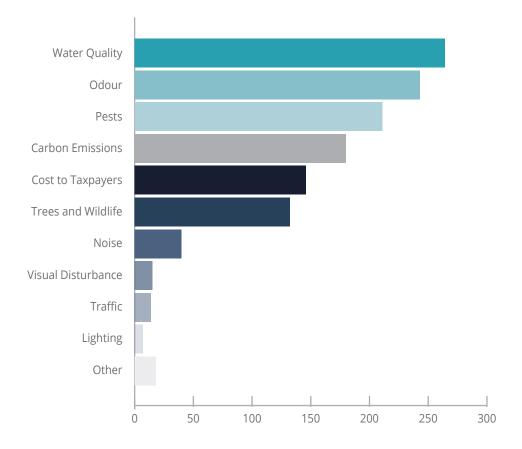
If yes, what do you think are the greatest benefits?

The top benefits indicated by respondents were:

- 1) Reducing waste in the landfill
- 2) Repurposing into nutrient rich compost
- 3) Reducing greenhouse gases methane
- 4) Extending the life of the landfill

Comox Strathcona Waste Management Regional Organics Facility

7. Here are some issues that we will manage at the new regional organics composting facility to minimize our impact on the community and the environment. Please choose the top three issues that you feel are most important for us to consider during the planning and design of this facility.

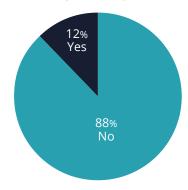


Other:

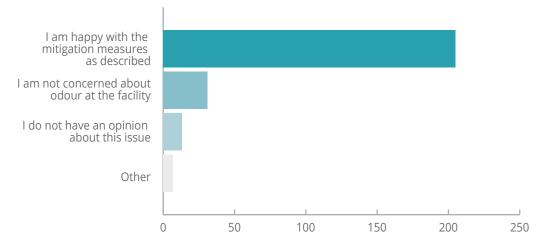
- Costs
- Location/hauling distance

8. Odour: The successful management of odour is a high priority and a critical component in the design and operations of this facility. To minimize the impact on residents, odours will be managed within our property boundary. The processing of organic waste will take place within enclosed buildings and air will be treated on site with biofilters. The finished compost will be stored outside and will resemble rich, dark earth.

Do you have any comments about management of odour at the facility?



If no, please tell us why?



Comments:

Campbell River: (21 comments)

- Concern there would be odours
- Facility shouldn't be built at Block J
- Nanaimo composting facility and Richmond facility were noted as being smelly

Comox: (2 comments)

 Noted Duke Point in Nanaimo being smelly

Courtenay: (14 comments)

- Concerned about odour
- Want to see a proper and above industry standard filtering system put into place

Cumberland: (0 comments)

Other: (3 comments)

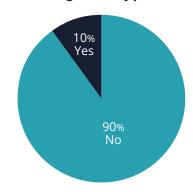
Area B

Concerns about the facility being near homes

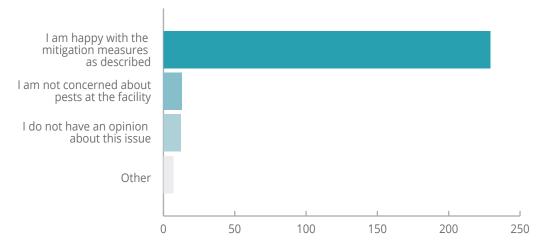
Nanaimo

 Concerns about the Nanaimo plant smelling **9. Pests:** The daily processing of organic material indoors not only minimizes odours, but also helps to control rodents and pests. Once the material is placed into an active compost pile, temperatures reach between 50-60 degrees celsius for several days. This environment is inhospitable for mammals and prevents their interest in the material. As the material is moved frequently, animals do not have time to establish a refuge.

Do you have any comments about management of pests at the facility?



If no, please tell us why?



