

REGIONAL SOLID WASTE ADVISORY COMMITTEE

Minutes from the meeting held on November 28, 2024, in the CVRD Civic Room at 770 Harmston Ave, Courtenay and via Zoom commencing at 10:00 am

PRESENT:

D. Baar	Campbell River
D. Birtch	Campbell River
W. Semmelink	Comox
J. Ellis	Courtenay
J. Best	Courtenay
K. Stubblefield	CVRD Area C
R. Telegus	Denman Island
K. Lukinuk	Hornby Island
C. Thompson, Manager of Solid Waste Services	City of Courtenay
C. Perry, Engineering Manager	Town of Comox
R. Crisfield, Manager of Operations	Village of Cumberland
M. Tatchell, Chief Administrative Officer	Village of Tahsis
S. Fisher, Engineering Services Coordinator	SRD
A. Milwid, First Nations Liaison	SRD
L. Bryan, Executive Director	WMABC
C. Melvin, Coordinator	Island Health
G. Yaron, Consultant	Light House
K. Hamilton, Consultant	Tavola
	Communications
T. Willard-Stepan, Community Educator	CSWM
L. Eason, Community Educator	CSWM
M. Rutten, General Manager of Engineering Services	CVRD
V. Schau, Senior Manager of CSWM Services	CVRD
S. Willie, Manager of Solid Waste Planning & Policy Development	CVRD
K. Broughton, Manager of Financial Planning	CVRD
J. Sexton, Financial Planning Analyst	CVRD
O. McDonald, CSWM Communications and Engagement Specialist	CVRD
B. Meagher, Branch Assistant	CVRD

ITEMS:**1. Review of Agenda and Minutes**

M. Rutten acknowledged that the meeting is being hosted on the traditional unceded territory of the K'ómoks First Nation, and the Comox Strathcona Waste Management (CSWM) service area is located in the Coast Salish, Kwakwaka'wakw, and Nuuchahnulth territories.

The committee reviewed the minutes of the Regional Solid Waste Advisory Committee (RSWAC) meeting on September 19, 2024, and no errors or omissions were noted. The advisory committee adopted the November 28, 2024, meeting agenda.

2. What We Heard Consultation Summary 2024

Katie Hamilton presented a summary of the 2024 consultation process. The consultation involved five open houses, two community events on Cortes and Quadra, facility tours of CVWMC and CR Organics Facility, and online tools such as Weigh-In On Waste for residents to provide input on services they'd like to see in their communities.

The CSWM July 2024 newsletter was mailed to 11,000 households with details about the SWMP process and opportunities for public participation. Outreach included media posts. Educational display boards were developed to visually present information. Participation was incentivized with a draw to win a yard of compost and a used goods swap at events. More than 1,900 people participated between July and October 2024. There was full registration for facility tours in September. Village of Cumberland elected officials and staff also toured CVWMC in October.

Facility tour and open house participants completed feedback forms. We offered multichannel engagement for residents to provide input on services they would like to see. We saw success in reaching people when we went to locations where they were already gathered. Rural curbside collection was among the services discussed; Some communities wanted the service, while others were more divided. All five communities wanted more recycling opportunities and more education around waste options. Cortes residents expressed satisfaction with their collection service. Quadra residents generally satisfied with proposed Depot options and wanted weekend access. Tour participant feedback highlighted high satisfaction with environmental protection measures at the facilities and an interest in options to increase waste diversion. Participants were positively engaged and wanted more opportunities for the public to see the facilities.

Advisory comments:

R. Telegus – Commendations on presentations to councils and elected officials. It's important to keep them in the loop. Why did CSWM target Quadra and Cortes, rather than Denman and Hornby?

S. Willie – Quadra and Cortes have service changes taking place in their communities. There are financial considerations with the Cortes curbside service. We're opening a depot on Quadra and the private hauler services have changed.

K. Lukinuk – Haulers on Hornby need options for disposal of commercial recycling, rather than bringing it to the Depot.

S. Willie – Recycle BC doesn't accept ICI/MF recycling. Cardboard is the highest revenue generator. Other materials are harder to manage. It's a challenge for the commercial sector. CVWMC and CRWMC have paid recycling services for mixed plastic containers and cardboard. CSWM is looking at the cost of subsidizing commercial recycling options.

M. Rutten – Attendance at some events such as the open house in Oyster River was quite low. What are the trends in participation?

K. Hamilton – We're observing people's engagement preferences coming out of the pandemic. With a long-term process, we don't see higher participation until there's a specific strategy or option to react to. More open-ended and higher-level consultation tends to see lower participation. Multichannel options and a long timeframe are helpful to encourage engagement. We want to keep people informed as we move through the process to raise awareness.

3. SWMP Next Steps

S. Willie reported that 39 strategies have been developed and outlined in nine technical memos. There have been 13 RSWAC meetings and a field trip. Next, strategies will be narrowed down to determine CSWM's focus over the next ten years and decisions will be made on which options can be funded. The CSWM Board is having a roundtable in February to discuss their values and goals. A short list of strategies will be developed for May and June 2025. The draft SWMP will be compiled and sent out for consultation in Fall 2025. The plan is then delivered to the Ministry for approval. Then we fund it, resource it, execute it.

What are the group's preferences for RSWAC meeting in 2025? Do Thursdays work?

Advisory comments:

R. Telegus – Shorter meetings would be my preference.

M. Tatchell – I have a conflict every other Thursday, so it might work if it's the alternating Thursday.

T. Willard-Stepan – Thursdays work depending on my teaching schedule.

D. Barr – Thursdays 10am or later works for me.

L. Bryan – 10am to 4pm is usually okay as long as I leave at 4pm for the ferry.

J. Best – Thursdays generally work. I have a conflict once per quarter.

R. Crisfield – Thursdays work for me.

S. Fisher – Current durations are fine, perhaps a little long. More frequent meetings would be hard to accommodate, especially in-person.

S. Willie – It's helpful if we know if people are attending in-person or virtually to provide food. Virtual meetings in winter may be preferable.

R. Telegus – You said we'll go to the Board to get input on values. Will you take the input from the public to the Board at the roundtable?

S. Willie – We'll take the public feedback to the Board so it's part of their decision making.

K. Lukinuk – I would like to put together an email to CSWM about ways to improve waste diversion on Hornby for recycling and compost. Would a summary be better than providing periodic input? There's a private operator looking to start up a service on Hornby. Denman operator might also be interested. I feel HIRRA doesn't represent the whole population of Hornby.

S. Willie – A summary of the information would be helpful.

M. Rutten – HIRRA represents Hornby residents in a similar way to elected representatives in the other communities.

4. Greenhouse Gas Strategies – Part 2

S. Willie presented the Morrison Hershfield (Stantec) findings on GHG strategies, following up on the Part 1 and Part 3 presentations shared at the last meeting. Scope 1 and 2 Emissions from all sites are primarily from on-site mobile equipment. The

CVWMC emissions include mobile equipment with the compactor as the biggest contributor, the boiler, and the leachate treatment plant.

Transportation emissions from hauling waste between facilities amounted to 417 tonnes CO₂e, with the majority from MSW transportation to CVWMC. Total LFG generation from all sites in 2022 was roughly 73,000 tonnes CO₂e, mostly from the CVWMC and smaller amounts from the remote landfills. Fugitive landfill emissions are uncaptured gases, which have been significantly reduced at CVWMC with the LFG capture system. Total CSWM Service fugitive GHG emissions in 2022 was roughly 39,000 tonnes CO₂e. We focused our efforts and strategies on landfill gas emissions as the largest contributor.

The report covers 14 strategies for reducing GHG. The majority of the landfill emissions reduction potential is at CRWMC where we're implementing an LFG collection system. Not all strategies are feasible or technically viable at this time. Short-term strategies include implementing automated well heads at CVWMC, which is new technology, and operating CRWMC gas collection system to its highest potential. We've had some challenges with staffing to support that initiative and asked the Board for additional staff resources. Another strategy put forward was operating six days per week rather than seven.

Other long-term strategies included landfill biocover systems, increasing organics diversion in the ICI sector and residential areas with no curbside collection, and providing local organics diversion options in remote communities. Facilities and transportation strategies included alternative fuel vehicles. Electric haul vehicles were investigated. At this time, there are no electric options for compactors. Using natural gas was another option. There are current technology challenges but future improvements are possible.

Assessment considerations include savings, payback period, viability, operational impacts, and reduction potential. Landfill gas capture is a viable strategy. The automated well heads are potentially viable. Some more costly strategies include electric vehicles for facilities. Organics collection in remote communities must include wildlife considerations. The cost per tonne is important to consider, as well as the sum of all the strategies undertaken by CSWM. We made a recommendation to the Board for staff resources for CRWMC LFG capture and automated well heads at CRWMC and CVWMC. The Board chose initiatives to reduce GHG in the short term. Some of the payback periods are quite low and some of the middle strategies could be pursued. The technology implementation status will evolve, e.g. dirty wood waste processing and electric vehicles. Some strategies impact staff directly and have budgetary implications. Some strategies may be driven more by politics and public

will, rather than results. Reducing traffic and saving landfill airspace is another consideration.

If we were to implement all the short-term strategies, there's a potential reduction of 52 per cent in emissions. We could reduce up to 60 per cent with longer term strategies. We're moving forward with the procurement of well heads. We've committed to summarizing a new baseline at the end of 2025 to compare to 2022 emissions and refine our long-term strategies and targets.

Advisory comments:

W. Semmelink – I would like to see L2 (diversion of organic waste from ICI sector), L5 (enforce organics diversion in Electoral Areas for residents), and L13 (prompt processing of organics locally in remote communities) move forward.

K. Stubblefield and L. Bryan – Agree with L2, L5 and L13 moving forward.

M. Tatchell – Does L5 apply to all electoral areas?

S. Willie – The analysis included all populations.

R. Telegus – I would support L5 and L13. I enjoyed the summary towards the end stating the cost and payback period are important, as well as the societal impacts of people buying into strategies. With rural communities, many people are willing to volunteer. There are opportunities for funding. The previously discussed strategy of offering grants up to \$10,000 to community groups to provide composting services might be helpful.

S. Willie – CVWMC LFG is currently captured and a small amount is sent to the leachate treatment plant for heating. The reduction in emissions is happening in the conversion of methane gas to carbon dioxide. There are still emissions with flaring but they're lower. There is also an initiative to use the gas as fuel.

M. Rutten – Is a biocover similar to a biofilter to manage odour? Is it something we can create with our own resources?

S. Willie – Yes, we would use organic materials such as wood chips. It would involve transport costs to provide to remote communities.

D. Baar – It's important to consider the global impact if every landfill similarly reduced their emissions. These short-term fixes are really significant if implemented across Canada.

S. Willie – There are less than 150 landfills in Canada with LFG capture systems. It's challenging for small landfills to cover the expense. BC has strong regulations to reduce emissions. There will be more federal regulations coming.

R. Telegus – The electric hauling containers are interesting.

S. Willie – Our operators have seen some challenges with these containers, such as leaking. It can depend on how much food waste and rain are received.

K. Lukinuk – Hornby uses the backhoe as a trash compactor.

L. Bryan – I was reviewing the MF report. Is there an opportunity to provide feedback now? A few observations from the private sector: The Ministry of Environment waste diversion discussion paper considers MF to be separate from ICI. When it comes to collection, MF is picked up with ICI. They're not separate. We want to make it clear. The majority of MF collection is under contract with service providers, rather than municipalities. Contracts are also in place for organics and recycling if services are available. Vancouver requires organics collection; they provided a timeline for systems to be implemented. There was pushback when given a long timeline, e.g. 18 months. Customers didn't want to pay for the service until they had to. You want to provide enough time for implementation, but don't push it out so far that people don't want to pay until necessary. Service providers were quick to respond. New builds have reduced space for garbage collection areas. When the space is underground, you need a smaller truck collecting waste. There's also limited street space to service bins. Vancouver is looking at staging areas where bins are left for tipping. There will be costs associated with this system as well. There can be single stream options such as bins just for cardboard and paper, depending on services available.

R. Telegus – This reopens the discussion about MF contracting with private haulers and the challenge of accessing Recycle BC services. Municipalities could require haulers to have an agreement with Recycle BC.

L. Bryan – There are some programs in place.

J. Best – Recycle BC will sign agreements directly with private collection companies. Private haulers want to mix ICI and we're working with them to develop strategies for integrated ICI/MF routes. They can send us a representative sample of how much is MF versus commercial recycling. Our services only cover residential recycling.

