



Public Works and Transportation Committee

**Anderson Room, City Hall
6911 No. 3 Road**

**Wednesday, April 17, 2019
4:00 p.m.**

Pg. # ITEM

MINUTES

PWT-4 *Motion to adopt the **minutes** of the meeting of the Public Works and Transportation Committee held on March 20, 2019.*



NEXT COMMITTEE MEETING DATE

May 23, 2019, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

- 1. ICBC-CITY OF RICHMOND ROAD IMPROVEMENT PROGRAM-2019 UPDATE**
(File Ref. No. 01-0150-20-ICBC1-01) (REDMS No. 6143801)

PWT-12

See Page PWT-12 for full report

Designated Speaker: Fred Lin

STAFF RECOMMENDATION

- (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 – 2019 Update,” dated March 27, 2019 from the Director, Transportation be endorsed for submission to the ICBC 2019 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 negotiate and execute the cost-share agreements, and that the Consolidated 5 Year Financial Plan (2019-2023) be amended accordingly.*



ENGINEERING AND PUBLIC WORKS DIVISION

2. **ANNUAL REPORT 2018: RECYCLING AND SOLID WASTE MANAGEMENT – BUILDING MOMENTUM TOWARDS 80% DIVERSION**

(File Ref. No. 10-6370-01) (REDMS No. 6149029 v. 3)

PWT-18

See Page PWT-18 for full report

Designated Speaker: Suzanne Bycraft

STAFF RECOMMENDATION

That the annual report titled, “Report 2018: Recycling and Solid Waste Management – Building Momentum Towards 80% Diversion” be endorsed and 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. **2019 NATIONAL PUBLIC WORKS WEEK**

(File Ref. No. 10-6000-01) (REDMS No. 6153921)

PWT-86

See Page PWT-86 for full report

Designated Speaker: Jatinder Johal

STAFF RECOMMENDATION

That the staff report titled “2019 National Public Works Week”, dated March 27, 2019 from the Director, Public Works Operations, be received for information.

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4. **MITCHELL ISLAND ENVIRONMENTAL STEWARDSHIP INITIATIVES**

(File Ref. No. 10-6175-01) (REDMS No. 6121739 v. 5)

PWT-89

See Page PWT-89 for full report

Designated Speaker: Chad Paulin

STAFF RECOMMENDATION

That the outreach initiatives proposed within the staff report titled “Mitchell Island Environmental Stewardship Initiatives” dated March 11, 2019 from the Senior Manager, Sustainability and District Energy, be endorsed.

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5. **WATER METER PROGRAM AND SEWER RATE UPDATE**

(File Ref. No. 10-6000-01) (REDMS No. 6037213 v. 8)

PWT-93

See Page PWT-93 for full report

Designated Speaker: Jason Ho

STAFF RECOMMENDATION

That Option 3 – Sewer Rate Cap, as outlined in the report titled “Water Meter Program and Sewer Rate Update” dated March 21, 2019, from the Acting Director, Engineering, be endorsed for use in the preparation of the 2020 utility rate options.

☐

6. **MANAGER’S REPORT**

ADJOURNMENT

☐



Public Works and Transportation Committee

Date: Wednesday, March 20, 2019

Place: Anderson Room
Richmond City Hall

Present: Councillor Chak Au, Chair
Councillor Linda McPhail
Councillor Kelly Greene
Councillor Alexa Loo
Councillor Michael Wolfe
Mayor Malcolm Brodie

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 21, 2019, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

April 17, 2019, (tentative date) at 4:00 p.m. in the Anderson Room

AGENDA ADDITION

It was moved and seconded

That Pedestrian Safety at Intersections be added to the Agenda as Item No. 1A.

CARRIED

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DELEGATION

- 1A. Julie Halfnights, City Centre resident, spoke to her recent experience as a pedestrian crossing intersections in the City Centre and cited concern with motorists for their lack of awareness of pedestrians. Ms. Halfnights then commented on pedestrian safety practices in Hawaii whereby pedestrians utilize flags to alert drivers of their presence.

Discussion took place on densification in the City Centre and whether Richmond could benefit from different pedestrian crosswalk treatments. Also, it was noted that this matter includes a community safety component and as such, the General Manager, Community Safety should be made aware of these happenings. As a result of the discussion, the following **referral motion** was introduced:

It was moved and seconded

That staff examine pedestrian safety practices at intersections and report back.

CARRIED

COUNCILLOR KELLY GREENE

1. **WARRANT STUDY FOR THE INTERSECTION AT CONSTABLE GATE AND STEVESTON HIGHWAY**
(File Ref. No.)

Councillor Greene cited concern with vehicular and pedestrian safety at Constable Gate and Steveston Highway and remarked that improvements at this intersections would be beneficial.

In reply to queries from Committee, Lloyd Bie, Director, Transportation, advised that this intersection was studied approximately two years ago and the figures collected indicate a low priority in comparison to data gathered for other intersections in the city. Mr. Bie then stated that a second intersection study will likely not result in different findings and therefore he suggested that other solutions such as alternate access be examined in an effort to address safety concerns. Also, Mr. Bie stated that a city-wide study on intersections will be carried out in the upcoming years as part of the Traffic Signal Master Plan.

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

It was moved and seconded

That staff look at options for the intersection at Constable Gate and Steveston Highway to improve traffic and pedestrian flow coming off Constable Gate.

CARRIED

PLANNING AND DEVELOPMENT DIVISION

2. TRANSLINK TRANSIT NETWORK REVIEW – FORTHCOMING CONSULTATION

(File Ref. No. 01-0154-04) (REDMS No. 6125994 v. 3)

In reply to queries from Committee, Donna Chan, Manager, Transportation Planning, advised that (i) staff will liaise with TransLink staff to ensure that all affected stakeholders, including Crestwood business park, are consulted, (ii) the proposed change for Route 416 would result in an additional four-minute walk for commuters, however the Route's frequency will be increased, (iii) staff will liaise with TransLink staff on proposed changes to Route 405 as they relate to service on Viking Way in an effort to ensure that employees in the area continue to be able to get to and from work.

Discussion took place on the proposed consultation and in response to Committee comments, Mr. Bie advised that staff will request that TransLink's public consultation materials be provided in multiple languages.

It was moved and seconded

- (1) *That TransLink's proposed transit network changes, as described in the attached report titled "TransLink Transit Network Review - Forthcoming Consultation" dated February 21, 2019 from the Director, Transportation, be endorsed for the purpose of public consultation; and*
- (2) *That staff be directed to report back on the results of the public consultation and TransLink's final decisions regarding the proposed service changes.*

CARRIED

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3. TRANSLINK 2019 CAPITAL COST-SHARE PROGRAM – SUPPLEMENTAL APPLICATIONS

(File Ref. No. 01-0154-04) (REDMS No. 6125295 v. 3)

It was moved and seconded

That the submission of transit-related projects for cost-sharing as part of the TransLink 2019 capital cost-share programs as described in the report titled “TransLink 2019 Capital Cost-Share Program – Supplemental Applications” dated February 12, 2019 from the Director, Transportation, be endorsed.

The question on the motion was not called as in reply to a query from Committee, Ms. Chan advised that staff would discuss the matter of timed stops for buses with TransLink in an effort to address sightline concerns at Seaward Gate and Steveston Highway.

The question on the motion was then called and it was **CARRIED**.

4. TRANSIT CIRCULATION AROUND RICHMOND-BRIGHOUSE STATION

(File Ref. No. 01-0154-04) (REDMS No. 6112361 v. 4)

It was moved and seconded

That the report titled “Transit Circulation around Richmond-Brighouse Station” dated March 11, 2019 from the Director, Transportation be received for information.

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

5. PROVINCIAL PESTICIDE USE PERMIT RENEWAL APPLICATION

(File Ref. No. 10-6160-07-01) (REDMS No. 6126419 v. 5; 6131932)

In reply to queries from Committee, Chad Paulin, Manager, Environment, provided the following information:

- the single cordgrass plant was removed by hand by Ducks Unlimited staff;
- if additional plants were found, an assessment would be carried out to determine the best removal option; and
- should the Ministry of Forests, Lands, Natural Resources Operations and Rural Development utilize herbicide to address invasive species, the City would be advised in advance and staff would work with the Ministry’s staff.

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Discussion took place and it was noted the use of aquatic pesticides is more problematic than the use of other pesticides as such pesticides drift from the application site, which results in far reaching effects of the chemicals used. As a result, it was noted that blanket pesticide applications by the Ministry be discouraged as best as possible.

It was moved and seconded

That the comments regarding a provincial Pesticide Use Permit application to manage invasive cordgrass outlined in the report titled “Provincial Pesticide Use Permit Renewal Application”, dated February 12, 2019 from the Director, Engineering, be endorsed for submission to the provincial Ministry of Forests, Lands, Natural Resource Operations and Rural Development.

CARRIED

6. **INVESTING IN CANADA INFRASTRUCTURE PROGRAM – CLEANBC COMMUNITIES FUND**

(File Ref. No. 10-6600-10-01) (REDMS No. 6123192 v. 6)

In reply to queries from Committee, Alen Postolka, Manager, District Energy, advised that (i) the CleanBC Communities Fund is in partnership with the Government of Canada and the Province of BC, (ii) the Oval Village District Energy Utility sewer heat recovery implementation was selected for submission as staff believe this project will be able to meet the timeline for deliverables, (iii) should the City’s grant application be unsuccessful, there would be no financial impact as this project is existing and financially planned for, and (iv) the City currently does not generate electric utility, however other utility technologies are regularly reviewed.

Discussion took place on advising local Members of Parliament and Members of the Legislative assembly on the proposed submission. As a result, the following **motion** was introduced:

It was moved and seconded

(1) That the submission to the Investing in Canada Infrastructure Program - British Columbia - Green Infrastructure - Climate Change Mitigation - CleanBC Communities Fund requesting funding of up to \$6.2 million for the Oval Village DEU Sewer Heat Recovery Implementation project, as outlined in the report titled “Investing in Canada Infrastructure Program - CleanBC Communities Fund” dated February 20, 2019, from the Director, Engineering, be endorsed;

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- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to enter into funding agreements with the government for the aforementioned project should it be approved for funding, as outlined in the report titled "Investing in Canada Infrastructure Program - CleanBC Communities Fund" dated February 20, 2019, from the Director, Engineering;*
- (3) *That, upon receipt of the funding for the aforementioned project, the City transfer the full funding amount to Lulu Island Energy Company Ltd., which is wholly owned by the City of Richmond, to deliver the aforementioned project as directed by Lulu Island Energy Company Ltd. Board of Directors; and*
- (4) *That the submission to the Investing in Canada Infrastructure Program - British Columbia - Green Infrastructure - Climate Change Mitigation - CleanBC Communities Fund be copied to Richmond MPs and MLAs.*

CARRIED

7. 2019 CLOTHES WASHER REBATE PROGRAM

(File Ref. No. 10-6060-01) (REDMS No. 6120486 v. 4)

In reply to queries from Committee, John Irving, Director, Engineering, commented on other conservation measures funded through the Toilet and Clothes Washer Rebate program budget, noting that any unspent funds are returned annually.

It was moved and seconded

- (1) *That the City of Richmond partner with BC Hydro to the end of 2019 to offer a combined rebate of \$100 for both spring and fall campaigns, equally cost shared between BC Hydro and the City, for the replacement of inefficient clothes washers with new high efficiency clothes washers; and*
- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works, be authorized to execute an agreement with BC Hydro to implement the Clothes Washer Rebate Program.*

CARRIED

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8. **DIKE MASTER PLAN – PHASES 3 AND 5 REPORT**

(File Ref. No. 10-6060-01) (REDMS No. 6121273 v. 6)

In response to questions from Committee, Eric Sparolin, Senior Project Engineer, and Mr. Irving provided the following information:

- the proposed dike design includes 0.6 freeboard to account for other factors like storms;
- the probability of a high water event with an earthquake is very low;
- managed retreat areas in the Hamilton area will be examined as part of future Capital works in the area;
- properties not within the City's diking system have flood covenants;
- although the City's perimeter dike was identified as a priority in 2008, staff continue to examine a mid-island dike on an opportunistic basis; and
- staff work closely with the City of New Westminster's staff on diking infrastructure that interface between the two cities.

Discussion took place on the technical nature of the Dike Master Plan – Phases 3 and 5 report and staff was requested to provide a user-friendly summary of the City's extensive diking efforts.

In reply to further queries from Committee, Mr. Paulin advised that Environmental Sustainability staff are working on a habitat banking program whereby a habitat compensation component would be included as part of Capital works; he remarked that a report on habitat banking is anticipated to be brought forward for Council consideration in late 2019.

Discussion ensued on work along the dike at the south end of Gilbert Road and Mr. Irving advised that staff would provide information regarding tree replacement and other environmental credits by way of memorandum. Also, staff was requested to provide public notification by way of advertisement in the local newspaper regarding the works being carried out along the dike at the south end of Gilbert Road.

It was moved and seconded

That the "Dike Master Plan - Phase 3 Final Report" and "Dike Master Plan - Phase 5 Final Report" as attached in the staff report titled "Dike Master Plan – Phases 3 and 5 Report," dated February 21, 2019 from the Director, Engineering, be endorsed for the purposes of capital project and development planning.