Comments:

Campbell River: (20 comments)

- Possibility of rats and pests
- Noted the rat problem in town and wondering what measures will prevent that from happening
- Concerned about rats and other pests accessing organics at curbside

Comox: (4 comments)

- Noted an existing rodent problem and not wanting to see it increase
- Concerned about rats and other pests accessing organics at curbside

Courtenay: (9 comments)

 Concerned that will curbside pickup will attract rodents or bears

Cumberland: (0 comments)

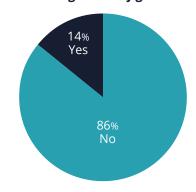
Other: (2 comments)

CVRD - unspecified area

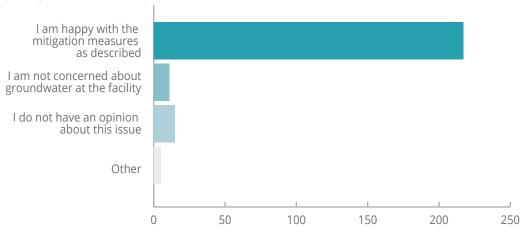
Concerned about about an increase in rats

10. Groundwater: Water use on-site will be managed carefully and will not have an impact on groundwater quality or supplies. There will be no discharge to the environment during the composting process. Water that comes into contact with organic waste at the facility will be collected and reused as part of the composting process. Excess water will be stored in a sealed tank and trucked offsite for treatment. Clean storm water will be collected in an onsite management pond and re-infiltrated into the ground.

Do you have any comments about management of groundwater at the facility?



If no, please tell us why?



Comments:

Campbell River: (31 comments)

- Asking for consistent monitoring of water
- Unsure what it means to haul water off-site for monitoring and the cost associated with it
- Concerned the mitigation measures are not enough
 - Stating it's already on contaminated land
- Worried the quality of drinking water will decrease

Comox: (3 comments)

 Interested in more information about whether/how water will be continually and consistently monitored

Courtenay: (12 comments)

- Questions about where the water will be transported and why there won't be a place to test water on site.
 - Many respondents asking for more information on this process

Cumberland: (0 comments)

Other: (2 comments)

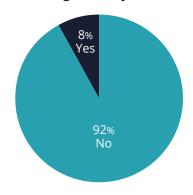
Area B

 Concerned about the contamination from the trucks

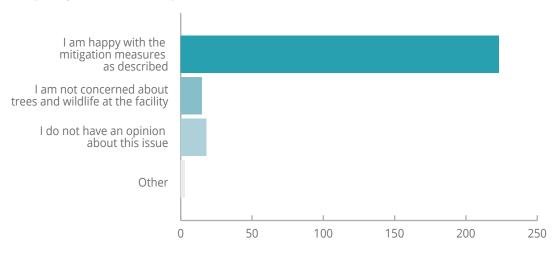
Area C

 Question about how and where the water will be treated off-site and whether it could be done on-site **11. Trees and Wildlife:** The facility will be located on already disturbed land to avoid disruption to adjacent forested areas and natural habitat. A wooded area will be kept around the facility to mitigate visual impacts. Delivery of compost feedstock and active composting will occur indoors to prevent birds from being attracted to the site. The site will be secured to ensure bears do not frequent the area and become a nuisance.

Do you have any comments about management of trees and wildlife at the facility?



If no, please tell us why?



Comments:

Campbell River: (12 comments)

- Want to ensure the trees are protected
- Want to ensure wildlife isn't harmed if on site, especially bears
- Questions about how this will be monitored

Comox: (2 comments)

- Questions about monitoring of hawks
- Want to ensure the trees are protected

Courtenay: (3 comments)

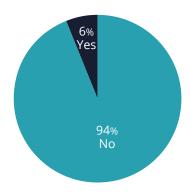
- Want to ensure the trees are protected
- Suggest the use of bird spikes to keep birds away

Cumberland: (0 comments)

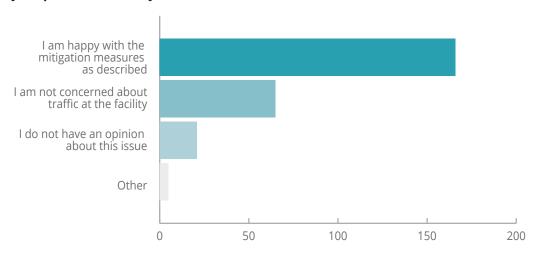
Other: (0 comments)

12. Traffic: There are almost no roadway improvements required and traffic impacts will be minimal, as organic waste collection will integrate with the existing garbage collection system. The main access to the site would be from Hwy 28, which will not affect most neighbouring properties on Argonaut Road.

Do you have any comments about management of traffic at the facility?



If no, please tell us why?



