Comox Strathcona Waste Management

Minutes

REGIONAL SOLID WASTE ADVISORY COMMITTEE

Minutes from the meeting held on May 11, 2023 in the Comox Valley Regional District, located at 770 Harmston Avenue, Courtenay, and via Zoom commencing at 1:04 pm

PRESENT:

D. Baar	Campbell River
D. Birtch	Campbell River
M. Jeffs	Sayward
M. Stewart	SRD Area D
J. Best	Courtenay
W. Semmelink	Comox
K. Stubblefield	CVRD Area C
R. Telegus	Denman Island
K. Lukinuk	Hornby Island
K. Hamilton	Tavola Group
M. Tatchell, Chief Administrative Officer	Village of Tahsis
D. Hadfield, Director of Operations	City of Campbell River
C. Perry, Manager of Public Works	Town of Comox
R. Crisfield, Manager of Operations	Village of Cumberland
S. Fisher, Engineering Services Coordinator	Strathcona Regional District
A. Milwid, First Nations Liason	Strathcona Regional District
J. Warren, Deputy Chief Administrative Officer	CVRD
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
A. McCallum, Student – Solid Waste Analyst	CVRD
M. Briggs, Branch Assistant – Engineering Services	CVRD

ITEMS:

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 Nuu-chah-nulth territories.

The committee reviewed the agenda and minutes of the April 13, 2023 Regional Solid Waste Advisory Committee (RSWAC) meeting and no errors or omissions were noted.

Meeting Intent

S. Willie gave an overview of the purpose of the meeting, continuing the review of CSWM facilities from the previous meeting and identifying next steps.

The committee was shown videos about the operations and services offered by the Denman Island Recycling Centre and Free Store, and Hornby Island Recycling Centre and Free Store, linked below.

Denman Island Recycling Centre
Hornby Island Recycling Depot

W. Semmelink joined the meeting at 1:16pm.

The committee was shown a drone video of the new organics facility at the Campbell River Waste Management Centre (CRWMC), with S. Willie describing the various areas of the facility and their purpose.

Advisory comments:

- CSWM Board regularly asks about adding more free stores, but municipalities are serviced by non-profit organizations and staff don't want to compete with them. Free stores work well for smaller and more remote communities. Free stores are run by volunteers, so requires support from community.
- Seems like there are specific population or population density ranges, and perhaps travel requirements, for which specific services/assets such as free stores vs. restore vs. free stuff in craigslist et al, and collection service levels, work or don't work. CSWM seems to have a pretty good handle on all of this, but the situation of course changes over time. Glad that it's being looked at actively.

Existing System Study

S. Willie provided information on the Denman Island Recycling Depot. The depot consists of recycling depot and bottle depot, open three days a week, and is about a 45 minute commute to the Comox Valley Waste Management Centre (CVWMC) with perfect ferry timing. Services Denman residents and visitors (roughly 1,391 permanent residents). Denman has no transfer station or centralized garbage collection point, with garbage collected by Strathcona Recycling and Disposal with weekly pickup in the summer and bi-weekly rest of year. Collection requires garbage bag tickets purchased at General Store or Recycling Centre.

Depot staff hired by and budget set by Denman Island Residents Association. CVRD function 362 provides for curbside garbage collection, operation of depot and free store, and transportation and processing of waste and recycling. Vehicle and building investment partially covered by CSWM function 391, as well as collection of scrap metal. Detailed tax breakdown for CVRD function 361 and CSWM function 391 revenue and contribution. Tipping fees are collected for waste brought in from Denman to CVWMC.

Information was provided on the Hornby Island Transfer Station and Recycling Depot. Located on former landfill site, and is roughly 1 hour and 20-minute drive to CVWMC with perfect ferry timing. Hornby has roughly 1,225 permanent residents, with highest proportion of non-resident dwellings in service area. Depot has most extensive list of accepted recyclable materials of all CSWM facilities, and includes area for separation of yard waste, wood waste, drywall, metal and tires. No curbside collection of garbage, with less self-hauling to CVWMC than Denman.

CSWM function 391 funds scale shack, household hazardous waste (HHW), maintenance, recycling buildings, and transportation of waste and recycling. CVRD function 360 funds service and construction and upgrade of free, with union staff employed by and budget set by Hornby Island Residents and Ratepayers Association (HIRRA). Tipping fees for residents and businesses to drop off garbage based on volume, due to no scale, to offset fees paid at CVWMC. Detailed tax breakdown for CVRD function 360 and CSWM function 391 revenue and contribution.

Information was provided on the Cortes Island Waste Management Centre (CIWMC). Roughly two hours from Cortes to CRWMC with perfect ferry timing. Roughly 1,059 permanent residents, with 3,000 residents during summer months. Recycling depot and transfer station operated by CSWM

contractor and accepts most EPR materials. Hours are 9am-1pm on Thursday to Sunday, while free store is run by volunteers and open 9am-1pm on Monday to Wednesday.

Weekly curbside garbage and recycling from single family homes, with contract managed by SRD, and Klahoose First Nation also has curbside collection. Typical cost is $99 per household for curbside garbage collection. Curbside recycling gets full funding by Recycle BC despite lack of use, with community mostly using depot. Waste and recycling from curbside collected at CIWMC, with recycling shipped off island by Recycle BC, and waste and diverted materials hauled off island by Unified Trucking under function 391.

Curbside collection funded by function 376, while tipping fees paid at CRWMC funded through function 374. Bylaw No. 2851 specifies rates for individual commercial customers, with average annual charge for residents at $82 per year. No fee to drop off waste at CIWMC. Curbside collection material collected separately from depot material. Provided tax breakdown for SRD functions 374 and 376 and CSWM function 391 revenue and contribution.

M. Thatchell joined the meeting at 1:51pm.

V. Schau provided information on the CRWMC. Site is 32km from Campbell River and 20m from Oyster River, and open 8:30am-5:30pm every day except statutory holidays. All equipment is provided by contractor. Former quarry site, with landfill established in 1950s and taken over by CSWM in 1999. Closed in May of 2022 and turned into transfer station with waste shipped to CVWMC. Full landfill closure nearly complete, with only outstanding items being installation of landfill gas flare and bottom liner for leachate collection. Landfill gas collection to begin in 2023 once flare is installed. Required to monitor and report to the province for ground and surface water monitoring and landfill gas collection for 30-year post-closure period. Liability for post-closure estimated at $4.5 million.

The CRWMC primarily serves residents and business in Campbell River, Wei Wai Kai, We Wai Kum, Tlowitsis, and Homalco First Nations, as well as Sayward, Quadra Island, and SRD Electoral Areas A and D, with SRD residents constituting less than three per cent of waste. Cortes and Gold River waste is directly hauled to the CVWMC. The transfer station serves roughly 40,000 people. Waste is hauled three-to-five times per day to CVWMC. Whenever possible, transfer trailers are backhauled with organic material from CVWMC to CRWMC. Facility use has increased 55 per cent between 2017 and 2022, consistent across service.

Free services can be accessed without using scale house, and site has area available for diversion of drywall, wood waste, tires, and yard waste. Two scales on site, but recently noted that scales are too short for 53' tractor trailer. Recycling depot accepts standard Recycle BC and EPR materials. HHW accepted two days a week and one Saturday a month. Separate area for commercial recycling of cardboard. Mattresses are segregated for processing for operational reasons and to save air-space, and program diverts roughly 8,000 a year across CSWM service. 4,963 tonnes diverted from site in 2022, with 25,303 tonnes of municipal waste and 134 tonnes of asbestos collected in 2022. Roughly 2,693,490 m^3 of waste buried in landfill.

Provided breakdown of CSWM function 391 revenue and contribution for the CRWMC, as well as cost for transfer of waste to CVWMC.

City of Campbell River provides weekly curbside collection of garbage, recycling, yard waste and food scraps from single family households. Yard waste previously seasonal service, but extended to year round with introduction of organics program. Organics limited to 360L per week and 80L of garbage per week in anticipation of transition to automated service in 2024. Cost of curbside collection is

roughly $233 per household, and is separate from CSWM service. Multi-family and ICI users must arrange collection with private haulers. Noted that municipal costs are being presented to note contribution from or burden on residents to diversion goals even if funds don't go to CSWM.

Information was provided on the CVWMC. Includes regional landfill and recycling depot sited in the Village of Cumberland, and roughly 30-minute drive from either end of services area. Facility open every day except statutory holidays from 8am to 5:30pm. First used in 1849 for coal waste and then Cumberland unregulated landfill until 1978 when CVRD took over operations, and later taking over ownership of land in 2012. CVRD also took over Field Sawmill Wood Waste Landfill in 2002. Former contaminated soil remediation site on land until 2014. Property is 307 acres, including buffer between neighbouring properties.

The CVWMC services 72,445 people in CVRD and 119,949 in waste shed (excluding Tahsis, Zeballos, Ehatsis and Oclucje). Average 315 customers per day across scale, with similar numbers for recycling depot, with peak at over 450 customers per day. Facility has seen 34 per cent increase in use between 2017 and 2022, due to population growth and expanded diversion opportunities. Received roughly 40,235 tonnes of waste in 2022, as well as 21,709 transferred from CRWMC.

Accepts waste from construction, demolition, hospital, grocery store, and aquaculture industries. Recycling depot accepts Recycle BC materials, electronics, small appliances, light bulbs, oil, etc. Refundables accepted as pilot program, sorted by local non-profit groups for fundraising, with over $20k raised to date. Mattresses, drywall, wood waste, yard waste, metal, and rubble segregated. Commercial recycling and hard plastic accepted inside scale. HHW accepted two days a week and one Saturday a month. Ocean Legacy Depot accepts ocean plastic for sorting and recycling in lower mainland. Wood waste is hauled by Pacific Wood Waste, yard waste is incorporated into SkyRocket, and drywall goes to New Westminster to be recycled.

Permit issued by Ministry of Environment and Climate Change Strategy, last updated in 2016 to allow expansion of Cells 1, 2, and 3. Currently placing waste in Cell 1. Amendment submitted in January 2022 to increase tonnage from 65,000 to 80,000, adjust treated leachate from 250 m^3/day to 275 m^3/day, and add new leachate equalization pond. Capacity of Cell 1 and 2 is anticipated to last until 2037, with final height of landfill and diversion performance determining lifespan of Cell 3, with the lifespan expected to be 6.5-9 years with a height of 185 m above sea level. Shared graph show cross-section of landfill and detailing estimated heights of each landfill cell. Currently filling Cell 1, with Cell 2 to be padded out shortly. Existing design height is 185 m above sea level, but increasing to 212 m would give significantly more air space, and add an extra five years between Cell 1 and Cell 3, as well as an extra 12 years if given permission to construct Cells 4 and 5. Based on current diversion rates, Cell 3 will be full in 2048, and if given permission to proceed then Cell 5 will be full by 2074, although better diversion rates will extend lifespan of landfill.

Landfill is lined, with leachate captured and diverted to equalization pond, where it is treated before returned to ground. Facility treated over 46,000 m^3 of leachate in 2022, and will see increase when Cell 2 opens. Facility is unique since most leachate from landfills is piped to municipal sewer system, but leachate at the CVWMC is treated on site. Landfill gas is captured from old landfill and new cells and flared on site. Roughly 35,178 tonnes of CO^2 or equivalent was destroyed in 2022. Landfill gas system is online 97.7 per cent of time, with average 522 m^3/hr of 50.7 per cent methane. Three per cent used in boiler to heat leachate and 97 per cent flared. Landfill gas efficiency at 56.2 per cent accuracy, with provincial target being 75 per cent.

Courtenay, Comox, Cumberland, and Royston all have curbside collection services. Courtenay ($237.50 per household) and Comox ($260.96 per household) have weekly garbage and organics, with bi-weekly

recycling, and will be transitioning to automated collection in 2024, with bi-weekly garbage and recycling and weekly organics. Cumberland ($174.40 per household) has bi-weekly garbage and recycling collection and weekly organics, with no plans currently to move to automated collection. Royston ($133.64 per household) has weekly garbage and bi-weekly recycling, but no organics. All curbside collection is contracted out to Emterra, and some services include multi-family or ICI customers. Royston curbside collection is separate CVRD service, function 366, and services roughly 1,100 households. Service was established by Royston Improvement District and expanded by petition in 2019. Will be engaging with public whether to include yard waste or organics, and whether to stay manual or move to automated. Funded by utility fees and Recycle BC. Provided breakdown of CSWM function 391 tax revenue and contribution for Courtenay, Comox, Cumberland, and CVRD Areas B and A (excluding Denman and Hornby).

Advisory comments:

Hornby Island Transfer Station and Recycling Depot

- Google Maps uses ideal time and conditions for travel time, so likely takes longer to get to Hornby depot or CVWMC. Lineup at depot and ferry more extensive during summer, so longer wait time.