CARRIED

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9. **FLOOD PROTECTION MANAGEMENT STRATEGY 2019 – PUBLIC AND STAKEHOLDER ENGAGEMENT**

(File Ref. No. 10-6060-04-01) (REDMS No. 6123036 v. 9)

It was moved and seconded

That the public and key stakeholders be engaged as identified in the staff report titled “Flood Protection Management Strategy 2019 – Public and Stakeholder Engagement” from the Director, Engineering, dated February 21, 2019.

CARRIED

10. **MANAGER’S REPORT**

(i) *South end of West Dike*

Larry Ford, Manager, Roads and Construction Services, spoke of upcoming works on the south end of the West Dike, noting that multiple beaver burrows have been found and as a result, staff will be investigating to determine the extent of the damage. Mr. Ford then remarked that the West Dike will remain open during staff’s examination of the dike.

(ii) *REaDY Summit*

Mr. Paulin highlighted that the 2019 REaDY Summit will be held on April 8, 2019 from 8:45 am to 12:30 pm at Steveston-London Secondary School and that this year’s theme is Youth Empowerment for a Sustainable Earth.

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (5:06 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 20, 2019.

Councillor Chak Au
Chair

Hanieh Berg
Legislative Services Coordinator



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: March 27, 2019

From: Lloyd Bie, P. Eng.
Director, Transportation

File: 01-0150-20-ICBC1-
01/2019-Vol 01

Re: ICBC-City of Richmond *Road Improvement Program – 2019 Update*

Staff Recommendation

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 – 2019 Update*,” dated March 27, 2019 from the Director, Transportation be endorsed for submission to the ICBC 2019 *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 negotiate and execute the cost-share agreements, and that the consolidated 5 Year Financial Plan (2019-2023) be amended accordingly.

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

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	
RCMP	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

At the May 28, 2018 Council meeting, Council endorsed a number of proposed joint ICBC-City of Richmond road safety improvement projects for 2018. This report summarizes the projects implemented in 2018 with funding from ICBC and presents a list of projects proposed to be implemented with funding contributions from ICBC as part of the 2019 ICBC-City of Richmond *Road Improvement Program* partnership.

Analysis

The City has been in partnership with ICBC in the *Road Improvement Program* since 1994. This partnership is an important component of the City's traffic safety program as it enables the City not only to undertake more traffic safety enhancements than it could alone, but also to expedite some of these road safety improvement projects. Each year, a list of potential eligible capital projects is developed for inclusion in the *Road Improvement Program* based on community requests and input from the Traffic Safety Advisory Committee and other stakeholders.

Completed 2018 ICBC-City of Richmond Road Improvement Projects

A total of 11 City projects fully or substantially completed in 2018 (Attachment 1) will receive a total of \$264,000 from ICBC's 2018 *Road Improvement Program*. Over the past five years, ICBC has contributed a total of \$951,390 towards the City's transportation projects (Figure 1).

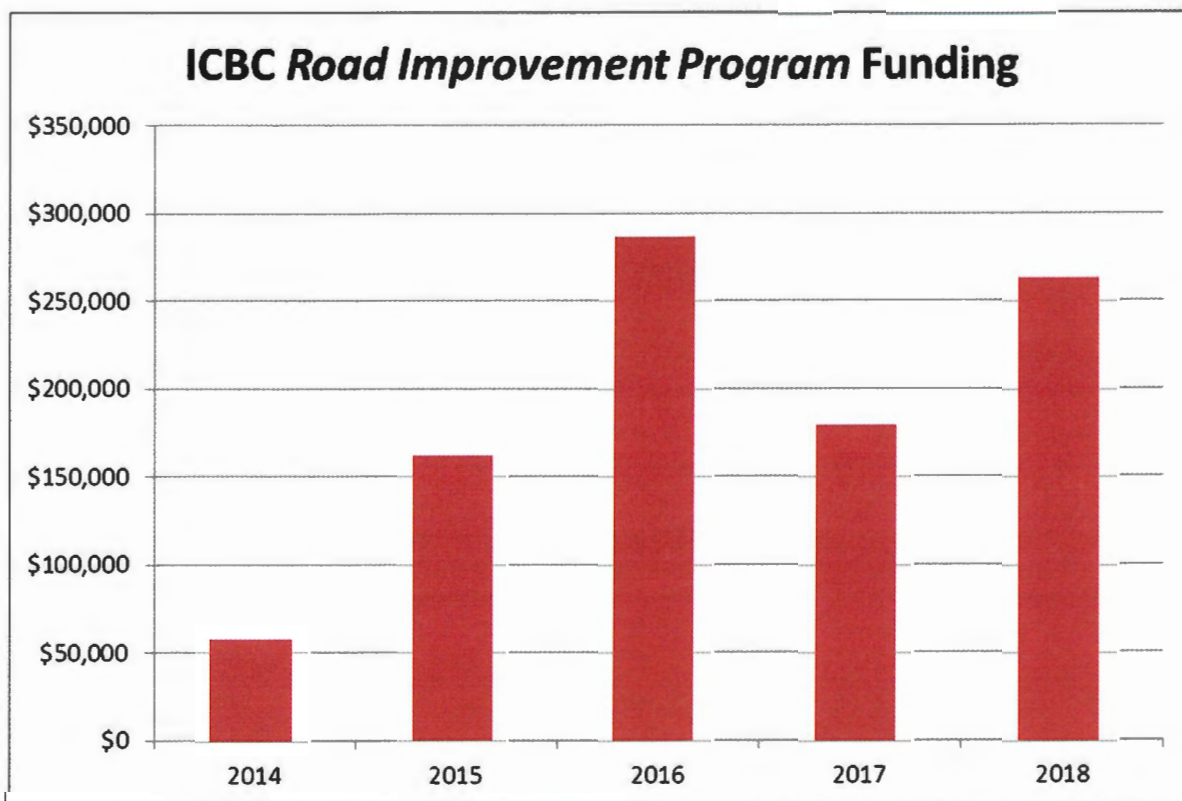


Figure 1: Annual ICBC Road Improvement Program Funding received by City

Proposed 2019 ICBC-City of Richmond Road Improvement Projects

Attachment 2 lists 13 projects proposed for submission to the 2019 *Road Improvement Program* for funding contribution from ICBC, all of which draw from approved Capital Budgets. The projects align with the objectives of the City and ICBC to improve the safety of all road users by implementing new infrastructure improvements to reduce crashes and injuries. ICBC's potential funding contribution to these projects will be determined by historical traffic crash rates at these locations and the estimated reduction in ICBC claim costs resulting from the proposed traffic safety improvements, project eligibility vis-à-vis the funding guidelines, and the total funding available, which varies from year to year. The outcome of ICBC's review of the projects will be reported back as part of the 2020 ICBC *Road Improvement Program*.

Upon approval of a project by ICBC, the City will be required to enter into a funding agreement with ICBC. The agreement is provided by ICBC and generally includes an indemnity in favour of ICBC. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the funding agreements for the approved projects and that the consolidated 5 Year Financial Plan (2019-2023) be amended accordingly to reflect the receipt of external grants. Should any submitted projects receive funding from ICBC, the City's portion of the total capital cost would be reduced accordingly.

Financial Impact

The total estimated cost of all the projects identified in Attachment 2 is \$9,345,000. As indicated in Attachment 2, the City's estimated portion of the costs of the projects (\$5,381,250) is fully funded with the funding sources having been previously approved by Council as part of past or current Capital Budgets. The projects with external agency funding will proceed only if a minimum of 50% external funding is secured.

Conclusion

ICBC is a significant long-time partner working with the City to promote traffic safety in Richmond. The traffic safety initiatives jointly implemented by ICBC and the City, including various road and traffic management enhancements, educational efforts and enforcement measures, have resulted in safer streets for all road users in Richmond. Therefore, staff recommend that Council endorse the various local road safety improvement projects for submission to the 2019 joint ICBC-City of Richmond *Road Improvement Program*.



For: Fred Lin, P.Eng., PTOE
Senior Transportation Engineer
(604-247-4627)



Joan Caravan
Transportation Planner
(604-276-4035)

Att. 1: 2018 Road Improvement Projects receiving ICBC Funding

Att. 2: Proposed 2019 City-ICBC Road Improvement Projects

2018 Road Improvement Projects receiving ICBC Funding

Location	Project Description	ICBC Contribution	Estimated Total Cost
<ul style="list-style-type: none"> No. 1 Road-Tucker Ave Cedarbridge Way-Elmbridge Way Woodwards Road-Railway Ave Deagle Road-Williams Road 8200-block Ackroyd Road 	Installation of Special Crosswalk	\$40,500	\$420,000
Kwantlen Street-Lansdowne Road	Upgrade of Special Crosswalk to Full Traffic Signal with LED Overhead Street Name Signs	\$35,500	\$350,000
<ul style="list-style-type: none"> Russ Baker Way-Miller Road Garden City Road/Great Canadian Way-Sea Island Way Great Canadian Way-Bridgeport Road Knight Street-Westminster Hwy No. 6 Road-Westminster Hwy Garden City Road-Westminster Hwy Lynas Lane-Westminster Hwy Fraserwood Pl-Westminster Hwy Russ Baker Way-Gilbert Road Minoru Blvd-Granville Avenue 	Installation of LED Overhead Street Name Signs	\$66,000	\$160,000
Granville Avenue-Minoru Gate	Upgrade of Pedestrian Signal to Full Traffic Signal with LED Overhead Street Name Signs and Video Detection Cameras	\$19,500	\$350,000
Granville Avenue-Minoru Complex Access	Installation of Pedestrian Signal	\$7,000	\$150,000
<ul style="list-style-type: none"> Lynas Lane-Westminster Highway No. 3 Road-Lansdowne Road No. 3 Road-Cook Road No. 3 Road-Alderbridge Way Viking Way-Bridgeport Road No. 6 Road-Cambie Road 	Installation of Video Detection Cameras	\$42,000	\$210,000
<ul style="list-style-type: none"> Shell Road-Cambie Road No. 5 Road-Bridgeport Road Viking Way-Bridgeport Road No. 6 Road-Bridgeport Road Coppersmith Pl -Steveston Highway 	Installation of UPS (Uninterruptible Power Supply) at Intersections	\$12,500	\$85,000
<ul style="list-style-type: none"> Westminster Highway (No. 8 Road-Nelson Road) No. 2 Road (Steveston Hwy-Dyke Road) River Dr (No. 4 Road-Van Horne Way) Riverside Industrial Park 	Construction of new multi-use pathways or sidewalks	\$19,000	\$4,634,000
Airport Road at Burkeville Park	Installation of 2 Speed Humps for Traffic Calming	\$5,000	\$6,000
Railway Avenue at Homma Elementary School	Installation of 2 In-Street Pedestrian Zone Markers	\$2,000	\$5,000
Network Screening Study	Identification of high crash locations and road safety countermeasures	\$15,000	\$30,000
Total		\$264,000	

Proposed 2019 City-ICBC Road Improvement Projects

Proposed 2019 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of City Funds ⁽¹⁾		External Agency Funding: TransLink ⁽²⁾
Installation of special crosswalk: <ul style="list-style-type: none"> Garden City Road & Saunders Road Westminster Highway & Windsor Court No. 4 Road & Mortfield Road Railway Avenue & Maple Road Other locations to be determined⁽⁴⁾ 	\$60,000 \$60,000 \$120,000 \$60,000 -	2019 Special Crosswalk Program	\$300,000	-
Installation of full traffic signal: <ul style="list-style-type: none"> Railway Avenue & Garry Street No. 5 Road & King Road No. 5 Road & Vulcan Way Park Road & Cooney Road Other locations to be determined⁽⁴⁾ 	\$350,000 \$325,000 \$325,000 \$350,000 -	2019 Traffic Signal Program	\$1,350,000	-
Installation of LED street name signs: <ul style="list-style-type: none"> Railway Avenue & Williams Road Railway Avenue and Blundell Road Railway Avenue and Granville Avenue Shell Road and Bridgeport Road Shell Road and Cambie Road Shell Road and Alderbridge Way Kwantlen Street and Alderbridge Way Hazelbridge Way and Alderbridge Way No. 4 Road and Cambie Road No. 5 Road and Bridgeport Road Simpson Road and Bridgeport Road St. Edwards Drive and Bridgeport Road Railway Avenue and Francis Road Other locations to be determined⁽⁴⁾ 	\$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 -	2019 LED Street Name Sign Program	\$195,000	-
Installation of traffic video cameras: <ul style="list-style-type: none"> No. 1 Road & Francis Road Railway Avenue & Francis Road Railway Avenue & Steveston Highway Gilbert Road & Lansdowne Road 3600-block No. 3 Road Buswell Street & Granville Avenue Garden City Road & Williams Road Other locations to be determined⁽⁴⁾ 	\$40,000 \$40,000 \$40,000 \$40,000 \$40,000 \$40,000 \$40,000 -	2019 Traffic Video and Communication Program	\$280,000	-
Installation of UPS (uninterruptible power supply): <ul style="list-style-type: none"> Lynas Lane & Westminster Hwy Russ Baker Way & Cessna Dr Russ Baker Way & Inglis Way No. 2 Road & Granville Avenue No. 2 Road & Blundell Road Other locations to be determined⁽⁴⁾ 	\$20,000 \$20,000 \$20,000 \$20,000 \$20,000 -	2019 Public Works Minor Capital – Traffic	\$100,000	-
Construction of pedestrian pathway: <ul style="list-style-type: none"> River Road (No. 6 Road-Burdette Ave) Other locations to be determined⁽⁴⁾ 	\$350,000 -	2018 Arterial Roadway Improvement Program	\$350,000	-
Upgrade of Railway Greenway intersections at: <ul style="list-style-type: none"> Blundell Road (north and south sides) Francis Road (south side) Williams Road (north and south sides) 	\$450,000	2019 Arterial Road Improvement Program	\$168,750	\$281,250 (Pending)

