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**Public Works and Transportation Committee  
Electronic Meeting**

**Council Chambers, City Hall  
6911 No. 3 Road**

**Wednesday, April 20, 2022  
4:00 p.m.**

Pg. #      ITEM

MINUTES

**PWT-5**      *Motion to adopt the **minutes** of the meeting of the Public Works and Transportation Committee held on March 23, 2022.*



NEXT COMMITTEE MEETING DATE

May 18, 2022, (tentative date) at 4:00 p.m. in the Council Chambers

ENGINEERING AND PUBLIC WORKS DIVISION

1. **2022 NATIONAL PUBLIC WORKS WEEK - MAY 15 TO 21, 2022**  
(File Ref. No. 10-6000-00) (REDMS No. 6858261)

**PWT-9**

**See Page PWT-9 for full report**

*Designated Speaker: Suzanne Bycraft*

STAFF RECOMMENDATION

*That the staff 2022 campaign theme to recognize National Public Works Week as outlined in the staff report titled “2022 National Public Works Week - May 15 to 21, 2022”, dated March 14, 2022, from the Director, Public Works Operations, be received for information.*



2. **RECYCLING AND SOLID WASTE MANAGEMENT – REPORT 2021: RETHINK WASTE TO SUPPORT A CIRCULAR ECONOMY**

(File Ref. No. 10-6370-01) (REDMS No. 6858841)

PWT-18

See Page PWT-18 for full report

*Designated Speaker: Suzanne Bycraft*

STAFF RECOMMENDATION

- (1) *That the report titled, “Recycling and Solid Waste Management – Report 2021: Rethink Waste to Support a Circular Economy”, dated March 16, 2022, from the Director, Public Works Operations, be endorsed; and*
- (2) *That the Report 2021: Rethink Waste to Support a Circular Economy be made available to the community on the City’s website and through various communication tools including social media channels and as part of community outreach initiatives.*



3. **SOLID WASTE AND RECYCLING REGULATION BYLAW NO. 6803, AMENDMENT BYLAW NO. 10361**

(File Ref. No. 10-6370-04-01) (REDMS No. 6608518)

PWT-90

See Page PWT-90 for full report

*Designated Speaker: Suzanne Bycraft*

STAFF RECOMMENDATION

- (1) *That the Solid Waste and Recycling Regulation Bylaw No. 6803, Amendment Bylaw No. 10361, be introduced and given first, second and third readings;*
- (2) *That mercury containing and electronic thermostats be added to the scope of materials accepted at the Richmond Recycling Depot by registering with the Thermostat Recovery Program delivered by the Heating, Refrigeration and Air Conditioning Institute of Canada; and*

- (3) *That the Consolidated 5 Year Financial Plan (2022-2026) be amended accordingly.*



4. **NOVEMBER 2021 ATMOSPHERIC RIVER EVENTS - SUMMARY AND OUTCOMES**

(File Ref. No. 10-6045-01) (REDMS No. 6817597)

PWT-98

See Page PWT-98 for full report

*Designated Speaker: Suzanne Bycraft and Milton Chan*

STAFF RECOMMENDATION

*That staff apply the knowledge gained from the November 2021 atmospheric river event and response to inform future updates to the City's infrastructure plans and strategies, as well as future capital, operating and utility budget submissions.*



PLANNING AND DEVELOPMENT DIVISION

5. **TRAFFIC SAFETY IMPROVEMENTS AROUND SCHOOLS – UPDATE**

(File Ref. No. 10-6450-09-01) (REDMS No. 6846745)

PWT-106

See Page PWT-106 for full report

*Designated Speaker: Bill Dhaliwal*

STAFF RECOMMENDATION

*That the staff report titled “Traffic Safety Improvements around Schools – Update” dated March 9, 2022, from the Director, Transportation:*

- (1) *be received for information; and*
- (2) *be forwarded to the Richmond Council-School Board Liaison Committee for information.*



6. **BARNES DRIVE AND FLURY DRIVE TRAFFIC CALMING –  
REPORT BACK ON REFERRAL**

(File Ref. No. 12-8060-20-010301) (REDMS No. 6827939)

PWT-114

See Page PWT-114 for full report

*Designated Speaker: Fred Lin*

**STAFF RECOMMENDATION**

- (1) *That Option 3 to establish a 30 km/h speed limit on Barnes Drive and Flury Drive, as described in the staff report titled “Barnes Drive and Flury Drive Traffic Calming – Report Back on Referral” dated March 15, 2022, from the Director, Transportation, be endorsed; and*
- (2) *That should Option 3 be endorsed, Traffic Bylaw No. 5870, Amendment Bylaw No. 10301, to revise the posted speed limit on Barnes Drive and Flury Drive to 30 km/h, be introduced and given first, second and third reading.*

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7. **MANAGER’S REPORT**

**ADJOURNMENT**

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## Public Works and Transportation Committee

Date: Wednesday, March 23, 2022

Place: Council Chambers  
Richmond City Hall

Present: Councillor Chak Au, Chair  
Councillor Andy Hobbs (by teleconference)  
Councillor Linda McPhail (by teleconference)  
Councillor Michael Wolfe (by teleconference)  
Councillor Alexa Loo (entered at 4:02 p.m. by teleconference)

Also Present: Councillor Carol Day (by teleconference)

Call to Order: The Chair called the meeting to order at 4:00 p.m.

### MINUTES

It was moved and seconded

*That the minutes of the meeting of the Public Works and Transportation Committee held on February 23, 2022, be adopted as circulated.*

**CARRIED**

### NEXT COMMITTEE MEETING DATE

April 20, 2022, (tentative date) at 4:00 p.m. in the Council Chambers

### PLANNING AND DEVELOPMENT DIVISION

1. **ICBC-CITY OF RICHMOND ROAD IMPROVEMENT PROGRAM – 2022 UPDATE**

(File Ref. No. 01-0150-20-ICBC1-01) (REDMS No. 6817741)

*Cllr. Loo entered the meeting (4:02 p.m.).*

## Public Works & Transportation Committee

### Wednesday, March 23, 2022

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Discussion ensued with regard to resolution of traffic cameras and on-going studies related to traffic calming measures.

It was moved and seconded

- (1) *That the list of proposed road safety improvement projects, as described in Attachment 2 of the staff report titled "ICBC-City of Richmond Road Improvement Program – 2022 Update," dated February 2, 2022 from the Director, Transportation be endorsed for submission to the ICBC 2022 Road Improvement Program for consideration of cost-share funding; and*
- (2) *That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the cost-share agreements on behalf of the City, and that the Consolidated 5 Year Financial Plan (2022-2026) be amended accordingly.*

**CARRIED**

## ENGINEERING AND PUBLIC WORKS DIVISION

### 2. **PROVINCIAL WATERSHED SECURITY STRATEGY AND FUND**

(File Ref. No. 10-6125-01) (REDMS No. 6834052)

Discussion ensued with regard to (i) best practices for reducing contamination from construction, industrial and agricultural activities, (ii) the water treatment process for water discharged from excavation sites, (iii) advocating for the restriction of certain activities in areas near watersheds, (iv) retention and protection of the peat soil areas in the city, (v) supporting improved habitats in aquatic ecosystems, and (vi) continued consultation with the Province during their review of watershed policies.

In reply to queries from Committee, staff noted that City comments related to the protection of retention of peat soil areas can be included in the submission to the Province.

It was moved and seconded

*That the comments outlined in the staff report titled "Provincial Watershed Security Strategy and Fund", dated February 16, 2022, from the Director, Sustainability and District Energy and the Director, Engineering, be endorsed and submitted to the provincial Ministry of Environment and Climate Change Strategy.*

**CARRIED**

**Public Works & Transportation Committee**  
**Wednesday, March 23, 2022**

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**2A. NO. 6 ROAD TRAFFIC SAFETY**

(File Ref. No.)

Discussion ensued with regard to (i) reducing the speed limit in 60 km/h sections of No. 6 Road, (ii) installing traffic calming signage, (iii) enforcing speed limits along No. 6 Road, (iv) investigating complaints related to street racing and engine brakes, and (v) reviewing the potential of a city-wide reduction of speed limits.

In reply to queries, staff noted that staff can review traffic calming signage and areas in the city where the speed limit is 60 km/h. Staff added that lowering speed limits and adding signage can be considered, however enforcement of such limits would be a key factor to lowering actual vehicle speeds.

As a result of the discussion, the following **referral motion** was introduced:

It was moved and seconded

*(1) That staff provide background information on the speed limit, traffic signs and other related issues along No. 6 Road; and*

*(2) That staff request information on the enforcement of vehicle speed, application of engine brakes and street racing from the Richmond RCMP;*

*and report back.*

**CARRIED**

**3. MANAGER'S REPORT**

*(i) Capstan Station Construction*

Staff noted that installation of sanitary lines has been completed. As a result, the two-lane closure of No. 3 Road has ended and has returned to the regular road closure of one northbound lane.

*(ii) Rail Works along Shell Road and Williams Road*

CN Rail is in the process of completing rail works along Shell and Williams Road and the City will be activating the intersection traffic signal in the coming week.

*(iii) South Dike Clean Up*

It was noted that debris was recently cleaned up along the South Dike.

*(iv) 2022 Mosquito Abatement Program*

Staff noted that Richmond will be participating in Metro Vancouver's Mosquito Abatement Program. The program will commence in May 2022 and will include target sites along the West Dike for larvae treatment.

**Public Works & Transportation Committee**  
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**(v) *Richmond Bee City Application***

Staff noted that Richmond's application to be a designated Bee City has been successful and Richmond is now Bee City certified.

**(vi) *Hamilton Area Street Banners***

Staff will be following up with Banner program staff on installing banners along Gilley Road and Westminster Highway.

**ADJOURNMENT**

It was moved and seconded

***That the meeting adjourn (4:55 p.m.).***

**CARRIED**

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Wednesday, March 23, 2022.

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Councillor Chak Au  
Chair

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Evangel Biason  
Legislative Services Associate



# City of Richmond

## Report to Committee

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**To:** Public Works and Transportation Committee      **Date:** March 14, 2022  
**From:** Suzanne Bycraft  
Director, Public Works Operations      **File:** 10-6000-00/Vol 01  
**Re:** **2022 National Public Works Week - May 15 to 21, 2022**

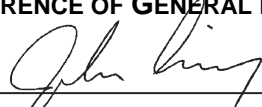


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### Staff Recommendation

That the staff 2022 campaign theme to recognize National Public Works Week as outlined in the staff report titled “2022 National Public Works Week - May 15 to 21, 2022”, dated March 14, 2022, from the Director, Public Works Operations, be received for information.

Suzanne Bycraft  
Director, Public Works Operations  
(604-233-3338)

Att. 2

REPORT CONCURRENCE	
<b>CONCURRENCE OF GENERAL MANAGER</b> 	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b> 
<b>APPROVED BY CAO</b> 	

## **Staff Report**

### **Origin**

The Canadian National Public Works Association's annual National Public Works Week is from May 15-21, 2022. In past years, the City has celebrated National Public Works Week with in-person events including an open house, school and education events, engineering exhibits and displays of public works and parks equipment.

Due to the uncertainty with the COVID-19 pandemic, staff have pivoted in 2022 to virtual events to celebrate this year's National Public Works Week, similar to that undertaken in 2021. National Public Works Week promotion in 2022 will include a social media, student engagement and community engagement campaign as outlined in this report.

### **Analysis**

#### **Background**

Each May, National Public Works Week recognizes the many people dedicated to their communities by working in public works careers. The week is used to energize and educate the public on the importance of public works in their daily lives. The City recognizes National Public Works Week through a proclamation outlining the following areas:

- Public Works services provided in the community are an integral part of Richmond citizens' everyday lives; and
- the support of an understanding and informed citizenry is vital to the efficient operation of Public Works systems and programs such as water, sewers, roads, public buildings and solid waste collection; and
- the health, safety and comfort of this community greatly depend on these facilities and services; and
- the quality and effectiveness of these facilities, as well as their planning, design and construction, is vitally dependent upon the efforts and skills of Public Works officials; and
- the efficiency of qualified and dedicated personnel who staff the Public Works Departments is materially influenced by the people's attitude and understanding of the importance of the work they perform.

#### **2022 Campaign Theme and Components**

This year's National Public Works Week theme is "Ready and Resilient" (Attachment 1). Staff will use this theme to illustrate the preventative work, proactive planning and skilled execution of services that allows us to be responsive, ready and resilient in the community when required.

The City will recognize National Public Works Week by hosting three integrated campaign approaches:

### Social Media

Staff are inviting the public to celebrate this year's National Public Works Week by visiting the City's social media channels daily from May 15-21, to view new photos/videos featuring different Public Works' staff and services including a Recycle Depot tour, a watermain project, a drainage project and video footage of a snow plough in action.

### Student Engagement

The City and CUPE 394 will continue to award the annual Public Works Open House Scholarship to two School District No. 38 grade 12 students. The scholarships are \$1,000 each and students who have elected to pursue a trades career are invited to submit an application to the School District. A video presentation of the scholarships will be provided to the recipients.

### Community Connections

Two community connections communication pieces, a video and an article, were produced to highlight the connection between Public Works and the community, and to showcase the exceptional work of staff. They further demonstrate how Council approved infrastructure based projects materialize into tangible services that provide practical and real benefits to the community.

The video, "Reeder Road South Laneway Drainage & Asphalt Upgrade", highlights the connection made between staff and Errington Elementary School students at this drainage infrastructure capital project. While working in the neighbourhood, staff could see an interest from the students and approached the school with an invitation to spend a morning to learn more about the project. After the field trip, students connected the importance of safety, the environment, social responsibility and City operations through an in-school project, and awarded staff with the title of "Community Heroes".

The article, "Pipes are Really About People", (Attachment 2) features a current watermain project in the Springfield neighbourhood and highlights one of the City's primary corporate values: people. The crew working on the watermain project have a special bond and passion for their work as well as building community, which is apparent from the kudos received from the public at several watermain projects throughout the City.

Going forward, these community connection pieces will be incorporated on the City's website. Staff will continue to produce feature materials which recognize Council's commitment to infrastructure improvements while demonstrating service excellence performed on various capital infrastructure improvement projects. The nature of these key infrastructure services being underground means they may be less visual to the community, but nevertheless are of significant importance to daily life for residents and businesses alike.

## **Financial Impact**

None

## **Conclusion**

The Canadian National Public Works Association's annual National Public Works Week is from May 15-21, 2022 and the City's Engineering and Public Works Division plays an active role in celebrating it. Three integrated campaigns through social media, student and community engagement highlights will be held in virtual format to recognize and highlight the people who provide and maintain the infrastructure services known as public works. Cities across Canada participate by raising awareness of public works contributions, and encourage community support for these dedicated employees who consistently improve the quality of life for residents.



Jatinder Johal  
Manager, Public Works Administration  
(3330)

LK:lk

Att. 1: National Public Works Week Poster

Att. 2: "Pipes are Really About People" Article



National Public Works Week Poster







# CONNECTING COMMUNITY: Pipes are really about people

There's a lot more to replacing water pipes than you'd think. It turns out, pipes are really about people. People who enjoy safe, reliable water. People in the community who share an interest in the project and the people on the City of Richmond Public Works crew who put people first. And with every project, the crews are demonstrating the City's corporate values: people, excellence, leadership, team and innovation.



Putting water pipes in the ground and hooking them up to homes is just part of what goes on when the City upgrades its watermain infrastructure. When you pass by the Springfield area, where the crew is installing new water pipes, you will see everything you expect: an excavator and other big equipment, crew members working together in hard hats and steel-toed boots with shovels and other tools, stacks of long blue pipes and lots of dirt.

*Continued on next page*



It's evident that there is a routine, even a rhythm, to their work, and they make quick progress, completing about 15 lengths of pipe a day (that's 90 metres). The City is investing \$1,505,000 to replace the watermain, add new hydrants and make other improvements in the area. The work includes digging the ground out, putting in the pipe, burying the pipe, installing valves and hydrants, testing the water pressure, chlorinating the water, dechlorinating the water, initiating water quality tests, connecting the water service to homes and smoothing out the area to make sure it's safe for drivers while waiting for paving. They move about 30 truckloads of soil (some in, some out) daily, and they get everything ready for each service connection so that residents are only without water for about 15 minutes. It's a lot.

*"Not many people really like to do what we do, but the guys on this crew want to do the work and they care about the product they put in the ground," says Jason Butler, the supervisor of the water crew. "They work really hard to get the job done well, and get it done quickly. I think my crew is one of the best. We're a tight-knit group."*

The quality of their workmanship is evident, as, from the time they first took on these types of projects about eight years ago, they continue to complete them on time and on (or even under) budget. Butler notes that their work also supports sustainability goals for the City as older pipes leak; whereas, with the new PVC pipes, zero leakage is permitted. They also recycle and reuse their materials, which are produced from the Sidaway site.

But when you spend a bit more time watching and listening, (and okay, speaking to their supervisor), you'll discover there's even more going on. When putting pipes in the ground for water service, the crew sees more than the task at hand. They recognize (and emphasize) the importance of a safe, reliable water, and the critical need to support a sustainable water supply to protect this limited and highly valuable resource.



They take pride in their work, and they keep the bigger picture in mind: the people who are connected to the system.

Before every project, the City sends letters to all the area residents who are affected by the construction work. That's pretty standard. But Butler takes it a step further to connect in person with people in the area. On his current project, he noted that there was a school nearby so he went to speak to the principal to let him know about the project and invited classes to drop by to see the work underway. About five classes took him up on his offer, and Butler not only talked to them about the work underway, he used it as an opportunity to teach them about water conservation.

*Continued on next page*



"I explain the water cycle, how much water there is on earth, and how little of it is water we can drink," says Butler. "It's a lot of work to get the water we enjoy daily, and I ask them to do their part to conserve water, like turning the water off while brushing their teeth."

Then there's the honorary member of their crew: Daniel, a young man with autism who lives in the community, is passionate about water pipes and the work they are doing. Rather than pushing him away, the crew connected with his father, confirmed that he had the required safety gear and allows him on the site with supervision so that he feels like part of the team.

And then there are the many positive community connections that they make simply by reaching out, being friendly and communicating with residents. Residents appreciate the extra effort to keep them informed, and they respond in many positive ways. One dropped by with sandwiches for the whole crew – and Butler shared his with Daniel. A home for adults with disabilities was also in the construction area for a recent project, and they painted thank-you signs on canvas and gave them to the crew.

Others call the City or send emails like these:

"I just had a call from a resident by the name of Terry to compliment the crew working on the watermain in the Chatsworth area, particularly Jason Butler. He said they are all doing a great job and have been super at dealing with the residents and keeping them up-to-date on the project."

"We want to share our appreciation of the onsite project team. They have consistently taken the time to provide us with updates; shown a strong work ethic; and, demonstrated a commitment to our safety while ensuring limited disruption in access to and from our property during the City's work hours. While the water pipe replacement project is not yet completed, it has so far been a very positive experience for us because of the highly competent on-site employees doing their jobs effectively."

*Continued on next page*







In addition to open, friendly and consistent communication, Butler's crew also puts people first by assessing how their work will affect residents. As an example, on the current project, the surveyors had marked the placement of a hydrant based on the required distance between each hydrant on the street. But this particular placement would result in the hydrant sitting right in the middle of the resident's garden, displacing a recently planted apple tree. Butler approached the residents on the affected property and asked them if they would be fine with him shifting it over a bit to save the tree and put it in a less disruptive location.

"The resident's son was there and was very worried about the apple tree being hurt by the hydrant, so they were happy to see it moved, and the small adjustment is something we can do for them while still meeting all the distance requirements," says Butler.

When asked about why he thinks his crew is so successful, Butler emphasizes that it's a group effort – and there are more crews involved who contribute to their success. Other crews include surveyors, engineering, roads/paving, inspection, water testing, transportation and project management.

But when pushed about his crew specifically, he notes that they share the same goal and everyone is ready to do any job needed.

"We want to make the area better than when we got there, so we look for ways to do that beyond the project itself, like fixing sidewalks and helping residents," says Butler. "We don't take short cuts, and we all do everything. No one says 'that's not my job' and we start the day with 'what can we do' and then work together to make it happen."

When Kenny Laboucane, also a leader of the crew, dropped by, Butler asked him why he thought they were successful. His response: "We're like a hockey team where you may not have all the best players on your team, but it all gels. It's the best crew. We've worked together for a long time. We're buddies. How many people can come into work every day with their best friends?"

Leveraging the success of Butler's crew, the City now also uses them as training ground to teach other crews how they work, and how they connect with the community.

Ultimately, what they do is truly public works. They don't just connect pipes, they connect with people. And the end result is about more than just safe, reliable drinking water. It's about building community.





# City of Richmond

## Report to Committee

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**To:** Public Works and Transportation Committee      **Date:** March 16, 2022  
**From:** Suzanne Bycraft  
Director, Public Works Operations      **File:** 10-6370-01/2022-Vol 01  
**Re:** **Recycling and Solid Waste Management – Report 2021: Rethink Waste to Support a Circular Economy**

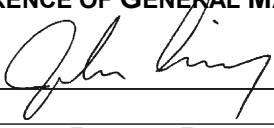


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### Staff Recommendation

1. That the report titled, “Recycling and Solid Waste Management – Report 2021: Rethink Waste to Support a Circular Economy”, dated March 16, 2022, from the Director, Public Works Operations, be endorsed.
2. That the Report 2021: Rethink Waste to Support a Circular Economy be made available to the community on the City’s website and through various communication tools including social media channels and as part of community outreach initiatives.

Suzanne Bycraft  
Director, Public Works Operations  
(604-233-3338)

Att. 1

REPORT CONCURRENCE	
<b>CONCURRENCE OF GENERAL MANAGER</b> 	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b> 
<b>APPROVED BY CAO</b> 	

## Staff Report

### Origin

This report highlights the City's success in implementing policies, services and new initiatives to help support a circular economy through sustainable waste management to help achieve the targets in Richmond's Community Energy and Emissions Plan. Richmond's achievements, goals for 2022 and tips and resources are outlined in the City's annual progress report as presented in the attached "Report 2021: Rethink Waste to Support a Circular Economy" ("Report").

This report supports Council's Strategic Plan 2018-2022 Strategy #2 A Sustainable and Environmentally Conscious City:

*Environmentally conscious decision-making that demonstrates leadership in implementing innovative, sustainable practices and supports the City's unique biodiversity and island ecology.*

*2.1 Continued leadership in addressing climate change and promoting circular economic principles.*

*2.2 Policies and practices support Richmond's sustainability goals.*

This report supports Council's Strategic Plan 2018-2022 Strategy #8 An Engaged and Informed Community:

*Ensure that the citizenry of Richmond is well-informed and engaged about City business and decision-making.*

*8.1 Increased opportunities for public engagement.*

### Analysis

Richmond's Community Energy and Emissions Plan is targeting opportunities to transition to a circular economy, and sustainable waste management is integral to achieving the City's goals. The strategy involves maximizing the value of resources and includes reducing carbon emissions, encouraging responsible consumption and minimizing waste as part of the global effort to be more sustainable and reduce environmental impacts. In a circular economy, waste is reduced or eliminated by transforming how products and services are designed, manufactured and used.

