

To: Performance and Audit Committee

From: Dean Rear, General Manager, Financial Services/Chief Financial Officer

Date: April 27, 2020 Meeting date: May 6, 2020

Subject: Semi-Annual Report on GVS&DD Development Cost Charges

### **RECOMMENDATION**

That the Performance and Audit Committee receive for information the report dated April 27, 2020, titled "Semi-Annual Report on GVS&DD Development Cost Charges".

### **EXECUTIVE SUMMARY**

Total GVS&DD Development Cost Charges (DCC's) collected in 2019 was \$60.2 million, up from \$32.1 million in the prior year. This is due primarily to the rate increase which came fully into effect in May of 2019.

Affordable housing development DCC waivers were approved in 2019 for a total of 946 units representing \$1.5 million in forgone revenue.

Total DCC's held in reserve at December 31, 2019 was \$227.5 million.

### **PURPOSE**

To report on the 2019 GVS&DD Development Cost Charge (DCC) revenues and any implications on their adequacy, as required by the Performance and Audit Committee Terms of Reference.

### **BACKGROUND**

Regional GVS&DD Development Cost Charges (DCC's) are collected on behalf of Metro Vancouver, as set out in the Board approved DCC Bylaw, by member municipalities and remitted twice a year. DCC's are used to fund growth related capital expenditures. The Performance and Audit Committee Terms of Reference requires that the DCC collections be reported to the Committee on a semi-annual basis. This is the second and final report for 2019.

### **DCC COLLECTIONS**

The collections received for 2019 were \$32.1 million (214.2 %) higher than that for 2018. Though there were only modest increases in two of the four sewer areas, the collections still reflect a fairly consistent and, in two areas, an elevated level of development activity combined with the impact of higher DCC rates that were implemented recently. DCC collections received by area are as follows:

### **DCC's Collected**

(\$ millions)	Fraser	Lulu	North Shore	Vancouver	Total
2019 TOTAL	\$49.919	\$1.948	\$1.373	\$6.999	\$60.239
2018 TOTAL	\$19.808	\$1.890	\$1.460	\$4.959	\$28.117

The DCC collections are net of waivers for qualifying affordable housing developments under the GVS&DD DCC Waiver for Affordable Housing Bylaw, No. 314, 2018, adopted in May 2018. Previously, waivers were permitted under GVS&DD DCC Bylaw No. 254, 2010. For 2019, DCC waivers were provided for 946 affordable housing units, located in the Fraser Sewerage Area (49%), Vancouver Sewerage Area (37%) and North Shore Sewerage Area (14%). This equates to approximately \$1.5 million in forgone DCC collections. The amount forgone in 2019 (new rates) is similar to that for 2018 (previous rates) but the number of waived units has declined by 46% (2018 - 1,761 units.)

Currently, DCC collections are in excess of the actual annual funding requirements for growth related projects. However, as illustrated in the 2020 - 2024 Financial Plan endorsed by the Board last fall, DCC utilization due to growth projects is expected to increase significantly in the short term.

### APPLICATION OF DCC FUNDING

The 2019 funding applications to be approved through *Greater Vancouver Sewerage and Drainage District Development Cost Charge Reserve Fund Expenditure Bylaw No. 339, 2020* are shown below:

**DCC Funding Applied** 

Dec i allallig Applica					
(\$ millions)	Fraser	Lulu	North Shore	Vancouver	Total
2019 DCC's Applied-Total	\$125.621	\$0.000	\$1.262	\$25.506	\$152.389
2019 DCC Applied-Debt	\$25.621	\$0.000	\$1.262	\$3.506	\$30.389
2019 DCC Applied-Capital	\$100.000	\$0.000	\$0.000	\$22.000	\$122.000
2018 DCC's Applied	\$8.107	\$0.001	\$0.733	\$1.919	\$10.760

Each year, the sewerage growth capital projects that are undertaken are funded through long term debt financing utilizing a 15-year amortization period, for which the DCC's are used to pay for the principal portion of the borrowing, or be applied directly for growth capital expenditures. Excess DCC collections are maintained as deferred revenues for future application as required. The DCC deferred revenue balances as at December 31, 2019 by Area were as follows:

Fraser Sewer Area	\$147,639,413
Lulu Island Sewer Area	24,462,851
North Shore Sewer Area	10,860,923
Vancouver Sewer Area	44,588,063
	\$227,551,250

A review of the DCC program was completed late in 2017 which resulted in the implementation of new DCC rates effective May 1, 2018 to generate additional future funding of regional growth requirements. The next review of DCC rates is expected to occur in 2020/2021.

### **ALTERNATIVES**

This is an information report. No alternatives are presented.

