# SOLID WASTE AND RECYCLING

**2024 ANNUAL REPORT** 







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## 1.0 INTRODUCTION AND HIGHLIGHTS

The Solid Waste and Recycling (SW&R) division of Burnaby's Engineering Department is responsible for planning, implementing and operating a wide range of waste management services across the city including:

- » solid waste collection
- » green waste collection
- » recycling collection
- » Eco-Centre operation
- » litter pickup
- » large item pickup program
- » abandoned material removal
- » waste diversion education
- » SW&R bylaw enforcement
- » community outreach services
- » development reviews for SW&R servicing
- » support for many street festivals and other special events
- » Adopt-a-Street: support for community volunteer-led litter clean up

Burnaby's SW&R division integrates the principles of waste reduction, environmental preservation, public participation and worker safety in order to serve the community. The City provides service to several sectors, including single and two-family households, multifamily (MF) buildings, and industrial/commercial/institutional/civic (ICI) facilities.

In 2024, the SW&R division maintained strong waste diversion results (the percentage of disposed items which enter the correct waste or recycling stream), expanded services at the Eco-Centre, and continued to seek opportunities to improve waste management performance.

This annual report provides an overview of the City's waste management system, including an outline of the programs and services which we will be implementing in 2025 and beyond to achieve our future waste diversion goals. Single-family, multifamily and ICI waste diversion (recycling/green waste collection) and disposal (garbage) volumes are shown from program inception year to 2024 to illustrate waste trends.



Electric-powered collection vehicle



Community Cleanup event

Highlights from our 2024 work plan included:

- » accomplishing a new lowest-ever per capita figure for single-family waste generation at 1,013 kg per household served
- » reaching a new milestone for MARR (Major Appliance Recycling Roundtable) appliances collected in a single year at 8,890 units
- » collecting 9,017 mattresses in a single year through our Large Item Pickup program, our all-time peak for proper diversion
- » installing 95 new pole-mounted receptacles at bus stops and space-limited walking areas which were previously unserviceable, helping to reduce littering across the city
- » hosting 5 Community Cleanup events in each of Burnaby's four quadrants, including a new location at Christine Sinclair Community Centre
- » building up our Adopt-a-Street program with over 100 volunteers, an improved volunteer database, an updated web page, and an application and interactive street map to support volunteers interested in helping clean up litter along City boulevards and streets
- » pioneering Burnaby's first electric-powered collection vehicle to reduce fleet emissions

- » debuting our first-ever Spring Clean Up event, which drew 1,133 vehicles dropping off 60,625 kg of garbage and over 100 mattresses
- » adding new battery recycling receptacles to all Burnaby community centres as well as City Hall and our works yards through our partner Call2Recycle, to improve awareness and access for battery recycling in the community and at work
- » installing bear-resistant steel container bin toppers and bear-resistant receptacles for multifamily properties in the designated Bear Area, which proved effective at securing attractants
- » receiving another maximum amount of \$128,000 in program incentive bonuses from Recycle BC for demonstrating high diversion rates in the residential curbside collection program
- » offering our Solid Waste & Recycling Curbside Collection Calendar in 10 languages for multilingual communitywide support of recycling initiatives and education
- >> continued reduction of paper thanks to equipping staff with tablets to digitize the process of resolving CSRs
- » supporting the Burnaby School District introduce their Recycling Rollout initiative at all Burnaby high schools and 7 elementary schools







Spring Clean Up event



## 2.0 POLICY

#### **Federal and Provincial Initiatives**

In 2020, the Government of Canada entered Phase 2 of the Canada-wide Action Plan on Zero Plastic Waste. This plan is designed to reduce plastic pollution, create economic opportunities to recover the value of used plastics and achieve the goal of zero plastic waste by 2030. This plan is designed to help Canada meet its per-capita waste reduction goals of 30% by 2030 and 50% by 2040.

The Canada-wide Action Plan on Zero Plastic Waste was announced in two phases with six priority action areas for each phase.

#### Phase 1

- 1. extended producer responsibility
- 2. single-use and disposable products
- 3. national performance requirements and standards
- 4. incentives for a circular economy
- 5. infrastructure and innovation investments
- 6. public procurement and green operations

#### Phase 2

- 1. information exchange and awareness
- 2. management of waste from aquatic activities
- 3. fishing and aquaculture
- 4. capture and clean-up
- 5. research
- 6. global leadership

On June 20 2022, the Government of Canada announced the *Single-use Plastics Prohibition Regulations*, under the *Canadian Environmental Protection Act*, 1999. These new proposed rules will prohibit the manufacture, import, and sale of six categories of single-use plastics:

- >> checkout bags
- >> cutlery
- » plastic foodservice containers
- stir sticks
- » ring carriers
- straws\*

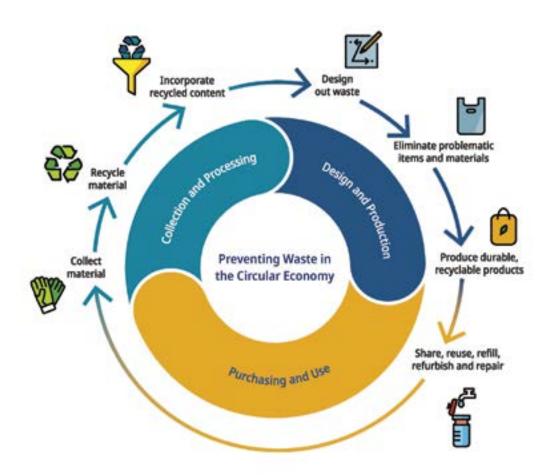
These new regulations were challenged by industry in the courts. On November 16, 2023, the single-use plastic ban was overturned by a federal court, ruling that plastic pollution did not meet the standard as a toxic substance. The federal government appealed this ruling, and on January 25, 2024, the Federal Court of Appeal granted a stay motion preventing the previous ruling from taking effect while the appeal is ongoing.

<sup>\*(</sup>some exclusions under certain conditions).

Provincially, the Government of British Columbia (via the Ministry of Environment and Climate Change Strategy) continues to work on the CleanBC Roadmap to 2030. CleanBC aims to reduce greenhouse gas emissions by keeping recyclable materials, food, and organic waste out of landfills, and by supporting the capture of landfill gases.

