

## Single-Use Plastics

<b>Date</b>	April 21, 2021
<b>To</b>	Operations and Community Services Committee
<b>From</b>	Citizen Services
<b>Service Area</b>	Water, Waste & Environment
<b>Item No.</b>	OCS21-13

### RECOMMENDATION

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The Operations and Community Services Committee recommends that City Council:

1. Approve Option 1, which continues to implement the Council-approved waste reduction and diversion initiatives outlined in Waste Plan Regina.
2. Remove MN19-6 and MN19-18 from the List of Outstanding Items for City Council.
3. Approve this recommendation at its April 28, 2021 meeting.

### ISSUE

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This report is a response to MN19-18 and MN19-6, which requested that:

1. City of Regina (City) Administration bring to Council, by the end of the first quarter of 2020, a report outlining the environmental impact for Regina of the use of single-use plastics and without limiting the generality of the foregoing, of the use of plastic checkout bags, plastic straws and polystyrene drinking cups, food takeout containers and microbeads.
2. In preparation of the said report, City Administration consider measures being taken by other jurisdictions and consult with Regina residents and interested stakeholders with respect to this issue.
3. That said report set out options for limiting the use of single-use plastics in the city together with the City Administration's recommendations.

To address the motion, City Administration conducted thorough jurisdictional scans, research, academic literature reviews and extensive engagement with interested stakeholders, including approximately 10,000 residents and businesses, as well as industry experts which is detailed in appendices A-1, B-1, B-2, C-1, D-1, D-2 and D-3.

On March 18, 2020 the report PWI 20-3 Single-Use Plastics was scheduled to be heard; however, the meeting was cancelled as a result of COVID. On May 19, 2020 the PWI Committee withdrew report PWI 20-3 Single-Use Plastics; however, the motions were not removed from the List of Outstanding Items for City Council.

On July 29, 2020, Council approved the implementation of *The Plastic Checkout Bag Ban Bylaw, 2020*, Bylaw No. 2020-49.

This report reviews options to limit single-use plastics as requested in the motions. This report examines the options against the following objectives:

Objective 1: Maximize environmental benefit considering the net decrease in plastic waste and the impacts associated with potential replacement products.

Objective 2: Maximize return on investment by ensuring that any financial investment in an option targets the greatest environmental return for the investment.

Objective 3: Minimize duplication of efforts between levels of government.

Objective 4: Minimize inconvenience and disruption to residents and businesses.

Objective 5: Respond to public concerns about single-use plastic pollution.

## **IMPACTS**

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### **Financial Impact**

There are no financial implications for the recommended option, Option 1, which focuses on delivering the initiatives outlined in Waste Plan Regina (WPR). Funding for these initiatives is considered in existing budgets and will be funded through the Solid Waste Reserve.

### **Environmental Impact**

Overall, single-use plastics account for about one per cent of the residential waste in Regina. Approximately five per cent of all the recyclables collected through the City's programs are plastic.

City Council set a community goal for the City of achieving net zero emissions and sourcing of net zero renewable energy by 2050. In support of this goal, City Council asked Administration to provide energy and greenhouse gas implications of recommendations so

that Council can evaluate the climate impacts of its decisions. While reducing single-use plastics is an effective waste reduction tactic, the manufacturing of alternative products can produce more greenhouse gas emissions.

For example, manufacturing a single-use plastic bag is less energy intensive and creates less carbon emissions per unit than paper or reusable cotton bags. Paper bags are typically only used once and have a greenhouse gas footprint approximately four times higher than single-use plastics. Individual cotton bags produce, on average, 170 times the greenhouse gas emissions of single-use plastic bags but can be reused many times. As long as reusable bags are used more than 170 times, it will result in lower greenhouse gas emissions, which means residents should limit the number of reusable bags, or other single-use plastic alternatives they own, in order to maximize reuse.

### **Policy/Strategic Impact**

Advancing waste reduction initiatives aligns with the goals outlined in WPR. Additionally, the City is committed to priorities outlined in *Design Regina: The Official Community Plan (OCP)* to promote conservation, environmental stewardship and sustainability through the adoption of leading practices in waste management.

Through continued focus on implementation of WPR (Option 1), the City can work toward reduction of all disposable products, including plastics. The initiatives in WPR are expected to move the City closer to Council's goal of 65 per cent diversion of residential waste. Moreover, WPR's planned initiatives, such as the implementation of a residential food and yard waste service and development of reduction strategies for industrial, commercial, institutional, construction and demolition waste streams, will have a broader environmental impact because these efforts will be directed to reduction or elimination of many products, not just plastic. The City's considerable public outreach and education programming has already shifted towards prioritizing waste prevention and reduction over disposal solutions.