Richmond is well positioned to support the transition to a circular economy, as a result of Council's commitment to provide comprehensive recycling programs to the community and residents' commitment to divert waste from the landfill. In 2021, key achievements noted in the Report include the adoption of the *Single-Use Plastic and Other Items Bylaw No. 10000* (Bylaw 10000) to help eliminate 35 million banned items annually from disposal in Richmond and reduce plastic pollution. This policy initiative demonstrates Council's leadership on the important challenge of plastic waste and its detrimental impact on the environment. The City

continued its extensive communications and community engagement with residents and businesses to raise awareness and prepare for Bylaw 10000, and promote opportunities to rethink and reduce waste. As well, residents continue to divert the majority of their household waste through Richmond's sustainable waste management programs.

The Report also includes detailed program information, insights into upcoming initiatives and a comprehensive tips and resources section.

### 2021 Highlights

The adoption of Bylaw 10000 to ban foam food service ware, plastic checkout bags and plastic straws included a comprehensive communications campaign to raise awareness about the new ban and encourage reusable options instead. In advance of the adoption of Bylaw 10000, the City continued to support businesses in the transition to accepted alternatives by hosting a series of virtual workshops.

Another key initiative to support a circular economy involved a Rethink Waste communications and community engagement campaign that encouraged residents to share ideas for reducing waste. Residents participated in a Rethink Waste Think Tank, which generated 160 grassroots ideas to support reducing waste and achieving a circular economy. Ideas related to reducing waste were collated and posted in a new Community Ideas Hub on the City's website.

Although COVID-19 continued to limit in-person community outreach, the City pivoted to expand its virtual outreach programs. This included events and activities involving Green Ambassadors, such as a new outreach program to promote electric vehicle awareness among youth, a virtual repair fair focused on how to maintain and repair gas lawnmowers, and virtual Let's Recycle Correctly workshops to provide tips on how to recycle correctly.

The Report also highlights the broad range of sustainable waste management programs provided to residents to make it easy and convenient to recycle. This includes the City's one-stop recycling centre at the Richmond Recycling Depot, curbside and centralized collection programs, public spaces recycling and litter collection.

### Report 2021 Overview

The Report contains four sections – the first two sections provide an overview of the past year, including highlights for 2021, details and statistics on the City's waste management programs and services, and key planned initiatives for 2022. The Report's next two sections provide details on the many programs and services that support sustainable waste management, and a comprehensive tips and resources guide that provides more information on where to recycle, dispose or donate various household items.

The following is a summary overview of each section:



*Section 1: Annual Outlook* provides an overview of the achievements in 2021, including:

- **Enhanced service at the Richmond Recycling Depot:** Expanded Recycling Depot service to seven days a week, began accepting baby car seats and installed a larger tent to accommodate increasing volumes of upholstered furniture.
- **Launched Virtual Outreach:** Created and hosted virtual education and outreach including a Repair Fair and Let's Recycle Correctly workshops to engage with residents online.
- **Initiated Commercial Recycling Services Review:** Completed project planning and sourced required services for assessing current practices and engaging the commercial sector.
- **Adopted Single-Use Plastic Bylaw:** Bylaw 10000 was adopted and will be effective on March 27, 2022.
- **Supported Single-Use Ban Implementation:** Conducted 10 virtual business workshops, conducted door-to-door outreach with 670 businesses, co-hosted a vendor trade show, developed a Business Resource Centre with a toolkit and point-of-sale materials, and implemented a "Let's Choose to Reuse" community information and awareness campaign.
- **Implemented Rethink Waste Outreach:** Created and promoted the Rethink Waste Think Tank to generate ideas from residents to reduce waste and support a circular economy, which led to a new Community Ideas Hub on the City website.
- **Expanded Green Ambassadors Virtual Program:** Green Ambassadors continued with virtual platforms for 10 symposiums, planning or training sessions and supported eight special events.
- **Excellence in Service Delivery:** Recognized with an honourable mention at the UBCM convention for Excellence in Service Delivery for the Richmond Recycling Depot upgrades.

*Section 2: Tracking Our Progress* provides statistics and data on the broad range of programs and services the City offers residents to responsibly reduce, recycle or dispose of their household items. Highlights from each program shows the contribution by residents in single-family homes in achieving 79.3% waste diversion.

Through the Green Cart program, residents diverted 23,047 tonnes of food scraps and yard trimmings from the landfill. The residential Blue Box and Blue Cart programs diverted 8,000 tonnes of recyclable material, while the Richmond Recycling Depot captured a total of 7,581 tonnes of materials. The average number of visitors to the Recycling Depot each month was 20,343. The Large Item Pick Up program completed 15,628 service requests for 19,100 items equating to 836 tonnes of materials collected, with 644 tonnes of which were recycled.

Through outreach and customer service, staff assisted residents with 17,928 customer service calls, litter containers in public spaces were inspected 13,135 times per month and serviced 17,784 times per month, for a combined 371,030 bin visits per year. This timely and consistent collection continued to be especially important due to contaminated items like masks, gloves and tissues being disposed in public bins. The Richmond Recycling app and its Recycling Wizard

feature continue to provide enhanced service, with 16,865 active collection reminders and 94,864 Recycling Wizard searches.

Community engagement included 1,731 hours of youth volunteering and training through the Green Ambassador program, and 22 virtual community sessions and workshops involving 409 participants.

The Rethink Waste Think Tank resulted in 160 posted ideas, 271 participants and 1,263 visitors to the website.

*Section 3: Programs and Services* describes the City's comprehensive recycling and waste reduction programs, tips on how to recycle correctly with each service, and how recycling and reducing waste can support a circular economy and the City's sustainability goals. This section also includes information on litter collection, public spaces recycling, event recycling, and community and school engagement programs.

*Section 4: Tips and Resources* highlights community resources and partnerships that support sustainable waste management, and provides a recycling and disposal directory for details on where to recycle banned, hazardous and other materials.

### Moving Forward

Through partnerships and community engagement, the City will continue to implement new initiatives to make it easier and more convenient for residents to recycle their household waste and support a circular economy. Key focus areas in 2022 will include:

- Implement the *Single-Use Plastic and Other Items Bylaw No. 10000* and continue to raise awareness about the issue of single-use plastic and promote better options that help reduce waste.
- Expand service at the Richmond Recycling Depot by offering regional recycling services through a partnership with Metro Vancouver and increase accepted items.
- Complete a commercial recycling services review to explore opportunities to enhance recycling options for the commercial sector.
- Expand outreach including continued engagement through virtual platforms to encourage residents to recycle correctly, rethink waste and shift to a circular economy.
- Initiate a grease pilot project to collect cooking oil and grease from 500-800 multi-family units and measure impacts on the City's sewer infrastructure.
- Initiate a waterway litter collection pilot project to install and assess Seabins at Steveston Harbour to collect litter and debris from the waterway.

- Support circular economy targets by evaluating reuse options and continue to promote awareness and education through Rethink Waste and Let's Choose to Reuse communication campaigns.

Additionally, targeted measures will also be undertaken to address reports from Recycle BC relating to material contamination caused by improper recycling material sorting by residents. Key challenges relate to proper segregation of glass and placement of non-program materials in recycling bins (including butane cylinders, plastic toys, batteries, Styrofoam, etc.). Measures to be undertaken may include a review of barriers to proper sorting of recyclable materials, continued targeted education campaigns, and potential material audits.

#### Proposed Communication

Subject to Council's direction, "Report 2021: Rethink Waste to Support a Circular Economy" will be made available on the City's website and through various communication tools including social media channels as part of community outreach initiatives.

#### **Financial Impact**

None.

#### **Conclusion**

Through the "Report 2021: Rethink Waste to Support a Circular Economy", the City is providing its residents with an annual progress report on Council's leadership in sustainable waste management and the many recycling and waste management programs and services delivered in the community. By tracking progress and waste diversion, the City is demonstrating Richmond's commitment to responsive services, responsible government and accessible information and communication.



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LH:lh

Att. 1: City of Richmond Recycling and Solid Waste Management Report 2021: Rethink Waste to Support a Circular Economy

**City of Richmond Recycling  
and Solid Waste Management**

# **REPORT 2021**

**RETHINK WASTE TO SUPPORT A CIRCULAR ECONOMY**



Environmental Programs is responsible for residential garbage and recycling services, including collection, drop-off services at the Richmond Recycling Depot, public spaces recycling and litter collection services.

With Council's leadership and commitment to strategic planning and policy, we strive to help create more sustainable waste management through our programs and services to support a circular economy. We believe that it is our responsibility to support our community and preserve our planet for future generations.

Through outreach and engagement, working with our residents and local businesses, and partnering with local agencies, we also strive to meet and exceed all regional waste diversion goals by continuously expanding our programs and service offerings.

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# Transition to a Circular Economy

Richmond's Community Energy and Emissions Plan is targeting opportunities to transition to a circular economy, and sustainable waste management is integral to achieving the City's goals. The strategy involves maximizing the value of resources and includes reducing carbon emissions, encouraging responsible consumption and minimizing waste as part of the global effort to be more sustainable and reduce environmental impacts. In a circular economy, waste is reduced or eliminated by transforming how products and services are designed, manufactured and used.

Thanks to the City's comprehensive recycling programs and residents' commitment to divert waste from the landfill, Richmond is well positioned to support the transition to a circular economy. The City's sustainable waste management programs make it easy and convenient to reuse, repurpose and recycle household items multiple times into new products to reduce reliance on raw materials and help conserve natural resources. Through its Rethink Waste communications and engagement campaign, the City is also encouraging community members to reduce waste overall by reassessing buying decisions and taking action to extend the lifespan of products and materials.

Working together with the community, Richmond aims to be a fully circular city by 2050.

# TOWARDS A CIRCULAR ECONOMY

# 1.0

## Annual Outlook

With the adoption of Bylaw 10000 to ban single-use plastic, the City held extensive outreach with businesses to develop helpful resources to support them in the transition to accepted alternatives. A broad communications and engagement campaign was also developed to encourage residents to rethink their waste and help Richmond on its track towards a circular economy.

In 2021, Richmond continued to support residents with programs and services that make it easy to recycle the majority of their household waste, but there was also an expanded focus on how to help support the City's Community Energy and Emissions Plan targets to transition to a circular economy. One of the key achievements that aligns with these targets was the adoption of the *Single-Use Plastic and Other Items Bylaw No. 10000*. Moving forward with this ban on single-use plastics is an essential part of reducing unnecessary waste and pollution. Introducing Bylaw 10000 involved a comprehensive community engagement campaign that included working directly with businesses and a public education and communications campaign to raise awareness about Bylaw 10000, why it's important to reduce plastic waste and how community members can help by choosing reusable options.

In advance of the adoption of Bylaw 10000 in September, which bans foam food service ware, plastic straws and plastic checkout bags, the City continued to support business in the transition to accepted alternatives by hosting a series of virtual workshops. Businesses were provided with an overview of Bylaw 10000 and encouraged to ask questions and share input on the City's Business Information Toolkit and customer information materials.

Following Council's adoption of Bylaw 10000, the City created an online resource centre for local businesses, co-hosted a vendor trade show with the Richmond Chamber of Commerce to make it easy for businesses to connect with suppliers, and developed point-of-sale communication materials that businesses can order or download for free. (For more details about the outreach and resources for business, see Setting Business Up for Success on page 9.)



“In addition to the new ban on single-use plastic, the City targeted opportunities to reduce waste overall as an essential part of reducing demand for raw materials.”

The City also initiated a comprehensive communications and education program to notify residents that Bylaw 10000 was adopted, highlight the importance of reducing plastic waste and pollution, and encourage reusable items through its Let's Choose to Reuse campaign.

In addition to the new ban on single-use plastic, the City targeted opportunities to reduce waste overall as an essential part of reducing demand for raw materials. This involved a new Rethink Waste communications and engagement campaign to generate and share ideas on how to reduce waste along with new virtual outreach initiatives.

Through its Rethink Waste campaign, the City encouraged residents to question their current practices, highlighting concerns like unnecessary waste from single-use plastic and identifying opportunities to keep products in use longer as part of supporting a circular economy. Recognizing that residents may have innovative ideas for reducing, repurposing and sharing products, the City launched its Rethink Waste Think Tank on Let's Talk Richmond to generate grassroots ideas. The strong support for the Think Tank was evident with 160 ideas posted, including suggestions ranging from sustainable waste management to reducing carbon emissions and other sustainable ideas that support a circular economy. The Think Tank ideas for reducing waste were collated and posted in a new Community Ideas Hub.

In addition to the Think Tank outreach, the City expanded its use of online outreach to host its first virtual Repair Fair focused on repairing and maintaining gas lawnmowers. This new approach to engaging residents featured a City staff member who provided key tips to help extend the lifespan and improve operation of gas lawn mowers as a means to help reduce waste.

The Richmond Green Ambassadors also demonstrated innovation and a commitment to sustainability through their work with the City to develop a new outreach program to promote electric vehicle awareness among youth. The outreach program, known as the Richmond EVie Lesson Toolkit includes a mascot, aptly named EVie, along with EVie emojis. There's also a video and lesson plans for both kindergarten to grade seven students and one for grades eight to 12. The Green Ambassadors also continue to volunteer at special events and participate in training to support recycling and sustainable waste management.

The City also continued to support residential recycling as a priority. This included providing a full range of curbside and centralized collection programs, and convenient, one-stop recycling service at the Richmond Recycling Depot, which is open seven days a week and continues to add new accepted items. As part of its public spaces recycling, crews continue to work seven days a week to service public spaces garbage and recycling bins to help keep the City clean and free of litter.

The City remains focused on education. As COVID-19 restrictions continued to limit in-person engagement, the City pivoted to expand its virtual outreach options in 2021. Improving the quality of recycling through reduced contamination was again a priority over the last year as the City strives to meet its contract requirements with Recycle BC. To help residents recycle correctly and reduce risk of fines and other penalties, the City hosted virtual “Let's Recycle Correctly” workshops and implemented both public and targeted communication to provide tips on how to sort recycling and keep hazardous materials out of collection bins. Positive feedback from participants included a post on a community Facebook recommending the workshop and highlighting “the really helpful workshop online with two City staff members” as well as some of the tips shared during the session.

Looking ahead, the City will continue to support the transition to a circular economy, including implementing the ban on single-use plastic, exploring opportunities for innovation to reduce and rethink waste and ensuring it has easy and convenient services in place for community members and visitors to recycle correctly and consistently. This includes initiating a Commercial Services Review project, which was delayed due to the impacts of COVID-19 on local businesses. This project will involve outreach to Richmond businesses as well as companies and organizations involved in commercial recycling and waste management with a goal to understand the current landscape and identify potential options to increase commercial recycling. The City will also be implementing new pilot projects to address issues related to improper disposal of oils and grease, and proactive measures to collect litter and debris from waterways. For more details about goals for 2022, see page 8.



Together we can change habits and make better choices that support a circular economy.

## LET'S RETHINK WASTE

Changing our habits to think differently about purchases, avoiding unnecessary waste and finding ways to reuse and recycle products and services contributes directly to positive outcomes like reducing reliance on raw materials.

Ultimately, it's about shifting to a circular economy, where the materials we use stay in circulation to be used, reused or repaired, and recycled multiple times into new products.

### TOP TIPS TO REDUCE WASTE:

- Avoid single-use items – choose reusable instead
- Choose products with minimal packaging
- Buy, sell, trade or donate household items
- Choose products with recycled content
- Repair products when possible
- Rethink – take a moment to assess: do I need this item, will it create unnecessary waste, how can it be reused or recycled?

# 1.1

## 2021 Top Accomplishments

This report showcases some of the key achievements in 2021, as well as looking back on the City’s top accomplishments over the last 30 years.

### RECYCLING MILESTONES

Looking back to the 1990s and the past decade, there have been many accomplishments that have helped Richmond reach its goals.



**1 ENHANCED SERVICE AT THE RICHMOND RECYCLING DEPOT**

Expanded Recycling Depot service to seven days a week, added baby car seats and installed a larger tent to accommodate increasing volumes of upholstered furniture.

**2 LAUNCHED VIRTUAL OUTREACH**

Created and hosted virtual education and outreach including a Repair Fair and "Let's Recycle Correctly" workshops to engage with residents online.

**3 INITIATED COMMERCIAL RECYCLING SERVICES REVIEW**

Completed project planning and sourced required services for assessing current practice and engaging the commercial sector.

**4 ADOPTED SINGLE-USE PLASTIC BYLAW**

Bylaw 10000 was adopted and will become effective on March 27, 2022.

**5 SUPPORTED SINGLE-USE BAN IMPLEMENTATION**

Conducted 10 virtual business workshops, conducted door-to-door outreach with 670 businesses, co-hosted vendor trade show, developed a Business Resource Centre with a toolkit and point-of-sale materials, and implemented a "Let's Choose to Reuse" information and awareness community campaign.

**6 IMPLEMENTED RETHINK WASTE OUTREACH**

Created and promoted Rethink Waste Think Tank to generate ideas from residents to reduce waste and support a circular economy, which led to a new Community Ideas Hub on the City website.

**7 EXPANDED GREEN AMBASSADORS VIRTUAL PROGRAM**

Green Ambassadors continued with virtual platforms for 10 symposiums, planning or training sessions and supported eight special events.

**8 EXCELLENCE IN SERVICE DELIVERY**

Recognized with an honourable mention at the UBCM convention for Excellence in Service Delivery for the Richmond Recycling Depot upgrades.

Launched Green Cart program for single-family and townhomes

Launched Large Item Pick Up program

**2013**

Launched biweekly Garbage Cart program

**2016**

Renovated Recycling Depot and expanded items accepted

**2020**

**2015**

Launched Green Cart program for multi-family complexes

**2019**

Introduced Single-Use Plastic and Other Items Bylaw

Expanded Large Item Pick Up program

Expanded hours and items accepted at Richmond Recycling Depot

**2021**

Adopted Single-Use Plastic and Other Items Bylaw No. 10000

Extended Recycling Depot operations to 7 days a week and expanded items accepted





# 1.2

## Setting Goals

Richmond's long-term goal is to support a circular economy through sustainable waste management, and the annual goals listed here are designed to help achieve this target.

### 1 EXPAND SERVICE AT RICHMOND RECYCLING DEPOT

Offer regional recycling services through partnership with Metro Vancouver and increase accepted items.

### 2 COMPLETE COMMERCIAL RECYCLING SERVICES REVIEW

Undertake a review and scoping exercise to explore enhanced recycling options for the commercial sector.

### 3 EXPLORE SUSTAINABLE IMPROVEMENTS

Assess options to pave a section of the Richmond Recycling Depot with asphalt that has a component of recycled plastic.

### 4 COMPLETE DISASTER DEBRIS PLAN

Prepare a Richmond-specific Disaster Debris Management Plan.

### 5 EXPAND OUTREACH

Continue engagement through virtual platforms to encourage residents to recycle correctly, rethink waste and shift to a circular economy where materials we use stay in circulation.

### 6 INITIATE GREASE PILOT PROJECT

Develop a pilot project to collect waste grease from 500-800 multi-family units and measure impacts on the City's sewer infrastructure.

### 7 SUPPORT CIRCULAR ECONOMY

Evaluate reuse options as a component of circular economy principles and continue to promote awareness and education through Rethink Waste and Let's Choose to Reuse communication campaigns.

### 8 INITIATE WATERWAY LITTER REDUCTION PROJECT

Initiate a pilot project to install and assess sea bins at Steveston Harbour to collect litter and debris from the waterway.

### 9 REDUCE ILLEGAL DUMPING

Continue annual updates to the Illegal Dumping Overview and Strategy as part of moving towards innovative approaches to mitigate illegal dumping.

### 10 EXPAND PUBLIC SPACES RECYCLING

Install new public spaces recycling bins at the Nature Park, Thompson Community Centre, Sea Island Community Centre, Britannia Shipyard and McDonald Beach.

# 1.3

## Setting Business Up for Success

*Richmond's new Single-Use Plastic and Other Items Bylaw No. 10000 is an important step towards reducing unnecessary plastic waste and pollution. Bans on single-use plastic are also anticipated at a provincial and federal level as part of a global initiative to reduce plastic waste.*

As Bylaw 10000 and other future bans are being implemented, the City of Richmond has made it a priority to provide support for local businesses to help set them up for success as they transition to alternative materials. Starting from the initial introduction of Bylaw 10000 through to adoption and planned implementation, the City has worked with local businesses and organizations to provide information, respond to questions and develop resources that support business as they prepare for the new bans. The feedback from businesses has been very positive, and their input was integrated into the development of resources and communication materials.

The initial round of engagement with business was held in 2019 following the introduction of Bylaw 10000, and it involved sharing information and collecting feedback on both the ban and how the City can support business. The City reached out directly to affected businesses in the community and worked with nine organizations to help get the word out about the proposed Bylaw 10000 and the opportunity to participate in workshops. A comprehensive Discussion Guide was developed, and the City hosted 10 workshops involving 179 attendees. Participants shared ideas, identified concerns and asked questions during the workshops and through feedback forms.

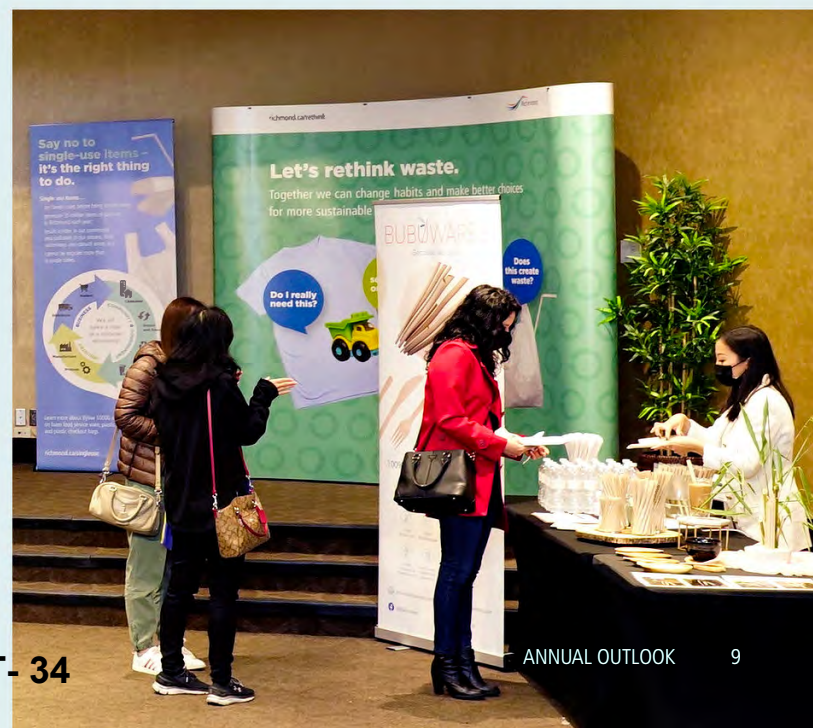
The City also hosted three open houses at local malls to make it easier for retail and restaurant vendors to participate. As well, staff completed door-to-door visits at 187 businesses in 2019 and attended two Richmond Chamber of Commerce Business-to-Business events.

