Regional District of Central Kootenay
JOINT RESOURCE RECOVERY COMMITTEE
Open Meeting Agenda

Date: Wednesday, December 11, 2024

Time: 1:00 pm

Location: Hybrid Model - In-person and Remote

Directors will have the opportunity to participate in the meeting electronically. Proceedings are open to the public.

Pages

1. ZOOM REMOTE MEETING INFO

To promote openness, transparency and provide accessibility to the public we provide the ability to attend all RDCK meetings in-person or remote.

Meeting Time:

1:00 pm PST

2:00 pm MST

Join by Zoom:

https://rdck-bc-ca.zoom.us/j/96757636881?pwd=63UFCdJfC3hEbPKxRaSaaJdHQJ5P7s.1&from=addon

Join by Phone:

- +1 778 907 2071 Canada
- 833 955 1088 Canada Toll-free

Meeting ID: 967 5763 6881
Meeting Passcode: 562073

2. CALL TO ORDER & WELCOME

Chair Jackman to call the meeting to order at ________p.m.

2.1 TRADITIONAL LANDS ACKNOWLEDGEMENT STATEMENT

We acknowledge and respect the Indigenous peoples within whose traditional lands we are meeting today.

2.2 ADOPTION OF THE AGENDA

RECOMMENDATION:
The agenda for the December 11, 2024 Joint Resource Recovery meeting be adopted as circulated.

2.3 RECEIPT OF MINUTES

The November 13, 2024 Joint Resource Recovery minutes, have been received.

2.4 DELEGATION 4

City of Nelson, Organics Program

Mary Tress, Climate Programs Coordinator

Note - Delegate presentation to be distributed following the meeting.

3. CHANGES TO MATERIAL MANAGEMENT AND TIPPING FEES 5 - 33

[All Areas]

The November 25, 2024 Committee Report from Heidi Bench, Projects Advisor outlining material management and tipping fee updates proposed for 2025 as a result of the System Efficiency Study, as well as proposing options to address the inequities in the current cost recovery structure, has been received.

RECOMMENDATION:
That the Board authorize Staff to draft an amendment to Bylaw No. 2905 to incorporate rubble and wood waste under the definition and fee schedule for mixed waste.

RECOMMENDATION:
That the Board authorize Staff to draft an amendment to Bylaw No. 2905 updating tipping fees to align with the proposed Tipping Fee Cost Recovery Objectives.

4. S188 WEST WASTE FINANCIAL PLAN AMENDMENT - OOTISCHENIA TIPPING WALL BINS 34 - 35

[West Subregion]

The December 3, 2024 Committee Report from Amy Wilson, Resource Recovery Manager requesting an amendment of the 2024 Financial Plan to account for the purchase of bins for the Ootischenia Landfill, has been received.

RECOMMENDATION:
That the Board approve an amendment to the 2024 Financial Plan for S188 West Waste to decrease the Repairs and Maintenance Account 55010 by $18,170 and increase the Capital Expense Account 60000 by $18,170 for the Ootischenia Landfill Tipping Wall Bins.

5. **S187 CENTRAL WASTE MFA EQUIPMENT FINANCING AUTHORIZATION - CENTRAL LOADER** 36 - 41
[Central Subregion]

The December 3, 2024 Committee Report from Amy Wilson, Resource Recovery Manager requesting an authorization for a Municipal Finance Authority equipment financing for the 2024 Central Loader, has been received.

RECOMMENDATION:
That the Board approve an amendment to the 2024 Financial Plan for S187 Central Waste to decrease the Proceeds from Equipment Financing Account 43200 by $284,395 and increase the Transfer from Regular Reserves Account 45000 by $284,395 for the Central Loader.

6. **S187 CENTRAL WASTE / A120 FINANCIAL AMENDMENT - 2023 INTERNAL TRANSFER** 42 - 45
[Central & West Subregions]

The December 3, 2024 Committee Report from Amy Wilson, Resource Recovery Manager requesting an amendment of the 2024 Financial Plan to account for an error in the 2023 internal transfers from Service S187 Central Waste to Service A120 Central-West Compost, has been received.

RECOMMENDATION:
That the Board approve an amendment to the 2024 Financial Plan for S187 Central Waste to increase the Transfer to Other Services Account 59500 by $257,493 and increase the Transfer from Other Services Account 45500 by $257,493 for the missed 2023 transfer for support of the Central Compost Facility.

7. **PUBLIC TIME**
The Chair will call for questions from the public and members of the media at _____ p.m.

8. **ADJOURNMENT**

RECOMMENDATION:
The Joint Resource Recovery Committee meeting adjourn at ______ p.m.

CITY OF NELSON

Pre-treated Organics: Program Evaluation and Extension

The City of Nelson's Pre-treated Organics Program is an innovative waste management program designed to divert organic waste from the landfill. The program provides residents with FoodCyclers—countertop appliances that reduce the weight and volume of food waste. This program is the first of its kind at a municipal scale and aligns with the City's climate action goals outlined in *Nelson Next*.

The City engaged a third-party waste management consultant to assess the technical, social, and environmental aspects of this program. Unlike a traditional curbside green bin program, it is not possible to directly measure the weight of wet organics diverted through the Pre-treated Organics Program. Additionally, residents using a FoodCycler can either drop off the pre-treated food waste for collection or apply it in a home garden. As a result, evaluating the Pre-treated Organics Program required a different approach to measurement.

The evaluation made use of curbside waste composition data, garbage tonnages, and organics drop-off bin weights to calculate the amount of food waste diverted from landfills. While this diversion rate per household is a useful metric, it may not fully capture the program's overall impact. Further data is needed to more accurately measure the total amount of food waste diverted through this program.

The evaluation found a decrease in the proportion of food waste in the garbage among participating households, and identified an opportunity for further reductions through the use of the FoodCycler. Initial calculations show a reduction in greenhouse gas emissions due to the decrease in organic waste in the curbside waste stream. Data collected for the evaluation process also allowed staff to identify additional opportunities for further diversion of curbside-recyclable materials.

Informed by the report findings, the City is finalizing plans for further data collection and educational outreach, focusing on reducing the portion of organic waste still present in the waste stream. The City will also examine the broader impact of self-hauling on the local waste management system.

For more information or to sign up for the Pre-treated Organics Program, please visit nelson.ca/organics.

Committee Report

Date of Report:	November 25, 2024
Date & Type of Meeting:	December 11, 2024; Joint Resource Recovery Committee (JRRC)
Author:	Heidi Bench, Projects Advisor
Subject:	CHANGES TO MATERIAL MANAGEMENT AND TIPPING FEES
File:	12-6300-20
Electoral Area/Municipality	Entire RDCK

SECTION 1: EXECUTIVE SUMMARY

The purpose of this report is to outline material management and tipping fee updates proposed for 2025 as a result of the System Efficiency Study, as well as to propose options to address the inequities in the current cost recovery structure.

SECTION 2: BACKGROUND/ANALYSIS

The 2021 Resource Recovery Plan (RRP), approved by the Ministry in 2023, established the 10-year strategic plan for the RDCK Resource Recovery System. One of the primary focusses of this plan was "*establishing a cost recovery system that is fair and sustainable, while also incentivizing waste minimization and diversion*." It was recognized that there would be cost implications to the strategies and actions outlined in the RRP, as these represented significant changes and improvements to the existing Resource Recovery system. Two actions were recommended to address financial implications of increasing costs associated with the strategic direction adopted with the RRP:

1) Consider an alternative administrative model for the Resource Recovery System; and,
2) Undertake a Resource Recovery system efficiency study and identify options to improve its cost effectiveness and equitability.

The System Efficiency Study, (the study) presented at the JRRC Open Meeting on November 13, 2024, was completed to satisfy the latter of these recommendations. The conclusions of this study reaffirmed the RRP recommendation to consider an alternative administrative model in recommending regionalization of the Resource Recovery system. The tipping fee cost recovery assessment portion of the study indicated that the RDCK's cost to manage materials varies significantly across sub-regions and exceeds what is being recovered by current tipping fees for most materials. As a result of this assessment and the RDCK's goal of for a user pay system, GHD Limited (GHD) recommended changing the management and tipping fees for specific materials. GHD's detailed recommendations were provided as Table 3 of the November 13 JRRC report, which is included as Attachment A for reference.

Recommended Changes in Material Management

GHD recommended changes in material management for the following materials:

Wood
Clean wood and wood waste are currently accepted at a lower tipping fee than mixed waste to incentivize diversion, but the RDCK does not currently have an end market for the wood being received. Wood grinding results in high processing costs, only for this material to be stored at facilities taking up space, posing an increased risk for interface fires, and eventually ending up primarily in the landfill. Many beneficial end uses of wood, such as compost or biochar, are prevented by mixing clean wood with other wood waste. GHD recommended using the classification of clean wood as defined in the Resource Recovery Facilities Regulatory Bylaw No. 2905 (as amended in January 2024; hereafter referred to as Bylaw 2905) and only accepting clean wood at an incentivized tipping fee, as this material can be processed and mixed with dried septage at the landfill facilities that receive septage, used as daily cover around the grizzly plates, road base, and as part of the cover mix used for landfill closure. GHD recommended that wood waste be charged at minimum the tipping fee for mixed waste and should be landfilled instead of processed and stockpiled.

Yard and Garden
Similar to wood waste, yard and garden materials are costly to manage due to processing and hauling, however with the compost facilities operating in Salmo and Creston, there is an end use for this material. Greater than 50% of the yard and garden materials collected are received during the free yard and garden events. Due to low tipping fees and free months, this service is substantially paid for through taxation. GHD recommended re-evaluating the free yard and garden waste months to help increase the tipping fee cost recovery for this material.

Rubble
Rubble is not received in significant amounts across the region. It comprises less than 1% of the total waste stream, varying from 0.4% in the Central sub-region to 2.3% in the East sub-region. Rubble was historically incentivized with a lower tipping fee such that the material could be stockpiled and used at facilities for road building; however the small quantities received make storage and processing of this material costly and inefficient. Due to this, it currently gets disposed as mixed waste (i.e. landfilled). GHD recommended that the tipping fee should reflect this by charging at minimum the rate of mixed waste, and ideally the rate of construction, demolition, renovation (CDR) waste to reflect the additional challenges in managing this bulky material.

Further analysis and Staff recommendations for changes in management of these materials are included in Section 3.1 of this report.

Recommended Changes to Tipping Fees
While tipping fee cost recovery is useful for better understanding and prioritizing material management, it should not be the only factor considered when setting tipping fees. The RRP goals of zero waste and user-pay are inversely correlated in that as the RDCK moves towards zero waste and increases diversion, tipping fee revenue (and therefore the sustainability of a user-pay system) will decrease. As diversion increases, the balance between tipping fees and taxation for cost recovery will need to shift as well; so, while a goal of this report is to establish tipping fee cost recovery goals for 2025, these should be periodically re-evaluated as programs and waste composition in the region change.

The tipping fee updates proposed by GHD were based on a general strategy of achieving 100% tipping fee cost recovery for mixed waste and most other landfilled materials, while keeping the existing higher tipping fees for asbestos (to account for added hazards and administration in handling this material) and CDR materials (to incentivize separation of divertible materials such as scrap metal and clean wood), and raising the tipping fees for other divertible materials to 75% of the cost to manage mixed waste. As noted in Section 3.1 of the November 13 JRRC report, the proposed tipping fees as a result of this strategy were significantly higher than existing tipping fees and those in neighbouring regional districts for most materials.

To ensure that tipping fees are realistic, don't encourage illegal dumping or out-of-region waste disposal, and to strive for transparency, consistency, and fairness in the cost recovery structure, Staff propose an approach based more on categories of material management rather than simply using the cost to manage mixed waste as a benchmark of which to set the tipping fees for all other materials. Table 2 shows the proposed structure of this approach, outlining the categories of materials and tipping fee cost recovery objectives. The balance not covered by tipping fees would continue to be paid via taxation. Recyclable materials are not included, as to incentivize diversion there are no tipping fees for these materials. Cost recovery for these materials is achieved through a combination of incentives and taxation. Further financial analysis is provided in Section 3.1.

Table 2: Proposed waste categories and tipping fee cost recovery objectives

Category	Materials	Tipping Fee Cost Recovery Objective
Landfilled – simple	mixed waste, biosolids, wood waste	100%
Landfilled – complex	asbestos, CDR, rubble	125%
Diverted	Tires	75%
Diverted (RDCK receives incentives)	scrap metal	25%
Re-purposed	organics (food waste), clean wood, uncontaminated soil, yard & garden	50%
Re-purposed (limited use)	waste soil	75%
Liquid waste	Septage	100%

This strategy aligns with the RDCK's goals to be user-pay by continuing to rely more on tipping fees than taxation for most materials, while moving towards zero waste by continuing to incentivize diversion with lower tipping fees. This approach would still result in tipping fee increases, but slightly lower than those recommended by GHD, in recognition that those recommended values (provided in Table 5 of the November 13 JRRC report) were not likely realistic. These proposed tipping fees, provided in detail in Section 3.1 below, would still put the RDCK at the high end of tipping fees for most materials compared to neighbouring regional districts, but this is logical based on the fact that the RDCK system cost per capita is also the highest of these regional districts. The high cost to manage materials in the RDCK is likely due to many factors, and the implementing changes based on the efficiencies identified in the System Efficiency Study, such as the above changes to material management, changes to facility hours or facility closures, and administrative centralization, should help to bring the cost to manage materials down, and if successful, allow for stabilization or reduction in the reliance on tipping fees.