Proposed 2019 City-ICBC Road Improvement Projects

Proposed 2019 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of City Funds ⁽¹⁾		External Agency Funding: TransLink ⁽²⁾
Construction of multi-use pathway:				
• Westminster Hwy (Smith Cr-Fraserside Gt)	\$1,100,000	2019 Roads DCC Program	\$440,000	\$660,000 (Pending)
• Garden City Road (Lansdowne Road-Westminster Hwy)	\$1,000,000	2019 Roads DCC Program	\$500,000	\$500,000 (Pending)
• Alderbridge Way (Shell Rd-No. 4 Road)	\$1,200,000	2018 Roads DCC Program	\$600,000	\$600,000 (Pending)
• Steveston Hwy (Shell Road-Mortfield Gate)	\$2,000,000	2019 Roads DCC Program	\$590,000	\$1,410,000 (Pending)
• Charles Street (Sexsmith Road-Bridgeport Station Entrance)	\$350,000	2019 Active Transportation Improvement Program	\$87,500	\$262,500 (Pending)
• No. 6 Road (Cambie Road-Bridgeport Road)	\$500,000	2019 Neighbourhood Walkway Program	\$250,000	\$250,000 (Pending)
Traffic calming measures in various locations pending results of traffic studies ⁽³⁾	\$55,000	2019 Traffic Calming Program	\$55,000	-
Installation of pedestrian zone markers pending results of traffic studies ⁽³⁾ :	\$10,000	2019 Traffic Calming Program	\$10,000	-
• Locations to be determined ⁽⁴⁾				
River Road (No. 6 Road-Westminster Hwy): installation of speed reader boards	\$35,000	2019 Traffic Calming Program	\$35,000	-
Westminster Hwy: installation of delineator posts at Sidaway Road-Jacombs Road	\$20,000	2017 Active Transportation Improvement Program	\$20,000	
Road Safety Studies: locations to be determined ⁽⁴⁾	\$50,000	2019 Transportation Planning, Functional and Preliminary Design	\$50,000	
Total	\$9,345,000		\$5,381,250	\$3,963,750 (Pending)

- (1) Should the submitted project receive funding from ICBC, the City's portion of the total cost would be reduced accordingly.
- (2) The amount shown represents the maximum funding contribution to be received from the external agency based on the City's cost estimate for the project. The actual approved amount may be lower than requested. The actual invoiced amount follows project completion and is based on incurred costs. The projects will proceed only if a minimum of 50% external funding is secured.
- (3) Implementation is subject to consultation with and support from affected residents.
- (4) Additional locations may be identified for submission to ICBC prior to its annual program deadline.



City of Richmond

Report to Committee

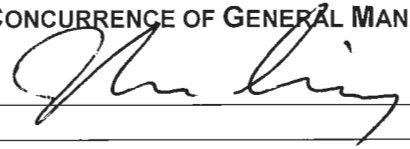

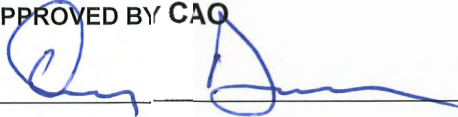
To: Public Works and Transportation Committee **Date:** April 5, 2019
From: Tom Stewart, ASCT.
Director, Public Works Operations **File:** 10-6370-01/2019-Vol
01
Re: **Annual Report 2018: Recycling and Solid Waste Management - Building
Momentum Towards 80% Diversion**

Staff Recommendation

That the annual report titled, "Report 2018: Recycling and Solid Waste Management – Building Momentum Towards 80% Diversion" be endorsed and 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.

Tom Stewart, ASCT.
Director, Public Works Operations
(604-233-3301)

Att. 1

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 
APPROVED BY CAO 	

Staff Report

Origin

This report presents the City's annual progress toward waste diversion goals as outlined in the attached "Report 2018: Recycling and Solid Waste Management – Building Momentum Towards 80% Diversion".

Analysis

Background

The City has adopted an aspirational waste diversion target of 80% by 2020 in accordance with the regional *Integrated Solid Waste and Resource Management Plan* (ISWRMP). As well, the City's vision for sustainability includes a key goal to be a Recycling Smart City. To support these goals, the City provides a comprehensive range of waste reduction, recycling and waste management services to residents. Local businesses can also participate in a City pilot program for food scraps, recycling and garbage collection services. To promote full participation and utilization of these services, the City also implements a broad range of communication and outreach initiatives to raise awareness about the services available, how to access them and the correct way to use the City's programs.

"Report 2018: Recycling and Solid Waste Management – Building Momentum Towards 80% Diversion" (the Report) presents the City's annual process update (Attachment 1). The Report summarizes Richmond's comprehensive programs and services, highlights results achieved in 2018, provides insights into upcoming initiatives, and includes tips and resources to support waste reduction, recycling and sustainable waste management.

2018 Highlights

The Report highlights Richmond's leadership in recycling and waste management practices over two decades, emphasizing some of the key milestones that have led to 78% waste diversion by residents in single-family homes. In 2018, the City continued to build momentum by expanding programs, adding services, leveraging technology and working with residents and community partners. Together, these efforts are integral to achieving the region's aspirational goal to divert 80% of waste from the landfill by 2020. The Report also highlights key initiatives and expanded services planned for 2019 to continue to promote sustainable waste management.

Key accomplishments in 2018 include:

- Expanded items at the Richmond Recycling Depot to accept flexible plastic packaging, which includes crinkly wrappers (chip bags), zipper lock pouches, woven and net plastic bags, ziplock bags, plastic shipping packaging, bubble wrap, shrink wrap and plastic bags with code 5 – all of which were previously garbage items as they were not recyclable.
- Introduced a Recycling Challenge Game and online recycling supplies ordering tools through the Richmond Collection Schedule app.

- Provided 250 recycling stations to 76 community events with approximately 243,000 attendees.
- Hosted a successful compost giveaway event, delivered 22 tours at the Richmond Recycling Depot, delivered 22 food waste reduction workshops and 21 recycling workshops with approximately 1,260 attendees. Staff also hosted 14 outreach displays and 12 information sessions at multi-family complexes.
- Renewed agreement with Recycle BC for residential Blue Box and Blue Cart collection services.
- Completed review of garbage and recycling collection services and awarded a new contract for the provision of residential solid waste and recycling collection service commencing January 2019.
- Launched an enhanced automated voice recording and call queuing system to improve the customer experience and provide efficient call management. The Environmental Programs Information Line also supported 16,647 customer service calls.
- Supported the Green Ambassadors program which engaged 145 student volunteers as they contributed 2,750 hours to promote recycling and responsible waste management at 24 special events. Green Ambassadors also spent 458 hours at training and networking symposiums hosted by the City.

Report 2018 Overview

The 2018 Report contains four sections. The first two sections provide an annual outlook on the past year and provide data collected to track progress on the City's various garbage and recycling programs and services, and highlights future key planned initiatives. The Report also includes a section that provides detailed information about recycling and waste management programs and services available to residents. The final section is a comprehensive tips and resources guide with information about where to recycle, dispose or donate various household items in Richmond.

The following is a summary overview of each chapter:

Section 1: Annual Outlook highlights the City's achievements over the past year, including expansion of the items accepted at the Richmond Recycling Depot to include flexible plastic packaging; successful implementation of the City's annual communication and outreach initiatives to improve recycling quality and quantity; and the completion of key agreements with Recycle BC and a garbage and recycling collection contractor. A new feature is added in this report to celebrate the contributions of the Green Ambassadors by featuring the experiences of two youth involved in the program. This section also provides a brief summary of the new initiatives and service targets for the upcoming year.

Section 2: Tracking Our Progress provides data on a broad spectrum of programs, services and initiatives. This section highlights how each program contributes to the overall diversion target and sustainable waste management goals. Residents in single-family homes achieved 78% waste diversion, only 2% from the City's 80% diversion target. Through the Green Cart programs, residents diverted approximately 21,878 tonnes of food scraps and yard trimmings were diverted

from landfill. The Blue Box and Blue Cart programs diverted more than 8,009 tonnes of packaging and printed paper. At the Richmond Recycling Depot, more than 3,744 tonnes of materials were collected. The Large Item Pick Up program fulfilled 8,543 service requests with 13,905 items picked up for recycling or proper disposal. Through outreach and customer service initiatives, 16,347 customer service calls were addressed and the Green Ambassadors contributed 2,752 volunteer hours to assist at special event recycling and environmental training. The City delivered 65 waste reduction and recycling workshops as well as Recycling Depot tours with 1,263 attendees.

Section 3: Programs and Services provides a comprehensive guide to recycling and waste management. There are detailed descriptions of the wide range of recycling and waste management programs and services that are available for residents including tips on how to manage waste effectively and efficiently. Also included is information on litter collection, public spaces and special event recycling as well as community and school engagement programs.

Section 4: Tips and Resources provides a quick search guide outlining what to do with special waste items and banned materials, including recycling and disposal options through take-back programs. There is contact information and locations for Richmond services and community partners involved in stewardship programs.

Moving Forward

As the City continues to work with residents, volunteers and community partners to achieve the region's aspirational goal of 80% waste diversion by 2020 and to be a Recycling Smart City, the City will be implementing a number of expanded services to make it easy and convenient for residents to recycle their household waste. Key focus areas in 2019 will include:

- Expand items accepted at Richmond Recycling Depot to include propane tanks, butane cylinders, upholstered furniture, tires, electronics, fire extinguishers, used motor oil, smoke alarms and car batteries. Conduct site upgrades at the Richmond Recycling Depot to enhance customer service and user experience.
- Collaborate with Richmond School District launch an awareness campaign on flexible plastic packing recycling at schools.
- Raise awareness on the issue of marine plastics. Research and stay current on policies and actions around the world.
- Expand the Large Item Pick Up program to six items per household per year and add tires as an eligible item.
- Continue to conduct public engagement through workshops, depot tours, and information booth at special events and support 2019 REaDY Summit.
- Continue to promote Green Ambassadors program and incorporate program information on the City's webpage to increase program recognition.

Proposed Communication

Subject to Council's direction, the annual "Report 2018: Recycling and Solid Waste Management – Building Momentum Towards 80% Diversion" 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 2018: Recycling and Solid Waste Management – Building Momentum Towards 80% Diversion", the City is providing its residents with an annual progress report. By tracking progress towards its goals for waste diversion and reporting this to the community, the City is demonstrating Richmond's commitment to responsive services, responsible government and accessible information and communication.

It is through residents' participating and commitment to recycling that those living in single-family homes have achieved 78% waste diversion in 2018, which is on track to achieve the region's aspirational goal to divert 80% of waste by 2020.



Suzanne Bycraft
Manager, Fleet and Environmental Programs
(604-233-3338)

SJB:lh

Att. 1: Report 2018: Recycling and Solid Waste Management – *Building Momentum Towards 80% Waste Diversion*

Attachment 1 – Report 2018: Recycling and Solid Waste Management –
Building Momentum Towards 80% Diversion

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

REPORT 2018

BUILDING MOMENTUM TOWARDS 80% DIVERSION





Thank You to Residents

The City of Richmond has introduced a number of new and expanded programs over the last several years, all with an aspirational goal to divert 80% of waste from the landfill by 2020.

This has involved changes to how residents recycle, and increased emphasis on recycling correctly to keep fees down.

Thanks to the efforts of Richmond residents, the City is a leader in recycling and is on track to achieve 80% diversion. The amount being diverted is currently at 78%. We know that those last 2% may be the most difficult to achieve, but we are confident that Richmond residents are up to the task because they have continuously demonstrated a shared commitment to recycle and reduce waste. We appreciate our residents' efforts to leverage the programs we offer to keep waste out of the landfill, and we look forward to working with the community in 2019 as we build on the momentum from the past year to achieve our goals.

We also want to thank the volunteers and organizations in our community who take a leadership role in promoting recycling. We have youth Green Ambassadors who work at events and help teach other students about recycling correctly, as well as Recycling Champions who help their neighbours with recycling. We also value the commitment of event organizers in our community who use the City's Event Recycling Program to make sure there are recycling bins strategically placed throughout the grounds to make it easy for event guests to recycle.

Together, we have the ability to be a Recycling Smart City. Thank you for helping us keep our City beautiful and manage our waste in a way that is responsible and sustainable.

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

We strive to help create a more resilient environment through our programs and services. We believe that it is our responsibility to preserve our community and our planet for future generations.

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



CITY OF RICHMOND



2% TO TARGET

Richmond is only 2% away from achieving the region's aspirational target to divert 80% of waste from the landfill by 2020.