The City initiated another round of engagement with business in 2021, which involved 10 virtual workshops with 121 participants. There were also 670 door-to-door visits to raise awareness about the upcoming ban and answer questions. In response to one of the top-rated ideas for supporting business, the City also partnered with the Richmond Chamber of Commerce to host a vendor trade show so that local businesses could meet directly with vendors.

Businesses who participated in the workshops and trade show expressed their appreciation noting that the City was “doing a lot more than most to support business” and that they felt much more informed about both Bylaw 10000 and accepted alternatives. In follow-up surveys, 80% of respondents indicated they found the vendor trade show very useful, and 100% of respondents said they felt informed about the new Bylaw following the workshops (66.7% very informed and 33.3% somewhat informed).

Richmond also developed multiple resources for businesses, including a Business Information Toolkit and point-of-sale communication materials like window decals, posters and shelf signs to help businesses inform their customers about Bylaw 10000 and to encourage reusable options instead. These materials and print order forms are all posted under Resources for Business at [richmond.ca/singleuse](http://richmond.ca/singleuse).

Making the change to ban single-use plastic is an essential part of reducing unnecessary waste and pollution, and working together with local businesses, the City is on track for a successful transition to eliminate these banned items and encourage reusable options instead.





# SHARING IDEAS TO REDUCE WASTE

# 2.0

## Tracking Our Progress

As part of tracking its progress, the City of Richmond collects data across a broad spectrum of programs, services and activities. This data shows how residents have improved their recycling over the years, and how new programs are contributing to a circular economy.

The mix of data reported reflects the amount of recycling handled through residential collection programs, the usage and types of materials dropped off at the Richmond Recycling Depot and a breakdown of the different types of recyclable materials that are being diverted from the landfill through multiple recycling programs. As well, the City has a number of outreach initiatives that are aimed at increasing awareness and understanding about how to recycle correctly and consistently.





# 2.1

## Diversion Statistics

Richmond residents in single-family homes diverted 79.3% of their waste from the landfill in 2021.

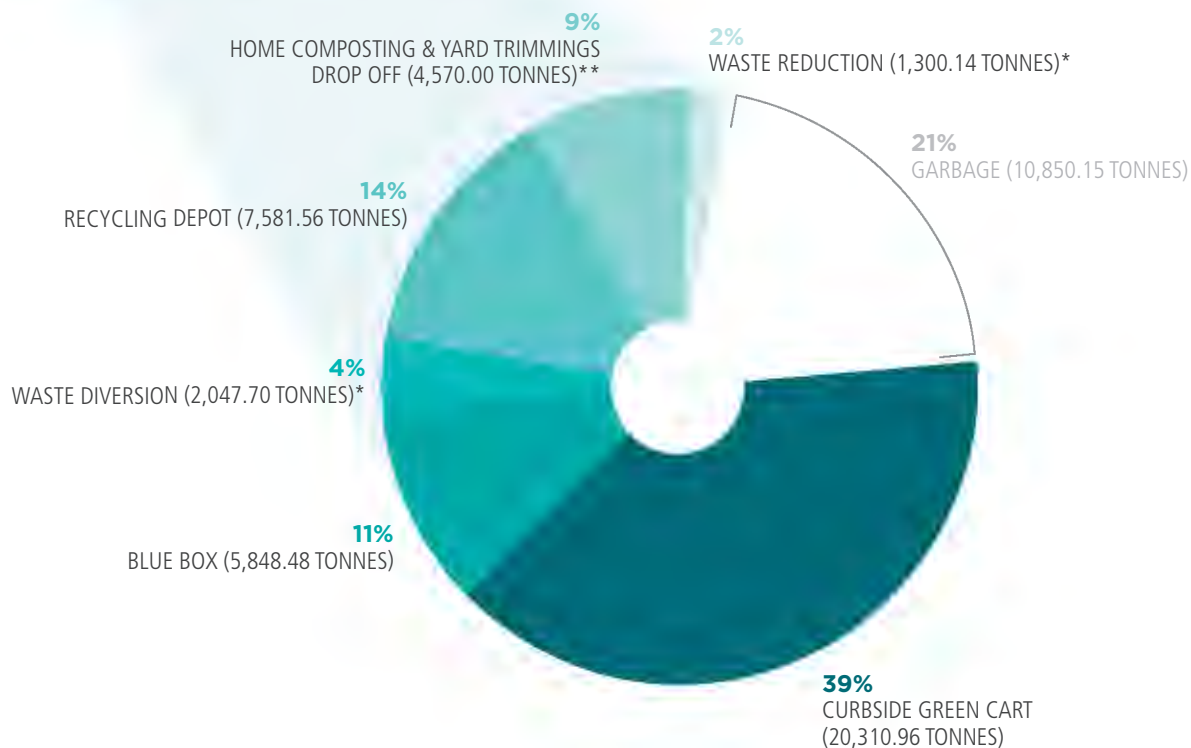
**79.3%**

**WASTE DIVERSION  
ACHIEVED!**

## SINGLE-FAMILY RECYCLING IN 2021

Residents took advantage of a variety of programs to divert **79.3%** of their waste from the landfill in 2021.

Residents were able to achieve this waste diversion through a number of recycling and waste reduction opportunities, including curbside and Richmond Recycling Depot collection, as well as composting programs.

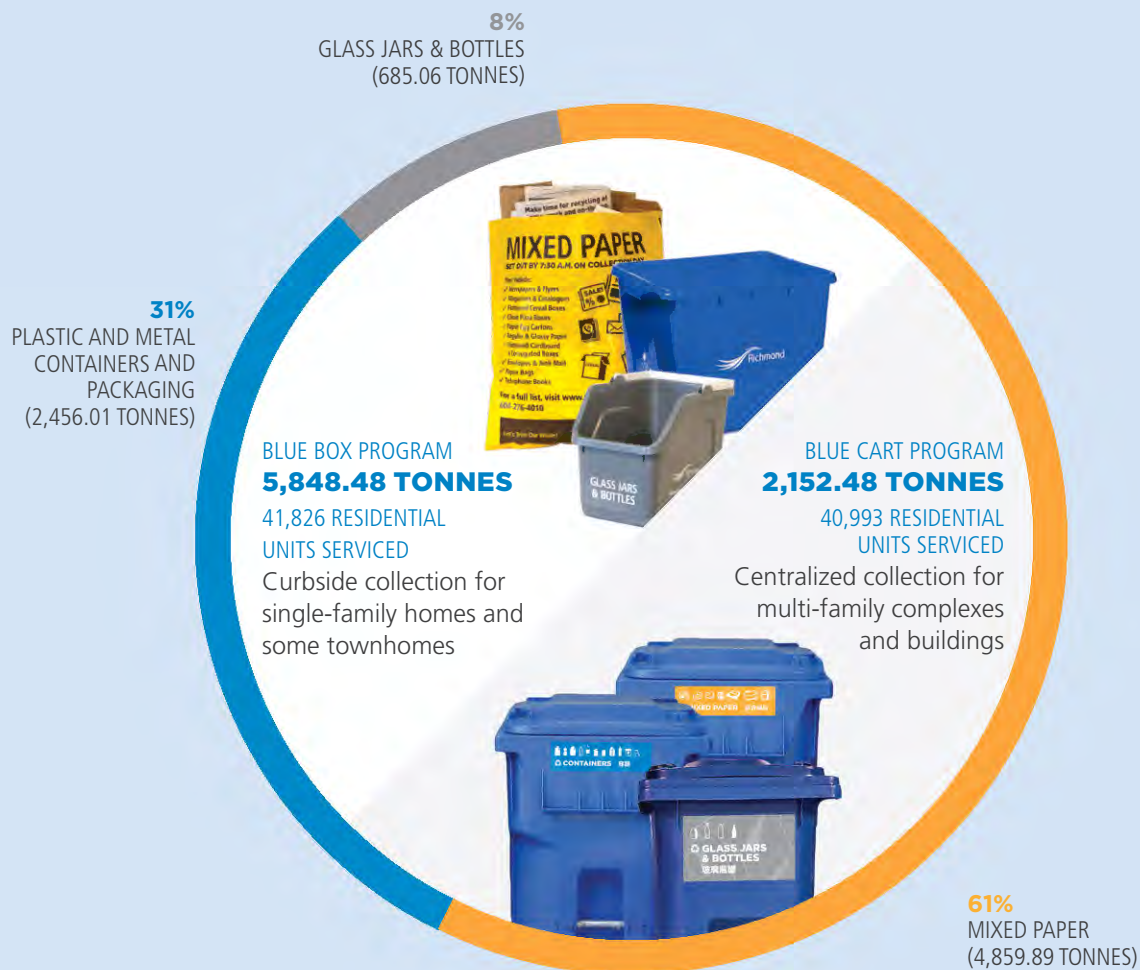


\* Estimated

\*\* Includes estimates for home composting, tree chipping and leaf drop-off programs.

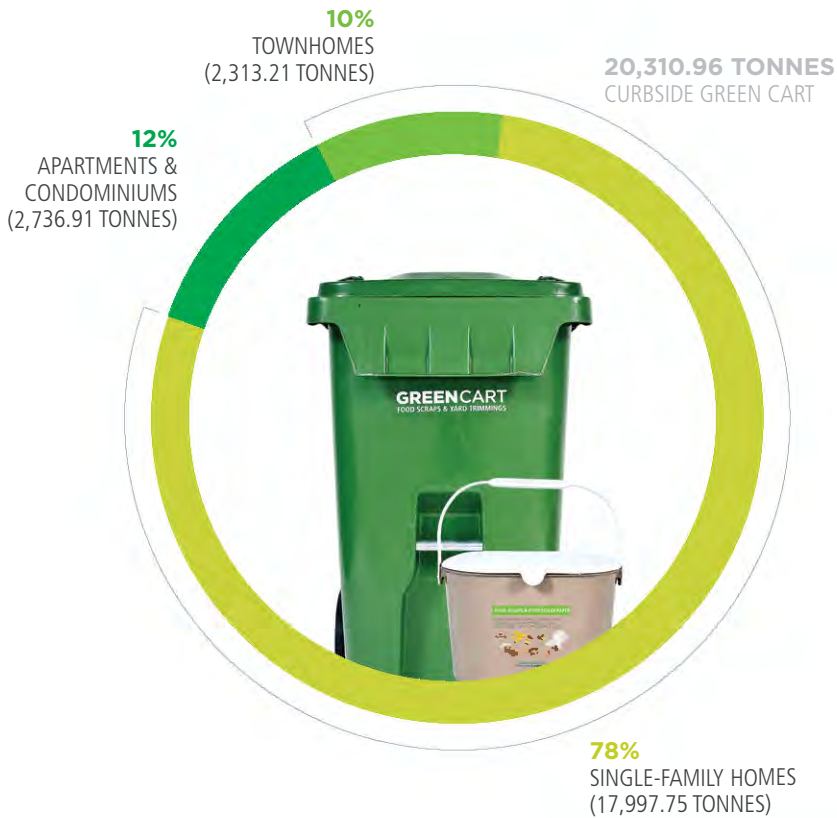
## BLUE BOX AND BLUE CART PROGRAMS RECYCLING MIX IN 2021

Through the Blue Box and Blue Cart programs, residents recycled a total of **8,000.96 tonnes** of recyclable materials.





## RESIDENTIAL GREEN CART RECYCLING IN 2021



Residents diverted **23,047.87 tonnes** of food scraps and yard trimmings from landfill in 2021 to be composted into new resources.

Richmond's Green Cart program is for residents in single-family homes, townhomes, apartments and condominiums.

72,600 residential units received weekly collection in 2021.

In 2021, **7,420.62 tonnes** of yard trimmings were collected at the Richmond Recycling Depot and the Ecowaste residential and commercial drop-off service.

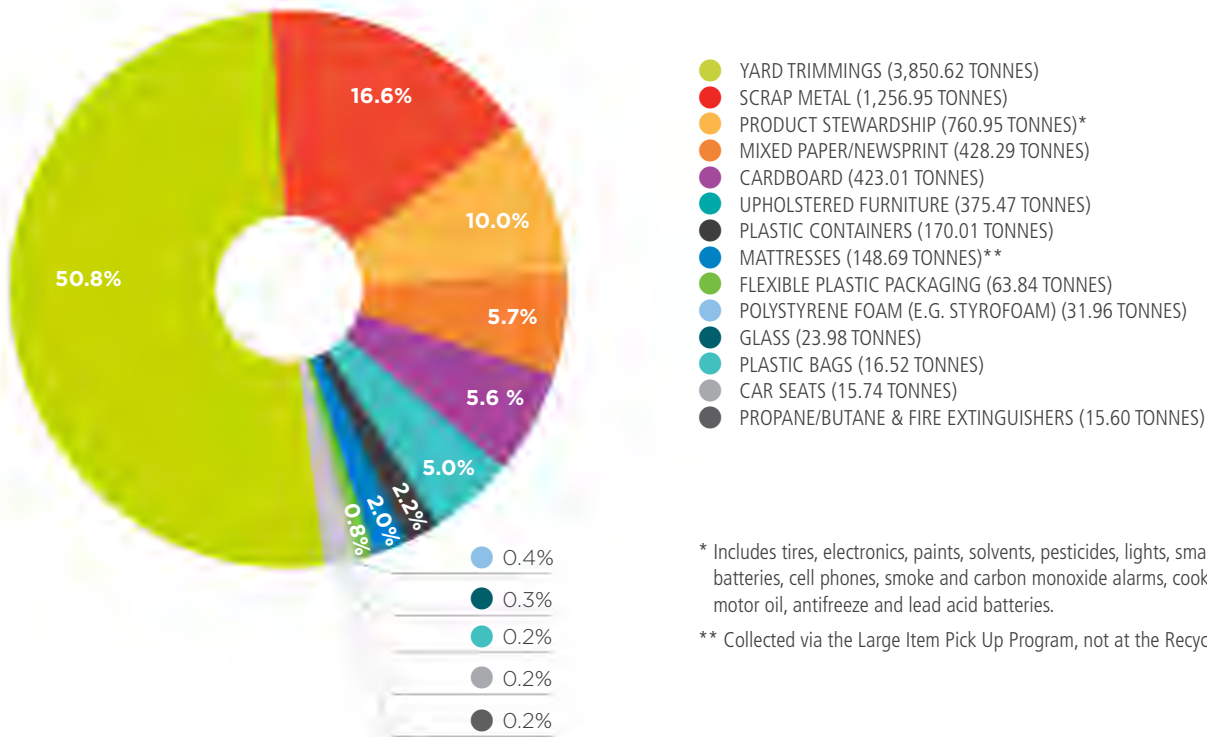
ECOWASTE INDUSTRIES  
**3,570.00 TONNES**

RICHMOND  
RECYCLING DEPOT  
**3,850.62 TONNES**

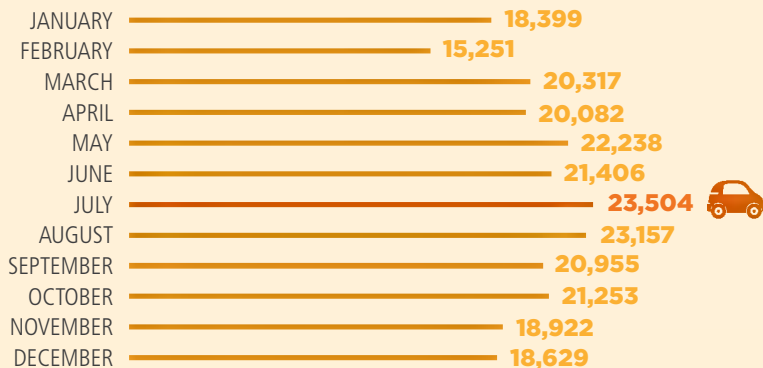
TOTAL  
**7,420.62 TONNES**

## MATERIALS COLLECTED AT THE RICHMOND RECYCLING DEPOT

In 2021, **7,581.56 tonnes** of recyclable materials were collected at the Recycling Depot.



## MONTHLY VEHICLE VISITS TO THE RICHMOND RECYCLING DEPOT



In 2021, July experienced the largest number of visits to the Richmond Recycling Depot at **23,504** visits.

## RECYCLE MORE AT THE RICHMOND RECYCLING DEPOT

Open seven days a week, the Recycling Depot provides a convenient one-stop recycling service. The City continues to increase accepted items, and total tonnage of recycled materials increases each year.



## LARGE ITEM PICK UP IN 2021



**43,300 residential units** recieved the service through their curbside programs.

**15,628 requests** for service.

**836 tonnes** were collected, and of this **644 tonnes** were recycled.



**4,907**  
MATTRESSES &  
BOXSPRINGS



**437**  
WASHERS & DRYERS



**257**  
TELEVISIONS



**642**  
FRIDGES & FREEZERS



**398**  
BARBECUES



**241**  
DISHWASHERS



**2,484**  
COUCHES &  
LOVESEATS



**1,217**  
CHAIRS & RECLINERS



**347**  
STOVES &  
MICROWAVES



**1,928**  
OTHER RECYCLABLE  
ITEMS

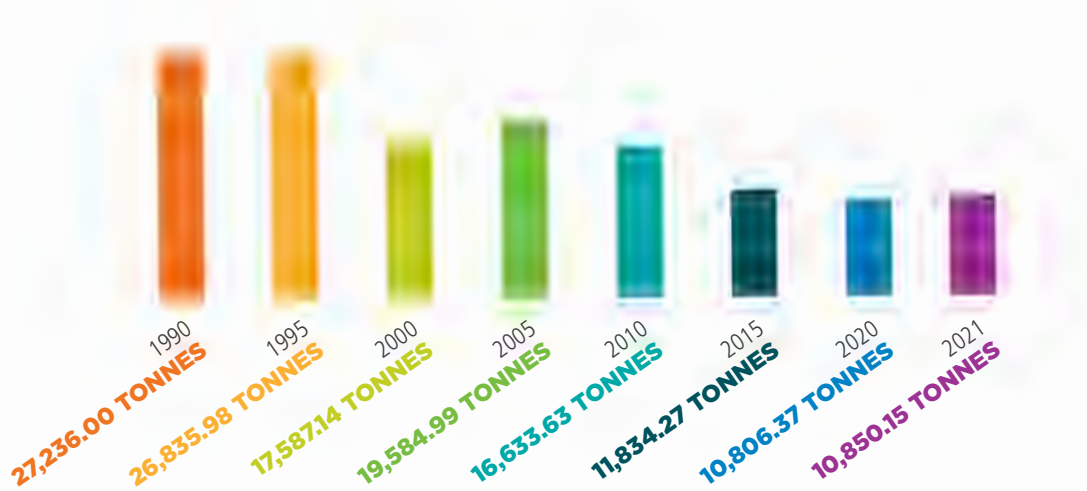
**6,242**

NON-RECYCLABLE HOUSEHOLD ITEMS COLLECTED  
FOR SAFE HANDLING AND DISPOSAL

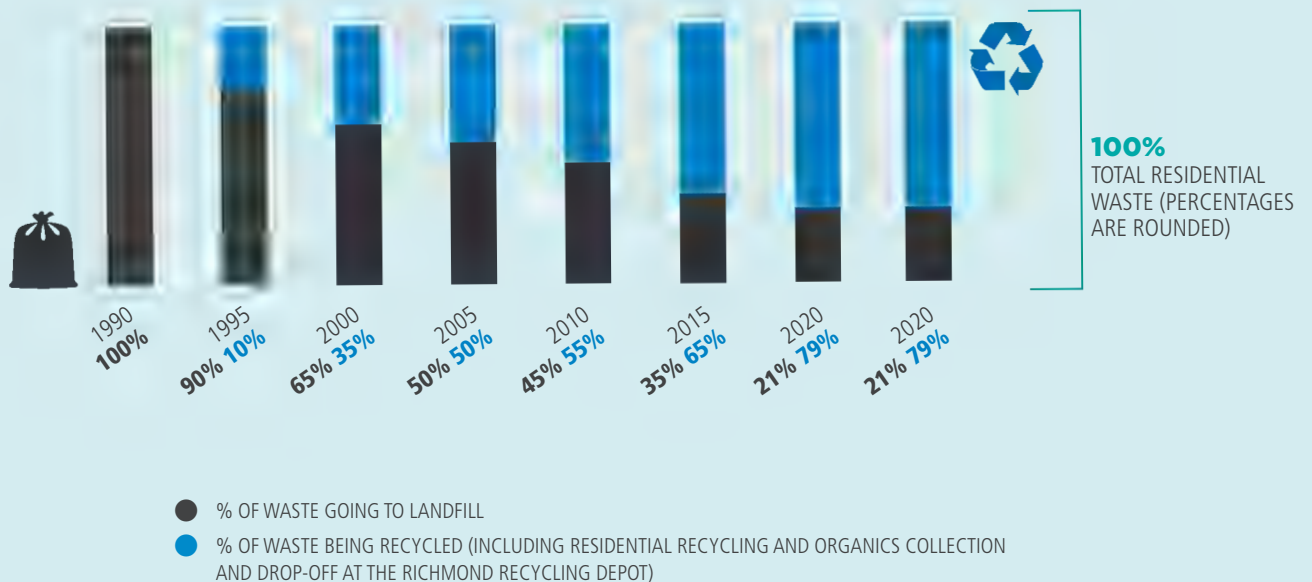
## FROM GARBAGE DISPOSAL TO DIVERSION

### Single-family homes garbage in tonnes:

35,500 residential units received Garbage Cart service in 2021.



### Single-family homes diversion over time:





# 2.2

## Outreach and Customer Service

Statistics in this section are related to our successful outreach and customer service programs, which are designed to turn education and information into action.

### CUSTOMER SERVICE AND OUTREACH

Richmond's Environmental Programs staff share information, tips and resources by phone, as well as through outreach events and on the website.