The above strategy could be implemented regionally, which would be based on the tipping fee cost recovery values for the RDCK as a whole, or the current tipping fee structure could be de-harmonized to allow each sub-region to establish targets based on the tipping fee cost recovery values in that sub-region. Staff advise against de-harmonization as it would be counter-intuitive based on the RDCK's goal to run the Resource Recovery system more efficiently. It would also further the inequities between sub-regions, as residents in the Central sub-region would end up paying both higher tipping fees and taxation for the same level of service as the other sub-regions.

While some of the tipping fee increases based on the recommendations in the study and the development of a cost recovery strategy may be substantial, Staff recommend that any tipping fee changes be implemented incrementally over a period of several years. As notice has already been sent out regarding up to 10% tipping fee changes, it is recommended that tipping fee changes for 2025 are limited to this, with the exception of materials that are changing classification, but that the strategy be used to guide transparent and consistent planning of subsequent tipping fee increases in future years.

Figure 1 summarizes the current cost recovery structure, as well as the cost to manage mixed waste and current tipping fee for mixed waste, the highest throughput material, for each sub-region and the RDCK as a whole.

Figure 1: Comparison of overall cost recovery and cost to manage mixed waste, by sub-region and for the RDCK as a whole

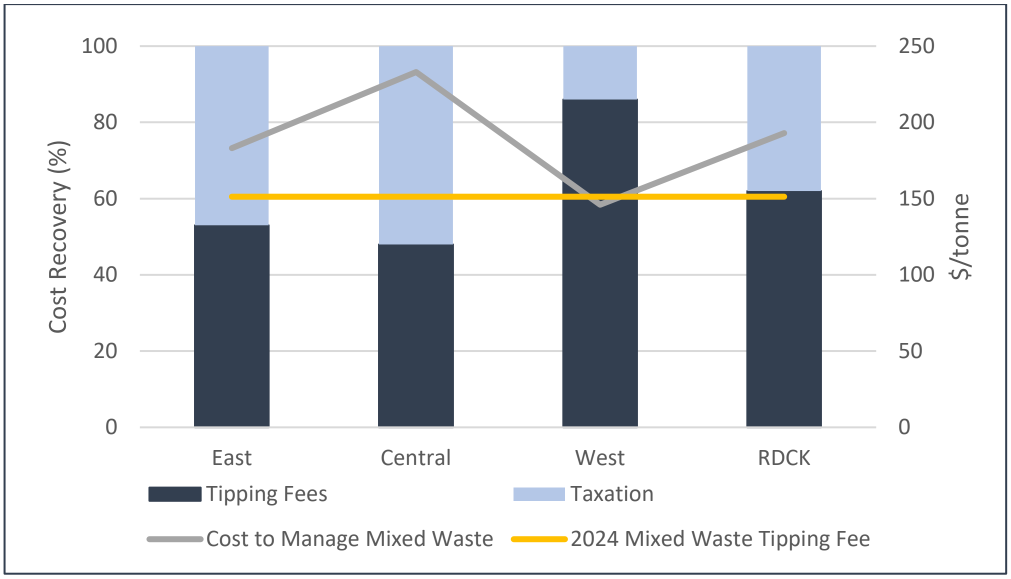

Figure 1 highlights the variability in cost recovery structure across the three sub-regions. There are several factors that influence this variability, such as the geographic location of waste disposal infrastructure, population of service area, the presence of scales at facilities, composition of the waste stream, and the administrative structure in which tipping fee revenue stays within the sub-region it was collected, not necessarily the sub-region where the waste was generated. As the RDCK regionalizes its waste management facilities and strives to meet the regulatory requirements in the *Landfill Criteria for Municipal Solid Waste* (BC Ministry of Environment, 2016) and proposed *Regulations Respecting the Reduction in the Release of Methane (Waste Sector)* (Government of Canada, 2024), it is anticipated that costs to manage the system are going to substantially increase due to more stringent requirements for infrastructure such as engineered liners, and landfill gas and leachate management systems. As waste management becomes more complex and costly, a regionalized administrative structure would maximize both financial efficiency and equitability for RDCK residents.

To ensure that the cost recovery strategy is fair and sustainable, Staff have developed the following options to promote administrative efficiency and address the sub-regional inequities in the current cost recovery structure:

1) Regionalize all Resource Recovery services (waste, compost, recycling);
2) Regionalize all Resource Recovery services (waste, compost, recycling), but create a new service for the management of HB Tailings Storage Facility based on the existing service area;
3) Regionalize only select Resource Recovery services (recycling, compost, septage) and leave the waste services as sub-regional, but implement a transfer of tipping fee revenue between sub-

regions, similar to the current transfer of Recycle BC incentives between sub-regions, that would equalize the taxation levels across sub-regions.

Continuing with the status quo would mean choosing to not address the sub-regional inequities and inefficiencies identified in the Study. All options would require some initial administrative time to implement. It is anticipated that Options 1 and 3 would best address the sub-regional inequities, while Options 1 and 2 would result in the greatest administrative efficiencies once implemented. Further analysis would be required to try to quantify this. Staff recommend Option 1 as this option best addresses both the sub-regional inequities and administrative inefficiencies, but are presenting these for consideration only at this point in time.

As requested at the November 13, 2024 JRRC meeting, Staff would like to meet with the JRRC members in a workshop format in January 2025. The intention of this workshop is to allow for more in depth discussion regarding the above options for addressing the sub-regional inequities and administrative inefficiencies of the current system identified by the System Efficiency Study, as well as around other outcomes and recommendations of the Study. This workshop will not be a repeat of what was presented in November, but an opportunity to provide more clarity on the results of the Study based on questions submitted by Directors, as well as to gather JRRC input on which recommendations from the study should be prioritized in Staff workplans for implementation or further analysis. Staff will reach out to Directors in advance of the workshop for questions to be submitted in writing and will use these questions to guide the workshop.

Staff recommend implementing the material management changes described in this report for wood, yard and garden waste, and rubble in 2025. Staff also recommend implementing incremental annual tipping fee increases, starting in 2025, to meet the cost recovery objectives of the tipping fee cost recovery strategy outlined in this report.

SECTION 3: DETAILED ANALYSIS

3.1 Financial Considerations – Cost and Resource Allocations:

Included in Financial Plan:	☒ Yes ☐ No	**Financial Plan Amendment:**	☐ Yes ☒ No
Debt Bylaw Required:	☐ Yes ☒ No	**Public/Gov't Approvals Required:**	☒ Yes ☐ No

Changes in Material Management

Cost analyses and recommendations related to changes in management or classification of wood, yard and garden, and rubble are provided below.

<u>Wood</u>

GHD recommended to separate clean wood from wood waste, as per the definitions of these materials in Bylaw 2905, to continue the current management practices for clean wood, and to consider wood waste under the category of mixed waste as there is currently no viable end use for separated wood waste. This change is expected to result in significantly decreased processing costs, increased tipping fee revenue, as well as some smaller increases to hauling costs. Table 3 outlines the estimated financial implications that could be expected as a result of changing the Bylaw such that wood waste is accepted as mixed waste. This does not include preserved wood or wood products that are mixed with other construction materials, which is considered CDR under the Bylaw, and shall remain as such.

Table 3: Estimated financial impacts of changing the management of wood materials

Sub-Region	Estimated Annual Values			
	Reduction in Wood Grinding	Increase in Hauling	Increase in Tipping Fee Revenue[1]	Total Impact on Cost to Manage Wood Waste
EAST	-$44,897	$1,510	-$41,180	-$84,566
CENTRAL	-$75,770	$7,529	-$62,205	-$130,446
WEST	-$48,339	$13,160	-$59,958	-$95,137
RDCK	**-$169,006**	**$22,199**	**-$163,343**	**-$310,149**

[1] Based on 2024 tipping fee for mixed waste

There is insufficient data to estimate the proportion of the wood tonnages that is clean versus wood waste as, while the Bylaw differentiates these materials, it is not currently differentiated in the scale data system. For the calculation in the above evaluation, it was estimated that clean wood would make up 10% and waste wood would be 90% of the total wood tonnage. As wood materials have been historically stockpiled at many sites and material type is not tracked on waste hauling invoices, there is limited data to accurately determine hauling costs specifically for wood. The above increase in hauling values are considered best estimates based on the data that was available.

Based on the predicted cost savings and until a beneficial end use for wood waste can be determined, Staff agree with GHD's recommendation to treat materials that fall under the definition of Wood Waste in Bylaw 2905 as Mixed Waste, by increasing the tipping fee to match that for mixed waste and landfilling this material. Materials that fall under the Bylaw definition of Clean Wood Waste shall continue to be separated and ground, as these materials can be used in other facility operations.

Yard and Garden

GHD recommended re-evaluating the cost recovery strategy for the yard and garden waste program, specifically the biannual free disposal months. GHD estimated that the free months for yard and garden waste costs the RDCK almost $57,000 per year in lost tipping fee revenues based on the 2024 tipping fee. Table 4 below summarizes this estimated potential revenue, as well as the estimated annual cost of the yard and garden diversion program and average annual revenue from tipping fees by sub-region, based on the average annual tonnage collected during the free months from 2020 to 2022, and on 2024 tipping fees.

Table 4: Estimated yard & garden program costs, revenues, and potential revenue due to bi-annual free disposal months

Sub-Region	Estimated Annual Cost to Manage Yard & Garden Materials ($)	Average Annual Tipping Fee Revenue ($)	Average Annual Tonnage Collected at Free Events (tonnes)	Estimated Potential Revenue from Bi-annual Free Disposal Months ($)
EAST	135,884	18,979	497	30,083
CENTRAL	253,832	35,373	359	21,740
WEST	53,059	7,821	85	5,121
RDCK	**442,774**	**62,173**	**941**	**56,944**

The potential revenue estimates are likely an overestimate as they do not account for the fact that if free disposal months were not to occur, many residents would likely burn a portion of these materials, stockpile them on their property, or just reduce clearing of brush in general. This would result in decreased tonnages in these months and therefore decrease this estimated potential revenue, while increasing community hazards such as fire risk and air pollution which are difficult to quantify.

Additionally, yard and garden waste materials are used as part of the composting process at Central and Creston landfills. As food waste collection increases, it is expected that the compost facilities should be able to keep up with the yard and garden waste collected from around the RDCK. Without this feedstock, the RDCK would likely have to source and potentially purchase material elsewhere for compost production. The cost of this was not determined as part of this analysis.

Due to the multi-faceted benefits of this program, historical tipping fees have been set low to incentivize diversion and FireSmart initiatives, and protect air quality. The System Efficiency Study indicated that the tipping fee cost recovery for yard and garden waste was 17-18% in all three sub-regions, meaning that this program is currently heavily subsidized with taxation. While tipping fee increases, as discussed later in this section, are recommended for yard and garden waste to achieve 50% cost recovery as proposed in the tipping fee cost recovery objectives, Staff recommend continuing the biannual free months for yard and garden waste collection, at minimum until proposed tipping fee increases and further analysis can be completed.

In conducting this analysis, a significant discrepancy was identified between the actual and expected tipping fee revenue for this material. This is likely due to the fact that most yard and garden materials are not charged by weight or volume, but by unit (“load”), and indicates that the unit rates are not sufficiently aligned with the by weight tipping fee. Staff plan to conduct further analysis to address the variation in weight, volume, and unit tipping fees for materials where this discrepancy in tipping fee revenue was observed to exist, and will provide further material management or tipping fee recommendations based on the outcome of this analysis.

Rubble

As noted above, rubble comprises a very small proportion of the overall waste stream in the RDCK and it is currently landfilled, not diverted. Table 5 summarizes the current cost recovery and the anticipated changes to cost recovery and additional revenue if rubble were to be charged at the rate for CDR or mixed waste (MW), based on the 2024 tipping fees, as recommended by GHD.

Table 5: Changes to cost recovery and estimated additional revenue by changing the tipping fee classification of rubble

	STATUS QUO		OPTION 1: Change to CDR rate			OPTION 2: Change to MW rate		
Sub-Region	Rubble Tipping Fee ($)	Cost Recovery (%)	CDR Tipping Fee ($)	Cost Recovery (%)	Additional Revenue ($)*	MW Tipping Fee ($)	Cost Recovery (%)	Additional Revenue ($)
EAST	53.25	17	242	132	48,320	151.25	83	25,088
CENTRAL	53.25	25	242	104	13,024	151.25	65	6,762
WEST	53.25	37	242	166	41,903	151.25	104	21,756
RDCK	**53.25**	**23**	**242**	**125**	**103,246**	**151.25**	**78**	**53,606**

It should be noted that the additional revenue shown in the table is likely an overestimate, as higher rates may encourage rubble generators to seek out alternative disposal options, such as businesses that process aggregates, several of which exist in the RDCK and some of whom accept rubble for free. Based on this, the change in the tipping fee for rubble may not significantly increase the cost recovery associated with managing this material in-house, but rather shift management of this material from the RDCK to external stakeholders capable of not only diverting it but upcycling it into a usable material.