Richmond has also taken steps to ensure that waste from single-family home demolitions is getting diverted from landfills. Through its Demolition Waste and Recyclable Materials Bylaw, a minimum of 70% of the waste from demolition of single-family/two-family homes and accessory buildings must be recycled. The development of this initial recycling requirement has now led to a new program offered through the City to promote reuse of homes rather than tearing them down. This House Moving and Salvage program provides an inventory listing of available homes to promote re-use connections and opportunities. Both of these programs are managed through the Building Approvals Department and contribute significantly to reducing the amount of waste going to landfills.

Achieving a more sustainable approach to waste management also involves working with partners and contractors in the industry who share the same goals. The City renewed its contract with Recycle BC and this partnership supports recycling and also helps generate revenue to offset costs for residents. Revenue is also generated through the City's partnership with product stewardship programs through collection of recyclables at the Richmond Recycling Depot. The City generates revenue when collected product stewardship items like paint, pesticides and appliances are sent through for processing. Richmond also completed a review of garbage and recycling collection services and awarded a new contract for the provision of residential solid waste and recycling collection service commencing January 1, 2019. As part of this agreement, the City works with its recycling and garbage collection contractor to increase awareness of how to recycle correctly.

Raising awareness about how to recycle consistently and correctly remains key to achieving 80% waste diversion by 2020. The City's outreach includes working with high school students through the Green Ambassador program, providing workshops for residents to help them understand why it's important to recycle, as well as how to do so correctly. The City hosts tours at the Richmond Recycling Depot and provides recycling support at events in the community, which offers benefits of both increasing awareness and the amount of recycling done at events. The City is also leveraging technology to help residents understand how to recycle. In addition to offering a Recycling Wizard to help find out where to recycle household items, the City has expanded services on the Richmond Collection Schedule app to allow residents to order supplies and play the Recycling Challenge Game, which both educates and entertains.

In addition to raising awareness about increasing the amount of recycling and reducing waste, the City continues to focus on increasing understanding about how to recycle correctly. This includes making sure that recyclable items are put in the correct bin and keeping non-recyclable items such as hazardous waste or other items that are not accepted out of recycling bins. Improving the quality of recycling is no longer just an ideal – it's a requirement. This is because China, the world's largest purchaser of recycled materials, has established higher standards for recycling quality under its National Sword campaign and will not purchase contaminated recycling. As well, the City may be subject to fines and other penalties when its contamination levels exceed 3% as part of its contract with Recycle BC.

The City continues to promote its Let's Recycle Correctly campaign, which includes education and tips about how to recycle correctly and enforcement if needed to address consistent problem areas. Maintaining recycling quality is essential for keeping costs down, which benefits residents.

Looking ahead to 2019, the City is well-positioned to continue its momentum towards achieving its goal for 80% waste diversion and to be a Recycling Smart City. Recognizing that the remaining 2% is likely from food scraps and plastics that are still not being recycled, the City will focus its communication and outreach in these areas.

In addition, the City will be implementing a number of expanded services at the Richmond Recycling Depot to make it even more convenient for residents to recycle their household waste. There will also be continued emphasis on working with community members and organizations who share the same commitment to sustainable waste management and supporting a beautiful, litter-free community.

HOW RESIDENTS CAN HELP US REACH OUR TARGET

1. STOP

Rethink what you're putting in the garbage. Can it be recycled, donated or reused?



2. REDUCE

Reduce waste by choosing reusable options and avoiding single-use items such as bottles, film wrap, plastic bags and Styrofoam containers.

3. REUSE

Donate used items in good condition so that they can be reused. Check out www.richmondshares.bc.ca

4. RECYCLE

Keep food scraps and food-soiled paper out of the garbage, and recycle other materials through City collection services, the Recycling Depot and take-back programs (See page 53).

CITY OF RICHMOND

1.1

2018 Top Accomplishments

Working with the community and partner organizations, the City of Richmond continues to take a leadership role in sustainable waste management. This report showcases some of the key achievements in 2018, as well as looking back on the City's top accomplishments over the last decade.

RECYCLING MILESTONES

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

Blue Box program launched

1990

Backyard compost bin distribution program launched

1992

Blue Cart program launched

1995

1991

Parking lot recycling depot opened at 5599 Lynas Lane

1993

Blue Cart pilot program for multi-family complexes launched

Richmond Recycling Depot opens at 5555 Lynas Lane

1996

Weekly curbside yard trimmings collection launched

1 FLEXIBLE PLASTIC PACKAGING RECYCLING

Expanded items accepted at the Richmond Recycling Depot to include flexible plastic packaging.

2 IMPROVED CUSTOMER EXPERIENCE

Launched an enhanced automated voice recording and call queuing system to improve customer experience and provide efficient call management.

3 PUBLIC SPACES RECYCLING

Installed 22 new public space recycling containers that are of newer design and implemented standard signage guidelines.

4 COMMERCIAL AND MULTI-FAMILY DEVELOPMENT GUIDELINES

Published user-friendly commercial and multi-family development guidelines to assist in design of garbage and recycling spaces to support increased diversion.

5 GREEN AMBASSADORS PROGRAM

Supported 24 special events and 10 symposiums for training and engagement with 2,752 volunteer hours. Developed outreach materials for the Green Ambassadors such as a table cover, banner and an interactive sorting game to increase recognition of the program at community events.

6 COMMUNITY OUTREACH

Held 22 Richmond Recycling Depot tours, 22 food waste reduction workshops, 21 recycling workshops, 14 outreach displays and 12 sessions at multi-family complexes with approximately 1,260 attendees and a successful compost giveaway event.

7 NEW CONTRACT AWARDED

Completed review of garbage and recycling collection services and awarded a new contract for the provision of residential solid waste and recycling collection service commencing January 1, 2019.

8 GARBAGE COLLECTION EFFICIENCY

Installed three in-ground litter collection containers to address capacity concerns and reduce service frequency.

9 RECYCLE BC AGREEMENT

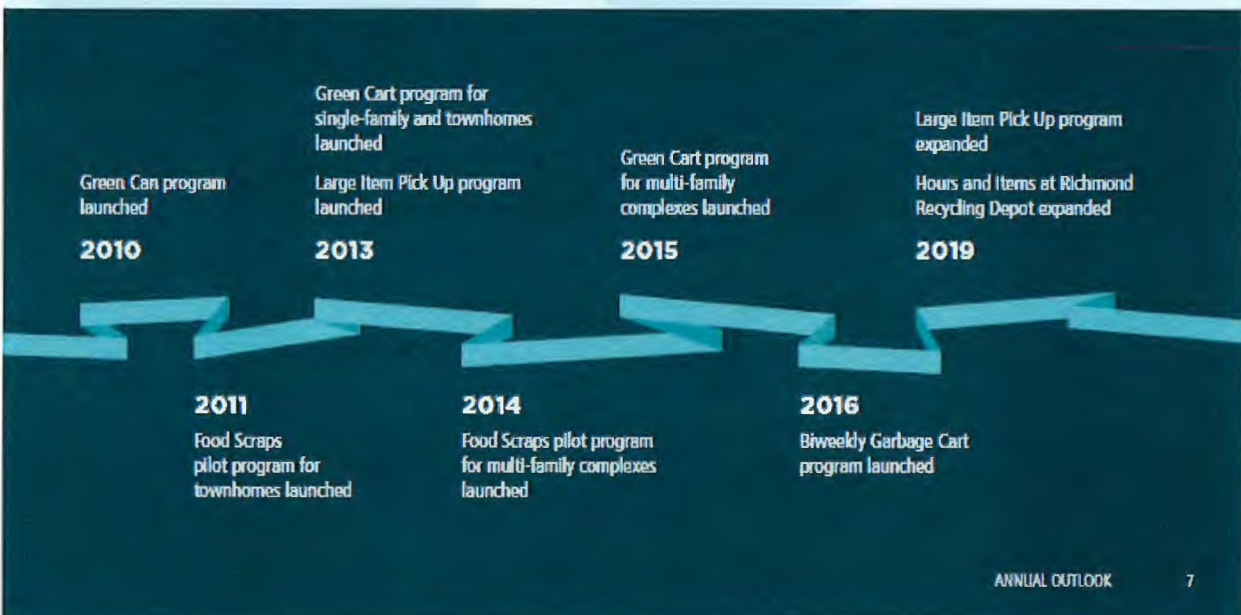
Renewed agreement with Recycle BC for residential Blue Box and Blue Cart collection services.

10 SPECIAL EVENT RECYCLING

Provided 76 special events (243,000 attendees) with more than 250 recycling stations.

11 NEW APP TOOLS

Introduced Recycling Challenge Game and online recycling supplies ordering tools through the Richmond Collection Schedule app.



CITY OF RICHMOND

1.2 Setting Goals

Richmond's long-term goal is to be a Recycling Smart City, and the annual goals listed here are designed to help achieve this target. Each goal is designed to make it easy and convenient to recycle and reduce waste in Richmond, as well as creating and promoting opportunities for innovation, partnership and continuous improvement.

1 ENHANCE SERVICE AT RICHMOND RECYCLING DEPOT

Include motor oil and antifreeze, smoke alarms, passenger/light duty truck tires, bicycle tires, fire extinguishers, propane tanks, butane cylinders, electronics and upholstered furniture, and extend days of operation to six days per week (Tuesday to Sunday). Promote expansion through increased community outreach and education.

2 EXPAND COMMUNICATION AND ENGAGEMENT

Develop and implement a communication plan to achieve 80% waste diversion.

3 EXPAND THE LARGE ITEM PICK UP PROGRAM

Increase program to six items per household annually and add tires as an eligible item.

4 PROMOTE GREEN AMBASSADOR PROGRAM

Incorporate Green Ambassador program information on the City's website to increase program recognition.

5 RAISE AWARENESS ON THE ISSUES OF MARINE PLASTICS

Research and stay current on policies and actions around the world and increase awareness of how to reduce plastic litter in Richmond.

6 DEVELOP STRATEGY TO ADDRESS ILLEGAL DUMPING

Continue development of the Illegal Dumping Overview and Strategy.

7 SUPPORT COMMERCIAL/ MULTI-FAMILY RECYCLING GUIDELINES

Update guidelines to incorporate service vehicle clearance to ensure they can enter buildings safely when collecting materials.

8 COMPLETE CITY DISASTER DEBRIS MANAGEMENT PLAN

Prepare the Richmond-specific Disaster Debris Management Plan and provide staff training.



Youth Leading the Way

MEET SOME OF OUR GREEN AMBASSADORS

In Richmond, there's a group of young people who can honestly say they are making a difference in their community.

They are the Green Ambassadors, and through their volunteer work they help to reduce waste and increase recycling. With their help, more than 70% of waste is recycled at events and they teach other youth and the community about recycling and other sustainability programs by hosting the REaDY Summit to celebrate Earth Day each year.

With these significant contributions to the community, it's interesting to learn that some of the biggest rewards are those they experience personally.

"Without the Richmond Green Ambassador program, I wouldn't have been able to learn so much about environmental sustainability," says Jason Pang who has been part of the program for four years. "I decided to join the program as I wanted to be exposed to different green careers and governmental social work. I am confident to say that my dream to become a sustainability strategist started from being a Green Ambassador."

For Eve Katayama, being a Green Ambassador has been both educational and rewarding.

"I signed up because I wanted to support the community in a way that a lot of people may not want to, and I know we are making changes that impact the community," says Katayama. "But I've found it rewarding beyond that as we interact with different people from different schools who have the same passion for this that I do."

Katayama also notes that she's learned a lot about how to manage waste properly as well as other sustainability areas such as transportation.

Pang says he is proudest of being able to educate the public on sustainable waste management and to promote being more environmentally conscious in the community. In particular, he finds the work he's done at events to recycle waste – and keep the area clean of litter – to be very rewarding. He also participates in and leads regular monthly symposiums hosted by the



Green Ambassadors assisting at Farm Fest. Left to right: Rebecca Sayson, Sarah Chen, Jason Pang and Eric Che.

Green Ambassadors where they learn about a diverse range of topics from energy conservation to wetlands protection.

"It's really great that I have the opportunity to connect with other youth leaders to work on promoting environmental awareness in our schools," adds Pang. "As a presenter myself, I found being able to introduce a unique perspective on relevant environmental issues to be very enlightening to myself as an educator and to my peers as learners."

For Katayama, participating in the REaDY Summit is an experience that stands out, in large part because she didn't know it existed before becoming a Green Ambassador.

"It's amazing how high schoolers can get the chance to educate younger kids and adults," said Katayama. "I was surprised that many citizens didn't know or seem to care about sorting their waste. I wish they knew more about the impact it makes when they throw things in recycling rather than the trash, and how they can make a difference."

Pang also has advice for residents. He recommends that residents visit www.richmond.ca/recycle to learn more about how to recycle properly, and to look for ways to reduce waste.

"Change doesn't happen in a day. It is very important that we take small steps towards changing our personal habits to increase recycling and reduce waste overall," adds Pang.





2.0

Tracking Our Progress

As part of tracking progress towards its goal to divert 80% of waste from landfills by 2020, the City of Richmond collects data across a broad spectrum of programs, services and activities. This data provides annual tracking, showing how residents have improved their recycling over the years.

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 of how to recycle correctly and consistently. This community engagement includes workshops, games and activities, student programs and the use of technology through the Richmond Collection Schedule app.