**17,928**

**CUSTOMER SERVICE  
CALLS SUPPORTED**

**70  
HOURS**

**70 participant  
hours** in virtual youth  
engagement sessions  
"Zero heroes: home  
edition"

**342  
REGISTRANTS**

**342 registrants** for  
**14 outreach sessions**  
on various topics





## COMPOST BINS, GARBAGE TAGS AND VOUCHERS

**110**  
COMPOST  
BINS SOLD

**10,860**  
GARBAGE  
TAGS SOLD

**2,223**  
GARBAGE DISPOSAL  
VOUCHERS SOLD

## GARBAGE, LITTER AND COMMUNITY GARDEN COLLECTION

Crews **travel 3,321 kilometres per week** to inspect and service bins , and **cleaned up 1,027 illegal dumping sites**.

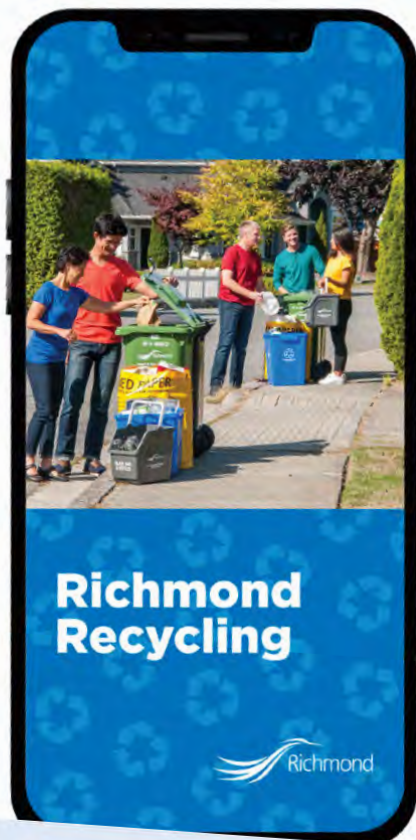
**13,135**  
BIN INSPECTIONS  
PER MONTH

**17,784**  
BINS SERVICED  
PER MONTH

**39**  
COMMUNITY  
GARDEN  
GREEN CARTS  
SERVICED

**371,030**  
BIN VISITS PER YEAR

## ONLINE SEARCH AND TIPS TOOLS



The Richmond Recycling app has been installed **10,563 times** to date, and used a total of **69,661 times**.

**16,865**  
REMINDERS

**8,947**  
PDF CALENDAR  
DOWNLOADS

**5,952**  
RECYCLING  
GAMES PLAYED

**94,864**  
RECYCLING WIZARD  
SEARCHES

### TOP MATERIALS SEARCHED ON THE RECYCLING WIZARD - ALL TIME



## SCHOOL AND YOUTH ENGAGEMENT

In 2021, **146 youth** volunteered in Richmond's Green Ambassador program.

**10 symposiums for training and networking** with fellow Green Ambassadors were held, for a total of 624 training hours.

In 2021, Green Ambassadors spent 325 hours providing input and guidance on the **electric vehicle toolkit and lesson plan**.



## COMMUNITY ENGAGEMENT



**4 Rethink and Reuse Waste** sessions with a total of **80 participants**.

**8 Recycling Workshops** with a total of **208 participants**.

**10 Single-Use Ban Business Workshops** sessions with a total of **121 participants**.

In spite of COVID restrictions limiting in-person outreach, the City **pivoted to expand virtual engagement**.

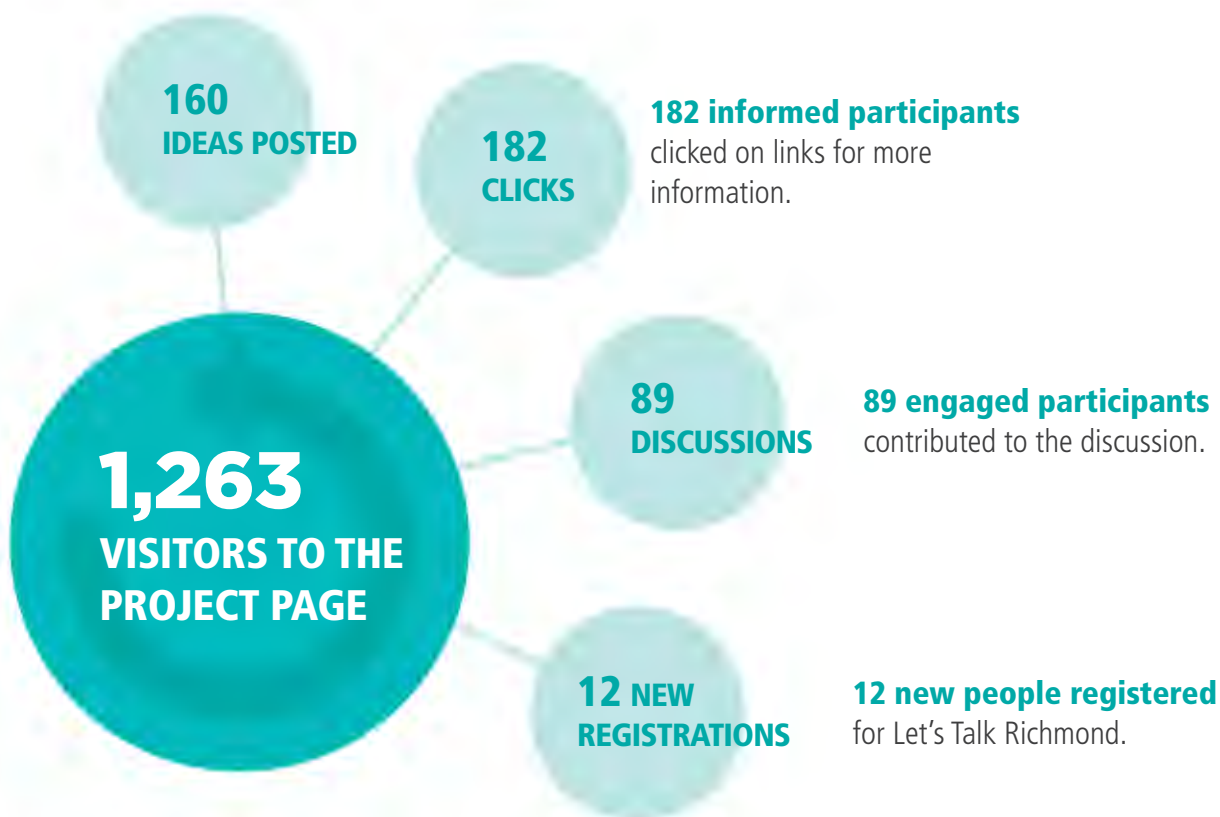


## RETHINK WASTE THINK TANK & COMMUNITY IDEAS HUB

Recycling is important, but reducing waste overall is an essential part of responsible waste management and protecting the environment. Recognizing that Richmond residents are dedicated to sustainable waste management, the City initiated the Rethink Waste Think Tank on Let's Talk Richmond to invite community members to share their ideas on how to reduce waste.

With **160 posted ideas**, the Rethink Waste Think Tank led to the development of a Community Ideas Hub on the City's website.

### RETHINK WASTE THINK TANK RESULTS



## COMMUNITY IDEAS HUB

The Community Ideas Hub features tips, resources and other suggestions shared by community members to help change habits and think differently about purchases, avoid unnecessary waste and find ways to reuse and recycle products to support a circular economy and reduce reliance on raw materials.

The Community Ideas Hub features ideas to:

**REDUCE  
SINGLE-USE  
ITEMS**

**REPAIR  
HOUSEHOLD  
ITEMS**

**REDUCE  
FOOD  
WASTE**

**RETHINK AND  
REPURPOSE  
ITEMS**

**DONATE, SELL,  
TRADE AND  
SHARE ITEMS**

To view the Community Ideas Hub for tips on how to reduce waste, visit [richmond.ca/rethink](https://richmond.ca/rethink).

## HOW RESIDENTS CAN HELP SUPPORT A CIRCULAR ECONOMY?

**1. Stop:** Rethink what you're putting in the garbage. Can it be recycled, donated, repurposed or reused?

**2. Reduce:** Reduce waste by choosing reusable options, repairing items and avoiding single-use products such as bottles, film wrap, plastic bags and Polystyrene foam (e.g. Styrofoam) plates and containers.

**4. Recycle:** Keep food scraps and food-soiled paper out of the garbage, and recycle other materials through City collection services, the Richmond Recycling Depot and take-back programs.

**3. Reuse:** Donate or sell used items in good condition so they can be reused.







**OUR GOAL IS  
CONSISTENT  
AND CORRECT  
RECYCLING**

# 3.0

## Programs and Services

Richmond residents in single-family homes divert most of their waste, and recycling is increasing in townhomes and other multi-family complexes.

To support residents and their commitment to recycling, Richmond continues to expand services to help residents reduce their garbage and create incentives to promote increased recycling. Green Cart and Blue Box/Blue Cart recycling remain core services to help residents recycle. Residents can also drop off a growing list of recyclable items at the Richmond Recycling Depot and other drop-off facilities.

Richmond works with residents, industry partners, product stewardship groups and businesses to achieve its goal to support a circular economy by implementing sustainable waste management. Through partnerships and community engagement, Richmond's commitment to continuous improvement results in enhanced services to benefit residents.

Through its contract with Recycle BC, the City generates revenue to offset recycling costs for residents; however, the City must also adhere to requirements related to the quality of recycling. If banned items are found in the garbage or contamination is found in recycling, the City can be charged fines and other penalties. These requirements are based on the City's *Solid Waste and Recycling Regulation Bylaw No. 6803*, contract requirements with Recycle BC and organics processing facilities, and Metro Vancouver disposal bans for items that must be recycled as they are not permitted in the garbage.

# 3.1

## Program and Service Overview

Richmond delivers a wide range of recycling and waste management services for residents to ensure that all waste is managed effectively and efficiently. The following are the key recycling and waste management services offered through the City of Richmond.



### BLUE BOX

The Blue Box program provides weekly curbside collection for paper, newsprint, glass bottles and glass jars, plastic containers, empty aerosol cans, milk cartons, plastic/paper drink cups, spiral wound containers, and tin and aluminium containers. For details, see page 30.



### BLUE CART

The Blue Cart program provides weekly recycling collection for paper, newsprint, glass bottles and glass jars, plastic containers, aerosol cans, milk cartons, plastic/paper drink cups, spiral wound containers and tin and aluminium containers. For details, see page 30.



### GREEN CART

The Green Cart program provides weekly collection for foods scraps and yard trimmings. This program is provided to residents in single-family homes, townhomes and multi-family complexes. For details, see page 36.



### BACKYARD COMPOSTING

Support for residential composting includes the sale of backyard compost bins and a composting demonstration garden. These services are available to all residents. For details, see page 39.



### GARBAGE CART

Biweekly curbside collection of garbage, not including banned items such as hazardous waste and materials that can be recycled, is available to residents in single-family homes and some townhomes. Garbage Tags and Garbage Disposal Vouchers for the Vancouver Landfill provide options for residents for disposal of additional garbage. For details, see page 40.



### LARGE ITEM PICK UP

Residents with the City Blue Box and/or City Garbage Cart program can arrange for collection of large household items. For details, see page 46.





### RICHMOND RECYCLING DEPOT

The Recycling Depot accepts products ranging from yard trimmings and household items, to hazardous materials and take-back program products. This service is available to all residents and in limited quantities for commercial operators. The Recycling Depot also sells backyard compost bins, rain barrels, Garbage Tags and Garbage Disposal Vouchers for use at the Vancouver Landfill. For details, see page 42.



### LITTER COLLECTION

Litter Attendants are on the road seven days a week to inspect or service garbage and recycling bins more than 6,700 times each week throughout the city, collecting additional litter along the way. For details, see page 49.



### PUBLIC SPACES AND EVENT RECYCLING

Recycling bins in the community make it easy to recycle on the go, such as in parks, at community centres, in the Steveston business district and at the Canada Line stations and Richmond central bus stops. Richmond supports community events by loaning garbage and recycling bins for local events at no charge. For details see Public Spaces Programs on page 48 and Outreach and Customer Service on page 50.



### COMMUNITY AND SCHOOL ENGAGEMENT

Through partnerships with students, teachers and the School District, Richmond delivers educational workshops, awareness programs and volunteer opportunities to increase understanding of recycling and the benefits of reducing waste. For details see Outreach and Customer Service on page 50.





# 3.2

## Blue Box and Blue Cart Programs

Richmond's Blue Box and Blue Cart recycling programs provide convenient collection of a wide variety of materials including mixed paper, plastic containers, paper and plastic drink cups, empty aerosol cans and spiral wound cans like frozen juice concentrate containers as well as glass bottles and glass jars.

Richmond's Blue Box program for door-to-door curbside collection includes a Blue Box for containers, yellow Mixed Paper Recycling Bag for paper and small, flattened cardboard items and a grey Glass Recycling Bin for glass bottles/jars. The Blue Cart program for centralized collection has separately labeled carts for containers, mixed paper and glass.

It is important to ensure materials are sorted correctly into the proper recycling receptacles. For example, recyclables must be placed individually in bins – not stacked, nestled or in plastic bags. Glass bottles/jars must be placed in the Glass Recycling Bin/Cart – not the Blue Box or Containers Recycling Cart.

Also, some items are not accepted in the Blue Cart/Blue Box program, such as non-packaging plastics like toys, hangers and laundry baskets, as well as non-packaging metal items like scissors and pans. These items are accepted at the Richmond Recycling Depot.

- ✓ Empty aerosol cans & caps (food items, air fresheners, shaving cream, deodorant, hairspray)
- ✓ Microwavable bowls, cups & lids
- ✓ Paper food containers & cartons
- ✓ Paper & plastic drink cups with lids
- ✓ Plastic containers, trays & caps (bakery containers & deli trays)
- ✓ Plastic & paper garden pots & trays
- ✓ Spiral wound paper cans & lids (frozen juice, potato chips, cookie dough, coffee, nuts, baby formula)

- ✓ Aluminium cans & lids
- ✓ Aluminium foil & foil containers (foil wrap, pie plates, food trays)
- ✓ Plastic bottles & caps (food items, condiments such as ketchup, mustard & relish, dish soap, mouthwash, shampoos, conditioners)
- ✓ Plastic jars & lids
- ✓ Plastic tubs & lids (margarine, spreads, dairy products such as yogurt, cottage cheese, sour cream, ice cream)
- ✓ Tin cans & lids

- X Aerosol cans with hazardous materials (spray paint)\*
- X Butane cylinders\*
- X Ceramic plant pots
- X Compostable/biodegradable plastic bags & containers
- X Containers for motor oil, vehicle lubricant or wax products\*
- X Foil-lined cardboard lids from take-out containers

- X Garden hoses
- X Paper takeout containers
- X Plastic bags & overwrap\*
- X Plastic string or rope
- X Polystyrene foam (e.g. Styrofoam) materials\*
- X Propane tanks\*

\* Take to the Richmond Recycling Depot



Place materials separately in the bins – don't put recyclables into plastic bags. Bagged items will go in the garbage.



Empty, rinse and flatten containers.  
Food or other materials in the  
containers contaminate the recycling.  
Remove lids and recycle separately.



Avoid stacking or nestling items together, instead place them separately in the bins. For example, don't nestle an aluminium can inside a plastic container.



Separate glass jars and glass bottles and recycle in the grey Glass Recycling Bin or Glass Recycling Cart.





## PAPER PRODUCTS: MIXED PAPER RECYCLING BAG/CART



### ✓ ACCEPTED

- ✓ Newspapers, inserts & flyers
- ✓ Flattened cardboard boxes
- ✓ Catalogues & magazines
- ✓ Cereal boxes
- ✓ Clean pizza boxes
- ✓ Corrugated cardboard (small pieces)
- ✓ Envelopes
- ✓ Junk mail
- ✓ Paper bags

- ✓ Paper egg cartons
- ✓ Paper gift wrap & greeting cards
- ✓ Paper takeout containers (including those with a shiny coating)
- ✓ Telephone books
- ✓ Shredded paper (place inside a paper bag to avoid scattering)
- ✓ Writing paper (notepads, loose leaf paper, white or coloured paper, printed paper)

### ✗ NOT ACCEPTED

- ✗ Cardboard boxes with wax coating
- ✗ Plastic bags used to cover newspapers/flyers
- ✗ Metallic wrapping paper
- ✗ Ribbons or bows

- ✗ Musical greeting cards with batteries
- ✗ Padded envelopes
- ✗ Plastic or foil candy wrappers



Remove plastic liners/covers and/or any food residue.



Put shredded paper in a paper bag before placing in the Mixed Paper Recycling Bag/Cart to avoid scattering.



Cut cardboard into small pieces and flatten boxes to take up less space in the Mixed Paper Recycling Bag/Cart and in the collection truck.



Oversized/excessive amounts of cardboard can be dropped off at the Richmond Recycling Depot.



## GLASS JARS & GLASS BOTTLES: GLASS RECYCLING BIN/CART



### ✓ ACCEPTED

- ✓ Clear or coloured glass bottles and glass jars (pickle jars, jam jars, spaghetti sauce jars, soy sauce bottles)

### ✗ NOT ACCEPTED

- ✗ Glasses, dishes, cookware, window glass and mirrors
- ✗ Ceramic products
- ✗ Lids and caps (remove from the glass bottle/jar and place in Blue Box/Containers Recycling Cart)



Remove plastic and metal lids and recycle separately in the Blue Box/ Containers Recycling Cart.



Empty and rinse jars and bottles. Make sure no food is left inside because it contaminates the recycling.



### Set Out Time

Before 7:30 a.m. every week on collection day.

Note: For centralized Blue Cart service, the collection details are arranged between the City and the Strata Council or Property Manager. Residents do not have to set the Blue Carts out for collection.



### Report a Missed Collection

Call 604-276-4010 or email [garbageandrecycling@richmond.ca](mailto:garbageandrecycling@richmond.ca).



### How to Get More Free Recycling Supplies

Supplies include:

- Blue Boxes
- Glass Recycling Bins
- Indoor Collection Bags
- Mixed Paper Recycling Bags

Three ways to order supplies:

1. Pick up at Richmond Recycling Depot
2. Call 604-276-4010
3. Order online at [richmond.ca/recyclesearch](http://richmond.ca/recyclesearch)

### Richmond Recycling Depot

5555 Lynas Lane  
Open 7 days a week  
(Closed on statutory holidays)  
9:00 a.m. to 6:15 p.m.



# How to Recycle Correctly

## SIMPLE STEPS FOR BETTER RECYCLING



### HOW TO RECYCLE CORRECTLY



#### COMMON MISTAKES

Glass bottles and glass jars are placed incorrectly in the Blue Box or Containers Recycling Cart

Non-recyclable plastic items are placed in recycling bins (Straws and plastic cutlery)

Containers with food residue are not rinsed before recycling

Recyclable items that are not accepted in residential collection are placed incorrectly in the Blue Box / Blue Cart, such as:

- Batteries and cell phones
- Electronics
- Paints and solvents
- Plastic bags
- Polystyrene foam (e.g. Styrofoam)
- Propane tanks and butane containers
- Non-packaging plastics like toys and coat hangers

#### HOW TO RECYCLE CORRECTLY

Recycle in grey Glass Recycling Bin or Glass Recycling Cart.

These are not recyclable. Please put in the garbage.

Remove food and rinse before placing in Blue Box or Containers Recycling Cart.

Drop off at Richmond Recycling Depot – 5555 Lynas Lane.



Not sure where to recycle an item?  
Use the Recycling Wizard on the free  
Richmond Recycling app or at  
**[richmond.ca/recyclesearch](https://richmond.ca/recyclesearch)**

You can find drop-off locations and how to recycle a variety of household items using the Recycling Wizard on the free Richmond Recycling app available at the Apple and Android app stores. Plus, you can schedule weekly collection day reminders, order supplies and play the Recycling Challenge game!



# 3.3

## Green Cart Program

Food scraps are banned from the garbage, which means they must be recycled or composted, and the City can be charged fines and other penalties when organics are found in the garbage. With the Green Cart program, all Richmond residents have access to food scraps recycling and when recycling with a Green Cart, residents are helping turn food scraps and yard trimmings into compost for nutrient-rich soil.

Richmond also encourages organics recycling by providing Green Cart service at no charge at the City-sponsored community gardens.

It is important to ensure that only food scraps, food soiled paper, and yard and garden trimmings go in the Green Cart. When items like plastic bags, polystyrene foam (e.g. Styrofoam) or biodegradable/compostable plastic bags are found in the Green Cart, the load is considered contaminated as these materials are not accepted at processing facilities because they compromise the quality of the compost.

Residents can also create their own compost at home to keep these organic materials out of landfills. Residents can purchase a backyard compost bin at the Richmond Recycling Depot.





## GREEN CART FOR FOOD SCRAPS & YARD TRIMMINGS



### ✓ ACCEPTED

#### FOOD SCRAPS & FOOD SOILED PAPER

- ✓ Breads, pasta, rice & noodles
- ✓ Coffee grounds & filters
- ✓ Dairy products
- ✓ Fruit
- ✓ Eggshells
- ✓ Meat, poultry, fish, shellfish & bones
- ✓ Paper tea bags
- ✓ Paper towels, napkins & plates
- ✓ Pizza delivery boxes
- ✓ Small amounts of grease/oil absorbed into paper towel
- ✓ Solid grease
- ✓ Table scraps & food scrapings
- ✓ Vegetables

#### YARD TRIMMINGS

- ✓ Flowers
- ✓ Leaves
- ✓ Grass clippings
- ✓ Other organic yard materials
- ✓ Plants (living or dead/dried)
- ✓ Plant trimmings
- ✓ Tree & hedge prunings (branches must be no more than 10 cm (4 in) in diameter and cut short enough to fit in the Green Can with the lid closed)

### ✗ NOT ACCEPTED

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>✗ Coffee cups</li> <li>✗ Compostable &amp; biodegradable plastic bags</li> <li>✗ Garden hoses or flower pots</li> <li>✗ Liquid grease</li> <li>✗ Lumber</li> <li>✗ Pet feces or kitty litter</li> <li>✗ Plastic bags &amp; plastic overwrap</li> </ul> | <ul style="list-style-type: none"> <li>✗ Plastic mesh tea bags</li> <li>✗ Plastic wraps</li> <li>✗ Polystyrene foam (e.g. Styrofoam) cups, meat trays or takeout containers</li> <li>✗ Prunings over 4 inches (10 cm) in diameter</li> <li>✗ Rocks, dirt or sod</li> </ul> |
|---|--|



Collect food scraps in your kitchen container. Wrap food scraps in small amounts of newspaper or used paper towel before adding to kitchen container.



Sprinkle kitchen container with baking soda to reduce odours and consider freezing food scraps until you're ready to empty them into the Green Cart.



Keep kitchen container clean by lining it with a few sheets of newspaper, a paper bag liner or used paper towel.



Empty materials from your kitchen container into your Green Cart.



Place yard trimmings into Green Cart along with your food scraps. Extra yard trimmings can go in large paper bags or additional labelled Green Cans.