This roadmap has led to the CleanBC Plastics Action Plan, which focuses on a combination of bans on specific single-use plastic items and expanding BC's expanded producer responsibility (EPR) policies..

Recycle BC continues to work with the Province to expand the list of materials eligible for blue box recycling, which will keep more plastics out of the waste stream and in line with CleanBC Plastics Action Plan.



Ministry of Environment and Climate Change Strategy, Government of British Columbia. April 2022, Preventing Single-use and Plastic Waste in British Columbia Intentions Paper, Page 4

The Province brought into effect the Single-Use and Plastic Waste Prevention Regulation on Dec 20, 2023. This regulation is a ban on 4 regulated single-use plastic categories including:

- » shopping bags
- » disposable food service accessories (plastic cutlery)
- y food service ware (plastic take-out containers)
- » oxo-degradable plastics (additives designed to quickly break down products into microplastics)

This regulation will come into force in stages:

#### 1. December 20, 2023

Restrictions on food service accessories

#### 2. July 15, 2024

Minimum fee for reusable or paper shopping bags, restrictions on shopping bags, food service ware and oxo-degradable plastics

#### 3. July 1, 2028

Restrictions on PVC film wrap

#### 4. July 1, 2030

Restrictions on polystyrene foam meat trays

BRITISH COLUMBIA SINGLE-USE & PLASTIC WASTE PREVENTION REGULATION

## Provincial Phase Out of Single-Use and Plastic Items







Single-Use and Plastic Waste Prevention Regulation: gov.bc.ca/reuse

waste, divert mare waste from landfills and keep what we do use working for us langer – creating a cleaner, better future for everyone.



#### Regional Waste Management System

Burnaby is one of 21 member municipalities that coordinate with Metro Vancouver on the solid waste initiatives shaping our regional waste management system. Metro Vancouver, with the participation of its member municipalities, developed the regional Integrated Solid Waste and Resource Management Plan (ISWRMP) which was approved by the provincial Ministry of Environment in 2011.

Metro Vancouver has since initiated the process of updating the ISWRMP to ensure the plan remains current in guiding the needs of the region. The updated plan is anticipated to build off the success of the current ISWRMP while accelerating waste diversion, reducing GHG emissions and promoting a circular economy. A circular economy is a model of production and consumption of materials in which components do not leave the cycle to become waste or pollution - a focus on recycling, repairing and reusing products and materials for as long as possible.

In 2024, membership recruiting was completed and two advisory committees began plan review work. The first was the Public and Technical Advisory Committee, which provides a forum for experts with a range of backgrounds to contribute to the review and update of the plan. The second was the Industry Advisory Committee, which provides a forum for industry contribution, discussion and advice on management planning, operations and policy issues related to solid waste and recycling services in Metro Vancouver.

Burnaby, like its municipal neighbours in the region, collaborates and shares ideas in two Metro Vancouver subcommittees - the Regional Engineers Advisory Committee (REAC) Solid Waste Subcommittee and the Regional Waste Reduction Coordinators Committee (RWRCC). These touchpoints provide opportunities for municipalities to share what programs and services are working, and a place to get ideas on what else is happening in other municipalities. Metro Vancouver can also share what projects or plans are in development and the impacts they will have on the region. They also provide workshops and resources for municipalities and can be a liaison between the province and local governments.

#### **Burnaby's Initiatives**

In November 2023, the Province mandated new zoning bylaw amendments in municipalities across the province to increase small-scale multi-unit housing (SSMUH) on residential properties. These changes permit a variety of new home types in Burnaby's R1 zoning district, including duplexes, multiplexes, rowhouses and laneway homes, as well as secondary suites up to 6 units. These changes came into effect on July 1, 2024. While these changes have not yet affected garbage and recycling collection, they will have a profound long-term impact on our waste collection and management processes.

With densification of residential properties will also come an increase in waste generation and opportunities to work on focused diversion strategies, including bylaw updates. On December 11, 2023, the Burnaby Solid Waste and Recycling Bylaw 2010 (Bylaw 12875) was amended. This amendment specified the definition of primary dwelling to align with the Burnaby Zoning Bylaw – Bylaw 14630. These changes also requires that property owners must first upgrade to the largest receptacle size before additional receptacles can be requested. This change ensures our residents are using the limited curbside space available for collection efficiently, as storage and staging space for placing and collecting additional bins continues to be a challenge with densification. Recycling bins are provided for free to residents to encourage diversion of waste into the

recycling and green waste streams, costing them less and helping to change waste disposal practices. As our neighbourhoods densify, space on the curb to put bins out for collection will become far more limited, and it is important to ensure our collection vehicles have enough room to collect efficiently. Future bylaw amendments and updates to our waste collection strategies may be required to ensure a high level of collection service continues for all residents.

In preparation for SSMUH development, the City developed "Waste and Recycling Design Guidelines" to

provide builders guidance on best practices for solid waste and recycling storage and collection in denser properties which will receive curbside collection. These guidelines aim to ensure these new home types provide enough space at the collection point without impacting traffic, parking and general operation. Burnaby's staff determined that collective garbage and green waste bins would be necessary to provide the most efficient service and individual recycling bin sets per unit. As the landscape of each community changes with denser neighbourhoods, guides and operation will need to adapt to provide the best service possible.

## Small-Scale Multi-Unit Housing Waste and Recycling Design Guidelines

Review the recommended planning for shared accommodation collection of Garbage Bins, Green Bins and Recycling Sets



Each property has shared garbage bins with approximately 180 L of garbage generation per unit.

Units	Garbage Bins (360 L)	Green Bin (240 L)	Recycling (Sets)	Total Storage Area (m²)
3	360 L + 180 L	1	3	2
4	2 x 360 L	1	4	2.25
5	(2 x 360 L) +180 L	1	5	3
6	3 x 360 L	1	6	3.25

As Green Bins include yard waste and food scraps, we expect yard waste to be minimalized due to the increase in structures and the decrease in yards.

We've seen in other multi-family complexes that one Green Bin is sufficient for up to six units. However, if more are required, they are available for a low delivery fee and there are no additional costs to collect the additional green waste.

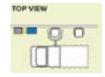
Recycling Sets include a Blue Bin (mixed containers), a Grey Bin (glass) and a Yellow Bag (mixed paper). One set is available for each unit, and additional bins and bags can be collected free of charge by the occupant with proof of Burnaby residency at the Eco Centre.