Cortes Island Waste Management Centre

- Is the curbside collection of recycling on Cortes mixed or separated by residents?
  - Mixed, with glass collected separately.
- What proportion of waste is commercial on Cortes?
  - Don't have scale or record of collected fees to track where material is coming in from. Based on conversation with field staff, most increases come from increased population in summer. Estimate possible 20 per cent contribution from commercial.

Campbell River Waste Management Centre

- Is "facility use" equivalent to tonnage or is it number of trips to CRWMC?
  - Number of visitors. Tonnage has also gone up, but not quite by the same amount, more in line with population.
- Is the diverted fraction increasing?
  - It has also increased. The kg/capita of waste has stayed about the same for waste.
- Does the user fee include tipping costs?
  - The user fee does include tipping costs.
- Slides showed tonnage of recyclable material, as well as MSW as five times more. Is diversion of recyclable material only 20 per cent of total?
  - 5k tonnes of diversion material includes those coming in through scale at CRWMC. Additional recycling is done through EPR programs and curbside collection in City of Campbell River, and could also include commercial recycling or recycling that goes to private facilities.

Comox Valley Waste Management Centre

- For the graph showing the cross-section of the landfill, the angle of repose is more acute on the left than the right. Why isn't it more evened out?
  - Not shown in graph, but left end will be wider and narrow or taper off to right. Horizontal scaling is also 25 m increments while vertical is 5 m increments.
- When leachate is cleaned, there must be heavy metals removed. Are there any details about that? Any chemicals taken out beforehand?
  - Permit specifies parameters to meet before releasing leachate back into ground. Does include some metals, but mostly focused on salts and biological material. Given same

level of treatment as if going to wastewater treatment plant. Closed system with leachate treated on site, so can modify process to address chemicals as they come up.

Break
The committee broke for recess at 2:54 pm and resumed its session at 3:03 pm.

S. Fisher left the meeting at 2:54 pm.

Existing System Study (continued)
S. Willie shared a table from the 2022 CSWM annual report showing leachate testing results and explained the breakdown of materials found in the leachate.

S. Willie gave an overview of the strategic drivers, goals, and targets that the CSWM is required to meet. Provincial targets include measures to reduce disposal of waste through solid waste management plans, organics recycling, food and plastic waste prevention initiatives, and improvement and expansion of EPR programs. Recommend long-term goal for per capita MSW disposal of 350 kg per year, with short-term goal of 460 kg per year, as well as 80 per cent of BC population covered by organics waste disposal restrictions. CSWM has also already taken steps towards the latter with construction of new organics facility. CVRD Corporate Energy and Emissions Plan covers fully-controlled CVRD assets and sites (Royston, Denman, Hornby, etc.), encouraging working with waste hauling companies to pilot new fuel technologies and the adoption of zero waste principles. Solid waste addendum to plan further addressed landfill gas, including provisions to investigate renewable energy sources, explore feasibility of refining landfill gas generation estimates, explore more efficient waste hauling system at waste depots, and incorporate landfill GHG reduction targets and actions into CSWM SWMP renewal. CVRD Regional Growth Strategy adopted in 2010 and includes objective to reach solid waste diversion rate of 48 per cent, with CVRD achieving 50 per cent in 2020, and objective to reduce GHG emissions, with baseline of 61,505 CO^2 in 2007 and 55 per cent reduction to 27,422 CO^2 in 2021. CVRD Comox Valley Sustainability Strategy includes objectives to develop zero waste strategy, support and promote product stewardship practices, apply zero waste principles at facilities, develop and implement regional construction waste management program, and 3-stream separation supportive design for multi-residential and commercial buildings.

A map of the SRD and CVRD boundaries was shared showing the CSWM service area, including population statistics. Population increasing at 1.2 per cent per year on average, with SRD having four-fifths of population in municipalities and CVRD having two-thirds of population in municipalities. Landfill waste generation has fluctuated over the years, impacted by people moving from mainland and COVID-19.

Shared distribution of waste disposed at each landfill, with 63,991 tonnes collected across service in 2020, and private landfills collecting additional waste including construction waste and soil. Conducted waste composition study in 2017, with another planned for 2024, showing distribution of waste from various sources such as curbside residential collection, self-haul customers, ICI, and construction/demolition waste. Food waste makes up 20 per cent of all waste. Compared waste composition to other local governments, including mix of construction/demolition, both non-compostable and compostable organics, plastics, and paper, with CSWM average for province in 2017. Expect compostable organics to decrease with new organics program, and construction/demolition waste may be impacted by changes to private sector.

Provided an overview of EPR diversion in 2020, with CSWM having collected over 20k tonnes from various sources for several EPR programs. Also provided overview of GHG generated by CSWM service in 2021, with total emissions at 70,951 tonnes in 2021. Landfills are primary contributor,

contributing over 80 per cent of total emissions, with CRWMC expected to decrease by 50 per cent once landfill gas collection begins. CVWMC emissions are lower than CRWMC because active landfill gas collection in place. Staff are investigating beneficial use agreement for landfill gas. Fuel for vehicle operations, transfers, and heating are fraction of overall emissions.

Provided overview of function 391 and its sub-functions. Function 391 has operating budget of $17 million annually, supported by $10,421,680 in tipping fees, $343,000 in recoveries, and $5,000,000 in tax requisition. Sub-function 392 is for post closure, and mostly focuses on post-closure of Campbell River and old Pidgeon Lake landfill, including cover maintenance. Sub-function 392 spends about $200k a year, and is allocated once a landfill is closed. Required to monitor and maintain landfill for 30 years after closure of cell. Decreased liability from $25M to $14.9M in post-closure liability. Sub-function 393 is for leachate treatment and is operated by wastewater staff. Will cost roughly $620,000 this year to run leachate plant and install new equalization pond. Sub-function 394 is for the new regional organics compost facility, and the facility's construction was funded by a combination of grants and reserves. Tipping fees set at $110/tonne for organics and ideally fees should cover operational costs. First year operating budget is $588,000. Owned by CSWM and operated under contract with transfer station operator for first few years. Expect 5,500 tonnes in first year from four participating municipalities, with 14,500 wet tonnes/year capacity to accommodate rural population and ICI. Able to expand to double production.

V. Schau provided overview of revenue from tipping fees and tax requisition. Service revenue is around $17M, with third of revenue from taxation. Board has questioned if tax requisition is most equitable form of revenue generation, and staff will seek feedback on how they would like the service funded. Taxation first implemented in 2013 due to significant closure and capital upgrade costs, since full tipping fee model wasn't adequate to fund service. Have had to increase tipping fees over time, but is similar to rates at neighbouring landfills.

S. Willie shared with the committee a table displaying a breakdown of the requisition values.

An explanation was provided for the Unified Transportation Model, which unifies solid waste transportation for all waste owned by the CVRD under the concept that once ownership is assumed at the transfer stations or landfills then all handling, transportation, and long-term care of waste is the legal responsibility of the CVRD. In 2012, transferred $67,000 from local services to regional service. Have also seen a reduction in transportation service costs due to scale, as well as reduced liability, cost effective and equitable service delivery across CSWM area.

A summary was given of the local solid waste services offered in the CSWM service area, their expenses, and funding sources.

The impact of self-haul vs consolidated collection on traffic and trips was discussed. Denman has optional collection, with 102 tonnes (34 loads) from haulers and 156 tonnes (1364 loads) from residents in 2022. Could see a similar ratio for the rural areas of the Comox Valley where a consolidated waste collection service isn't offered. Hornby has option to drop waste at depot, with 465 tonnes (62 loads) from haulers and 79 tonnes (140 loads) from residents in 2022, with residential usually being construction waste or larger loads.

CVRD proposed rural waste collection service in 2013 and 2021, but did not receive electoral assent. Rationale for bringing forward twice is that those with curbside recycling collection are more likely to recycle. CVRD's Electoral Areas A, B, and C and SRD Electoral Area D don't have curbside collection. Proposed service was $200-275 for recycling, garbage, and seasonal yard waste, compared to private collection companies offering bi-weekly garbage collection for $400-500. 2021 rural roadside survey

received 3073 responses with 74 per cent in favour. Alternative Approval Process failed with over 10 per cent of population in opposition, with 2,601 forms received. Received responses afterwards by those surprised service did not go forward. Many in opposition stated that they preferred to manage own waste or did not believe CVRD could offer service at proposed rate. Going forward, would like to consider options for diversion in rural areas.

Advisory comments:
Curbside Collection

- Hopefully the house-specific tracking that will come with the cart system will contribute to heightened awareness and responsibility, and reduction.

CSWM Waste

- There's a real communication opportunity here. I think if the public had a greater understanding of the impact of their waste, they would be easier to mobilize into positive action. Maybe some effective visualizations of e.g. mountainous volume equivalents of MSW amounts would help. "That's like 50,000 cars piled up together."

GHG Emissions

- Striking that landfill gas emissions are two orders magnitude higher than transportation.
- Want to confirm that emissions from flare are nothing but emissions from trucks and transport are not quite nothing?
    - Correct, but all values are converted to CO^2 equivalent.

Sub-function 392 – Post-closure

- Is the old Hornby landfill monitored in any way?
    - Not part of our monitoring program.

Rural Roadside Collection

- In Area C where I live I think there was a huge misconception by people on what they would actually receive and the entire public educational piece about recycling etc. is necessary to make people understand.

Next Steps
S. Willie provided an overview of next steps for the committee. The committee members were asked to review a draft Existing System Report, to be distributed following the meeting. In-person engagements will occur in the summer, with dates and locations to be shared with the committee members once available. The next meeting is scheduled for September 19, 2023, and staff are looking into arranging a tour of the organics facility for committee members.

Advisory comments:
None.

Wrap-Up
S. Willie sought input from the committee.

Advisory comments:

- Lot of information to absorb.
- Surprised at disparity of services and costs for smaller islands. Curious how much rural and island residents compare their services as opposed to larger municipal services and expecting them to cost the same.

- Seems Hornby is paying a lot more than Denman. Is there a better way to show that in the tax breakdown? Has any monitoring ever been done for the old Hornby landfill? Can something be installed to monitor it?
- Cumberland just ran its first repair Café April 29. Well attended by repair volunteers and people bringing in repair items. Lindsay Eason will have numbers but I think we fixed about 15+ electrical items, saved from becoming landfill. Quadra Island Repair Café is May 28 I think.
- Real opportunity to expand on marketing to reduce waste and get out information to public. Can touch on at future meeting.
    - Staff will be working on preparing visualizations for material to bring to community. Looking to focus on infographic style over text blocks.
- Noted there are events where charities will accept your refundables for those who don't want to sort and recycle them themselves. Return-It Depot in Campbell River is unpleasant experience, so should encourage alternatives to handling recyclables. There is considerable land associated with the landfill site. Has it been looked into to lease land to someone to generate revenue or to sell landfill gas?
    - Staff are looking for opportunities for beneficial use of landfill gas in Campbell River. Could also utilize land for solar panels or wind turbines for energy use. Most unused land is for buffer though, since 500 m buffer required with other properties.
- On the topic of returnable, have second Loaves and Fishes depot in Tahsis due to positive resident response.
- Learned so much from meetings. Public information piece will be very important. Many people could benefit from additional info.
- Insightful session and look forward to meeting in September
- Shocked by extent of GHG emissions. Organics looks like best place to start on reducing emissions. Will be thinking and strategizing on what can do to help address and reduce GHG emissions and waste.
- Every community is different due to evolution of system and many communities managing their own waste before CSWM took over, which has led to disparity in services between communities. Will be interesting to see if preference is for consistency or for communities to maintain their solid waste identity.

M. Rutten adjourned the meeting.

GENERAL:
The next Regional Solid Waste Advisory Committee is scheduled for September 19, 2023 at 12:30 pm.

TERMINATION:
The meeting terminated at 4:13 pm.