## MULTIPLE GREEN CART SIZES AVAILABLE

Richmond provides Green Carts in multiple sizes to meet resident's recycling needs. Residents can exchange their Green Cart for a different size by contacting the Environmental Programs Information Line at 604-276-4010 or email [garbageandrecycling@richmond.ca](mailto:garbageandrecycling@richmond.ca). There is a \$25 fee for cart exchanges.

### SINGLE-FAMILY HOMES CART SIZE SELECTION



### TOWNHOMES CART SIZE SELECTION





## BACKYARD COMPOSTING PROGRAMS

**Backyard Compost Bins:** Backyard compost bins are available for sale at the Richmond Recycling Depot for \$25 plus tax.

**Demonstration Garden:** To help residents learn about composting, the City hosts a Compost Demonstration area in the Terra Nova Rural Park at 2631 Westminster Highway just west of No. 1 Road. It is open from dawn to dusk year-round.

**Compost Hotline:** For tips call 604-736-2250 or email [composthotline@telus.net](mailto:composthotline@telus.net).

## YARD TRIMMINGS DROP-OFF

Richmond residents and commercial landscapers can drop off yard trimmings at the following locations.

**Ecowaste Industries**  
15111 Williams Road

Commercial operators can be pre-approved for dropping off materials at no charge when they are servicing residential properties with Richmond Green Cart service.

Visit [ecowaste.com](http://ecowaste.com) or call 604-277-1410 for detailed information.

**City Recycling Depot**  
5555 Lynas Lane  
Open 7 days a week  
(Closed on statutory holidays)  
9:00 a.m. to 6:15 p.m.

There is no charge for dropping off amounts less than one cubic yard (a car, station wagon or minivan load). Large loads are charged a fee of \$20 per cubic yard. Commercial operators will be charged a fee of \$20 per cubic yard at the Richmond Recycling Depot.



### Set Out Time

Before 7:30 a.m. every week on collection day.

Note: For centralized Green Cart service, the collection details are arranged between the City and the Strata Council or Property Manager. Residents do not have to set the carts out for pick up.



### Report a Missed Collection or Damaged Green Cart

Call 604-276-4010 or email [garbageandrecycling@richmond.ca](mailto:garbageandrecycling@richmond.ca).



### How to Exchange your Green Cart

Various cart sizes are on display at the Richmond Recycling Depot. Please note there is a \$25 charge to exchange your cart. To change to an alternative size please contact:

**Environmental Programs**  
604-276-4010



### New/Replacement Kitchen Containers

Three ways to get a kitchen container:

1. Pick up at Richmond Recycling Depot
2. Call 604-276-4010
3. Order online at [richmond.ca/recyclesearch](http://richmond.ca/recyclesearch)





# 3.4

## Garbage Cart Program

Richmond's curbside Garbage Cart program provides residents with convenient options for waste disposal. Household garbage is collected biweekly. The Garbage Cart program includes City-provided carts with wheels and lids and is designed to lower costs for residents who are reducing their garbage by recycling their household waste.

Most household items are recyclable. Residents are encouraged to think twice before putting items in the garbage to help keep recyclables out of the landfill.

It's important to secure or wrap loose garbage to prevent materials from being scattered by wind or animals. Garbage must be securely packed in plastic bags. This includes ashes, kitty litter, disposable diapers, vacuum cleaner sweepings, disposable masks and gloves, and other loose household garbage.

All garbage must be placed at curbside before 7:30 a.m. on collection day but no earlier than 8:00 p.m. the day before. Do not place receptacles or other items on the road.

Residents are responsible for cleaning up any loose materials that have been scattered over the ground by animals, wind or vandalism.



## EXTRA ITEM DISPOSAL OPTIONS

### Garbage Disposal Vouchers

Richmond residents may purchase a Garbage Disposal Voucher for \$5 at all City facilities. These vouchers are good for up to \$25 at the Vancouver Landfill, and are valid anytime. They are limited to one per household.

### \$2 Garbage Tags

Garbage Tags for curbside collection are available for purchase at all City facilities. One Garbage Tag is good for an additional garbage bag or can.

Visit [richmond.ca/garbage](http://richmond.ca/garbage) for a list of City facilities selling Garbage Tags and Garbage Disposal Vouchers.

## GARBAGE CART SIZE OPTIONS

Residents who select smaller cart sizes are generating less garbage and as a result, pay less for their annual garbage collection.

Residents can exchange their cart for a different size, and their garbage collection fees are adjusted according to the size selected. Residents can exchange their Garbage Cart for a different size for \$25 by calling 604-276-4010.



**Extra Large**  
360 litres  
D 34.5 x W 25 x H 44.5 in



**Large**  
240 litres  
D 27.5 x W 24.5 x H 43 in  
**Standard size for  
single-family homes**



**Medium**  
120 litres  
D 21.5 x W 19 x H 37.5 in  
**Standard size  
for townhomes**



**Small**  
80 litres  
D 20 x W 16 x H 34.5 in





# 3.5

## Richmond Recycling Depot

The Richmond Recycling Depot is located at 5555 Lynas Lane and is open from 9:00 a.m. – 6:15 p.m., seven days a week for drop off of a broad range of materials.

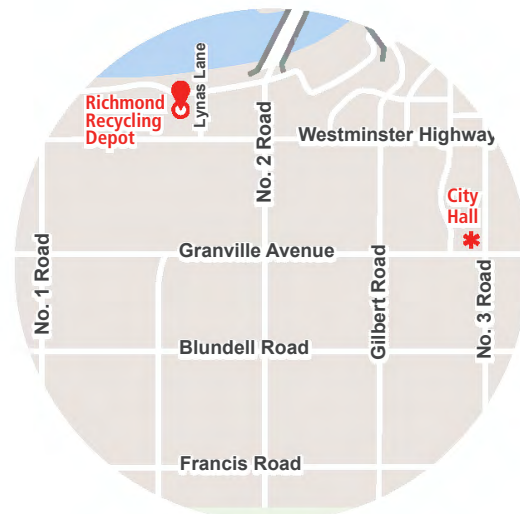
The Recycling Depot is owned and operated by the City of Richmond, with both full-time staff and additional staff support as needed to manage increased recycling volumes. Staff on site are available to answer questions and provide assistance with unloading awkward or heavy items.

The City continues to increase the number of items accepted at the Recycling Depot to make it a convenient, one-stop drop-off location for multiple items. Richmond residents can drop off a wide range of recyclable materials at no charge.

### Richmond Recycling Depot

5555 Lynas Lane

Open 7 days a week, 9:00 a.m. to 6:15 p.m.  
(except statutory holidays)





## RECYCLING DEPOT SERVICES

Residents are encouraged to use the curbside recyclables collection for glass bottles and glass jars, rigid plastic containers, newsprint and mixed paper. Businesses are encouraged to subscribe to on-site collection services if a large quantity of recyclables is produced. However, small business operators can drop off one cubic yard of materials at the Recycling Depot per day.

This facility accepts a wide range of materials including cardboard, yard and garden trimmings, mixed paper and newspapers, as well as Polystyrene foam (e.g. Styrofoam), used books, cell phones, household batteries, plastic

bags and metal items (e.g. bike frames, barbecues, lawn mowers). The facility is also a product stewardship (take back) collection site for large and small appliances, paints, solvents, flammable liquids, pesticides, lights and lighting fixtures, tires, electronics, motor oil, batteries, and smoke and carbon monoxide alarms.



### For Sale at the Recycling Depot

- Compost bins - \$25 each + tax
- Rain barrels - \$30 each + tax
- Extra Garbage Tags - \$2 each
- Garbage Disposal Vouchers - \$5 for Richmond residents and value is up to \$25 at the Vancouver Landfill



### Free Recycling Supplies Available at the Recycling Depot

- Kitchen Containers
- Grey Glass Recycling Bins
- Blue Boxes
- Yellow Mixed Paper Recycling Bags
- Indoor Collection Bags
- Green Can Decals

# Welcome to the Richmond Recycling Depot!

You'll be amazed by how much you can take – for free – to the Richmond Recycling Depot.

Use the map below to see where to take your items once you arrive at the Recycling Depot. The icons are colour-coded to match the signs at the Depot and help you quickly find your way.

There are always attendants available to help you and to safely handle hazardous recyclable items.






For a virtual tour, visit  
**[richmond.ca/depot](http://richmond.ca/depot)**



**Welcome!**



## MATERIALS ACCEPTED

- ✓ Aerosol & spiral wound cans
- ✓ Aluminium materials
- ✓ Appliances
-  ✓ Baby car seats/booster seats (pilot program)
- ✓ Batteries (lead acid car batteries)
- ✓ Batteries (small household batteries less than 5 kg)
- ✓ Books
- ✓ Butane cylinders
- ✓ Cell phones (including batteries)
- ✓ Cooking oil & animal fat
- ✓ Corrugated cardboard (flattened, clean corrugated boxes)
- ✓ Electronics
- ✓ Exercise & hobby machines
- ✓ Fire extinguishers
- ✓ Flammable aerosols
- ✓ Flammable liquids
- ✓ Flexible plastic packaging
- ✓ Flower pots (paper & plastic pots/trays)
- ✓ Gasoline (in approved ULC containers)
- ✓ Glass bottles/jars (clear & coloured)
- ✓ Lights
- ✓ Lighting fixtures
- ✓ Magazines
- ✓ Metal items
- ✓ Mixed paper
- ✓ Motor oil & antifreeze
- ✓ Newspaper
- ✓ Paints (household paints)
- ✓ Paint aerosols
- ✓ Pesticides (domestic pesticides)
- ✓ Plastic containers
- ✓ Plastic grocery bags & plastic overwrap
- ✓ Polystyrene foam (e.g. Styrofoam) packaging
- ✓ Power tools
- ✓ Propane tanks
- ✓ Sewing, knitting & textile machines
- ✓ Smoke & carbon monoxide alarms
- ✓ Tin & aluminium cans
- ✓ Tires (passenger & light-duty trucks only)
- ✓ Upholstered furniture
- ✓ Yard & garden trimmings

All materials must be sorted into different containers at the Recycling Depot. Please visit [richmond.ca/depot](http://richmond.ca/depot) for more information.





# 3.6 Large Item Pick Up Program

Richmond's Large Item Pick Up program provides a convenient curbside collection service for up to six large household items per year, including mattresses, furniture and appliances. This program is designed to make it more convenient for residents to dispose of large household items and to help reduce illegal dumping. As well, through this program, large household items that can be recycled will be diverted from the landfill.

The Large Item Pick Up program is provided to residents in single-family homes, as well as townhomes and multi-family complexes with the City's Garbage Cart and/or Blue Box program.

This service makes it easier for residents who do not have access to a vehicle to dispose of large items.

## HOW THE PROGRAM WORKS

- 1** To schedule collection of up to six items per year, residents can contact the City's service provider, Sierra Waste Services at 604-270-4722 or schedule online at [richmond.ca/largeitem](http://richmond.ca/largeitem).
- 2** Sierra Waste Services will contact you to provide a pick up date and confirmation number.
- 3** On your scheduled pick up date only, place items at the curb or for multi-family complexes, in the area designated by the strata or property manager, before 7:30 a.m. or no earlier than 8:00 p.m. the night before.

### LARGE ITEM PICK UP PROGRAM



#### ✓ ACCEPTED

- ✓ Appliances (e.g. stove, dishwasher, washer and/or dryer, hot water tank, refrigerator, freezer, microwave)
- ✓ Barbecue (remove lava rock briquettes and/or propane tank)
- ✓ Bed frame
- ✓ Electric lawnmower
- ✓ Exercise equipment (treadmill, elliptical, stationary bike, stair climber, weight set)
- ✓ Furniture (e.g. couch, coffee table, chair, desk, dresser, TV stand, cabinet, table, hutch, crib, high chair, entertainment center)
- ✓ Headboard
- ✓ Mattress or boxspring
- ✓ Outdoor furniture (chair, patio table, patio umbrella)
- ✓ Small household goods, provided they are boxed or bundled and are a reasonable size (one box or bundle is equal to one of the resident's six allotted items)
- ✓ Tires (car and light duty truck)

#### ! PREPARATION REQUIREMENTS

- ! Wrap mattresses in plastic and seal with tape to prevent them from getting wet. Cover boxsprings and upholstered furniture with tarps or plastic to keep it dry. Tarps will be left behind for reuse.
- ! Confirm mattresses, boxsprings and upholstered furniture are free of bedbugs to ensure they are accepted for recycling at the facility.
- ! Remove latch/door from freezers, refrigerators or any other container equipped with a door, latch or locking device.

#### ✗ NOT ACCEPTED

- ✗ Car bodies or parts
- ✗ Carpets
- ✗ Construction and demolition waste (drywall)
- ✗ Gas lawnmowers\*
- ✗ Hazardous waste
- ✗ Home renovation (sinks, flooring, doors, windows)
- ✗ Lumber
- ✗ Mattresses/boxsprings and upholstered furniture that are wet or infested with bed bugs or vermin
- ✗ Propane tanks\*
- ✗ Tree stumps

\*Take to Richmond Recycling Depot

Not sure where to recycle an item? Use the Recycling Wizard tool on the free Richmond Recycling app to find out where to recycle your item.





# 3.7

## Public Spaces Programs

Maintaining a litter-free community and encouraging recycling in parks and other public spaces is an essential part of responsible and sustainable waste management. Not only does this help to keep the City a beautiful place to live and visit, it also helps to reduce the amount of plastic and other garbage going into oceans and other waterways.

The City has three primary services to support recycling and a litter-free community: Public Spaces services, Litter Collection services and Special Event Recycling.

Because building community pride and increasing responsible behaviours involves working together with the community, the City also works with volunteers through the Partners for Beautification program and community clean up events.



## PUBLIC SPACES SERVICES

The City of Richmond has recycling and garbage bins located throughout the community in public spaces that include parks and business districts. Recycling and garbage bins are serviced or inspected over 7,100 times each week.

The City's bins include instructional bin labels to help inform people about how to sort items correctly. Many of the recycling bins feature images that complement the surrounding scenery, and others feature custom artwork by local artists. To further improve capacity and operational efficiency, the City also has large in-ground garbage collection bins in high traffic areas.



## SPECIAL EVENT RECYCLING

Recycling stations are recommended for special event bookings taking place in Richmond. For some events, the City hosts recycling stations with assistance from Green Ambassador volunteers. This involves setting up recycling stations and having recycling assistants at the event to advise people on how to recycle.

The City also supports events by providing organizers with recycling bins and garbage carts at no charge, as well as complimentary collection services. This makes it easy for event organizers to keep the venue clean and recyclables out of the landfill.

In addition, the City participates in community clean up events each year.

## LITTER COLLECTION SERVICES

Maintaining a litter-free city is a key focus area to ensure residents can enjoy clean parks and public spaces. The City of Richmond has made efforts to ensure that there are garbage bins, and in many cases recycling options, in public spaces throughout the city.

In addition, as essential workers, City crews work seven days a week to collect litter from parks, school grounds, roadsides, sidewalks and boulevards.

They inspect or service garbage and recycling from litter and recycling receptacles in the community 30,919 times every month. Crews also assist with removing graffiti from City garbage bins, and they collect illegally-dumped materials found on City property and provide safe disposal and recycling of these items.

The extensive work to maintain public spaces and collect litter may go unnoticed, particularly because it is done well and regularly. Richmond residents enjoy the benefits, but may not realize the extent of work involved in maintaining a clean and livable city.







# 3.8

## Outreach and Customer Service

Richmond's successful outreach and customer service programs are designed to help turn information and education into action.

By working with children and youth through school programs and the Green Ambassadors, Richmond creates a learning environment where students gain a better understanding about recycling and sustainable waste management, and then apply their skills as volunteers and through school activities. The City is also offering more virtual outreach opportunities.

Providing outreach, customer support services and information materials also assists residents by increasing their understanding of how to recycle correctly along with new tools and services to promote recycling at home and on the go.

The Environmental Programs Information Line staff assist customers on the phone, via email and at community events to answer questions, assist with requests relating to garbage and recycling, and provide guidance on where to go for additional information and resources. Richmond staff also assist customers directly at the Recycling Depot, and through its outreach programs in the community.

At the Recycling Depot, staff provide assistance with where and how to recycle using its drop-off options, answer questions about City programs and services and sell products such as compost bins and rain barrels as well as Garbage Tags and Garbage Disposal Vouchers. Through outreach, Richmond goes into the community to connect with residents to share information and respond to questions.



## SEARCH & TIPS TOOLS

Richmond offers the Recycling Wizard to help residents search for where to recycle household items. The Recycling Wizard is available online at [richmond.ca/recyclesearch](http://richmond.ca/recyclesearch) and in the Richmond Recycling app, free from the Apple and Android app stores.

## COMMUNITY WORKSHOPS

Richmond's free community workshops provide education and tips that support recycling and waste reduction techniques. A summary of workshops is provided below.

For information on the workshops, call the Environmental Programs Information Line at 604-276-4010, email [garbageandrecycling@richmond.ca](mailto:garbageandrecycling@richmond.ca), or visit the Community Outreach section at [richmond.ca/recycle](http://richmond.ca/recycle).

## RICHMOND GREEN AMBASSADORS

Richmond's Green Ambassadors are dedicated high school students who participate in monthly symposiums to learn about environmental sustainability and apply what they have learned as volunteers at City events and activities. These energetic and environmentally conscious individuals also manage green initiatives in their schools, including an annual REaDY Summit (Richmond Earth Day Youth Summit).

## STUDENT OUTREACH

Richmond sponsors programs, contests and other activities for local students to raise awareness about the importance of reducing waste and how to recycle correctly. These activities inspire them to feel that taking care of the planet is fun.

TYPE OF WORKSHOP	DESCRIPTION
Recycling Workshops	Learn how to reduce reliance on single-use items and sort household recyclables properly to reduce contamination. Understand the recycling process and the importance recycling has on the environment, including the impact of marine plastic and other hot topics in solid waste management.
Richmond Recycling Depot Tours	Interactive tour of the Richmond Recycling Depot designed to teach residents about the drop-off options available and materials accepted for recycling.





# RESOURCES TO RECYCLE CORRECTLY

# 4.0

## Tips and Resources

In Richmond, we care about our community, and we are working together with residents and local organizations to reduce waste and promote a circular economy. These Tips and Resources highlight the City's community partners, and provide a guide for how to deal with hazardous waste and other items not accepted in curbside and centralized recycling programs.

With the help of community resources and partnerships, Richmond residents have access to easy and convenient drop-off services and programs to support recycling, safe disposal, and waste reduction. This section includes contact information and locations for Richmond services and community partners involved in take-back collection through product stewardship programs. Together these Tips and Resources help to support maximum recycling and reduce the amount waste going to the landfill.





# 4.1

## Community Resources and Partnerships

## ECOWASTE INDUSTRIES

The City offers residents the option to drop off unlimited quantities of yard and garden trimmings for free at Ecowaste Industries. Proof of Richmond residency is required.

### Ecowaste Industries:

15111 Williams Road  
Hours of operation and instructions:  
604-277-1410  
ecowaste.com

## COMPOST HOTLINE

The Compost Hotline is a community program operated by City Farmer that provides support and tips for best practices in home composting.

### Compost Hotline:

604-736-2250  
composthotline@telus.net

## RICHMOND SHARES

Richmond Shares is a non-profit organization that facilitates the exchange of gently used items.

**Richmond Shares:** richmondshares.bc.ca

## METRO VANCOUVER RECYCLES

Metro Vancouver Recycles helps you find options for recycling products and get helpful links to online services.

### Metro Vancouver Recycling Directory:

metrovancoverrecycles.org

## RECYCLING COUNCIL OF BRITISH COLUMBIA (RCBC)

RCBC provides information and resources to support recycling in the community.

### Recycling Hotline

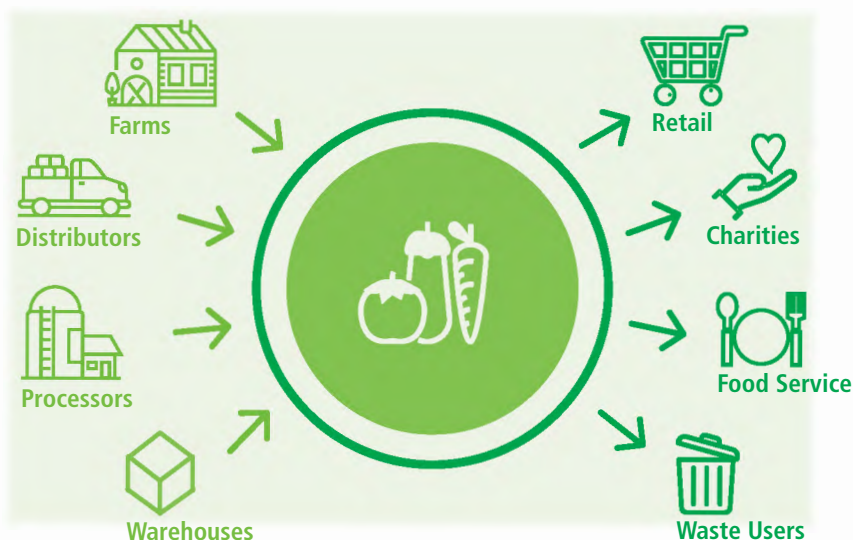
Monday to Friday, 9 a.m. to 4 p.m.  
604-RECYCLE (604-732-9253)  
hotline@rcbc.bc.ca

## CITY OF RICHMOND FOOD RECOVERY NETWORK

Partnering with FoodMesh, this program safely and easily diverts surplus food by bringing together local food businesses with charities and farmers.

### Richmond Food Recovery Network:

foodmesh.ca/services-regional/richmond







# 4.2

## Banned and Hazardous Materials

Careless handling of hazardous products can cause serious injury as well as damage to the environment. Hazardous products that are dumped in sewers or green spaces can injure livestock, wildlife and plant life. Careful and often specialized disposal is essential for these materials.

There are certain materials that Metro Vancouver disposal facilities do not accept, either because there are already disposal programs set up for these items, or because they are hazardous to waste collection workers, the public and the environment.

At disposal sites, garbage loads are inspected for banned and prohibited materials. Loads that arrive at the disposal sites containing prohibited materials are assessed a \$65 minimum surcharge, plus the cost of removal, clean-up or remediation. Loads containing banned materials are assessed a 50% tipping fee surcharge.

For a list of drop-off locations, use the City's Recycling Wizard available on the Richmond Recycling app and at [richmond.ca/recyclesearch](http://richmond.ca/recyclesearch), or call the RCBC Recycling Hotline at 604-732-9253.



