

COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES

Greater Vancouver Sewerage and Drainage District Board Meeting Date – Friday, February 28, 2025

This information item, listing recent information received by committee, is provided for the GVS&DD Board's information. Please access a complete PDF package here">here.

Zero Waste Committee – February 6, 2025

Delegations:

No delegations presented

Information Items:

- E1 2023 Annual Solid Waste and Recycling Statistics
- E2 2025 Zero Waste Conference and National Zero Waste Council Update

Finance Committee – February 13, 2025

Delegation Summaries:

C1 Ray VanMarrewyk, Director at BC Greenhouse Growers' Association and BC Agriculture Council

Subject: Consideration of Development Cost Charge Reduction for Intensive Agriculture

Executive Summary provided



To: Zero Waste Committee

From: Kelly Du, Project Engineer, Solid Waste Services

Date: January 24, 2025 Meeting Date: February 6, 2025

Subject: 2023 Annual Solid Waste and Recycling Statistics

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated January 24, 2025, titled "2023 Annual Solid Waste and Recycling Statistics".

EXECUTIVE SUMMARY

Metro Vancouver achieved a 65% recycling rate in 2023 and continued to demonstrate decreasing disposal per capita. Since the approval of the solid waste management plan in 2011, Metro Vancouver's disposal rate has decreased by 26%, from 0.57 tonnes/capita in 2011 to 0.42 tonnes/capita in 2023. Data for the annual report is collected from many sources taking a substantial amount of time. Therefore, the statistics presented in this report are for 2023.

In comparison to 2022, significant recycling increases were seen in plastic, gypsum, and wood waste which may correlate to an increase in new housing construction in 2023. The commercial/institutional and residential sectors showed similar quantities of recycled yard trimmings and food waste in 2023 as in 2019. Concrete and asphalt recycled quantities have been fixed at 2021 levels due to some uncertainty with the data quality. If reported concrete and asphalt recycled quantities were used, the recycling rate would increase to 69%.

PURPOSE

The purpose of this report is to update the Zero Waste Committee on progress towards the waste reduction and recycling goals outlined in the solid waste management plan for the calendar year 2023.

BACKGROUND

Metro Vancouver is responsible for waste reduction, recycling planning, and the operation of a series of solid waste facilities in the region. Planning for less waste, improving reuse and recycling systems, and managing the remaining waste reflects the public's expectations of high environmental stewardship and affordable and accessible waste management. The annual report includes a summary of data on municipal solid waste including waste generated by residents, commercial/institutional sources, and construction and demolition activity. It excludes industrial and agricultural waste.

Metro Vancouver staff prepare the Solid Waste and Recycling Annual Report using multiple sources, including member jurisdiction surveys, extended producer responsibility organization reports, and aggregated private facility data. Some of this data is not available until late the following year. The report then undergoes multiple internal quality checks and is presented to advisory committees, such as the Solid Waste and Recycling Industry Advisory Committee, before being published and

presented annually to the Zero Waste Committee. The entire report preparation process takes approximately one year, therefore the data presented to committee typically reflects data from one or two years prior.

ANNUAL SUMMARY

The primary objectives of the solid waste management plan are to avoid waste through waste reduction, reuse, and recycling campaigns, programs and policies, and to recover materials and energy from waste that remains. The target for waste reduction is to reduce the per capita waste generation rate to 90% or less of 2010 levels by 2020. The recycling rate target is 80%, calculated as the portion of waste recycled as a fraction of the total waste generated. In 2023, the per capita waste generation rate was 86% of 2010 levels. This exceeds the objective outlined in the solid waste management plan. The recycling rate for 2023 is 65%, matching the 2022 recycling rate.

The table below provides a summary of waste disposed, recycled, and generated, by sector. The full 2023 Annual Report is available on the Metro Vancouver <u>website</u>.