Recorded by:	Certified correct:
M. Briggs	***V. Schau***
Michael Briggs Branch Assistant – Engineering Services	Vivian Schau Senior Manager of CSWM Services

Regional Solid Waste Advisory Committee Meeting

SWMP Renewal Meeting #4

May 11, 2023

Zoom (and CVRD Civic Room, 770 Harmston Ave)

1 pm to 4 pm



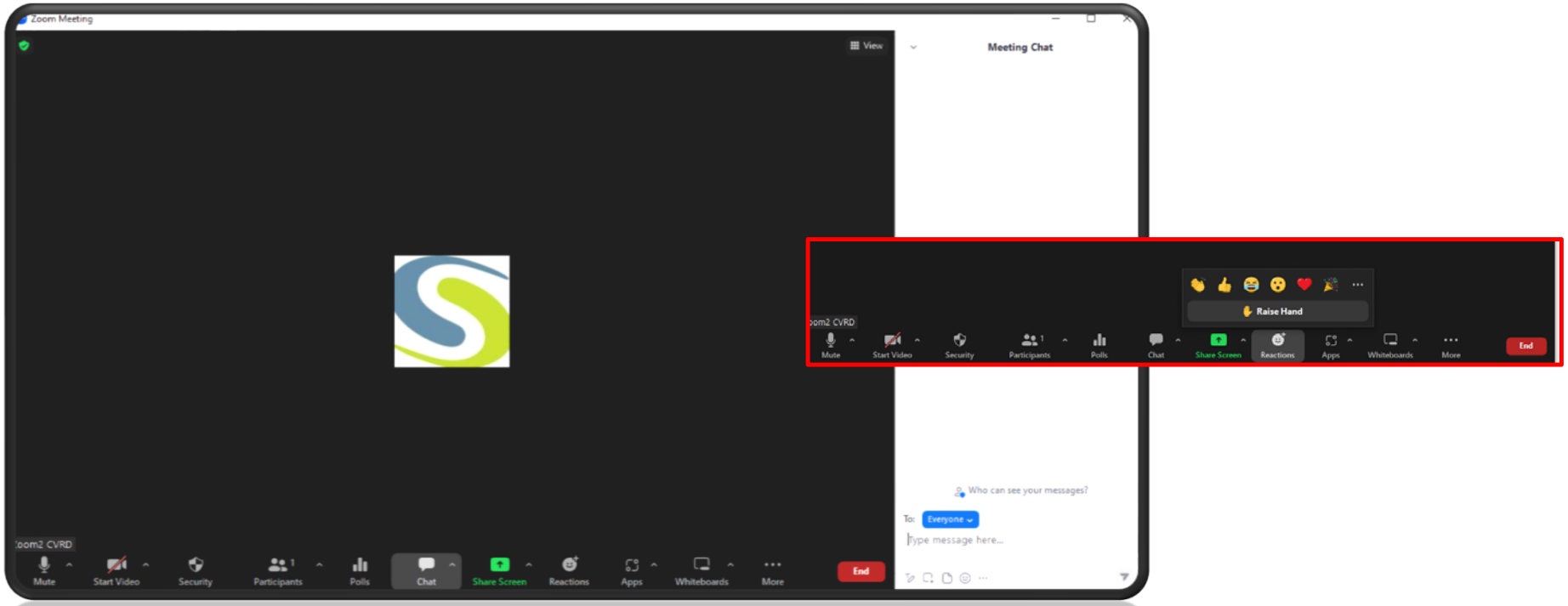
Comox Strathcona Waste Management



Welcome and Questions

- Questions can be asked anytime throughout the meeting today
- Use your virtual hand raising feature and we will call on you to unmute
- Alternatively you can type in the chat function to make comments, or to ask questions of us or your colleagues

Zoom Meeting Tools

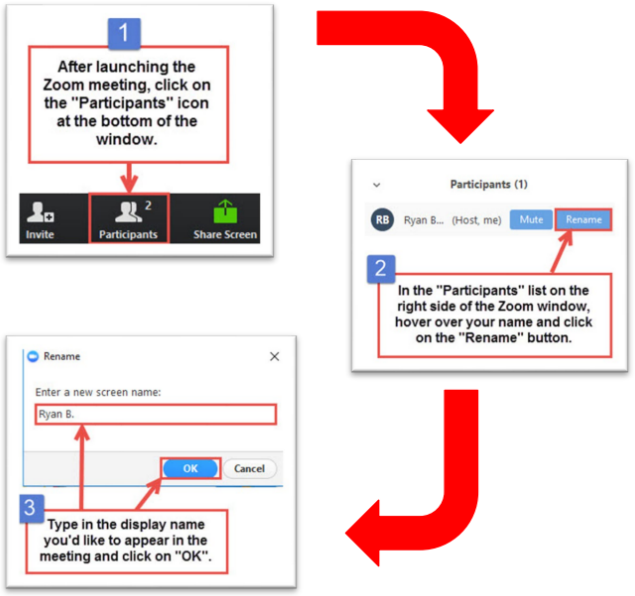


Comox Strathcona Waste Management

Recording for Minutes

- We are recording this meeting for note taking purposes.
- The recording will not be distributed or published.
- To ensure those participating are meant to be with us, please ensure your name is visible and use your camera if you can.

How to change your name.



Comox Strathcona Waste Management

Review of Agenda and Minutes

Marc Rutten

10 minutes

RSWAC Meeting 4.1

Comox Strathcona Waste Management

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 Nuu-chah-nulth territories.



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.



Meeting Intent

Sarah Willie

5 minutes

RSWAC Meeting 4.2

Comox Strathcona Waste Management

Purpose of the Meeting

- Finish detailed review of the CSWM facilities
- Improve overall knowledge of CSWM Service
- Identify areas of exploration in next steps



Diving Into Facilities, Programs and Services

Sarah Willie, Vivian Schau and Jesse Lee

60 minutes

RSWAC Meeting 4.3

Comox Strathcona Waste Management

Video Tours

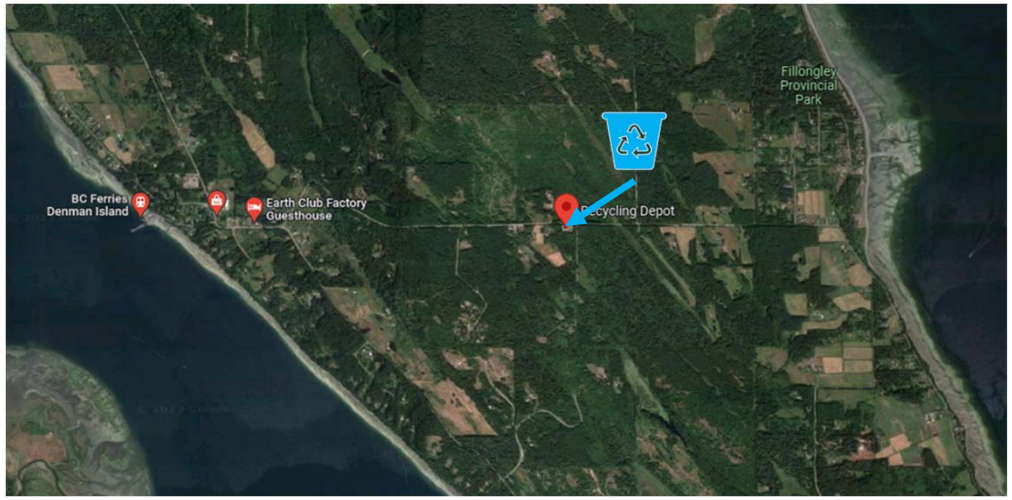
Denman Island Depot

Hornby Island Depot

Regional Organics Compost Facility

Let’s get the technical glitches out of the way…

Denman Island Recycling Depot



- Recycling Depot located with Bottle Depot and Farmers Market
- 28 km, about 45 min with a perfect ferry commute, to the CVWMC
- 15 min to anywhere on the island

Denman Island - Profile

- Serves permanent and seasonal residents of Denman Island as well as visitors
- Population Estimate: 1,391 permanent residents
- Limited commercial activity on the island
- DIRA - Denman Island Residents Association
  - Sets the scope of work and manages the contract for solid waste services on the island.



Denman Island – CVRD Function 362

- Established in 1973, collects a tax requisition from Denman properties for the curbside collection of garbage, and the operation of the Free Store, Recycling Depot and Bottle Depot
- Staff are hired by DIRA and budget is set by DIRA
- Includes site rental and DIRA administrative fees
- Future building investment is intended to be covered by CSWM under Function 391, in line with other facilities

Denman Island – Garbage

- No transfer station or centralized garbage collection point
- Garbage is collected by Strathcona Recycling and Disposal weekly in the summer, and bi-weekly the remainder of the year
- Garbage bags must have stickers, $3 for one or $5 for two, and can be purchased at the General Store or the Recycling Centre
- Funded by bag tags and Function 362
- Self-hauling garbage to the CVWMC is also an option

Denman Island – Diversion Operations

- Recycling depot co-located with a Bottle depot and free store
- Buildings are not owned by CSWM
- Transportation and recycling processing funded through CVRD Function 362, except scrap metal
- Facility is open 3 days a week, 728 hours a year
- Recycle BC, small appliances, used oil, scrap metal, batteries etc.



Denman Island – CVRD 391 and 362

- 50% of Combined Hornby and Denman 2023 Requisition Value for 391: $99,199
- Tax Requisition Amount for 362: $127,500
- Denman 2022 Tipping Fees to 391: $54,462

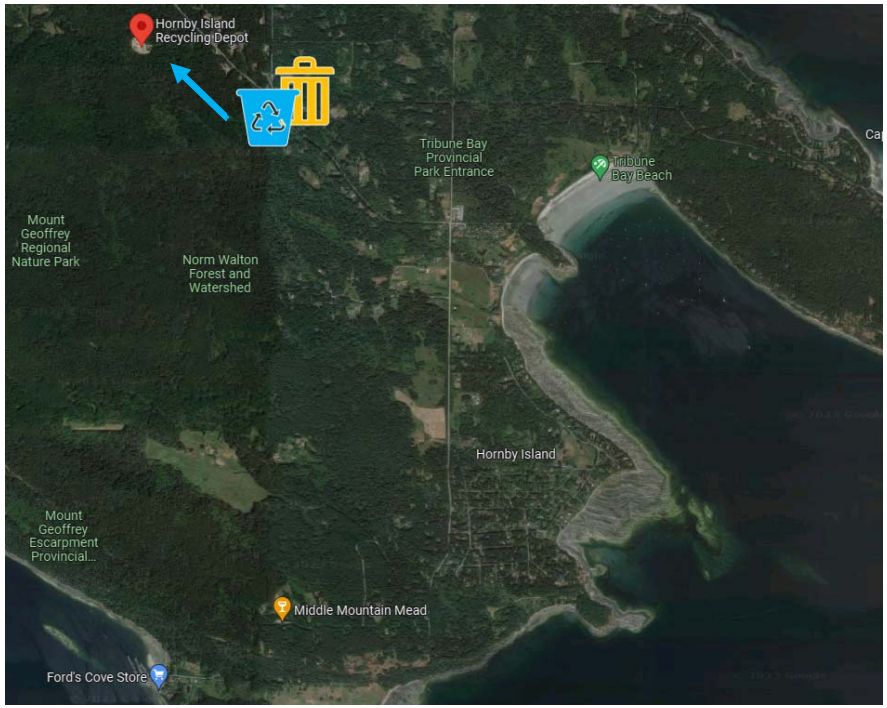
- EPR and Scrap Metal Revenue: $0

- Approximate Contribution from 391: $0

Any Questions or Observations?



Hornby Island



- Transfer Station and Recycling Depot located in area of former landfill
- 45 km, 1 h 20 min drive to CVWMC with perfect ferry timing for two ferries
- Less than 10 minute drive from anywhere on the island



Hornby Island - Profile

- Population Estimate: 1,225 permanent residents
- Highest proportion of non-resident dwellings in the service area, popular tourist area and increase in population in summer months
- Additional Users: Tourism, camping

Hornby Island – Diversion Operations

- Recycling depot located on Crown land, 391 funds the capital infrastructure for:
  - Scale shack and Drop Bays
  - HHW, Maintenance, Recycling Buildings
- Transportation for waste and recycling funded through 391
- Facility is open 3 days a week from 9 am to 1 pm, and 4 days in the summer, 704 hours a year
- A dedicated time for commercial users is added in the summer for another 80 hours year

Hornby Island – Diversion Operations



- Paint, batteries, used oil, light bulbs, propane accepted one day a week
- The depot has the most exhaustive list of accepted materials for diversion of all CSWM facilities
- The site includes an area for separation of yard waste, wood waste, drywall, scrap metal and tires