### **FINANCIAL IMPLICATIONS**

The DCC program was established pursuant to the concept of "growth pays for growth". Should the collections be inadequate to fund the Sewerage growth related projects, the funding burden would default to Sewer levies collected from the GVS&DD member municipalities.

### **SUMMARY / CONCLUSION**

DCC collections for 2019 were \$60.2 million. DCC's received are used to pay for the principal portion of the borrowing or directly for capital expenditures for growth related GVS&DD projects or for both. As the requirement for capital projects related to growth is substantial and continues to grow, a review of the DCC program rates was completed late in 2017 which resulted in rates increasing effective May 1, 2018. The next review of DCC rates is expected to occur in 2020 / 2021.

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To: Liquid Waste Committee

From: Larina Lopez, Division Manager, Corporate Communications

Date: April 29, 2020 Meeting Date: May 14, 2020

Subject: 2020 Regional Unflushables Campaign - Update

### **RECOMMENDATION**

That the Liquid Waste Committee receive for information the report dated April 29, 2020, titled "2020 Regional Unflushables Campaign – Update".

### **EXECUTIVE SUMMARY**

The incorrect disposal of wipes and other items down the toilet is an ongoing issue for the wastewater system, contributing to clogs, damaged equipment and sewer overflows. The regional Unflushables campaign targets seven priority items that should not be flushed – wipes, paper towels, hair, dental floss, tampons and applicators, condoms and medications. The campaign was advanced to March to respond to increased purchasing (and likely flushing) of wipes due to COVID-19. The campaign was also adjusted to focus on channels that reach people at home (digital advertising, television, online article); these elements will run from March 30 to June 7. Online metrics and outreach team reporting (if applicable) will assess campaign impact. Currently, members can participate in the campaign by sharing messaging on social media; other public-facing opportunities may be available later in the year.

### **PURPOSE**

To update the Liquid Waste Committee on the 2020 regional Unflushables campaign to reduce the flushing of wipes, medications and other materials, which was launched in March to address concerns of increased use of wipes and other unflushables due to COVID-19.

### **BACKGROUND**

The disposal of wipes and other items into the wastewater system can cause sewer clogs, damaged equipment and sewer overflows. Flushed medications are not always fully removed through treatment and may end up in the aquatic environment and residual materials like biosolids. The Unflushables campaign was first launched in 2017 and educates residents about seven priority items that should not be flushed – wipes (including baby wipes, personal hygiene wipes and cleaning wipes), paper towels, hair, dental floss, tampons and applicators, condoms and medications.

Due to COVID-19, use of wipes and paper towels has increased significantly. Toilet paper shortages also make it more likely that wipes will be used as a substitute for toilet paper, increasing the risk that they will be flushed down the toilet and impact the region's wastewater system. For the year over year period of January to April of this year there has been an 46% increase in collection pump deragging events which can be interpreted as a proxy for a wipes increase in the system. With the impact of COVID-19 there are concerns that we will experience greater impacts throughout the rest

of the year. This report provides an overview of the 2020 Unflushables campaign plans, as identified in the 2020 Liquid Waste Committee Work Plan.

### **2020 REGIONAL UNFLUSHABLES CAMPAIGN**

The campaign addresses the seven items identified as being most problematic for the wastewater system: wipes (including baby wipes, personal hygiene wipes and cleaning wipes), paper towels, hair, dental floss, tampons and applicators, condoms and medications.

### **Campaign timing**

In response to COVID-19 and immediate needs, the campaign was activated earlier than anticipated with a two-week digital media buy from March 16 to April 3. The digital portion of the regular campaign, originally scheduled for May 4, was brought forward to run from March 30 to June 7.

### **Campaign Approach**

The campaign continues to use a lighter tone to reach residents, which has proven to be an effective approach in previous campaigns. The campaign targets both women and men, with a slightly greater emphasis on women, as the main purchasers of many of these products. The campaign gives extra focus to wipes, which remain the most problematic item for the wastewater system and where we are seeing increased use at this time.

Original plans included digital advertising (YouTube, display ads, social media, Google search, Daily Hive article), out-of-home placements (cinema, posters in washrooms and other locations), a TV news hour interview and outreach at events. Due to the current restrictions, planned out-of-home elements make less sense at this time, but there is an increased opportunity to reach people at home. The campaign is now focusing on digital approaches and a television public service announcement (PSA) buy; other elements will be reassessed and shifted to digital and other viable tactics, extended into the Fall

### **Creative Materials and Campaign Elements**

Creative materials will continue to profile all seven items as individual characters (see Attachment), using the "Don't Flush Us" tagline.

The main campaign elements to be used from March to June are:

- advertising through online display ads (Google search), YouTube and social media (Facebook, Twitter and Instagram);
- a public service announcement for television;
- online Daily Hive article; and
- campaign web page.

