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# **Year in Review**

### 2022 Highlights

- February 1 The Plastic Checkout Bag Ban came into effect, reducing reliance on plastic checkout bags and encouraging residents to Reach for Reusables.
- April 25 Opened the Education Room at the Waste Management Centre geared towards children ages 8 to 13 to encourage behaviour change by learning sustainable waste and water practices.
- In June Introduced Notice of Violation tickets for Waste Management Bylaw infractions that contribute to litter in response to the Clean Communities motion. Approximately 219 tags were issued with two notices of violation.
- October 26 Council approved the move to a single curbside user fee for all curbside waste services (recycling, food and yard and garbage) to incentivize waste diversion in support of the City's 65 per cent waste diversion goal.
- November 21 Opened the permanent household hazardous materials depot that will operate year-round, increasing the accessibility to hazardous waste disposal by 94 per cent.
- Reached over 6,000 residents through outreach interactions through school and community group presentations, tours through the new education room and event information booths. This represented an increase of almost 40 per cent more than in 2021.
- Regina residents are sending 4 per cent less waste to the landfill from single-family homes. In total, the landfill received 7.4 per cent less waste from all sectors. There is now 28 years of life left in the Fleet Street landfill, two more years than 2021 calculations.

# Regina's Waste Management Strategy

Since 2009, Waste Plan Regina (WPR) has guided solutions to the growing demands of Regina's waste management system. WPR provides direction for the City of Regina (City) solid waste programs and services for both residential and non-residential sectors. This update summarizes the City's 2022 accomplishments and looks at what is coming next.

# Waste Management Hierarchy

The Waste Management Hierarchy is used internationally to help shape waste management planning. It ranks from most to least environmentally preferred actions based on use of natural resources and energy, production of pollution and potential toxicity. The hierarchy emphasizes source reduction and reuse, followed by recycling and composting and energy recovery from waste, treatment and finally disposal (landfilling).

# Regina residents are among the highest waste producers in Canada. Regina residents are among the highest waste producers in Canada. Treatment & Disposal

# **Messaging for Change**

Sustained promotion and education programs are a best practice and have been proven to be an effective tool in changing attitudes related to social and environmental issues. The City's public outreach and education programming continued to promote reduction, reuse, recycling and proper waste sorting.

Throughout 2022, the City engaged with 40 per cent more residents than 2021. That is almost 6,000 interactions through information booths, school and community group presentations and tours through the new education room.

# Opened the Education Room

On April 25, 2022 the City unveiled an interactive, 800 square foot, learning space designed to spark children's interest and capture their imagination. The room features an interactive play-based learning experience that teaches waste behaviours that protect their environment. By participating in activities propelled by technology and principles of gamification, participants learn sustainable waste and water practices while having a fun and memorable experience.

The goal of the educational room is to teach children that actions have consequences on the environment. By adopting positive behaviors in their daily lives, they can make a difference and reduce their ecological footprint. Natural resources are precious and should be preserved as much as possible by reducing unnecessary waste. Schools, community groups and corporate groups are invited to use the room for meetings or to receive educational presentations on responsible environmental practices.

Our launching year hosted 19 events and 525 participants.



# **Fun Fact:**

The education room has two educational themes: waste and water.

"I think you'll all agree that this is a fun way for kids to discover how the city manages waste and water," Kim Onrait, Regina's Executive Director of Citizen Services said. "Kids really are the leaders of tomorrow, and this is a great way to share a vision with them so they can get there."



# Messaging for Change (cont.)

### Waste Education Campaign

Anyone can become a waste diversion superhero with the power to sort, reduce and reuse. This fall, the City launched an education campaign to empower residents to take action and help increase waste diversion efforts to contribute to a greener and more sustainable city. This creative concept encouraged residents to take action to create a community of waste diversion superheroes in Regina. We want the public to champion waste diversion, helping become ambassadors of good habits. The campaign built a sense of empowerment for people to want to learn more about how they can help us reach our 65 per cent waste diversion goals.



Communication tactics included online (responsive display, connected TV and YouTube) social media (Facebook, Instagram, TikTok and Twitter), radio and out of home (washroom posters, bus benches and rink board ads). Ninety-eight per cent of webpage traffic came from the paid media efforts. This campaign successfully drove people to learn more.