Hornby Island – CVRD Function 360

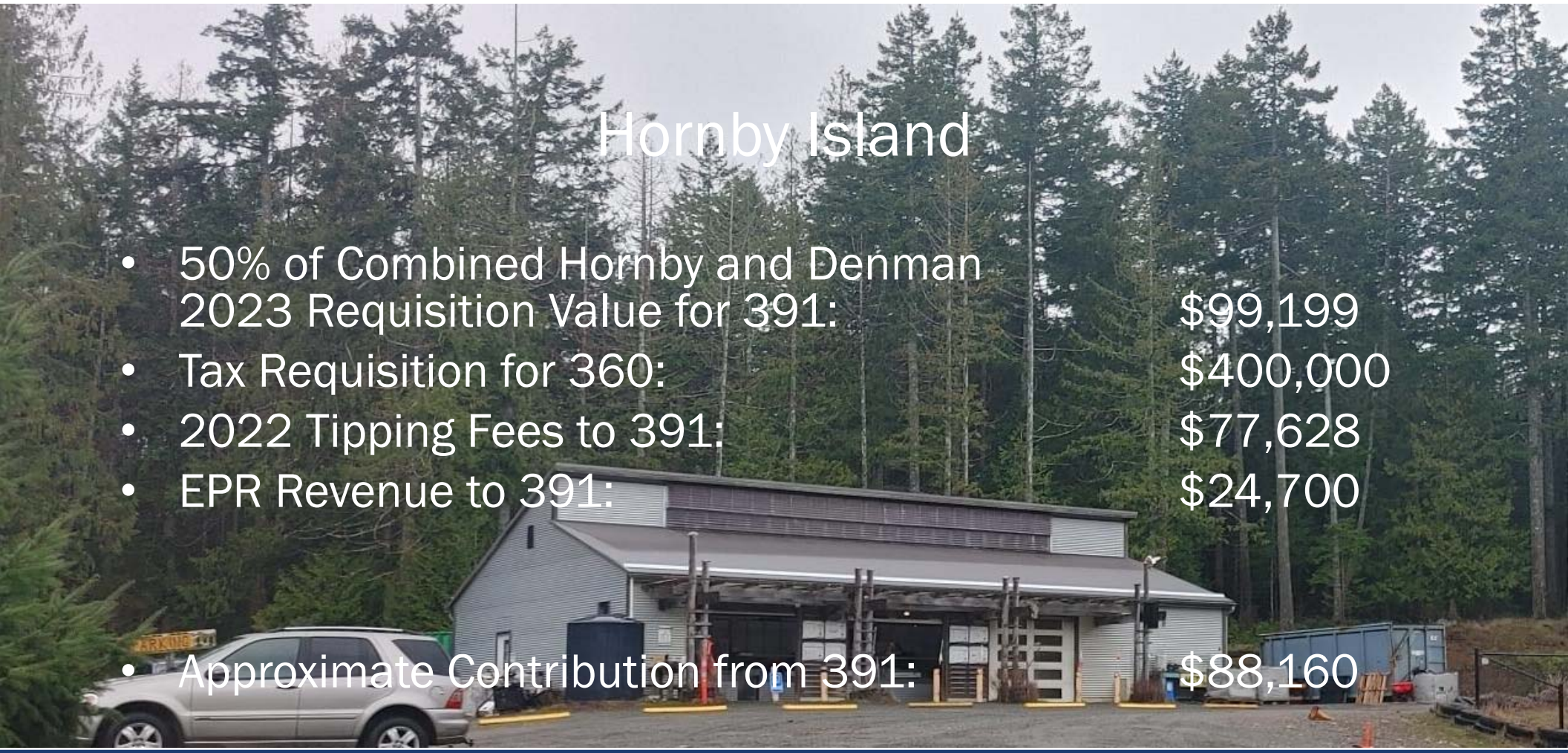
- Established in 1972, collects a tax requisition from Hornby properties for the operation of the Recycling Depot, Free Store and management of waste
- Operated by union staff and a supervisor, under employment of HIRRA, and budget is set by HIRRA
- Function 360 has paid for the Free Store Building construction and upgrades
- Total budgeted expense of $586,675 in 2022, with user fees, recycling revenues and a surplus reducing tax requisition amount

Hornby Island – Garbage

- Residents and businesses pay to drop-off garbage at the Recycling Depot
- Fees are collected by volume and go to HIRRA to offset tip fees paid at CVWMC
- No curbside collection of garbage
- Self-hauling garbage to CVWMC is used less than Denman residents



Hornby Island



- 50% of Combined Hornby and Denman 2023 Requisition Value for 391: $99,199
- Tax Requisition for 360: $400,000
- 2022 Tipping Fees to 391: $77,628
- EPR Revenue to 391: $24,700

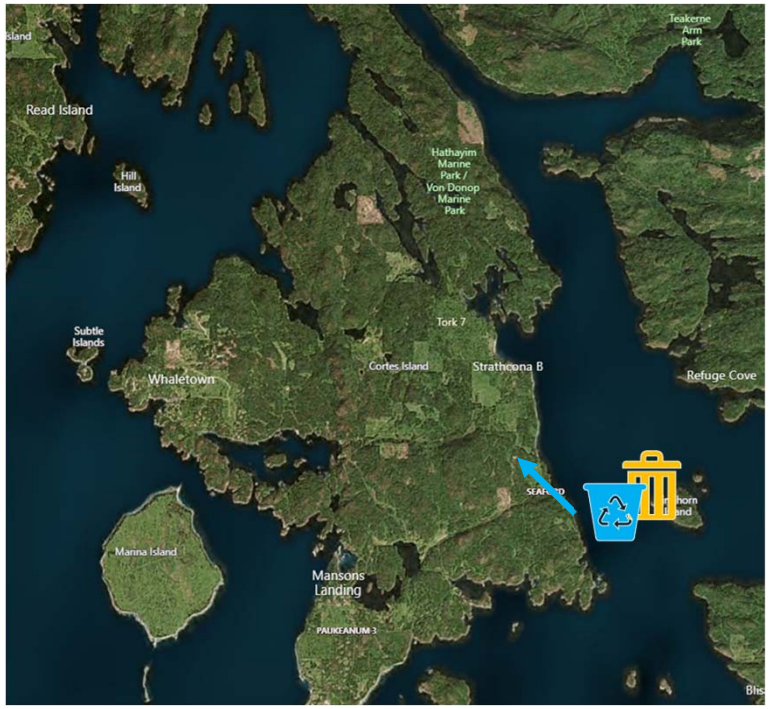
- Approximate Contribution from 391: $88,160

Comox Strathcona Waste Management

Any Questions or Observations?



Cortes Island – SRD Electoral Area B



- Cortes Island Waste Management Centre (CIWMC) located in area of former landfill
- 52 km, 2 h drive to CRWMC with perfect ferry timing for two ferries
- Less than 20 minute drive from anywhere on the island

Cortes Island - Profile



- Population Estimate: 1,059 permanent residents
- Known to grow to over 3,000 in the summer months
- Additional Users: Tourism, hotels
- Average residential property value 2023: $643,596

Cortes – Diversion Operations

- Recycling depot and transfer station operated by a CSWM contractor, accepts most EPR materials.
- Hours are Thursday to Sunday 9:00 am to 1:00 pm, 832 hours/yr
- There is a free store built and run by volunteers open Mon and Wed from 9 am to 1 pm.
- Recycling Depot is centrally located by the Village office and is co-located with works yard and complementary services provided by the Village

Cortes – SRD Function 376 and 374

- Weekly curbside garbage and recycling collection from single family homes on the island, single contract managed by SRD
- Typical cost is $99 per household for curbside
- Collection truck drives waste and recycling to the CIWMC, recycling is shipped off island by Recycle BC
- Waste tipping fees are paid at the CRWMC funded through SRD Function 374; the trucking is subsidized by 391
- Bylaw 2851 specifies rates for commercial customers, average annual charge for residents is $82 per year

Cortes Island – Garbage

- No fee to drop off waste at CIWMC for residents or businesses
- Drywall and construction waste is separated from MSW
- Waste and diverted materials hauled off funded by 391 and Unified Trucking
- Klahoose First Nation also have curbside collection for garbage and recycling



Cortes Island

- 2023 Requisition Value for 391: $62,744
- 2023 Requisition for SRD 374: $76,972



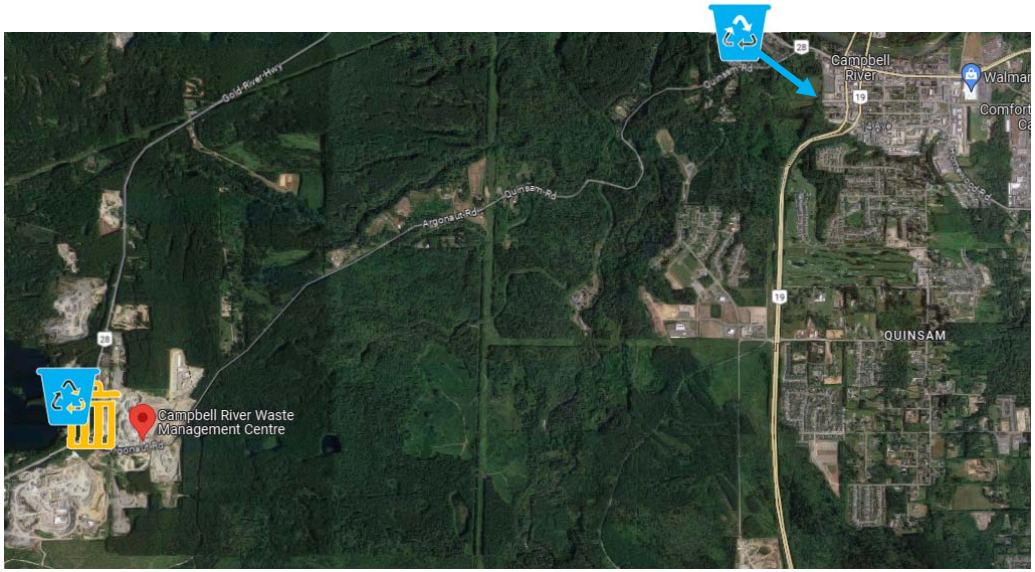
- 2022 Tipping Fees to 391: $114,688
- EPR Revenue to 391: $23,300
- EPR Revenue to SRD 376: $23,400

- Approximate Contribution from 391: $264,860

Any Questions or Observations?



Campbell River Waste Management Centre



- CRWMC is located just outside of Campbell River about 32 km and 30 min from the Oyster River
- Was originally a quarry in the 1950s, CSWM took over ownership from City of Campbell River in 1999

CRWMC - Profile

- Serves predominately residents and businesses of Campbell River including the Wei Wai Kai, We Wai Kum, Tlowitsis and Homalco First Nations
- SRD residents from Sayward, Quadra Island, Electoral Area's A and D also use this facility (representing <3% of tonnes)
- Population Estimate: 35,519 in the City of Campbell River, and 8,088 in the adjacent contributing waste shed

CRWMC - Overview

- Crown land, northern portion is in Agricultural Land Reserve
- Residential users can access the HHW and recycling area before the scale
- Two scales on site, too short for 53’ tractor trailer
- Transfer station and diversion area for drywall, clean wood waste, tires, and yard waste
- Landfill reached capacity and was closed in 2022; no bottom liner for leachate collection
- Regional Organics Compost Facility built north of landfill with separate entrance
- Open every day except statutory holidays, 8:30 am to 5:30 pm, 3,186 hr/yr

CRWMC – Diversion Operations

- Recycling Depot accepts standard Recycle BC materials, batteries, motor oil, and electronics
- Accepts broad suite of EPR materials
- HHW is accepted two days a week plus one Saturday a month
- Separate area for commercial recycling of carboard and mixed containers
- Mattresses are segregated for processing
- Received 4,963 t of diversion material



CRWMC – Garbage



- Received 25,303 tonnes of MSW in 2022, including 134 t of asbestos
- Tipping fees are set in CVRD Bylaw No. 720 and align with fees at CVWMC
- All of the equipment for operations are provided by the contractor, including transfer trailers
- Waste is hauled 3-5 times per day to CVWMC
- Facility use has increased 55% between 2017 and 2022

CRWMC - Landfill

- There is an estimated 2,693,490 m^3 of waste buried in the landfill
- Landfill gas collection to begin in 2023
- Post-closure period is at least 30 years
- Continued groundwater monitoring, LFG collection, surface water management and maintaining the cover integrity
- Liability for post-closure is $4.5 million



City of Campbell River – Municipal Services

- Weekly curbside collection of garbage, recycling, yard waste and food scraps from single households
- Organics are limited to 360 L per week, and garbage 80 L
- Recently transitioned to year round collection of yard waste and began accepting food waste April 17
- Cost of service is $233 per household in 2023
- Multi-family and ICI users contract with private companies for waste management services

Campbell River Waste Management Centre



City of Campbell River

- 2023 Requisition Value for 391: $1,258,940
- 2022 Tipping Fees to 391: $3,858,695

- CRWMC scrap metal & EPR Revenue: $185,000

- Approximate Operational Cost of CRWMC and Waste Transfer Services to 391: (Excludes Organics) $2,437,600

Comox Strathcona Waste Management

Any Questions or Observations?