Online metrics will be used to help assess the impact of the campaign, including: video views, engagement with content, number of people reached and visits to the campaign website. Outreach teams will be tracking number of interactions and qualitative data, should events go ahead in the summer.

### **Collaboration with Members**

Campaign materials were shared with members in March. Members can participate in the campaign by sharing messaging on social media, and if later conditions allow, by placing posters in washrooms and hosting outreach teams at events. Other cities outside the region have also asked to use campaign materials.

### **ALTERNATIVES**

This is an information report. No alternatives are presented.

### FINANCIAL IMPLICATIONS

The budget for the regional Unflushables outreach program is \$190,000. These costs are included in the 2019 Liquid Waste Communications Program Budget managed by the External Relations Department.

### CONCLUSION

The COVID-19 health restrictions have necessitated a rethinking of campaign approaches and timing. The campaign was originally planned to start in May, but the current increased purchasing of wipesand likely flushing of wipes and other items - means that campaign messaging will be most effective now. While planned out-of-home elements (cinema, events, posters in washrooms and other locations, etc.) are currently less suitable options, there is an increased opportunity to reach people in their homes. Moving up the campaign's start date, focusing on TV/digital channels and highlighting wipes messaging allows the campaign to better reach residents and respond to current needs.

### **Attachment:**

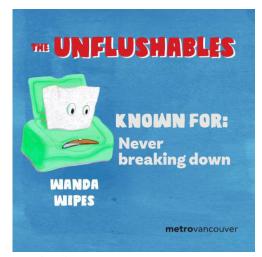
Sample of Campaign Materials

### Reference:

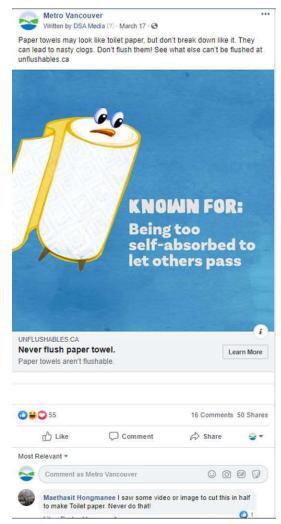
**Unflushables Campaign Web Page** 

38519250

### **Sample of Campaign Materials**



Social media image



Facebook post



Campaign poster



Wipes PSA



Wipes vs. Toilet Paper video on Instagram



Wipes vs. Toilet Paper video on Instagram



To: Zero Waste Committee

From: Lynne Vidler, Senior Project Engineer, Solid Waste Operations, Solid Waste Services

Date: May 8, 2020 Meeting Date: May 15, 2020

Subject: Solid Waste Services Capital Program Expenditure Update as of December 31, 2019

### **RECOMMENDATION**

That the Zero Waste Committee receive for information the report dated May 8, 2020, titled "Solid Waste Services Capital Program Expenditure Update as of December 31, 2019".

### **EXECUTIVE SUMMARY**

The capital expenditure reporting process, as approved by the Board, provides for regular status reports on capital expenditures three times per year. This is the year-end report for 2019 which includes both the overall capital program for Solid Waste Services with a multi-year view of capital projects and the actual capital spending for the 2019 fiscal year compared to the annual budget. In 2019, annual capital expenditures for Solid Waste Services were \$31.6 million compared to a capital budget of \$89.2 million. The underspend is primarily due to timing of construction expenditures for the Coquitlam Transfer Station replacement and Surrey Recycling and Waste Drop-Off projects, which are currently in progress. The replacement Coquitlam Transfer Station is expected to be completed in early 2021, and Surrey Recycling and Waste Drop-Off is expected to be completed in late 2021.

Any surplus resulting from a 2019 underspend is used to directly fund capital in 2020 and avoid future borrowing.

### **PURPOSE**

To report on the status of the Solid Waste Services' capital program and financial performance for the year ending December 31, 2019.

### **BACKGROUND**

The capital expenditure reporting process, as approved by the Board, provides for regular status reports on capital expenditures with interim reports sent to the Water, Liquid Waste, Zero Waste, and Performance and Audit Committees, in June/July and October/November, and a final year-end report to the Committees and the Boards in April of each year.

This is the third in a series of three reports for 2019 and looks at both the overall capital program for Solid Waste Services with a multi-year view of capital projects and the actual capital spending for the 2019 fiscal year compared to the annual budget.

### **2019 CAPITAL EXPENDITURES**

### **Solid Waste Capital Program Funding**

The capital spending for Solid Waste Services is funded through the Solid Waste Services operating budget by a combination of contribution to capital (pay-as-you-go funding) and debt service costs,

(principal and interest payments) which is generated annually from the regional ratepayers through tipping fees. As a result, the annual impact on the ratepayers is less than the level of budgeted capital expenditures.