The City's reporting also highlights how partnerships help to increase the quality and quantity of recycling at events hosted in Richmond, and projects to promote a beautiful, litter-free community.

CITY OF RICHMOND

2.1 Diversion Statistics



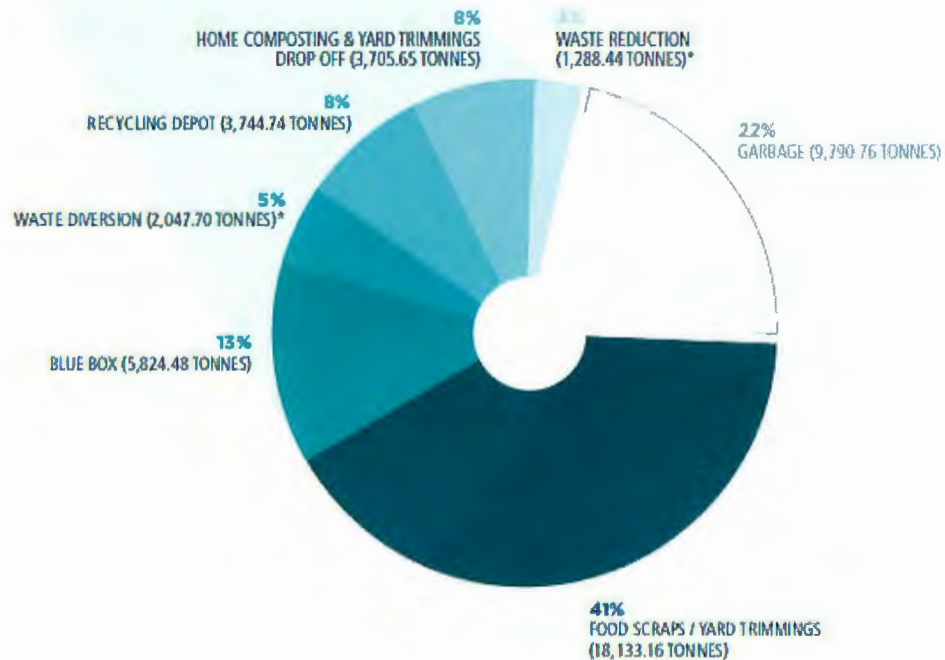
Richmond residents in single-family homes diverted 78% of their waste from the landfill in 2018, coming to within 2% of the City's diversion target.



SINGLE-FAMILY RECYCLING IN 2018



Residents took advantage of a variety of programs to divert 78% of their waste from the landfill in 2018.



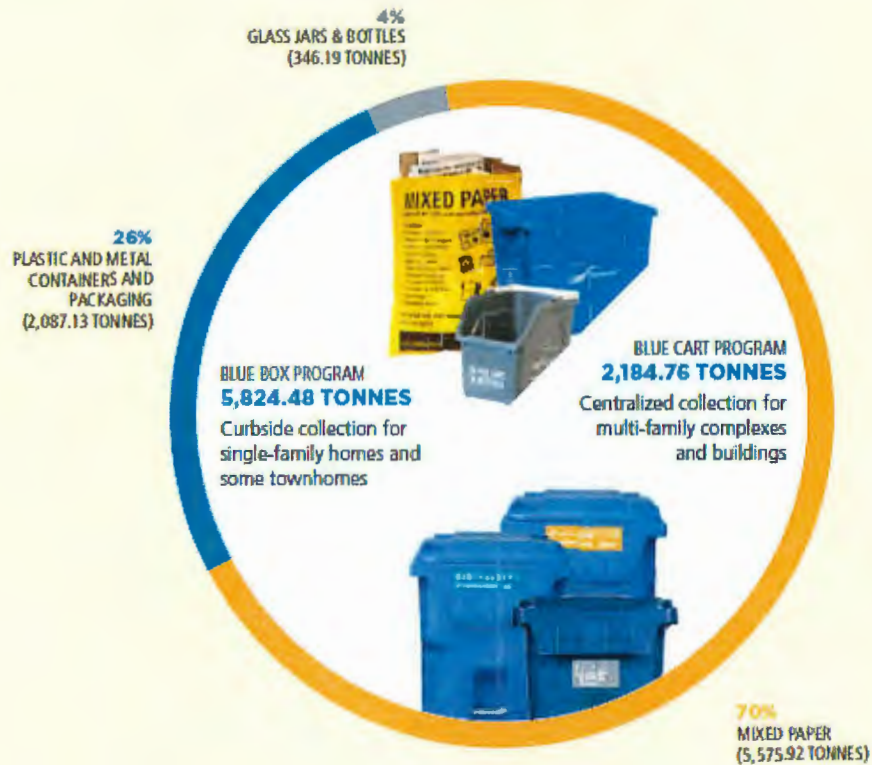
Residents were able to achieve this through a number of recycling and waste reduction opportunities, including curbside and Richmond Recycling Depot collection, as well as composting programs.

* ESTIMATED

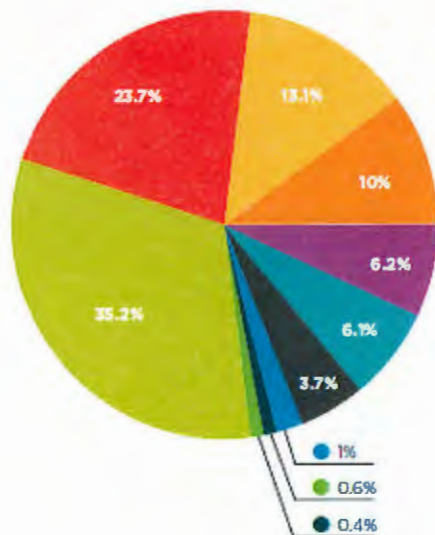
CITY OF RICHMOND

BLUE BOX AND BLUE CART PROGRAMS RECYCLING MIX IN 2018

Through the Blue Box and Blue Cart programs, residents recycled a total of **8,009.24 tonnes** of recyclable materials.



MATERIALS COLLECTED AT THE RICHMOND RECYCLING DEPOT



In 2018, **3,744.74 tonnes** of recyclable materials were collected at the Recycling Depot.

- YARD TRIMMINGS (1,319.48 TONNES)
- SCRAP METAL (885.85 TONNES)
- MIXED PAPER/NEWSPRINT (488.82 TONNES)
- LARGE ITEM PICKUP (373.62 TONNES)
- PRODUCT STEWARDSHIP (232.81 TONNES)*
- CARDBOARD (227.98 TONNES)
- PLASTIC CONTAINERS (137.12 TONNES)
- PLASTIC BAGS (41.53 TONNES)
- STYROFOAM (21.28 TONNES)
- GLASS (16.25 TONNES)

* This includes yard trimmings, scrap metal, mixed paper products and rigid plastic containers.

8,009.24 tonnes

**BLUE BOX AND
BLUE CART**



3,744.74 tonnes

**RECYCLING
DEPOT**

= 11,753.98 tonnes recycled in 2018



TAKE-BACK PROGRAMS AT THE RICHMOND RECYCLING DEPOT



PAINT
209,520
EQUIVALENT
LITRES



AEROSOLS
10,675 EQUIVALENT
LITRES



**SOLVENTS &
PESTICIDES**
9,936 EQUIVALENT
LITRES



**SMALL
APPLIANCES**
99 TONNES



CFLS
476 BOXES



4' TUBES 8' TUBES
362 BOXES 45 BOXES

RESIDENTIAL GREEN CART RECYCLING IN 2018



Residents diverted 21,878.95 tonnes of food scraps and yard trimmings from landfill in 2018 to be composted into new resources.

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

In 2018, 4,362.17 tonnes of yard trimmings were collected at the Richmond Recycling Depot and the Ecowaste residential and commercial drop-off service.



CITY OF RICHMOND

LARGE ITEM PICK-UP IN 2018

APPROXIMATELY
8,543
REQUESTS
FOR SERVICE



2,914
MATTRESSES &
BOXSPRINGS



535
WASHERS & DRYERS



278
TELEVISIONS



585
FRIDGES & FREEZERS



356
BARBECUES



198
DISHWASHERS

595 TONNES
WERE
COLLECTED

OF THIS, **293** TONNES
WERE
RECYCLED



231
STOVES



48
MICROWAVES

13,905
ITEMS
COLLECTED

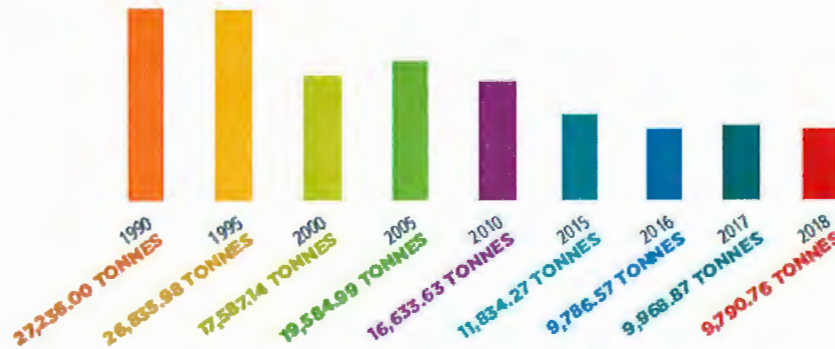
7,794
NON-RECYCLABLE HOUSEHOLD
ITEMS COLLECTED FOR SAFE
HANDLING AND DISPOSAL



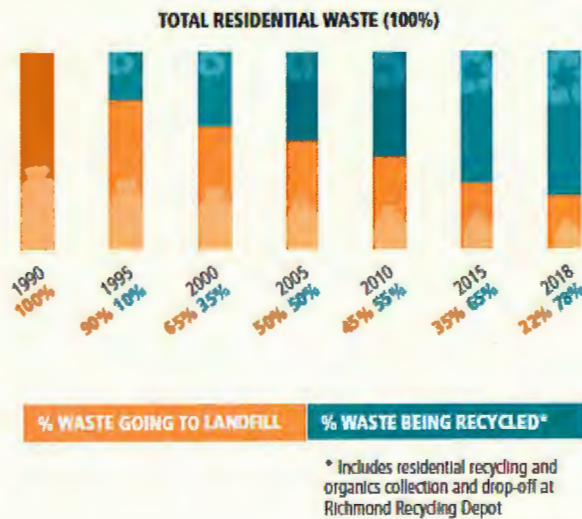
966
OTHER RECYCLABLE
ITEMS

FROM GARBAGE DISPOSAL TO DIVERSION

SINGLE-FAMILY HOMES GARBAGE IN TONNES



SINGLE-FAMILY HOMES DIVERSION OVER TIME

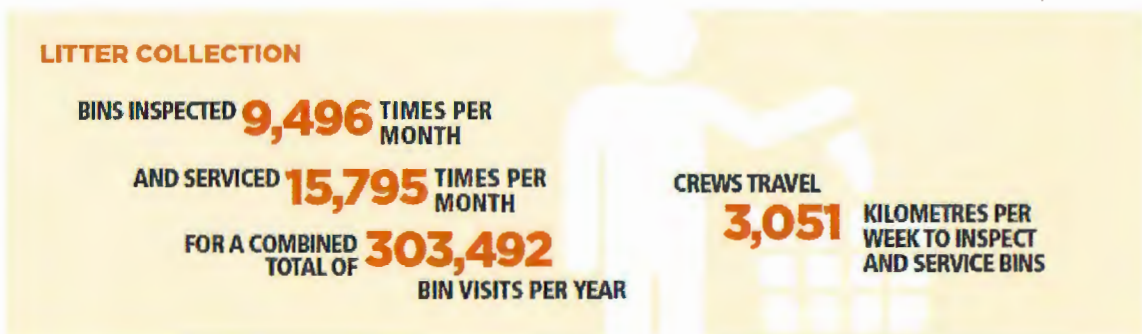


CITY OF RICHMOND

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.



CITY OF RICHMOND

ONLINE SEARCH AND TIPS TOOLS



RICHMOND COLLECTION APP - ALL-TIME STATS



126,996
RECYCLE WIZARD
MATERIALS SEARCHED

6,190
APPS INSTALLED
TO DATE

9,661
ACTIVE
REMINDERS

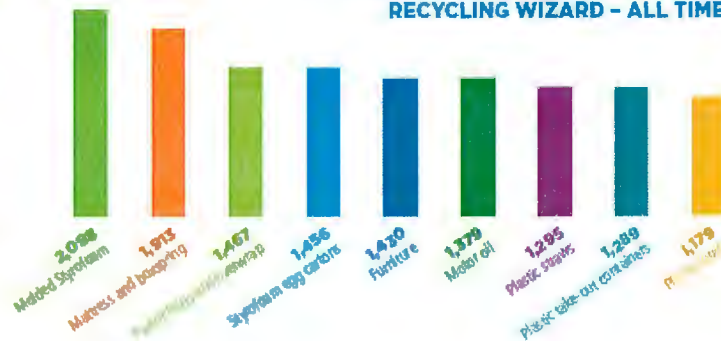
737
RECYCLING GAMES
PLAYED

49,296
TOTAL ALL-TIME
APP USAGE

2,837
PDF CALENDAR
DOWNLOADS

61,404
RECYCLING
WIZARD
SEARCHES

TOP MATERIALS SEARCHED ON THE RECYCLING WIZARD - ALL TIME



SCHOOL AND YOUTH ENGAGEMENT

GREEN AMBASSADOR PROGRAM



The annual **REaDY Summit** engaged 270 elementary students from 9 schools, 30 teachers and parents and 50 student leader volunteers



24 special events were supported by Green Ambassadors, with 2,294 hours

10 symposiums for training and networking with fellow Green Ambassadors for a total of 458 training hours



CITY OF RICHMOND

EVENT RECYCLING

In 2018, the City hosted recycling stations at **76 events** and Green Ambassadors supported **24 events** to help keep recyclable materials out of the garbage at events.