WASTE SECTOR		DISPOSED (tonnes)		RECYCLED (tonnes)		GENERATED (tonnes)		RECYCLING RATE (%)	
		2022	2023	2022	2023	2022	2023	2022	2023
Residential	tonnes	505,592	538,848	579,754	571,230	1,085,346	1,110,078	53%	51%
	tonnes/capita	0.18	0.18	0.20	0.19	0.38	0.37		
Single Family	tonnes	248,750	252,945	434,495	421,472	683,245	674,417	64%	62%
Multi-Family	tonnes	256,842	285,903	145,259	149,758	402,101	435,661	36%	34%
Commercial/ Institutional	tonnes	400,976	403,678	375,466	398,826	776,443	802,504	- 48%	50%
	tonnes/capita	0.14	0.14	0.13	0.13	0.27	0.27		
Construction and Demolition	tonnes	338,955	326,938	1,395,360	1,423,304	1,734,315	1,750,242	80%	81%
	tonnes/capita	0.12	0.11	0.49	0.48	0.61	0.59		
Total	tonnes	1,245,523	1,269,465	2,350,580	2,393,360	3,596,103	3,662,825	65%	65%
	tonnes/capita	0.44	0.42	0.82	0.80	1.26	1.23		

Note: Due to rounding, some numbers presented may not add precisely to the totals indicated

Waste Reduction

The Integrated Solid Waste and Resource Management Plan quantifies waste reduction by estimating the change in waste generation over time. Waste generated is the total of the waste disposed and recycled in the region. The total waste generated in 2023 was approximately 3.66 million tonnes, or 1.23 tonnes per capita, a 3% decrease in per capita generation from 2022, due to a decrease in residential, construction, and demolition waste generation.

Reuse

Reuse tonnage is reported separately from the generation rate and recycling rate calculations. The methodology is being re-evaluated as Metro Vancouver seeks more representative approaches to enhance the tracking and accuracy as part of an ongoing solid waste performance metrics review. The reuse data for 2023 is not included in this report; however future annual reports will provide an estimate using refined methods of collecting and analyzing reuse data.

Recycling

In 2023, the region achieved a recycling rate of 65% and recycled approximately 2.39 million tonnes (0.80 tonnes per capita), compared to 2.35 million tonnes (0.82 tonnes per capita) in 2022. Materials with the highest recycling quantities were concrete, yard trimmings, food scraps, and paper. In comparison to 2022, recycling increases were seen in plastic, gypsum and wood waste. This may be correlated to the increase in construction of new housing (see Reference 2) in 2023. Note that while the overall tonnage of recycling increased, the tonnage per capita decreased. This corresponds to a population growth of 4.7% from 2022 to 2023.

Overall recycling in the commercial/institutional sector increased by 23,360 tonnes, while the residential sector experienced a decrease of 8,524 tonnes in recycled material between 2022 and 2023. In the residential sector, yard and food waste recycling has decreased each year following a significant increase in 2020, corresponding to the beginning of the COVID-19 pandemic. Meanwhile, yard and food waste recycling in the commercial/institutional sector continues to increase since a low point in 2020. Both sectors are reverting to comparable quantities of recycled yard and food waste, as seen in 2019. This change is likely associated with the full return of businesses to prepandemic business operations in food waste generating sectors, and a corresponding normalizing of recycling habits.

Asphalt and concrete quantities were kept fixed for unlicensed processing facilities in 2023 due to large increases in quantities reported without a clear explanation for the increases. In 2023, 492,602 tonnes of asphalt and 1,068,904 tonnes of concrete were reported to be recycled, which would have resulted in a regional recycling rate of 69%. Since Metro Vancouver relies on voluntary reporting of this data and is not able to verify these increases, 2021 data was used to produce a conservative estimate.

The table below summarizes the total recycled material quantities for 2022 compared to 2023. Additional materials and quantities are included in the detailed annual summary report on Metro Vancouver's website.