### **Overall Capital Program**

The overall capital program for Solid Waste Services includes capital projects which require multiple years to complete. These projects are broken down into various phases such as project definition, pre-design, detailed design and construction. With the completion of each phase more information is learned for the appropriate costing of subsequent phases.

It is projected that the capital spending on several key Solid Waste Services capital projects ongoing in 2019 will require additional budget in the amount of approximately \$15.4 million. These budget changes are as a result of a combination of increased building and subdivision requirements (replacement Coquitlam Transfer Station) along with site specific issues related to developing the transfer station on a closed landfill, and updated cost estimates with the completion of the detailed design phase (Surrey Recycling and Waste Drop-Off). Updated budgets addressing these issues were approved by the Board through the annual financial planning process in October 2019.

Table 1 in Attachment 1 provides a summary of Solid Waste Services capital expenditures for both ongoing and completed projects for the approved 5-year Capital Budget. Completed projects include a summary of actual spending compared to the Board approved spending limits while the ongoing projects include a summary of projected spending to completion compared to Board approved spending limits. With the rare exception, projects tend to complete with actual spending below the approved limits predominantly due to savings on budgeted contingency amounts. The majority of projects that were not started in 2019 were not scheduled to begin until 2020 or later.

Attachment 2 provides the details behind the summary information including specific capital projects, summary financial information and notes where required. Attachment 3 provides additional project status information of some of the key projects.

### **2019 Capital Program Summary**

The Metro Vancouver financial planning process includes Board approval of both an annual Operating Budget (operations, contribution to capital and debt service) and an annual capital budget for the planned capital infrastructure projects. The annual Capital Budget comprises the projected spending for a list of capital projects either continuing or to be started within the calendar year.

In 2019, capital expenditures for Solid Waste Services were \$31.6 million compared to an annual capital budget of \$89.2 million, representing an overall expenditure rate of 35.4%. The underspend is primarily due to timing of expenditures for the Coquitlam Transfer Station replacement and the Surrey Recycling and Waste Drop-Off projects. Construction is in progress for the Coquitlam Transfer Station replacement and completion is expected in early 2021. The Board approved the construction contract award for Surrey Recycling and Waste Drop-Off at the February 28, 2020 meeting and with completion anticipated in late 2021.

Table 2 in Attachment 1 provides a summary of the 2019 actual capital spending compared to the Board-approved Capital Budget.

### **ALTERNATIVES**

This is an information report. No alternatives are presented.

### **FINANCIAL IMPLICATIONS**

Capital expenditures are funded internally (pay-as-you-go) and through debt financing. As capital expenditures are incurred, short term financing is secured and converted twice per year to long term debt through the Municipal Finance Authority. If capital expenditures are less than budgeted for the year, this surplus, per policy, will be used in future years to fund capital and avoid debt.

### **CONCLUSION**

This is the third in a series of three capital expenditure progress reports for 2019. Solid Waste Services is underspent in its annual Capital Budget by \$57.6 million. The variance is primarily due to timing of construction expenditures for projects in progress.

Although the 2019 Solid Waste Services Capital Budget shows a year-end underspend, the variance is a result of cash flow timing. It is projected that in aggregate, ongoing capital projects are monitored to ensure they remain within total project budgets. Any surplus resulting from a 2019 underspend is used to directly fund capital in 2020 and avoid future borrowing

### **Attachments** (*Orbit # 38695552*)

- 1. Capital Expenditure Summary Solid Waste Services
- 2. Detailed Solid Waste Services Capital Expenditure Summary
- 3. Solid Waste Services Capital Project Status Information

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### **Metro Vancouver**

Capital Expenditure Summary Solid Waste Services As at December 31, 2019

Table 1 – Ongoing and Completed Project Summary

	Total Projected to Completion	Total Budget	Projected Variance		
Solid Waste Services					
Ongoing	\$ 208,153,000	\$ 194,400,000	\$	(13,753,000)	
Completed	-	-		-	
Not Started	37,150,000	37,150,000		-	
	\$ 245,303,000	\$ 231,550,000	\$	(13,753,000)	

Table 2 – 2019 Capital Spending Summary

	2019	Budget	Actual Expenditures		
Solid Waste Services					
Infrastructure Opportunity Program	\$	210,000	\$	-	
Landfills		9,400,000		4,029,855	
Transfer Station System		65,000,000		24,151,218	
Waste to Energy Facility		14,600,000		3,386,013	
	Ś	\$ 89.210.000		31.567.085	