Typically very high diversion rates are achieved at civic events, thanks to the Green Ambassador volunteers. Examples are below.



COMMUNITY ENGAGEMENT

COMMUNITY WORKSHOPS AND TOURS

65

COMMUNITY
WORKSHOPS AND TOURS
OFFERED IN 2018

1,263

PARTICIPANTS

TYPE	NUMBER	PARTICIPANTS
Food Waste Reduction Workshops	22	308
Recycling Workshops	21	540
Richmond Recycling Depot Tours	22	415
Total	65	1,263

COMMUNITY CLEAN-UP EVENTS

Environmental Programs partnered with Parks in 2018 to support community clean-up events along Richmond's waterfront and in other public spaces throughout Richmond.

32

COMMUNITY
CLEAN-UP
EVENTS



MAKING RECYCLING EASY AND CONVENIENT

3.0

Programs and Services

Richmond residents in single-family homes divert 78% 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 be a Recycling Smart City and implement sustainable waste management. Through partnerships and community engagement, Richmond's commitment to continuous improvement results in enhanced services to benefit residents.

CITY OF RICHMOND

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

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. This program is provided to over 40,565 residential units in single-family homes and townhomes. For details, see page 30.



BLUE CART

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. This program is provided to more than 37,685 multi-family units. For details, see page 30.



GREEN CART

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.



RICHMOND RECYCLING DEPOT

Drop-off service for 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.



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.



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.



LITTER COLLECTION

Litter Attendants are on the road seven days a week to inspect or service more than 4,500 garbage and recycling bins 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, milk cartons, paper and plastic drink cups, empty aerosol cans and spiral wound tins like frozen juice concentrate containers as well as glass bottles and glass jars. Approximately 78,250 residential units are serviced with weekly collection under these programs.

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 and glass 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 and 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 metal items like scissors and pans. These items are accepted at the Richmond Recycling Depot.

CONTAINER RECYCLING: BLUE BOX/CONTAINERS RECYCLING CART



✓ ACCEPTED

- ✓ Empty aerosol cans & caps (food items, air fresheners, shaving cream, deodorant, hairspray)
- ✓ Microwavable bowls, cups & lids
- ✓ Paper food containers & cartons (ice-cream, milk, liquid whipping cream)
- ✓ 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

✗ NOT ACCEPTED

- ✗ Aerosol cans with hazardous materials (spray paint) *
- ✗ Butane cylinders *
- ✗ Ceramic plant pots
- ✗ Compostable/biodegradable plastic bags & containers
- ✗ Containers for motor oil, vehicle lubricant or wax products
- ✗ Foil-lined cardboard lids from take-out containers
- ✗ Garden hoses
- ✗ Plastic bags & overwrap *
- ✗ Plastic string or rope
- ✗ Propane tanks *
- ✗ Styrofoam materials *

* 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.



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



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



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

✗ NOT ACCEPTED

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

✗ NOT ACCEPTED

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

✓ ACCEPTED

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

 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 & 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.



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 www.richmond.ca/recyclesearch

Richmond Recycling Depot
5555 Lynas Lane
Tuesday to Sunday (Closed on Mondays and Statutory Holidays)
9:00 a.m. to 6:15 p.m.

CITY OF RICHMOND



It's important to think of recycling as a commodity to sell – not waste.

LET'S RECYCLE CORRECTLY!

Richmond introduced a new information and awareness campaign – Let's Recycle Correctly! – to help inform residents about how to improve the quality of their recycling by reducing contamination.

It is becoming increasingly critical to generate quality recycling as China, the world's largest purchaser of recycled materials, is setting high standards for recycling quality under its National Sword campaign and will not purchase contaminated recycling. As well, the City is subject to fines and other penalties when contamination is found in recycling, which increases taxpayer costs.

The City's Let's Recycle Correctly! campaign began in 2017 and continued into 2018 with a goal to help increase awareness about how to sort recycling correctly and reduce contamination. The campaign included information kits for residents, as well as advertising, social media, promotion of the City's Recycling Wizard and other outreach. City recycling teams conducted random recycling audits throughout the community and worked with residents to help them improve the quality of their recycling. The City will continue to promote correct recycling through similar initiatives in 2019.

AVOIDING CONTAMINATION: WHAT TO WATCH FOR



TYPES OF CONTAMINATION	HOW TO RECYCLE CORRECTLY
Glass bottles and glass jars are placed incorrectly in the Blue Box or Containers Recycling Cart	Recycle in grey Glass Recycling Bin or Glass Recycling Cart.
Recyclable items that are not accepted in Blue Box / Blue Cart (Styrofoam, plastic bags, paints and solvents, batteries and cell phones, a non-packaging plastics like toys and coat hangers)	Drop off at Richmond Recycling Depot – 5555 Lynas Lane.
Non-recyclable plastic (Straws and plastic cutlery)	These are not recyclable. Please put in Garbage Cart.
Containers with food residue	Remove food and rinse before placing in Blue Box or Containers Recycling Cart.
Propane tanks and butane cylinders	Drop off at Richmond Recycling Depot – 5555 Lynas Lane.
Electronics	Drop off at Richmond Recycling Depot – 5555 Lynas Lane.

Do you know where it goes?

Non-packaging plastics like toys and coat hangers are **not accepted** in your Blue Box or Blue Cart, but can be taken to Richmond Recycling Depot.



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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.

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, Styrofoam or biodegradable/compostable 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 towels, napkins & plates
- ✓ Pizza delivery boxes
- ✓ Small amounts of grease/oil absorbed into paper towel
- ✓ Solid grease
- ✓ Table scraps & food scrapings
- ✓ Tea bags
- ✓ Vegetables

YARD TRIMMINGS

- ✓ Flowers
- ✓ Leaves
- ✓ Grass clippings
- ✓ Other organic yard materials
- ✓ Plants (living or dead/dried)
- ✓ Plant trimmings
- ✓ Tree & hedge prunings

✗ NOT ACCEPTED

- ✗ Coffee cups
- ✗ Compostable and biodegradable plastic bags
- ✗ Styrofoam cups, meat trays or takeout containers
- ✗ Garden hoses or flower pots
- ✗ Liquid grease
- ✗ Lumber

- ✗ Pet feces or kitty litter
- ✗ Plastic bags and plastic overwrap
- ✗ Plastic wraps
- ✗ Prunings over 4 inches (10 cm) in diameter
- ✗ Rocks, dirt or sod



-  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 Cars.



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. There is a \$25 administration fee for cart exchanges.

SINGLE-FAMILY HOMES CART SIZE SELECTION



STANDARD

Extra Large
360 litres
D 34.5 x W 25 x
H 44.5 inches

Large
240 litres
D 27.5 x W 24.5 x
H 43 inches

Medium
120 litres
D 21 x W 19 x
H 37.5 inches

Small
80 litres
D 21.5 x W 16 x
H 34.5 inches

TOWNHOMES CART SIZE SELECTION



STANDARD

Small
80 litres
D 21.5 x W 16 x
H 34.5 inches

Compact
46.5 litres
D 12 x W 11 x
H 27 inches

YARD TRIMMINGS DROP-OFF

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

Ecowaste Industries

15111 Triangle 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 www.ecowaste.com or call 604-277-1410 for detailed information.

City Recycling Depot

5555 Lynas Lane
Tuesday to Sunday (Closed on Mondays and 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.



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 Noval Rural Park located 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



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.



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 www.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 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

\$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.

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.

Visit www.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., Tuesday to Sunday for drop off of a broad range of materials.

The Recycling Depot is owned and operated by the City of Richmond, with two full-time staff and additional staff support in the summer months 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.



REPORT 2018 • BUILDING MOMENTUM TOWARDS 80% DIVERSION

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 onsite collection services if a large quantity of recyclables is produced. However, residents and small business operators can drop off one cubic yard of recyclables and three large appliances at the Depot per day.

This facility accepts a wide range of materials including cardboard, yard and garden trimmings, mixed paper and newspapers, as well as Styrofoam, used books, cell phones, household batteries and plastic bags. The facility also accepts large appliances (e.g. fridges, stoves, washing machines) and metal items (e.g. bike frames, barbecues, lawn mowers). The facility is also a product stewardship (take back) collection site for small appliances, paints, solvents, flammable liquids, pesticides, lights and lighting fixtures.



Richmond Recycling Depot
5555 Lynas Lane
Tuesday to Sunday, 9:00 a.m. to 6:15 p.m.



For Sale at the Recycling Depot

- Compost bins - \$25 each + GST
- Rain barrels - \$30 each + GST
- 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

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Welcome to the Richmond Recycling Depot!

Please see attendants for assistance with recycling supplies such as Blue Boxes, and for recycling hazardous materials such as paints, solvents, pesticides and gasoline.





MATERIALS ACCEPTED

- ✓ Aerosol & spiral wound cans
- ✓ Aluminium materials
- ✓ Appliances
- ✓ Batteries (small household batteries less than 5 kg)
- ✓ Books



- ✓ Butane cylinders
- ✓ Cell phones (including batteries)
- ✓ Clean untreated wood
- ✓ Cooking oil and animal fat
- ✓ Corrugated cardboard (flattened, clean corrugated boxes)



- ✓ Electronics
- ✓ Exercise and hobby machines
- ✓ Flammable aerosols
- ✓ Flammable liquids



- ✓ Flexible plastic packaging
- ✓ Flower pots (paper & plastic pots/trays)
- ✓ Gasoline (in approved ULC containers)
- ✓ Glass bottles and jars (clear & coloured)
- ✓ Lights

- ✓ Lighting fixtures

- ✓ Magazines

- ✓ Metal items

- ✓ Mixed Paper

- ✓ Newspaper

- ✓ Paints (household paints)

- ✓ Paint aerosols

- ✓ Pesticides (domestic pesticides)

- ✓ Plastic containers

- ✓ Plastic grocery bags & plastic overwrap

- ✓ Power tools



- ✓ Propane tanks

- ✓ Sewing, knitting and textile machines

- ✓ Styrofoam packaging

- ✓ Tin and aluminium cans



- ✓ Tires (passenger & light-duty trucks only)



- ✓ Upholstered furniture

- ✓ Yard and garden trimmings

All materials must be sorted into different containers at the Recycling Depot. Please visit www.richmond.ca/depot for details.



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, which will help Richmond achieve its goal for 80% waste diversion from the landfill by 2020.

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 www.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
- ✓ Barbecues (remove propane tank and/or lava rock briquettes)
- ✓ Bed frame
- ✓ Electric lawnmowers
- ✓ Furniture
- ✓ Headboard
- ✓ Outdoor furniture
- ✓ Small household goods, which must be in boxes or bundled and are a reasonable size (one box or bundle is equal to one of the resident's six allotted items)
- ✓ Weight training equipment
- ✓ Mattresses or boxsprings – please cover your mattress with a plastic bag.

✗ NOT ACCEPTED

- ✗ Car bodies or parts
- ✗ Carpets
- ✗ Construction materials
- ✗ Drywall
- ✗ Gas lawnmowers
- ✗ Hazardous waste
- ✗ Lumber, demolition or home renovation materials
- ✗ Pianos
- ✗ Propane tanks*
- ✗ Tree stumps

Note: Items that contain any hazardous liquids such as gas, oil, etc. will not be accepted. See page 56-61 for disposal locations or call the RCBC Recycling Hotline at 604-732-9253.

* Take to Richmond Recycling Depot, 5555 Lynas Lane

SAFETY CONSIDERATIONS

- ✓ Wrap mattresses and upholstered furniture in plastic or reusable tarp and secure them to prevent these items from getting wet or waterlogged. Wet mattresses and furniture pose safety hazards for lifting and are not accepted at the processing facility. Tarps will be left behind for re-use.
- ✓ Remove latch/door from freezers, refrigerators or any other container equipped with a door latch or locking device.

Note: The item(s) must be able to be safely handled from the curbside in order to qualify for collection.



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.



REPORT 2018 • BUILDING MOMENTUM TOWARDS 80% DIVERSION

PUBLIC SPACES SERVICES

The City of Richmond has more than 4,500 recycling and garbage bins located through the community in public spaces that include parks and business districts. 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.

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, 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 25,291 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. Together, these measures help to support a safe and appealing community.

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 the 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.



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. 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 also assists 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 now offers the Recycling Wizard to help residents search for where to recycle household items. The Recycling Wizard is available online at www.richmond.ca/recyclesearch and in the Richmond Collection Schedule app, free from the Apple and Android app stores.

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.

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.

COMMUNITY WORKSHOPS

Richmond's free community workshops provide education and tips that support recycling and waste reduction techniques. A summary of workshops that focus on helping residents towards the City's goal for 80% waste diversion is provided below.