Comments:

Campbell River: (6 comments)

- Questions about why smaller sites closer to each city are not being built
- Concerned about the quality of the road
- Questions about how spillage from the trucks will be monitored
- Question about whether a traffic study been completed

Comox: (1 comment)

Asking for truck route to be designated

Courtenay: (4 comments)

- Concerned about spillage from trucks
- Suggestions of electric trucks rather than diesel

Cumberland: (1 comment)

 Question about whether transportation emissions are being taken into account and whether those emissions have the weighted against the greenhouse gases produced by the compost

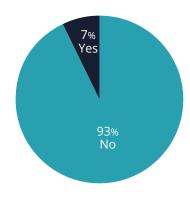
Other: (1 comment)

Area B

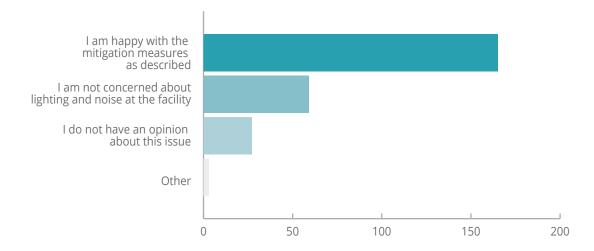
Concerned about the increased number of trucks

13. Lighting and Noise: The current design creates the greatest buffer area possible between the facility and neighbours, protecting sightlines and minimizing light and noise.

Do you have any comments about management of noise and light at the facility?



If no, please tell us why?



Comments:

Campbell River: (19 comments)

- Concerned about the loud back up beepers
- Concerned about light pollution in the area affecting residents and wildlife
- Calling for the biggest buffer possible to reduce noise for the neighbours

Comox: (1 comment)

• Would like to see biggest buffer possible to mitigate noise, light and site aesthetic.

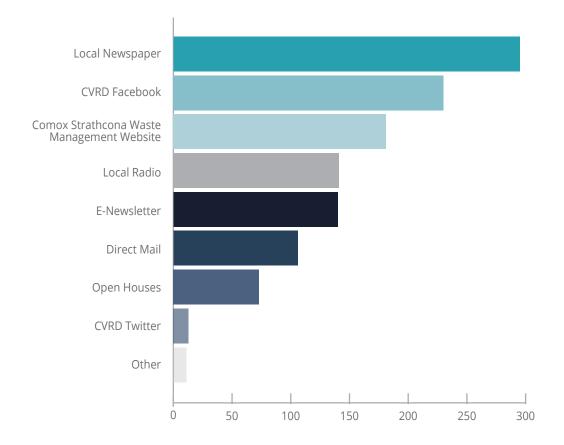
Courtenay (4 comments)

Concerned about light pollution and nocturnal animals

Cumberland: (0 comments)

Other: (0 comments)

14. As we work towards introducing the new residential organics collection program, we want to tailor our communications to the needs and preferences of our residents. What are the best ways to keep you informed about composting and waste management?



Other:

- Text
- Garbage app
- Information at each municipal building

Comox Strathcona Waste Management Regional Organics Facility

We welcome any additional feedback you might like to offer

(209 comments)

Campbell River:

- Excited this is happening
- Concerned about location chosen
- Those in condos/apartments/stratas hoping to be able to use it
- Many questions about specifics What will be included? What will pick-up look like?
 Who will be included in roadside collection?

Comox:

- Keep costs low
- Introduction of pet waste
- Support for the program in condos/apartments/stratas
- Very supportive
- Questions about bags that can be used in the bins wanting compostable ones like in Victoria

Courtenay:

- Very supportive
- Those in apartments concerned about not being able to take part
- Concerns about the facility being so far away and the carbon footprint involved

Cumberland:

- Happy to see the project happening
- Would like to be able to use compostable bags

Other:

- Very supportive
- Concerned those in rural areas will be excluded from the program
- Would like bear proof bins for their compost
- Questions about whether residents will be able to take their compost directly to the site without curbside pick-up

APPENDIX B

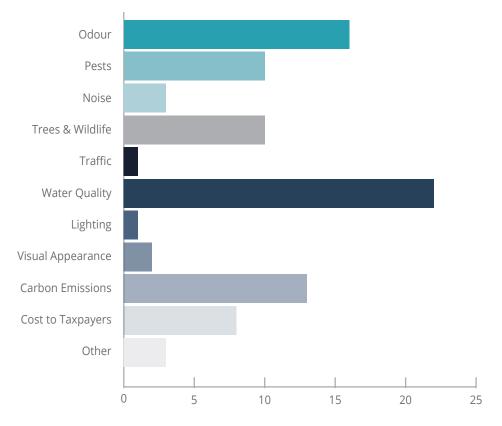
Comments Received at Open House

What do you feel are the greatest benefits of a regional composting facility and collection program?