35.4%

# Metro Vancouver Solid Waste Services Capital Expenditures Summary As of December 31, 2019

As of December 31, 2019	Г		Lifetime							
	L	Total	Total		Lifetiffe	Projected			Project	
		Project	Expenditures	Remaining	Projected	Remaining	Percent		on	
Project Name	Project Location	Budget	to Date	Budget	Expenditures	Budget	Complete	Status	Schedule? No	te Comments
1 Toject Name	1 Toject Location	Duuget	to Date	Duaget	Experiartares	Duaget	Complete	Status	Schedule: 140	Commence
Infrastructure Opportunity Program										
WTE Facility District Heating Opportunities	Burnaby	2,300,000	-	2,300,000	2,300,000	-	0%	Not Started	l N	
, 5 11	-	2,300,000	-	2,300,000	2,300,000	-	• •			
Landfills										
Coquitlam Landfill Closure	Coquitlam	5,000,000	1,828,442	3,171,558	5,000,000	-	37%	Ongoing	Υ	
Coquitlam Landfill East Closure	Coquitlam	5,000,000		5,000,000	5,000,000	-	0%	Not Started	l N	Dependent on area development
Coquitlam Landfill Fly Ash Cell 2 Closure Final Cover	Coquitlam	3,200,000		2,056,975	3,200,000	-	36%	Ongoing	Υ	
Coquitlam Landfill Gas Collection Upgrades Phase II	Coquitlam	3,300,000		2,299,853	3,300,000	-	30%	Ongoing	Υ	
Coquitlam Landfill Pump Station Upgrade	Coquitlam	600,000		584,024	600,000	-	3%	Ongoing	Υ	
Coquitlam Landfill: Leachate Collection System Grade Realignment	Coquitlam	1,000,000		1,000,000	1,000,000	-	0%	Not Started		Coordinating with other Coquitlam Landfill work.
	-	18,100,000	3,987,590	14,112,410	18,100,000		-			
	-	10,100,000	3,307,330	14,112,410	13,100,000		-			
Transfer Station System										
Coquitlam Transfer Station Compactor Replacement	Coquitlam	2,000,000		2,000,000	2,000,000	-	0%	Ongoing	Υ	
Coquitlam Transfer Station Replacement	Coquitlam	70,200,000	28,242,319	41,957,681	77,600,000	(7,400,000)	40%	Ongoing	N	Construction timing extended. Budget increase approved to address building permit and subdivision requirements.
Maple Ridge Transfer Station Upgrades	Maple Ridge	2,000,000	-	2,000,000	2,000,000	-	0%	Not Started	l N	·
North Shore Transfer Station Compactor Replacement	Dist of North Van	2,000,000		2,000,000	2,000,000	_	0%	Not Started		
Surrey Recycling and Waste Drop-Off	Surrey	42,300,000		39,228,890	50,300,000	(8,000,000)	7%	Ongoing	Y	Budget increase approved based on final class A cos
, , , ,	Surrey								·	estimate
Surrey Transfer Station Building Upgrades	Surrey _	1,000,000		1,000,000	1 <u>B</u> , <b>4</b> ,90,0,000		0%	Not Started	l Y	
	-	119,500,000	62,626,858	56,873,142		(15,400,000)	-			
Waste to Energy Facility										
Acid Gas Reduction	Burnaby	47,000,000	450,000	46,550,000	47,000,000	-	1%	Ongoing	N	Operational Certificate ammendment pending
Biosolids Processing	Burnaby	500,000	-	500,000	500,000	-	0%	Ongoing	Υ	
Bottom Ash Dischargers / Conveyors	Burnaby	1,700,000	1,404,465	295,535	1,127,000	573,000	95%	Ongoing	Υ (1	)
Feed Hopper/Chute	Burnaby	2,600,000		2,600,000	2,600,000	, -	0%	Ongoing	Υ	,
Feedwater Pump Replacement	Burnaby	1,000,000		757,444	284,000	716,000	90%	Ongoing	Υ (1	.)
Furnace Liner Upgrade	Burnaby	2,500,000		460,117	2,158,000	342,000	99%	Ongoing	Υ (1	
Maintenance Infrastructure Allowance	Burnaby	12,850,000		12,850,000	12,850,000	-	0%	Not Started		,
Primary Economizer Replacement	Burnaby	5,000,000		5,000,000	5,000,000	-	0%	Not Started		
Refuse Crane	Burnaby	7,000,000		6,926,461	7,000,000	-	1%	Ongoing	Ϋ́	
Second Pass Superheater Replacement	Burnaby	5,500,000		3,159,184	5,484,000	16,000	66%	Ongoing	Y (1	1
Secondary Economizers Replacement	Burnaby	6,000,000		6,000,000	6,000,000	10,000	0%	Not Started	. (-	1
Secondary Leonomizers Replacement		91,650,000		85,098,741	90,003,000	1,647,000	_ 0/0	NOT STATEG	ı	
	<del>-</del>					-	-			
Grand Total Solid Waste Services	=	231,550,000	41,852,278	189,697,722	245,303,000	(13,753,000)	=			