5. LUNCH BREAK

6. Construction, Renovation and Demolition

Diversion Pilot Experience

Community Educators Daryl and Lindsay Eason presented the results of a CRD waste diversion case study focusing on a new build on their property between February and August 2024. The participating construction company was provided with tools to sort waste for increased diversion. They hand-sorted the waste into 13 categories, such as clean wood, metal, cardboard, flexible plastic, coffee cups. Educators observed what happens with waste on a construction site, which depends on the time, space and budget available. Sometimes all waste gets put in one pile. Metal and clean wood may get put aside while loading trailers/bins. A common practice is using cardboard boxes as garbage cans. All lunch food items get thrown into the same pile.

At the case study work site, 1,500kg of waste was sorted by hand. They found 51 per cent was garbage. 38 per cent of divertible materials was clean wood, so 11 per cent is divertible. Hardy board greatly increases weight because it's not recyclable in our region. They approached construction companies with systems and signage to help separate and divert waste, including a flexible sorting system for smaller sites. They met with the participating contractor for feedback and next steps. By the third site visit, they'd modified the diversion system to accommodate a large volume of clean wood waste. The system needed to be moved as the project progressed. The contractor bought their own containers for sorting on-site. They collected refundable beverage containers in a bin. Pallet bins worked well for collecting scraps. As a result of the case study, the contractor had a tidier site and expanded the system to other sites.

Key takeaways: There's no financial incentive for construction waste diversion. The company was interested in doing something to divert waste but found separating out all clean wood too time consuming. Ultimately, they were provided with simple and adaptable tools to use in future. The accountability piece was significant. The contractor worked towards increasing diversion with the educators providing engagement and support. It was a soft approach aiming to find early adopters to win over the construction industry. In conclusion, construction waste diversion could be promoted by offering contractors adaptable options such as toolkits, bins and signage.

Advisory Comments:

R. Telegus – Companies could advertise themselves as being part of these pilot initiatives to attract business.

D. Eason – The smaller items such as metal and containers are more readily diverted. Wood waste is more time consuming.

L. Eason – Companies pay more for mixed waste with recyclables. The costs are passed on to homeowners without them knowing.

J. Ellis – There is a plan in place for making wood recycling more viable. The time, space and efforts aren't currently rewarded. It's challenging.

D. Baar – What a fascinating project. My understanding is not all finished wood is clean wood. Is that the case? I agree there could be consumer pull for creating standards for contractors.

J. Ellis – Latex paint is alright on wood. It can be difficult to tell.

D. Birtch – If a contractor shows up with waste sorted, are there financial savings?

S. Willis – There may be a benefit if they want to take the time to loop through the scale house to weigh the clean wood waste and metal separately.

D. Birtch – In Europe, construction waste was minimal due to diversion. Here it's easier and cheaper to dispose of waste without separating materials. If it's not worth the cost to contractors, they won't do it.

L. Bryan - An example of a CnD waste reduction toolkit:

<https://metrovancover.org/services/solid-waste/Documents/construction-and-demolitionwaste-reduction-and-recycling-toolkit.pdf>

Reduction Strategies

Gil Yaron from Light House provided an overview of construction waste reduction strategies. Waste is referred to as Construction, Renovation and Demolition (CRD) waste because renovations contribute to roughly 40 per cent of construction waste. The strategies are framed with a circular economic approach focusing on reduction, reuse and restoring our ecosystems. This approach aligns with CSWM guiding principles, including maximizing the use of materials, preventing recyclables and organics from going in the landfill, and building and supporting collaborative partnerships to meet targets.

Construction waste represents the second largest category of materials received by the landfills. The infrastructure and technology in the region are not sufficient to support CRD diversion. Northwin commercial landfill has seen a large increase in CRD materials. Some materials are being recycled such as drywall, clean wood and metal. These are managed at CVWMC and CRWMC but not at all sites. The housing market will impact future waste volumes with increased housing starts. Demolition data is not correlated with housing starts, possibly due to tracking of permits by local

governments. Approximately 42 per cent of housing stock was built before 1980, so these buildings may be renovated or demolished.

CSWM has variable tipping fees as financial incentive to sort materials. It doesn't appear to be resulting in increased sorting. Eleven key stakeholders were interviewed. They were generally satisfied with CVRD's handling of materials and management of the landfill and transfer stations. There was consensus that tipping fees don't have an impact on sorting. Most were accepting of fees if applied equally across the industry. Corporate-owned waste companies absorb costs and pass them on to customers. As CSWM sets higher fees on mixed loads, it may be more economical for companies to do sorting. One stakeholder said nothing short of a ban will stop mixed loads. Commercial haulers are avoiding penalties on mixed loads by using tipping trailers that aren't examined at the tipping face. They expressed a need for more consistent and streamlined handling of drywall at the site. Policies may encourage reuse and relocation of homes, rather than demolition. There's demand for more educational support and penalties for illegal dumping.

Eight strategic options have been developed. The first three may go together:

8a. Pre-demolition assessment:

Assess homes prior to demolition to determine whether they can be relocated or deconstructed. Sixty to 80 per cent of homes could be relocated or deconstructed. Diversion potential is high. Operational and staffing resources required are minimal once a policy framework is developed. No regulatory authority required. Many municipalities are considering this strategy, but none have implemented it yet.

8b. Mandatory compliance with pre-demolition assessment:

Local governments require an assessment prior to demolition to see if a building could be relocated or deconstructed.

8c. Early green removal permits, move-on permits, expedited electrical disconnection, and improved data management:

Develop systems for construction to move faster when relocating and deconstructing.

8d. Comprehensive regional strategy to salvage and process clean wood:

There's already diversion happening. The service could be expanded with additional staffing or contracting out to process material. We suggest fees for clean wood be reduced further to \$80/tonne. The Hartland Landfill banned clean wood at the beginning of this year. They contracted out on-site processing.

8e. Engage with other jurisdictions on cross-regional solutions:

The Building Material Exchange Program enables companies to buy and sell materials from each other to reduce waste.

8f. Educational tools and resources to support on-site material management:

While we don't see a direct correlation between education and diversion, it provides a foundation for other policies. Medium operational impact.

8g. Financial incentive for deconstruction:

Currently it costs more to deconstruct. Homeowners could be offered \$5,000 to deconstruct. Financial impact is estimated at \$100,000 to \$125,000. Seattle and Portland offer incentives, so there is precedent.

8h. Implement tipping pad and sorting at CVWMC:

Haulers could drop off mixed loads and staff or contractors could sort on-site. Contractors would be charged mixed load fee. Some regulatory changes required. The Regional District of Okanagan-Similkameen used this strategy with a contractor.

Advisory Comments:

S. Fisher – In the SRD, an increase in permitting would be challenging.

R. Telegus – Denman and Hornby also don't require permitting. You could perhaps have demolition requirements in the solid waste bylaw, rather than using building permits.

G. Yaron – Other districts have built requirements into their solid waste bylaws.

D. Eason – Why did Victoria choose pre-1940 for deconstruction?

G. Yaron – Pre-1940 homes used valuable materials such as old growth Douglas fir. There's enough financial incentive to deconstruct. Governments currently considering this policy are looking at an assessment approach, rather than a date cut-off, because some new homes have valuable materials.

S. Fisher – I wonder if implementing the requirements in CSWM bylaws would work if some areas don't support it. Are the financial implications of the downloading captured?

G. Yaron – The financial implications aren't captured, but we do flag where we see potential costs for local governments. We didn't attempt to quantify it for this report.

S. Fisher – Would the staffing impact apply to the CSWM or the CVRD and SRD?

G. Yaron – We focused on impacts to CSWM and noted whether we anticipate impacts on other local governments.

S. Willie – We'll consider the building and planning departments when looking at strategies.

G. Yaron – We identified where there is potential to share resources across departments or governments.

7. 2025 Budget and Financial Picture

M. Rutten presented the CSWM financial plan. It was presented to the Board for recommendations. Many directors are from remote communities with different interests than larger communities. There's a desire to break the budget down by the different lines of business (e.g. administration, transportation, debt servicing) to provide the ability to focus on different parts of the CSWM Service. Metrics show CSWM in the middle of the ranking of waste diversion across BC. These metrics are helpful for the Board and there's a desire to provide more of them.

Trends, challenges and opportunities: There are many opportunities to divert more waste. Traffic counts have increased and it creates an impact at the frontend with 500 or 600 cars arriving daily. It creates backups at the scales. Regulatory requirements have increased and we need to keep up. Disaster preparedness is an emerging item. Messaging is another challenge in promoting behaviour change. We can improve education and enforcement. The automated wells are an opportunity.

2024 accomplishments include GHG emissions reduction with completion of the CR Organics Facility. The Campbell River flare was commissioned. Also, we're using an emissions detection drone. The progress with the SWMP renewal is a major accomplishment. Landfill and Organics Facility tours were popular with the public.

We expect to generate more revenue than predicted. The surplus has several components, including higher revenue at the scales and underspending. Strategic priorities come from the 2012 SWMP. We're focused on reducing GHG, as well as developing environmentally responsible waste management services. There has been a big improvement in both these areas. Old landfills have been capped, the new landfill is fully lined, and GHG has been reduced.

The proposed budget asks for additional staff resources for LFG operation, including leachate operation, a financial planning analyst, and summer coverage. Overall expenses include landfill operation, leachate treatment, and processing organics. We

no longer show surpluses as a revenue source in order to be more prudent in our budgeting. Surpluses are not guaranteed. We have significant future capital needs to be considered, such as building a new landfill cell. We need to accumulate reserves to help pay for capital projects. If we improve diversion, we can defer the building of the new cell.

K. Broughton presented on fiscal sustainability. Some policies are being introduced to the Board, such as the operating and capital reserve policies. Another policy will be a debt management policy. The ratio between tipping fees and requisition will be examined. The debt servicing levels are projected to remain the same, with debt increased by the construction of the new cell. Reserves are underfunded and don't yet meet fiscal sustainability best practices. Policy changes are planned to increase reserves. The Board recommendation was to increase requisition by \$500,000 rather than \$1,000,000, with CSWM coming back with proposals for tipping fee increases.

M. Rutten explained the Board didn't provide feedback on the budget itself. They were concerned about getting additional funding through tax increases and generally felt a user pay model was better. They encouraged increasing tipping fees to get funds.

Advisory Comments:

R. Telegus – I commend the Finance department on seeking sustainable financing.

S. Willie – Our objective in sharing this information is demonstrating what we can afford to do. Past decisions put us in a position of needing to borrow to fund necessary projects. We're trying to pay debt while raising funds for the future.

D. Baar – A requisition increase might mean \$100 per household.

8. Wrap up and Meeting Adjournment

Committee members invited to submit ongoing feedback.

GENERAL:

The Regional Solid Waste Advisory Committee meeting schedule for 2025 will be released shortly.

TERMINATION:

S. Willie adjourned the meeting at 4:00 pm.

Recorded by:

Certified correct:

B. Meagher

Bridget Meagher
Branch Assistant – Engineering
Services

S. Willie

Sarah Willie
Manager of Solid Waste Planning
and Policy Development

Regional Solid Waste Advisory Committee Meeting

SWMP Renewal Meeting #13

November 28, 2024

Hybrid Meeting

10:00 am to 2:00 pm



Review of Agenda and Minutes

Marc Rutten

10 minutes

RSWAC Meeting 13.1

Land Acknowledgement

We would like to acknowledge we are hosting this meeting on the traditional unceded territory of the K'ómoks First Nation, and the Comox Strathcona Waste Management service area is located in the Coast Salish, Kwakwaka'wakw, and Nuuchahnulth territories.



Meeting Agenda

- What We Heard Consultation Summary 2024
- SWMP Next Steps
- GHG Emission Reduction Strategies
- Construction, Renovation and Demolition
- 2024 Budget and Financial Picture



Adoption of Minutes and Agenda

Approval of Minutes

- Any modifications to minutes?

Agenda for Today

- Take a quick look at the agenda, is anything missing?

Parking Lot
Issues or questions that come up as we go along can be placed in the 'parking lot' for discussion at the end, or future meetings.



Summer Engagement Highlights

Katie Hamilton (Virtual)

30 minutes

RSWAC Meeting 13.2

Any Questions?