# **Fun Fact:**

Over 41,000 materials were searched on the waste wizard with 17,628 first time users. Top materials searched were Styrofoam, glass bottles and jars, CD & DVD cases, clothing and toothpaste tubes.

### The Waste App

Since the inception of the Blue Cart Recycling Program, the City has utilized the Recollect software system for waste notifications for collection day reminders, service alerts like delayed pickup, and upcoming events such as the household hazardous waste days. Residents could choose to receive notifications via text message, email, phone call or iCal. The software also provides the waste wizard tool that allows a resident to search a waste item to find the appropriate disposal method as well as an interactive sorting game.

In 2021, the City was notified that the telecommunication industry would be increasing text messaging costs substantially by the spring of 2022. In response to the industry changes, Recollect developed a mobile app for notifications to replace text messages. The mobile app provides the collection reminders as well as the Waste Wizard and the Waste Sorting Game.

With 19,000 text subscribers, the City recognized the need to continue to maintain an easy and effective notification system for waste services especially over the next few years with collection schedule changes related to the addition of the green cart service.

Starting in June 2022, the City encouraged residents to switch to the waste app through push notifications, service alerts and various outreach events letting them know "We're cutting costs by trashing texts. To keep receiving waste collection reminders, get the free app now." There are over 24,000 households receiving notifications.



Moving from texts to the waste app saved the City over \$75,000/year.

# Messaging for Change (cont.)

### Circular Economy Month Proclaimed

In October, Mayor Sandra Masters proclaimed the first ever Circular Economy Month, joining municipalities across the country to build awareness around the social, environmental, and economic benefits of a circular economy. Each week had a theme, with the third week being dedicated to Waste Reduction Week.

The City celebrated Waste Reduction Week with a follow-up to its Superhero campaign. Residents were encouraged to improve their own waste reducing superpowers and test their sustainability knowledge through quizzes for a chance to win superhero themed prize packages.

### Green Your Holiday Campaign

Once again, the City encouraged residents to reduce waste over the holiday season. The "Green Your Holiday" Campaign encouraged residents to be greener when they decorate, gift and gather. The City offered helpful tips through social media and tv spots to remind residents how to recycle their holiday waste with the Naughty and Nice list of holiday recyclables.



### Notice of Violation Tickets

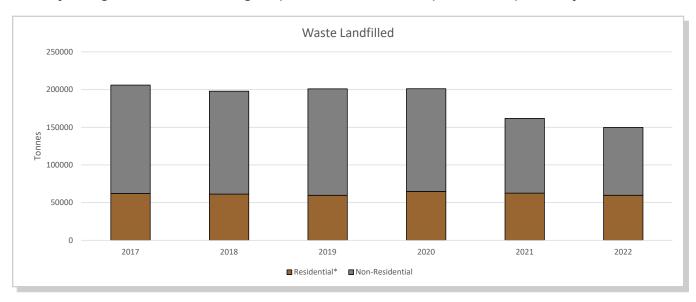
In 2022, Council approved the introduction of Notice of Violation tickets for waste actions that potentially lead to litter in the community following an education first approach. Notice of Violation tickets were introduced for actions that are in violation of the bylaw provisions and create litter. The tickets can be issued for the following reasons: if a property has left the cart out in the collection spot before or after the collection day, if the cart is not secured on the property when not out for collection, if there are overfilled carts or cart contents outside of cart and for unbagged garbage.

The threat of a ticket seems to be an effective incentive for residents to ensure they are complying with the bylaw and not contributing to litter in their neighbourhood. The City issued over 200 tags with only two resulting in a Notice of Violation ticket. Residents are listening.

# Regina's Waste Data

### **Waste Generation Rates**

The City of Regina landfill is receiving 7.4 per cent less waste compared to the previous year.



# Did you know?

The Fleet Street Landfill accepts waste from Regina and surrounding areas in southern Saskatchewan. The landfill serves residential properties, the industrial, commercial and institutional (ICI) sector and the construction and demolition (C&D) sector.

Based on current waste generation rates and upcoming program changes, the City of Regina Landfill is projected to have enough space to operate for approximately 28 more years.