### Notes:

<sup>(1)</sup> Contractor authorized expenditure amount

# Capital Project Status Information – Solid Waste Services December 31, 2019

Major GVS&DD solid waste capital projects are proceeding on schedule and within budget. Project details are highlighted below:

### <u>Transfer Station Program</u>

- The Coquitlam Transfer Station replacement project construction started in May 2018 with site grading works. The full construction contract was awarded in December 2018.
   Construction is currently underway with anticipated commissioning of the new transfer station scheduled for early 2021.
- The Surrey Recycling and Waste Drop-Off Facility project received rezoning and a development permit in late 2018. The project was issued for construction RFP in October 2019 and closed in December 2019. General contractor submissions are currently being evaluated. A building permit was granted by the City of Surrey in November 2019. Construction is anticipated to start in April of 2020.

### Landfills Program

• Construction of Phase 2 landfill gas collection system upgrades for the new Coquitlam Transfer Station are in progress. The system has been designed as a combination of an active system at buildings and a passive system over the remainder of the transfer station site. Installation of the active gas wells was completed in 2019. Installation of the passive system along with laterals and header pipes for the active system is anticipated to be completed in late 2020. A new control room at the blower flare station is required for the existing and future system upgrade. Design of the new control room is complete and construction is anticipated in Q3 2020.

### Waste-to-Energy Program

- The refuse crane replacement project commenced with preliminary engineering on February 14, 2019. The preliminary engineering report identified funding gaps which will be addressed through the 2021 budget cycle.
- The second pass superheater replacement project started on April 11, 2019. The replacement tubing has been received and installed on two boilers during the 2019 fall outages. Installation will occur on the final boiler during the spring outage in April 2020.
- The feedwater pump replacement project commenced on May 3, 2019. The pump was installed in November 2019 and commissioned in January 2020. Covanta is working with the pump manufacturer to bring the pump capacity up to full specifications.
- The feed hopper / chute replacement project started on October 28, 2019. Quotations have been requested from vendors with the plan to install two units in fall 2020 and one unit in Spring 2021.
- The biosolids processing preliminary design project started on October 28, 2019. Preliminary design work will continue through 2020.



To: Zero Waste Committee

From: Larina Lopez, Division Manager, Corporate Communications, External Relations

Date: May 6, 2020 Meeting Date: May 15, 2020

Subject: 2019 and 2020 Food Scraps Recycling Campaign Results

### RECOMMENDATION

That the Zero Waste Committee receive for information the report dated May 6, 2020, titled "2019 and 2020 Food Scraps Recycling Campaign Results."

### **EXECUTIVE SUMMARY**

The food scraps recycling campaign continued in fall 2019 and winter 2020. The primary objective was to increase diversion of organic waste into the green bin. The food faces creative platform was used, with some updates, and several new tactics added to help people understand why we compost and alleviate confusion. The media strategy included both broad reach and targeted digital tactics, and delivered over 75 million impressions. Overall, 91% of residents now say they typically dispose of organic waste into the green bin. 30% of residents recall seeing or hearing the campaign advertising, which is the highest awareness level achieved since 2014. 36% of residents who saw the advertising message shared it with others.

### **PURPOSE**

To update the Committee on the results of the regional 2019 and 2020 food scraps recycling campaign, "Food Scraps Aren't Garbage."

### **BACKGROUND**

The Food Scraps Recycling (FSR) campaign supports the waste reduction objectives in the *Integrated Solid Waste and Resource Management Plan.* 2020 marked the seventh year of the FSR campaign. This report provides an update on the results of the 2019 and 2020 FSR campaigns as identified in the 2020 Zero Waste Committee Work Plan.

## 2019 AND 2020 REGIONAL "FOOD SCRAPS RECYCLING" CAMPAIGN Campaign Timing

This report covers two activations of the FSR campaign: Fall 2019 (September 9 to October 20) and Winter 2020 (January 6 to February 16). The FSR campaign has traditionally been in market in the fall each year. However, Metro Vancouver tends to run several other campaigns during this time, so the FSR campaign was moved to winter in 2020 to reduce overlap and improve effectiveness.

### **Campaign Approach**

According to 2018 waste composition data, people were still disposing of basic organics, like fruits and vegetables, in the garbage. So, the 2019/2020 campaign took a back-to-basics approach. The campaign objective was, first, to increase diversion of organic waste into the green bin, and second to reduce plastic bag contamination. The audience was all Metro Vancouver residents.