## BANNED HAZARDOUS AND OPERATIONAL IMPACT MATERIALS



- × Agricultural waste
- × Asbestos
- × Automobile parts and bodies
- × Barrels, drums, pails or large (205 litre or greater) liquid containers, full or empty
- × Biomedical waste
- × Dead animals
- × Gypsum
- × Hazardous waste
- × Inert fill material including soil, sod, gravel, concrete and asphalt exceeding 0.5 cubic metres per load
- × Liquids or sludge
- × Refuse that is on fire, smouldering, flammable or explosive
- × Wire and cable exceeding 1% of load

## BANNED MATERIALS THAT ARE RECYCLABLE WITH CITY SERVICES



- × Beverage containers
- × Containers made of glass, metal or banned recycled plastic
- × Corrugated cardboard
- × Electronics
- × Expanded polystyrene packaging
- × Food waste
- × Green waste
- × Mattresses
- × Motor oil & antifreeze
- × Propane tanks
- × Recyclable paper
- × Tires (passenger & light-duty truck only)

For a complete list of banned materials, please visit [metrovanancouver.org/services/solid-waste/recycling-programs/disposal-ban](https://metrovanancouver.org/services/solid-waste/recycling-programs/disposal-ban)



# 4.3

## Recycling and Disposal Directory

Many common hazardous household and automotive products must be recycled or disposed through special depots. Disposal sites and take-back collection options for hazardous, banned and other materials are listed on the following pages.

Please note that this information is provided as a reference for your convenience; however, it is not guaranteed. Please call first to confirm that the site is still open to accept these take-back products and to check hours of operation.



### ANTIFREEZE AND EMPTY CONTAINERS

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Jiffy Lube 10991 No. 4 Road	604-448-0142
List of accepted items: <a href="http://bcusedoil.com">bcusedoil.com</a> or 604-732-9253.	



### APPLIANCES – SMALL


DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Best Buy 700-5300 No. 3 Road	604-273-7335
Ironwood Bottle & Return-It Depot 110 - 11020 Horseshoe Way	604-275-0585
OK Bottle Depot 145-5751 Cedarbridge Way	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171
List of accepted items: <a href="http://electrorecycle.ca">electrorecycle.ca</a> or 604-732-9253.	




### BABY CAR SEATS

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot (pilot program) 5555 Lynas Lane	604-276-4010
 City of Vancouver Landfill 5400 72nd Street, Delta	604-873-7000
 Pacific Mobile Depots (third Saturday of every month) Britannia Community Centre, 1661 Napier Street, Vancouver	604-718-5800
 Queensborough Landing Return-it Depot Unit A - 409 Boyne Road, New Westminster	604-540-4467

Watch for the **blue** listings for items recyclable through the City of Richmond. See Programs and Services starting on page 28 to find out what is accepted through the City's collection and drop-off services.

 **Disposal Ban** – Banned from the landfill and recyclable through retailers, stewardship or take-back programs

 **Disposal Ban** – Banned from the landfill and recyclable through the City and other services

 **Not Banned** – Recyclable through the City and other services

 **Not Banned** – Recycling options are available

 **A fee is charged**



### BATTERIES – AUTOMOTIVE

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Canadian Tire 35010 No 3 Road 11388 Steveston Highway	604-273-2939 604-271-6651
Kal Tire 2633 No. 5 Road	604-278-9181
Regional Recycling 13300 Vulcan Way	1-855-701-7171

Note: All retailers accept a used battery for each one purchased. Collection sites: [recyclemybattery.ca](http://recyclemybattery.ca)



### BATTERIES – HOUSEHOLD AND MOBILE PHONES

Batteries weighing 5kg or less

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Best Buy 700-5300 No. 3 Road	604-273-7335
Costco 9151 Bridgeport Road	604-270-3647
Home Depot 2700 Sweden Way	604-303-9882
Kwantlen Student Association 8771 Lansdowne Rd	604-599-2865
London Drugs 5971 No. 3 Road 3080 - 11666 Steveston Highway	604-448-4811 604-448-4852
Pharmasave 105-12420 No. 1 Road	604-232-0159
Regional Recycling 13300 Vulcan Way	1-855-701-7171
Rona (batteries only) 7111 Elmbridge Way	604-273-4606
Staples 8171 Ackroyd Road 110 - 2780 Sweden Way	604-270-9599 604-303-7850
The Source 1113 - 6551 No. 3 Road	604-273-1475
Value Village 8240 Granville Ave	604-248-2285

Batteries accepted: [call2recycle.ca](http://call2recycle.ca) or 1-888-224-9764.

Mobile phone drop-off sites: [call2recycle.ca/locator](http://call2recycle.ca/locator).

All cellular/mobile phone stores accept used cellular/mobile phones for refurbishing or recycling.

To erase data from your device, use the free Cell Phone Data Erasers at [recyclemycell.ca/recycling-your-device](http://recyclemycell.ca/recycling-your-device).



### BUTANE CYLINDERS

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010

### CARBON MONOXIDE (CO), SMOKE AND COMBINATION SMOKE & CO ALARMS

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
London Drugs 5971 No. 3 Road 3080 - 11666 Steveston Highway	604-448-4811 604-448-4852
Regional Recycling 13300 Vulcan Way	1-855-701-7171
Rona 7111 Elmbridge Way	604-273-4606

Complete list of alarms accepted: [regeneration.ca](http://regeneration.ca) or 604-732-9253.



### ELECTRONICS: Audio visual equipment, computers, monitors, televisions, printers, fax machines, scanners, video games and accessories

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Best Buy 700 - 5300 No. 3 Road	604-273-7335
Blundell Return-It Centre 130 - 8180 No. 2 Road	
Ironwood Bottle & Return-It Depot 110 - 11020 Horseshoe Way	604-275-0585
OK Bottle Depot 145 - 5751 Cedarbridge Way	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171
Staples 8171 Ackroyd Road 110 - 2780 Sweden Way	604-270-9599 604-303-7850

Complete list of materials accepted: [return-it.ca/electronics](http://return-it.ca/electronics) or 604-473-2400.



### EXERCISE AND HOBBY MACHINES

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Regional Recycling 13300 Vulcan Way	1-855-701-7171

Complete list of materials accepted: [return-it.ca/electronics](http://return-it.ca/electronics) or 604-473-2400.

**EYEGLASSES****DROP-OFF LOCATION**

Drop off at any local optometrist or eye care professional.

**FIRE EXTINGUISHERS****DROP-OFF LOCATION****PHONE**

Richmond Recycling Depot  
5555 Lynas Lane

604-276-4010

 Vancouver Fire  
22131 Fraserwood Way

604-232-3473

**FLAMMABLE LIQUIDS, PESTICIDES, SOLVENTS AND GASOLINE****DROP-OFF LOCATION****PHONE**

Richmond Recycling Depot  
5555 Lynas Lane


604-276-4010

Regional Recycling  
13300 Vulcan Way

1-855-701-7171

Complete list of accepted items: [regeneration.ca](http://regeneration.ca) or 604-732-9253.

**GENERAL HAZARDOUS MATERIALS****DROP-OFF LOCATION****PHONE**

 Secure Energy  
160 -13511 Vulcan Way

604-214-7000

**GYPSUM DRYWALL**

No other materials attached to or on drywall

**DROP-OFF LOCATION****PHONE**

 City of Vancouver Landfill  
5400 72nd Street, Delta

604-873-7000

Ecowaste Industries Ltd. (Depot)  
15111 Williams Road

604-788-0484

 New West Gypsum Recycling  
11871 Horseshoe Way

604-247-1664

Western Material Recovery  
11610 Twigg Place

604-247-1664

Vancouver Transfer Station  
(maximum 1/2 sheet with  
a paid load of garbage)  
377 W. Kent Avenue N., Vancouver

604-873-7000

**HYPODERMIC NEEDLES****DROP-OFF LOCATION**

Purchase a "Sharps Container" from a pharmacy and return the container to same pharmacy when full.  
Complete list of drop-off locations:  
[healthsteward.ca/returning-medical-sharps](http://healthsteward.ca/returning-medical-sharps).

**LIGHTS AND LIGHTING FIXTURES****DROP-OFF LOCATION****PHONE**

Richmond Recycling Depot  
5555 Lynas Lane

604-276-4010

Canadian Tire (lights only)  
11288 Steveston Highway

604-271-6651

Ironwood Return-It Depot  
110-11020 Horseshoe Way

604-275-0585

OK Bottle Depot  
7960 River Road

604-244-0008

Regional Recycling  
13300 Vulcan Way

1-855-701-7171

Rona  
7111 Elmbridge Way

604-273-4606

Urban Impact Recycling  
15360 Knox Way

604-834-8748

Accepted items: [regeneration.ca](http://regeneration.ca) or 604-732-9253.

**LUBRICATING OIL (USED), OIL FILTERS AND PLASTIC OIL CONTAINERS****DROP-OFF LOCATION****PHONE**

Richmond Recycling Depot  
5555 Lynas Lane

604-276-4010

Accepted items: [bcusedoil.com](http://bcusedoil.com) or 604-732-9253.

**MATTRESSES AND BOXSPRINGS****DROP-OFF LOCATION****PHONE**

 Canadian Mattress Recycling  
1210 Cliveden Avenue, Delta

604-777-0324

 City of Vancouver Landfill  
5400 72nd Street, Delta

604-873-7000

 Vancouver Transfer Station  
377 W. Kent Ave. N., Vancouver

604-873-7000

Richmond's Large Item Pick Up Program: Contact  
Sierra Waste at 604-270-4722. Some restrictions  
apply. Program details: [richmond.ca/largeitem](http://richmond.ca/largeitem).





### MEDICAL DEVICES AND EQUIPMENT

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
OK Bottle Depot 145 - 5751 Cedarbridge Way	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171



### MUSICAL INSTRUMENTS (ELECTRONIC)

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
OK Bottle Depot 145 - 5751 Cedarbridge Way	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171



### PAINT AND PAINT AEROSOL CONTAINERS

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Ironwood Bottle & Return-It Depot 110 - 11020 Horseshoe Way	604-275-0585
Regional Recycling 13300 Vulcan Way	1-855-701-7171

Complete list items accepted: [regeneration.ca](http://regeneration.ca) or 604-732-9253.



### PHARMACEUTICAL DROP-OFF LOCATION

All pharmacies accept leftover or outdated prescription drugs, non-prescription medications, herbal products, mineral supplements, vitamin supplements and throat lozenges for safe disposal.

For a list of pharmacies and/or drugs, medications, herbal products and mineral supplements accepted, visit [healthsteward.ca/returning-medications/#drop-off-map](http://healthsteward.ca/returning-medications/#drop-off-map) or call 604-732-9253.

*Note: Please do not wash these items down the drain or throw them in the garbage.*



### POLYSTYRENE FOAM (E.G. STYROFOAM) - MOLDED PACKAGING & FOOD CONTAINERS

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Ironwood Bottle & Return-It Depot 110 - 11020 Horseshoe Way	604-275-0585
London Drugs 5971 No. 3 Road 3080 - 11666 Steveston Highway	604-448-4811 604-448-4852
Queensborough Landing Return-it Depot Unit A - 409 Boyne Road, New Westminster	604-540-4467



### POLYSTYRENE FOAM (E.G. STYROFOAM) - PEANUTS/CHIPS

DROP-OFF LOCATION	PHONE
Packaging Depot 6360 Kingsway, Burnaby 5524 Cambie Street, Vancouver	604-451-1206 604-325-9966



### PROPANE TANKS: Refillable & Disposable

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
City of Vancouver Landfill 5400 72nd Street, Delta	604-873-7000

*Note: Free drop-off of up to four disposable tanks and two refillable tanks.*



### OUTDOOR POWER EQUIPMENT

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Regional Recycling 13300 Vulcan Way	1-855-701-7171



### SEWING, KNITTING & TEXTILE MACHINES

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Ironwood Bottle & Return-It Depot 110 - 11020 Horseshoe Way	604-275-0585
OK Bottle Depot 145 - 5751 Cedarbridge Way	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171



### TELUS EQUIPMENT (RENTAL OR RETAIL)

#### DROP-OFF LOCATION

All TELUS rental or retail equipment such as cordless/corded phones, Voice Over IP (VOIP) phones, Global Positioning System (GPS) equipment and video/telephone conference equipment can be returned via Canada Post. Call 604-310-2255 for more information.



### THERMOSTATS

#### DROP-OFF LOCATION PHONE

Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Andrew Sheret Ltd. 4500 Vanguard Road	604-278-3766
Cape Construction (2001) Ltd. 633 - 5960 No. 6 Road	604-232-8608
Vancouver Zero Waste Centre (maximum 2) 8588 Yukon Street, Vancouver	604-873-7000

Drop-off locations: [hrai.ca/public-drop-off-locations](http://hrai.ca/public-drop-off-locations) or 1-800-267-2231 ext 224.



### TIRES – VEHICLES

#### DROP-OFF LOCATION PHONE

Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Island City Automotive 180 - 5400 Minoru Blvd	604-273-4023
Canadian Tire (no rims) 3500 No. 3 Road 11388 Steveston Highway	604-273-2939 604-271-6651
Kal Tire 2633 No. 5 Road	604-278-9181
Metro Tires Ltd. 16160 River Road	604-321-9004
OK Tire (only 4 per household) 5831 Minoru Boulevard	604-278-5171
Redline Automotive Ltd. 1 - 11711 No. 5 Road	604-277-4269
Vancouver Landfill (Passenger/light truck, with/without rims, limit of 10) 5400 72nd Street, Delta	604-873-7000

Richmond's Large Item Pick Up Program: Contact Sierra Waste at 604-270-4722. Some restrictions apply. Program details: [richmond.ca/largeitem](http://richmond.ca/largeitem).

Complete list of locations: [tsbc.ca/recycle-your-tires/](http://tsbc.ca/recycle-your-tires/) or 1-866-759-0488.

All retail locations accept a used tire for a new one purchased.



### TIRES AND TUBES – BICYCLES

#### DROP-OFF LOCATION PHONE

Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Cap's/Krusty's Bicycles 135-8460 Alexandra Road	604-270-2020
Village Bikes (small amounts) 3891 Moncton Street	604-274-3865

List of locations: [tsbc.ca/bike.php](http://tsbc.ca/bike.php) or 1-866-759-0488.



### TOOLS - POWER (ELECTRONIC & ELECTRICAL)

#### DROP-OFF LOCATION PHONE

Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Ironwood Bottle & Return-It Depot 110 - 11020 Horseshoe Way	604-275-0585
OK Bottle Depot 145 - 5751 Cedarbridge Way	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171
Richmond Return-It Depot 135 - 8171 Westminster Hwy	604-232-5555



### TOYS (ELECTRONIC & ELECTRICAL) INCLUDING VIDEO GAMING SYSTEMS & ACCESSORIES

#### DROP-OFF LOCATION PHONE

Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Best Buy 700 - 5300 No. 3 Road	604-273-7335
Ironwood Bottle & Return-It Depot 110 - 11020 Horseshoe Way	604-275-0585
OK Bottle Depot 145 - 5751 Cedarbridge Way	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171



### UPHOLSTERED FURNITURE (COUCHES, ARMCHAIRS, ETC)

#### DROP-OFF LOCATION PHONE

Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Canadian Mattress Recycling 140 - 715 Eaton Way, Delta	604-777-0314
City of Vancouver Landfill 5400 72nd Street, Delta	604-873-7000

Richmond's Large Item Pick Up Program: Contact Sierra Waste at 604-270-4722. Some restrictions apply. Program details: [richmond.ca/largeitem](http://richmond.ca/largeitem).

Our thanks go to Richmond residents who have helped us divert the majority of our household waste from the landfill through consistent recycling, as well as their continued efforts to reduce waste.

We also appreciate the many local business operators who participated in the City's outreach. Their input helped the City develop resources to set up to set up business for success as part of preparing for the new ban on single-use plastic.

Together, we are making continuous improvements that support a circular economy and more sustainable waste management.





## **CITY OF RICHMOND**

Environmental Programs Information Line:  
604-276-4010

[richmond.ca/recycle](http://richmond.ca/recycle)



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# City of Richmond

## Report to Committee

**To:** Public Works and Transportation Committee  
**From:** Suzanne Bycraft  
Director, Public Works Operations  
**Date:** February 22, 2022  
**File:** 10-6370-04-01/2021-  
Vol 01  
**Re:** **Solid Waste and Recycling Regulation Bylaw No. 6803, Amendment Bylaw No. 10361**

### Staff Recommendation

1. That the Solid Waste and Recycling Regulation Bylaw No. 6803, Amendment Bylaw No. 10361, be introduced and given first, second and third readings.
2. That mercury containing and electronic thermostats be added to the scope of materials accepted at the Richmond Recycling Depot by registering with the Thermostat Recovery Program delivered by the Heating, Refrigeration and Air Conditioning Institute of Canada.
3. That the Consolidated 5 Year Financial Plan (2022-2026) be amended accordingly.

Suzanne Bycraft  
Director, Public Works Operations  
(604-233-3338)

Att. 1

REPORT CONCURRENCE		
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>
Finance Department	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b>	<b>APPROVED BY CAO</b>

## Staff Report

### Origin

The City operates the Richmond Recycling Depot (“Depot”), which provides a convenient one-stop recycling service for both residential and non-residential properties to drop off a number of recyclable materials. Year over year, quantities of materials received at the Depot and costs associated with processing continue to increase.

This report proposes an increase to the fee charged for yard and garden trimmings received at the Depot. Additionally, the introduction of a fee structure for drop off of upholstered furniture by non-residential properties is proposed. Lastly, as part of continuing to expand the scope of materials accepted at the Depot, this report seeks approval to add thermostats as an accepted item.

This report supports Council’s Strategic Plan 2018-2022 Strategy #2 A Sustainable and Environmentally Conscious City:

*2.2 Policies and practices support Richmond's sustainability goals.*

This report supports Council’s Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

*5.3 Decision-making focuses on sustainability and considers circular economic principles.*

### Analysis

#### Background

The Depot receives a wide variety of recyclable items ranging from common recyclables such as cardboard and Styrofoam, to more specialty items such as propane tanks and electronics. There are limitations on quantities for non-residential properties or items that require special handling, and fees apply to yard and garden trimmings drop off as noted in Table 1.

Table 1: Fees and Quantity Limitations

Description	Property Type	Fees	Limits
Recyclable materials	Residential	N/A	<ul style="list-style-type: none"> <li>General recyclables: None</li> <li>Items requiring special handling: program specific<sup>1</sup></li> </ul>
	Non-residential	N/A	<ul style="list-style-type: none"> <li>General recyclables: one cubic yard per day</li> <li>Items requiring special handling: program specific<sup>1</sup></li> </ul>
Yard and garden trimmings	Residential	N/A	<ul style="list-style-type: none"> <li>First cubic yard</li> </ul>
	Residential	\$20.00	<ul style="list-style-type: none"> <li>Each subsequent cubic yard</li> </ul>
	Non-residential	\$20.00	<ul style="list-style-type: none"> <li>Each cubic yard</li> </ul>

<sup>1</sup> Cooking oil, fire extinguishers, flammable liquids, gasoline, lead-acid batteries, light bulbs, motor oil, paint and pesticides



The fee for yard and garden trimmings drop off has not changed since 2008. The City has also added a considerable number of items to the scope of materials accepted at the Depot, including upholstered furniture. Furniture quantities have continued to grow, with more than double the number of items received in 2021 as compared to 2020. The costs for recycling upholstered furniture are increasing as the quantities increase.

### Yard and Garden Trimmings

In 2021 the Depot received approximately 3,500 tonnes of yard and garden trimmings. The \$20.00 per cubic yard fee generated \$75,000 of revenue, which funds just 24% of the total transportation and processing costs.

Staff propose to increase the drop off fee for yard and garden trimmings to \$25.00 per cubic yard. This is expected to increase annual revenues to approximately \$95,000, or 30% of total transportation and processing costs. Table 2 provides an overview of the increasing volumes of yard and garden trimmings.

Table 2: Yard and Garden Trimmings

	<b>2019</b>	<b>2020</b>	<b>2021</b>
Tonnes received	1,469	2,507	3,541
% Increase from previous year		71%	41%

Staff note that as a no-cost alternative, residents have the ability to drop off unlimited quantities of yard and garden trimmings at Ecowaste Industries free of charge, with the costs billed back to the City. Commercial landscapers also have the opportunity to utilize a no cost drop-off option at Ecowaste Industries for services provided to properties in Richmond by registering in advance.

### Upholstered Furniture

Starting January 1, 2019 the City began accepting upholstered furniture for drop off at the Depot. Accepted items include office or dining chairs, armchairs, recliners, loveseats, couches, reclining couches, sectionals, sofa-beds and ottomans. This program ensures that upholstered furniture items, which were previously sent to the landfill, are taken to a local facility for reuse or recycling.

Quantities of upholstered furniture received at the Depot were trending at normal patterns until 2021, where there was an increase of over 100% as shown in the table below. Recycling costs are also shown to have increased markedly in parallel with the increased quantities received.

Table 3: Upholstered Furniture

	<b>2019</b>	<b>2020</b>	<b>2021</b>
Upholstered furniture items	5,242	5,931	11,972
% Increase from previous year		13%	102%
Recycling Cost	\$102,326	\$123,133	\$223,186
% Increase from previous year		20%	81%

To help manage costs and control volumes, staff are proposing a fee be implemented for items dropped off by commercial operators and items originating from non-residential properties typically brought to the depot by moving or junk removal businesses. The addition of fees will help to curtail further cost escalation associated with drop off by commercial operators. This approach is consistent with that already in place for yard and garden trimmings and is prudent to implement at this time to avoid volume increases beyond that which can be reasonably managed at the Depot. The Depot is also the only local facility at the present time that accepts free drop off of upholstered furniture for recycling.

The proposed fee structure for non-residential properties is shown in Table 4. The proposed fee structure is based on size or type of furniture and cost recovery for processing and transportation of the items to the recycling facility.

Table 4: Proposed Non-Residential Upholstered Furniture Fee Structure

<b>Description</b>	<b>Proposed Fee</b>
Office or dining chair, ottoman, bench	\$20.00
Arm chair, loveseat, couch, recliner, chaise	\$35.00
Sectional, sofabed, reclining loveseat/couch, massage chair	\$50.00

Annual revenues from this fee structure are estimated at \$25,000.

Richmond residents will continue to have access to this service at the Depot at no charge. Residents are also able to participate in the City's Large Item Pick Up Program, where items are collected from curbside for residents with Blue Box or Garbage Cart service.

### Thermostats

The Depot is conveniently located and highly used by residents since a wide range of materials are accepted for recycling. The City is continually looking for opportunities to expand the scope of materials accepted to be considered a one-stop location for drop off of recyclable materials.

Thermostats contain mercury and require safe handling to prevent environmental impacts. Thermostats include both mercury containing and electronic products that sense and control room temperature through communication with heating, ventilation and air conditioning equipment. By recycling used thermostats, hazardous waste is diverted from the landfill and the need for raw materials to manufacture new products is reduced. The Thermostat Recovery Program is a stewardship program which is delivered by the Heating, Refrigeration and Air Conditioning Institute of Canada, and is funded by the manufacturers and distributors that sell and/or import mercury containing thermostats into Canada.