Regina residents are generating 4 per cent less waste than in 2021, demonstrating residents are adopting the most preferred approach to waste management - reduction. Reduction is anything that reduces waste by using less material in the first place. This can be as simple as using both sides of a piece of paper, using a reusable mug instead of a disposable one or buying bulk rather than individually packaged items.



# Regina's Waste Data (cont.)

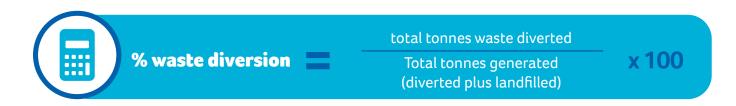
### Residential Diversion Rate

The City has set a residential diversion target of 65 per cent. That means, the City wants to keep 65 per cent of the waste generated out of the landfill through diversion services such as recycling and composting. Over the past five years the average diversion rate has remained around 19 per cent.

	2017	2018	2019	2020	2021	2022
<b>City Program Diversion</b>	18%	19%	19%	20%	20%	19%
Curbside Recycling Collection	7,796	7,272	6,891	6,486	6,344	5,966
Curbside Food & Yard Waste Collection Pilot	-	-	-	172	688	607
SARCAN Glass	-	-	29	38	54	56
Big Blue Bin	806	801	787	792	856	847
Yard Waste Depot	N/A*	839	2,660	4,247	3,632	2,707
Household Hazardous Waste Days	N/A*	77	122	125	139	59
Treecycle	27	28	32	31	43	31
Diversion at the Landfill	4,994	5,800	3,766	3,898	3,478	3,269
Total Diversion (Tonnes)	13,623	14,817	14,287	15,789	15,234	13,542
Residential Garbage	62,149	61,377	59,695	64,879	62,555	59,719

<sup>\*</sup>Yard Waste Depot and Household Hazardous Waste Days were cancelled in 2017.

With the amount of waste generated down by 4 per cent, it also can lower diversion rates. The reason for this is that reduction can also reduce diversion. Reduction comes from replacing single-use items with reusable items such as plastic water bottles with a reusable bottle, plastic take-out containers with reusable containers, and generating less paper with online versions and more electronic documents. With less divertible items in the waste stream, the diversion rate is lower. Overall reduction is preferred.



# Reduction & Diversion Initiatives

### Plastic Checkout Bag Ban

It was official on February 1, 2022, the ban on the use of plastic checkout bags had residents reaching for reusables. The City's



Plastic Checkout Bag Ban Bylaw applies to plastic bags provided to customers at the checkout counter. Other in-store plastic bags used for items such as bulk foods, fruits and vegetables are still permitted.

Residents heard about it at malls, shopping centres and grocery stores. Businesses were sent a business tool kit to educate their customers.

The ban had the desired effect and reduced plastic litter in our community. Both landfill and parks staff have noticed fewer plastic bags since the ban.



The City received over 10,000 responses to the Plastic Checkout Bag Ban survey making it one of most successful surveys in terms of response rate.

# **Fun Fact:**

Only 11 businesses were reported for not complying with the Bylaw. All were in compliance during a follow-up visit.

### Federal Update on Single Use Plastics

In a December 17 news release, the Canadian Federal Government announced Canada's ban on certain harmful single-use plastics. Beginning December 20, 2022, the federal government implemented regulations prohibiting the import and manufacture of single-use plastic checkout bags as well as five other problematic single-use items including straws and stir sticks.



The ban on the manufacture and import of ring carriers will come into force in June 2023.

By December 2023, the prohibition on the sale of these items will come into effect.

# Reduction & Diversion Initiatives (cont.)

### Repair Café – Repair to Reduce

On April 9, the City hosted its' second Repair Café at the Cathedral Neighbourhood Centre. Repair Café is a one-day event where residents can bring in broken items where a team of volunteers will try to fix them! The goal is to avoid throwing items out. The event is hosted in partnership with Saskatchewan Waste Reduction Council. The event had 30 attendees and 70 per cent of the items brought in were repaired.

### **Diversion Services**

The City continued to offer curbside recycling services and curbside food and yard waste collection to pilot residents. The City also continued offering depot services for recyclables, yard waste, Christmas trees and household hazardous material.

In 2021, the tonnage collected through all diversion programs declined with the exception of the SARCAN glass program. In 2019, the City partnered with SARCAN to provide residents with the option to take their glass directly to SARCAN for recycling. Two tonnes more were taken to SARCAN in 2022 than 2021.