## **OTHER OPTIONS**

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**Option 2: Mandatory fees for single-use items. Introduce a bylaw which requires retailers and other businesses to charge a fee for single-use items.**

Across Canada, fees for single-use items have been used mainly for checkout bags. No other fees were noted across the researched municipalities.

Fees for plastic checkout bags have been driven primarily by the private sector and evidence suggests they are effective at reducing customer demand. Large retailers that have voluntarily instituted bag fees as a reduction strategy report substantial reductions in plastic checkout bag usage. Given no other municipalities implemented fees for other single-use items, this option examined enforcing a fee for checkout bags. Bag fee bylaws are rare in Canada (see Appendix D-2).

## Evaluation

Objective 1: This option would be expected to provide a more immediate improvement in reduction of single-use plastics entering the City's waste stream but would not eliminate banned single-use items in the landfill because the Fleet Street landfill serves much of southern Saskatchewan.

Objective 2: A fee bylaw for one or multiple single-use items would result in costs to manage and enforce the fee while not substantially reducing the waste going to the landfill. This option would require initial funding for an implementation phase, including communication and education for retailers and residents, and the development of regulatory and administrative processes to manage enforcement. Ongoing annual funding would be required for enforcement.

Objective 3: The provincial government is in the best position to legislate a bag fee that works for consumers and businesses. Deposit programs and eco-fee programs are legislated by the provincial government through *Extended Producer Responsibility/Product Stewardship legislation*. Such programs have been demonstrated to work effectively, like the SARCAN beverage container deposit program. See Appendix A-1. In addition, a bag fee may be rendered redundant by federal restrictions that will be announced in late 2021.

Objective 4: A fee imposes an additional expense on residents who may not understand where the revenue goes. This may appear to residents to be a "money grab". It also results in an administrative burden for both the City and retailers. Mandatory fees can create administrative barriers, especially for small businesses. See Appendix C-1.

Objective 5: This option would take specific action to reduce single-use plastic pollution but would have less impact than a direct ban.

### **Option 3: Ban specific single-use plastics (Styrofoam containers, plastic checkout bags or plastic straws) in Regina at the municipal level via a municipal bylaw with provisions for enforcement.**

A few larger and a number of smaller municipalities have implemented single-use plastic bans largely targeted at checkout bags, with a smaller number focused on other single-use plastics such as straws. Recently, some larger retailers, such as Sobeys Inc., have eliminated the option of plastic checkout bags, encouraging reusable bags and offering paper bags for a fee as an alternative. This option examined instituting a ban on plastic checkout bags as it is the most common type of ban in Canada; however, the analysis is generally applicable to all single-use plastics as outlined above.

## Evaluation

Objective 1: As with Option 2, this option would provide a more immediate improvement in reduction of single-use plastics entering the City's waste stream; however, the landfill will still receive these items because the landfill serves much of southern Saskatchewan. It is expected to reduce litter in the City by reducing the single-use items. Switching from single-use plastics to other single-use items may not result in any environmental benefit.

Objective 2: This option would result in costs to manage and enforce a ban while not substantially reducing the waste going to the landfill. This option would require initial funding for an implementation phase, including communication and education for retailers and residents and the development of regulatory and administrative processes to manage enforcement. Ongoing annual funding would be required for enforcement.

Objective 3: The federal government is in the best position to legislate a single-use plastic ban that works for consumers and businesses. The federal government has indicated its intention of implementing a national ban on harmful single-use plastics as early as 2021, potentially rendering a municipal ban redundant.

Objective 4: Bans implemented by individual municipalities can result in a patchwork of regulations that are challenging and costly for retailers to manage. Standardization of legislation across the country/province would prevent the development of an uncoordinated patchwork of different municipal bans spread around the province, each with its own definitions, rules, and exemptions. This can be confusing to customers and onerous for retailers that operate in multiple jurisdictions. (See Appendix C-1.)

In addition, bans on certain single-use items may create economic barriers for small businesses by imposing the requirement to find acceptable alternatives. This additional cost and effort must be absorbed by the small business and/or passed on to the customer, whereas large businesses can more easily source low cost alternatives.

Objective 5: This option directly responds to the public concerns about single-use plastic pollution by directly addressing one source. Seventy-seven per cent of respondents in the City's online survey supported a ban on check-out bags. (See Appendices B-1 and B-2.)

## **COMMUNICATIONS**

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City Administration will develop a communication strategy to inform and educate citizens and support the implementation of any regulations resulting from the recommendations of this report.