SWMP Next Steps

Sarah Willie

15 minutes

RSWAC Meeting 13.3

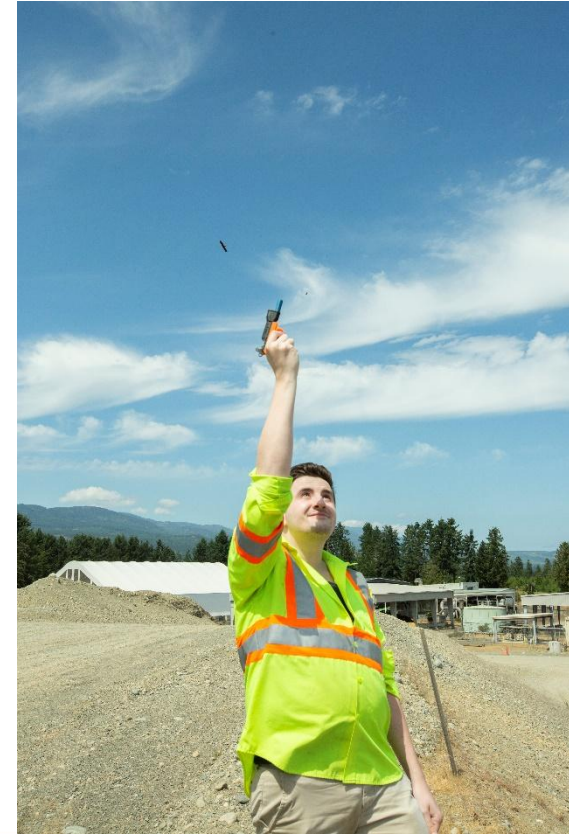
Work to Date



- 39 strategies presented to date
- 9 technical memos and further supporting documentation reviewed
- 13 meetings and one field trip day
- Too many hours of me droning on to count

Narrowing Down the Strategies

- Some big meetings coming up to review the strategies presented and get them down to a recommended list
- Direction from the Board on how we consider the strategies, what importance to put on cost, diversion potential, GHG benefits etc.
- Bring the short list to the public May and June of 2025





Draft Plan Compiled

- Pull together all the feedback, the costs and the strategies and summarize in a draft plan
- Send that out for consultation Fall 2025
- Deliver to Ministry
- Fund it. Resource it. Execute it.

Any Further Questions or
Observations?



Greenhouse Gas Reduction Strategies

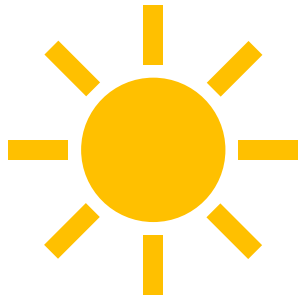
Sarah Willie

35 minutes

RSWAC Meeting 13.4

Any Further Questions or
Observations?





Lunch Break Time



Construction, Renovation and Demolition Waste Reduction

Lindsay and Darrell Eason

Gil Yaron

65 minutes

RSWAC Meeting 13.6

CONSTRUCTION WASTE REDUCTION PILOT

Darrell and Lindsay Eason

Global Affinity Communications Inc.



NEW CONSTRUCTION CASE STUDY

Purpose: To understand waste diversion opportunities for construction site by sorting on site and weighing each category.

Method: Waste was hand sorted by two experienced waste auditors and placed in containers and weighed on an industrial weigh scale.

Waste was sorted into the following 13 categories:

- Clean wood
- Metal
- Cardboard
- Flexible plastic
- Plastic containers
- Paper cups
- Drywall
- Food waste
- Styrofoam
- Sawdust
- Hazardous waste
- Refundables
- Garbage (painted/stained wood, paint rollers and brushes, foam, insulation,

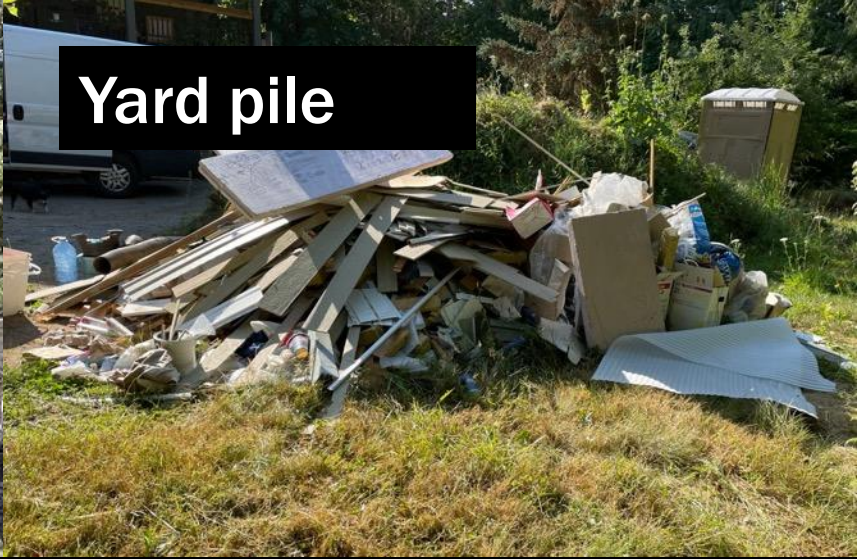




Roll off bin



Tow trailer



Yard pile

NORMAL WASTE PRACTICES ON A CONSTRUCTION SITE

- Waste collection depends on space, budget and time.
- Usually, waste gets piled in one spot to be loaded onto a trailer later.
- Metal and clean wood may get pulled to one side when loading.



COMMON PRACTICES



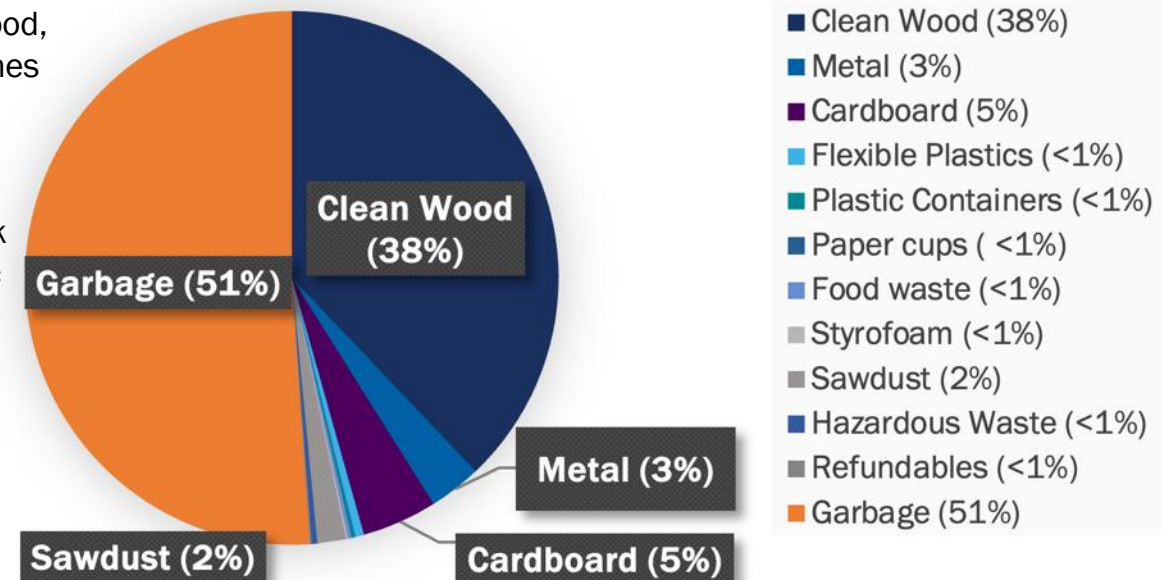
- Cardboard boxes are used as garbage cans.
- Lunch food, containers, coffee cups and cigarettes get added to the pile.
- The drywallers and roofers took away the offcuts leaving none for disposal onsite.
- The framers re-use their concrete forms, and chip off any concrete to save for current or future jobs.

RESULTS



- 1500 kg re-sorted and weighed (~10 hrs)
- 51% is garbage
- 49% is divertible, mostly clean wood

¾ Hardieplank, plus clearcoat trim wood, paint/stain brushes and rollers, rags, trays, insulation (Rockwool and Styrofoam), Tyvek and sheet plastic



WASTE DIVERSION PILOT WITH CONSTRUCTION COMPANIES

Purpose: To find a company doing new construction and a company doing a major renovation and provide options for them to sort themselves to achieve high diversion rates.

Challenges: Getting a commitment from companies and finding ones at the start of a project willing to take time to divert.

Confirmed one builder doing major renovations (also attended the breakfast meeting in 2023).



Are you doing renovations or a small new build?
Want help creating a recycling station for your job site?

Construction Waste Diversion Pilot

Recyclable material and prohibited waste is ending up mixed with construction and demolition waste and being buried at the landfill. We are trying to better understand the challenges to divert these materials and want to provide support to companies who are willing to try to divert all recyclable and prohibited material.

How the Pilot Program Works

- We will offer signage for divertible material (such as cardboard, metal, plastic containers, clean wood waste, divertible gypsum, hazardous waste)
- We will provide adjustable rope dividers, totes and tarps for each category (which can be used on the ground or directly on a trailer)
- Initial site visit and check in schedule
- Communication material for all on-site trades
- A chance to offer input about waste management
- Reimbursement on diverted material at the end of pilot

Contact Darrell@globalaffinity.ca or (250) 650-2302

Comox Strathcona Waste Management
www.cswm.ca

What can you divert?

The following materials are prohibited from being buried in the landfill (except for garbage) under Bylaw 720 CSWM Tipping Fees and Disposal Regulation June 16, 2022.

- CARDBOARD**
All cardboard and paper unless it has contaminated with paint or sealant. Staples and tape are ok.
- METAL**
Broken tools, saw blades, nails, steel stud, pipe, metal shavings, paint rollers (not the paint sleeve).
- RIGID PLASTIC**
Packaging and containers made of hard plastic for tools, appliances, finishing materials can all be taken to the commercial plastic bin at the Comox Valley Waste Management Center (CVWMC).
- DEPOT RECYCLING**
 - Coffee cups (empty, lids removed - can add to curbside)
 - Batteries
 - Electronics/small or large appliances
 - Flexible Plastic such as bubble wrap, shrink wrap, soft foam and plastic wrap (free of tape and/or paint and dirt).These items must be taken by a homeowner to the CVWMC or Return-it Depot.
- CLEAN WOOD:** Any building wood that is free and clear of paint or stain. Raw untreated pallets, lumber offcuts, particle board without laminate, plywood, hardwood flooring.
- REFUNDABLE:** All bottles, cans, tetra packs, etc. for refund - please take to the Return-it Depot.
- DIVERTIBLE GYPSUM (drywall):** All drywall must be kept out of the landfill. There are three drywall categories - new construction drywall, renovation demolition drywall and asbestos containing drywall. www.cswm.ca/recycling/drywall-gypsum-diversion
- HAZARDOUS WASTE:** All left over paint, sealant, PVC glue, etc. is considered hazardous waste. The Comox Strathcona Waste Management (CSWM) service does not accept commercial hazardous waste for disposal. If you have commercial hazardous waste (or large quantities of household hazardous waste), please contact one of the following commercial hazardous waste recyclers: Safety-Kleen 250-746-6246 or Environmental 360 Solutions 250-722-3885
- GARBAGE:** Use clear garbage bags in a garbage bin rather than putting all waste in a cardboard box. Common construction waste that is considered garbage includes: Dirty paint brushes, anything with paint on it, insulation (all types), damaged tarps, MDF, ceiling tile, hoses, hardieplank, dirty buckets, vapour barrier, tile off-cuts, drywall mud, used glue fillers, molding and trim, insulation, particle board etc. Plastic that is considered garbage includes dimple mat, Tyvek, tarps, poly, PVC pipe and materials that are contaminated with paint, sealant, etc.

If you are not sure about what goes where, feel free to text a photo or give us a call to confirm which category it should go into. Text or call (250) 650-2302 or (250) 650-4661.

SUPPORT OFFERED



- Coroplast 12" sign for each category
- Strapping, rebar posts
- Four site visits plus phone calls
- Not included: containers (wanted to see what would fit best – they used their own totes)

CLEAN WOOD



✓ All wood that is free of paint and stain.

Includes lumber off-cuts, particle board without laminate, hardwood flooring, untreated pallets, plywood, etc.