- Composting is a great way to recycle food waste and make its way back into the environment as a nutrient source
- Diversion of waste from the Landfill
- Collecting in a facility reduces probability of increased rat population inspired by some backyard composting efforts
- Life of the landfill and reusing food waste
- Can there be a facility in the city populated area for those without vehicles, using buses, bicycles, etc.
- Less waste to landfills
- Great that it's taking meat, bones, fish, dairy
- Reduction of waste in the landfills
- I'll be glad not to have compost at home
- Location makes sense

- Increasing the life of the landfill, decrease rodent habitat in the city, more compost for use in local home gardens
- Divert waste from the landfill
- Local control to meet the needs of Campbell River
- The sooner the better
- Animal feces? Yes or no?
- Would like to see move of this type of thing
- Creating opportunity for local food production initiatives
- Glad to see organics out of waste stream
- Make compost available for residents
- Demonstration garden to showcase benefits of compost city (municipal) flower gardens – strategic beautification

Topics of Importance:



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Anything else to add?

- Use of gas/diesel trucks for pick-up
- Curbside pickup containers blow over/away in wind now
- Contamination garbage/non-compostable materials how will that be handled?
- Carbon footprint of trucking organics from Comox Valley to CR Facility
- Loud Backup alarms
- Impact to neighbours is important to me
- Not happy with process to date
- Norm Wood would be preferred

Mitigating Impacts Through Design and Operations

Odour:

- See January 2018 report "Odour from a Compost Facility" odour is caused by air emissions
 contain bacteria, toluene, ethyl alcohol. Measures 800m downstream of compost facility
- Organic kitchen waste amount 3 gallon/week one family
- Good fitting lid
- Weekly curbside pick-up same as recyclables simply rinse and reuse
- Concerned about odours like at Duke Point

Pests:

- Rats are already a problem in Campbell River
- Bears, rats, racoons and other pests are already coming to the bins on the street
- Is 50 to 60 degrees Celsius to kill weed seeds?
- Organics at the curb concerned about pests

Trees & Wildlife:

- Ensure fully enclosed and covered to eliminate birds access
- Eagles and wildlife disrupted by facility construction and operating

Traffic:

- Traffic in general why are we trucking compostables using trucks? Do it locally.
- More heavy industrial traffic along Campbell River impacting fishing, hiking, and other uses
 of River area
- Combine pick-up times for better efficiency for both residents and municipality

Lighting & noise:

• Backup alarms are loud! Neighbours can hear them from the landfill

Groundwater:

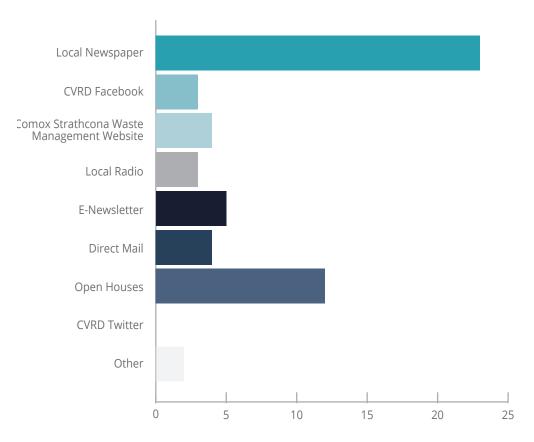
- Settling pond stormwater
- Contamination of environment
- Cumberland problems with stormwater management
- Leachate runoff management
- Like the proposed contaminated soil dump across from the landfill, it's imperative that nothing gets into the John Hart reservoir to contaminate the water supply for City of Campbell River

- Contamination of drinking water why take the risk?
- Treatment of leachate

Anything else you would like to add?

- The bins should be consistent design in all communities
- Bins should state what's accepted
- Don't forget apartments and condos they need collection too
- Use leachate as nutrient source
- Waste of taxpayer dollars to build a facility on a site that is too small to begin with and has no room for expansion
- Why was the decision made before CR people were given information and a property of choice?
- What will compost cost? Where will I be able to buy it? At a processing site or landscaping supply facilities?
- Why aren't representatives from the city of Campbell River here?