Participation in the Thermostat Recovery Program is at no direct cost to the City because the program steward pays the collection and processing costs. The City's costs are limited to staffing and administration associated with receiving these materials from customers. The City receives the thermostats in containers provided by the program steward and subsequently ships them to the processing facility at the program steward's cost. The program steward is responsible for all processing and any related disposal costs.

There are currently only two locations in East Richmond that accept them for recycling, staff suggest the addition of thermostats as an accepted item at the Depot to provide residents an alternative drop off option.

### **Financial Impact**

Estimated annual revenue from the fee increase for yard and garden trimmings is expected to be approximately \$20,000 above current revenue amounts. The fee for commercial drop off of upholstered furniture at the Depot is expected to generate \$25,000 in additional annual revenues.

There is no cost for adding thermostats to the scope of materials accepted at the Depot.

The Consolidated 5 Year Financial Plan (2022-2026) will be amended accordingly for the additional revenue generated for the yard and garden trimmings and upholstered furniture at the Depot.

### **Conclusion**

Costs for handling yard and garden trimmings at the Depot have increased over the years. As there has been no increase in the drop off fee since 2008, staff are proposing to increase the service fee from \$20.00 to \$25.00 per cubic yard. Further, due to increased use and popularity of upholstered furniture drop off at the Depot, staff recommend the addition of a fee structure for drop off of upholstered furniture by commercial operators as outlined in this report. These changes require an amendment to *Solid Waste and Recycling Regulation Bylaw No. 6803*, as presented with this report.

Staff also recommend that mercury containing and electronic thermostats be added to the scope of materials accepted at the Depot. This is in keeping with the City's ongoing efforts to offer continuous improvement in recycling services provided to the community.



Laurie Ackerman  
Waste Reduction and Recycling Coordinator  
(604-233-3356)

LA:la

Att. 1: Solid Waste and Recycling Regulation Bylaw No. 6803, Amendment Bylaw No. 10361



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**Solid Waste & Recycling Regulation Bylaw No. 6803, Amendment  
Bylaw No. 10361**

The Council of the City of Richmond enacts as follows:

1. The **Solid Waste and Recycling Regulation Bylaw No. 6803**, as amended, is further amended by deleting Section 2.1.1(c) in its entirety and replacing with the following:

(c) establish and maintain a recycling depot for use by **owners** and **occupiers** of both **residential properties** and **non-residential properties** for the deposit:

(i) of **yard and garden trimmings**;

(ii) of **upholstered furniture**; and

(iii) free of charge, of **recyclable material** and scrap metal and aluminum items,

and every owner of **residential property** and **non-residential property** must pay the applicable City recycling service fee specified in Schedule B, which is attached and forms part of this bylaw.

2. The **Solid Waste and Recycling Regulation Bylaw No. 6803**, as amended, is further amended by deleting Section 2.1.2 in its entirety and replacing with the following:

Notwithstanding the provisions of clause (c) and (d) of subsection 2.1.1,

(i) the **owner** or **occupier** of a **non-residential** property is limited to depositing one cubic yard of the material described in clause (c)(ii) and (c)(iii) per visit, per day; and

(ii) **regional customers** are limited to depositing one cubic yard of **base depot materials** per visit, per day.

3. The **Solid Waste and Recycling Regulation Bylaw No. 6803**, as amended, is further amended by adding the following definition to Section 15.1 in the appropriate alphabetical order and reordering the remaining definitions:

“**Upholstered Furniture**” means residential furniture intended for indoor use in a home and designed to be used for sitting, resting or reclining that is wholly or partially stuffed or filled with resilient cushioning materials enclosed within a covering consisting of fabric or related materials and does not include mattresses or box springs.



4. The **Solid Waste and Recycling Regulation Bylaw No. 6803**, as amended, is further amended by deleting Schedule B and substituting Schedule A attached to and forming part of this Bylaw. For greater certainty, any reference to Schedule B shall be interpreted as a reference to Schedule A of this Bylaw.
5. This Bylaw is cited as **“Solid Waste & Recycling Regulation Bylaw No. 6803, Amendment Bylaw No. 10361”**.

FIRST READING

SECOND READING

THIRD READING

ADOPTED

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MAYOR

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CORPORATE OFFICER

CITY OF RICHMOND
APPROVED for content by originating dept. <i>LA</i>
APPROVED for legality by Solicitor <i>LB</i>

**SCHEDULE A to BYLAW NO. 10361****BYLAW YEAR: 2022****SCHEDULE B to BYLAW NO. 6803**

<b>FEES FOR CITY RECYCLING SERVICE</b>	
Annual City recycling service fee:	
(a) For residential properties, which receive blue box service (per unit)	\$ 68.94
(b) For multi-family dwellings or townhouse developments which receive centralized collection service (per unit)	\$ 53.50
Annual City recycling service fee:	
(a) For yard and garden trimmings and food waste from single-family dwellings and from each unit in a duplex dwelling (per unit)	\$ 176.94
(b) For yard and garden trimmings and food waste from townhome dwellings that receive City garbage or blue box service (per unit)	\$ 71.11
(c) For yard and garden trimmings and food waste from multi-family dwellings	
- Weekly Service	\$ 54.44
- Twice per week service	\$ 74.22
Cardboard bin recycling service for multi-family dwellings, collected once every 2 weeks	\$ 60.00/bin/month
Cardboard bin recycling service for multi-family dwellings, collected weekly	\$ 70.00/bin/month
Fee for yard/food waste cart replacement	\$ 25.00
Annual City recycling service fee for non-residential properties	\$ 6.23
Optional Monthly City organics collection service fee for Commercial customers	
- Weekly service	\$ 72.64
- Cost per additional cart	\$ 32.11
Optional Monthly City organics collection service fee for Commercial customers	
- Twice weekly service	\$ 100.16
- Cost per additional cart	\$ 61.11
City recycling service fee for the Recycling Depot:	
	\$25.00 per cubic yard for the second and each subsequent cubic yard
(a) (i) for yard and garden trimmings from residential properties	
(ii) for recyclable material from residential properties	\$ 0.00
(b) For yard and garden trimmings from non-residential properties	\$25.00 per cubic yard
(c) For recycling materials from non-residential properties	\$ 0.00
(d) For upholstered furniture from residential properties	
(i) office/dining chair, ottoman, bench	\$ 0.00
(ii) arm chair, loveseat, couch, recliner, chaise	\$ 0.00
(iii) sectional, sofabel, reclining loveseat/couch, massage chair	\$ 0.00
(e) For upholstered furniture from non-residential properties	
(i) office/dining chair, ottoman, bench	\$ 20.00
(ii) arm chair, loveseat, couch, recliner, chaise	\$ 35.00
(iii) sectional, sofabel, reclining loveseat/couch, massage chair	\$ 50.00



# City of Richmond

## Report to Committee

**To:** Public Works and Transportation Committee  
**From:** Suzanne Bycraft  
Director, Public Works Operations  
Milton Chan, P. Eng.  
Director, Engineering  
**Date:** March 11, 2022  
**File:** 10-6045-01/2022-Vol  
01  
**Re:** **November 2021 Atmospheric River Events - Summary and Outcomes**

### Staff Recommendation

That staff apply the knowledge gained from the November 2021 atmospheric river event and response to inform future updates to the City's infrastructure plans and strategies, as well as future capital, operating and utility budget submissions.

Suzanne Bycraft  
Director, Public Works Operations  
(604-233-3338)

Milton Chan, P. Eng.  
Director, Engineering  
(604-276-4377)

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
SENIOR STAFF REPORT REVIEW	INITIALS: 
APPROVED BY CAO 	

## Staff Report

### Origin

The City, along with other jurisdictions in the Lower Mainland and Fraser Valley regions, experienced significant rainfall events during November 2021. These were termed ‘atmospheric river’ events due to consistent and substantial quantities of rainfall received over short periods of time. In many areas throughout the region, the capacity of drainage systems was exceeded.

The foresight and continued investment in the City’s drainage and diking infrastructure over many years, including long-term infrastructure planning, maintenance and inspections, resulted in system resiliency during these events. Despite being tested at and beyond design levels, the City’s system performed exceptionally well. Those areas built to current flood construction levels experienced no flooding concerns, while some areas not yet built to these levels experienced some degree of flooding.

As with all events of this magnitude, it is beneficial to reflect on areas of strong performance as well as identify areas of focus for creating even greater resilience and to enhance future response capabilities. This report provides an overview of the events and identifies areas to enhance mitigation and future response efforts.

This report supports Council’s Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

*Enhance and protect the safety and well-being of Richmond.*

*1.3 Ensure Richmond is prepared for emergencies, both human-made and natural disasters.*

This report supports Council’s Strategic Plan 2018-2022 Strategy #4 An Active and Thriving Richmond:

*An active and thriving community characterized by diverse social and wellness programs, services and spaces that foster health and well-being for all.*

*4.2 Ensure infrastructure meets changing community needs, current trends and best practices.*

### Analysis

#### Background

The City has a number of Council adopted strategies and plans in place that guide the City’s management of flood risks. These include the Flood Protection Management Strategy, Integrated Rainwater Resource Management Strategy, and multiple phases of the Dike Master Plan. These documents are updated regularly to reflect current climate change science and regulatory requirements.

The principles and priorities from these documents are then combined with analysis from the ageing utility infrastructure planning process to inform the 5 Year Capital Plan, the Capital



Budget, the Utility Budget and the Operating Budget. Raising the perimeter dike is currently the strategic priority for improving the resilience of the City's flood protection system. The dike protects the City against flooding from any high tides and storm surges, as well as from high river flows caused by events such as spring freshet or prolonged heavy rainfall upstream of Richmond. Water from high river flows is also broadly disbursed by the time it reaches Richmond, lessening any potential impacts. The effect of high river flows is also reduced by the tide cycle, as the change in river level due to tides is much greater than the change due to high river flow events.

The interior drainage system and pump stations protect the City against flooding from heavy rainfall. The strategic priority in this area is to increase the capacity of the drainage pump stations. In the past 20 years, 14 pump stations have been rebuilt and 4 more have been significantly upgraded. With storm intensity and frequency expected to increase due to climate change, additional emphasis has been placed on the large box culverts renewal. The box culvert system largely mirrors the arterial road grid and is critical for conveying stormwater from all parts of the City to the pump stations. In 2017 Council supported the implementation of a box culvert maintenance program that will extend the life cycle of the culverts and minimize long term replacement costs. By minimizing replacement costs, more funding can be applied to new drainage infrastructure or upgrades.

#### November 2021 Atmospheric River

The City's diking network is designed to withstand a 500 year return period flooding event, and the drainage system is designed to withstand a 10 year return period rain event. The severity and intensity of the November 2021 atmospheric river far exceeded the original weather forecasts, and a 50 year return period rain event occurred, with 138 mm of total rainfall.

One of the anticipated effects of climate change is the increased frequency and duration of storm events. This means that the 10 year return period rain event that the drainage system is designed to accommodate will likely be more severe in the future. Staff are reviewing and updating the City's drainage model to determine what upgrades are potentially required to accommodate the changing nature of these events. Continuing to invest in upgrades to the drainage and flood protection system will help to ensure that the City can withstand these future storms.

Richmond experienced fewer issues than most other municipalities in the region, due in large part to the pro-active planning and implementation of Council's endorsed strategies and plans. Staff will use the observations from this event to further refine the City's drainage model and identify future drainage upgrades.

#### *Flooding Issues – Infrastructure Within Richmond's Jurisdiction*

Although some flooding occurred in various locations, the City's drainage system performed well overall during this event.

- *Horseshoe Catchment Area*  
The majority of flooding challenges associated with infrastructure under the City's jurisdiction was experienced in the area between Steveston Highway, Williams Road, No. 4 Road and No. 5 Road. This area experienced recurring flooding issues during smaller

rainfall events in the past and has always presented challenges as existing land elevations are among the lowest in the City.

Recognizing these challenges in the past, in the mid 2000's over five kilometres of drainage pipes were upgraded, and in the past decade new drainage pipes have been installed in most of the back lanes of this area. The Horseshoe Slough Drainage Pump Station was recently upgraded, and a hydraulic study of the slough upstream of the pump station was done in 2018 that found the slough had adequate design standard capacity to accommodate the storm water runoff from the catchment area.

While the recently upgraded Horseshoe Slough Drainage Pump Station performed as designed, parts of the pipes, box culverts and drainage canals in this area were at capacity and water began entering some properties in the Seacote area.

Although staff will continue to review potential drainage upgrades that will improve the ability to move storm water to the pump station, there are limits to the level of drainage that can be provided to the lower lying properties and many of these upgrades have already been installed to address the historical flooding issues.

The dwellings that experienced flooding are older and are below the City's current Flood Construction Levels. One of the points of emphasis in the Flood Protection Management System is long term raising of the land levels as a principle strategy within the City to protect against this type of flooding. Staff are reviewing additional interim measures that can be taken to protect against flooding of lower lying properties during future extreme storm events.

#### *Flooding Issues – Infrastructure Within Metro Vancouver and Provincial Jurisdiction*

- *No. 5 Road and Highway 99 Corridor*  
Highway 99 was closed by the Ministry of Transportation and Infrastructure (MOTI) due to flooding of the highway north of Westminster Highway. The City's drainage system in this area is interconnected with that of MOTI. Staff have requested that MOTI include drainage analysis and any identified upgrades extending to Highway 91 as part of the upcoming George Massey Crossing project.

Staff have also requested that MOTI coordinate inspections and maintenance schedules with the City and ensure that regular ditch maintenance practices are conducted to maximize the highway system's capacity to convey storm water during rainfall events.

- *Metro Vancouver Sanitary Sewer Failure at Gilbert and Blundell Roads*  
Flooding and damaged infrastructure resulting in road closures occurred when an access chamber in the Metro Vancouver sanitary sewer system that connects to the Gilbert Trunk Sewer experienced a failure. As this system operates under pressure during daytime flows, a large amount of liquid waste was discharged onto the street.

Completion of the new Gilbert Trunk Sewer and connecting sewer lines would significantly reduce the chances of a similar failure in the future. Metro Vancouver staff

have advised that the next phase of the project is in the procurement stage. Staff will continue to push for updates and timely completion of this project.

In the interim, to prevent a repeat occurrence, staff are requesting that Metro Vancouver identify any other locations along the complete length of the sanitary sewer main where a similar configuration exists and install mitigation measures.

### *Fraser River Flows*

As seen by the flooding events that occurred in other areas of the province, Fraser River flows were elevated for a short period as a result of the atmospheric river.

- *Flow Data*

Data from Environment and Climate Change Canada indicate that the peak river flows at Hope were 6,230 cubic metres per second (m<sup>3</sup>/s), and peak flows at Mission were 10,700 m<sup>3</sup>/s. For comparison, the average freshet flow over the past five years has been 9,400 m<sup>3</sup>/s at Hope, and 11,150 m<sup>3</sup>/s at Mission. River level sensors at Richmond's drainage pump stations showed river levels were slightly higher than would be expected from tidal effects alone.

The high flows from the atmospheric river had a much shorter duration than freshet flows. While freshet flows can last for weeks, the high flows in November subsided within a day.

This information indicates that widespread, heavy, prolonged rain events that include a significant portion of the entire Fraser River watershed can raise river flows to the extent that the effect is similar to a short duration freshet event. Richmond's dike system is designed to protect the City against these types of flows.

Staff are continuing to communicate with the BC River Forecast Centre and other stakeholders to better understand the impact of the atmospheric river on the Fraser River flows, in particular the large difference seen between the flows measured at Hope and Mission. Staff are also reviewing the location and quantity of river level sensors around the City to improve the quality of data collected in the future.

### *Communications*

- *Call Management*

The overnight deluge resulted in an overwhelming number of calls to Public Works Dispatch as residents awakened to the impacts from the rainfall event. Over 1,300 calls were received during this event, approximately 600 of which were received in simultaneous fashion, causing call queueing and delays. While calls were distributed throughout many areas of the City, the Horseshoe catchment area and the Highway 99/No. 5 Road corridor were the areas where the highest concentration of calls were received.

Calls for sandbagging assistance were prioritized based on residents ability to collect them from the Works Yard and City crews delivered and placed sandbags at homes where residents were elderly or otherwise unable. City crews also helped residents fill

and place sandbags into residents' vehicles at the City Works Yard. Staff will review options to provide greater distributed access for sandbags throughout the City if resources permit in future events. For example, the Sidaway soil/operations site could serve as a satellite distribution point.

- *Public Communications*

Operational status reports were provided regularly and as the situation unfolded across the City, allowing information to be conveyed regularly via social media channels and the media. A web page was also created to provide ongoing updates. While the dynamic and changing nature of events such as this can be challenging, feedback from the public, stakeholders and media about the level of timeliness and nature of communication from the City was extremely positive.

Moving forward, helping residents understand the importance of the flood protection management system and individual resident's roles in keeping conveyance systems clear will continue to be integrated into public outreach and through enhanced social media. Additional instructional videos will be produced to inform residents on flood protection measures in general. Public engagement on the Dike Master Plan Phase 4 will be expanded to obtain input on the best methods to share this type of information.

The event showed that some improvements could be made to the Public Works call management system to handle extremely high call volumes. Staff have implemented measures to allow for rapid call centre expansion to reduce queueing and delays in the future.

The benefits of providing the public with more information on the City's drainage and flood protection system was also identified. Moving forward, helping residents understand the importance of the drainage system and individual resident's roles in keeping the system clear will continue to be integrated into public outreach and through enhanced social media. Additional instructional videos will be produced to inform residents on flood protection measures in general. Public engagement on the Dike Master Plan Phase 4 will be expanded to obtain input on the best methods to share this type of information.

### *Works Yard*

- *Fuel Supply*

Storm events of this magnitude and the wide-scale impact caused throughout the region highlighted the level of reliance on suppliers and vendors, particularly for fuel supply. The Works Yard serves as the fuel supply hub for all the City's various business units plus Richmond Fire Rescue, RCMP and the Richmond School Board. There are seven fire halls that also have on site diesel fuel tanks. Total fuel capacity at the Works Yard is 67,570 litres, inclusive of gasoline, diesel and propane. Fire halls have a total of 37,259 litres of diesel fuel capacity.

In a major event, it is expected that normal supply chains may be impacted. While the City's primary fuel supply continued uninterrupted, mobile fueling for off-site generators was impacted. To manage these issues, staff will work with our primary fuel vendor to ensure back-up sources in the event of supply chain disruptions. Staff will also identify



additional portable fuel capacity and fuel pump upgrade requirements necessary to ensure robustness of the current fueling station for future funding consideration.

The City's in-ground fuel tanks are also subject to potential impacts from storm water infiltration which would hinder the City's ability to respond to a major event.

- *Other Municipalities*

Staff note that the Works Yard sites for some other municipalities in BC were flooded and this severely impacted their response capability.

The City's ability to respond to future events is dependent on having supporting infrastructure that is resilient enough to withstand the event. Many of the resources deployed in response to the event are based out of the Works Yard. Although the Works Yard performed well during this event, the site is below the current Flood Construction Level and should be raised as identified in the Flood Protection Management Strategy.

The overall resiliency of the Works Yard, Fire Halls and other City facilities needs to be continually assessed to ensure that they can withstand the expected increasing severity of future substantial weather events.

#### *Emergency Response / Emergency Operations Centre (EOC) / Emergency Management BC*

- *Departmental Operations Centre*

Staff response was co-ordinated interdepartmentally through a departmental operations centre at the Public Works Administration Building. Public Works, Parks and Engineering resources were managed at the departmental level. During the event, the need to activate the Emergency Operations Centre and access provincial resources was continually assessed and was ultimately not required.

The City also responded to and provided resources to assist with the Metro Vancouver sanitary sewer failure at Gilbert and Blundell, and offered assistance to MOTI and their contractor for the flooding on Highway 99.

The severity of events elsewhere in the province caused Emergency Management BC, Metro Vancouver and a number of other municipalities to activate their EOCs. During the event, staff experienced communication delays from external agencies when seeking updates and information on issues such as the Metro Vancouver sanitary sewer failure and the flooding on Highway 99 with MOTI.

This event highlighted the degree to which there can be impacts caused by the failure of infrastructure located in the City, but under the jurisdiction of other agencies and, hence, outside of the City's direct management and control. Staff regularly work with these partner agencies to ensure their maintenance standards and/or response actions are sound and timely to reduce impacts to City-owned infrastructure and private property. However, during large scale events such as this, the partner agencies may be dealing with multiple issues of equal or much greater severity throughout the region, resulting in Richmond specific issues being prioritized accordingly. In cases like this, inter-agency communication is key so that the public can be kept properly informed.

Staff are currently in the process of reviewing and updating the City's Emergency Response Plans. A fundamental component of these plans will be inter-agency communication and collaboration. As the severity and frequency of extreme weather events is forecasted to continue to increase, adopting a comprehensive approach to address these issues will enhance the City's response capability.

In response to the atmospheric river, Metro Vancouver has created a Flood Resiliency Task Force to provide advice and recommendations to the Metro Vancouver Board and to the Board members appointed to the Leadership Committee of the Lower Mainland Flood Management Strategy on issues related to flood resiliency. Should the opportunity arise, staff will provide comments consistent with Council's adopted position on the Lower Mainland Flood Management Strategy, as well as comments relating to improved communication protocols during emergency events.

Metro Vancouver is looking at renewal of the Public Works Mutual Aid Agreement for Major Emergencies. This agreement lays out the terms under which cities who agree to join will share public works related resources with other impacted local authorities. Support would be limited to situations where a local authority's response capabilities are exceeded, and other local authorities who are parties to the agreement are able to provide needed support. Resources could include equipment, personnel and facilities. Richmond is a party to the existing agreement, which was developed in 2000. An updated agreement is nearing completion and staff expect to be in a position to bring the agreement forward to Council for consideration in the second quarter of 2022.

### **Financial Impact**

None at this time. Staff are evaluating the current resources available for responding to events such as this and will prepare budget submissions for Council's consideration accordingly.

### **Conclusion**

The November 2021 atmospheric river events caused major flooding and damage throughout the Province. In comparison, Richmond's long term planning and investment in critical infrastructure resulted in much less damage and flooding than in other areas of the region. The City's Flood Protection Management Strategy, Integrated Rainwater Resource Management Strategy, and Dike Master Plan will continue to be updated as climate change science evolves to ensure that residents and businesses remain protected.