GARBAGE



✓ Dirty paint brushes, Anything with paint, insulation, MDF, ceiling tile, tile off-cuts, hardie plank, vinyl siding, vinyl plank, laminate, vapour barrier, drywall mud, glue fillers, particle board, tarps, etc.

METAL



✓ • Anything 50% metal or more
• Saw blades
• coated wiring
• old light fixtures
• metal ducting or pipe
• brackets/hinges
• broken tools
• steel studs
• paint rollers (no sleeves)
• metal shavings
• metal strapping

REFUNDABLE BOTTLES/CANS



✓ • All refundable bottles & cans
• Tetrapacks

Must be empty

Return bottles and cans for refund.

INITIAL SITE VISIT



Site located in Area B



2nd site visit (June)



3rd site visit (July)



4th site visit (Sept)



BEFORE AND AFTER

Full 'back to the studs' renovation



KEY TAKE AWAYS

- **Sorting is time consuming and not financially incentivized (except for refundables)**
- **Accountability: Having a someone as a resource and being part of the pilot kept all builders on track with diversion**
- **Need to set up a system that makes it easy to avoid contamination**
 - **Access to movable bins and signs**
 - **Pallet cage worked well for wood scraps**

LESSONS LEARNED

- **This was a soft approach** – don't push the companies who are not that interested (no incentive)
- **Early adopters** – In order to win over the construction industry, we need early adopters who can try a few methods and prove to the rest of the industry what works and what doesn't
- **Adaptability** – This pilot offered a flexible method that got the crew thinking about how to adapt (site specific) and be most effective
- **Toolkit** – Simple and versatile (indoors/outdoors)
 - If the CVRD provided containers, labels and an easy way to drop off/pick up the toolkit, there may be more site separation for the non wood/garbage waste

Any Questions or
Comments?



Construction, Renovation & Demolition (CRD) Waste Reduction: Evaluating Strategies & Options

Presentation to the Regional Solid Waste Advisory Committee
November 28, 2024



Agenda

1. Strategy overview
2. Guiding principles
3. CSWM Background
4. Stakeholder interviews & findings
5. Strategy options



Strategy Overview

1. Prioritize source reduction and reuse as highest and best use of materials.
2. CRD waste reduction supports CSWM goals
 - Circular economy approach (eliminate waste, recirculate materials at their highest value, regenerate nature)
 - Reduce waste to landfill



Guiding Principles

Almost all the guiding principles are applicable to CRD waste management. Those most applicable include:

- Maximize beneficial and best use of waste materials and manage residuals appropriately (e.g. clean wood waste).
- Prevent organics and recyclables from going into the garbage.
- Build and support collaborative partnerships to achieve regional targets set in plans.



CSWM Background

- Comox Valley Waste Management Centre diverts drywall, wood waste, rubble and metal
- Campbell River Waste Management Centre diverts drywall, wood waste, and metal.
- Gold River, Hornby and Cortes Island divert wood waste and metal.
- Sayward, Tahsis, and Zeballos divert metal.
- Various locally private companies accept CRD or wood waste under various terms and conditions: Northwin Environmental Landfill (Campbell River), Pacific Wood Waste (Courtenay and Campbell River) and Al and Sons (Campbell River).
- Campbell River does not accept anything larger than 20-yard bin and dump trucks and trailers cannot dump CRD waste to avoid double handling and improve cost effectiveness of CSWM waste transfer operations.



CSWM Background

- CRD materials represent the second largest category of materials received
- CRD materials diverted decreased from 49.5% in 2022 to 41.9% in 2023
- Of the non-diverted CRD material:
 - 18% (2,600 tonnes) were divertable materials
 - 24% (3,600 tonnes) could be diverted by CSWM does not have recycling technologies and end markets
 - 58% are not divertable and require disposal (public/private sites)
- Northwin Environmental has seen an exponential increase in CRD material received from 121 tonnes in 2019 to 8,205 tonnes in 2023 following the opening of their new landfill in 2021.



CSWM Background

How diverted materials are currently managed:

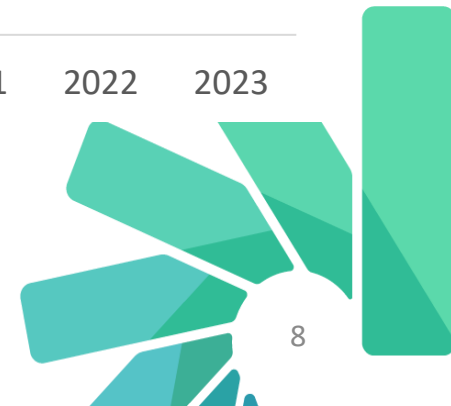
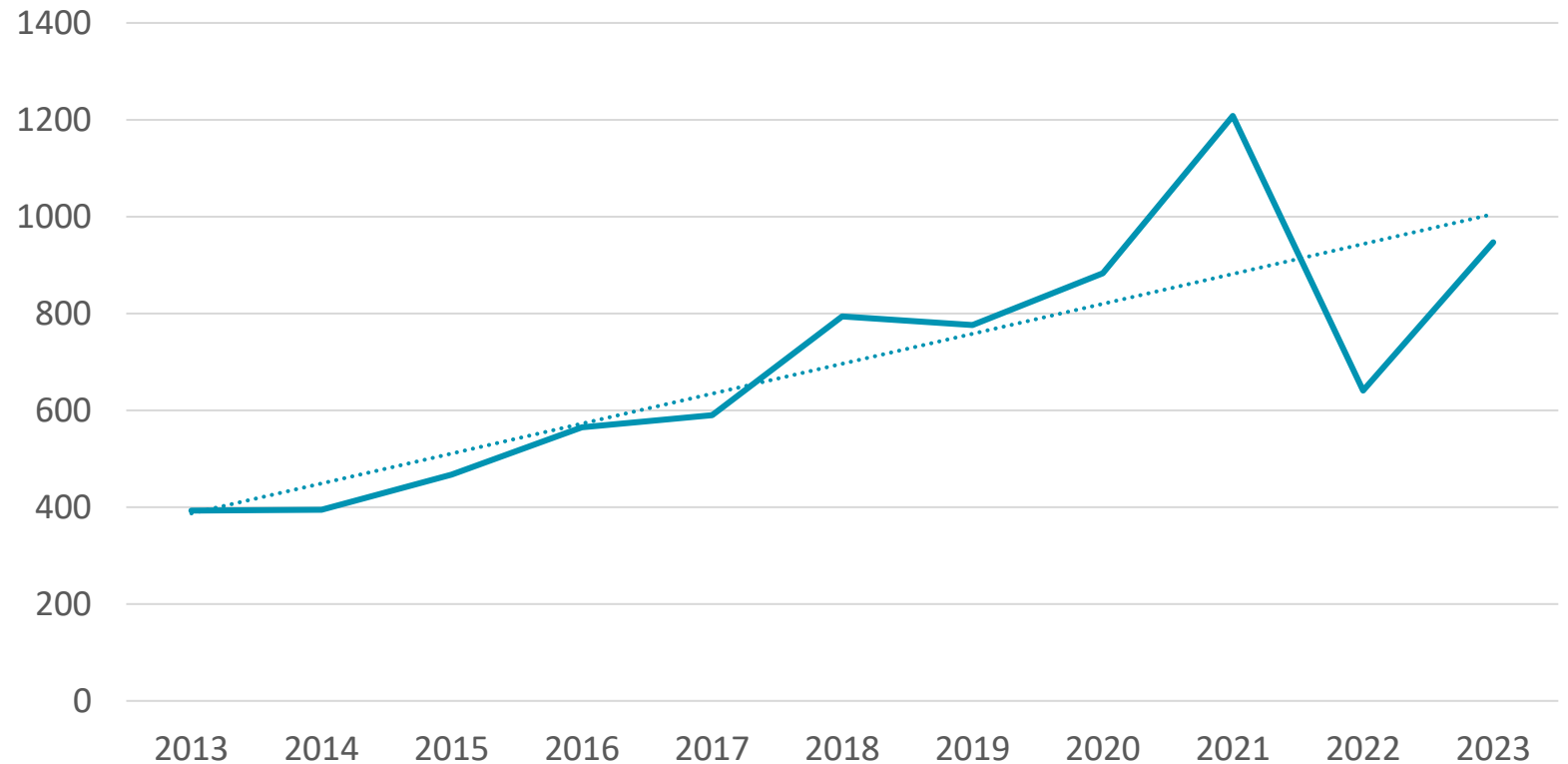
- Clean wood waste: Sent to Catalyst Paper Mill, Port Alberni and converted to compost amendment and animal bedding
- Gypsum/Drywall: Shipped to New West Gypsum (New Westminster) and recycled into drywall
- Aggregate (bricks and concrete): Crushed and used as alternative daily cover (some private sites sell it as a product).
- Metal: Segregated and sold to metal recyclers



CSWM Background: Demographics

Housing starts have increased approximately 250% over the past decade.

Expected to continue due to residential zoning restrictions by the province, lower interest rates and unabated population growth.

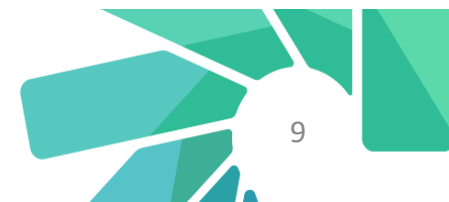
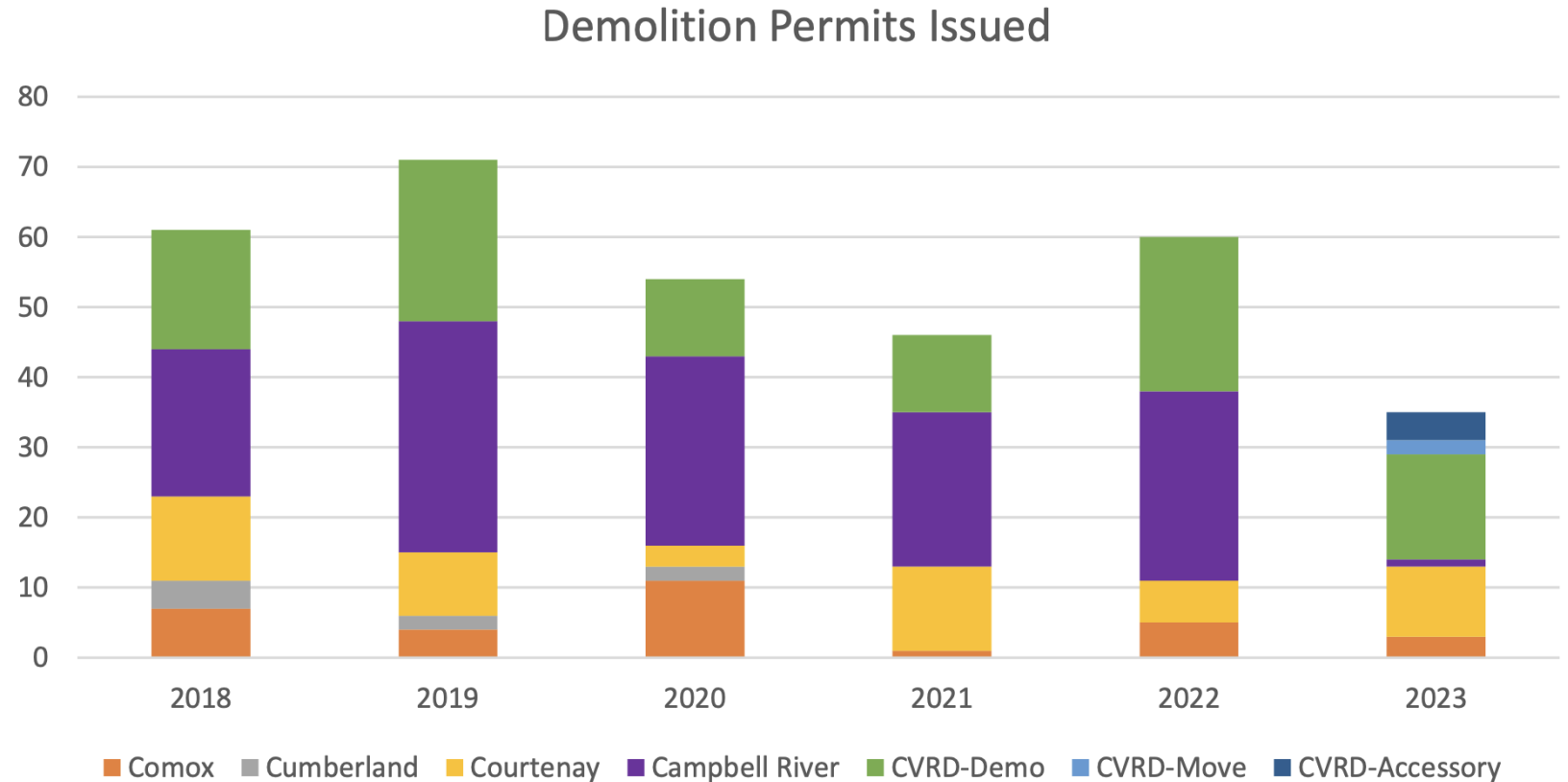


CSWM Background: Demolitions

No correlation between construction and demolition, BUT demolition rates are expected to increase.