Comox Valley Waste Management Centre



- Recycling depot and Regional Landfill
- First use was in 1849 for rail spur and coal waste piles
- 307 acres, owned by CSWM
- 30 min drive from either end of the service area, Oyster River or Mud Bay

CVWMC - History

- Used for coal waste from 1849 to 1967
- Village of Cumberland unregulated dump until 1978
- Regional District took over operations, and officially took over ownership of the land in 2012
- Field Sawmill Wood Waste Landfill closed in 1990s, CVRD took ownership of the property in 2002
- Former contaminated soil remediation facility onsite until 2014

CVWMC - Profile

- Population Estimate: 72,445 in CVRD
- 119,949 residents in the waste shed (excludes Tahsis, Zeballos, Ehatis and Oclucje)
- Additional Users: Construction and demolition, hospital waste, grocery stores, aquaculture
- Average 315 customers per day across the scale, similar number at recycling depot daily
- Peak at over 450 customers per day

CVWMC– Diversion Operations

- Recycling Depot accepts standard Recycle BC materials, electronics, small appliances, light bulbs, used oil and many more materials.
- Donation of refundables have been accepted as a pilot, sorted by local non-profit groups for fundraising, over $20,000 raised to date
- Hours are every day but stat holidays 8:00 am to 5:30 pm, 3,363 hr/yr



CVWMC– Diversion Opportunities

- Customers segregate mattresses, drywall, clean wood, yard waste, metal and rubble, 8,466 t in 2022
- Inside the scale is commercial cardboard and hard plastics, major appliances, cooking oil as well as household hazardous waste
- HHW is accepted two days a week and one Saturday a month, staffed by a third party contractor
- Ocean Legacy Depot accepts ocean plastic for sorting, consolidation and recycling in the lower mainland

CVWMC – Diversion





- Facility use has increased by 34% between 2017 and 2022
- Attributed to population growth, development and expanded diversion opportunities
- Wood waste is hauled to Pacific Wood Waste, yard waste is incorporated into SkyRocket, drywall goes to become new drywall in New Westminster

CVWMC– Permit

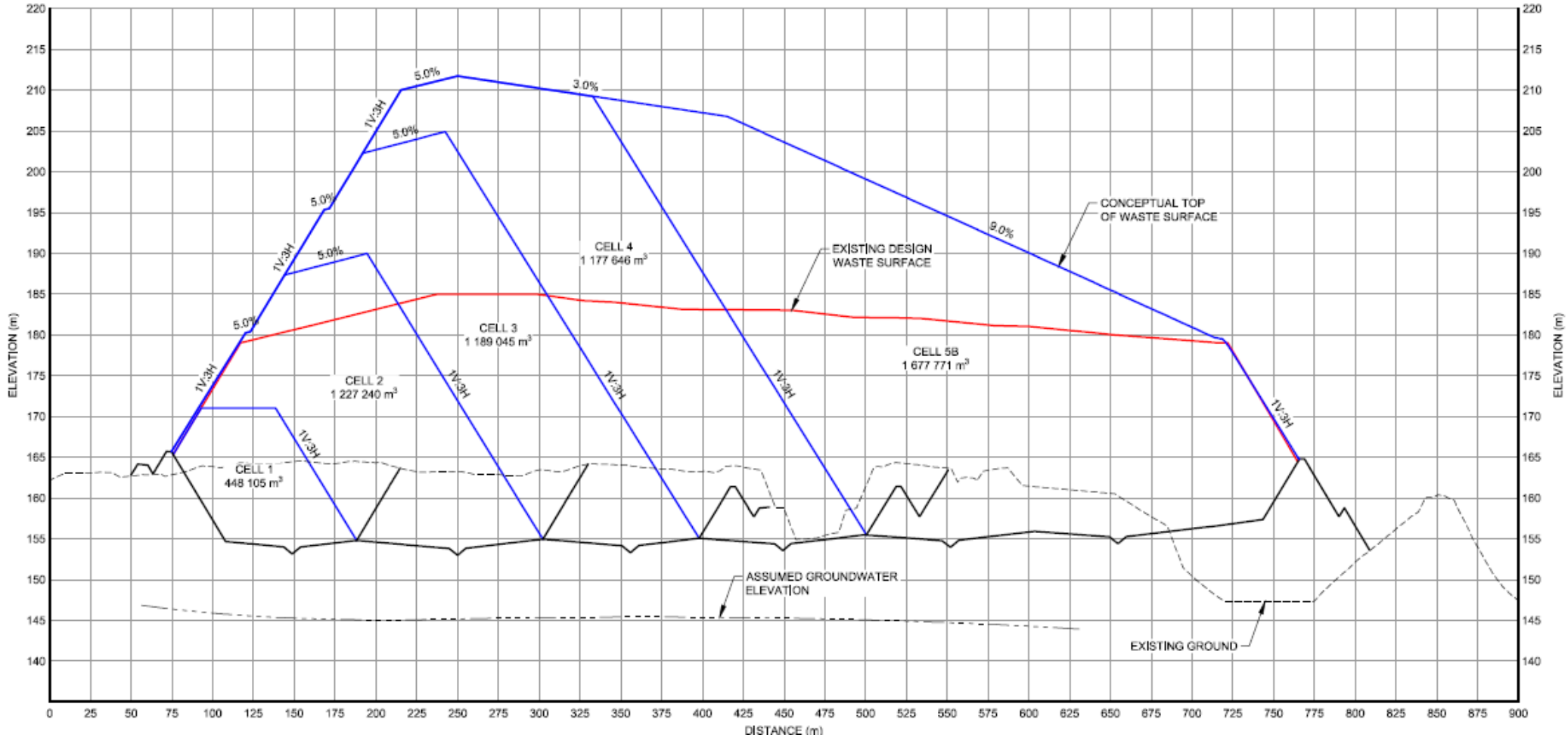
- Issued by the BC Ministry of Environment and Climate Change
- OC-5050 last updated in 2016 to permit the expansion of Cells 1, 2 and 3 of the Engineered Landfill
- Amendment submitted in January 2022 to
  - Increase tonnage per year to 80,000 from 65,000
  - Adjust treated leachate from 250 m^3/day to 275 m^3 annual daily average
  - Adding new leachate equalization pond
- Comprehensive consultation with First Nations



CVWMC – Landfill



- Received 40,235 t of waste in 2022, plus the 21,709 t that were transferred from CRWMC
- Capacity of Cell 1 and 2 is anticipated to last until 2037
- Final height of the landfill and diversion performance will determine lifespan of Cell 3, at 185 masl it is 6-9.5 years



Comox Strathcona
Waste Management

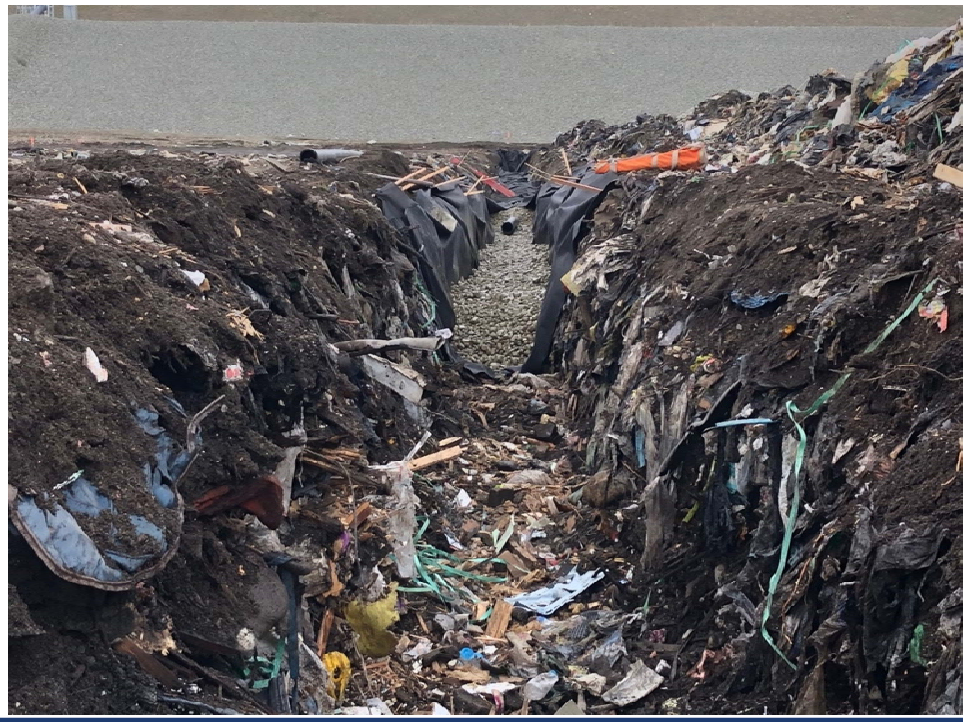
CVWMC – Environmental Controls



- Leachate is captured from Engineered Landfill, stored in lined ponds, and treated in onsite wastewater treatment plant
- Treated water is returned to the ground
- Surface water is kept away from the waste and directed to ponds to infiltrate
- Landfill gas is captured and destroyed
- Monitoring wells are sampled

Landfill Gas Collection

- LFG collection system was online 97.7% of the time
- Average flow of 522 m3/hr of 50.7% methane
- Utilized 3% in the boiler, flared 97%
- Destroyed 35,178 t CO_2e
- LFG collection efficiency 56.2% (75% target)



Comox Valley – Municipal Services

- All three municipalities have curbside collection for garbage, recycling and organics for at least single family homes
  - Courtenay $237.50 and Comox $260.96 – weekly garbage and organics, bi-weekly recycling
  - Both moving to carts in 2024, will have alternating bi-weekly garbage and recycling, weekly organics
  - Cumberland $174.40 –alternating bi-weekly garbage and recycling, weekly organics
  - Royston $133.64 – weekly garbage, bi-weekly recycling
- All contract with Emterra for collection, and some include multi-family and ICI customers in their contracts

Royston Roadside Collection – CVRD Function 366

- CVRD Function 366, total expense $221,393
- Approximately 1,100 households
- Established with Royston Improvement District, expanded by petition in 2019
- Possibly expanded in future to include yard waste or organics, consultation with community
- Funded by utility fee and Recycle BC payment of $44,168

Comox Valley Waste Management Centre

Courtenay, Comox, Cumberland, CVRD Area B and A (Vancouver Island)

- 2023 Requisition Value for 391: $2,562,819
- 2022 Tipping Fees to 391: $5,556,394

- Scrap metal and EPR Revenue: $300,000
- Approximate cost of Services to 391: $2,920,000
  Landfill, LFG and leachate, Transfer Station and Recycle Depot



Break Time



Existing System Information

Sarah Willie

60 minutes

RSWAC Meeting 4.5

Comox Strathcona Waste Management

Strategic Drivers

Provincial Targets

- Reduce MSW through regional SWMPs, promotion of organics recycling and food and plastic waste prevention initiatives, and continuous improvement and expansion of EPR programs.
- Take local government actions to support the phase out of single-use plastics
- Provincial Performance Measures
    1. Per capital MSW disposal 460 kg per year, (350 kg long term)
    2. 80% of BC's population covered by organics waste disposal restrictions

Corporate Energy & Emissions Plan, 2022

- Fully controlled CVRD assets and sites
  - Work With Third-Party Waste Hauling Companies to Pilot New Fuel Technologies
  - Encourage the Adoption of Zero Waste Principles
- Solid Waste Addendum
  - LFG1: Investigate Renewable Energy Sources for Stationary Assets
  - LFG2: Explore the Feasibility of Refining LFG Generation Estimates
  - LFG3: Explore More Efficient Waste Hauling Systems At Waste Depots
  - LFG4: Incorporate Landfill GHG Reduction Targets and Actions Into the CSWM Solid Waste Management Plan Renewal

Regional Growth Strategy, 2010

Objective 5-E: Reduce regional solid waste and improve landfill performance.

- Solid waste diversion rate: Baseline 2010, 48%
- Medium-term 2020, 65% 2020 Actual: 50%

Objective 8-C: Reduce GHG emissions in the solid waste sector.