MATERIAL TYPE RECYCLED	2022 (tonnes)	2023 (tonnes)	
Asphalt ¹	295,300	295,422	
Concrete ¹	866,363	870,092	
Paper	340,386	322,903	
Glass	55,582	47,869	
Gypsum	58,512	63,349	
Metal	58,515	61,300	
Plastic	54,037	57,639	
Wood	161,242	191,859	
Yard and Food	392,044	412,753	
All Other Materials	68,598	70,173	
TOTAL	2,350,580	2,393,360	

¹Unlicensed private facility data from 2021 used, the data accounted for small differences between 2022 and 2023 from other sources

Disposal

In 2023, municipal solid waste from residential and commercial/institutional sources in Metro Vancouver was disposed at the Vancouver Landfill and Metro Vancouver Waste-to-Energy Facility, and through contingency disposal contracts. Construction and demolition waste was disposed of at the Vancouver Landfill and private facilities. In 2023, an estimated 1.27 million tonnes of waste or 0.42 tonnes per capita was disposed, which is a 2.6% decrease in tonnage per capita from 2022, and 26% decrease from the per capita disposal rate when the solid waste management plan was approved in 2011. The region continued to experience an increase in waste disposed from commercial and institutional sources, while residential waste disposal remained steady, and waste from construction and demolition sectors decreased. This trend was first noted in 2021 during economic recovery from the COVID-19 pandemic.

Future Reporting Updates

To enhance the accuracy of this report's data, Metro Vancouver is enhancing its data collection processes. Starting in 2025, Metro Vancouver will consider including data on recycled materials used as fuel substitutes, which will help track energy savings from recycled materials compared to raw materials and promote a circular economy. Future reports will incorporate new metrics and tracking methods following updates to the solid waste management plan. To increase transparency and accessibility, Metro Vancouver is also exploring using an interactive dashboard to present solid waste data.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Metro Vancouver's waste reduction and recycling initiatives are implemented within the annual budget for the Solid Waste Services department.

CONCLUSION

In 2023, the waste disposal rate was 0.42 tonnes per capita, while the recycling rate held steady at 65%. Residential and commercial/institutional sources, and construction and demolition activity generated approximately 3.7 million tonnes of waste, of which 2.4 million tonnes were recycled. Notable increases in recycling were observed in plastics, gypsum, and wood waste, corresponding to a rise in new housing construction (see Reference 2). The recycling rate in commercial/institutional and residential sectors was primarily influenced by yard waste and paper. For these sectors in 2023, the levels of recycled yard waste and food closely resemble 2019 (prepandemic).

Metro Vancouver is reviewing its data collection methods and metrics to further improve data measurement and reporting as part of an updated solid waste management plan. This will include tracking recycled materials used as fuel substitutes and may include an interactive dashboard for additional transparency.

ATTACHMENTS

1. Presentation re: 2023 Annual Solid Waste and Recycling Statistics.

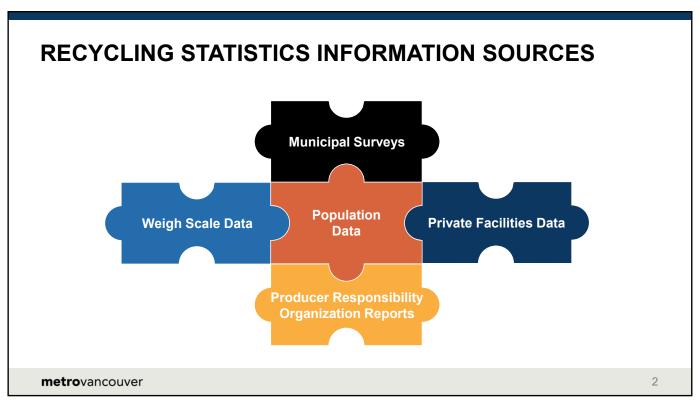
REFERENCES

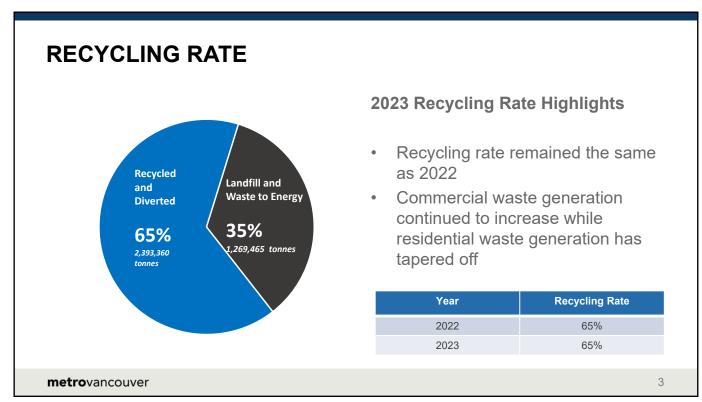
- 1. <u>Draft 2023 Solid Waste Management Annual Summary.</u>
- 2. <u>Canada Mortgage and Housing Corporation Report, Page 15.</u>