42% of existing housing stock (20,600 units) was built prior to 1980.

Densification in urban areas will require removal of existing structures.



CSWM Background

Material	Rate (per tonne)
Landfilled Materials	
Construction and Demolition Waste without Recyclable Materials or Prohibited Waste	\$155
Construction and Demolition Waste containing Recyclable Materials or Prohibited Waste	\$365
Asbestos Containing Material	\$310
Roofing Material	\$155
Recyclables	
Clean Wood Waste	\$120
Gypsum - Divertible	\$275
Clean Fill	\$40
Rubble	\$40
Metal	Free



Stakeholder Interviews & Findings

Stakeholder Group

Landfill operators 3

Builders/Contractors 4

Haulers 2

House movers 2

Total 11



Stakeholder Interviews & Findings

- General satisfaction with the CSWM's current policies and management of CRD materials
- Acknowledged the efforts of CSWM staff.



Stakeholder Interviews & Findings

Tipping Fees

- Some felt they are way too low while others found them prohibitive. Most stated they were reasonable provided they are applied equally across the industry.
- General consensus – no impact on sorting.
- Owner/operator haulers have a vested interest in sorting, employees of corporate-owned waste management companies do not.
- Higher fees at CSWM facilities allow private facilities to set their fees at a rate that makes it economical for them to sort.



Stakeholder Interviews & Findings

Preventing Contamination of Loads

- Nothing short of material bans will reduce mixed loads.
- Commercial haulers are avoiding penalties on mixed loads by using tipping trailers because they are not checked at the tipping face.
- Need for more consistent and streamlined handling of drywall loads by CSWM staff.
- Policies that disincentivize dumping foster interest in home relocation as a solution.



Stakeholder Interviews & Findings

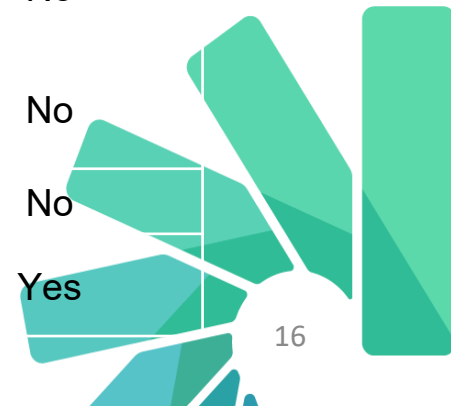
Other Considerations

- Convenience is a common consideration for waste haulers
- Need economical end markets for materials
- Need more disincentives for illegal dumping.
- More educational support is required about what can be recycled, what is being recycled, zero cost options



Summary of Strategic Options

Strategic Option	Diversion Impact	Operational/ Staffing Impact	Financial Implications	Regulatory Authority Req'd
8a. Pre-demolition Assessment	High	Low	Low	No
8b. Mandatory compliance with pre-demolition assessment	High	Low	Low	No
8c. Early Green Removal Permits, Move-On Permits and Expedited Electrical Disconnects	Medium	Low	Low	No
8d. Implement a comprehensive regional strategy to salvage and process clean wood	High	High	High	Yes
8e. Engage with other jurisdictions on cross-regional solutions (BMEx)	Low	None	Low	No
8f. Educational Tools & Resources to Support On-Site Material Management	Low	Medium	Medium	No
8g. Financial Incentive for Deconstruction	High	Medium	Medium	No
8h. Implement tipping pad and sorting at CVWMC	High	High	High	Yes



Strategic Option 8a: Pre-Demolition Assessment

Present policy recommendations to local governments introducing a requirement for all structures slated for removal to undergo an assessment to determine whether they can be relocated or deconstructed (fully or partially).

Diversion Potential	High	100,000 kg of waste per average home, 60%-80% of homes can be relocated/deconstructed, 85%-95% diversion potential per home deconstructed.
Operational Impacts	Low	Require time to draft and consult on the recommended policy framework and present it to local governments for consideration.
Financial Implications	Low	Staff time required to develop the recommended policy and consult with local municipal governments.
Regulatory Authority Required	No	Permit requirements would need to be extended to include a pre-demolition assessment.
Precedent	Assessment requirements already exist in the region for other purposes (Courtenay, Cumberland)	

Strategic Option 8b: Mandatory compliance with pre-demolition assessment

Present policy recommendations to local governments requiring that the findings from pre-demolition assessments be followed coupled with refundable salvage deposit.

Diversion Potential	High	Burnaby: 29 deconstructions completed resulting in 9,448 tonnes of materials being diverted (Oct 2022 – Mar 2024)
Operational Impacts	Low	In conjunction with 8a, require time to draft and consult on the recommended policy framework and present it to local governments.
Financial Implications	Low	Staff time required to develop the recommended policy and consult with local municipal governments.
Regulatory Authority Required	No	For local administrations, amendments would be required to bylaws governing demolition, as well as form templates to support the documenting and reporting of salvaged materials.
Precedent	The City of Victoria requires all homes older than 1940 be deconstructed. A \$19,500 refundable deposit is taken and returned once the contractor provides evidence that 3.5 kg of wood has been salvaged per square foot of liveable floor space.	

Strategic Option 8c: Early Green Removal Permits, Move-On Permits, Expedited Electrical Disconnects and Improved Data Management

Present policy recommendations to local governments establishing separate expedited permits for the relocation/deconstruction of homes (early green removal permit) and resituating of moved homes (move-on permit) to disincentivize demolition.

Diversion Potential	Medium	Each relocated home keeps more than 75,000 kg of building materials out of landfill. Electrical disconnects make deconstruction more attractive.
Operational Impacts	Low	Time to draft and consult on the recommended policy framework and present it to local governments for consideration.
Financial Implications	Low	Staff time required to develop the recommended policy and consult with local municipal governments and utilities.
Regulatory Authority Required	No	Amendments to municipal building bylaws and fee bylaws would be required.
Precedent	District of North Vancouver offers an expedited green demolition permit. Town of Comox has a move-on permit. Seattle City Lights fast tracks deconstruction projects for electrical disconnects.	

Strategic Option 8d: Comprehensive regional strategy to salvage and process clean wood

Build on the existing diversion program for clean wood by banning clean wood from all public and private facilities and establish and expand pathways to salvage and process clean wood for resale.

Diversion Potential	High	More than 1,000 tonnes of clean wood from CVWMC and another 2,000+ tonnes from Northwin Environmental landfill. Also reduce GHG emissions by eliminating one primary source of organic material from landfill.
Operational Impacts	High	Separate areas would need to be established at each facility to receive the material. Additional staff, training and equipment required or contract out.
Financial Implications	High	Capital costs to expand the existing receiving area for clean wood, additional site preparation and the leasing of handling and processing equipment to manage salvaged wood. Additional staff time. Up to \$100k in foregone revenue by reducing fees on clean wood to \$80 per tonne.
Regulatory Authority Required	Yes	Require budget approval and possible amendments to Bylaw 720 (CSWM Tipping Fees and Charges). Operational certificates for private facilities might also require amendment.
Precedent	The Capital Regional District has banned clean wood from landfill as of January 2, 2024 and established an on-site processing facility.	

Strategic Option 8e: Engage with other jurisdictions on cross-regional solutions

Initiate conversations with other local governments, First Nations and organizations to identify and support cross-regional initiatives that would allow consolidation of material streams with other regions and allow for solutions at scale. Support Vancouver Island Building Material Exchange.

Diversion Potential	Low	BMEx is just becoming established in the community with volumes diverted expected to increase in successive years. Additional potential diversion impact from cross-regional initiatives could be significant (e.g. clean wood processing facility, asphalt shingle recycling facility).
Operational Impacts	None	
Financial Implications	Low	Financial implications are project specific. Participation in the BMEx program is \$25,000 per year with funds going to fund the online marketplace in its first year, support matchmaking efforts and educational & awareness activities.
Regulatory Authority Required	No	
Precedent	Vancouver Island Building Material Exchange has the support of RDN, Cowichan Valley RD and CRD	

Strategic Option 8f: Educational Tools & Resources to Support On-Site Material Management

Develop a portfolio of materials and resources to educate and support circular best practices amongst the construction sector.

Diversion Potential	Low	Education and awareness about options for diverting CRD materials are the first steps to action.
Operational Impacts	Medium	Communications staff will need to be engaged to develop and disseminate materials. Materials already exist from other jurisdictions and can just be modified.
Financial Implications	Medium	\$50,000 - \$60,000 in staff time and resources
Regulatory Authority Required	No	
Precedent	RDN Construction Best Practices Guide; Metro Vancouver Deconstruction Guide	

Strategic Option 8g: Financial incentive for deconstruction

Offer a financial incentive (\$5,000) to contractors that select deconstruction over demolition to help offset the cost differential between the two approaches.

Diversion Potential	High	If 20 homes are deconstructed per year, more than 1,500 tonnes of CRD materials could be diverted.
Operational Impacts	Medium	Staff would need to implement and administer a system for contractors to evidence deconstruction was done and the materials diverted from landfill for alternate uses.
Financial Implications	Medium	In addition to staff time to implement and administer the incentive program, an estimated \$100,000 - \$125,000 in incentives would be required annually assuming 20-25 homes were deconstructed each year.
Regulatory Authority Required	No	
Precedent	The City of Seattle offers a \$4,000 incentive for deconstruction.	

Strategic Option 8h: Implement tipping pad and sorting at CVWMC

Implement a staging area at the CVWMC with a tipping pad where trucks dump their loads of mixed CRD and a contracted operation or regional staff sort and divert recyclable materials.

Diversion Potential	High	Approximately 18% of the mixed CRD materials currently being landfilled
Operational Impacts	High	Two additional staff to receive, sort and track loads or contract out
Financial Implications	High	Two full-time staff and equipment, or subsidy provided for contracted service
Regulatory Authority Required	Yes	Budget approval and possible amendments to Bylaw 720 (CSWM Tipping Fees and Charges). Operational certificates for private facilities might require amendment.
Precedent	Regional District of Okanagan-Similkameen (RDOS) opened up a demolition material sort facility.	



www.light-house.org

2025 Budget and Financial Picture

Marc Rutten and Kelly Broughton

30 minutes

RSWAC Meeting 13.7



2025-2029 Financial Planning

Comox Strathcona Waste Management

November 21, 2024
Proposed Budget

Authority	Waste Management Act
Service Establishment Bylaw	Bylaw 1822, March 1997 Amended by Bylaw 331, November 2014
Service Name	Comox Strathcona Waste Management
Purpose	The collection, removal and disposal of waste and noxious, offensive or unwholesome substances and the regulation, storage and management of municipal solid waste (MSW) and recyclable material, including the regulation of facilities and commercial vehicles used in relation to these matters
Participants	Comox Valley Regional District Strathcona Regional District