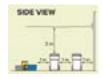
All Bins must be kept on the property when they are not out for collection. Bins cannot be stored in the lane or on the street.

While there should be a designated space allocated/planned out for the property for the storage of the bins, with possibilities of an expansion, if necessary, the recycling sets are smaller and could be stored within each family dwelling unit.

During the design stage, curbside collection location must be pre-planned for all bins for collection day:

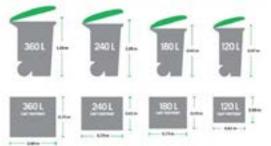
- Garbage Bins are collected every two weeks
- Recycling Sets are collected weekly
- Green Bins are collected weekly





The design stage must include a scenario for all bins being collected simultaneously. Recycling Sets may be staged together and are not required to be in a continuous long train. They may be placed in front or behind each other.

Planning for collection and your review by an SWR requires a basic location or square that outlines the area of storage and collection points on a basic site plan.





SWR - Version 5.1 | AUG 2024



## 3.0 PROGRAMS AND SERVICES

Burnaby's in-house collection services have been integral to the City's Solid Waste and Recycling Program for over 40 years. The programs and services we provide are made possible by a team of approximately 140 staff members and a fleet of 85 vehicles, with our office team and field crews working together to meet the changing needs of the community.

## 3.1 Curbside Collection Program

The curbside collection program collects waste and recycling materials from three sectors: single-family, multifamily, and industrial/commercial/institutional. Our multi-stream recycling collection program (blue for mixed containers, yellow for mixed paper, and grey for glass jars and bottles) supports Recycle

BC's residential printed paper and packaging recycling program. Our green bin program accepts food scraps, yard trimmings and leaf debris to be processed into valuable compost at a City-contracted facility. Garbage is collected and transported to a Metro Vancouver facility for disposal or incineration.

Table 1 – Curbside collection summary

	Single-family	Multifamily	Industrial, commercial and institutional
Property type	Houses, duplexes and row-houses	Condos, apartments and townhomes	Businesses, religious buildings and educational establishments
Customers	34,073 households	40,942 households 589 contracts	596 contracts
Equipment	16 automated trucks 17 recycling trucks 1 rear-loading truck 1 container delivery van	7 front-loading trucks 6 recycling trucks 2 rear-loading trucks 9 jitney trucks	
Receptacles provided	Garbage bins (120L, 180L, 240L, 360L) Recycling - blue boxes, grey boxes, yellow bags Green bins (180L, 240L, 360L)	Garbage containers (3, 4, Garbage bins (180L, 240L) Recycling Blue and yellow (360L) ar Cardboard containers (3, Green bins (240L, 360L)	nd grey (240L, 360L)
Collection frequency	Recycling and green bins collected weekly  Garbage collected every	Recycling and green bins  Garbage collected 1-2 tim	·
	other week	22.2490 00.100.04 12 1.11	

## 3.2 General Services Program

The General Services Program is responsible for the City's Large Item Pickup, Litter and Public Space Collection and Abandoned Waste Collection programs. The General Services program utilizes three rear-loaders for large item collection and abandoned waste collection, four 2-tonne flat deck trucks for curbside mattress and appliance collection, five split-body trucks for public space recycling and waste collection, and three mid-size and three full-size pickup trucks for litter collection.

#### Streetscape Recycling and Waste Collection

Littering, a common issue in dense, urban areas like Burnaby, detracts from the beauty of our natural environment and streetscape. To prevent littering, the City has made it easier to properly dispose of garbage and recycling in public by installing 552 waste receptacles on major arterial roads, at bus stops and in heavy pedestrian traffic areas. The litter collection fleet empties these receptacles on a regular basis and picks up litter on the streets and boulevards.

To encourage recycling in public places, the City entered into an agreement with Creative Outdoor Advertising in 2010 to supply the City with three-stream SilverBox<sup>™</sup> receptacles — one for waste, one for paper recycling and one for mixed container recycling. The project came at no additional cost to the City, with Creative Outdoor supplying and maintaining the bins. In return, Creative Outdoor Advertising has rights to the advertising space on the front and back sides of the rectangular bins, with a percentage of revenue payable to the City. A percentage of the total units is also allocated for City advertising. Several SilverBox™ receptacles currently have City-branded posters to support our Climate Action Framework by emphasizing the "Reduce, Reuse, Recycle" message. In 2024, there were a total of 353 SilverBox™ receptacles throughout the City.

In addition to the Silverboxes™, the City is exploring other options for possible streetscape receptacles. These units provide options for servicing where space is limited or the volume demand is especially great. Streetscapes diversion rate in 2024 decreased slightly to 30%, with 214 tonnes of garbage and 90 tonnes of recycling collected.



Waste receptacle at bus stop



Option for streetscape receptacles

#### **Abandoned Material Service**

Large items like old mattresses, couches and appliances are commonly abandoned and found on roadsides in Burnaby. Abandoned items collection crews are dispatched when these items are observed by staff, or in response to complaints from residents. In 2024, the City received 6,938 service requests (a 22% increase from 2023) for abandoned items, general litter and illegal dumping.

In an effort to combat illegal dumping in Burnaby streets and lanes, residents in neighborhoods that historically experience a high frequency of dumping activity receive a letter about the Large Item Pickup program encouraging them to report abandoned materials in their area. In 2024, the City proactively sent 894 information letters to residents in such areas, which may have contributed to the increase of requests for large item pickup. Towards the end of 2021, the Engineering department acquired a mobile camera unit to place near illegal dumping hot spots on city streets and lanes. Before deployment, a notification is sent to residential properties within 50m of the unit informing them of its purpose and contact information if there are questions or concerns. In 2024, 386 notification letters were issued. The unit is well lit with flashing lights and signage with the message "This area is under 24-hour video surveillance". While deployed, the camera has proven to be a useful tool in deterring illegal dumping near the unit location. The camera can also help identify violators, as many do not realize what the unit is.

#### **Large Item Pickup**

In addition to weekly recycling and waste collection services, residents can request special pickups for large items like mattresses, appliances and couches.