Communication Preferences



Other:

- LinkedIn
- Education in schools

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APPENDIX C

Neighbouring Properties

Residents from three nearby properties attended the open houses on one or both nights. Two of the neighbours expressed concern about siting the facility at block J, with several reasons provided including: impacts to adjacent and nearby properties, site constraints due to ALC approval, uncertainty regarding regulatory approvals for future expansion of the facility, lack of due-process in choosing the site and the need to amend the current grant application before full funding is secured. There is a strong feeling that one family is being sacrificed for a location which does not appear to offer many benefits over the original site identified at the Norm Woods facility.

Dust, air pollutants, noise, traffic, odours, pests and safety of groundwater were all identified as major concerns for neighbours. Specifically, the following comments from two neighbouring property owners were recorded:

- The road leading to the site is narrow and has a sharp curve, which could pose a problem for large trucks. Safety is a concern, particularly after weather events which can make road conditions dangerous.
- Property owners can already hear operations at the landfill and pre-construction activities happening on Block J are causing a disturbance. Noise from the fans required for the compost facility, as well as air handlers and facility lighting, are all likely to be disruptive.
- Soil around the landfill is likely contaminated due to past practices. One resident was concerned that construction at the compost facility site could disturb contaminants in the soil and impact groundwater while another felt that groundwater may already be contaminated.
- Potential contaminants in soil and groundwater could impact the adjacent property's ability to obtain the appropriate accreditations needed to start-up an organic farm.
- The ability to control rats and other pests was questioned given the issues faced by downtown Campbell River as it unsuccessfully tries to control rodents around homes and businesses.

Follow-Up Comments Received After Open House

Email received on February 13, 2020, from 5900 Argonaut Road

- There are no fire hydrants in the area composting using static aerated piles technology generates a lot of heat and the risk of fire is high at compost facilities, as they contain many fuel sources
- Bacteria has been detected 1400 m downwind of compost facilities and VOCs have been detected up to 800 meters from compost facilities. Biofilters do not remove all emissions. Therefore to site a compost facility at a distance of 250 m away from a residence is too close for the health of the residents
- The site has the potential for extra construction costs, for example the steep undercut bank will need securing and use of the gravel extraction site will require additional fill
- Additional costs (and carbon footprint) should be considered for trucking clean water to the site and trucking contaminated water to the waste water treatment plant
- In order to meet diversion goals, the facility should consider public access at some point. As well, will the public be able to access the site to purchase the final product? Both of these

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scenarios will increase traffic to Argonaut Road, which is already in terrible condition. Local residents choose Argonaut to travel by when accessing the CRWMC, as it is a shorter distance and often not patrolled by law enforcement. Hence the trash that often lines the side of road - everything from plastic bags to entire couches.

- Lack of a biological inventory how can environmental impacts be considered if there is no knowledge of birds, amphibians, mammals etc in the area
- Current OC amendment request is yet another example of CVRD seeking retroactive approval
 for operations already undertaken. Continued non-compliance, operation without permit,
 and giving misleading information leaves neighbours with zero faith that the CVRD will
 operate this new compost facility following proper regulation and legislation

^{*} Note: The project team has met in-person with neighbours located at 5800 and 5900 Argonaut Road to discuss and respond to their concerns. This additional input will be considered and will be responded to in separate correspondence. Members of the Project Team will continue to be available to neighbours to answer questions throughout the project.

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APPENDIX D

Stakeholder Groups

Representatives from Recycle BC, Strathcona Regional District and Coast Waste Management Association attended the Open House and were supportive of the project, seeking to obtain more information about the project itself and the consultation process.

Representatives from the Campbell River Environmental Committee had specific concerns related to the siting of the facility and the following comments were recorded:

- Concern about current use of Block J to store tires and mattresses
- Dust and air contaminants from the facility, including the possible presence of Volatile Organic Compounds, harming nearby residents.
- Properties are located down-gradient of Block J putting groundwater at risk.
- CSWM will need to comply with Canadian laws pertaining to odour.
- Perceived inconsistency with CSWM position on tree removal.
- Harming the potential of nearby properties to achieve organic farm status.