Serving Eight Municipal Partners and several unincorporated Rural Areas

Campbell River

Comox

Courtenay

Cumberland

Gold River

Tahsis

Sayward

Zeballos

Eight Electoral Areas

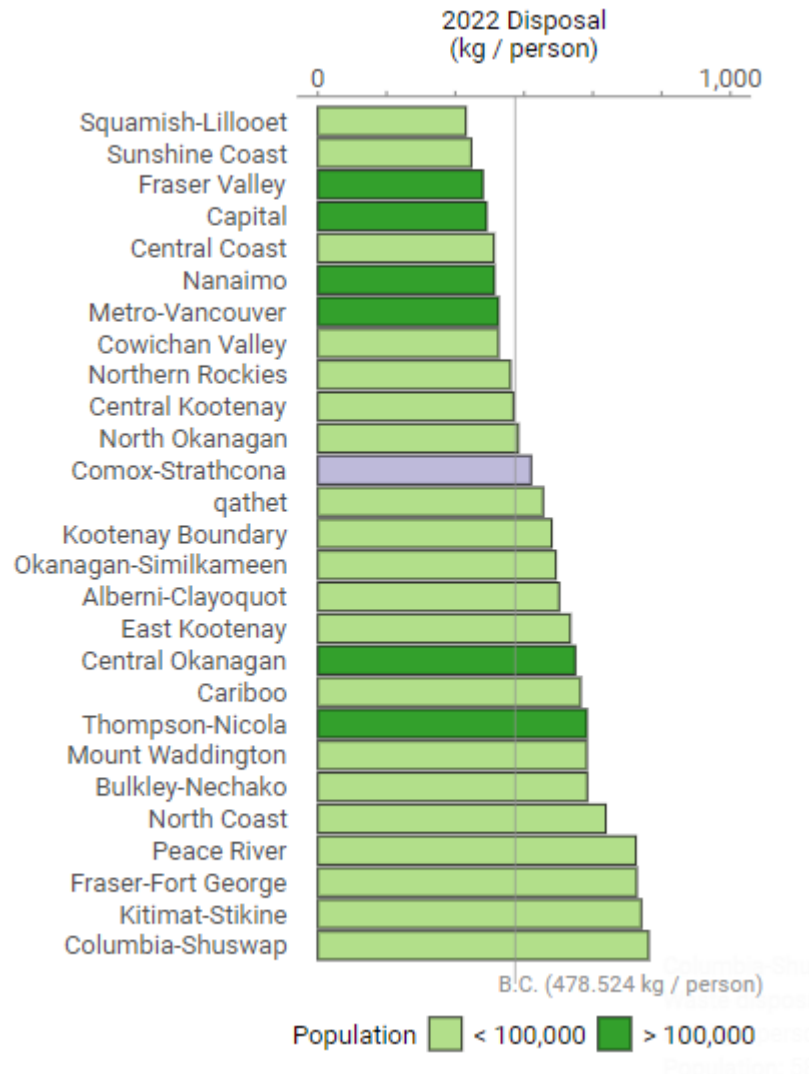


Services and Service Levels

Main Areas of Operations	Metric	Location
Regional Engineered Landfill	1	Cumberland
Waste Management Centers	2	Cumberland, Campbell River
Regional Organics Processing Centre	1	Campbell River
Historical Landfills	3	Zeballos, Tahsis, Gold River
Recycling Depots	2	Quadra Island & Oyster River
Transfer stations and recycling depots	6	Hornby & Cortes Islands, Villages of Gold River, Tahsis, Zeballos, Sayward

Lines of Business

Administration
 Annual Debt Servicing and Capital Contribution
 Capital Upgrades and Asset Management
 Diversion - Organics
 Diversion - Recycling
 Education and Policy
 Environmental and Closure
 Landfill Disposal
 Transfer Station and Remote Landfills
 Unified Transportation



Metrics (2023)

- Disposal Rate = $\frac{\text{total tonnage buried}}{\text{population}}$
- Waste disposed per capita
 - CSWM: 499 kg per capita (2023)
 - BC Average: 478 kg per capita (2022)
 - Ministry Target: 350 kg per capita

Trends, Challenges and Opportunities

Key Challenges	Emerging Opportunities
Waste Diversion and Reduction	Education and enforcement
Increased Traffic, Landfill Capacity and Airspace Management	Implement innovative compaction strategies
Regulatory Compliance and Escalating Costs	Invest in autotuning technology for LGF wells
High Capital Expenditures vs. Inadequate Reserves	Develop sustainable funding strategy
Policy and Enforcement Limitations	Modernize policies and strengthen regional collaborations to enhance compliance
Operational Pressures and Capacity Constraints	Invest in staff training and development
Infrastructure and Service Gaps	Explore service levels (SWMP)
Disaster Preparedness and Resilience	Enhance planning and collaboration to build resiliency
Education and Community Engagement	Increase targeted education campaigns to foster a culture of waste diversion and recycling
Function and Resource Allocation	Financial stability

2024 Accomplishments

- Greenhouse Gas Emission Reduction
 - Regional organics facility – 1st full year of operation
 - Campbell River flare commissioned
 - Drone methane detection flights
- SWMP renewal – Step 3 (underway)
 - Phase 1 - and in-person engagement in communities to inform strategies
 - municipal council meetings
 - 8 technical studies to inform long list
- Education
 - Landfill and regional organics tours

2024 Third Quarter Budget Update

By Line of Business (?)	2024 Actual to Date	2024 Approved Budget	3 rd Quarter Projection	Variance
391 - CSWM (Revenues)	\$17,670,277	19,642,706	21,007,365	\$1,364,659
391 - CSWM (Expenses)	\$14,270,640	17,946,119	17,397,216	\$548,903
392 – Post Landfill Closure	\$50,990	172,758	67,987	\$104,771
393 – Leachate Treatment Plant	\$302,502	598,042	418,173	\$179,869
394 – Regional Organics	\$687,012	925,787	921,016	\$4,771
Surplus/Deficit				\$2,202,974

Key Variance Items

- Increased revenue [\$686k]
- 2023 Actual Surplus [\$588k]
- Expense Savings [\$838k]
- Projects continuing to 2025 [\$440k]

Strategic Priorities and Initiatives

Type	Initiative
Board	Objective One - Minimize Waste Generation
Board	Objective Two - Reduce Greenhouse Gas Emissions
Board	Objective Three - Environmentally Responsible and Compliant Residual Waste Management

2025 Work Plan Priorities

Type	Initiative	Comment
Planning	SWMP Step 3(b)	Raising awareness and collecting input on the proposed short list of option Update masterplan
Operations	Landfill Compaction Trials	Compaction of waste to yield airspace/ cost savings
Operations	Scale Software Implementation	Implementation of new Paradigm software
Operations	Disaster Debris Planning	Develop clear protocols for rapid debris management post-disaster, prioritizing public safety and landfill capacity
Operations	Autotuners for CV & CR	automation to improve gas extraction efficiency and reduce manual adjustments
Operations	Onboarding Quadra Depot	Final building, community outreach, and staff training
Operations	Organics Expansion	Measured approach to expansion for Multifamily and select ICI
Operations	CVWMC Office Building	Consolidate operations, improve efficiency, and prepare for future growth

Human Resources

	2025
Opening FTE Balance	30.93
Addition Request	
Full time - Waste Water and Landfill Gas Operator	1.00
Full time - Health and Safety Coordinator	0.33
Part Time - Financial Planning Analyst	0.50
Temporary /Casual - Waste Management Attendants	0.75
Adjustments	-0.63
Total Change	1.95
Ending FTE Balance	32.88

- Leachate Treatment Plant operations and maintenance
- Landfill gas systems operations and maintenance
- Site safety coordination
- Seasonal support for peak summer traffic
- Dedicated financial planning support

Overall Expenses: 391-394

Year over Year Change	2024 Approved Budget	2025 Proposed Budget	Increase (Decrease) (\$)(%)	
Support Services	\$999,614	\$1,203,017	\$203,403	20.3%
Personnel Costs	3,523,106	3,831,902	308,796	8.8%
Grants to Other Organizations	961,139	714,558	(246,581)	(25.7%)
Materials, Supplies and Utilities	2,609,195	2,785,515	176,320	6.8%
Contract and General Services	5,784,186	6,068,793	284,607	4.9
Transfer to Other Services	25,812	5,280	(20,532)	(79.5%)
Transfer to Reserve – Future Expenditure	100,000	100,000	-	-
Transfer to Reserve – Capital	1,908,549	807,270	(1,101,279)	(57.7%)
Transfer to Reserve – Other	600,000	600,000	-	-
Debt Charges	2,736,105	2,736,105	-	-
Minor Capital	395,000	149,000	(246,000)	(62.3%)
Total	19,642,706	19,001,327	(641,379)	(3.3%)

391 CSWM - Expenses

Year over Year Change	2024 Approved Budget	2025 Proposed Budget	Increase (Decrease) (\$) (%)	
Support Services	\$999,614	\$1,203,017	\$203,403	20.3%
Personnel Costs	3,267,004	3,480,675	213,671	6.5%
Grants to Other Organizations	961,139	714,558	(246,581)	(25.7%)
Materials, Supplies and Utilities	2,159,706	2,319,679	159,973	7.4%
Contract and General Services	4,808,190	4,917,359	109,169	2.3%
Transfer to Other Services	25,812	5,000	(20,812)	(80.6%)
Transfer to Reserve	2,608,549	1,507,157	(1,101,392)	(42.2%)
Debt Charges	2,736,105	2,736,105	-	-
Minor Capital	380,000	98,000	(282,000)	(74.2%)
Total	17,946,119	16,981,550	(964,569)	(5.4%)

Key Notes

- Support services allocation increase driven by level of capital projects
- Grants to others decreases with completion of Cumberland paving project [300K]
- Tipping Fees [+193K]
- Several large minor capital projects in 2024; unallocated amount cut back [-100K]

392 Post Landfill Closure - Expenses

Year over Year Change

	2024 Approved Budget	2025 Proposed Budget	Increase (Decrease)	
			(\$)	(%)
Personnel Costs	\$75,517	\$119,625	\$44,108	58.4%
Materials, Supplies and Utilities	41,648	51,477	9,829	23.6%
Contract and General Services	55,593	62,921	7,328	13.2%
Transfer to Other Services	-	280	280	100.0%
Total	172,758	234,303	61,545	35.6%

Key Notes

- Training and Development [+3K], Travel [+3K], LFG Materials [+2.9K]
- Flare Repairs [+4.2K], Flare Building Maintenance [+2.5K]

393 Leachate Treatment Plant - Expenses

Year over Year Change

	2024 Approved Budget	2025 Proposed Budget	Increase (Decrease) (\$) (%)	
Personnel Costs	\$155,828	\$203,531	\$47,703	30.6%
Materials, Supplies and Utilities	361,811	327,083	(34,728)	(9.6%)
Contract and General Services	70,403	83,593	13,190	18.7%
Minor Capital	10,000	51,000	41,000	410.0%
Total	598,042	665,207	67,165	11.2%

Key Notes

- Chemicals [-50K], Replacement probes [+8.7K], Safety Equipment [+4.0K]
- Equipment and Machinery Repairs and Contracts [+12K]
- Backup pump [+7K], Tank 1 mixer [+14K], Water line [+10K]

394 Regional Organics - Expenses

Year over Year Change

	2024 Approved Budget	2025 Proposed Budget	Increase (Decrease)	
			(\$)	(%)
Personnel Costs	\$24,757	\$28,071	\$3,314	13.4%
Materials, Supplies and Utilities	46,030	87,276	41,246	89.6%
Contract and General Services	850,000	1,004,920	154,920	18.2%
Minor Capital	5,000	-	(5,000)	(100.0%)
Total	925,787	1,120,267	194,480	21.0%

Key Notes

- Fuel/Lubricants [36K], Hydro [+1.5K], Advertising [-10K]
- Regional Organics contract [+120K]