The Large Item Pickup program continues to be one of our most popular programs, which is much appreciated by residents for being provided at no charge and accommodating up to three items per pickup. Residents can request this service by phone or through an online form. In 2024, over 11,719 requests (a 4% annual increase) were submitted, making the Large Item Pickup form the most popular form on the City's website. To support the regional disposal ban on mattresses, the City collects and diverts all mattresses to one recycling facility contracted by the City.

Table 2 – Large item pickup in 2024 by category

Large item	2024
Mattresses and boxsprings	9,017
Large items	11,719
Appliances	8,890



Mobile camera unit

## 3.3 Burnaby Eco-Centre

The Burnaby Eco-Centre is the foundation of the City's waste diversion program. It functions as both a true one-stop drop-off spot for residents, and as a central transfer facility for green waste collected by the City. In 2024, 44 different types of recyclable materials were processed through the Burnaby Eco-Centre.

Operated by City staff, the Eco-Centre has always been on the front line of new recycling initiatives. It was the first place in Burnaby to offer collection of household batteries and electronics prior to the introduction of provincial Extended Producer Responsibility (EPR) programs, and initiated pilot programs for the collection of used cooking oil and Styrofoam™, both of which are now permanently accepted.

The City continues to partner with several recycling stewardship agencies and local charities to offer free recycling and donation drop-off, including:

- » Recycle BC
- » Product Care Association
- Call2Recycle
- » BC Used Oil
- » Major Appliance Recycling Roundtable
- » Encorp Pacific (Canada)
- » BC Children's Hospital
- » Diabetes Canada
- **>>** Salvation Army
- » K2 Services
- Canadian Electrical Stewardship Association (CESA)



Propane tank recycling station



Battery recycling station



Recycling stations

#### Accepted Materials at the Eco-Centre

#### **Extended Producer Responsibility (EPR)**

- » newspaper, magazines, mixed paper (including phone books)
- >> cardboard
- » large appliances
- » glass jars and bottles
- tin and aluminium cans
- » plastic film
- ) flexible plastic packaging
- » household and automotive batteries
- » household paints, solvents, gasoline and pesticides
- » used motor oil, oil containers and filters and antifreeze
- Styrofoam™ (white and coloured)
- » small appliances
- » power tools
- » smoke detectors
- » light bulbs
- >> thermostats
- » electronic devices and electronic toys
- » batteries

#### **Donations**

- » clothing
- » books
- » cell phones

#### Miscellaneous

- » scrap metal
- » newspaper, magazines, mixed paper (including phone books) (commercial non-Recycle BC)
- » cardboard (commercial non-Recycle BC)
- used cooking oil
- » propane and butane tanks
- » hard plastics

#### **Green Waste**

Burnaby residents may drop off one load of green waste (100 kg or less) per day at no cost. Larger loads of green waste (yard trimmings) can be dropped off at the facility for \$113/tonne. In addition to dropping off recyclables and green waste material, residents can purchase backyard composters and rain barrels through the Eco-Centre. In 2024, Burnaby residents purchased 71 composters and 65 rain barrels.

EPR is an approach to recycling that puts the responsibility of the life cycle of the products sold back on the producers, i.e. manufacturers, distributors and retailers. This includes the collection by curbside or depot and usually forming an agency who will operate that recycling program.



Electronic recycling station

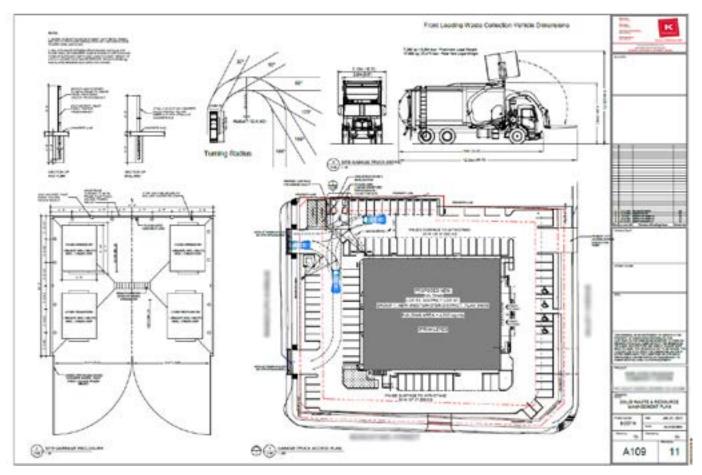
## 3.4 Environmental Services

#### **Development Reviews**

As the City continues to grow, the Environmental Services team works on development projects to ensure new constructions include adequate space for solid waste and recycling operations at the design level. This includes recycling and garbage areas, bulky item storage, and a staging area for collection. Good design ensures waste diversion will not be limited by space or access. It also helps our City team perform effective route planning for our waste collection routes, which is key for good waste management and the next generation of Burnaby's development. Our teams work as one of the many teams of reviewers of preliminary plan approval (PPAs), rezoning plans (REZ), building permits (BP) and SSMUH residential building permits (R-BP) include creating, altering or re-locating solid waste and recycling spaces for new and existing developments.

Table 3 – Development reviews in 2024 by category

Review type	Completed in 2024	Submitted in 2024 (in-progress)
PPA	36	14
REZ	19	38
BP	41	40
R-BP	5	17



Solid waste and resource management plan

#### **Education and Enforcement**

The Solid Waste and Recycling Bylaw requires that residents and businesses across Burnaby follow the proper diversion channels for recyclables, green waste, and non-hazardous waste. These services can be arranged through the City or a private hauler, however some residents and businesses are not aware of how to properly dispose of some materials, or choose not to utilize these services. When material is placed in a bin in which it does not belong, it is noted by staff, a sticker placed on the bin, and a letter sent to the owner about their bin contamination. These letters contain information about the nature of the contamination, and their options for proper disposal. If a second contamination incident is noted, a service report is generated for environmental services staff to follow-up. During follow-up, an on-site inspection of the bin in question is conducted. If contamination remains an issue, staff will attempt other methods to connect with the occupants/property owners/property management staff to ensure they are aware of the issue. Unfortunately, some individuals/ businesses still continue to contaminate their bins after these good-faith efforts, at which time the situation escalates to the next step of enforcement - a Bylaw Violation Notice (BVN), better known as a ticket.