Follow-Up Comments Received After Open House

Email received on January 31, 2020, from the Campbell River Environmental Committee

- CREC has concerns with emissions of bacteria measured up to 1400 meters downwind of compost facilities including gram-positive actinomycetes; fungi such as moulds; viruses; algae; and pollen identified in this report.
- A study by the National Collaborating Centre for Environmental Health has reported VOC emissions measured up to 800 meters downwind of compost facilities which include:
 - "Emissions from composting facilities typically belong to any of the following chemical classes of VOCs: aromatics, sulphur compounds (mercaptans, and organic sulphides), aldehydes, alcohols, amines (ammonia), volatile fatty acids, terpenes, ketones, benzene, toluene and ethylbenzene."
 - o "The most common VOCs characterized in samples from one compost facility were acetic acid, acetone, limonene, benzene derivatives, hexane, pinenes, toluene, napthalene, and xylene."
 - "Another study identified 74 compounds in the ambient air of a composting plant, with ethyl alcohol detected at the highest concentration of all compounds"
- The same report indicates that Bio Filters do not totally eliminate emissions.
 - "...odour emissions are still possible despite use of biofilters. For instance, terpenes have been detected in the effluent air stream of compost facilities equipped with biofilters, and in one facility, the outlet of the biofilter contained dimethyl disulphide, which is known to be malodorous"
- The above report also identified that:
 - "There may be interactions between different types of VOCs with non-odourous co-pollutants, such as particulates, which can contribute to health symptoms. Chronic exposure to elevated levels of bioaerosols is known to affect respiratory health. Potential health effects to bioaerosols include allergic asthma, rhinitis, hypersensitivity pneumonitis, chronic obstructive pulmonary disease, and organic dust toxic syndrome, as well as eye and skin irritation. An experimental

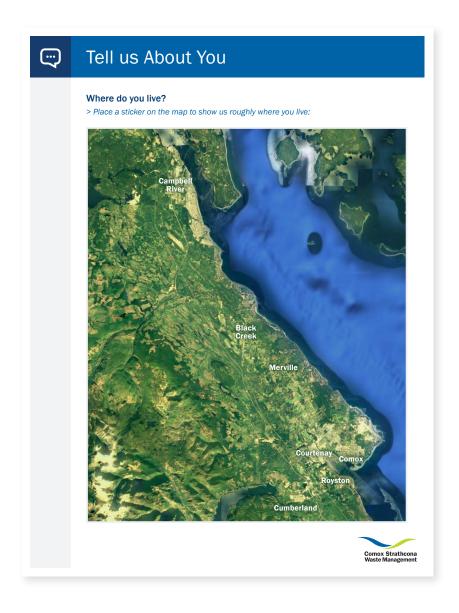
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study of airborne endotoxins around composting sites found an association between endotoxin levels and cytokine induction in human cells, suggesting a mechanism for health effects resulting from infection, immune responses, or inflammation."

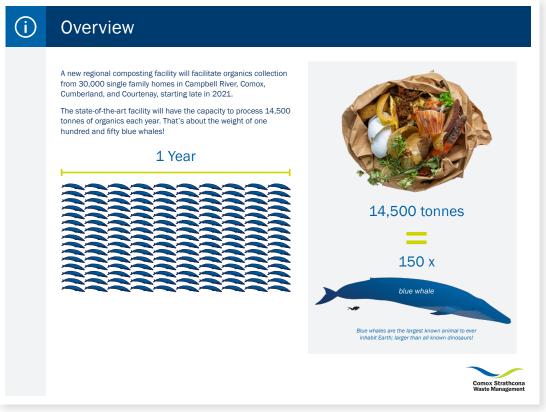
*Note: The above referenced study by the National Collaborating Centre for Environmental Health titled Odour from a Compost Facility, was submitted to the project team via email. This additional input will be considered and will be responded to in separate correspondence.

APPENDIX E

Display Boards Presented at Open House



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organic material into compost for agricultural and landscaping use.

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Benefits of Composting

Diverting organics helps extend the life of regional landfills, reducing the cost and environmental impact of creating new landfills.

When buried in a landfill, decomposing food and yard waste produces methane gas, a key contributor to greenhouse gas emissions and climate change.





The composting facility will re-purpose organic material into a nutrient rich compost for use in agriculture and landscaping.