### **Big Blue Bins (BBB)**

The City has nine BBB sites throughout Regina that collect the same recyclables as the curbside recycling cart. The three busiest sites remain in order: Sandra Schmirler Centre, Northwest Leisure Centre and Westhill. The Sandra Schmirler site receives 8 per cent more than the second busiest site. A new east end site is required and planning is underway to find a suitable location.

### **Yard Waste and Christmas Trees Depot**

The seasonal depot operates from April to November and December to January each year for the collection of yard waste and live Christmas trees. The site received 25 per cent less material in 2022. The City expects this to decline in 2023 with the City wide roll-out of the green cart. In 2024, operating hours will be reviewed in light of the upcoming program changes.

### **Household Hazardous Waste Days**

Household hazardous material is the most toxic and environmentally hazardous component of residential waste. It requires special handling and disposal to mitigate environmental and health risks. In the spring of 2022, the City continued to offer temporary residential drop-off events to manage disposal of household hazardous materials. The events were offered in April, May and June. Spring attendance was down by 37 per cent and there was a 45 per cent reduction in the material collected compared to the previous year. Historically, the greatest participation occurs in the fall during the September and October events which did not proceed in anticipation of the permanent site opening.



HHW depots collected on average 116 tonnes of hazardous waste.

### **Compost Give Away**

May 1-7, 2022 was all about Compost Awareness Week. Free compost, generated from the City's organic diversion programs, was again offered to Regina residents. The City had 47 tonnes of finished compost to distribute to residents, community gardens and City parks.

Residents were allowed to collect 60L per household of the nutrient rich soil to use in their home gardens and planters.



# Reduction & Diversion Initiatives (cont.)

### Regina Opens the Province's First Household Hazardous Materials Depot (HHMD)

On November 21, 2022, the City delivered on a major Waste Plan Regina initiative and a Ministry of Environment priority, the permanent HHMD. The Depot provides a model for future locations across Saskatchewan. The site was developed in partnership with the provincial stewards, Product Care Association of Canada (Product Care) and Saskatchewan Association for Resource Recovery Corporation (SARRC) to provide a convenient one-stop location for all hazardous materials including used oil and antifreeze.

The permanent service model provides the City with access to provincial stewardship funding that is expected to cover costs previously bourn by City funds for transportation and processing of program materials. The City's program accepts both stewardship program material and non-program material.

The new site operates every Friday and Saturday from 10:00 am to 3:00 pm. The permanent service will increase accessibility to hazardous waste disposal by 94 per cent from 11 to 104 days annually. On average, to date, the site has been serving approximately 30 residents per operating day.

"We commend the City of Regina and Product Care for partnering to open Saskatchewan's first household hazardous materials depot," Environment Minister Dana Skoropad said in a release. "Our province is home to one of the most robust lists of recycling programs in the country, and I am so pleased to see another service being added right here in Regina. When waste is managed responsibly, it protects the health and safety of Saskatchewan residents and the environment for our future generations."



# **The Way Forward**

### Residential Changes

### **Green Carts Are Going City-wide**

In 2023, green carts are rolling out city wide to every single-family home. These residents will join the 2800 pilot participants in diverting food and yard waste from the landfill. Starting in the fall of 2023, residents will receive their first green cart collection. Residents will receive a 240-litre green cart and kitchen catcher to collect all their meats, dairy, vegetables, paper towel, coffee grounds including any fats, oils and greases also known as a "scrape the plate" program. The service will run weekly from April to October and bi-weekly from November to March.

The green cart program is expected to divert up to 24,000 tonnes per year and eliminate 10,820 tonnes of green house gas emissions annually over the first ten years.

Multi-residential properties will be required to follow by the summer of 2024.





# The Way Forward (cont.)

### **Incentivizing Diversion**

On October 26, 2022 Council approved moving all waste services to a single-user curbside waste fee starting January 1, 2024. The single user fee will be based on the resident's selected garbage cart size, 240 litre (\$193.45/year or \$0.53/day) or 360 litre (\$284.70/year or \$0.78/day) garbage cart and will include the recycling and food and yard waste services. Residents will have the option to purchase one additional cart for either garbage, recycling or food and yard waste to manage waste capacity at their property.