Illegal dumping, when linked to an owner, results in a letter from our staff and a BVN, depending on whether the item(s) can be collected immediately. In 2024, 15 tickets were issued due to illegal dumping and 33 issued for continuous contamination of either the recycling or green waste curbside collection receptacles.

Table 4 – SW&R bylaw infraction service reports in 2024

Service reports (SRs)	
Average per month	69
Total (2024)	833
Average resolved per month	73
Total resolved (2024)	871

Table 5 – Contamination education letters issued in 2024 by category

Contamination education letters issued	
Garbage	36
Recycling	2625
Yard waste	2336
Multifamily ICI	249
Illegal dumping	73

Table 6 – Status of Bylaw Violation Notices (Tickets) issued in 2024

Tickets	
Issued	48
Paid	17
Collections	18
Adjudication requests	2



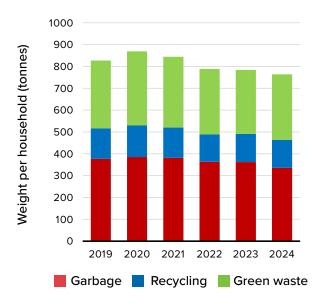
## 4.0 PERFORMANCE

In 2024, the volume of garbage collected continued to reduce year-over-year while the volume of both recycling and green waste continued to increase, reflecting a steadily improving rate of diversion. The City collected approximately 68,658 tonnes of total material (garbage, recyclables and green waste) generated by Burnaby residents and businesses. This represents a 2% (1,273 tonnes) decrease from the previous year, with significant decreases in garbage collected, minimal change in recycling collected, and an increase in green waste collected.

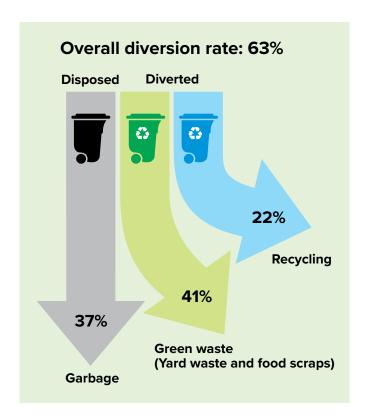
Overall, waste generated per household serviced across Burnaby has continued to decrease since 2020. In 2024, average household waste generated dropped by nearly 20 kg of waste generated to 764 kg per household serviced. This encouraging decline is a benchmark to be surpassed for 2025.

The diagram below illustrates our 2024 disposal versus diversion rates. The City's overall diversion rate increased from 61% in 2023 to 63% in 2024. The Eco-Centre saw larger volumes of scrap metal, commercial cardboard, electronics, small appliances, smoke detectors, books, and mattresses above 2023 levels.

Figure 1 – Total customer household garbage, recycling and green waste per household serviced, 2019-2024



2024 Breakdown of Disposal/Diversion
Achieved by the City System (Single-family, multifamily and industrial/commercial/institutional)



## **4.1 Single-family Diversion**

In 2024, the weight of garbage collected decreased for a fourth straight year to 10,226 tonnes (down 7% from 2023). Diversion of recyclable materials decreased 1% to 5,161 tonnes collected. Green waste collection increased by 4% to 19,129 tonnes. Burnaby's single-family total diversion rate increased by 2% to 70%.

Single-family waste per household serviced dropped to 300 kg for garbage, remained consistent at 151 kg for recycling, and increased to 561 kg for green waste. Total waste generation per household serviced is 1,012 kg, the lowest since recording. Figure 3 (opposite) shows the diversion per household serviced since 2019.



Single-family home in Burnaby

Figure 2 – Single-family curbside garbage, recycling and green waste weights, 2006-2024

As of June 2010, green waste = yard waste + food scraps.

As of April 2017, garbage collection moved to bi-weekly; green waste and recycling remained weekly.

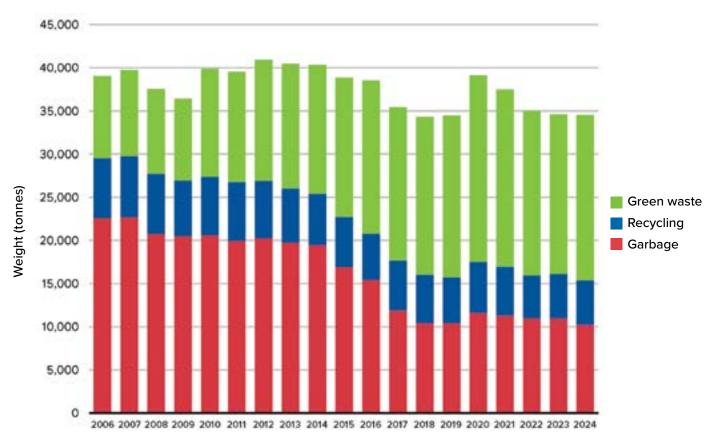
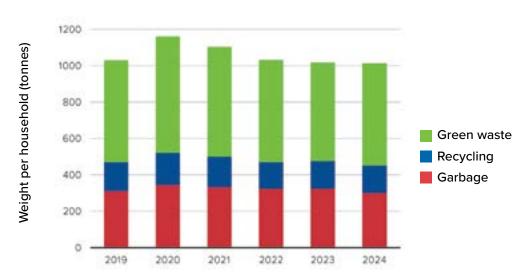


Figure 3 – Single-family garbage, recycling and green waste per household serviced, 2019-2024



## 4.2 Multifamily and Industrial/Commercial/ **Institutional (ICI) Diversion**

In 2024, 15,011 tonnes of garbage was collected from multifamily and ICI clients, a decrease of over 6% (1,069 tonnes) from 2023. Diversion of recyclables remained consistent at 4,354 tonnes collected. Green waste diversion continues to increase each year, just under 1% over 2023 with 3,432 total tonnes collected. Figure 4 (opposite) reflects the total amount of garbage, recycling and green waste collected for both the multifamily and ICI sectors. The multifamily and ICI total diversion rate increased from 33% in 2022 to 34% in 2024. While the overall trend on diversion rate for multifamily and ICI sectors is slowly improving each year, additional work is required to build on this positive trend.

The average total of multifamily garbage generated per household, has decreased to 367 kg (26 kg less than 2023). The average total of multifamily recycling per household increased slightly for recycling to a total of 108 kg (an increase of 2 kg). Average multifamily green waste per household stayed consistent at 84 kg. In total, this sums to an average of 557 kg of waste generated per multifamily household. Figure 5 (opposite) shows the diversion per household serviced since 2019.