Replenishing the soil, enriching plant health, and promoting garden sustainability are some of the ways composting gives back to the Earth.

Healthy soil reduces the need for chemical fertilizers, unnatural methods of soil enrichment, and toxic pesticides that are harmful to our environment, health, and food.



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Capital cost estimates for the regional organics facility in Campbell River and a transfer station at the Comox Valley **Waste Management Centre:**

Total Capital Cost Estimate	\$14.7 million
Reserves and Tipping Fees	\$8.3 million
Organics Infrastructure Program	\$909,630
New Building Canada Grant	\$5.5 million

These amounts are reflected in the preliminary 2020-2024 Financial Plan.

Funding Sources: 44% **56%**

Funding Partners:



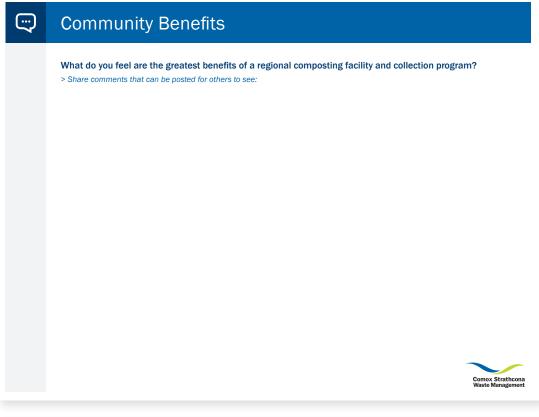




Public Engagement A common understanding of public engagement is important to help ensure we are working towards common goals. The following table illustrates the goals and promises associated with different levels of engagement. Inform Consult To obtain public feedback on analysis, alternatives and/or decisions. To provide the public with balanced and objective information to assist them in understanding the problem, alternatives opportunities and/or solutions, Infrastructure Program grant. We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and We will keep vou informed. proposals. The public engagement to support the design and operations of the regional composting facility falls under Inform-Consult. Your feedback will be used to help us: Design the best Communicate with residents facility that we can effectively about the project

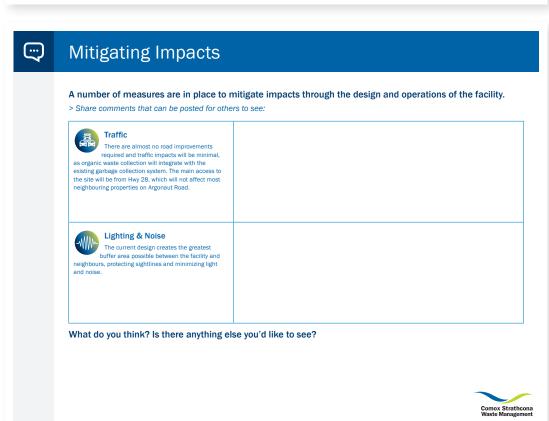
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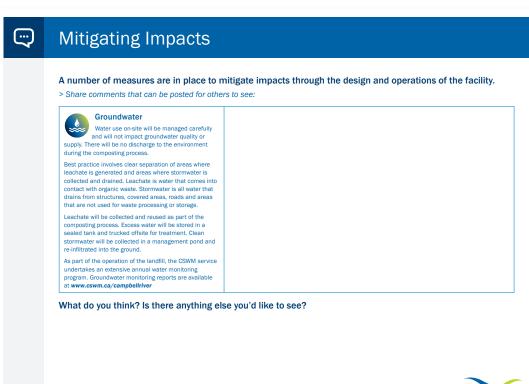
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Topics of Importance Please choose the top three issues that you feel are most important to minimize our impact on the community and the environment. > Place a dot on the three issues that are most important to you: Odour Pests Trees & Wildlife Traffic **Water Quality** Lighting Visual Appearance **Carbon Emissions Cost to Taxpayers** Other Anything else to add? > Share comments that can be posted for others to see: Comox Strathcona Waste Management









<u>[]</u>	Communication Preferences	
	communications to th	ntroducing the new residential organics collection program, we want to tailor our ne needs and preferences of our residents. to keep you informed about composting and waste management? three preferences:
	Local Radio	
	Local Newspaper	
	CVRD Twitter	
	CVRD Facebook	
	Open Houses	
	CSWM Website	
	E-Newsletter	
	Direct Mail	
	Other	
	> Share "other" examples	Comox Strathcon Waste Management