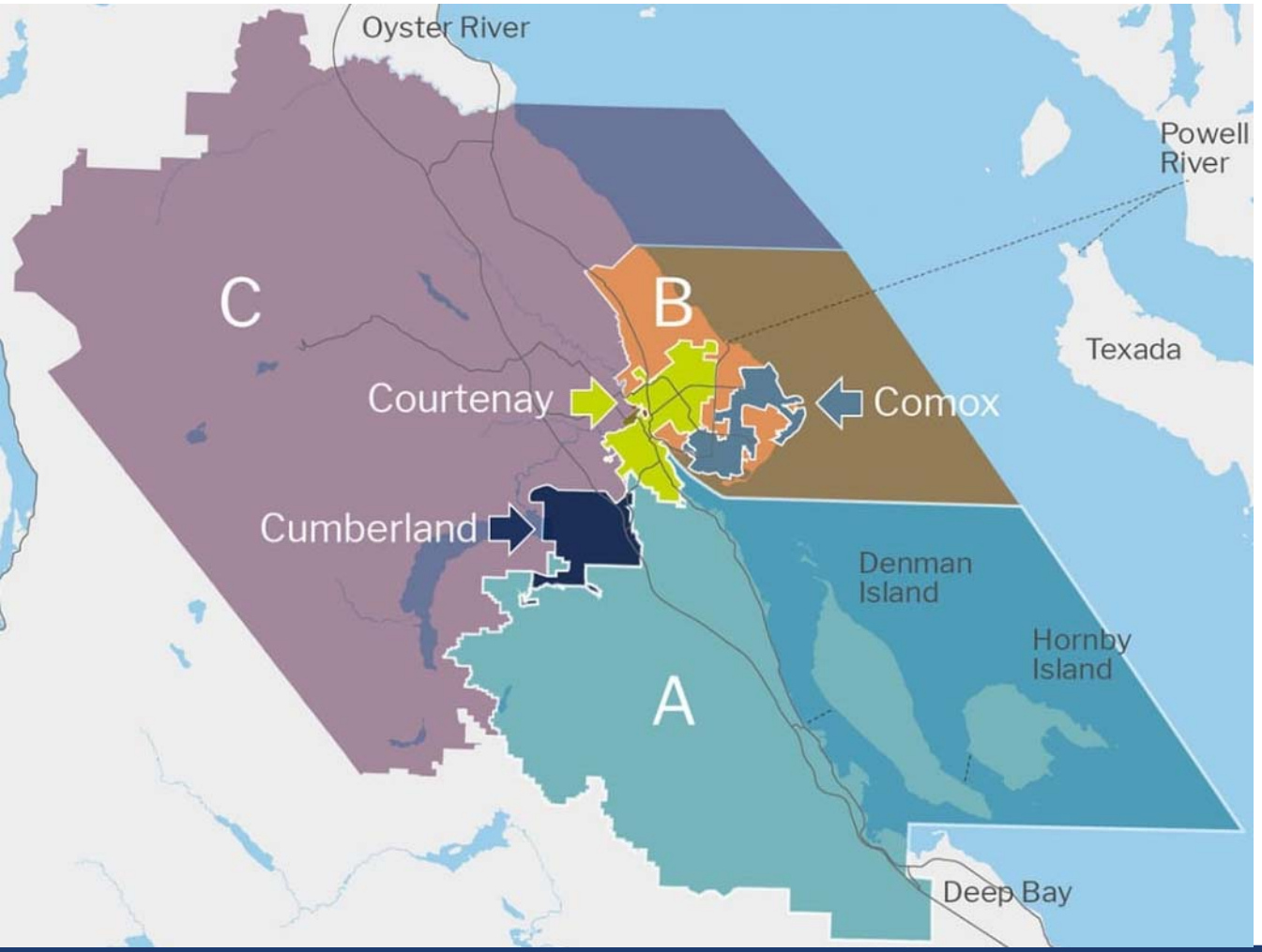
- Solid waste GHG emissions: Baseline 2007, 61,605 $CO_2e(t)$
- Medium-term 2020 33% Reduction
- 2021 Emissions: 27,422 $CO_2e(t)$, 55% Reduction

Comox Valley Sustainability Strategy, 2010

- Objective 3.3.1: Develop a regional Zero Waste strategy, including promotion of recycling that is aimed at waste reduction and diversion from landfill disposal.
- Objective 3.3.2: Product stewardship practices are supported and promoted by businesses.
- Objective 3.3.3: Zero waste principles are applied in civic facilities and operations.
- Objective 3.4.1: Develop and implement a regional construction waste management program.
- Objective 3.4.2: New multi-residential and commercial buildings have 3-stream separation supportive design (garbage, recycling, organics).



Comox Strathcona Waste Management



- CVRD is 1,725 km^2
- SRD is 18,278 km^2
- Mild climate
- Rugged coasts
- High peaks
- Populous valleys
- Temperate rainforest biome

Population Statistics

	2021 Census Population	Population Change 2016-2021
Municipality	**37,618**	
Campbell River	35,519	7.6%
Gold River	1,246	2.8%
Sayward	334	7.4%
Tahsis	393	58.5%
Zeballos	126	17.8%
Electoral Area	**8,813**	
A - Kyuquot/Nootka-Sayward	864	13.1%
B - Cortes Island and the surrounding Archipelago Islands	1,059	2.3%
C - Discovery Islands and Mainland Inlets	2,737	12.6%
D - Oyster Bay - Buttle Lake	4,153	4.4%
SRD	**46,431**	**7.8%**

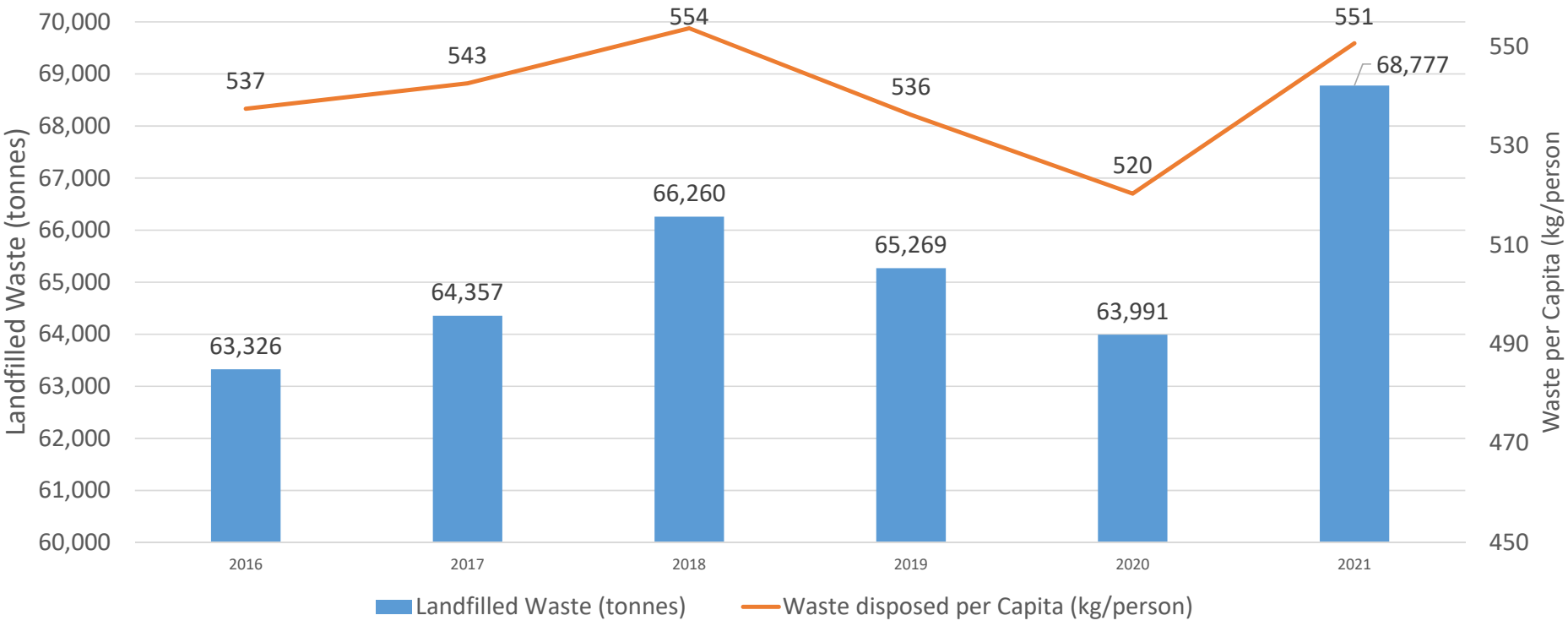
- 2006 was 101,595
- 15 years on 120,595
- 19% increase
- 1.2% per year average

Population Statistics

- Includes 2,015 First Nation peoples
- 60/40 split between CVRD and SRD

	2021 Census Population	Population Change 2016-2021
Municipality	**47,673**	
Courtenay	28,420	10.8%
Comox	14,806	5.5%
Cumberland	4,447	18.5%
Electoral Area	**24,476**	
A - Baynes Sound - Denman/Hornby Islands	7,926	9.9%
B - Lazo North	7,392	4.2%
C - Puntledge Black Creek	9,158	6.8%
CVRD	**72,149**	**8.9%**

Landfilled Waste Generation



Comox Strathcona Waste Management

2020 Waste Disposed in CSWM Area

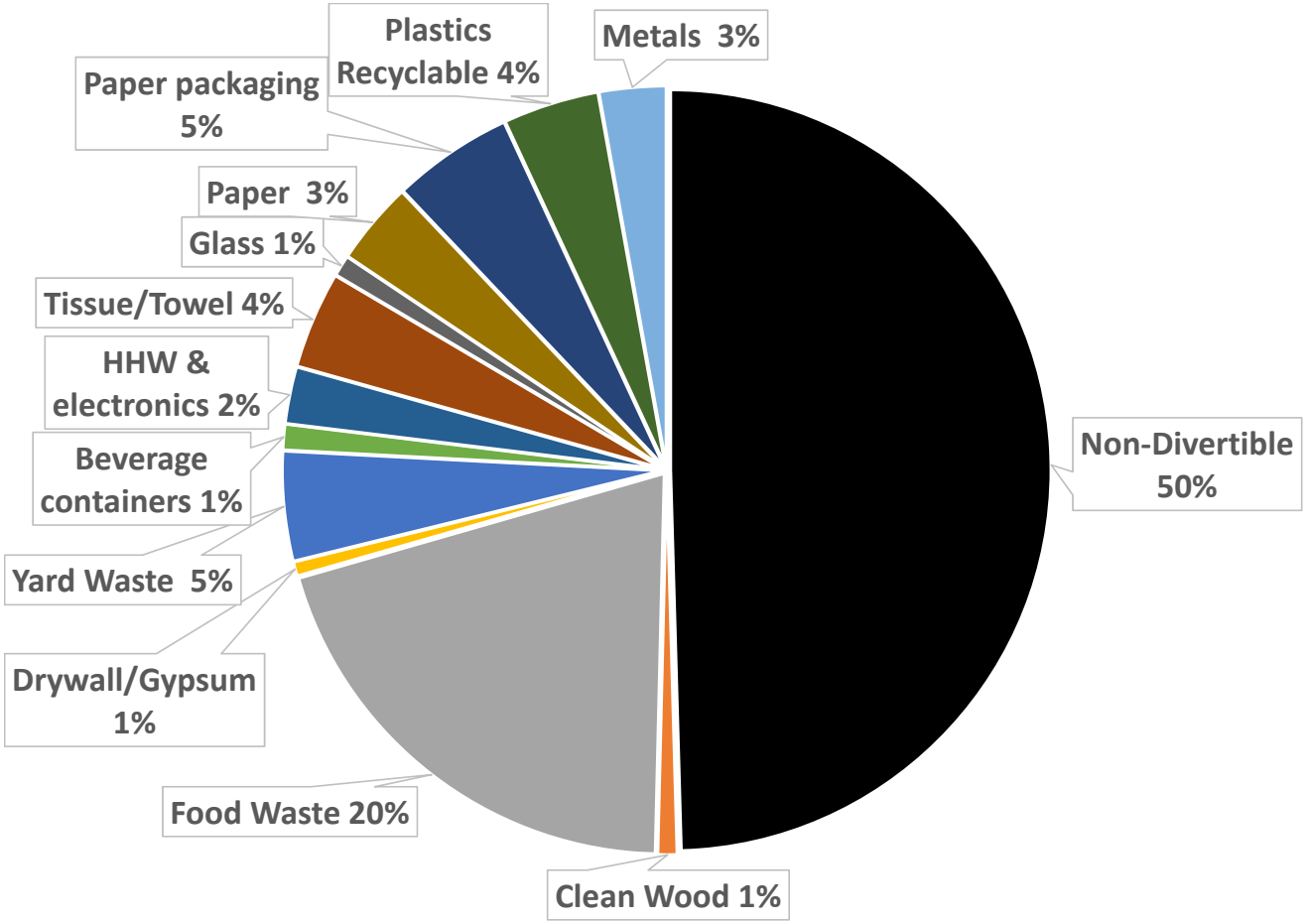
- Private landfill accepted 849 t C&D and 11,454 t soil
- Private landfill accepted 5,966 m^3 of soil, demolition debris and sludge

Waste Disposed In Landfill	CVRD	SRD	CSWM
Zeballos Waste Estimate	0	230	230
Tahsis Waste Estimate	0	616	616
Gold River Waste Estimate	0	394	394
CRWMC Scaled Tonnage	0	26,272	26,272
CVWMC Scaled Tonnage	36,479	0	36,479
Total Disposed Tonnage	**36,479**	**27,512**	**63,991**