Revenue

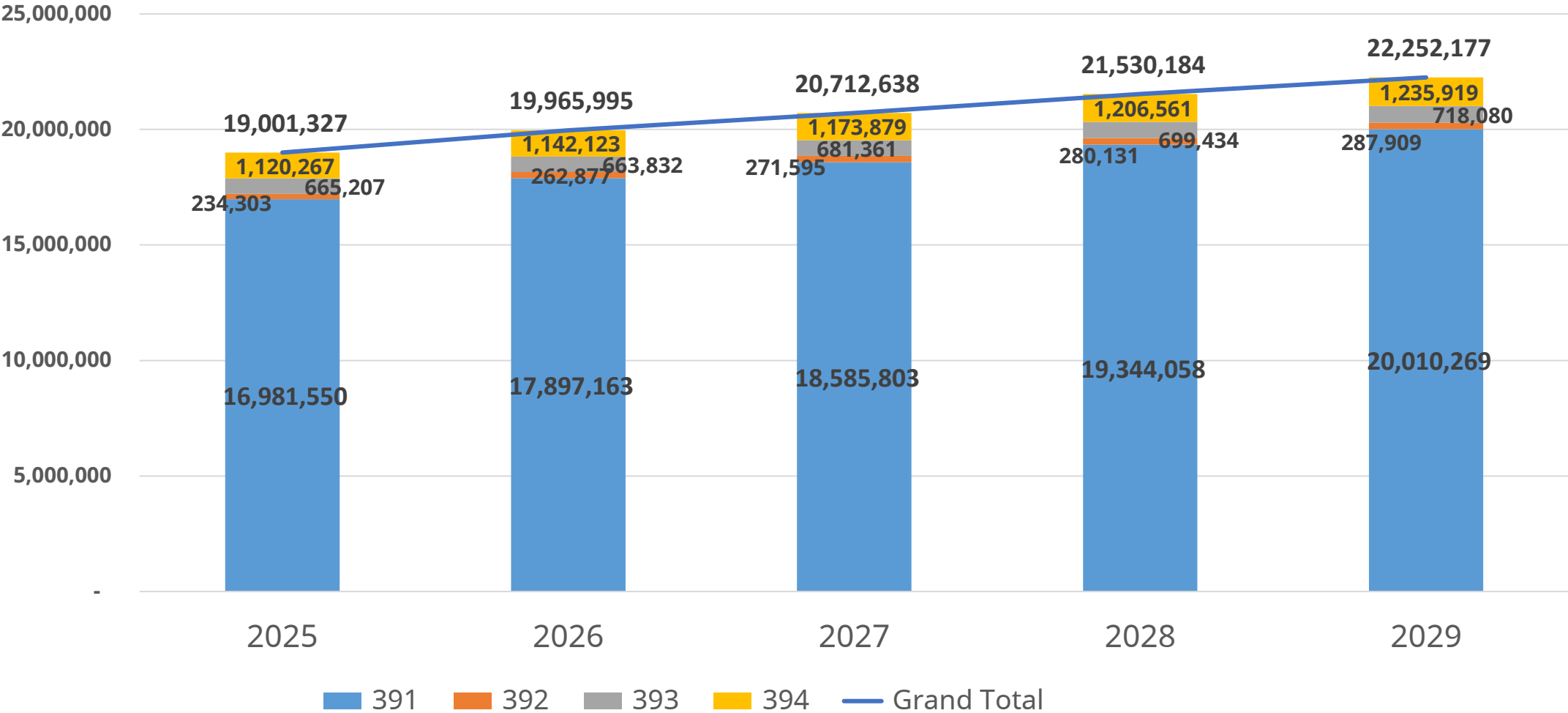
Year over Year Change

	2024 Approved Budget	2025 Proposed Budget	Increase (Decrease)	
			(\$)	(%)
Grants in lieu	\$85,000	\$5,000	(\$80,000)	(94.1%)
Taxation	5,000,000	6,000,000	1,000,000	20.0%
Sale of Services	11,737,768	12,126,327	388,559	3.3%
Prior Year Surplus	2,476,938	-	(2,476,938)	(100.0%)
Recoveries	343,000	870,000	527,000	153.6%
Total	19,642,706	19,001,327	(641,379)	(3.3%)

Key Notes

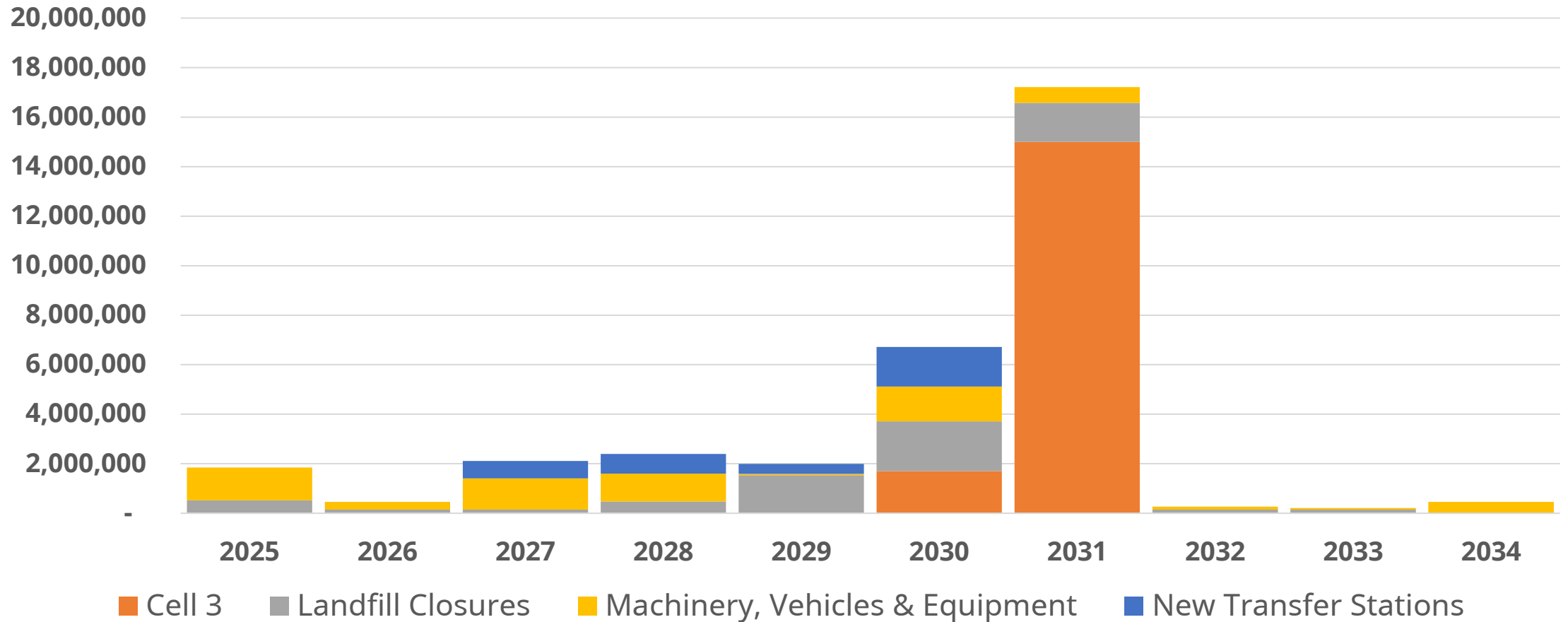
- Requisition increase to build reserves to sustainable level
- Recoveries increased to better reflect actuals in prior years

Operating Budget: 2026-2029 Projections



Comox Strathcona Waste Management 2025-2035 Capital Planning

Ten-year Capital Plan



2025-2029 Capital Plan

	2025	2026	2027	2028	2029
1029 – Annual Capital Projects	\$900,000	-	-	-	-
1048 – CVWMC Landfill Closure	200,000	-	-	-	-
1050 – CVWMC New Landfill	-	-	-	-	-
1051 – CRWMC Closure	200,000	-	-	-	-
1054 - Vehicle and Machinery	825,000	\$60,000	\$1,260,000	\$1,120,000	\$60,000
1077 – Tahsis Transfer Station	-	-	-	-	200,000
1083 – Zeballos Transfer Station	-	-	700,000	800,000	-
1087 – Zeballos Landfill Closure	-	-	-	330,083	957,749
1122 – CVWMC New Engineered Landfill Progressive Closure	121,000	150,000	150,000	150,000	150,000
1132 – Gold River Landfill Closure	-	-	-	-	426,456
1133 – Gold River Transfer Station	-	-	-	-	200,000
1134 – Tahsis Landfill Closure	-	-	-	-	-
1164 – Membrane Filtration	-	245,000	-	-	-
Total	2,246,000	455,000	2,110,000	2,400,083	1,994,205

2030-2034 Long Term Capital Plan

	2030	2031	2032	2033	2034
1029 – Annual Capital Projects	-	-	-	-	-
1048 – CVWMC Landfill Closure	-	-	-	-	-
1050 – CVWMC New Landfill	\$1,700,000	\$15,000,000	-	-	-
1051 – CRWMC Closure	-	-	-	-	-
1054 - Vehicle and Machinery	1,410,000	640,000	120,000	60,000	460,000
1077 – Tahsis Transfer Station	800,000	-	-	-	-
1083 – Zeballos Transfer Station	-	-	-	-	-
1087 – Zeballos Landfill Closure	-	-	-	-	-
1122 – CVWMC New Engineered Landfill Progressive Closure	150,000	150,000	150,000	150,000	-
1132 – Gold River Landfill Closure	1,387,367	-	-	-	-
1133 – Gold River Transfer Station	800,000	-	-	-	-
1134 – Tahsis Landfill Closure	470,860	1,425,580	-	-	-
1164 – Membrane Filtration	-	-	-	-	-
Total	6,718,227	17,215,580	270,000	210,000	460,000

CVWMC Landfill Projections

Table 9: Summary of Available Airspace and Lifespan for Cells 1-6

Cell Identification Number	Available Airspace (m ³)	Estimated Cell Life (Years)		Year Capacity Reached	
		Scenario #1*	Scenario #2**	Scenario #1*	Scenario #2**
Cell 1	470,945 m ³	6.0 years	7.5 years	2022	2024
Cell 2	1,046,472 m ³	8.5 years	12.0 years	2031	2036
Cell 3	1,040,890 m ³	8.0 years	11.5 years	2039	2048
Cell 4	954,748 m ³	7.0 years	10.0 years	2046	2058
Cell 5a	775,124 m ³	5.5 years	8.0 years	2052	2066
Cell 5b	1,302,922 m ³	9.5 years	13.0 years	2056	2071
Cell 6	885,560 m ³	6.0 years	8.5 years	2058 (option 5a) 2062 (option 5b)	2074 (option 5a) 2079 (option 5b)
TOTAL Airspace and Cell Life (Cell 5a)	5,173,739 m ³	41.5 years	57.5 years		
TOTAL Airspace and Cell Life (Cell 5b)	5,701,536 m ³	45.5 years	62.5 years		

*Scenario #1 – Cell life and capacity based on constant status quo disposal rate

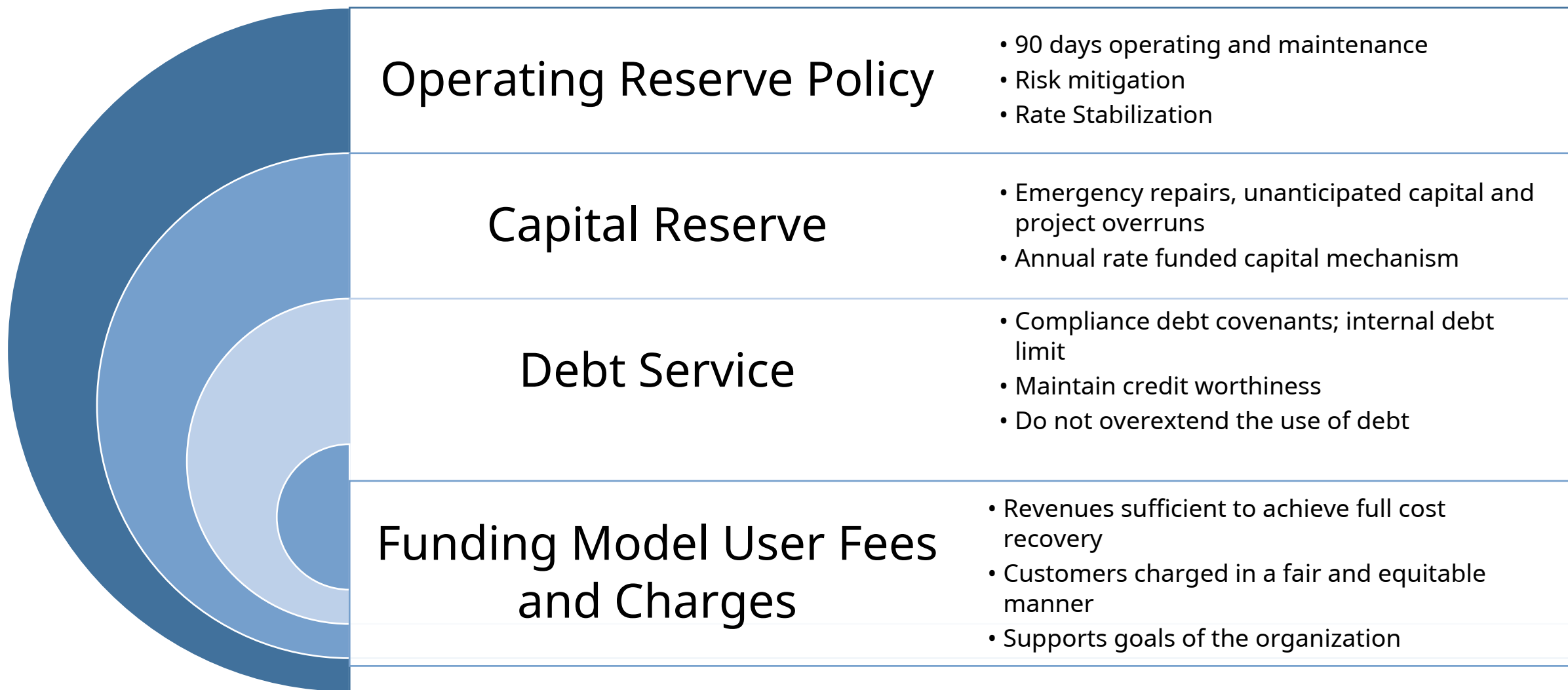
**Scenario #2 – Cell life and capacity based on 2012 CS-SWMP 70% diversion rate being achieved by 2022