For information on the workshops, call the Environmental Programs Information Line at 604-276-4010 or email garbageandrecycling@richmond.ca.

TYPE OF WORKSHOP	DESCRIPTION
Food Waste Reduction Workshops	Reduce food waste by learning harvesting, freezing/canning, and fermenting techniques to store foods.
Recycling Workshops	Learn how to sort household recyclables properly to reduce contamination. Understand the recycling process and the importance recycling has on the environment.
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.



4.0

Tips and Resources

In Richmond, we care about our community, and we are working together to trim our waste. The City works with residents and community partners to make it easy and convenient to recycle at home and on the go. It's all about making recycling a way of life.

This at-a-glance resource on the various types of recycling programs and services available through the City of Richmond is a valuable guide to support being recycling smart in Richmond.

The Tips and Resources include highlights such as how and where to recycle, what to do with hazardous waste and where to find additional information.

Resources also include 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 with minimum contamination in the waste going to the landfill.



4.1

Community Resources and Partnerships

54

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:
1511 Triangle Road
Hours of operation and instructions:
604-277-1410
www.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: www.richmondshares.bc.ca

METRO VANCOUVER RECYCLES

Metro Vancouver Recycles helps you connect with people who could use products you don't need, find options for recycling products and get helpful links to online services.

Metro Vancouver Recycling Directory:
www.metrovancouverrecycles.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



Download the free Richmond Collection Schedule App or use the Recycling Wizard at www.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 Collection Schedule App available at the Apple and Android app stores. Plus, the app sends you weekly collection day reminders!

The Recycling Wizard is also available online at www.richmond.ca/recyclesearch.



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 Collection Schedule app and at www.richmond.ca/recyclesearch, or call the RCBC Recycling Hotline at 604-732-9253.

BANNED HAZARDOUS AND OPERATIONAL IMPACT MATERIALS



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

BANNED MATERIALS THAT ARE RECYCLABLE WITH CITY SERVICES



- X Beverage containers
- X Clean wood
- X Containers made of glass, metal or banned recycled plastic
- X Corrugated cardboard
- X Food waste
- X Green waste
- X Mattresses
- X Propane Tanks
- X Recyclable paper
- X Tires (passenger & light-duty truck only)

For a complete list of banned materials, please visit www.metrovancouver.org/services/solid-waste/bylaws-regulations/banned-materials






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.


Watch for the **BLUE** listings for items recyclable through the City of Richmond

-  **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**

See Programs and Services starting on page 27 to find out what is accepted through the City's collection and drop-off services.



ANTIFREEZE AND EMPTY CONTAINERS

DROP-OFF LOCATION	PHONE
Jiffy Lube 10991 No. 4 Road	604-448-0142
 Mobil 1 Lube Express 3011 No. 5 Road	604-278-1999
Regional Recycling 13300 Vulcan Way	1-855-701-7171

For a complete list of antifreeze or containers accepted, visit www.bcusedoil.com or call 604-732-9253.



APPLIANCES – SMALL

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 7960 River Road	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171
Richmond Return-It Depot 135 - 8171 Westminster Hwy	604-232-5555

For a complete list of small appliances accepted, visit www.electrorecycle.ca or call 604-732-9253.



BABY CAR SEATS

DROP-OFF LOCATION	PHONE
 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	604-540-4067



BATTERIES – AUTOMOTIVE

DROP-OFF LOCATION	PHONE
Kal Tire 2633 No. 5 Road	604-278-9181
Regional Recycling 13300 Vulcan Way	1-855-701-7171

Note: All retail locations accept a used car battery for each new one purchased. For a list of collection sites, please visit www.recyclemybattery.ca

CITY OF RICHMOND

**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
Dr. Battery 102-4460 Jacobs Road	604-273-8248
Home Depot (batteries only) 2700 Sweden Way	604-303-9882
London Drugs 5971 No. 3 Road	604-448-4811
3200 - 11666 Steveston Highway	604-448-4852
Pharmasave 116 - 10151 No. 3 Road	604-241-2898
Rona 7111 Elmbirdge Way	604-273-4606
Staples 8171 Ackroyd Road	604-270-9599
110 - 2780 Sweden Way	604-303-7850
Regional Recycling 13300 Vulcan Way	1-855-701-7171

For a complete list of batteries accepted, please visit www.call2recycle.ca or call 1-888-224-9764.

For a complete list of mobile phones drop off locations, visit www.call2recycle.ca/locator.

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

To erase information from your device, including text messages, contacts and personal files, use Cell Phone Data Erasers by www.recyclemycell.ca/recycling-your-device available for free.

**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
London Drugs (smoke detectors only) 5971 No. 3 Road	604-448-4811
3200 - 11666 Steveston Highway	604-448-4852
Regional Recycling 13300 Vulcan Way	1-855-701-7171

For a complete list of alarms accepted, please visit www.regeneration.ca or call 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
Ironwood Bottle & 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
Staples 8171 Ackroyd Road	604-270-9599
110 - 2780 Sweden Way	604-303-7850

For a complete list of materials accepted, please visit www.return-it.ca/electronics or call 604-473-2400.

**EXERCISE AND HOBBY 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 7960 River Road	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171

For a complete list of materials accepted, please visit www.return-it.ca/electronics or call 604-473-2400.

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

Drop off at any local optometrist or eye care professional.

**FIRE EXTINGUISHERS**

DROP-OFF LOCATION	PHONE
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

For a complete list of flammable liquids, gasoline, pesticides and solvents accepted, please visit www.regeneration.ca or call 604-732-9253.

GENERAL HAZARDOUS MATERIALS

DROP-OFF LOCATION	PHONE
 Tervita 160 - 13511 Vulcan Way	604-214-7000
 Terrapure Environmental 9 - 7483 Progress Way, Delta	604-952-1220



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
 New West Gypsum Recycling 11871 Horseshoe Way	604-534-9925
Vancouver Transfer Station (maximum 1/2 sheet with a paid load of garbage) 377 W. Kent Avenue N.	604-326-4600

HYPODERMIC NEEDLES

DROP-OFF LOCATION

Purchase a "Sharps Container" from a pharmacy and return the container to same pharmacy when full.

-  **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**




LIGHTS AND LIGHTING FIXTURES

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
London Drugs (lightbulbs only) 5971 No. 3 Road 3200 - 11666 Steveston Highway	604-448-4811 604-448-4852
Rona 7111 Elmbrook Way	604-273-4606
Regional Recycling 13300 Vulcan Way	1-855-701-7171

For a complete list of lighting products accepted, visit www.regeneration.ca or call 604-732-9253.



LUBRICATING OIL (USED), OIL FILTERS AND PLASTIC OIL CONTAINERS

DROP-OFF LOCATION	PHONE
Jiffy Lube 10991 No. 4 Road	604-448-0142
 Mobil 1 Lube Express 3011 No. 5 Road	604-278-1999
Regional Recycling 13300 Vulcan Way	1-855-701-7171

For a complete list of lubricating oil, oil filters and plastic oil containers accepted, visit www.busedoil.com or call 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

Richmond's Large Item Pick Up Program: Contact Sierra Waste at 604-270-4722. Please note some restrictions apply. Visit www.richmond.ca/largeitem for program details.



MEDICAL DEVICES AND EQUIPMENT

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 7960 River Road	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171

CITY OF RICHMOND

**MUSICAL INSTRUMENTS**

DROP-OFF LOCATION	PHONE
Richmond Recycling Depot 5555 Lynas Lane	604-276-4010
Ironwood Bottle & Return-It Depot (electrical instruments only) 110 - 11020 Horseshoe Way	604-275-0585
OK Bottle Depot (electrical instruments only) 7960 River Road	604-244-0008
Regional Recycling (electrical instruments only) 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
Regional Recycling 13300 Vulcan Way	1-855-701-7171
Rona 7111 Elmbridge Way	604-273-4606

For a complete list of paint & paint aerosol containers accepted, please visit www.regeneration.ca or call 604-732-9253.

**PHARMACEUTICAL
DROP-OFF LOCATION**

All pharmacies accept left over 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/returns/british-columbia or call 604-732-9253.

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

**PROPANE TANKS: Refillable**

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

**PROPANE TANKS: Small / 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

**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 7960 River Road	604-244-0008
Regional Recycling 13300 Vulcan Way	1-855-701-7171
Richmond Return-It Depot 135 - 8171 Westminster Hwy	604-232-5555

**STYROFOAM - MOLDED PACKAGING & FOOD CONTAINERS**

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

London Drugs customers can return moulded packaging Styrofoam from their appliance, computer and accessories products to any London Drugs store with proof of purchase.

**STYROFOAM CHIPS (PEANUTS)**

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

**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**

Andrew Sheret Ltd. 604-278-3766
4500 Vanguard Road

For more information, call 1-800-267-2231 ext 224.

**TIRES – VEHICLES****DROP-OFF LOCATION PHONE**

Richmond Recycling Depot 604-276-4010
5555 Lynas Lane

 Island City Automotive 604-273-4023
180 - 5400 Minoru Blvd

Canadian Tire 604-273-2939
3500 No. 3 Road
11388 Steveston Highway 604-271-6651

 Express Lube & Tune Centre 604-278-1018
2840 No. 3 Road

Kal Tire 604-278-9181
2633 No. 5 Road

Metro Tires Ltd. 604-321-9004
13320 Mitchell Road

OK Tire Store 604-278-5171
5831 Minoru Boulevard

Redline Automotive Ltd. 604-277-4269
1 - 11711 No. 5 Road

Vancouver Landfill (Passenger/light truck, with/without rims, limit of 10) 604-873-7000
5400 72nd Street, Delta

Richmond's Large Item Pick Up Program: Contact Sierra Waste at 604-270-4722. Some restrictions apply. Visit www.richmond.ca/large-item for program details.

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

For a complete list of where tires are accepted, visit www.tsbc.ca or call 1-866-759-0488.

**TIRES AND TUBES – BICYCLES****DROP-OFF LOCATION PHONE**

Village Bikes (small amounts) 604-274-3865
3891 Moncton Street

Cap's/Krusty's Bicycles 604-270-2020
135-8460 Alexandra Road

For more information, visit www.tsbc.ca/bike.php or call 1-866-759-0488.

**TOOLS - POWER (ELECTRONIC & ELECTRICAL)****DROP-OFF LOCATION PHONE**

Richmond Recycling Depot 604-276-4010
5555 Lynas Lane

Ironwood Bottle & Return-It Depot 604-275-0585
110 - 11020 Horseshoe Way

OK Bottle Depot 604-244-0008
7960 River Road

Regional Recycling 1-855-701-7171
13300 Vulcan Way

Richmond Return-It Depot 604-232-5555
135 - 8171 Westminster Hwy

**TOYS (ELECTRONIC & ELECTRICAL) INCLUDING VIDEO GAMING SYSTEMS & ACCESSORIES****DROP-OFF LOCATION PHONE**

Richmond Recycling Depot 604-276-4010
5555 Lynas Lane

Best Buy 604-273-7335
700 - 5300 No. 3 Road

Ironwood Bottle & Return-It Depot 604-275-0585
110 - 11020 Horseshoe Way






OK Bottle Depot 604-244-0008
7960 River Road

Regional Recycling 1-855-701-7171
13300 Vulcan Way

**UPHOLSTERED FURNITURE (COUCHES, ARMCHAIRS, ETC)****DROP-OFF LOCATION PHONE**

Richmond Recycling Depot 604-276-4010
5555 Lynas Lane

Richmond's Large Item Pick Up Program: Contact Sierra Waste at 604-270-4722. Some restrictions apply. Visit www.richmond.ca/largeitem for program details.

-  **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**





City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: March 27, 2019

From: Tom Stewart, AScT.
Director, Public Works Operations

File: 10-6000-01/2019-Vol
01

Re: 2019 National Public Works Week

Staff Recommendation

That the staff report titled "2019 National Public Works Week", dated March 27, 2019 from the Director, Public Works Operations, be received for information.

Tom Stewart, AScT.
Director, Public Works Operations
(604-233-3301)

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER 	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS:
APPROVED BY CAO 	

Staff Report

Origin

The Canadian National Public Works Association's annual National Public Works Week is from May 19-25, 2019 and to celebrate the City will host three events. This report provides information on the upcoming events that will be held to acknowledge National Public Works Week.

Analysis

Each May, National Public Works Week recognizes the many people dedicated to their communities by working in public works careers. Municipalities celebrate National Public Works Week with open houses, school and education events, and displays of public works equipment. 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 residents' everyday lives.
- 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.
- The health, safety and comfort of this community greatly depend on these facilities and services.
- 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 staff.
- The efficiency of qualified and dedicated personnel who staff the Public Works department is materially influenced by people's attitude and understanding of the importance of the work they perform.

The City will recognize National Public Works Week by hosting three significant events:

1. Project WET

Project WET, the City's annual water education program developed in partnership with the Richmond School District, will be held from May 7-8, 2019. The program will be presented to 10 elementary school classes, with approximately 275 students and teachers expected to attend. This interactive program teaches intermediate students the importance of water consumption, conservation, quality and supply. Students will also learn about Richmond's recycling programs, dikes, pump stations and sewerage and drainage operations.