GHD recommended that rubble be managed and charged as CDR waste to reflect the additional challenges associated with landfilling larger materials, or at minimum the fee for mixed waste. While treating rubble as CDR is logical and ideal based on cost recovery, Staff recommend that initially rubble be managed and charged at the rate for mixed waste, with an eventual goal of changing this to CDR once viable diversion end uses for this material are established or confirmed. To determine a viable end use and to discourage illegal dumping of this material due to rate increases, Staff would plan to engage with aggregate processors across the RDCK to determine if these businesses have sufficient capacity and/or interest in this material.

Changes to Tipping Fees

The System Efficiency Study identified that the cost to manage most materials exceeds the revenue recovered by the respective 2024 tipping fees and recommended increasing tipping fees for selected materials. Staff incorporated GHD's recommended changes in material classification, the tipping fee cost recovery values from the study, and the objective tipping fee cost recovery percentages in the strategy outlined in Table 2 above to calculate target tipping fees. For efficiency' sake due to time limitations for this report, these values assume a regional approach (i.e. keeping the tipping fees harmonized across sub-regions). If Director's prefer to de-harmonize tipping fees, further analysis can be completed and presented at a later date. Due to the magnitude of some of the increases, Staff propose these increases be implemented incrementally over a three or five year period. Tables 6 and 7 outline the proposed tipping fees changes and implementation schedule over a three and five year period, respectively. Only materials where changes to tipping fees are proposed are included.

Table 6: Proposed tipping fee increases on 3-year schedule

Material	2024 Tipping Fee ($/tonne)	Target Tipping Fee ($/tonne)	2025		2026		2027	
			% change	Tipping Fee ($/tonne)	% change	Tipping Fee ($/tonne)	% change	Tipping Fee ($/tonne)
Mixed waste	**$151.25**	**$193**	10%	$166	8%	$180	7.5%	$193
Biosolids	**$60.50**	**$88**	10%	$67	15%	$77	15%	$88
Rubble[1]	**$53.25**	**$193**	262%	$166	8%	$180	7.5%	$193
Soils (uncontaminated)	**$21.75**	**$44**	30%	$28	25%	$35	25%	$44
Soils (waste)	**$48.50**	**$66**	36%	$66	-	$66	-	$66
Wood (clean)	**$78.75**	**$100**	10%	$87	7.5%	$93	7.5%	$100
Wood (waste)[1]	**$78.75**	**$193**	145%	$166	8%	$180	7.5%	$193
Y&G	**$60.50**	**$82**	10%	$67	10%	$74	10%	$82

[1] Significant tipping fee increase is due to change in material classification as this material is recommended to be classified as mixed waste going forward.

Table 7: Proposed tipping fee increases on 5-year schedule

Material	2024 Tipping Fee ($/tonne)	Target Tipping Fee ($/tonne)	2025		2026		2027		2028		2029	
			% change	Tipping Fee ($/tonne)	% change	Tipping Fee ($/tonne)	% change	Tipping Fee ($/tonne)	% change	Tipping Fee ($/tonne)	% change	Tipping Fee ($/tonne)
Mixed waste	**$151.25**	**$193**	10%	$166	4%	$173	4%	$180	4%	$187	3%	$193
Biosolids	**$60.50**	**$88**	10%	$67	8%	$72	7%	$77	7%	$82	7%	$88
Rubble[1]	**$53.25**	**$193**	262%	$166	4%	$173	4%	$180	4%	$187	3%	$193
Soils (uncontaminated)	**$21.75**	**$44**	15%	$25	15%	$29	15%	$33	15%	$38	15%	$44
Soils (waste)	**$48.50**	**$66**	10%	$53	7%	$57	5%	$60	5%	$63	5%	$66
Wood (clean)	**$78.75**	**$100**	10%	$87	4%	$90	4%	$94	4%	$97	3%	$100
Wood (waste)[1]	**$78.75**	**$193**	145%	$166	4%	$173	4%	$180	4%	$187	3%	$193
Y&G	**$60.50**	**$82**	10%	$67	6%	$71	5%	$74	5%	$78	5%	$82

[1] Significant tipping fee increase is due to change in material classification as this material is recommended to be classified as mixed waste going forward.

Tipping fee changes in the tables above are by weight, but would be carried through to other per unit tipping fees using conversion values once additional analysis of these conversions is completed. Conversion values for bagged waste were updated in 2024 as a result of the 2023 Waste Composition Study, but as mentioned in the yard and garden section above, Staff will re-evaluate the conversion values for volume and unit tipping fees in the coming year and provide additional recommendations as appropriate.

Changes to tipping fees were not recommended for the following materials:

- Organics: As recommended by GHD, organics were not included in proposed tipping fee increases to give the cost to manage this material time to stabilize.
- Septage: Tipping fee increases are already set for this material in 2025 and management processes (and therefore costs to manage this material) are in flux.
- Tires: Based on the results of the System Efficiency Study, a tipping fee reduction for this material could be warranted; however Staff recommend keeping the existing rate to direct this material to extended producer responsibility (EPR) collection partners in the region and away from RDCK sites. Tire Stewardship BC identifies twenty (20) return to retailer locations for recycling tires in the RDCK.
- Asbestos, CDR, land clearing waste, and scrap metal: The current tipping fees for these materials satisfied the proposed tipping fee cost recovery structure.

Table 8 summarizes the estimated increase in annual revenue anticipated as a result of the proposed tipping fee changes once fully implemented (2027 or 2029, depending on the implementation schedule selected).

Table 8: Tipping fee objectives and anticipated impact on tipping fee revenue

Material	2024 Tipping Fee ($/tonne)	Target Tipping Fee ($/tonne)	Impact on Tipping Fee Revenue		
			EAST	CENTRAL	WEST
Mixed waste	**$151.25**	$193	$275,258	$397,251	$488,767
Biosolids	**$60.50**	$88	-	-	$6,573
Rubble	**$53.25**	$193	$35,776	$9,643	$31,025
Soils (uncontaminated)[1]	**$21.75**	$44	$7,498	-	$46,102
Soils (waste)[1]	**$48.50**	$66	$10,938	-	$67,358
Wood (clean)[2]	**$78.75**	$100	$1,339	$2,019	$1,955
Wood (waste)[2]	**$78.75**	$193	$64,894	$98,027	$94,485
Y&G[3]	**$60.50**	$82	$10,965	$25,155	$4,967
		TOTALS	**$406,667**	**$532,094**	**$741,230**

[1] The proportion of uncontaminated versus waste soil varies significantly from year to year; the proportion varied from 63-99% waste soil in the years since 2020. To provide a conservative estimate, the proportion of waste soil was assumed to be 65%.
[2] There is insufficient data to estimate the proportion of wood waste that is clean versus non-clean as, while the Bylaw differentiates these materials, it is not currently differentiated in the scale data system. It was estimated that clean wood would make up 10% and waste wood would be 90% of the total wood waste.
[3] Based on average tonnage of paid yard and garden waste (assumes continuation of bi-annual free yard & garden collection months).

These estimates are based on the average annual tonnages from the study (2020-2022) and do not account for fluctuations in tonnage that may occur due to changes in tipping fees and/or material management. Assuming the cost to manage these materials is relatively stable, the additional revenue from increasing tipping fees should reduce reliance on taxation required in the waste services.

As discussed in the November 13 JRRC report and in Section 2 of this report, while the above recommended tipping fee increases and material management changes would increase cost recovery, under the current administrative model the distribution of added tipping fee revenue would not be even across the three sub-regions and would further increase the discrepancies in taxation levels shown in Figure 1 above.

3.2 Legislative Considerations (Applicable Policies and/or Bylaws):

Changes to tipping fees and material classification will require an amendment to the Resource Recovery Facilities Regulatory Bylaw No. 2905.

Staff recommend that further in-house evaluation be completed to assess the costs and benefits of regionalization of the Resource Recovery system based on the options presented in Section 2 of this report. Any changes related to allocation of expenses and tipping fees revenues would require amendments to the following bylaws:

- Creston and Electoral Areas A, B & C Refuse Disposal Local Service Area Bylaw No. 924 (1992), as amended by Bylaw No. 1072 and Bylaw No. 1148;
- Central Waste Management Subregion Refuse Disposal/Recycling Local Service Area Establishment Bylaw No. 1071, as amended by Bylaw No. 1149; and,
- West Waste Management Subregion Refuse Disposal/Recycling Local Service Area Establishment Bylaw No. 1070, as amended by Bylaw No. 1140.

3.3 Environmental Considerations

The Study, its recommendations, and this additional evaluation focus on efficiency primarily from a financial perspective; however decisions regarding how to implement the recommendations need to also take into account the related environmental impacts which are much more difficult to quantify. Due to the technical analysis required, the following environmental considerations are presented for consideration but were not able to be quantified as part of this report.

The recommendations to landfill non-clean wood waste and rubble are not expected to have significant environmental impacts, as despite current tipping fees indicating an intention to divert these materials, both are destined for the landfill based on current practices.

For rubble, the recommended change is primarily administrative to ensure that the tipping fee reflects the cost to manage this material, as it is currently disposed at the landfill alongside mixed waste. As mentioned in the section above, to discourage illegal dumping of this material due to rate increases, Staff would plan to engage with aggregate processors across the RDCK to determine if these businesses have sufficient capacity and/or interest in this material. If they are a viable alternative option for rubble disposal, this would reduce greenhouse gas (GHG) emissions associated with hauling and landfill disposal of this material.

For wood waste, this change in management will reduce GHG emissions associated with wood grinding and reduce the on-site fire hazard from storage of chipped materials at facilities. If this material were truly being diverted from landfills currently, as intended by the reduced tipping fee, then this change in management would result in an increased amount of waste hauling (and associated GHGs), increased landfill airspace consumption, and increased organic material in the landfill resulting in increased GHG emissions related to anaerobic decomposition. However, since there is not currently a viable end-use for this material, current practices of grinding and stockpiling wood waste have simply delayed its hauling and disposal, and the associated environmental impacts. The environmental benefit of reduced GHG emissions related to grinding the material would likely be offset by the extra hauling required to account for the additional volume of the unprocessed wood waste.

The purpose of the biannual free yard and garden months is to incentivize FireSmart and air quality initiatives. Elimination of this program could result in increased community fire risk or reductions in local air quality due to increased burning of these materials.

Changes to practices in material acceptance or increases to tipping fees could also result in increases in illegal dumping or reductions in diversion of materials from the landfill.

3.4 Social Considerations:

Tipping fees have generally been set at the same rate across all three sub-regions to promote user equitability between sub-regions and to prevent excessive transportation of waste (i.e. users seeking cheapest disposal option). The revenue from these tipping fees currently stays in the sub-region in which it was collected. Where cost recovery is less than 100%, the balance is covered primarily through taxation, with some amounts covered by grants and/or incentives. The discrepancies in cost to manage materials across sub-regions, while having a single tipping fee structure to promote user equitability, results in inequitable tax subsidization for residents across the RDCK. Based on this structure, residents in the Central sub-region pay more than four times those in the West, while residents in the East pay almost three times those in the West in taxation for the same level of service. While raising tipping fees should decrease the overall reliance on taxation in each sub-region, the discrepancies between sub-regions will still exist and would likely widen. Regionalization is an option that would improve equitability in taxation across the Resource Recovery system.

3.5 Economic Considerations:

None at this time.

3.6 Communication Considerations:

Communication of plans to increase tipping fees by up to 10% for select materials was sent to all municipalities and account holders on October 18 and 30, respectively. The public will need to be notified of any additional changes to material acceptance practices and tipping fees that are recommended for implementation in 2025 as soon as possible once any amendments to Bylaw 2905 are approved.

3.7 Staffing/Departmental Workplace Considerations:

The Environmental Coordinator has drafted an amendment to Bylaw No. 2905 to increase the tipping fee for mixed waste in early 2025, and will incorporate additional increases based on the outcome of this report. The Resource Recovery Operations Coordinator and Field Supervisors would oversee Staff training related to any changes in material management and implementation of new tipping fees.

The Resource Recovery Projects Advisor, with oversight and support from the Resource Recovery Manager and General Manager of Environmental Services, is planning to facilitate a workshop with Directors on the outcomes and recommendations from the System Efficiency Study.

3.8 Board Strategic Plan/Priorities Considerations:

The changes to tipping fees and material management aligns with the RDCK's strategic objectives to manage assets and service delivery in a fiscally responsible manner and to continue to innovate to reduce the impact of waste.

SECTION 4: OPTIONS & PROS / CONS

RECOMMENDATION 1:

OPTION 1: That the Board authorize Staff to draft an amendment to Bylaw No. 2905 to incorporate rubble and wood waste under the definition and fee schedule for mixed waste.

Pros:

- Ensures that the tipping fees more accurately reflect the operational processes and associated cost to manage these materials
- Removes a financial incentive, intended to incentivize diversion, for materials that are not diverted as they do not currently have a viable end use and as a result are being stockpiled and/or disposed in the landfill
- Would reduce the fire risk associated with large stockpiles of wood waste at facilities across the RDCK
- Would reduce the cost to manage wood waste by reducing the need for grinding of this material

Cons:

- Increased cost to generators of these materials
- Significant increases to tipping fees for rubble and wood waste may lead to increased illegal dumping of these materials

OPTION 2: That the Board does not authorize Staff to alter the definition or classification of rubble and wood waste categories in Bylaw No. 2905.