Fiscal Sustainability, Reserves, Debt, Funding Sources and Implications to Typical Household

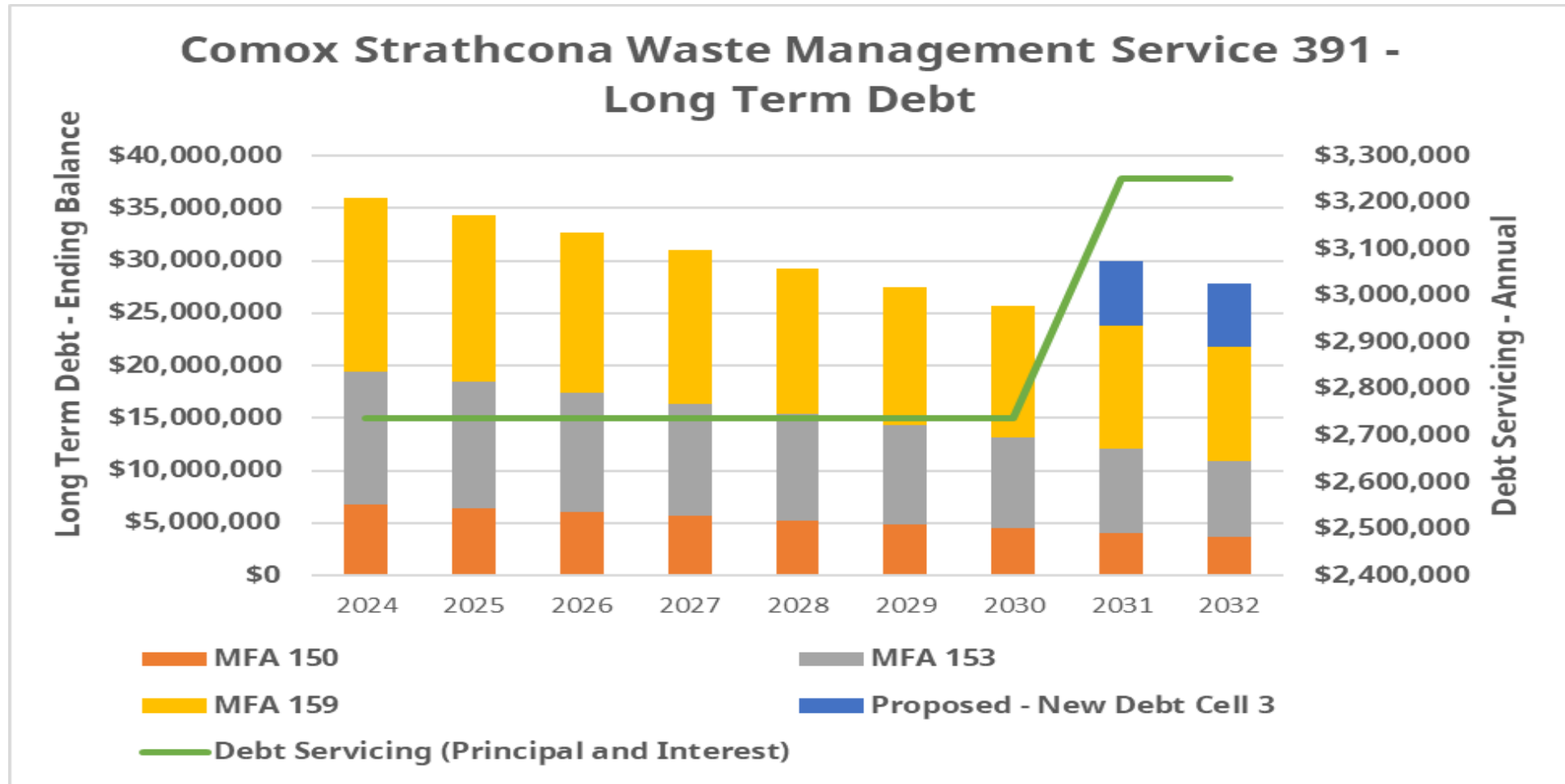
K. Broughton, CVRD Manager Financial Planning

L. Wiwcharuk, CVRD CFO

Fiscal Sustainability Governance



Long Term Debt



Reserves

Projected Balances

Reserve	2024 Ending Balance
391 – Future Expenditure Reserve	\$1,627,800
830 – Capital Works Reserve	4,810,240
831 – Engineered Landfill Reserve	76,372
893 – Landfill Closure Reserve	3,313,502
Total	\$9,827,914

Future Expenditure Reserve (391)

Projected Balances

	2025	2026	2027	2028	2029
Opening Balance	\$1,627,800	\$1,727,800	\$1,827,800	\$1,927,800	\$2,027,800
Contributions to Reserve	100,000	100,000	100,000	100,000	100,000
Transfers from Reserve	-	-	-	-	-
Ending Balance	\$1,727,800	\$1,827,800	\$1,927,800	\$2,027,800	\$2,127,800

Target Balance: equivalent to three months operating costs [\$3M] ; risk mitigation and rate stabilization

Capital Works Reserve (830)

Projected Balances

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	\$4,810,240	\$4,292,397	\$5,984,949	\$6,631,954	\$7,784,351	\$10,801,717	\$9,854,544	\$5,112,638	\$9,240,732	\$13,428,829
Contributions to Reserve	807,157	1,997,552	2,607,005	3,072,397	3,477,366	3,762,827	3,498,094	4,248,094	4,248,094	4,259,169
Transfers from Reserve	1,325,000	305,000	1,960,000	1,920,000	460,000	4,710,000	8,240,000	120,000	60,000	460,000
Ending Balance	4,292,397	5,984,949	6,631,954	7,784,351	10,801,717	9,854,544	5,112,638	9,240,732	13,428,826	17,227,995

Engineered Landfill Reserve (831)

Projected Balances

	2025	2026	2027	2028	2029
Opening Balance	\$76,372	\$76,372	\$76,372	\$76,372	\$76,372
Contributions to Reserve	-	-	-	-	-
Transfers from Reserve	-	-	-	-	-
Ending Balance	\$76,372	\$76,372	\$76,372	\$76,372	\$76,372

Landfill Closure Reserve (893)

Projected Balances

	2025	2026	2027	2028	2029
Opening Balance	\$3,313,502	\$3,392,502	\$3,842,502	\$4,292,502	\$4,412,419
Contributions to Reserve	600,000	600,000	600,000	600,000	600,000
Transfers from Reserve	521,000	150,000	150,000	480,083	1,534,205
Ending Balance	\$3,392,502	\$3,842,502	\$4,292,502	\$4,412,419	\$3,478,214

Landfill Closure Reserve (893)

Projected Balances

	2030	2031	2032	2033	2034
Opening Balance	\$3,478,214	\$2,069,987	\$1,094,407	\$1,544,407	\$1,994,407
Contributions to Reserve	600,000	600,000	600,000	600,000	600,000
Transfers from Reserve	2,008,227	1,575,580	150,000	150,000	-
Ending Balance	\$2,069,987	\$1,094,407	\$1,544,407	\$1,994,407	\$2,594,407

Funding Source

Taxation Planning

Year	Base	Incremental increase	Cumulative Increase	Annual Taxation
2025	5,000,000	1,000,000	1,000,000	6,000,000
2026	6,000,000	500,000	1,500,000	6,500,000
2027	6,500,000	500,000	2,000,000	7,000,000
2028	7,000,000	500,000	2,500,000	7,500,000
2029	7,500,000	500,000	3,000,000	8,000,000
2030	8,000,000	250,000	3,250,000	8,250,000
2031	8,250,000	250,000	3,500,000	8,500,000

Key Notes

Planning for
2030/31 New
Landfill

Prudent to begin
savings and avoid
high cost of debt
servicing to future
years

Implications to taxpayer at \$1,000,000 = \$13.90 (averaged)

Taxation Implications to Typical Household

Property Tax Requisition Amount						
	2024 Average Assessed Residential Property Value	2024 Requisition \$5M	Proposed 2025 Requisition \$6M	Proposed 2027 Requisition \$7M	Proposed 2029 Requisition \$8M	Difference between \$5M - \$8M
City of Campbell River	678,000	69.65	83.58	97.51	111.45	41.79
City of Courtenay	719,000	73.87	88.64	103.41	118.18	44.32
CVRD Electoral Area A - All	865,000	88.86	106.64	124.41	142.18	53.32
CVRD Electoral Area B	966,000	99.24	119.09	138.94	158.78	59.54
CVRD Electoral Area C	819,000	84.14	110.97	117.79	134.62	50.48
SRD Electoral Area A	401,821	41.28	49.54	57.79	66.05	24.77
SRD Electoral Area B	727,966	74.79	89.74	104.70	119.66	44.87
SRD Electoral Area C	657,811	67.58	81.09	94.61	108.13	40.55
SRD Electoral Area D	752,482	77.31	92.77	108.23	123.69	46.38
Town of Comox	789,000	81.06	97.27	113.48	129.69	48.63
Village of Cumberland	788,000	80.95	97.14	113.34	129.53	48.57
Village of Sayward	350,000	35.96	43.15	50.34	57.53	21.57
Village of Tahsis	163,000	16.75	20.09	23.44	26.79	10.05
Village of Zeballos	140,000	14.38	17.26	20.14	23.01	8.63

Total Tax Requisition by Participant – 2025 Proposed Requisition of \$6,000,000 (using 2024 Completed Role Values)

Estimated Taxation Requirement		\$6,000,000		
Municipal Members - Converted Value General Purpose Assessment,		Greater of \$7,000,000 or \$1.00 per \$1,000 -		
Electoral Areas Converted Value Hospital Purpose Assessment		100% Assessment		
Participant	Net Taxable Assmt	Converted Value	Levy	Max Levy \$\$ > of \$7,000,000 or \$1.00 per \$1,000. assessed value
0-771-CNR-SRVA#66	\$11,553,027,300	\$1,248,761,826	\$1,539,474	\$11,553,027
0-772-CRR-SRVA#57	4,096,001,418	471,258,843	580,968	4,096,001
0-784-CNR-SRVA#57	114,352,709	25,913,107	31,946	114,353
Campbell River	10,870,710,297	1,240,552,470	1,529,354	10,870,710
Comox	5,028,557,224	532,156,007	656,042	5,028,557
Courtenay	9,818,384,555	1,137,455,799	1,402,256	9,818,385
Cumberland	1,467,977,750	167,075,898	205,971	1,467,978
Gold River	215,073,696	25,938,425	31,977	215,074
Sayward	62,873,750	7,468,859	9,208	62,874
Tahsis	70,233,200	7,904,963	9,745	70,233
Zeballos	19,034,850	2,481,369	3,059	19,035
				-
Total	\$43,316,226,749	\$4,866,967,566	\$6,000,000	\$43,316,227
	Approx. Residential Rate per \$1,000		\$0.1232800	
	Equivalent Maximum Levy Rate		\$1.0000000	
Assessed Value Based on 2024 Revised Role Statutory Reports Adopted Budget March 2024				

Options & Recommendations

That the proposed 2025-2029 financial plan for the Service 391 Comox Strathcona Waste Management Service, be accepted. Staff will return to the January 30, 2025 meeting with finalized budget figures and to present the recommended budget.

Questions?

Questions?



Wrap-Up

Parking Lot

- Any outstanding questions, comments, thoughts?

Roundtable

- Any strategies we haven't addressed yet that you thought we would?



Thank YOU.



Any questions or
comments, email or
call Sarah.

250-334-6065

swillie@comoxvalleyrd.ca

Final Word and Meeting Adjournment from GM Engineering