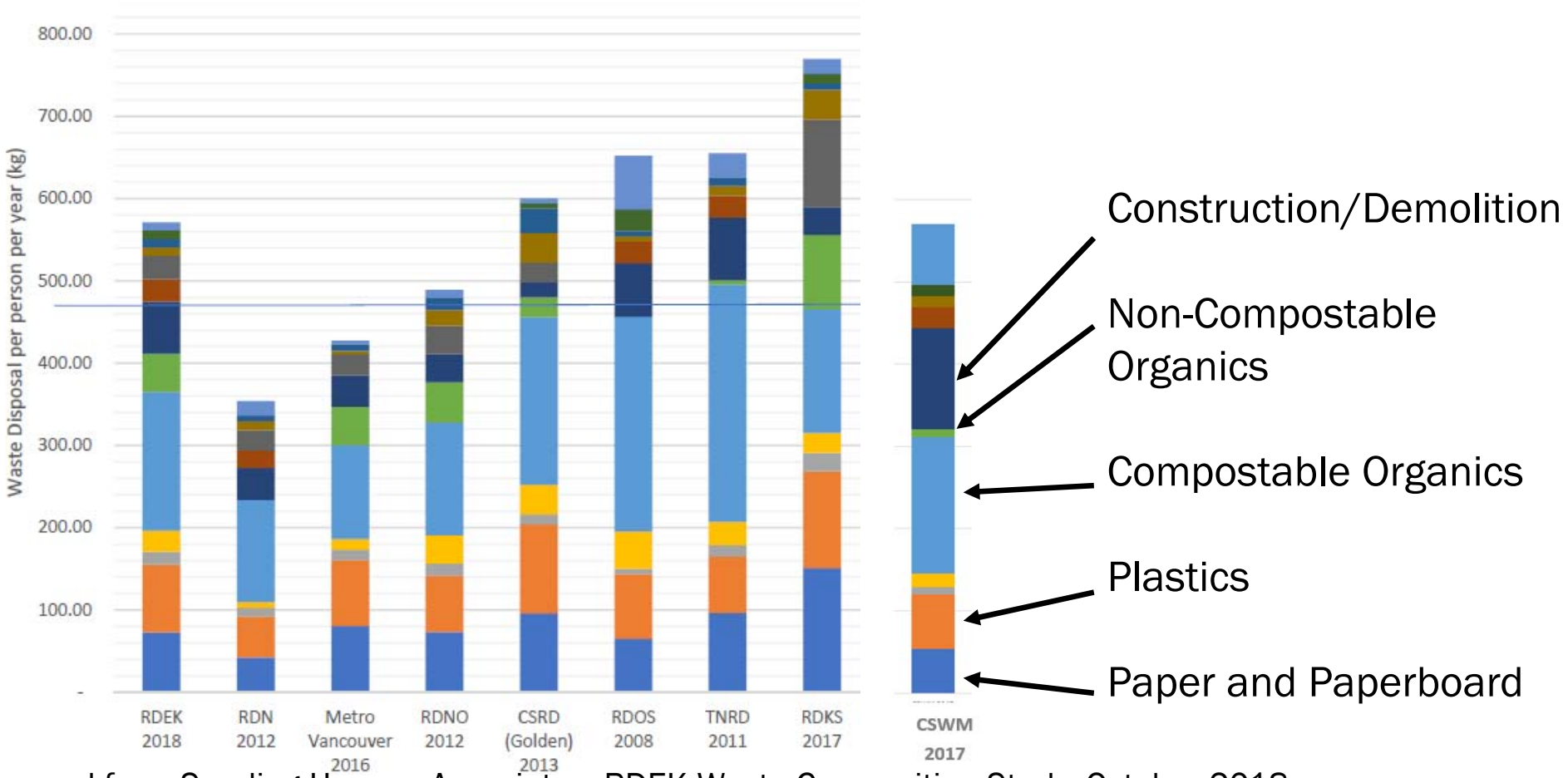
2017 Waste Composition Study

	CRWMC 51	CVWMC 53	Total 104
Curbside Single Family Residential	12	10	22
Self-Haul Customers	23	14	37
Large Industrial, Commercial & Institutional	3	5	8
Small ICI/Multi-Family	8	13	21
Construction, Renovation and Demolition	5	11	16

- Only waste composition study done to date
- Planned study for 2024
- Results at a granular level, by municipality or electoral area have higher variance



- Top 3 divertible streams – 50%:
  - Food waste
  - Paper Packaging
  - Yard Waste
- Planned study for 2024

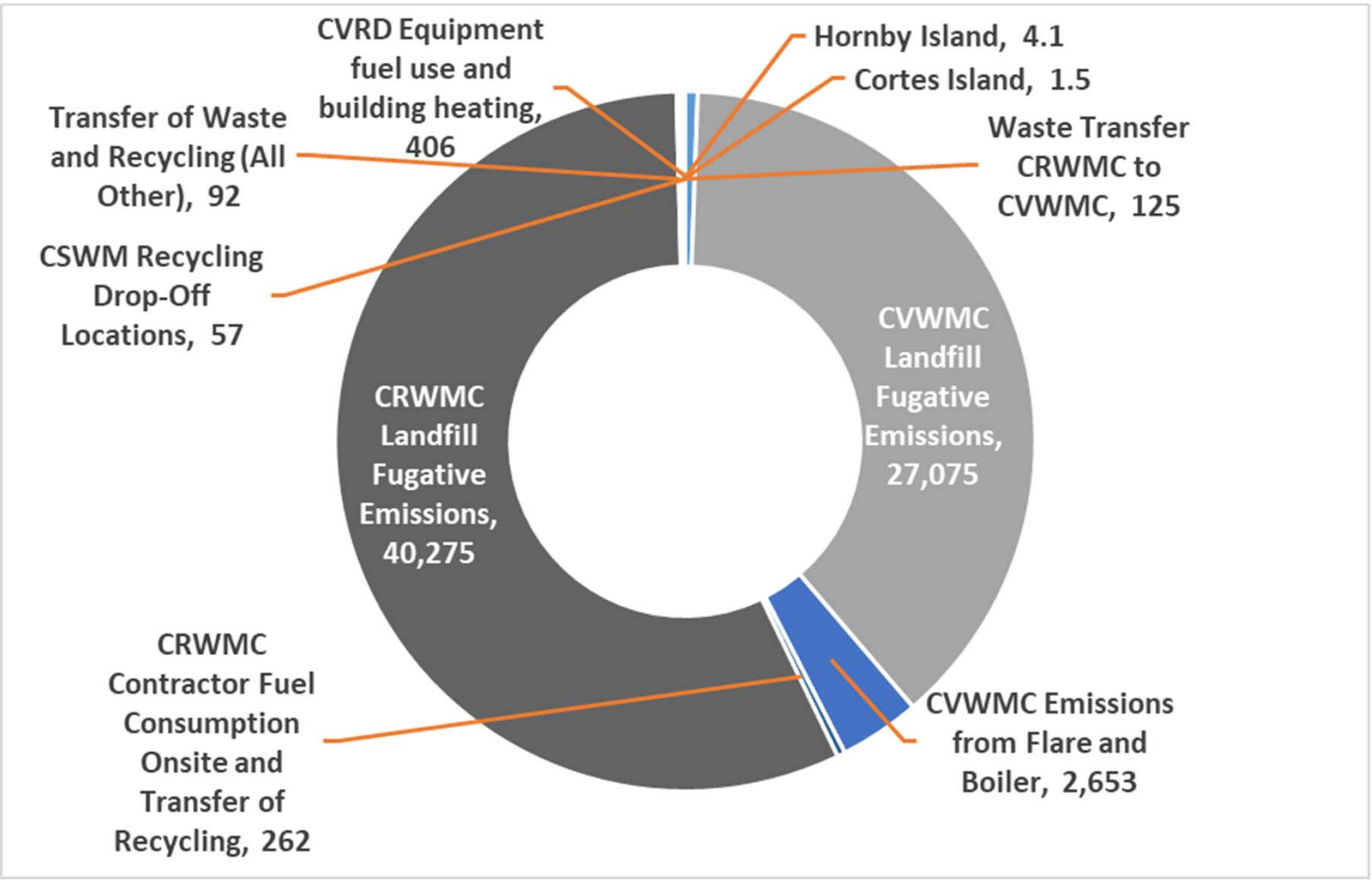


Sourced from Sperling Hansen Associates, RDEK Waste Composition Study, October 2018.

2020 EPR Diversion by all Collection Partners

Recycling and Diversion				
2020 EPR Program Quantities Collected	Reported Quantities			
	CVRD	SRD	CSWM	Units
Recycle BC	3566	1694	5260	tonnes
Encorp Return-it	1574	794	2368	tonnes
Brewers Recycling Container Collection Council	268	179	447	tonnes
CESA Electronic recycling	109	35	144	tonnes
CBA - Canadian Battery Assoc	321	226	547	tonnes
EPRA - Electronic Recycling	201	98	300	tonnes
Household Batteries (Call2Recycle)	14	7	21	tonnes
BCUOMA	913	611	1525	tonnes
PCA - Alarm Recycle	0.2	0.1	0.3	tonnes
PCA - Light Recycle	28	9	37	tonnes
PCA - Paint and HHW	93	44	137	tonnes
Major Appliance Stewardship (included in scrap)	3957	4084	8041	units
Tire Stewardship	571	672	1243	tonnes
Pharmaceuticals	2	1	3	tonnes
Stewardship Program Totals	**7,660**	**4,371**	**20,072**	**tonnes**

- Includes local government curbside programs
- Return to Retail
- Private Depots
- Thrift Stores
- Large Volume Generators
- CSWM Sites

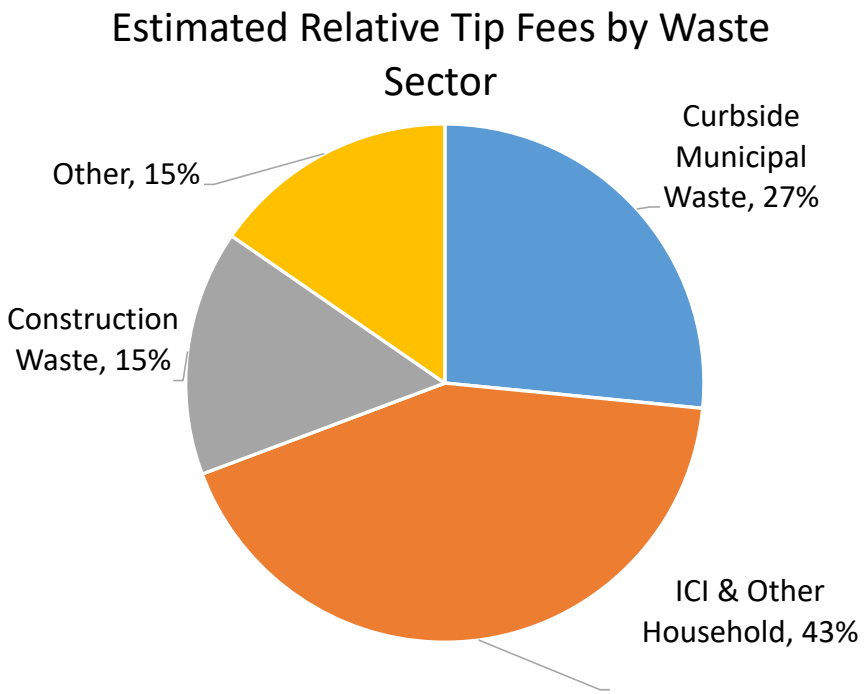


2021 Estimate of GHGs Generated by CSWM Services in tonnes CO_2e

70,951 total

30,000 ft Level Finances

- Main CSWM service, Function 391, was established by Bylaw No. 1822
- The operating budget to support this service is $17 million annually
  - Tip fees $10,421,680
  - Recoveries $343,000
  - Tax requisition $5,000,000
- The overall reserve fund is around $7.8 million





Sub Function 392 – Post Closure

Annual spending around $200,000 for LFG management and cover maintenance

$14.9 million in Post-Closure Liability (as of Dec 31, 2022)

- Campbell River
- Comox Valley Pidgeon Lake and Engineered Landfills
- Gold River, Tahsis. Zeballos
- Field Sawmill Landfill