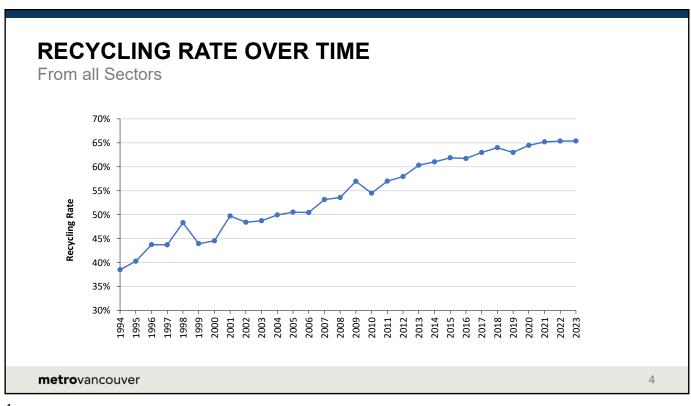
Attachment 1

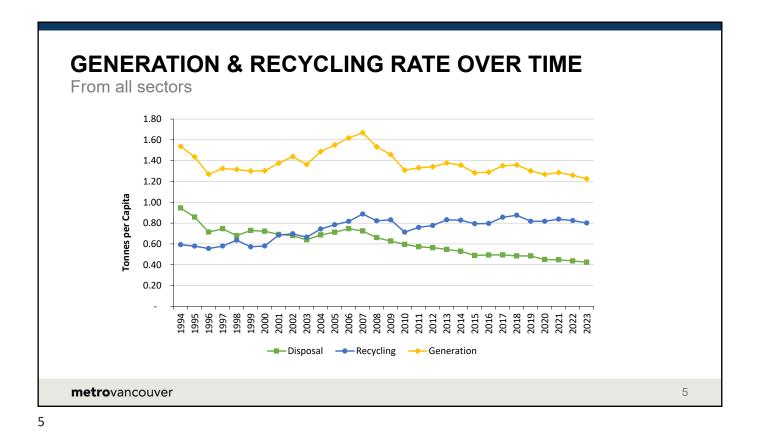


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2023 SUMMARY

WASTE SECT	DISPOSED (tonnes)		RECYCLED (tonnes)		RECYCLING RATE (%) ⁽³⁾			
		2022	2023	2022	2023	2022	2023	% change
Residential	tonnes	505,592	538,848	579,754	571,230	53%	51%	-2%
	tonnes/capita	0.18	0.18	0.20	0.19			
Single Family ⁽¹⁾ tonnes		248,750	252,945	434,495	421,472	64%	62%	-1%
Multi-Family ⁽²⁾ tonnes		256,842	285,903	145,259	149,758	36%	34%	-2%
Commercial/Institutional (2)	tonnes	400,976	403,678	375,466	398,826	48%	50%	1%
	tonnes/capita	0.14	0.14	0.13	0.13			
Residential + Commercial/ Institutional	tonnes/ household	0.81	0.80	0.85	0.82	51%	51%	-1%
Construction & Demolition (4)	tonnes	338,955	326,938	1,395,360	1,423,304	80%	81%	1%
	tonnes	1,245,523	1,269,465	2,350,580	2,393,360			
Total	tonnes/capita	0.44	0.42	0.82	0.80	65%	65%	0%
	tonnes/ household	1.11	1.08	2.10	2.04			