## **DISCUSSION**

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### *Definitions*

There is no general agreement on a definition of single-use plastic. For the purposes of this report, City Administration has focused on plastic checkout bags, plastic straws, polystyrene drinking cups, food take-out containers and microbeads. Microbeads are tiny synthetic polymer particles which were used in personal care products. Toiletries that rinse off and wash down household drains were especially likely to contribute to plastic pollution in oceans, rivers and lakes. Several other common plastic items that meet the basic definition of single-use plastics are not generally the focus of reduction efforts, such as syringes, balloons or cigarette filters. However, at a basic level, almost all plastics in Canada are single-use plastics because Canada recycles only nine per cent of its plastics. The other 91

per cent are used and then landfilled, incinerated or littered. The vast majority of plastics are thus rendered single-use plastics, whether they are recyclable or not.

#### *Ongoing Federal/Provincial Work on Single-Use Plastics*

The federal government, through the *Canada-wide Action Plan on Zero Plastic Waste* policy, has confirmed its commitment to ban or restrict certain six harmful single-use plastics (plastic check-out bags, stir sticks, six-pack rings, cutlery, straws and food service ware made from problematic plastics) by the end of 2021.

The January 31, 2020 release of the *Draft Science Assessment of Plastic Pollution* document reaffirmed this commitment. On October 7, 2020, the federal government announced a ban on six single-use plastics across Canada using the same approach used to ban microbeads.

The Province of Saskatchewan's recently released *Saskatchewan Solid Waste Management Strategy* in which it cites this upcoming federal plan as a basis for the provincial strategy. Additionally, the Province of Saskatchewan could coordinate efforts with the federal government to reduce plastic use and/or introduce legislation to make the producers and first sellers of these items responsible stewards. (See Appendix A-1.)

#### **Recommended Option**

**Option 1: Continue to focus on delivering the initiatives outlined in WPR, support the federal government's implementation of a national ban on harmful single-use plastics anticipated in late 2021 and continue educational campaigns to reduce the use of single-use plastics.**

This suite of projects and services is intended to advance the City's overall waste management, including reduction of single-use plastics. In 2020, the City launched a waste reduction campaign asking residents to "Choose to Reduce". The goal of the campaign was to improve public awareness on the importance and benefits of reducing the amount of waste coming into and out of the home. The three single-use items featured in the campaign were plastic bags, coffee cups and water bottles.

#### **Evaluation**

Objective 1: This option does not provide an immediate improvement in the reduction of single-use plastics; however, the recommended option does encourage the public to use less single-use plastic and the federal ban could make a significant impact.

Instead, this option focuses on a holistic approach to waste management, working to educate and inform residents to reduce their total waste generation.

It is useful to consider the problem of single-use plastics in relation to other parts of the waste stream in Regina. Single-use plastics account for approximately one per cent of the residential waste stream and are not easily eliminated by a municipal ban alone.

The Fleet Street landfill serves much of southern Saskatchewan and would continue to receive single-use plastics from the region when Regina implements a ban.

By contrast, organic material accounts for approximately 50 per cent of the waste in the average residential garbage cart in Regina. Half the residential waste stream is compostable and easily divertible via a curbside food and yard waste program. WPR has prioritized development the food and yard waste curbside service, which is in its initial pilot phase in Regina.

Similarly, industrial, commercial, institutional, construction and demolition (ICI, C&D) waste account for approximately 70 per cent of total waste entering the landfill. The WPR identifies waste diversion service development for ICI, C&D as a priority for 2020 - 2023.

Objective 2: This option continues to prioritize the projects and services that provide the best environmental return on investment by focusing on the areas that create the largest waste – organic material and ICI and C&D material. By focusing on changing resident habits to reduce total waste, the City has the greatest opportunity to influence behavioral changes and minimize the problem of replacing one single-use product with another. By focusing on ICI and C&D the City can have an impact on the sector that most impacts the landfill (i.e. 70 per cent).

After investigating waste management practices in other Canadian municipalities, in general, municipalities consider bylaw restrictions on single-use plastics once they have completed work on a number of other larger scale, waste related actions such as introducing curbside collection of food and yard waste, landfill bans on food or recyclables, and mandating diversion for IC&I, C&D waste. Working on larger scale waste issues first allows for maximum environmental impact and the best return on investment. For example, while replacing plastics with other single-use products like paper bags is not environmentally desirable, paper bags can be composted, reducing their negative impact. Requiring businesses to provide compostable alternatives is of almost no environmental value until the City's food and yard waste service is in place. The City has planned for full implementation of this service for 2023.