The campaign once again leveraged the googly-eyed food face characters. However, to provide better clarity to the campaign with respect to what is avoidable food waste, i.e., food that could have been consumed and likely should not go in the garbage as opposed to food scraps, the key message was changed from "Food Isn't Garbage" to "Food Scraps Aren't Garbage." The suite of characters was updated to show food scraps, and not avoidable food waste. So, for example, the half-eaten bagel retired, and an apple core and onion peel were added. These changes made the campaign feel inherently less wasteful (Attachment 1) and more supportive of the prevention of food waste. Developing new characters created opportunity to animate them. Several videos were made for TV (Reference 1) and social media (References 2 and 3).

Focus testing had revealed the need to provide specific information. The more people know, the more questions they have. (E.g. Paper plates can go in the green bin? What about shiny ones?) Several tactics were introduced in response to this need. A whiteboard-style explainer video (Reference 4) illustrated why we compost. An interactive "Green Bin Q&A" was created, in which Metro Vancouver's experts answered questions via Instagram Stories. (Please see below for details on this tactic.) Finally, infographic images addressing common points of confusion were created and used in the 2020 campaign (Attachment 2).

A concurrent but smaller promotion focusing on plastic bag contamination ran as a secondary message (Attachment 3). Similar to 2018, ads were targeted to people who have previously searched for info about plastic bag composting.

### Website

The campaign website (Reference 5) was refreshed to ensure it was accurate and accessible. New content was added to respond to residents' needs, as below.

- What Goes in the Green Bin a list of what goes in, and what should stay out.
- Tips for Green-Binning tips and ideas to make composting easier.
- Municipal Food Scraps Programs direct links to each municipality's food scraps recycling webpage and contact information (fact-checked by municipal member staff).
- Plastics in the Green Bin explains the issue of plastics in the green bin, including those labelled "biodegradable" or "compostable."

### **Media Strategy**

The media buy leveraged both broad reach and targeted tactics, including TV PSA (geo-targeted; 14 networks), transit shelter ads, bus sides, digital banner ads, Google Search, YouTube, social media (Facebook, Instagram, and Twitter), interactive Instagram Stories, and native content articles (in "Vancouver Is Awesome" and "Daily Hive").

### **Green Bin Q&A**

The "Green Bin Q&A" addressed residents' need for specific information. It featured helpful experts from Metro Vancouver's Solid Waste Services department responding directly to questions from residents (see an example in Attachment 4).

Each week, questions were collected via an interactive form on Metro Vancouver's Instagram Story. On Wednesday afternoons, Metro Vancouver's experts shot short answer videos. The videos were uploaded to Instagram that same afternoon. The user who had sent in a question would get a

notification when they received a reply, and the videos were also seen organically by Metro Vancouver's followers (the total organic reach was 52,590). Finally, the videos were promoted widely through a paid placement on Instagram Stories.

Over the two campaign flights, 181 questions were asked by residents. 57 were answered on video, and the rest were answered via direct message. The top three most common question topics follow:

- Single-use takeout items (e.g. containers, cups, cutlery): 34
- Plastics labelled "compostable" or "biodegradable" (e.g. bags): 26
- Body stuff (e.g. hair, nail clippings, teeth): 19

Instagram Stories are ephemeral, with content disappearing after 24 hours. This creates a sense of urgency to view them. The Q&A videos have been saved to an Instagram Highlight (Reference 6).

### **Engagement of Metro Vancouver Members**

Campaign materials were made available to all Metro Vancouver members, including social media content and co-branded assets like transit shelter ads and digital message boards. Several members used the materials on their social media channels and throughout their municipalities.

### Use by Other Municipalities and Like-Minded Organizations

The FSR campaign was used by the Town of Canmore and the Northamptonshire Waste Partnership (UK) in 2019. The City of Calgary is exploring using the campaign in 2020.

### **Results**

### Website Traffic

- The campaign webpages had 20,019 page views in the 2019 flight (477/day), and 9,301 in 2020 (221/day). Engagement was strong, with high average time on page and low bounce rates.
- Besides the landing page, the most visited pages were "What Goes in the Green Bin," "Tips for Green Binning" and "Plastics in the Green Bin." This indicates that the new content was relevant and useful to the audience.

Post-Campaign Survey: Recall and Behaviour Change Assessment

- A post-campaign survey targeting all Metro Vancouver residents ran in February 2020.
- Overall, 91% of all residents say they typically dispose of at least one type of organic waste into the green bin. This metric was 80% in 2016. (In 2017 and 2018, only multi-family residents were surveyed; their reported green bin usage was 77% and 83% respectively.)
- 30% of residents recall seeing or hearing the campaign advertising. This is the highest awareness level achieved since 2014, indicating that the strategy and tactics were effective.
- 36% of those who saw the advertising talked about it with others.