*numbers may not add up correctly due to rounding

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RECYCLING

MATERIAL TYPE	TOTAL (tonnes)	CHANGE IN TOTAL (YEAR OVER YEAR)		
Asphalt	295,422	0%		
Batteries	13,884	0%		
Concrete	870,092	0%		
Electronic & Electrical Equipment	10,719	-1%		
Paper/Paper Products	322,903	-5%		
Glass	47,869	-14%		
Gypsum	63,349	<u> </u>		
Household Hazardous Waste	24,579	1%		
Metal	61,300	5 %		
Other	778			
Plastic	57,639			
Textiles	288	-22%		
Tires	19,925	4%		
Wood	191,859	1 9%		
Yard & Food	412,753	— 5%		
TOTAL	2,393,360	— 2%		

2023 Recycling Highlights

- Increases in wood, gypsum and plastic
 - Most notable from commercial non-EPR materials
 - Reported recycled concrete and asphalt tonnage from facilities increased
 - 2021 Unlicensed Facilities Values used in Calculation

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RECYCLING

MATERIAL TYPE	TOTAL (tonnes)	CHANGE IN TOTAL (YEAR OVER YEAR)
Asphalt	295,422	0%
*Reported Asphalt	492,602	△ 67%
Batteries	13,884	0%
Concrete	870,092	0%
*Reported Concrete	1,068,904	<u>23%</u>
Electronic & Electrical Equipment	10,719	-1%
Paper/Paper Products	322,903	-5%
Glass	47,869	-14%
Gypsum	63,349	<u> </u>
Household Hazardous Waste	24,579	1%
Metal	61,300	5%
Other	778	
Plastic	57,639	
Textiles	288	-22%
Tires	19,925	4%
Wood	191,859	1 9%
Yard & Food	412,753	<u> </u>
TOTAL	2,393,360	2%
*Total (including reported concrete and asphalt)	2,858,307	<u> 22%</u>

Regional Recycling Rate

(using reported concrete and asphalt values)

69%

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FUTURE REPORTING UPDATES

- 2025 Data: Separate reporting of recycled commodities used as fuel substitutes
- New metrics to be considered for an updated solid waste management plan
- Continuing to review and improve:
 - Reuse data
 - · Accuracy of recycled material data
- Exploring dashboard format to present data

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To: Zero Waste Committee

From: Paul Henderson, General Manager, Solid Waste Services

Date: January 29, 2025 Meeting Date: February 6, 2025

Subject: 2025 Zero Waste Conference and National Zero Waste Council Update

RECOMMENDATION

That the Zero Waste Committee receive for information the report dated January 29, 2025, titled "2025 Zero Waste Conference and National Zero Waste Council Update".

EXECUTIVE SUMMARY

Since 2010, Metro Vancouver has delivered the Zero Waste Conference to bring governments, businesses, and non-profits together to advance waste prevention. The conference has moved to a biennial delivery model. The 2025 Zero Waste Conference will be held on November 27, 2025, at the Vancouver Convention Centre. The conference will emphasize waste prevention through a program of interactive workshops, networking, and keynote speakers.

A refreshed vision for the National Zero Waste Council has been developed. The focus will be on local government leadership and collaboration through knowledge building, sharing, and coordinated advocacy on waste prevention and circularity. Opportunities for private sector and non-profit participation will remain part of the Council's work.

Waste and Resources Action Programme (WRAP) has entered into an agreement with FoodMesh to take on the role of Canadian campaign license holder for Love Food Hate Waste. Metro Vancouver will continue to participate in the program but will no longer be responsible for the administration of the campaign.

PURPOSE

This report provides a summary of planning for the 2025 Zero Waste Conference and an update on the National Zero Waste Council.

BACKGROUND

The Zero Waste Conference and National Zero Waste Council were developed to support success in the first two goals of the 2011 solid waste management plan. The focus of both initiatives is waste prevention, with an emphasis on circularity as a solutions framework, and seeking cross-jurisdiction and cross-sector approaches to reducing waste through changes in design and behavior. Finding solutions to waste prevention requires knowledge-building, knowledge-sharing, collaboration, advocacy, and implementing system changes at scales ranging from the local to the national.