Multifamily homes in Burnaby

Figure 4 – Multifamily, industrial, commercial and institutional garbage, recycling and green waste weights, 2006-2024 As of June 2010, green waste = yard waste + food scraps.

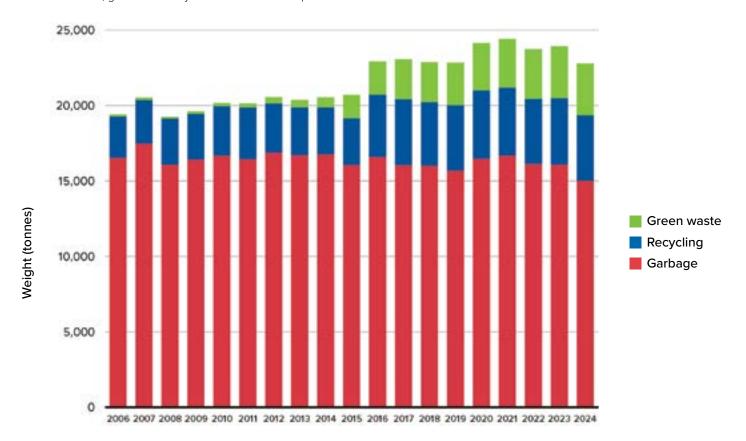
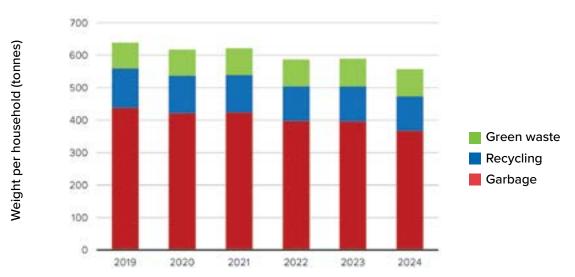


Figure 5– Multifamily garbage, recycling and green waste per household serviced, 2019-2024



## 4.3 Municipal Eco-Centre Diversion

Figure 6 shows a detailed breakdown of printed paper and packaging collected through the residential drop-off Recycle BC Program, and the materials collected through the City's commercial and scrap metal recycling program. In 2024, the Eco-Centre diverted 6,293 tonnes of recyclables (Recycle BC, commercial, scrap metal and select EPR programs), a 2% increase from 2023.

In addition to residential printed paper and packaging, the City's Eco-Centre accepts other material for recycling not collected through curbside programs. Table 7 illustrates the amount of EPR and other material accepted for recycling. In 2024, the City saw consistent amounts of household hazardous waste (such as household/vehicle batteries, paint, solvents, used oil and antifreeze) diverted from the garbage through the Eco-Centre.

In 2024, the Eco-Centre received approximately 6,236 tonnes of green waste (a 3% decrease from 2023) as illustrated in Figure 7.

Figure 6 - Tonnage of recycling materials collected at the Eco-Centre for Recycle BC, commercial and scrap metal in 2024

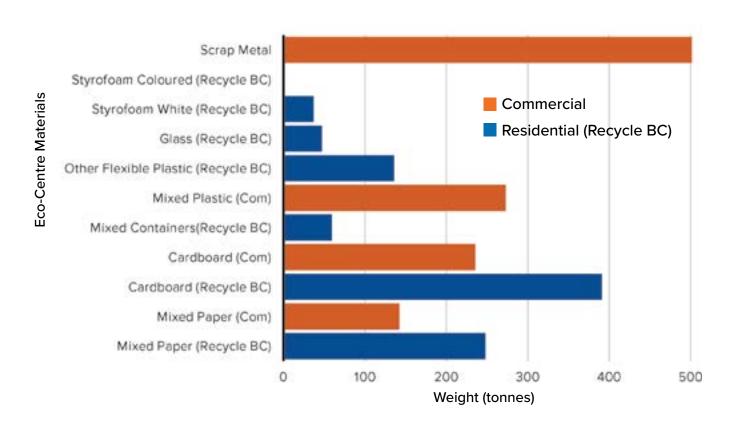
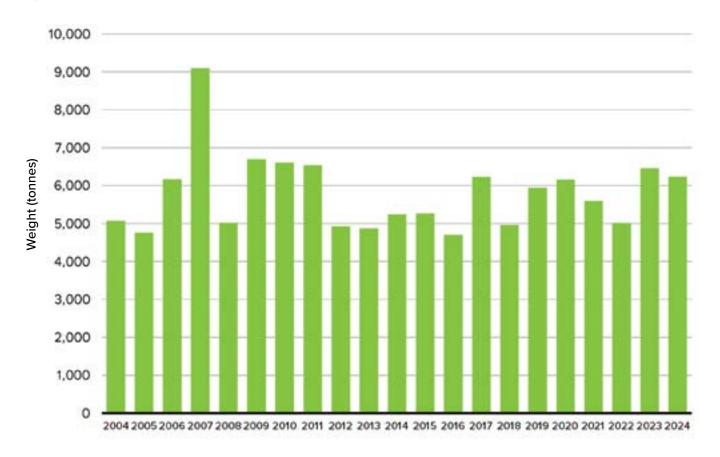


Table 7 – Amount of EPR and other materials collected at the Eco-Centre in 2024

EPR/other materials	ther materials Amount collected in 2024		
Propane tanks (>5lbs)	1,314	units	
Used oil/antifreeze	164,455	litres	
Car batteries	1,648	units	
Household batteries	14.49	tonnes	
Solvents	34	skids	
Pesticide	13	skids	
Paint/aerosol	629	skids	
Oil filters/containers	54	drums	
Freon-containing appliances	4,144	units drained	

Figure 7 – Green waste collected at the Eco-Centre, 2006-2024



### 4.4 Construction and Demolition Waste

In June 2022, the city adopted a Construction and Demolition (C&D) Waste Diversion Bylaw that requires all buildings being demolished to divert C&D materials from the landfill through reuse and recycling. Construction and demolition waste, such as drywall, clean wood and concrete account for a third of all waste generated in the Metro Vancouver region. Recycling and reusing building materials reduces energy consumption and production of greenhouse gas (GHG) emissions, conserves landfill space and promotes a circular economy.