Sub Function 393 – Leachate Treatment



Liner designed to collect leachate

Leachate transferred to lined equalization pond and treated

~$620,000 for 2023

Comox Strathcona Waste Management

Sub Function 394 - Regional Organics Compost Facility



$17.5 million

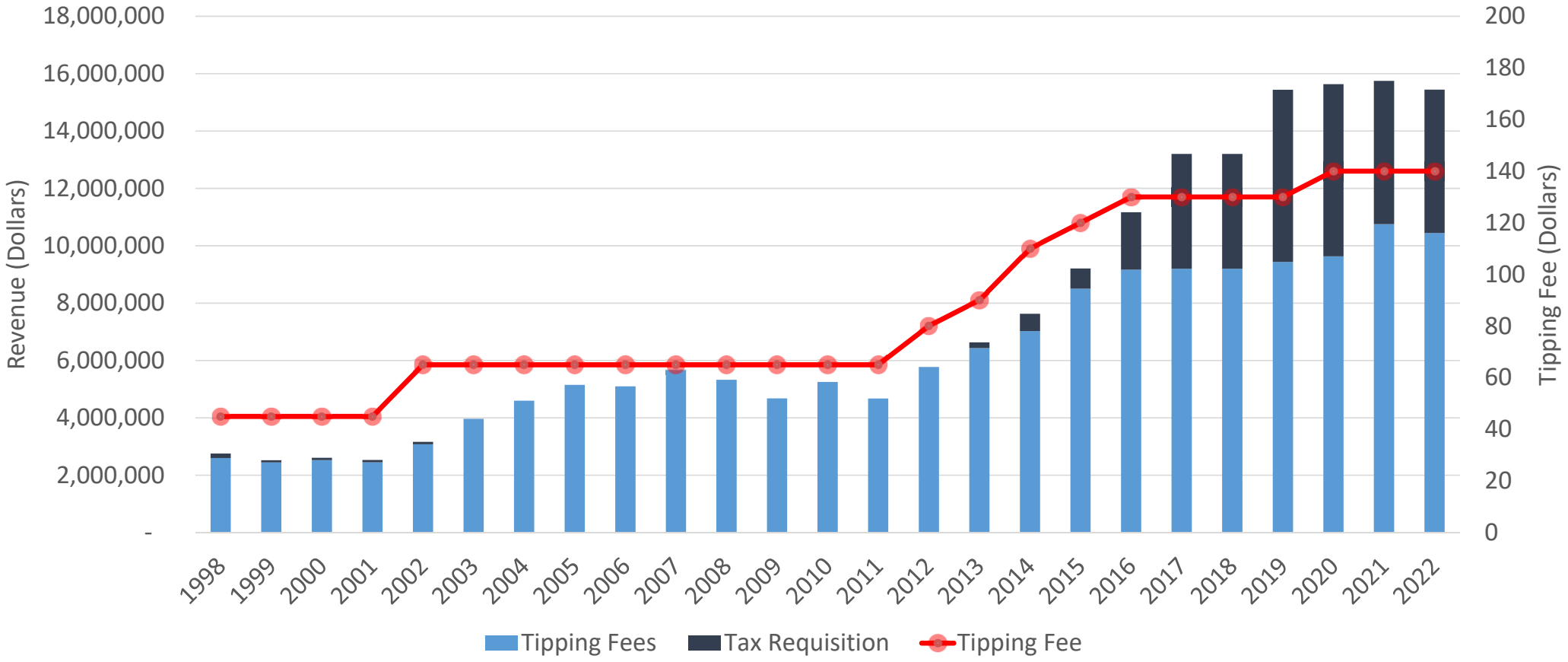
- $6.4 million in federal and provincial grants
- $11.1 million in capital reserves

Comox Strathcona Waste Management

Sub Function 394 - Regional Organics Compost Facility

- Tipping Fees are set to cover operational expense, $110/tonne
- First year operating budget is $588,000
- Purchase of kitchen catchers was part of program launch cost
- Facility is owned by CSWM, and operated under contract with transfer station operator while we get started
- Expect 5,500 tonnes in first year from four urban municipalities
- 14,500 wet tonnes/yr capacity
- Expandability to double production

CSWM Revenue Requirements



Comox Strathcona Waste Management

Financing for Function 391 CSWM Service		2023 Assessed Values		Requisition Value	2022 Tipping Fees to 391 (self identified)		2021 Census Population	
CVRD		**$ 3,085,070,127**	**64.0%**	**$ 3,201,642**	**$ 6,074,401**	**58%**	**72,445**	**60%**
Area A	Jur 771	$ 477,164,028	9.9%	$ 495,194	$ 575,868	5.5%	7,926	6.6%
Area A Baynes Sound	*Jur 771*	*$ 285,990,264*	*5.9%*	*$ 296,797*	*$ 443,476*	4.3%	5,310	4.4%
Area A Denman/Hornby	*Jur 771*	*$ 191,173,763*	*4.0%*	*$ 198,397*	*$ 132,392*	1.3%	2,616	2.2%
Area B	Jur 771	$ 345,574,768	7.2%	$ 358,633	$ 128,864	1.2%	7,392	6.1%
Area C	Jur 771	$ 424,389,601	8.8%	$ 440,426	$ 385,615	3.7%	9,158	7.6%
Comox		$ 539,887,436	11.2%	$ 560,288	$ 1,344,216	12.9%	14,806	12.3%
Courtenay		$ 1,128,790,076	23.4%	$ 1,171,442	$ 3,227,860	31.0%	28,420	23.6%
Cumberland		$ 169,264,219	3.5%	$ 175,660	$ 411,978	4.0%	4,447	3.7%
SRD		**$ 1,732,879,604**	**36.0%**	**$ 1,798,358**	**$ 4,348,272**	**42%**	**48,150**	**40%**
Area A East	Jur 772	$ 37,450,978	0.78%	$ 38,866	$ 28,953	0.28%	864	0.72%
Area A West	Jur 784	$ 22,825,575	0.47%	$ 23,688	$ 12,037	0.12%		
Area B	Jur 772	$ 60,459,464	1.3%	$ 62,744	$ 114,688	1.1%	1,059	0.88%
Area C	Jur 772	$ 161,528,928	3.4%	$ 167,632	$ 129,675	1.2%	2,737	2.3%
Area D	Jur 772	$ 195,602,890	4.1%	$ 202,994	$ 64,473	0.62%	4,153	3.4%
Campbell River		$ 1,213,101,959	25.2%	$ 1,258,940	$ 3,858,695	37.0%	35,519	29.5%
Gold River		$ 24,782,446	0.51%	$ 25,719	$ 121,192	1.2%	1,246	1.03%
Sayward		$ 8,008,051	0.17%	$ 8,311	$ 18,551	0.18%	334	0.28%
Tahsis		$ 7,260,416	0.15%	$ 7,535	$ 10	0.00%	393	0.33%
Zeballos		$ 1,858,897	0.04%	$ 1,929	$ -	0.00%	126	0.10%
		$ 4,817,949,731	**100%**	**$ 5,000,000**	**$ 10,422,673**	**100%**	**120,595**	

Unified Transportation Model

The purpose of the unified transportation concept is to unify solid waste transportation for all waste owned by the CVRD under the concept that once ownership is assumed at transfer stations or landfills by the CVRD, then all handling, transportation and long term care of the waste is the legal responsibility of the CVRD.



Unified Transportation Model

- Transferred $67,000 (2012) dollars from local services to the regional service
- Reduction in transportation service costs due to scale
- Reduced liability, cost effective and equitable service delivery across the CSWM area



Complementary Local Services

2022 Budget Values	Governing Board	Service	Total Expense	Requisition Value	User Fees	Recycling Revenues	Prior Year Surplus	Transfer From Reserves	Contribution from 391
Hornby Island Waste Service	CVRD	360	$ 586,675	$ 400,000	$ 126,226	$ 23,935	$ 36,514	$ -	$ -
Denman Island Waste Service	CVRD	362	$ 127,500	$ 127,500	$ -	$ -	$ -	$ -	$ -
Royston Curbside Collection	CVRD	366	$ 221,393	$ -	$ 136,493	$ 44,168	$ 40,732	$ -	$ -
Sayward Valley Curbside Collection	SRD	370	$ 89,112	$ -	$ 77,415	$ -	$ 2,407	$ 3,903	$ 5,387
Sayward Valley Community Clean-Up	SRD	368	$ 33,773	$ 26,080	$ -	$ -	$ 1,693		$ 6,000
Cortes Island Waste Management Centre	SRD	374	$ 79,113	$ 60,832	$ -	$ -	$ -	$ 9,709	$ 8,572
Cortes Island Roadside Collection	SRD	376	$ 96,667	$ -	$ 83,395	$ -	$ 13,272	$ -	$ -
Kyuquot/Nootka Solid Waste Disposal	SRD	364	$ 8,632	$ 7,463	$ -	$ -	$ 1,169	$ -	$ -

Impact of Self-Haul vs Consolidated Collection on Traffic and Trips



<u>Denman Island</u>

102 t by curbside
34 loads
Avg. 3,000 kg



156 t self-hauled
1364 loads
Avg. 114 kg

<u>Hornby Island</u>

465 t hauled by CSWM
62 loads

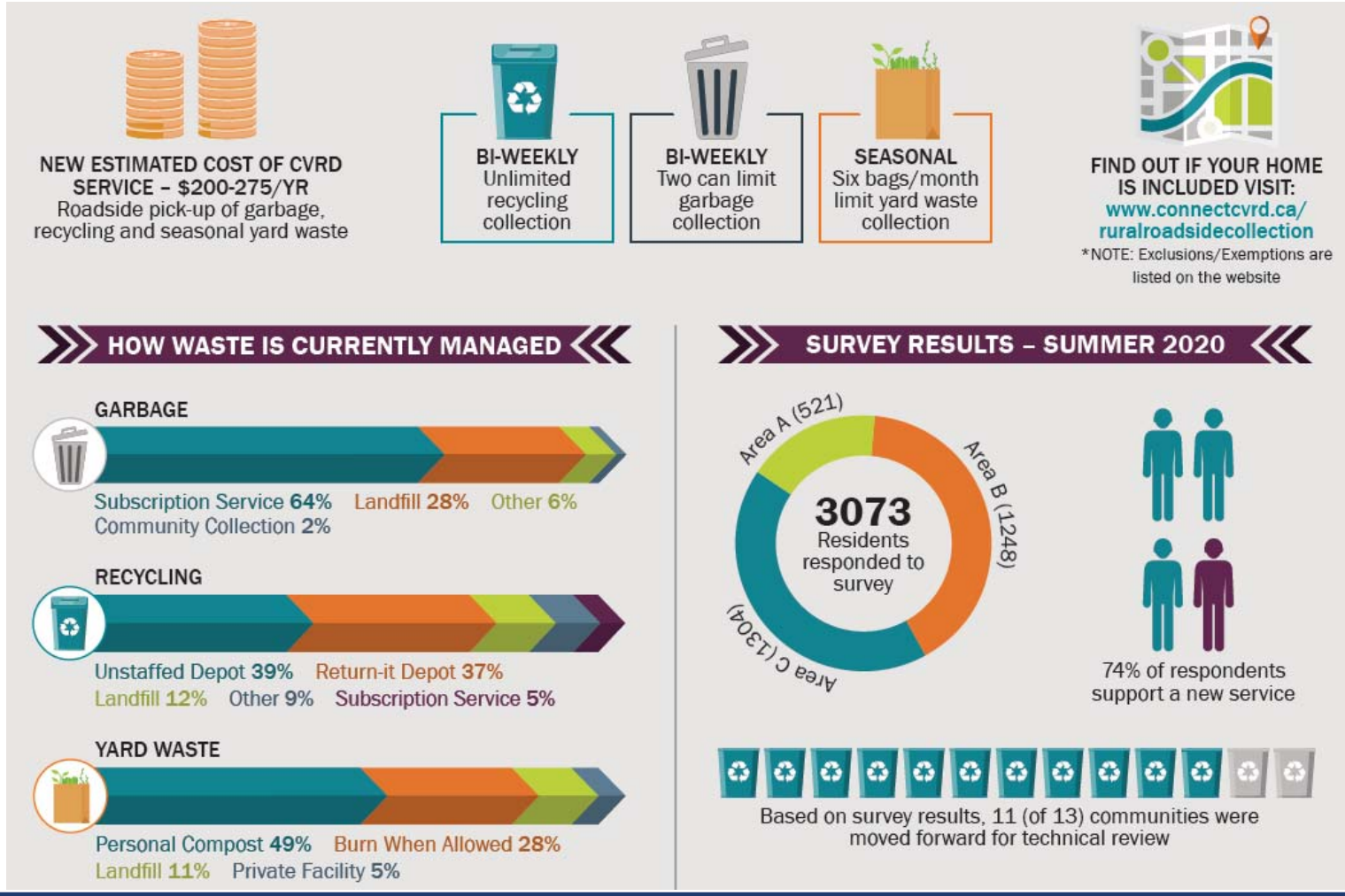
79 t self-hauled, 140 loads

Rural Waste Collection

- Residents in Electoral Area A (Baynes Sound), B and C of the CVRD and Area D of the SRD are not served by a consolidated waste collection contract, they have the option of subscribing to a private waste collection service
- Currently Waste Management Canada, Waste Connections and Strathcona Recycling and Disposal are offering services
- 2021 and 2013 residents in CVRD rural areas opposed a consolidated contract for waste collection by the CVRD
- $200-$275/yr for recycling, garbage and seasonal yard waste, compared to $400-$500 for bi-weekly garbage collection

2021 Rural Roadside Survey
3073 responses
74% in favour

Alternative Approval Process
>10% of electorate were opposed to the service
2,601 Forms Received



Comox Strathcona Waste Management

Next Steps and Wrap Up

Sarah Willie

15 minutes

RSWAC Meeting 4.6 – 4.8

Comox Strathcona Waste Management

Next Steps for the RSWAC

- Review the Draft Existing System Report to be sent Monday, identify any corrections or missed initiatives in your community.
- Look for an in-person engagement in your area this summer!
  - We will send out a list of dates and places.

- Next Meeting is a Tuesday **September 19, 2023**
  - Meeting will be in-person, we may arrange for a tour of the Regional Organics Compost Facility in Campbell River

Wrap-Up

Parking Lot

- Any outstanding questions, comments, thoughts?

Roundtable

- Inspirations or frustrations?
- How did the meeting go?



Thank YOU.





Any questions or comments, email or call Sarah.

250-334-6065

swillie@comoxvalleyrd.ca

Final Word and Meeting Adjournment from Marc Rutten



Comox Strathcona Waste Management