The Zero Waste Conference, hosted by Metro Vancouver, has been held since 2010. Waste prevention has continued to be the core focus of the conference. The conference attracts interest from government, the business sector, sustainability practitioners, academia, and the public within

the region and across Canada. Speakers and discussion at the conference provides both future-oriented innovations as well as immediately implementable examples of best practices in waste prevention. The National Zero Waste Council was co-founded by Metro Vancouver and the Federation of Canadian Municipalities in 2012 with the goal of advancing waste prevention at a local and national level through cross-sector collaboration.

ZERO WASTE CONFERENCE

The most recent Zero Waste Conference was held November 2023 and received highly positive feedback from participants. Hosted by Metro Vancouver, the conference included international, national, and local speakers and met its goal of attracting nearly 600 participants. The conference featured the connections between waste prevention, circular solutions, and a heightened emphasis on climate through the theme of "Climate Action through Circularity". Following the 2023 conference, it was decided to move to deliver the conference biennially, with the next one in 2025.

2025 Zero Waste Conference

The planned approach for the 2025 conference is to host a single-day event and focus on providing opportunities for conference attendees to connect and workshop ideas and challenges, in addition to providing keynote speakers. The conference will be held on November 27, 2025, at the same venue as previous years: the Vancouver Convention Centre. Staff have reviewed the past conference's attendance demographics, themes, attendee feedback, and surveyed similar conferences and events happening across Canada and the United States in 2025 to propose a theme that is both focused on waste prevention and responds to the changing landscape of 2025.

The 2025 Zero Waste Conference theme is expected to be, innovation and the business case for waste prevention. Speakers and workshops will highlight the connection between innovation, affordability, economic growth, and achieving outcomes while considering the environmental cost. Programming for the day is planned to provide both inspiration and practical insights that conference participants can apply to their businesses and organizations. Feedback from previous conference attendees consistently notes the importance and value of networking, discussion, and workshop time. Keynote speakers are planned for the beginning and end of the day, with most of the day dedicated to concurrent workshops, allowing conference participants to choose sessions and conversations that are of particular interest to them. The conference will conclude with a light reception to enable additional networking following the formal sessions — as per previous participant's recommendations.

National Zero Waste Council Refresh

The National Zero Waste Council has been in place for over 12 years. Because many other entities have entered the zero waste and circular economy space since its creation, Metro Vancouver is recalibrating the Council to focus primarily on local governments. The emphasis will be on policy and practice change to advance waste prevention and circular systems, delivered through advocacy and knowledge-sharing. The new vision involves broadening and deepening collaborations with local governments across Canada. In addition to focusing on urban local governments, the Council will continue to connect with the private and not-for-profit sector across Canada. Key areas of interest for the Council will include circular food systems, the built environment, consumer goods, and packaging, all of which will also be woven into the 2025 Zero Waste Conference program.

Love Food Hate Waste Canada Update

Love Food Hate Waste is a globally recognized consumer-facing behaviour change campaign owned by the Waste and Resources Action Programme (WRAP) to prevent household food waste. Metro Vancouver, through the National Zero Waste Council, secured the license from WRAP to bring the campaign to Canada in 2018, and proceeded to steward the national campaign through 2024.

At its April 4, 2024, meeting, the Zero Waste Committee received a report indicating that Metro Vancouver was working to shift the coordination of the national campaign to another organization while staying involved as a regional partner.

WRAP has entered into an agreement with FoodMesh, a food recovery organization focused on securing surplus food throughout the supply chain and diverting it to those who need it most, as the new national campaign license holder to manage the national campaign beginning in 2025.

This transition allows Metro Vancouver to participate as a regional partner alongside other local governments across Canada, but relieves the administrative burden associated with the management of the national campaign. Metro Vancouver has an existing contract with FoodMesh for the Metro Vancouver Food Recovery Network. The contract has been amended to accommodate a sublicense agreement with FoodMesh for Metro Vancouver's participation in the campaign in 2025.

ALTERNATIVES

This is an information report therefore no alternatives are included.