As part of the demolition process, the city requires a waste diversion plan, that includes the estimated type and weight of materials that will be reused, recycled, or landfilled, and payment of a waste diversion deposit. After demolition, a compliance report is provided to the city to verify where materials were taken, and to determine how much material was diverted. A minimum of 70% of materials must be diverted through reuse or recycling to receive a full deposit refund.

To provide the building community time to adjust to the new requirements, the bylaw was implemented in two phases:

- October 1, 2022 for demolition of multifamily and non-residential buildings (i.e. commercial, industrial, institutional), including related accessory buildings (i.e. detached sheds/garages)
- » March 1, 2023 for demolition of single and two-family buildings, including related accessory buildings in March 2023.

Table 8 provides the building type breakdown of demolitions completed in 2023 and 2024; no demolitions were completed in 2022 under the new bylaw requirements. Single and two-family buildings made up the largest portion of buildings demolished for both 2023 and 2024, followed by non-residential and accessory buildings. Three (3) multifamily demolitions were completed in 2024.



Construction materials for reuse/recycle

Table 8 – Breakdown of demolitions completed in 2023 and 2024 by building type

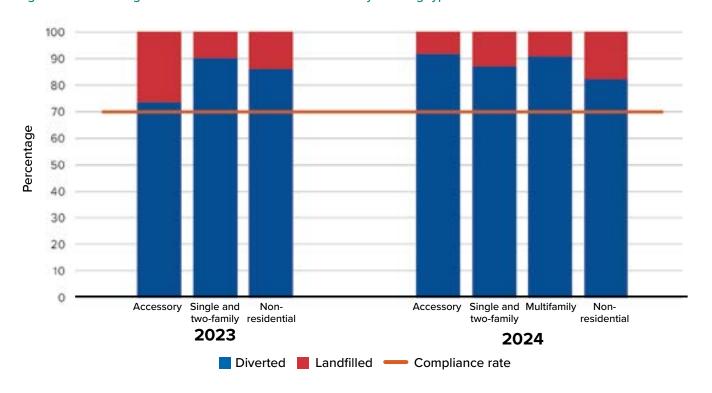
Building type	Demolitions completed	
	2023	2024
Accessory	3	10
Single & two-family	19	70
Multifamily	0	3
Non-residential	2	7
Total	24	90

In 2023 and 2024, a total of 8,553 tonnes and 9,067 tonnes of C&D waste were diverted from the landfill respectively, for a total of 17,620 tonnes diverted since implementation of the new diversion requirements. Figure 1 shows the percentage of materials diverted and landfilled along with the compliance rate achieved for each building type.

In 2023, accessory buildings achieved a diversion rate of 73%, while in 2024 these buildings achieved a 91% diversion rate. This variation can be attributed to the type of buildings demolished. In 2023, most accessory buildings demolished were sheds and carports, while in 2024, more detached garages were demolished, which contain more recyclable materials. The diversion rate for single and two-family and non-residential buildings remained consistent despite an increase in the number of demolitions of these buildings. An overall diversion rate of 87% was achieved across all building types for 2023 and 2024, exceeding the compliance rate of 70%.

87%
Overall diversion rate in 2023 & 2024

Figure 8 – Percentage of materials diverted and landfilled by building type





## 5.0 BEAR AREA

#### **Bear Area Education and Enforcement**

In 2019, City Council approved the addition of a designated Bear Area to the Solid Waste and Recycling Bylaw. Within the Bear Area, single and two-family properties are required to follow specific set-out times on collection morning, while multifamily and industrial/commercial/institutional properties are also required to secure their receptacles or store them in a bear-resistant enclosure.

The Bear Area's boundaries are based on bear activity data as reported to the BC Conservation Officer service line and to the City directly, and are adjusted annually based on changes in patterns of reported bear activity. The BC Conservation Officer Service is no longer tracking bear activity in a form available to outside organizations - therefore Burnaby's Parks and SW&R divisions have collaborated with the City's Geographic Information Systems (GIS) team to create a Burnaby Wildlife Tracking App. This app can help collect wildlife activity data points on a GIS map that is accessible to multiple Burnaby departments, as there is no other shared database available. With this information, the city is able to track bear, coyote and any other wildlife sightings, calls and complaints. Decision-makers can use this information to determine how to allocate resources optimally to minimize human-wildlife interactions.

Bear activity throughout pockets of the northeast quadrant of Burnaby prompted an expansion of the Bear Area as per Figure 9 below.

As of 2025, our Bear Area regulations have been in effect for 5 full years. To prepare residents for the upcoming "bear season" (May to November) when increased bear sightings are generally noted, bear awareness packages may be mailed out to all residents living in Bear Area. In addition to general awareness packages, environmental staff conducted some monitoring of neighborhoods with increased bear activity, collaborating with B.C. Conservation officers and communicating non-compliance issues with property owners. In 2024, 1,807 bear letters were sent out to notify residents about bear activity in their area and how to best secure attractants, especially those related to food waste and garbage.

Areas with the highest activity, such as the Burnaby Mountain community, require additional support with controlling attractants. In these areas, a trial of metal bear toppers on top of metal garbage bins has proven effective, and more have been ordered to harden this area from unwanted bear interactions. New bear-resistant food scrap bins were trialed in 2024 and proved successful at keeping the bears out-however, these measures still offer some service challenges that are being addressed. In spite of service challenges, the most effective approach is for multifamily customers to secure their receptacles or store them in a bear-resistant enclosure.

Figure 9 - Bear Area - 2024





## 6.0 PUBLIC OUTREACH AND EDUCATION PROGRAMS

#### **Waste Collection App**

Single-family residents can avoid missing a collection day by downloading Burnaby's free waste collection app, Recycle Coach. With the app, residents can set up reminders and get instant access to the most up-to-date garbage, recycling and green bin information. The app also provides the user with:

- » collection-day reminders for residential curbside collection schedules, including alerts for holiday schedule changes and weather disruptions
- » collection details, including accepted items and preparation requirements for the recycling, green bin or garbage programs
- » notifications on changes in service and accepted materials (i.e. Recycle BC updates)
- » drop-off depot information through the "What goes where?" searchable database
- "Report a Problem" feature to notify the City about missed collection, illegal dumping and other waste or recycling concerns



The app is currently available for Apple and Android operating systems as well as through the recycling and garbage pages on the City's website. In 2024, the total number of users on the app was 21,221 (17% decrease from 2023) with a total of 4,781,908 interactions (<1% increase from 2023) or 156,272 interactions per 1,000 households.