Pros:

- Does not result in any increase to the tipping fee for generators of these materials

Cons:

- Existing tipping fee does not accurately reflect the operational processes and associated cost to manage these materials and provides a financial incentive intended for diversion, even though these materials are not being diverted from the landfill, resulting in more taxation required to subsidize the management of these materials
- Does not address the fire hazard of stockpiling wood waste at RDCK facilities
- Does not reduce the cost associated with grinding wood waste

RECOMMENDATION 2:

OPTION 1: That the Board authorize Staff to draft an amendment to Bylaw No. 2905 updating tipping fees to align with the proposed Tipping Fee Cost Recovery Objectives.

Pros:

- Increases the tipping fee cost recovery for management of several waste materials in alignment with the RRP's goal of a user pay system
- Provides a consistent and transparent structure for the establishment of tipping fees based on cost recovery

Cons:

- Increases the cost of disposal for generators of materials that have tipping fee increases proposed

OPTION 2: That the Board authorize Staff to draft an amendment to Bylaw No. 2905 updating only the tipping fee for mixed waste in 2025.

Pros:

- Minimal increases to tipping fees for waste generators

Cons:

- Does not address the gaps in cost recovery identified in the System Efficiency Study, resulting in heavier reliance on taxation as opposed to the user pay goal as set in the RRP

SECTION 5: RECOMMENDATIONS

RECOMMENDATION 1:

That the Board authorize Staff to draft an amendment to Bylaw No. 2905 to incorporate rubble and wood waste under the definition and fee schedule for mixed waste.

RECOMMENDATION 2:

That the Board authorize Staff to draft an amendment to Bylaw No. 2905 updating tipping fees to align with the proposed Tipping Fee Cost Recovery Objectives.

Respectfully submitted,
Heidi Bench, Projects Advisor

CONCURRENCE

Resource Recovery Manager – Amy Wilson
General Manager of Environmental Services – Uli Wolf
Corporate Administrative Officer – Stuart Horn

ATTACHMENTS:
Attachment A – Committee Report: Results of the Resource Recovery System Efficiency Study (presented to the JRRC on November 13, 2024)

Committee Report

Date of Report:	October 31, 2024
Date & Type of Meeting:	November 13, 2024; Joint Resource Recovery Committee (JRRC)
Author:	Heidi Bench, Projects Advisor
Subject:	RESULTS OF THE RESOURCE RECOVERY SYSTEM EFFICIENCY STUDY
File:	12-6300-20
Electoral Area/Municipality	All areas and municipalities

SECTION 1: EXECUTIVE SUMMARY

The purpose of this report is to present a summary of the results of the Resource Recovery System Efficiency Study (the Study) and to recommend moving forward with the closure of Riondel, Kokanee Park Marina, and Winlaw Recycling Depots.

SECTION 2: BACKGROUND/ANALYSIS

The 2021 Resource Recovery Plan (RRP) committed to the strategy of ensuring that the RDCK Resource Recovery system is financially sustainable and resilient. As part of this, the RDCK set an action item of undertaking an efficiency study of the Resource Recovery system. The purpose of the Study was to:

1) Assess cost recovery of tipping fees to:
   a. Understand the costs of managing specific waste types and how much of these costs are currently covered by tipping fees versus taxation;
   b. Ensure that the balance between tipping fees and taxation is fair and equitable;
2) Benchmark the system to determine if the RDCK is over or under-serviced, both internally (between sub-regions) and externally (comparing similar regional districts); and,
3) Identify options to recognize efficiencies and improve cost-effectiveness and equitability, while ensuring regulatory compliance.

The proposed scope of work to accomplish these goals was presented to the JRRC in July 2023. The RDCK received proposals from two proponents and in September 2023, GHD Limited (GHD) was procured to complete the Study. GHD created a data model to assess tipping fee cost recovery and completed a benchmarking assessment comparing service levels in the RDCK both internally and externally. The results of these assessments were used to evaluate the performance and efficiency of the system as a whole, as well as for each sub-region.

The following sections will further detail each of the assessments, as well as summarize GHD's recommendations and how Staff see these fitting into their work plan.

TIPPING FEE COST RECOVERY ASSESSMENT

GHD worked with RDCK Staff to develop a data model to analyze the cost recovery of the existing tipping fee structure by waste material. This was completed by incorporating resource recovery expense, tipping fee revenue, and waste tonnage data from three full fiscal years (2020-2022), as well as capital expense data from 2016 through 2022 and planned capital expense data from 2023-2027. This data was used to estimate the cost per tonne to manage specific materials as well as the revenue from tipping fees per tonne, both at the sub-regional and regional level.

Expenses were organized by three distinct sub-categories: operations and maintenance (O&M) costs, capital costs, and administrative costs. Expenses were allocated to waste material types where possible, and where not (some capital and most administrative expenses), they were allocated equally across the material types such that the cost to manage each material was proportional to the tonnage of that material handled.

GHD noted that the three administrative sub-region model of the RDCK Resource Recovery system, and the variation in infrastructure and in how materials and finances are managed across these sub-regions, is akin to operating waste management systems for three separate regional districts, which added a significant level of complexity to the building of this model. Due to this complexity and nature of the data available, there were numerous assumptions and limitations in developing the model. As such, the cost to manage output values in the model are not exact and have an uncertainty of +/-$10 per tonne for large throughput materials (those greater than 3% of waste stream by weight) and a higher level of uncertainty for smaller throughput materials (those less than 3% of waste stream by weight). Assumptions and limitations of the model include the following:

- Tonnage data:
  - As the RDCK does not have scales at all sites, conversion values were used to estimate total tonnages collected. Tonnage data for household hazardous waste, recycling, and tires was provided by the product stewardship organization or contractor collecting that material.
  - As the organics program for food waste had not yet been fully implemented in the assessment period, annual organics tonnages and associated tipping fee revenues were estimated based on tonnages received between January 2023 and July 2024.
- Expense data:
  - With the exception of salary-related expenses, expenses were averaged across the years of data available to determine average annual cost (2020-2022 for O&M and administrative expenses, 2016-2027 for capital expenses).
  - For salary-related expenses, the model used 2022 salary data as using an average would underestimate the salary burden of the resource recovery program. Salary-related expenses for positions that have been added since 2022 (Resource Recovery Projects Advisor, Field Supervisors, Compost Operator) were also added to reflect expenses as accurately as possible in the model.
  - Costs associated with HB Tailings Facility were not included in the model.
- Tipping fee revenue data:
  - To account for tipping fee increases that occurred since 2022 (10% in 2023 and a subsequent 10% in 2024), the 2020-2022 averaged tipping fee revenue values were increased to represent what the revenue would be based on 2024 tipping fees.

For each material in the study, the model generated a cost per tonne to manage and tipping fee revenue per tonne, for the RDCK as a whole and for each sub-region (Table 1). The cost to manage materials was generally lowest in the West due to having the largest throughput of waste, followed be East and then Central sub-regions. Costs were highest in the Central sub-region primarily due to significantly more hauling being required as there is no active landfill in this sub-region, yet Central still pays for a portion of landfill operations via an annual transfer to the West.

Table 1: Material Management Costs ($/tonne)

MATERIAL	EAST	CENTRAL	WEST	RDCK
Mixed waste[1]	$183	$233	$146	$193
Asbestos[2]	$183	-	$146	$193
Biosolids	-	-	$78	$88[3]
Construction, demolition, renovation (CDR)[2]	$183	$233	$146	$193
Organic waste	$613	$202		$314
Scrap metal[1]	$196	$174	$92	$144
Septage	-	$106	$78	$101
Soils	$95	$101	$78	$88
Tires[2]	$106	$136	$118	$125
Wood	$191	$239	$149	$199
Yard and garden	$135	$166	$168	$163
Recycling	$571	$1,039	$701	$933
Household Hazardous Waste (HHW)	$6,411	$1,195	$5,284	$1,664

[1] Includes materials that are managed as mixed waste (bulky waste, land clearing, noxious weeds, rubble)

[2] The actual cost to manage these materials is underestimated in the model as it was not possible to estimate and model the exact costs associated with management of each and every material, especially for the smaller throughput materials that require additional handling or administrative support. For example, asbestos-containing materials require additional administrative support for permitting and scheduling, require more soil or borrow material for immediate cover, and due to these cover requirements, take up more space in the landfill than just the footprint of the disposed asbestos.

[3] When administrative and capital costs are allocated across the entire region as a whole, they are slightly higher than those for just the West sub-region, resulting in a higher estimated cost to manage this material regionally than those estimated for the West sub-region to manage independently.

The cost/tonne and revenue/tonne values from the model were used to estimate the percent cost recovery from tipping fees for each material, for the RDCK as a whole and for each sub-region. Table 2 below summarizes the tipping fee cost recovery based on the results of the model.

Table 2: Tipping Fee Cost Recovery (%)

MATERIAL	EAST	CENTRAL	WEST	RDCK
Mixed waste	79%	78%	116%	87%
Asbestos	276%	-	231%	189%[2]
Biosolids	-	-	77%	69%[2]
Construction, demolition, renovation (CDR)	122%	112%	163%	122%
Organic waste	14%	63%		42%
Scrap metal[1]	49%	45%	75%	52%
Septage	-	54%	74%	57%[2]
Soils	23%	22%	61%	50%
Tires	284%	260%	311%	275%
Wood	38%	33%	47%	41%
Yard and garden	17%	17%	18%	18%

[1] While the tipping fees for scrap metal do not recover the costs associated with managing it, once the revenues from scrap metal recycling are applied, costs are fully recovered (estimated 153% cost recovery for the RDCK as a whole).

[2] Cost recovery for the RDCK as a whole is slightly underestimated for this material. This is due to the fact that this material is not managed in all three sub-regions. When administrative and capital costs are allocated across the entire region in the

model, they are slightly higher than those for just the individual sub-regions, resulting in a higher estimated cost to manage and therefore lower cost recovery regionally.

The tipping fee cost recovery assessment indicated that the RDCK's cost to manage most materials exceeds what is being recovered by current tipping fees, and that cost recovery varies significantly across sub-regions for some materials.

As per the 2021 RRP, the "user pay" model, where users who generate waste pay for its disposal, is something that the RDCK strives towards in its resource recovery system, where feasible. Based on this, tipping fees would ideally cover, at minimum, the cost to manage waste materials that end up in the landfill. User pay is also the goal of Extended Producer Responsibility programs such as RecycleBC; however, until stewardship organizations are able to establish rates that actually cover the cost to manage the materials they recycle, subsidization through taxation will be necessary for these programs.

According to GHD's waste specialists, typically in regional solid waste operations, mixed waste tipping fees are set higher than the estimated cost to manage this material in order to incentivize diversion and to provide revenue to subsidize the costs to manage divertible materials, such as wood, yard and garden, and scrap metal. However, as diversion rates increase, the waste stream going into the landfill and associated tipping fee revenue typically decreases, which, in the absence of EPR programs that cover the full costs of diversion, means that taxation will always be needed to achieve the goal of increasing diversion.

Based on the cost recovery values identified by the model and guided by the user pay principle and capabilities of the current Resource Recovery system, GHD made the recommendations shown in Table 3 below.

Table 3: Summary of Tipping Fee Assessment Recommendations

MATERIAL	RECOMMENDATION(S)	RATIONALE
Mixed Waste	Increase the tipping fee to approximately $193/tonne	Tipping fee should cover, at minimum, the regional cost to manage this material.
Wood	Increase the tipping fee for clean wood to 75% of the mixed waste tipping fee Increase the tipping fee for all other wood waste (i.e. painted wood, furniture, laminates, etc.) to match the rate for mixed waste and dispose of in the landfill without processing.	Clean wood and wood waste are currently accepted at a lower tipping fee to incentivize diversion, but the RDCK does not currently have an end market for the volume of wood being received, resulting in high processing costs (wood grinding), only for it to be stored at facilities taking up space or ending up in the landfill. Many beneficial end uses of wood, such as compost or biochar, are prevented by mixing clean wood with other wood waste.
Yard & Garden	Increase the tipping fee to 75% of the mixed waste tipping fee Consider the cost savings of discontinuing the free yard and garden drop-off months versus the community benefit (e.g. fire prevention)	Similar to wood waste, yard and garden materials are costly to manage due to processing and hauling, and the RDCK currently receives far more than it is able to use (in compost, mixed with dried septage at landfill sites). Greater than 50% of the yard and garden materials collected are received during the free yard and garden events. Due to low/lack of tipping fees, this service is substantially paid for through taxation.
Soil	Increase the tipping fee for clean soil to 75% of the mixed waste tipping fee	Soil is needed for landfill cover material, but not in the amounts that were received during the timeframe of the study. Accepting too much soil

MATERIAL	RECOMMENDATION(S)	RATIONALE
	Increase the tipping fee for contaminated soil to match the tipping fee for CDR	consumes valuable landfill airspace. As regulations regarding the relocation of clean soil have become more stringent, there are few options for clean soil disposal and a low tipping fee is not necessary to incentivize soil disposal at landfills. If additional clean soil is needed, a lower rate could be provided on a case-by-case basis. The environmental containment structure of a landfill is necessary to manage the potential impacts from contaminated soil, similar to any other landfill materials, therefore the tipping fee for this should at minimum, recover the life cycle costs of a landfill, as reflected in the tipping fee for mixed waste.
Rubble	Eliminate this waste category and include as CDR	Rubble is not received in significant amounts across the region, but a decent amount was received in the East sub-region during the timeframe of the study. Rubble was likely incentivized with a lower tipping fee such that the material could be stockpiled and used at facilities for road building; however it currently is disposed of as mixed waste (i.e. landfilled). As such, it should be charged to reflect this cost to manage as CDR to reflect the additional challenges associated with landfilling larger materials until an end use that allows for diversion is developed.
Septage	Implement planned increase to $90/tonne in 2025	The septage bylaw dictates that the tipping fee will increase by $20/tonne in 2025, bringing this tipping fee to $90/tonne. This will allow for slightly higher than cost recovery in the West sub-region, where the most septage is received, and close to cost recovery in Central, where minimal septage is received. Cost recovery for Septage in the East sub-region was not calculated as part of this study as significant changes are currently underway for septage management in the East sub-region, so detailed analysis of the current system did not have much value.
Organics	Allow time for full implementation of the program and evaluate cost recovery again in a few years	The organics program is still getting off the ground and increasing tipping fees at this point might discourage participation in this program. It would be best to re-assess cost recovery for this material in a few years once the tonnages going into the facility have stabilized more and the pilot for biosolids composting is completed.