FINANCIAL IMPLICATIONS

Funding for the Zero Waste Conference for 2025 would include the net budgeted MVRD contribution of \$212,000, revenue from ticket sales, and funding from GVS&DD to support conference attendance of elected officials, staff, advisory committees, and students. The overall expected cost of the conference for 2025 is anticipated to be approximately \$360,000, approximately \$100,000 less than the initial budget. Cost savings are expected through the move to a single-day conference and through taking advantage of cost saving opportunities compared to previous years. With the move to a biennial conference, the MVRD contribution to the conference has been halved compared to the historic annual conference delivery approach.

The MVRD budget for the National Zero Waste Council is \$120,000 per year, with additional funding from GVS&DD for two staff positions allocated to manage and deliver the work program for the Council.

Metro Vancouver's participation in the Love Food Hate Waste campaign is funded as an element of Metro Vancouver's behaviour change campaigns.

CONCLUSION

Planning and programming for the single-day 2025 Zero Waste Conference is underway. Programming will focus on providing attendees with networking opportunities and interactive

2025 Zero Waste Conference and National Zero Waste Council Update

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workshops. Moving to a single-day and biennial delivery model for the conference has helped to reduce costs while delivering a conference that will bring governments, businesses, and non-profits together to inspire the advancement of waste reduction in our region and beyond. It is expected the conference will be delivered within the approved operating budget.

In parallel, Metro Vancouver is working on a refreshed vision for the National Zero Waste Council, with two areas of focus: local government leadership and collaboration through knowledge building and sharing; and coordinated advocacy on waste prevention and circularity.

Summary

- 1. Lack of consultations—the agriculture industry and the Metro Vancouver Agriculture Advisory Committee were not informed or consulted on water and parkland acquisition DCCs prior to the development and implementation of Bylaw No. 257.
- 2. Agriculture is inaccurately grouped with non-residential, leading to unrealistic charges. The infrastructure charge should be factored into water usage charges rather than being treated as a separate development fee.
- 3. Need for a separate category, but the term 'intensive agriculture' is outdated
- 4. Exclude agriculture from Parkland Acquisition DCC

Background

McNell's report referenced under item #4 on the agenda (pages 43-46) captures the issue well. Below are additional considerations.

Key Points

Inaccurate Assessment: The non-residential *water* infrastructure Development Cost Charge (DCC) rate does not align well with agricultural practices. This is because the impact of agricultural use on the infrastructure can vary significantly from other commercial activities. This variation is particularly noticeable in structures such as greenhouses, which often utilize water (re)collection mechanisms that result in lower water usage.

Assessment Impact: So far, several major greenhouse expansion projects are on hold in the Metro Vancouver Regional District. In business, timing is critical, and missing the expansion opportunity could result in losing or prohibiting building relationships with important customers. Therefore, we cannot wait until the review is complete. The new DCCs must be waived for any agriculture development in the interim to prevent further project delays.

First-hand Example

An agriculture business plans to expand by 16 hectares in 2026/2027. The development cost of construction (DCC) will be \$9.54 per square foot, with a total DCC cost of over \$16 million. To put this into perspective, at over \$1 million per hectare, these DCCs could be more expensive than the land it is built on and have no direct link to the burden on resources.

This high cost makes the project unfeasible, leaving the producer with no choice but to build south of the border or in another area outside the Metro Vancouver Regional District (MVRD).

Agriculture Water Rate: To enhance agricultural viability, it's essential to implement agriculture-specific rates that account for the unique infrastructure demands of agricultural use. These rates should be integrated into water usage charges rather than being treated as a separate development fee, ensuring that everyone pays based on their actual usage. The FortisBC case may serve as a relevant <u>example</u>, with no endorsement implied. A distributive approach could result in lower rates per user, potentially stimulating growth.

Definition Consideration: The term "Intensive Agriculture" is outdated, as it doesn't accurately represent the diverse practices and techniques of agricultural production. A generic term such as 'Agriculture' may be suitable.

Exclusion of Agriculture from Parkland Acquisition DCC: Our understanding is that parkland acquisition fees are typically charged on new residential and commercial developments to ensure that there is sufficient park space to accommodate the growing population. However, the agriculture business does not directly contribute to population growth, so no additional demand is created for park facilities.