### Media Performance

- Across the two campaign activations, there were over 75 million impressions delivered.
- The broad traditional tactics delivered 52 million impressions. Significantly, geo-targeted TV PSAs were excellent value, with over 20,000 airings in 2019.
- The targeted digital tactics delivered 23 million impressions with a reach of 5.8 million.
- There were 1.8 million video views on social media.

These results, along with the data that shows organics diversion has increased significantly in recent years, with a current diversion rate of 68% and over 430,000 tonnes of organics recycled in 2018, indicates the significance of ensuring green bin messages and campaigns like this are consistently shared with residents.

### Social Media Engagement

- The campaign performed well on paid and organic social media, with over 16,000 engagements (likes, comments, shares) across Facebook, Twitter, and Instagram.
- The most commented-on post was the whiteboard-style explainer video on Instagram, with many users saying that they had learned something new or asking follow-up questions.
- The infographic content resonated strongly with the audience, shown by high reach organic reach and number of shares (10,500 reach and 74 shares on one post). (See Attachment 2.)

### Plans for 2021 Regional Campaign

The campaign will run again in early 2021. It will likely continue to use the existing creative platform, as performance is strong. The target audience and key messages are to be determined, but will be based on insights from 2020's campaign and data from Solid Waste Services.

### **ALTERNATIVES**

This is an information report. No alternatives are presented.

### FINANCIAL IMPLICATIONS

The 2019 and 2020 FSR campaigns each had a budget of \$100,000 supported under the Zero Waste Communications Program of the 2019 and 2020 General Government budgets.

### CONCLUSION

The 2019 and 2020 "Food Scraps Aren't Garbage" campaigns performed strongly, contributing to an increase in reported green bin use among residents in the region (now at 91%). While adoption of the program is high, updates were made to the well-known googly-eyed food face characters based on research findings that found some confusion around what is avoidable food waste as opposed to food scraps. New tactics were added and the website was updated, including information to help people better understand why we compost, alleviating confusion and providing the more specific info that residents seek. Analyzing social media data (e.g. from the "Green Bin Q&A") illustrated what the pain points are for residents. These learnings, among others, will inform future iterations of the FSR campaign.

### **Attachments:**

- 1. Sample Creative
- 2. Infographic Images
- 3. Plastic Bag Creative
- 4. Green Bin Q&A Example

### **References:**

- 1. "Food Scraps Aren't Garbage Intervention" 30-second Video
- 2. "Items You Didn't Know You Could Compost Food Scraps Recycling" Sample 15-second Video
- 3. <u>"Food Soiled Paper Food Scraps Recycling" Sample 6-second Video</u>

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- 4. <u>"Food Scraps Aren't Garbage Explainer" Video</u>
- 5. Food Scraps Recycling Campaign Website
- 6. "Green Bin Q&A," Instagram Story Highlight

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### **Sample Creative**

### Posters (All)









Apple



Red Pepper



Eggshell



Napkin



Grease



Pineapple



Onion Peel



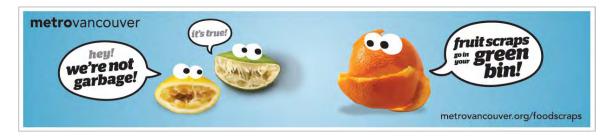
Chicken Bone

Chopsticks



### **Bus Sides**





Digital Banner Ads (Animated)





Frame 1 Frame 2



### Social Media Ads



### Facebook



Instagram

# Metro Vancouver Sponsored • ③ Food scraps aren't garbage! They belong in your green bin. Click for tips to make green-binning easier. METROVANCOUVER.ORG/FOODSCRAPS Food Scraps Aren't Garbage Get green bin tips.

### Facebook



Instagram

### Search Ads

### What Goes in the Green Bin? | Metro Vancouver | Green Bin Tips

Ad www.metrovancouver.org/ ▼

Don't be confused by composting. Find out what goes in your green bin. Food-soiled paper can help prevent odours.

### Food Scraps Aren't Garbage | Metro Vancouver

Ad www.metrovancouver.org/ ▼

What waste should go in the green bin? Learn more about what can be collected. Composting doesn't have to be a chore.

### Smelly green bin? | Metro Vancouver

Ad www.metrovancouver.org/ ▼

Food-soiled paper can help prevent odours. Get more storage tips. Don't be confused by composting. Find out what goes in your green bin.

Composting 101 Food Scraps Recycling - Make It Easy - Keep It Clean

### **Infographic Images**

### Social Media Images



### **Facebook Post**



### **Plastic Bag Creative**

Digital Banner Ad (Animated)







Frame 1

Frame 2

Frame 3





Frame 4

Frame 5

### **Green Bin Q&A Example**



Tue: Introduction



Tue: Question Prompt



Wed: Introduce Experts



Wed: Question



Wed: Answer (Video)



Wed: Close / Call to Action