In addition to the app features mentioned above, the app allows the City to direct message users on collection schedule changes (statutory holidays, weather disruptions) and special events (e.g. Christmas tree collection). The table below outlines the types of app users that were observed in 2024.

Table 9 – Number of Recycle Coach users in 2024 by user method

Number of Recycle Coach

users in 2024	
Mobile users	21,221
Web app users	10,997
Communication users	6,609
Calendar users	5,574

Table 10 – Number of Recycle Coach reports in 2024 by issues

Number of Recycle Coach reports in 2024	
General issues	109
Illegal dumping	136
Missed collection	617
Total problems reported	862

#### Social Media, Web and Print Campaigns

Recycling and garbage continue to be among the top-searched topics on the City's website. As such, when the City's website was updated in August 2021, Solid Waste and Recycling content was selected to be the first category listed in the Services and Payments menu and continues through 2024. In the past year, we also expanded our digital and print presence through consistent social media posts and vibrant posters on our collection vehicles. Highlights from this year's social media, web and print campaigns include:

» Distributed our annual Collection Calendar to all residences receiving curbside collection. The double-sided, single-sheet calendar and recycling guide was distributed to all houses, duplexes, and row-houses in December 2024. The calendar was translated into nine other languages which are available online:

Chinese (Simplified and Traditional)

Farsi

French

Italian

Korean

Punjabi

Spanish Tagalog

The new "Oops" stickers continue to successfully inform and educate residents when common waste and recycling issues are noted on collection day. A contamination letter follows the stickers in the mail, providing educational material and contact information for any follow-up questions.





#### **Community Events and Outreach Campaigns**

The City hosted its first Spring Clean Up Event on June 8, 2024 which focused on providing a one-stop shop for Burnaby residents discarding household garbage, recycling and re-usable items at our Still Creek Works Yard. The goal was to accept materials and divert as much of it as possible, with the support of City staff and partners. This event brought in 1,133 vehicles and collected 60,625 kg of garbage, over 100 mattresses, and recycling tonnage which was added transferred to the Eco-Centre across the street.

Reused items were collected by our partners Big Brothers of Greater Vancouver:

- 3 1,549 kg of clothing, shoes, accessories, bedding, towels etc.
- 3 1,382 kg of small household items such as pots, pans, dishware, cutlery, small decorations, toys, small gym equipment, etc.
- » 152 kg of books
- 3 60 large items (small pieces of furniture, decorations, etc.)

The City also hosted five community cleanup litter events in partnership with Green Teams of Canada, May to September in 2024. Our 2024 events enlisted the support of 399 volunteers, and removed more than 675 kg (256 kg more than in 2023) of litter from the streets near Burnaby's 4 major Town Centres (Edmonds, Lougheed, Brentwood, and Metrotown). The partnership helped reach out farther to all corners of the city, and even encouraged residents of neighbouring municipalities to come out and volunteer. The July 20 event at Bonsor Recreation Complex near Metrotown had the largest turnout since our clean-up events began, with 123 community volunteers.

Overall, the Solid Waste & Recycling team participated in 30 community and City-hosted events across Burnaby in 2024, providing educational outreach on recycling and waste reduction, garbage and recycling disposal and pickup on-site, and/or traffic support. We also supported nine resident-led community cleanups, providing equipment and pick-up of collected litter to volunteer groups.

Other outreach initiatives include:

- 3 5 outreach talks provided to Burnaby elementary schools, local business & a not-for-profit group
- >> 5 tours of the Eco Centre Facility to local groups
- Worked with local Burnaby Neighbourhood House communities to provide education and outreach over 4 events.

The Adopt-a-Street program was created in 2022, and has been continuing to grow to over 100 volunteer applicants. To better manage this influx of volunteers, an improved volunteer database debuted in 2024, along with improvements to our web page, application and interactive street map. These improvements will better support volunteers interested in helping clean up litter along City boulevards, streets and lanes. Our team also improved internal collaboration with Parks Recreation & Culture department to broaden clean-up to City parks and facilities. In 2025, we plan to introduce Adopt-a-Street signs to showcase the great volunteers dedicating their time to keep the city clean and litter-free.

Throughout the year, the City actively promotes seasonal waste diversion campaigns. During November and December, a dedicated Holiday Waste Reduction web page showcased ideas for diverting holiday related packaging and food waste. The page also provided information about the City's special Christmas tree collection service to encourage proper tree recycling. This information was also visible on the curbside calendar, the mobile app, and notifications sent out during the holidays to draw attention to this service and information.



Community Cleanup event



## 7.0 LOOKING AHEAD TO 2025

The City has successfully met environmental challenges over the years through developing innovative solutions while maintaining its commitment to environmental protection. Looking ahead to 2025 brings forward enhancements to Burnaby's waste reduction programs that will further strengthen our waste reduction goals.

In 2025, we're planning to:

- » host a second annual Spring Clean Up Event
- » adapt and optimize waste and recycling operations to provide the best service available to new SSMUH developments
- » install additional charging infrastructure at our Still Creek Works Yard to support additional future fleet electrification
- » collaborate with the City's Parks and Information Technology departments to create a new Burnaby Wildlife Reporting App
- » pilot wildlife-resistent enclosure at Barnet Beach to support additional food scraps and recycling diversion
- » start "Recycling Rock Star" positive reinforcement sticker initiative for good resident recyclers
- » continue research on bear-resistant equipment that is compatible with our collections trucks and will further reduce waste-associated wildlife encounters
- » install 3-stream streetscape bins at all transit stops and explore streetscape bin enclosure designs that will allow for flexibility in limited spaces while being compatible with our automated collection trucks
- » expand the Adopt-a-Street program, encouraging more community members to get involved to help keep Burnaby clean
- » continue to conduct waste composition audits and use our findings to set priorities for education, contamination and diversion programs
- » switch to 100% renewable diesel alternative fuels which provide over 70% reduction in GHG emissions





Staff at Spring Clean Up event



#### **ENGINEERING DEPARTMENT**