Objective 3: This option provides the best opportunity to maximize environmental benefit by balancing and coordinating with the activities of different levels of government. The federal government is working to have new regulations in place as early as 2021, where such regulations are supported by scientific evidence and warranted to show a benefit to the environment. In the January 31, 2020 release of the *Draft Science Assessment of Plastic Pollution* document the federal government reaffirmed its commitment. On October 7, 2020 the federal government announced a ban on six single-use items (plastic checkout bags, stir sticks, six pack rings, straws, cutlery and food service made from problematic plastics). The federal government has indicated it expects to finalize regulations banning these items in 2021.

The City will continue to implement Council-approved initiatives in WPR. This work includes monitoring any changes in the physical and legislative environment and responding to anticipated federal/provincial restrictions.

As indicated in the City's public engagement survey results from October 2019, 72 per cent of respondents feel that all three levels of government (municipal, provincial, and federal) should take action to reduce single-use plastics. (See Appendices B-1 and B-2 for the survey results.) Typically, the higher the level of government that responds legislatively to this issue, the better the environmental outcome because the federal government has the ability to control production, imports, exports, and sales of these items which is a much broader scope of control than can be exercised by a municipality. Similarly, the higher the level of government that responds legislatively to this issue, the less disruption to the supply chain and consumer because the requirements will apply nationally and not vary municipality to municipality.

The issue of plastic microbeads provides an example of the effectiveness of the federal power in regulating in the single-use plastic realm. In July 2018, the federal government addressed the problem of microbeads under federal regulations, banning their use in toiletries and prohibiting the manufacture, import, and sale of all toiletries containing microbeads. Most consumers are not even aware these single-use plastic products have been successfully eliminated from the Canadian supply chain and products because action by the highest level of government resulted in the best possible environmental outcome with no disruption to the consumer.

Meaningfully addressing the problem of single-use plastics requires systemic change, which can best be achieved by cooperation with higher levels of government.

Objective 4: As identified above, federal restrictions on single-use plastics would minimize disruption to the supply chain and consumers. Banning at the federal level, as early as 2021, will allow for minimal disruption to the market and end user and maximum environmental benefit. Meanwhile, focusing the City's efforts on advancing the suite of services and initiatives outlined in WPR will allow the City to reduce, measurably, the use and impact of all waste in Regina, including single-use plastics.

Objective 5: While this option includes reduction of single-use plastics in its overall reduction approach, it does not directly and immediately address the public interest in more aggressively reducing single-use plastic pollution.

Both the ability and willingness for action at the level of the consumer are limited. Although nearly 10,000 people responded to the online survey on single-use plastics and 82 per cent of the residents consider reducing single-use plastics to be "important" or "very important", only 53 per cent of the same respondents say that they "rarely" or "never" use a to-go cup when purchasing beverages. This suggests that the behavioral changes required to eliminate single-use plastics are not yet in place among Regina residents. If polystyrene cups and takeout containers are merely replaced with other non-recyclable mixed materials

(typically made of paper and plastic), the basic problem of using disposable items rather than reusable items is not resolved. These materials often weigh more, cost more, and must also be landfilled in the end. Continued communication and education efforts are required to influence behavioral change.

Implementing the waste initiatives outlined in WPR can effectively reduce not only plastic waste, but the overall waste footprint of the city of Regina.

## **DECISION HISTORY**

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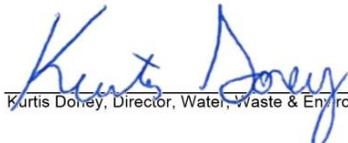
On April 29, 2020, City Council received written notice of the Checkout Bag Bylaw motion (MN20-3).

On July 29, 2020, City Council considered report CM20-21 and *The Plastic Checkout Bag Ban Bylaw* was passed in response to MN20-3.

*The Plastic Checkout Bag Ban Bylaw* will come into effect August 1, 2021 except during a pandemic or other health related emergency. City Administration deferred the effective date to Q1, 2022 due to the uncertainty around COVID. Current health orders discourage the use of reusable checkout bags.

Respectfully Submitted,

Respectfully Submitted,

  
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3/31/2021

  
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4/14/2021

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## **ATTACHMENTS**

- A-1 Letter from MMSW
- B-1 Resident Survey Report
- B-2 Business Survey Report
- C-1 Retail Council of Canada Letter
- D-1 Municipal and Provincial Bag Bans in Canada
- D-2 Municipal Bag Fee Bylaws in Canada
- D-3 Municipal Restrictions on Other Single-Use Plastics in Canada