Waste Plan Regina estimates that a user pay system that charges for garbage produced can increase diversion by 5 to 10 per cent. Communities that have implemented variable fee systems have seen improvements in waste reduction and increases in recycling rates up to 16 per cent.

Implementing a full user pay model for waste alongside the introduction of the curbside food and yard waste service brings the City's 65 per cent diversion target within reach.



### **Recycling Service Stewardship Funding Changes**

Starting in 2016, the Extended Producer Responsibility (EPR) model was adopted for the recycling of household packaging and paper which requires businesses that supply waste packaging and paper to Saskatchewan residents to share of the financial responsibility (up to 75 per cent) with municipalities and taxpayers to ensure responsible end of life handling. Multi-Material Stewardship Western (MMSW) is the non-profit organization established to help steward organizations meet their requirements under the regulations.

The province is proposing regulatory changes to the household packaging to paper stewardship program that would see the program regulations transition from a partial funding model to a full extended producer responsible model as early as 2024. This could mean changes for the City of Regina's recycling service ranging from the City receiving 100 per cent of the cost for the service but more likely, the City no longer being responsible for processing or collection services. The exact changes are unknown. The City is keeping a watchful eye on the proposed regulations and impacts to City waste programs.



There are nine Big Blue Bins around the city.



# The Way Forward (cont.)

### Beyond the Residential Sector

### Industrial, Commercial & Institutional (ICI) Sector Waste Requirements

The ICI sector generates approximately 66 per cent of all waste sent to the Fleet Street Landfill. With over 42 per cent of ICI material divertible, implementing multi-stream waste sorting will remove 216,000 tonnes of material from the landfill and eliminate 36,000 tonnes of greenhouse gas emissions annually over the first ten years.

### The City's Green Routine – An Example

The City operates a diverse range of services that mirror the institutional, industrial and commercial sectors. To trial multi-stream waste sorting stations, the City began a pilot that rolled out to all City owned and operated facilities in 2021. 2022 was the first full year with the multi-stream waste sorting stations in all its facilities.

Prior to the Green Routine, the City was diverting 10 per cent of its waste which was mostly paper. Based on waste audits, through use of the multi-stream waste sorting stations to divert recyclables (more than paper) and food and yard waste, there was potential to divert 60 per cent.



Audits show that the City is diverting 42 per cent of the waste generated in daily operations and public facilities. The City continues to conduct waste audits and coordinate with the Green Team, our environmental champions, on making better choices to reduce and divert waste.

### **Establishing Waste Requirements for ICI**

In 2022, the City conducted stakeholder engagement on proposed requirements for the ICI sector waste management based on the City's experience and regulations in other municipalities.

In May of 2022, the City conducted three focus groups with a total of 18 participants from the ICI sector and a thrird with waste collectors and processes. The discussion focused on understanding current diversion practices and implications and barriers to adopting the proposed waste diversion requirements. As a follow-up, the City invited stakeholders to fill out a survey, which gathered 107 responses from a diverse range of organizations.

Administration's research and information gathered during the public engagement with the ICI sector will be the basis of the recommendations going to Council for a decision in 2023 with an anticipated implementation date in 2025.

# What's Next

### 2023-2025 Solid Waste Master Plan

Waste Plan Regina, the City's current waste management plan, is now over 10 years old. The waste management landscape has evolved since its adoption, with regulatory changes at the provincial, federal and international levels. The City will explore refreshing the Solid Waste Master Plan to provide a modern framework to guide the City's waste management policies and operations over the next 10 to 20 years. This includes reviewing the diversion metric or if a reduction target should also be included.

### 2023-2026 Loyalty Programs

The City will look into loyalty programs as a way to recognize residents for participating in diversion programs through resident rewards or promoting neighbourhood competitions and encourage neighbourhood pride.

### 2024 - 2027 Construction & Demolition Sector Waste Requirements

The City will explore establishing waste management policies for construction and demolition waste to divert these materials from the Landfill. This could include mandated recycling or bans/surcharges for divertible materials.

### 2024-2028 Landfill Diversion

The City is considering more opportunities to divert problematic waste materials by establishing a diversion station at the Landfill to accept items such as construction materials (untreated wood and gypsum), and mattresses, etc. These items are bulky and are difficult to break down in the Landfill.