Suzanne Bycraft  
Director, Public Works Operations  
(604-233-3338)



Milton Chan, P. Eng.  
Director, Engineering  
(604-276-4377)



# City of Richmond

## Report to Committee

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**To:** Public Works and Transportation Committee      **Date:** March 9, 2022  
**From:** Lloyd Bie, P.Eng.  
Director, Transportation      **File:** 10-6450-09-01/2022-  
Vol 01  
**Re:** **Traffic Safety Improvements around Schools – Update**

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### Staff Recommendation

That the staff report titled “Traffic Safety Improvements around Schools – Update” dated March 9, 2022, from the Director, Transportation:

- (i) be received for information; and
- (ii) be forwarded to the Richmond Council-School Board Liaison Committee for information.

Lloyd Bie, P.Eng.  
Director, Transportation  
(604-276-4131)

Att. 2

REPORT CONCURRENCE		
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>
Engineering	<input checked="" type="checkbox"/>	
Community Bylaws	<input checked="" type="checkbox"/>	
Fire Rescue	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b> 	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

At the March 23, 2021 meeting of the Parks, Recreation and Cultural Services Committee, there was a referral to staff to implement traffic calming measures on Fundy Drive that has since been addressed. The discussion of the item included comments regarding “increased traffic around schools in general and the potential for other areas bordering schools to experience similar issues.” This report summarizes the results of staff’s review of existing traffic safety measures at all public elementary and secondary schools, and identifies the next steps of a proactive plan to expand the application and consistency of measures across the city to increase safety, support walking to/from school and reduce vehicle traffic associated with student pick up/drop off activities.

This report supports Council’s Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

*Enhance and protect the safety and well-being of Richmond.*

*1.4 Foster a safe, caring and resilient environment.*

### Analysis

#### Existing Traffic Safety Improvements around Schools

Historically, the implementation of traffic safety measures around schools has occurred on a case-by-case basis in response to requests. The requests arise primarily from concerns regarding motorist speeding and traffic congestion around schools during pick-up/drop-off activities. Typical existing measures implemented to address these concerns include (Table 1):

- *In-street School Zone Sign*: A street-mounted school zone speed limit sign that narrows the roadway, raises motorists’ awareness of the school zone and encourages drivers to slow down. This signage is relatively low cost and can be implemented on local roads given suitable roadway characteristics (e.g., sufficient width) and no driveway conflicts. To date, the signage has been installed at 10 elementary schools and one secondary school and staff have not received any negative feedback.
- *Speed Hump/Raised Crosswalk*: A speed hump is a rounded vertical traffic calming device placed across the road that reduces vehicle speeds and discourages short cutting in neighbourhoods. Implementation is subject to confirmation that the devices will not impede emergency response vehicles below desired service levels as well as neighbourhood consultation and majority support. A raised crosswalk is similar to a speed hump but with a flat top and a pedestrian crossing. The measure reduces vehicle speeds and provides a more visible crossing for pedestrians. Four elementary schools have speed humps while two elementary schools have a raised crosswalk. While before/after speed surveys are not available, numerous research studies have documented the efficacy of speed humps in slowing down vehicle speeds.
- *Pick-up/Drop-off Area*: Delineation of a specific area for student pick-up/drop-off activities where sufficient right-of-way is available. The designated area can help to better manage traffic congestion around the school and reduce common illegal manoeuvres (e.g., stopping




in a No Stopping zone, prohibited turns when exiting parking lots). Existing examples include an improved off-street pick up/drop off area on Forsyth Crescent at Thompson Elementary School and Gibbons Park and an on-street loading zone effective during school days established on Moresby Drive at Quilchena Elementary School. The principals at both schools have indicated that measures have been effective in improving student safety.

- **Curb Extension:** A bulge(s) at intersections or mid-block to reduce roadway width, reduce the crossing distance for pedestrians and encourage motorists to slow down. Single or paired bulges have been implemented at three elementary schools and one secondary school.
- **Speed Reader Board:** Uses radar to measure motorists' speeds and provides feedback to drivers of their speed relative to the speed limit to encourage appropriate travel speeds. Speed reader boards (one in each direction) have been installed at two elementary schools.

Table 1: Typical Existing Traffic Safety Measures around Schools

Measure	School
<p>In-Street Marker</p> 	<ul style="list-style-type: none"> <li>• Blair: 2 signs on Lynas Lane</li> <li>• Cambie: 2 signs on Jack Bell Dr</li> <li>• Diefenbaker: 6 signs on Fundy Dr</li> <li>• General Currie: 2 signs on General Currie Road</li> <li>• Hamilton: 2 signs on Smith Cr</li> <li>• Homma: 2 signs on Railway Ave</li> <li>• Maple Lane: 2 signs on Tweedsmuir Ave</li> <li>• Spul'u'kwuks: 2 signs on Blanshard Dr</li> <li>• Manoah Steves: 2 signs on Fourth Ave</li> <li>• Tomsett: 2 signs on Odlin Road</li> <li>• Westwind: 2 signs on Kingfisher Dr</li> </ul>
<p>Speed Hump</p> 	<ul style="list-style-type: none"> <li>• Diefenbaker: 3 speed humps on Fundy Dr</li> <li>• Dixon: 6 speed humps on Diamond Road</li> <li>• Homma: 2 speed humps on Brunswick Dr</li> <li>• Thomas Kidd: 2 speed humps on Maddocks Road</li> </ul>
<p>Raised Crosswalk</p> 	<ul style="list-style-type: none"> <li>• Anderson: 1 raised crosswalk on Alberta Road</li> <li>• Homma: 1 raised crosswalk on Railway Ave</li> </ul>
<p>Pick-Up/ Drop-Off Area</p> 	<ul style="list-style-type: none"> <li>• McKinney: on-street loading zone on Wallace Rd</li> <li>• Quilchena: on-street loading zone on Moresby Dr</li> <li>• Thompson: off-street parking area on Forsyth Cr</li> </ul>
<p>Curb Extensions at Crosswalk</p> 	<ul style="list-style-type: none"> <li>• General Currie: on General Currie Road</li> <li>• McKinney: on Lassam Road</li> <li>• McNeill: on Garry Street</li> <li>• Spul'u'kwuks: on Blanshard Dr</li> </ul>

Measure	School
<p>Speed Reader Board</p> 	<ul style="list-style-type: none"> <li>• Thomas Kidd: 2 signs on Shell Road</li> <li>• Jesse Wowk: 2 signs on Woodward's Road</li> </ul>

### Development of City-wide Plan for Traffic Safety Improvements around Schools

While the above individual measures have been effective at each site, the result is a city-wide mix across schools. As the first step of a proactive approach to develop a toolkit of engineering measures to address traffic safety issues around schools while also improving consistency in the application of measures across the city, staff completed a comprehensive review of all public elementary and secondary schools and adjacent parks to document existing traffic safety measures within the school zone at each site.

The process involved preparation of an aerial view of each site that identified existing features such as pedestrian facilities and traffic calming measures (example in Attachment 1). Staff then conducted site visits to confirm the existing conditions and audit the existing regulatory and information signage. Gaps and opportunities to upgrade existing pedestrian pathways were also noted.

The process identified deficiencies for 31 (of 38) elementary schools and nine (of 10) secondary schools, which staff anticipate will be addressed by the end of 2022. These safety improvements primarily consist of new signage to increase awareness of intersecting pedestrian pathways for motorists, curb ramps and crosswalks (Figure 1). The remaining schools did not require improvements.

As the next step, this baseline inventory of traffic safety measures will be updated to include staff's assessment of the feasibility of each type of measure at each school site. The data will then provide a springboard for consultation with the City's Traffic Safety Advisory Committee (TSAC), which includes representatives from the Richmond School District and the Richmond District Parents Association. The aim is to achieve consensus on the types and categories of measures that can be implemented either across all sites or are dependent on site specific conditions (examples in Attachment 2).



Figure 1: Example of Walkway with Curb Ramp and Walkway Signage

Staff anticipate subsequent consultation with the principals of each school as they have first-hand knowledge of day-to-day operations and traffic safety concerns. Guidance from TSAC members will be sought regarding the best way to engage with the principals.

Ultimately, the toolkit of traffic safety measures will inform a comprehensive plan for their implementation to address traffic safety issues around school zones and adjacent parks. The program will enable the City, Richmond School District and each neighbourhood to work towards a common goal of improved safety while also improving consistency in the application of measures across the city.

**Financial Impact**

None.

**Conclusion**

Staff have initiated work to progress from a reactive to proactive approach for the implementation of traffic safety measures around school zones. An inventory of existing measures has been documented and observed minor deficiencies such as missing pathway signage and curb ramps are anticipated to be addressed by the end of 2022.

As the next phase, staff will consult with the City's Traffic Safety Advisory Committee as part of the development of a comprehensive plan to for the implementation of a city-wide consistent suite of traffic safety measures at all elementary and secondary schools to support walking to/from school, reduce vehicle speeding and better manage congestion associated with student pick up/drop off activities.



Bill Dhaliwal  
Traffic Supervisor  
(604-276-4210)



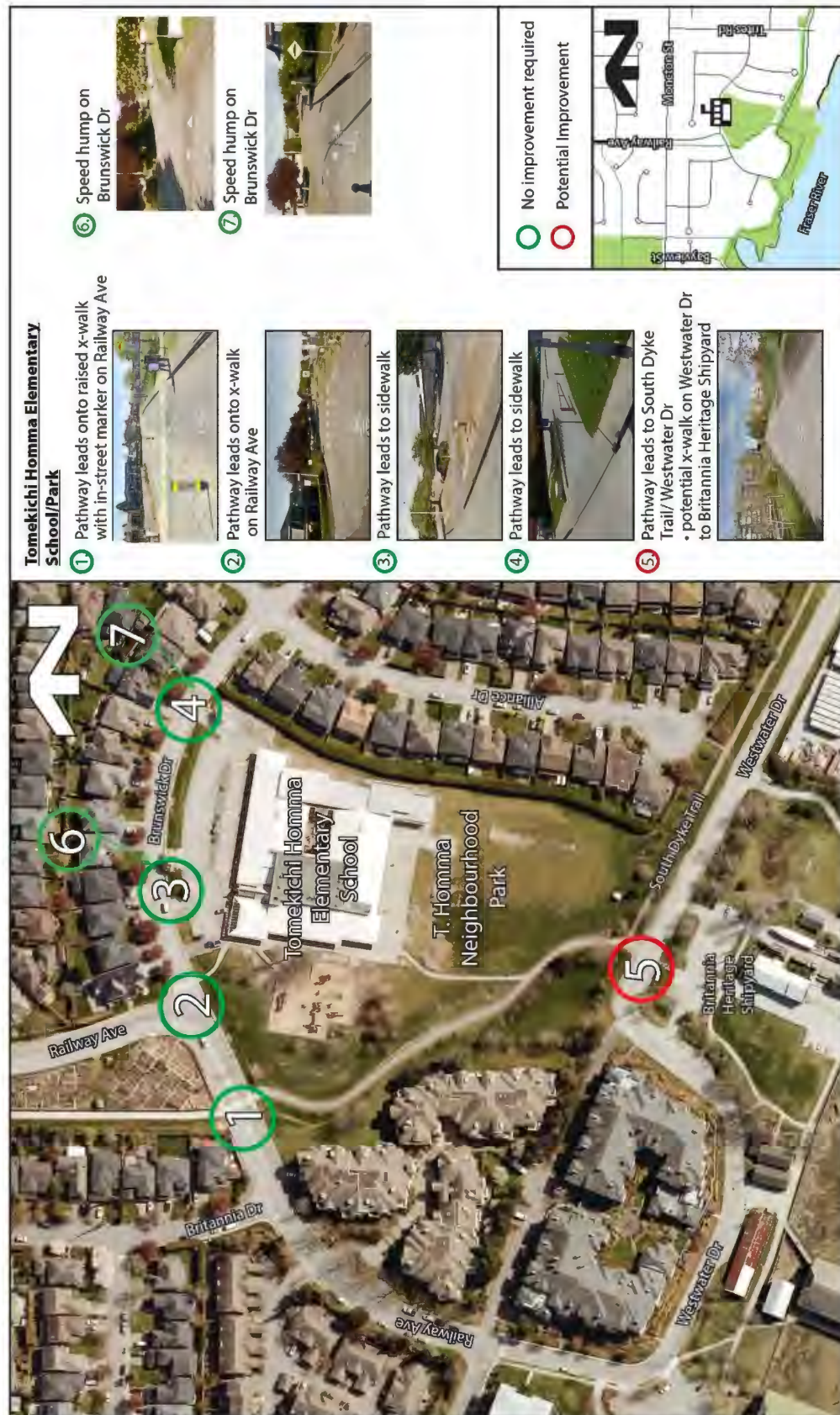
Joan Caravan  
Transportation Planner  
(604-276-4035)

BD:jc

- Att. 1: Example School Site – Aerial Map of Existing Traffic Safety Measures
- 2: Example Engineering Measures to Improve Traffic Safety









# Example School Site – Aerial Map of Existing Traffic Safety Measures










### Example Engineering Measures to Improve Traffic Safety

Measure	Description/Purpose	Road Type	Example
Raised Crosswalk	<ul style="list-style-type: none"> <li>Similar to a speed hump but with a flat top and a pedestrian crossing</li> <li>Reduces vehicle speeds</li> <li>More visible crossing for pedestrians</li> </ul>	Local Collector Minor Arterial	
Pedestrian Walkway	<ul style="list-style-type: none"> <li>Provide a safe passage for pedestrians</li> <li>Improve walking access to/from school</li> </ul>	All	
Speed Hump	<ul style="list-style-type: none"> <li>Rounded vertical traffic calming device placed across the road</li> <li>Reduces vehicle speeds</li> <li>Discourages short cutting in neighbourhoods</li> </ul>	Local Collector Minor Arterial	
Curb Extension	<ul style="list-style-type: none"> <li>Bulge at intersections or mid-block to reduce roadway width</li> <li>Reduces crossing distance for pedestrians</li> <li>Encourages motorists to slow down</li> </ul>	Local Collector	
Revised Curb Radius	<ul style="list-style-type: none"> <li>Reduce curb radius</li> <li>Slows turning vehicles</li> <li>Reduces crossing distance for pedestrians</li> </ul>	Local Collector Minor Arterial	
In-street School Zone Sign	<ul style="list-style-type: none"> <li>Street-mounted school zone speed limit signs</li> <li>Narrows the roadway and encourages drivers to slow down</li> </ul>	Local	

### Example Engineering Measures to Improve Traffic Safety

Measure	Description/Purpose	Road Type	Example
Pavement Markings	<ul style="list-style-type: none"> <li>Highly visible, fluorescent yellow-green road markings</li> <li>Replicate school zone sign or 'SCHOOL'</li> <li>Help increase awareness of where the reduced speed limit begins</li> </ul>	Local	
Traffic Circle	<ul style="list-style-type: none"> <li>Raised island located in centre of intersection</li> <li>Reduces vehicle speeds</li> <li>Provides right-of-way control and reduces conflicts</li> </ul>	Local Collector	
Speed Reader Board	<ul style="list-style-type: none"> <li>Use radar to measure motorists' speeds</li> <li>Provide feedback to drivers of travel speed relative to speed limit</li> <li>Reduce vehicle speeds</li> </ul>	All	
Stop Sign In-fill	<ul style="list-style-type: none"> <li>Installation of stop sign</li> <li>Reduces vehicle speeds</li> <li>Discourages short-cutting traffic</li> <li>Reduces conflicts at intersections</li> </ul>	Local Collector Minor Arterial	
Review of Signage and Markings	<ul style="list-style-type: none"> <li>Signage placement and visibility of pavement markings</li> <li>Sightlines and possible encroaching foliage</li> <li>Location of on street parking</li> </ul>	All	



# City of Richmond

## Report to Committee

**To:** Public Works and Transportation Committee  
**From:** Lloyd Bie, P.Eng.  
Director, Transportation  
**Date:** March 15, 2022  
**File:** 12-8060-20-  
010301/Vol 01  
**Re:** Barnes Drive and Flury Drive Traffic Calming – Report Back on Referral

### Staff Recommendation

1. That Option 3 to establish a 30 km/h speed limit on Barnes Drive and Flury Drive, as described in the staff report titled “Barnes Drive and Flury Drive Traffic Calming – Report Back on Referral” dated March 15, 2022, from the Director, Transportation, be endorsed; and
2. That should Option 3 be endorsed, Traffic Bylaw No. 5870, Amendment Bylaw No. 10301, to revise the posted speed limit on Barnes Drive and Flury Drive to 30 km/h, be introduced and given first, second and third reading.

Lloyd Bie, P.Eng.  
Director, Transportation  
(604-276-4131)

REPORT CONCURRENCE		
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>
Engineering	<input checked="" type="checkbox"/>	
Fire Rescue	<input checked="" type="checkbox"/>	
RCMP	<input checked="" type="checkbox"/>	
Finance	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b>	<b>APPROVED BY CAO</b>

## Staff Report

### Origin

In April 2021, staff received a petition from eight residents of Barnes Drive and Flury Drive requesting traffic calming measures to address perceived concerns of speeding motorists. Following engagement with the neighbourhood in summer 2021, staff presented a report at the November 22, 2021 Council meeting that recommended establishing a 30 km/h speed limit on Barnes Drive and Flury Drive. Further to Council discussion, the following referral was carried:

*That the staff report titled “Barnes Drive and Flury Drive – Traffic Calming Update” dated October 12, 2021, from the Director, Transportation, be referred back for additional neighbourhood consultation, and report back.*

This report provides the outcome of staff’s additional engagement with the neighbourhood.

This report supports Council’s Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

*Enhance and protect the safety and well-being of Richmond.*

*1.4 Foster a safe, caring and resilient environment.*

### Analysis

#### Additional Engagement with Neighbourhood

From late January to early February 2022, residents were surveyed a second time to determine the level of support for and obtain comments on the following traffic calming options:

- Option 1: No Change
- Option 2: 30 km/h Advisory Signage
- Option 3: 30 km/h Enforceable Signage

A total of 52 surveys were mailed out to the registered addresses in the neighbourhood; 71 responses were received including 20 registered addresses with more than one response. Nine addresses did not provide a response. The Zoning Bylaw permits two units per lot (i.e., one secondary suite per principal dwelling unit in single detached housing). Thus, the number of responses counted was limited to two per registered address. Table 1 provides a breakdown of the original and revised number of responses received per registered address.

Table 1: Original and Revised Survey Responses Received

# of Registered Addresses	# of Responses per Registered Address	Total # of Responses Received	Total # of Responses Received (Limited at 2 per Address)
9	0	0	0
23	1	23	23
14	2	28	28
4	3	12	8
2	4	8	4
<b>52</b>		<b>71</b>	<b>63</b>



The percent support for each option is calculated based on the number of responses for that option divided by the revised total of 72 housing units (i.e., 63 responses received plus nine addresses with no response). As shown in Figure 1, the results indicate a majority support of 64% of housing units for an enforceable 30 km/h speed limit.

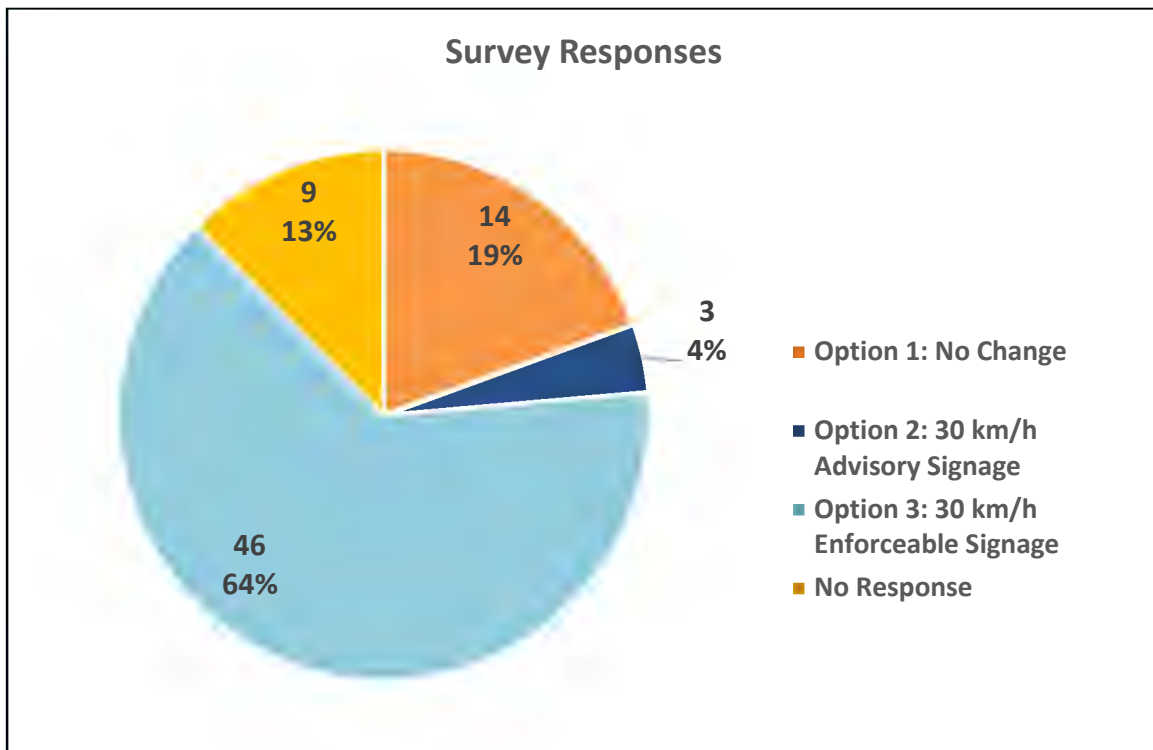


Figure 1: Survey Results for Traffic Calming Options

Based on these results, staff recommend the installation of regulatory 30 km/h speed limit signage that is enforceable by Richmond RCMP. This option provides a material change that responds to residents' interest in a lower speed limit for the neighbourhood and better aligns with the actual operating speed on the ring road as determined by the speed survey. Establishing an enforceable 30 km/h speed limit requires Council approval to amend Traffic Bylaw No. 5870.

### Crash History

At the November 22, 2021 Council meeting, there was also a request for details of the crash history for the roads. During 2016 to 2020 (the most recent five year period), a total of four incidents were reported to ICBC. No incidents were speed-related nor did any involve a pedestrian or cyclist.

### **Financial Impact**

The estimated cost to implement the signage associated with the recommended Option 3 is \$1,500, which can be funded by the approved 2021 Traffic Calming Program.

### **Conclusion**

The second survey of the residents of Barnes Drive and Flury Drive has confirmed a majority support for an enforceable 30 km/h speed limit. Staff recommend an amendment to Traffic

March 15, 2022

- 4 -

Bylaw No. 5870 to establish an enforceable 30 km/h speed limit for the streets as a tangible measure that responds to residents' desire for a change from the status quo and is anticipated to improve traffic safety and the walkability of the neighbourhood, thereby encouraging greater community wellness and social interaction.



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(604-247-4627)



Bill Dhaliwal  
Supervisor, Traffic Operations  
(604-276-4210)

JC:jc