MATERIAL	RECOMMENDATION(S)	RATIONALE
-	Aggregate system costs and revenues across the RDCK instead of by sub-region	Tipping fees are currently the same across all sub-regions, with the exception of the per container rate for mixed waste in the Central sub-region. As tipping fee revenue currently remains in the sub-region where it was collected, while the cost to manage materials varies across sub-regions, this results in significant variation in the level of taxation required across the three sub-regions. The taxation for waste management services in the Central sub-region is more than four times the taxation in the West sub-region, while taxation in the East is about triple that in the West. Aggregation of costs and revenues at the regional level would result in a more equitable and efficient Resource Recovery system for RDCK residents.

BENCHMARKING ASSESSMENT

GHD completed a jurisdictional scan to identify regional districts with similar characteristics and demographics to the RDCK for the external benchmarking assessment. From the list of twenty-seven (27) regional districts in BC, seven (7) regional districts were identified as similar to the RDCK. Service level and financial benchmarking criteria were set based on conversations between GHD and Staff, and public availability of data. Service level and financial data was collected, tabulated, and analyzed for the selected regional districts, as well as for the three RDCK sub-regions for internal benchmarking. Tables summarizing these detailed analyses are in Section 4 of the Study, included as Attachment A.

Comparison to Other Regional Districts

Of the seven regional districts, the RDCK ranked second in both the service level and cost benchmarking, indicating that the RDCK Resource Recovery system provides residents with a high level of service compared to the other regional districts in the Study, alongside a relatively high cost per capita to pay for the system and this level of service. Of the regional districts in the Study, the RDCK had the highest tipping fee for mixed waste.

Equitability in the balance between tipping fee revenue and taxation to cover the costs of the Resource Recovery system is a subjective measure. There is no correct or perfect amount, it depends on the values and goals of the governing body. GHD completed a simplified costing exercise to benchmark this balance across the regional districts in the Study. Based on this crude analysis, the RDCK ranked second for cost recovery via tipping fees, which is reflective of its higher tipping fees, indicating that the user pay principle is being applied more strongly in the RDCK than in other regional districts.

GHD notes that as diversion has been prioritized and growing over the past 15 years, solid waste systems are increasingly leaning on taxation as opposed to tipping fees for funding, due to loss of tipping fee revenue as materials are increasingly diverted from landfills. The results of the simplified costing exercise show that of the regional districts in the Study, on average 40% of waste system costs are being funded through tipping fees, with the remaining 60% through taxation. This excluded the RDEK who has limited tipping fees at landfills only and therefore relies almost exclusively on taxation for funding. Based on this simplified analysis, the RDCK was funded slightly more through tipping fees than average, with 45% tipping fee cost recovery and 55% funded through taxation.

Comparison between RDCK Sub-Regions

Based on the service level benchmarking analyses, GHD deemed the system to provide an equitable level of service across the RDCK, with slight variations. The East sub-region has the most facilities per capita and by area, but also the highest proportion of rural population without access to curbside services, while the Central sub-region has the highest service level with the most operating hours per capita and access to a year-round eco-depot, but accepts fewer materials than the other sub-regions due to not having an active landfill (i.e. asbestos, biosolids, bulky waste, and land clearing waste).

To further investigate where the Resource Recovery system might be under or over-operating internally, GHD completed a benchmarking analysis at the RDCK facility level by using the weekly number of summer operating hours and tonnage collected at each site to determine an estimated average weight collected per hour of operation at each site.

As expected, the landfills receive the highest weight of waste per hour of operation, while the standalone recycling depots receive the lowest. One exception to this is Grohman Narrows Transfer Station, which receives more waste than the Nakusp Landfill. There were three (3) facilities that received less than 50kg of material per hour of operation:

- Riondel Recycling Depot
- Kokanee Park Marina Recycling Depot
- Winlaw Recycling Depot.

GHD identified that these three facilities represent potential opportunities to reduce system costs as each is in close proximity (less than 20 minute drive) to other RDCK recycling facilities. As these facilities are satellite recycling depots, they only accept a portion of recyclable materials and residents must access nearby transfer stations/core depots for disposal of flexible plastics, foam, and other waste materials. Even at low weekly hours of operation, the costs of operating, maintaining, and hauling materials from these three facilities is approximately $120,000 per year, which is about 10% of the budget for recycling services.

An additional four (4) facilities only received between 50 and 100 kg per hours of operation:

- Salmo Recycling Depot
- Crescent Valley Recycling Depot
- New Denver Recycling Depot
- Yahk Recycling Depot and Transfer Station

GHD proposed that the Salmo, Crescent Valley, and New Denver facilities' hours of operation could be reduced to 12 hours or less per week to reduce operating costs and bring the efficiency of these sites more in line with other RDCK facilities. The Yahk facility is open only four (4) hours per week and there are no nearby RDCK facilities, so no changes were recommended here.

Core and Satellite Recycling Depot Comparison

GHD also completed a benchmarking of the distribution of core and satellite recycling facilities across the regional districts in the Study and across the RDCK. This identified that the RDCK operates the second highest number of recycling depots, and a high number of satellite depots compared to other regional districts, most of whom do not operate any. GHD states that even with the closure of the four satellite depots suggested above and some reduction in hours at the other depots listed, the RDCK would continue to provide its residents a reasonable to high level of service compared to most of the other regional districts in the Study.

SUMMARY

The Study identified that the RDCK Resource Recovery system is operated generally efficiently despite the complexities of the three sub-region administrative model. The RDCK provides a high level of service and accessibility to waste and recycling compared to similar regional districts and the cost to run the system reflects this. Internally, GHD deemed the system to provide an equitable level of service across the RDCK, with slight variations. GHD identified that efficiencies and cost savings could be recognized in several areas. Table 4 summarizes the recommendations made by GHD and how Staff propose to address these.

Table 4: System Efficiency Study Recommendations and Implementation Plan

Recommendation (GHD)	Proposed Plan (RDCK Staff)
Increase tipping fees for select materials	Tipping fee increases will be proposed for incorporation in an update to the Resource Recovery Facilities Regulatory Bylaw No. 2905, expected to be presented to the Board by the ***Environmental Coordinator*** in December 2024.
Change how select materials are accepted and stored (scrap metal, wood, yard and garden)	The ***Environmental Coordinator*** will conduct a review of end markets for scrap metal, wood, and yard and garden materials to guide/improve diversion strategies and reduce storage time at facilities (in-house).
Reduce the operating hours at three (3) facilities	The ***Resource Recovery Operations Coordinator*** will conduct a more thorough site hours review in early 2025 to determine if operating hours should be adjusted at RDCK facilities.
Closure of three (3) facilities	Staff seek authorization from the Board to plan the closure of at minimum, the Kokanee Park Marina Recycling Depot, as well as the Riondel and Winlaw Recycling Depots in 2025. This would be overseen by the ***Resource Recovery Technician.***
Continue to optimize use of Strong scale software to track flow of materials across the RDCK	The ***Environmental Coordinator*** will continue to optimize use of the Strong scale software, including implementing tracking of source sector of waste (i.e. residential, commercial, CDR) in 2025.
Track waste hauling by material type to better understand that costs associated with each material	The ***Operations Supervisor*** will request that waste material type be included on waste hauler invoices (East and West sub-regions) and implement internal tracking system for in-house waste hauling (Central sub-region) in 2025. The ***Resource Recovery Projects Advisor*** will compile and analyze this data after one year of collection to better understand the hauling costs associated with each material, to help guide further diversion strategy development.
Continue to monitor the implementation of new extended producer responsibility (EPR) programs and evaluate how the RDCK should participate	The ***Resource Recovery Technician*** will continue to advocate for increased EPR programs, and monitor and plan for their implementation.
Conduct a regionalization study to assess the cost-benefit of operating from a single, centralized administrative system	**Option 1:** The ***Resource Recovery Projects Advisor*** could conduct an equitability analysis using the 2025 budget to estimate the difference in tax allocation if all services were under one administrative sub-region, as well attempt to quantify potential efficiencies in staff time. **Option 2:** The ***Resource Recovery Manager*** and ***Technician*** could pilot regionalization by combining the allocation services for recycling (A116-A118) into one centralized service in 2025.

Staff have provided further analysis and recommendations on the suggested recycling facility closures in the sections below. The remaining recommendations from the Study are provided for information only at this point in time. Staff will assess each of GHD's recommendations and provide the JRRC with more fulsome analysis in coming months for those that require direction or authorization from the Board.

SECTION 3: DETAILED ANALYSIS

3.1 Financial Considerations – Cost and Resource Allocations:

Included in Financial Plan:	☒ Yes	☐ No	**Financial Plan Amendment:**	☐ Yes	☒ No
Debt Bylaw Required:	☐ Yes	☒ No	**Public/Gov't Approvals Required:**	☒ Yes	☐ No

Tipping Fee Changes

Based on the results of the tipping fee cost recovery assessment, GHD recommended considering increases to tipping fees for mixed waste, clean wood, wood waste, clean (uncontaminated) soil, waste (contaminated) soil, rubble, and yard & garden waste. Table 5 shows the estimated increase in annual tipping fee revenue that could be expected based on GHD's recommended tipping fee increases and the average waste tonnages from the period of the Study.

Table 5: Estimated Annual Tipping Fee Revenue Increase

Material	Current Tipping Fee ($/tonne)	Proposed Tipping Fee ($/tonne)	Estimated Additional Annual Tipping Fee Revenue ($)[1]		
			EAST	CENTRAL	WEST
Mixed waste	$151.25	$193.00	$275,258	$397,251	$488,767
Clean wood waste[2]	$78.75	$144.75	$4,158	$6,290	$6,065
Wood waste[2]	$78.75	$193.00	$64,894	$97,992	$94,496
Uncontaminated soil[3]	$21.75	$144.75	$41,414	-	$254,899
Waste soil[3]	$48.50	$242.00	$120,996	-	$744,714
Rubble	$43.00	$193.00	$38,400	$10,350	$33,300
Yard & Garden[4]	$60.50	$144.75	$42,883	$56,233	$19,462
		TOTALS	**$588,003**	**$568,116**	**$1,641,703**

[1] Relative to the 2024 tipping fee revenue, based on 2020-2022 average waste tonnages.

[2] There is insufficient data to estimate the proportion of wood waste that is clean versus non-clean as, while the Bylaw differentiates these materials, it is not currently differentiated in the scale data system. Due to this, it was estimated that clean wood would make up 10% and waste wood would be 90% of the total wood waste.

[3] The proportion of uncontaminated versus waste soil varies significantly from year to year; the proportion varied from 63-99% waste soil in the years since 2020. To provide a conservative estimate, the proportion of waste soil was assumed to be 65%.

[4] Based on average tonnage of paid yard and garden waste (assumes continuation of bi-annual free yard & garden collection months).

These estimates do not account for fluctuations in tonnage that would likely occur due to changes in tipping fees and/or material management. When updating tipping fees, consideration should be given to the balance between the user pay (tipping fee) and taxation-based system models. GHD noted that while the RDCK strives to have a user-pay system, as diversion rates grow, increased taxation becomes necessary to fund waste systems, as tipping fee increases cannot be made in perpetuity. If tipping fees are too high, they will discourage proper disposal and diversion. Maintaining the use of tipping fees satisfies the RRP guiding principle to incorporate the user-pay model, where feasible, to reduce the amount of taxation required. While cost recovery is a helpful guide, it should not be the only factor in setting tipping fees. For comparison, Table 6 shows the range of per tonne tipping fees for these materials in neighbouring regional districts.

Table 6: 2024 Tipping Fees in Neighbouring Regional Districts ($/tonne)

Material	RDCK	Columbia Shuswap Regional District	Regional District of East Kootenay	Regional District of Kootenay Boundary
Mixed waste	$151.25	$90	free	$120
Clean wood waste	$78.75	$50	free	$50
Wood waste	$77.75	$50	$0-$200	$120-$175
Uncontaminated soil	$21.75	$10	$0-$40	$10-$20
Waste soil	$48.50	$40	$100	$20-$40
Rubble	$43.00	$90	free	$50
Yard & Garden	$60.50	$0-$90	free	$50[1]

[1] Tipping fee for woody plant waste. Grass clippings and leaves are $5/load.

Of these regional districts, the RDCK already has the highest tipping fees for mixed waste, clean wood waste, and uncontaminated soil. It is unlikely that other regional districts are recovering the full costs to manage these materials through tipping fees, indicating that they are likely leaning towards more taxation-based waste management strategies, or simply haven't quantified the cost of managing different waste types. This data will be considered in the development of formal recommendations relating to tipping fee and material management changes, to be made as part of an upcoming bylaw amendment.

While the recommended tipping fee increases and material management changes would increase cost recovery, under the current administrative model the distribution of added tipping fee revenue would not be even across the three sub-regions and would result in further discrepancies in taxation levels. The West sub-region would see the greatest benefit as it receives the greatest proportion of the high throughput materials (mixed waste, soil, septage), yet has the lowest cost to manage these materials. As GHD points out in the Study, the West sub-region waste services are likely being subsidized with tipping fee revenues from material generated in the Central sub-region, as the West hosts the primary receiving landfill for both sub-regions. This provides additional justification to consider evaluating centralizing system administration through a regionalization study.

In addition to increased equitability for residents across the RDCK, potential financial benefits of regionalization would also include cost savings related to administrative and operational efficiency. Both GHD and the consultants overseeing the RRP (Maura Walker Environmental Consultants Ltd. and Carey McIver and Associates Ltd.) pointed out that the current Resource Recovery system operates similar to three separate regional districts. While there are some cost savings compared to the operation of three independent regional districts in having staff that oversee programs across all three, administration and management of the three sub-regions is far more complex than operating as a single regional district. The cost benchmarking in GHD's Study identified that the RDCK had one of the highest costs per capita of the regional districts in the study. While part of this is likely related to the relatively high level of service provided by the RDCK, operating with three administrative sub-regions also results in increased staff, staff time, and associated cost. Further analysis would be required to quantify the cost savings of regionalizing waste services.

Changes to Service Levels

It is anticipated that the new RecycleBC incentive rates proposed for 2025 will cover close to 60-65% of the RDCK's current cost to manage recycling. The recommended facility closures and hours reductions would help to close the gap between recycling system costs and the incentive received from RecycleBC, further reducing the amount of subsidization required from taxes. Similar to the facilities GHD recommended for closure, the Ymir

Transfer Station and Recycling Depot is also located less than 20 minute drive from other RDCK facilities. The Ymir facility is currently only open 6 hours per week, so there would not be much cost savings in reducing hours at this site, but closure of this facility would result in cost savings for the Central sub-region, which currently has the highest tax burden of the three sub-regions.

Even with the closure of these four facilities, the RDCK would have above average facility density and operating hours per capita compared to other regional districts in the Study, indicating that the RDCK would still be providing a high level of service to its residents. The Central sub-region would still have the highest facility hours of operation per capita of the three sub-regions, but would have the lowest facility density.

The closure of these facilities would result in the cost savings shown in Table 8. The values in this table do not include costs related to administrative and managerial staff time for these facilities. The Study indicated that the cost per tonne for the RDCK as a whole to manage recycling is $933/tonne and to manage mixed waste is $193/tonne.

Table 8: Facility Operating Costs

Facility	Annual Operating Cost (2023)	Operating Cost per Tonne of Recycling
Winlaw Recycling Depot	$33,382	$2,384/tonne
WEST SUB-REGION TOTAL	**$33,382**	
Kokanee Park Marina Recycling Depot	$68,562	$1,459/tonne
Ymir Transfer Station and Recycling Depot	$45,304	$612/tonne[1]
CENTRAL SUB-REGION TOTAL	**$113,866**	
Riondel Recycling Depot	$17,552	$1,463/tonne
EAST SUB-REGION TOTAL	**$17,552**	

[1] Costs and tonnages are for waste and recycling combined, so this value reflects the combined cost per tonne for all materials accepted at this site (mixed waste and recycling).

Reductions in operational hours at other low volume facilities would also result in cost savings; however staff would need to conduct an operational hours review to determine what hours reductions would be reasonable and to quantify cost savings. It should be noted that, while it is not anticipated that this change would deter residents from continuing to separate recyclable materials from their waste, any reductions seen would result in a reduction to the incentive received from RecycleBC to fund this program.

3.2 Legislative Considerations (Applicable Policies and/or Bylaws):

Tipping fee changes will require an amendment to the Resource Recovery Facilities Regulatory Bylaw No. 2905.

Staff recommend that further in-house evaluation be completed to assess the costs and benefits of regionalization of the Resource Recovery system, and recognize that any changes related to allocation of expenses and cost recovery would require amendments to the following bylaws:

- Creston and Electoral Areas A, B & C Refuse Disposal Local Service Area Bylaw No. 924 (1992), as amended by Bylaw No. 1072 and Bylaw No. 1148;
- Central Waste Management Subregion Refuse Disposal/Recycling Local Service Area Establishment Bylaw No. 1071, as amended by Bylaw No. 1149; and,
- West Waste Management Subregion Refuse Disposal/Recycling Local Service Area Establishment Bylaw No. 1070, as amended by Bylaw No. 1140.

3.3 Environmental Considerations

The Study and its recommendations focus on efficiency primarily from an equitability and financial perspective; however decisions regarding how to implement the recommendations need to also take into account the related environmental impacts which can be difficult to quantify.

Changes to tipping fees and practices in material acceptance could result in increases in illegal dumping or reductions in diverting materials from the landfill. In particular, the environmental impacts related to the recommendation to landfill non-clean wood waste are unclear. Environmental benefits include reducing greenhouse gas (GHG) emissions associated with wood grinding and reducing on-site fire hazard from storage of chipped materials at facilities. However, this would also result in an increased amount of waste hauling (and associated GHGs), increased landfill airspace consumption, and increased organic material in the landfill resulting in increased GHG emissions related to anaerobic decomposition. Similarly, elimination of the biannual free yard and garden months could result in increased community fire risk. Further analysis would be required to quantify the cost-benefit of recommended changes to wood and yard and garden material management.

Closure or hours reductions at recycling facilities may lead to more recyclable materials being landfilled. As residents using the Winlaw, Kokanee Park Marina, and Riondel satellite recycling depots need to use the nearby transfer stations/core depots to dispose of other waste materials anyways, it is not anticipated that this change would deter residents from continuing to separate recyclable materials from their waste, nor should it incur significantly more GHG emissions related to transportation. The supplemental waste composition study, scheduled for 2028, will help to quantify the impact of these changes in the waste stream (if implemented).

3.4 Social Considerations:

Tipping fees have generally been set at the same rate across all three sub-regions to promote user equitability between sub-regions and to prevent excessive transportation of waste (i.e. users seeking cheapest disposal option). The revenue from these tipping fees currently stays in the sub-region in which it was collected. Where cost recovery is less than 100%, the balance is covered primarily through taxation, with some amounts covered by grants and/or incentives. The discrepancies in cost to manage materials across sub-regions, while having a single tipping fee structure to promote user equitability, results in inequitable tax subsidization for residents across the RDCK. Based on this structure, residents in the Central sub-region pay more than four times those in the West, while residents in the East pay almost three times those in the West in taxation for the same level of service. Regionalization is an option that would improve equitability in taxation across the Resource Recovery system.

The potential closure of satellite recycling facilities would reduce convenience for users of impacted facilities, requiring residents to store their core recycling materials for delivery along with their other waste and recyclables at the nearest transfer station/recycling depot. Potential reductions in facility operating hours would require users to adapt to new hours.

3.5 Economic Considerations:

No economic considerations at this time.

3.6 Communication Considerations:

Communication of plans to increase tipping fees by up to 10% for select materials was sent to all municipalities and account holders on October 18 and 30, respectively.

If recycling facility closures are authorized, communication of closures would need to be made to the public and facility staff/operators a minimum of thirty days in advance of proposed closure date. As the Ymir Transfer Station and Recycling facility provides more service than the other satellite recycling depots, more notice would be required if closure of this facility were pursued.

No additional communication considerations at this time.

3.7 Staffing/Departmental Workplace Considerations:

The works proposed based on the recommendations of the Study shall be completed by several members of the Resource Recovery team, as highlighted in Table 4 above. The Resource Recovery Projects Advisor will guide the implementation of these actions, with oversight and support from the Resource Recovery Manager and General Manager of Environmental Services.

3.8 Board Strategic Plan/Priorities Considerations:

The Tipping Fee Cost Recovery Assessment and System Efficiency Study aligns with the RDCK's strategic objectives to manage assets and service delivery in a fiscally responsible manner and to continue to innovate to reduce the impact of waste.

SECTION 4: OPTIONS & PROS / CONS

RECOMMENDATION 1: CENTRAL SUB-REGION

OPTION 1: That the Board authorize Staff to not extend the existing lease agreement with Kokanee Creek Marine Ltd. for the lease of lands and operations associated with the Kokanee Park Marina Recycling Depot and permanently close the Kokanee Creek Marina Recycling Depot effective December 31, 2024.

Pros:

- Reduces costs to the Central sub-region by approximately $68,562 while still providing residents a reasonable to high level of service compared to other regional districts.
- Helps to close the gap between the operating cost of the RecycleBC program and the funding provided through RecycleBC incentives.

Cons:

- Residents who use this satellite depot will have less convenience for core recycling material disposal and will have to store these materials for delivery along with their other waste and recyclables at the nearest transfer station/recycling depot.
- May result in slight increases in recyclable materials being landfilled.

OPTION 2: That the Board authorize Staff extend the existing lease agreement with Kokanee Creek Marine Ltd. for the lease of lands and operations associated with the Kokanee Park Marina Recycling Depot.

Pros:

- Allows the RDCK to continue to provide a higher level of service than other regional districts.
- Residents who use Kokanee Park Marina Recycling Depot will continue to have convenient access for disposal of core recycling materials.

Cons:

- Does not result in any cost savings or help to close the gap between the operating cost of the RecycleBC program and the funding provided through RecycleBC incentives.

RECOMMENDATION 2: EAST SUB-REGION

OPTION 1: That the Board authorize staff to plan the permanent closure of Riondel Recycling Depot in 2025.

Pros:

- Reduces costs to the East sub-region by approximately $17,552, while still providing residents a reasonable to high level of service compared to other regional districts.
- Helps to close the gap between the operating cost of the RecycleBC program and the funding provided through RecycleBC incentives.

Cons:

- Residents who use this satellite depot will have less convenience for core recycling material disposal and will have to store these materials for delivery along with their other waste and recyclables at the nearest transfer station/recycling depot.
- As this site would no longer be staffed, this would eliminate the oversight for the current collection of waste in the same location through the site staff. This may either increase disposal without bag tag (resulting in revenue loss) or require additional staffing and therefore cost under service S189 Refuse Transfer Area A.
- May result in slight increases in recyclable materials being landfilled.

OPTION 2: That the Board does not authorize staff to plan the permanent closure of Riondel Recycling Depot in 2025.

Pros:

- Allows the RDCK to continue to provide a higher level of service than other regional districts.
- Residents who use Riondel Recycling Depot will continue to have convenient access for disposal of core recycling materials.

Cons:

- Does not result in any cost savings or help to close the gap between the operating cost of the RecycleBC program and the funding provided through RecycleBC incentives.
- Continues to provide the oversight for the current collection of waste in the same location through the recycling site staff.

RECOMMENDATION 3: WEST SUB-REGION

OPTION 1: That the Board authorize staff to plan the permanent closure of Winlaw Recycling Depot in 2025.

Pros:

- Reduces costs to the West sub-region by approximately $33,382, while still providing residents a reasonable to high level of service compared to other regional districts.
- Helps to close the gap between the operating cost of the RecycleBC program and the funding provided through RecycleBC incentives.

Cons:

- Residents who use this satellite depot will have less convenience for core recycling material disposal and will have to store these materials for delivery along with their other waste and recyclables at the nearest transfer station/recycling depot.
- May result in slight increases in recyclable materials being landfilled.

OPTION 2: That the Board does not authorize staff to plan the permanent closure of Winlaw Recycling Depot in 2025.

Pros:

- Allows the RDCK to continue to provide a higher level of service than other regional districts.

- Residents who use Winlaw Recycling Depot will continue to have convenient access for disposal of core recycling materials.

Cons:

- Does not result in any cost savings or help to close the gap between the operating cost of the RecycleBC program and the funding provided through RecycleBC incentives.

SECTION 5: RECOMMENDATIONS

RECOMMENDATION 1: CENTRAL SUB-REGION

That the Board authorize Staff to not extend the existing lease agreement with Kokanee Creek Marine Ltd. for the lease of lands and operations associated with the Kokanee Park Marina Recycling Depot and permanently close the Kokanee Creek Marina Recycling Recycling Depot effective December 31, 2024.

RECOMMENDATION 2: EAST SUB-REGION

That the Board authorize staff to plan the permanent closures of Riondel Recycling Depot in 2025.

RECOMMENDATION 3: WEST SUB-REGION

That the Board authorize staff to plan the permanent closure of Winlaw Recycling Depot in 2025.

Respectfully submitted,
Heidi Bench, Projects Advisor

CONCURRENCE

Resource Recovery Manager – Amy Wilson
General Manager of Environmental Services – Uli Wolf
Corporate Administrative Officer – Stuart Horn

ATTACHMENTS:
Attachment A – Tipping Fee Cost Recovery Assessment & Resource System Efficiency Study

Committee Report

Date of Report: December 3, 2024
Date & Type of Meeting: December 11, 2024 Joint Resource Recovery Meeting
Author: Amy Wilson, Resource Recovery Manager
Subject: S188 WEST WASTE FINANCIAL PLAN AMENDMENT – OOTISCHENIA TIPPING WALL BINS
File: 05-1700-30-ENV ENVIRONMENTAL SERVICES-RR BUDGET 2024
Electoral Area/Municipality West Sub-Region

SECTION 1: EXECUTIVE SUMMARY

The purpose of this report is to request an amendment of the 2024 Financial Plan to account for the purchase of bins for the Ootischenia Landfill.

SECTION 2: BACKGROUND/ANALYSIS

Bins to collect and transport waste from the tipping wall at the Ootischenia Landfill were in need of repair. At time of 2024 budget development staff was uncertain if the bins could be repaired or would require replacement. Budget was allocated in the Repairs and Maintenance Account in Service S188 West Waste.

Upon assessment it was determined some bins could be repaired, and two bins needed replacement. They were purchased for $8,490 each (total of $16,980), excluding taxes. As the bins are new assets, the Finance Department identified they should be accounted as capital items rather than repairs.

Staff recommend a 2024 financial plan amendment to reallocate funds from the Repairs and Maintenance account 55010 to the Capital Expenses account 60000 in Service S188 West Waste.

SECTION 3: DETAILED ANALYSIS

3.1 Financial Considerations – Cost and Resource Allocations:

Included in Financial Plan:	☒ Yes	☐ No	**Financial Plan Amendment:**	☒ Yes	☐ No
Debt Bylaw Required:	☐ Yes	☒ No	**Public/Gov't Approvals Required:**	☐ Yes	☒ No

The 2024 Financial Plan for Service S188 West Waste allocated $20,000 to the Repairs and Maintenance Account 55010 for repair and/or replacement of bins for the Ootischenia Landfill, the cost of the two bins was $16,980, excluding taxes ($18,170 with PST).

3.2 Legislative Considerations (Applicable Policies and/or Bylaws):

None at this time.

3.3 Environmental Considerations

None at this time.

3.4 Social Considerations:

None at this time.

3.5 Economic Considerations:
None at this time.

3.6 Communication Considerations:
None at this time.

3.7 Staffing/Departmental Workplace Considerations:
None at this time.

3.8 Board Strategic Plan/Priorities Considerations:
None at this time.

SECTION 4: OPTIONS & PROS / CONS
N/A

SECTION 5: RECOMMENDATIONS
That the Board approve an amendment to the 2024 Financial Plan for S188 West Waste to decrease the Repairs and Maintenance Account 55010 by $18,170 and increase the Capital Expense Account 60000 by $18,170 for the Ootischenia Landfill Tipping Wall Bins.

Respectfully submitted,

Amy Wilson – Resource Recovery Manager

CONCURRENCE
Finance Manager – Heather Smith
General Manager of Environmental Services – Uli Wolf
Chief Administrative Officer – Stuart Horn

ATTACHMENTS:
None

Committee Report

Date of Report:	December 3, 2024
Date & Type of Meeting:	December 11, 2024 Joint Resource Recovery Meeting
Author:	Amy Wilson, Resource Recovery Manager
Subject:	S187 CENTRAL WASTE MFA EQUIPMENT FINANCING AUTHORIZATION – CENTRAL LOADER AND ROLL OFF BINS
File:	05-1700-30-ENV ENVIRONMENTAL SERVICES-RR BUDGET 2024
Electoral Area/Municipality	Central Sub-Region

SECTION 1: EXECUTIVE SUMMARY

The purpose of this report is to request an authorization for a Municipal Finance Authority equipment financing for the 2024 Central Loader.

SECTION 2: BACKGROUND/ANALYSIS

Following the report received at the October 16, 2024 Joint Resource Recovery Meeting (Attachment A), the Board passed the following resolution (539/24):

> *That the Board authorize staff to purchase a Hyundai HL940A loader from Woodland Equipment Inc. up to a total cost of $287,790 (excluding taxes);*
>
> *AND FURTHER, that the Chair and Corporate Officer be authorized to sign the necessary documents;*
>
> *AND FURTHER, that the costs be paid from Service S187 Central Waste.*

The 2024 Financial Plan directed this purchase to be funded through equipment financing. However, in the process of preparing the draft 2025 Financial Plan for S187 staff have determined there are sufficient regular reserves to fund the purchase. Therefore, propose to instead fund the purchase of $284,395 through Regular Reserves and authorize an amendment to the 2024 Financial Plan.

SECTION 3: DETAILED ANALYSIS

3.1 Financial Considerations – Cost and Resource Allocations:

Included in Financial Plan:	☒ Yes	☐ No	**Financial Plan Amendment:**	☐ Yes	☒ No
Debt Bylaw Required:	☐ Yes	☒ No	**Public/Gov't Approvals Required:**	☐ Yes	☒ No

The 2024 Financial Plan included $325,000 for the Central Loader in the Capital Expenses and the same value as Proceeds from Equipment Financing. The actual purchase price of the Loader is $284,395, including PST.

There is expected to be $895,467 in Central Regular Reserves at end of 2024. Using reserves to fund the purchase, rather than financing, would save approximately $60,000 annually in loan repayment costs over the next five years.

Reserve contributions are projected to rise in future years (2027-2029) in the Draft 2025 Financial Plan.

3.2 Legislative Considerations (Applicable Policies and/or Bylaws):
None at this time.

3.3 Environmental Considerations
None at this time.

3.4 Social Considerations:
None at this time.

3.5 Economic Considerations:
None at this time.

3.6 Communication Considerations:
None at this time.

3.7 Staffing/Departmental Workplace Considerations:
None at this time.

3.8 Board Strategic Plan/Priorities Considerations:
None at this time.

SECTION 4: OPTIONS & PROS / CONS
Option 1: That the Board That the Board approve an amendment to the 2024 Financial Plan for S187 Central Waste to decrease the Proceeds from Equipment Financing Account 43200 by $284,395 and increase the Transfer from Regular Reserves Account 45000 by $284,395 for the Central Loader.

Option 2: That the Board of the Regional District Central Kootenay authorizes up to $284,395 to be borrowed, under Section 403 of the *Local Government Act*, from the Municipal Finance Authority – equipment financing program, for the purpose of 2024 Central Loader; AND FURTHER that the loan be repaid within five (5) years from S187 Central Waste, with no rights of renewal.

SECTION 5: RECOMMENDATIONS
That the Board approve an amendment to the 2024 Financial Plan for S187 Central Waste to decrease the Proceeds from Equipment Financing Account 43200 by $284,395 and increase the Transfer from Regular Reserves Account 45000 by $284,395 for the Central Loader.

Respectfully submitted,

Amy Wilson – Resource Recovery Manager

CONCURRENCE
Finance Manager – Heather Smith
General Manager of Environmental Services – Uli Wolf
Chief Administrative Officer – Stuart Horn

ATTACHMENTS:
Attachment A – October 11, 2024 Purchase of Loader Committee Report

ATTACHMENT A

Committee Report

Date of Report:	October 11, 2024
Date & Type of Meeting:	October 16, 2024; Joint Resource Recovery Committee
Author:	Larry Brown, Resource Recovery Operations Supervisor
Subject:	Purchase of Loader
File:	06-2230-15-2024-101 ENV LOADER
Electoral Area/Municipality:	CENTRAL SUB-REGION

SECTION 1: EXECUTIVE SUMMARY

The purpose of this report is seek Board direction to purchase of a new rubber tire wheel loader to be deployed within the Central Subregion.

SECTION 2: BACKGROUND/ANALYSIS

A request through Canoe to loader suppliers was sent out in late July and closed on August 15, 2024.

The criteria upon which the suppliers were to base their submissions on was as follows:

"The RDCK is requesting quotes from Canoe suppliers for the procurement of one (1) wheel loader; suitable for solid waste and recycling transfer station uses such as pushing up garbage or recycling piles, transporting, arranging, and loading "super sacks" (~ 1 tonne capacity woven sacks) filled with recycling material, loading and moving pallets, and moving snow. The following general specification has being provided:

1) *The machine MUST be new and be the current production model, provide details. Demo units with low hours (i.e. <250hrs) are acceptable provided comparable details are provided.*
2) *Minimum operating weight: 30,000lbs.*
3) *Self-leveling bucket*
4) *Bucket size: 3 – 3.5 cubic yards.*
5) *Quick change mechanism to allow for ease in changing the attachments.*
6) *Required attachments: adjustable forks."*

Six separate submissions were received from dealers located in the south-east region of BC. Staff reviewed the submissions based on the following criteria:

The RDCK will be making its purchase decision based on the evaluation criteria listed below.

- *Quote specifies that Canoe member pricing is provided, reference the RDCK's Canoe member number and the supplier's Canoe contract number. (Pass/Fail)*
- *Quote is provided in Canadian currency*
- *Price*
- *Terms of warranty*

- *Shipping fees*
- *Insurance terms during shipping*
- *Return policy and any return shipping fees*
- *Expected delivery date (delivery lead time)*
- *Service availability, location and operating hours*
- *Local parts availability*
- *Provision of operation and service manuals*
- *Operating hours for service*
- *Sustainability*

Staff met on several occasions over the course of a month following the closure date to review all information received and solicit feedback from staff. Several submissions were incomplete and required clarification. The evaluation score, overall ranking, and price are presented in the table below and the evaluation matrix is included as Attachment A.

Unit	Evaluation Score	Overall Ranking	Price
John Deere – 524P	75.32 %	4	$303,000
Case – 621G XT	**80.56 %**	**1**	**$303,010**
Hyundai – HL940A	80.55 %	2	$265,790
Komatsu – WA-270-8	78.48 %	3	$283,000
Volvo – L70H	71.97 %	6	$319,272
Caterpillar – AR 926M	72.35 %	5	$288,950

Evaluation Rating	Details
100%	Outstanding Proposal that Substantially Exceed Requirements
85%	Above Average Fulfilling Requirements
70%	Fully Meets Requirements
50%	Meets Minimum Requirements
25%	Does Not Meet Minimum Requirements in All Areas
0%	Unsatisfactory

Based on the evaluation staff recommend purchasing the Case 621G XT unit. The Case unit specifications meet operational needs, was the highest ranked, and the price is within the budgeted value. It also includes a 2000 hour Comprehensive Maintenance Plan, a 3000 hour warranty, and a service & repair technician is located in Castlegar.

SECTION 3: DETAILED ANALYSIS

3.1 Financial Considerations – Cost and Resource Allocations:

Included in Financial Plan:	☒Yes	☐ No	**Financial Plan Amendment:**	☐Yes	☒ No
Debt Bylaw Required:	☐Yes	☒ No	**Public/Gov't Approvals Required:**	☐Yes	☒ No

The RDCK 2024 Financial Plan for Service S187 Central Waste includes $325,000 for a rubber-tired loader. The Case unit recommended by staff is $303,010, with provincial tax applied is $324,221, is within the budget.

3.2 Legislative Considerations (Applicable Policies and/or Bylaws):

Board approval is required for this purchase.

3.3 Environmental Considerations

None at this time.

3.4 Social Considerations:

None at this time.

3.5 Economic Considerations:

None at this time.

3.6 Communication Considerations:

None at this time

3.7 Staffing/Departmental Workplan Considerations:

With support from the Procurement Coordinator, the Resource Recovery Operations Supervisor will lead the purchase of the selected loader and oversee the deployment of the unit into operations.

3.8 Board Strategic Plan/Priorities Considerations:

The purchase of a new loader aligns with the RDCK Strategic Plan focuses on developing more cost effective and practical approach to asset management.

SECTION 4: OPTIONS & PROS / CONS

Option 1: That the Board authorize staff to purchase a Case 621G XT from Inland Truck and Equipment up to a total cost of $303,010 (excluding taxes).

Pros:

- The purchase price is within the budget of $325,000.
- The Case loader scored 80.56 points which is the highest of all loaders on the evaluation scale.
- The unit comes with one of the best overall warranties (3 year 3000 hour). Only Case and Hyundai included a 3000 hour warranty. All other suppliers provided only one year.
- Included in the purchase price is a comprehensive scheduled 2000 hour Maintenance Service Plan which includes all labour and material (not including travel). The estimated value of this plan is $20,000. The benefit of this plan is not incorporated into the technical score of the evaluation. The overall score of the Case would increase to 82.42 if the value of the plan is deducted from the purchase price.
- Repair costs and potential down time over the anticipated life cycle for the Case loader will be lower than the next highest rated loader (Hyundai) due to the location of the dealership and service technician in Castlegar. This difference is included in the value adds section of the technical evaluation.

Cons:

- The purchase price is $37,220 (excluding taxes and environmental fees) higher the next highest rated loader (Hyundai).

Option 2: That the Board authorize staff to purchase a Hyundai HL940A loader from Woodland Equipment Inc. up to a total cost of $265,790 (excluding taxes).

Pros:

- The purchase price is within the budget of $325,000.
- The Hyundai loader scored very high on the evaluation scale. (80.55 points),
- The purchase price is $37,220 (excluding taxes and environmental fees) lower than the highest rated loader (Case loader).
- The unit comes with one of the best overall warranties (3 year 3000 hour).

Cons:

- The submission for the Hyundai was 0.01 points below the Case.
- Repair costs and potential down time over the anticipated life cycle for the Hyundai loader will be higher due to the location of the dealership and service technician in Kamloops.
- A 2000 hour comprehensive Maintenance Service Plan matching that of the Case for this loader is an additional $22,612.

SECTION 5: RECOMMENDATIONS

That the Board authorize staff to purchase a Case 621G XT loader from Inland Truck and Equipment up to a total cost of $303,010 (excluding taxes);

AND FURTHER that the Chair and Corporate Officer be authorized to sign the necessary documents;

AND FURTHER that the costs be paid from Service S187 Central Waste.

Respectfully submitted,

Larry Brown
Resource Recovery, Operations Supervisor

CONCURRENCE

Resource Recovery Manager – Amy Wilson

ATTACHMENTS:
Attachment A – Evaluation Matrix

Committee Report

Date of Report:	December 3, 2024
Date & Type of Meeting:	December 11, 2024 Joint Resource Recovery Meeting
Author:	Amy Wilson, Resource Recovery Manager
Subject:	S187 CENTRAL WASTE / A120 FINANCIAL PLAN AMENDMENT – 2023 INTERNAL TRANSFER
File:	05-1700-30-ENV ENVIRONMENTAL SERVICES-RR BUDGET 2024
Electoral Area/Municipality	West Sub-Region

SECTION 1: EXECUTIVE SUMMARY

The purpose of this report is to request an amendment of the 2024 Financial Plan to account for an error in the 2023 internal transfers from Service S187 Central Waste to Service A120 Central-West Compost.

SECTION 2: BACKGROUND/ANALYSIS

The 2023 Financial Plan for S187 Central Waste and A120 Central-West Compost services included a transfer from S187 to A120 for a total of $286,863 to support the Central Compost Facility.

It was determined at year end that the 2023 internal transfer request was missing $257,493 from the line item associated with tax-based subsidy coming from S187 to A120. Only a transfer of $29,369 representing the transfer of projected tipping fees was transferred from S187 to A120 in 2023. Reporting of year end balances from 2023 was delayed into late 2024 due to new accounting standards and asset retirement obligations. The $257,493 portion of the total transfer amount wasn't detected by staff until budget preparation began in late 2024.

Staff recommend a 2024 financial plan amendment to allocate funds from S187 Central Waste to A120 Central-West Compost services to correct the missed 2023 transfer value of $257,493.

SECTION 3: DETAILED ANALYSIS

3.1 Financial Considerations – Cost and Resource Allocations:

Included in Financial Plan:	☒ Yes	☐ No	**Financial Plan Amendment:**	☒ Yes	☐ No
Debt Bylaw Required:	☐ Yes	☒ No	**Public/Gov't Approvals Required:**	☐ Yes	☒ No

As noted above the missing value of $257,493 was included in the 2023 Financial Plan for S187 Central Waste and A120 Central-West Compost services. When the funds were not transferred this resulted in an unaccounted surplus in S187 Central Waste and a deficit in A120 Central-West Compost services in 2024. The funds associated with the prior year surplus/deficit in the services will offset the funds transfer in 2024.

This 2024 transfer correction is noted in the Draft 2025 Financial Plan for both S187 and A120 so that the services are adjusted accordingly.

3.2 Legislative Considerations (Applicable Policies and/or Bylaws):

None at this time.

3.3 Environmental Considerations

None at this time.

3.4 Social Considerations:
None at this time.

3.5 Economic Considerations:
None at this time.

3.6 Communication Considerations:
None at this time.

3.7 Staffing/Departmental Workplace Considerations:
None at this time.

3.8 Board Strategic Plan/Priorities Considerations:
None at this time.

SECTION 4: OPTIONS & PROS / CONS
N/A

SECTION 5: RECOMMENDATIONS
That the Board approve an amendment to the 2024 Financial Plan for S187 Central Waste to increase the Transfer to Other Services Account 59500 by $257,493 and increase the Transfer from Other Services Account 45500 by $257,493 for the 2023 transfer for support of the Central Compost Facility.

Respectfully submitted,

Amy Wilson – Resource Recovery Manager

CONCURRENCE
Finance Manager – Heather Smith
General Manager of Environmental Services – Uli Wolf
Chief Administrative Officer – Stuart Horn

ATTACHMENTS:
Attachment A – Excerpt from the 2023 S187 Financial Plan showing the intended 2023 transfer
Attachment B – Excerpt from the 2023 A120 Financial Plan showing the intended 2023 transfer

ATTACHMENT A

S187 - Central Resource Recovery - 5 year Financial Plan (2023-2027)

	Account	Account(T)	Work Order	Work Order(T)	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2023 Notes
113	53040	Advertising			6,000	6,000	6,000	6,000	6,000	
135	53050	Insurance			27,380	28,749	30,187	31,696	33,281	
141	53080	Licence & Permits			9,950	19,954	9,958	19,962	9,966	
143	54010	Legal			60,000	0	0	0	0	
148	54020	Professional Fees			214,817	201,281	73,281	77,378	77,378	
174	54030	Contracted Services			613,956	604,571	641,866	645,294	693,312	
204	55010	Repairs & Maintenance			171,346	142,278	142,942	143,639	144,371	
215	55020	Operating Supplies			19,650	14,650	14,650	14,650	14,650	
220	55030	Equipment			39,450	1,000	1,000	1,000	1,000	
227	55040	Utilities			10,815	11,304	11,530	11,760	11,995	
233	55050	Vehicles			170,368	202,376	220,337	239,764	261,049	
237	55900	Provisions			0	0	0	0	0	
240	56110	Short-Term Financing Interest			5,312	60,343	47,418	34,492	21,566	
243	56010	Debenture Interest			296,942	296,942	311,882	311,882	311,882	
246	56120	Short-Term Financing Principal			0	286,600	286,600	286,600	286,600	
249	56020	Debenture Principal			341,766	341,766	371,009	371,009	371,009	
254	56610	Equipment Financing Interest			18,574	31,899	21,860	12,384	5,245	
259	56620	Equipment Financing Principal			125,125	248,452	271,275	213,606	103,628	
262	59000	Contribution to Reserve			461,250	95,264	302,394	536,605	787,328	
263	59500	Transfer to Other Service	OVR153-100	Central RR Subregion Administration	1,000	2,000	0	0	0	A112 PM fees - all combined see notes
264	59500	Transfer to Other Service	OVR153-100	Central RR Subregion Administration	255,015	260,115	265,318	270,624	276,036	A102 Resource Recovery Placeholder: 70% (20% to A118 recycling allocation service and 10% to A120 C-W Compost allocation service)
265	59500	Transfer to Other Service	OVR153-303	Contribution to West	190,914	171,823	154,640	156,187	157,749	Placeholder, cont to West for OOT landfill, (reduction of 10% in 2024&25 for reduction from compost)
266	59500	Transfer to Other Service	OVR153-100	Central RR Subregion Administration	257,493	161,289	160,717	168,700	160,549	Placeholder - transfer to A120 compost allocation service A120 (subsidization)
267	59500	Transfer to Other Service	OVR153-100	Central RR Subregion Administration	29,369	58,739	64,612	67,843	68,522	Placeholder; GRO organics Tipping fees - Transfer to A120 Compost Allocation Service for CEN compost facility
268	59500	Transfer to Other Service	OVR153-100	Central RR Subregion Administration	696,216	920,212	941,919	879,008	906,705	Transfer to Central Recycling Allocation Service A117
269	59500	Transfer to Other Service			1,430,007	1,574,178	1,587,206	1,542,362	1,569,561	
271	59510	Transfer to Other Service - General Admin. Fee			162,618	184,878	188,576	192,347	196,194	

ATTACHMENT B

A120 - Central/West Compost - 5 year Financial Plan (2023-2027)

	Account	Account(T)	Work Order	Work Order(T)	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2023 Notes
2	42020	Sale of Services			(60,000.00)	(132,000.00)	(133,320.00)	(134,653.20)	(135,999.73)	
4	42030	User Fees			(2,500.00)	(10,000.00)	(10,000.00)	(10,000.00)	(9,999.00)	
6	43025	Grants - Specified			(1,452,632.00)	0.00	0.00	0.00	0.00	
8	43100	Proceeds from Borrowing			(276,065.09)	0.00	0.00	0.00	0.00	
10	43200	Proceeds from Equipment Financing			0.00	0.00	0.00	0.00	0.00	
12	45000	Transfer from Reserves			0.00	0.00	0.00	0.00	0.00	
13	45500	Transfer from Other Service	OVR153-100	Central RR Subregion Administration	(29,369.31)	(58,738.62)	(64,612.48)	(67,843.10)	(68,521.53)	Transfer from S187 - in lieu of tipping fees @ $80/T
14	45500	Transfer from Other Service	OVR153-100	Central RR Subregion Administration	(257,493.25)	(161,289.09)	(160,716.76)	(168,700.01)	(160,549.31)	Placeholder Transfer from S187 - organics (subidization)
15	45500	Transfer from Other Service	OVR154-100	West RR Subregion Administration	(43,697.68)	(131,224.27)	(132,536.51)	(133,861.88)	(135,200.50)	Transfer from S188 - in lieu of tipping fees @$80/T
16	45500	Transfer from Other Service	OVR154-100	West RR Subregion Administration	(257,493.25)	(161,289.09)	(160,716.76)	(168,700.01)	(160,549.31)	Placeholder Transfer from S188 - organics (subidization)
17	45500	Transfer from Other Service			(588,053.50)	(512,541.07)	(518,582.50)	(539,105.00)	(524,820.65)	
19	49100	Prior Year Surplus			867,000.00	0.00	0.00	0.00	0.00	
20	TOTAL REVENUE				(1,512,250.59)	(654,541.07)	(661,902.50)	(683,758.20)	(670,819.38)	
21	TIPPING FEES				(574,986.50)	(454,578.19)	(454,753.51)	(472,053.22)	(457,098.35)	
22	CAP FUNDING SUBTOTAL				(1,728,697.09)	0.00	0.00	0.00	0.00	
25	51010	Salaries			49,364.51	66,609.18	67,408.49	68,217.39	69,036.00	
27	51020	Overtime			1,000.00	500.00	500.00	500.00	500.00	
29	51030	Benefits			14,315.71	19,316.66	19,548.46	19,783.04	20,020.44	
31	51050	Employee Health & Safety			1,150.00	1,150.00	1,150.00	1,150.00	1,150.00	
33	51500	Directors - Allowance & Stipend			5,740.56	5,855.37	5,972.48	6,091.93	6,213.77	
35	51560	Directors - Travel			500.00	525.00	551.25	578.81	607.75	
37	52010	Travel			750.00	500.00	500.00	500.00	500.00	
39	52020	Education & Training			2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	
41	52030	Memberships, Dues &			0.00	0.00	0.00	0.00	0.00	
43	53020	Admin, Office Supplies & Postage			300.00	300.00	300.00	300.00	300.00	
45	53030	Communication			1,870.00	811.50	994.58	1,044.31	1,096.52	
47	53040	Advertising			3,500.00	3,500.00	2,000.00	2,000.00	2,000.00	
49	53050	Insurance			2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	
51	53080	Licence & Permits			200.00	204.00	208.08	212.24	216.49	
53	54020	Professional Fees			8,731.50	0.00	0.00	0.00	0.00	
56	54030	Contracted Services			50,000.00	85,000.00	81,600.00	83,232.00	84,896.64	
59	55010	Repairs & Maintenance			8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	
61	55020	Operating Supplies			1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	
63	55030	Equipment			1,000.00	1,000.00	1,000.00	2,500.00	2,500.00	
65	55040	Utilities			28,527.50	49,411.00	50,399.22	51,407.20	52,435.35	
67	55050	Vehicles			31,384.50	62,769.00	69,045.90	75,950.49	83,545.54	
69	55060	Rentals			0.00	30,000.00	31,500.00	33,075.00	34,728.75	
71	56110	Short-Term Financing Interest			7,122.43	7,122.43	7,122.43	7,122.43	7,122.43	
73	56120	Short-Term Financing Principal			152,653.47	152,653.47	152,653.47	152,653.47	152,653.47	
76	56610	Equipment Financing Interest			3,222.85	2,244.37	1,246.12	257.99	0.00	
79	56620	Equipment Financing Principal			39,328.55	40,307.03	41,305.28	28,107.03	0.00	
81	59000	Contribution to Reserve			5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
85	59500	Transfer to Other Service			87,546.00	79,606.92	81,199.06	82,823.04	84,479.50	
87	59510	Transfer to Other Service - General Admin. Fee			15,322.00	3,178.00	3,241.00	3,306.00	3,372.00	
89	59520	Transfer to Other Service - IT Fee			5,516.00	5,626.32	5,738.85	5,853.62	5,970.70	
91	59550	Transfer to Other Service - Environmental Services Fee			17,991.00	18,350.82	18,717.84	19,092.19	19,474.04	
96	60000	Capital Expenditures			967,214.00	0.00	0.00	20,000.00	20,000.00	
97	TOTAL EXPENSES				1,512,250.58	654,541.07	661,902.50	683,758.20	670,819.38	