2. National Public Works week breakfast and scholarships

A breakfast to celebrate Public Works staff will be held on Thursday, May 9 at 6:30 a.m. at the Works Yard. The breakfast provides an opportunity for employees to celebrate their achievements and to acknowledge the hard work that is put into maintaining the City's infrastructure 24 hours a day, seven days a week. Additionally, recipients of the \$1,000 City of Richmond/CUPE Local 394 scholarships will be invited to receive their awards on stage. These scholarships are awarded annually to two Richmond High School students who have elected to pursue trades professions.

3. Public Works Open House

The annual Public Works Open House will take place on Saturday, May 11, from 11:00 a.m. to 3:00 p.m. at the Works Yard. Nearly 6,500 residents attended in 2018. The free event allows residents to meet City staff; learn about the work they perform and the programs offered; have fun exploring the various booths; participate in the interactive displays; eat at one of the food vendors; and listen to live entertainment.

Residents once again will have an opportunity to participate in our Works on Wheels interactive bus tour. The tour will be showcasing Engineering and Public Works projects such as a drainage pump station, a district energy centre and the Terra Nova Pollinator Park.


The success of the Public Works Open House is due to the organizing committee, which is made up of staff from a number of departments across the organization. There were over 270 staff who volunteered their time last year to make Public Works Open House a successful community event. Acknowledgment also goes to staff members' family and friends, and the McMath Secondary School Leadership students who also volunteered.

Financial Impact

None.

Conclusion

The City's Engineering and Public Works Division together with Transportation, Community Services, and Community Safety play an active role in celebrating the annual National Public Works Week. Three events are held 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, CPA, CGA
 Manager, Public Works Administration
 (604-233-3330)



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** March 11, 2019
From: Peter Russell, MCIP RPP **File:** 10-6175-01/2019-Vol
Senior Manager, Sustainability and District Energy 01
Re: Mitchell Island Environmental Stewardship Initiatives

Staff Recommendation

That the outreach initiatives proposed within the staff report titled "Mitchell Island Environmental Stewardship Initiatives" dated March 11, 2019 from the Senior Manager, Sustainability and District Energy, be endorsed.

Peter Russell, MCIP RPP
Senior Manager, Sustainability and District Energy
(604-276-4130)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Sewerage & Drainage	<input checked="" type="checkbox"/>	
Community Bylaws	<input checked="" type="checkbox"/>	
Policy Planning	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

Mitchell Island is an important industrial hub within the City of Richmond that is connected to the ecologically sensitive Fraser River through the City's drainage infrastructure. Persistent environmental concerns such as spills to the environment have been noted and staff have identified an opportunity to implement an island-specific outreach program to promote environmental stewardship among local land and business owners and improve collaboration between staff and senior governments regarding management objectives on the island.

Background

Mitchell Island is a human-made island in the North Arm of the Fraser River that is within the municipal boundaries of the City of Richmond. The 135 hectare island was created in the mid-1920s, when the channels between the former Mitchell Island, Twigg Island and Eburne Island were filled to create a single land mass. The area primarily supported fishing and agricultural activities until the early 1930s, when industrial activities began to increase. Richmond's first zoning bylaw was adopted in 1949 and officially zoned the Island for industrial use.

Mitchell Island remains zoned for industrial use and the City's Official Community Plan (2041) recognizes its socio-economic and environmental importance within the community by designating the land for industrial uses. Mitchell Island is located in the Fraser River estuary, which supports all species of Pacific salmon and an abundance of other wildlife at varying times of the year.

Mitchell Island currently hosts a variety of traditional industrial businesses such as auto wreckers but the area has begun to attract the attention of businesses from the region's emerging technology sector including bio-technology. There is an extensive network of infrastructure including a closed and open drainage network that conveys surface water to the Fraser River. The City has designated the foreshore as an Environmentally Sensitive Development Permit Area that regulates development with a review and permitting process to promote conservation of the aquatic resource. The drainage infrastructure requires a disproportionate amount of maintenance than other areas of the city to remove the excess buildup of sediment introduced by the various business operations. Considerable effort is also spent by staff responding to operational complaints including drainage impacts, spills and fires.

Council adopted the City's *Pollution Prevention and Clean-up Bylaw No. 8475* in 2009. The bylaw prohibits the introduction of polluting substances into the environment and was recently updated in 2018 to include additional provisions to respond to spill incidents. Staff propose to develop a series of community engagement initiatives to promote stewardship and improve awareness within the Island's business community regarding persistent operational and environmental concerns pursuant to Bylaw No. 8475.

Analysis

Aquatic environments, such as the Fraser River Estuary, are particularly sensitive to the introduction of pollution due to the abundance of flora and fauna that utilize the area. Pollution has the ability to disrupt the form and function of ecosystems and is regulated by all levels of government. Staff have implemented some positive initiatives to improve non-compliant operating practices, including distributing informative material outlining eco-friendly best management practices and supporting local owners interested in improving their wastewater onsite treatment systems.

Staff document and track spills and non-compliance reports utilizing an electronic mapping resource at the City. The data is used to identify areas with persistent pollution concerns which will allow staff to monitor the success of stewardship initiatives if endorsed.

Mitchell Island is located in the Fraser River and subject to municipal, provincial and federal pollution prevention regulations. Staff understand the complexities of the Island's regulatory framework and sees an opportunity to work collectively with senior governments to align management objectives related to pollution. Staff have taken a leadership role in this regard and hosted an intergovernmental working group meeting in November 2018 that included representatives from various city departments and senior governmental departments. Staff facilitated an effective engagement session and collected valuable information from participants that is being used to support the stewardship initiatives herein and design future stewardship activities on the Island. Feedback from the event was very positive and participants were enthusiastic about the future collaboration opportunities.

Staff recognize that strengthening relationships with land owners on the Island will help to promote operational and environmental awareness and will implement the following initiatives in 2019, if endorsed:

- **Local Business Outreach:** Staff propose a local business outreach program designed to promote community stewardship and operational responsibility. A package of informative material for businesses will be distributed. Staff will focus initial efforts on businesses such as stone cutting operations, auto repair, and concrete and asphalt recyclers. Materials provided will include information on environmental expectations, industry-specific best environmental practices, and other useful resources.

Staff will host a community information session in May 2019 to launch the outreach program. Representatives from local businesses as well as regulators will be invited to begin a dialogue on management objectives and promote environmental awareness. Staff intend on taking advantage of one of Island's green spaces, overlooking the Fraser River, to host an outdoor event for stakeholders.

- **Multi-jurisdictional Collaboration:** Individual regulators typically respond independently to minor concerns with minimal input from other jurisdictions. Staff have identified an opportunity to improve collaboration among regulators.

Regular meetings with senior regulators to discuss persistent compliance concerns are proposed. It is expected that this organized approach to environmental management will improve staff efficiency, build local relationships and improve environmental responsibility among business owners and employees.

- **Environmental Monitoring:** Staff recognize the need to collect baseline information to measure the effectiveness of the outreach program. Staff will implement a simple monitoring program on the Island to collect qualitative such as vegetation assessment and quantitative information such as water quality monitoring pursuant to Bylaw No. 8475. Data will be used internally to support future outreach initiatives and improve the City's pollution tracking system. Staff intend to provide an update within one year of the launch of the program.

Financial Impact

None.

Conclusion

Mitchell Island is an important industrial hub in Richmond that is connected to the Fraser River by open and closed drainages that convey stormwater runoff from roads and properties. Staff have noted some operational concerns in the area and recommend initiating an island-specific outreach program intended to improve local relationships and reduce the introduction of pollution originating from the Island into the Fraser River.



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City of Richmond

Report to Committee

To: Public Works and Transportation Committee
From: Milton Chan, P.Eng.
Acting Director, Engineering
Date: March 21, 2019
File: 10-6000-01/2019-Vol
01
Re: **Water Meter Program and Sewer Rate Update**

Staff Recommendation

That Option 3 – Sewer Rate Cap, as outlined in the report titled “Water Meter Program and Sewer Rate Update” dated March 21, 2019, from the Acting Director, Engineering, be endorsed for use in the preparation of the 2020 utility rate options.

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

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Department	<input checked="" type="checkbox"/>	
Water Services	<input checked="" type="checkbox"/>	
Sewerage and Drainage Services	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

This report outlines the current status of the water meter programs.

At the December 10, 2018 Regular Council Meeting, a delegation spoke in regards to sewer charges during the summer season for single-family dwellings and expressed concerns with inequities arising from different types of water usage during the summer (i.e. irrigation). Staff advised that information would be provided to Council on this matter. This concern was also raised by several other residents.

This report also brings forward options for alternative single-family sewer rate structures.

Analysis

Water Metering Update

Water metering provides Richmond residents with an equitable way to pay for drinking water and supports the Official Community Plan (OCP) objective to pursue water demand management strategies and continue water conservation initiatives. The City currently meters 100% of Industrial, Commercial and Institutional (ICI) and single-family properties. To date, 46% of multi-family dwellings have been metered through a volunteer program for existing complexes and a mandatory program for new complexes.

Universal deployment of the fixed base meter reading network was endorsed by Council as part of the 2017 Capital budget process and is expected to be completed by the end of 2019. The fixed base network, or Advanced Metering Infrastructure (AMI), is a system of radio receivers and transmitters that gather real-time consumption data from water meters. This project expands the existing fixed base network to cover the entire urban area in Richmond and will ultimately read 97% of Richmond's water meter inventory. Consumption data gathered by the fixed base network will allow staff to assist in helping customers identify causes of leaks and water consumption patterns, as well as enhance revenue forecasting to inform the utility budget process.

The population of Richmond has increased by 18% since 2003, while total water consumption in the City has decreased. By reducing water consumption, the City achieved a cost reduction of over \$10M in Metro Vancouver water and sewer charges in 2018 alone. This is a strong validation that water metering and conservation efforts to date are having a positive impact.

Single-Family Water Metering

Single-family dwellings are universally-metered. In 2018, approximately 82% of these customers saved money compared to the flat rate, with an average savings of approximately 47%.

Multi-Family Water Metering

The multi-family water meter program consists of a mandatory program for new complexes and a volunteer program for existing complexes. Mandatory metering of new multi-family complexes began in 2005, and 238 complexes (13,317 dwelling units) have been metered under this program. Volunteer metering of existing multi-family complexes began in 2010, through which 146 complexes (9,117 dwelling units) have been metered. Interest in the volunteer multi-family water meter program has decreased over time. In 2018, only three complexes volunteered for water meters. To date in 2019, two complexes have volunteered.

As of January 2019, 46% of the multi-family dwellings have been metered, 98% of which saved money in 2018, averaging a 48% savings compared to the flat rate.

Table 1 is a tabulation of the multi-family residential inventory and their water metering status.

Table 1. Multi-Family Inventory (January 2019)

Type	Number of Complexes	Number of Units	Number of Complexes Metered	Number of Units Metered	% of Units Metered
Townhouse	557	17,123	222	5,476	32%
Apartment	304	31,904	162	16,958	53%
Total	861	49,027	384	22,434	46%

The City subsidizes the installation of water meters for volunteer multi-family complexes up to the greater of \$1,200 per unit or \$100,000 per complex for the installation cost. If the installation cost exceeds the subsidy, the strata complex is required to pay the difference.

Currently, multi-family complexes that install a water meter are eligible for a two-year guarantee. If metered water charges exceed the flat rate in the first two years of the meter install, the complex will only be responsible for the flat rate charge. In addition, the two-year guarantee would then be extended to a five-year guarantee to allow residents more time to adjust water use habits and fix leaks without financial risk.

The remaining flat rate multi-family dwellings (54%) are the only properties yet to be metered for water, representing approximately 15% of the City's overall water consumption.

Fixed Base Meter Reading Network

Over the last four years, funding for the water meter program has been largely utilized for the universal single-family water meter program, water meter upgrades, and the fixed base network. The universal single-family water meter program is now completed, and water meter upgrades and the fixed base network will be complete by 2020.

Over the last five years, Metro Vancouver's water rate has increased by 15%. Furthermore, Metro Vancouver approved financial plans that indicate this trend will continue at an increasing rate. Increasing Metro Vancouver water cost is the primary driver for the City's water utility rates, accounting for approximately 60% of the City's water rate.

By the end of 2019, 82% of the City's water consumption will be metered. Staff will continue to pursue options to improve water usage data collection, including real-time monitoring through the fixed base network.

Some of the benefits of the fixed base network include:

- Expanding staff ability to proactively assess and notify metered residents of leakage through an enhanced leak detection program;
- Allowing detailed monitoring of consumption habits amongst customer classes; and
- Determining aggregate water usage by unmetered properties.

This will allow the City to adjust the flat and metered rates more equitably.

Sewer Rate Options

Metered customers pay for the water they use as opposed to flat rate customers who pay a fixed fee for the services. Metered customers are currently charged for sewer based on their water consumption.

Metered single-family home owners that have higher water use in the spring and summer, due to irrigation and other outdoor uses, will see a corresponding increase in their sewer charge. Some home owners have complained that this is inequitable as the water used outdoors does not generally enter the sanitary sewer system.

Unlike water meters, residential sewer meters are not a practical solution on the basis of additional cost, lack of accuracy in sewer metering technology, inaccessibility, and complexity of installation and maintenance.

Four options for sewer rate strategies have been reviewed, focusing on Q2 (April to June) and Q3 (July to September) for single-family dwellings. All options represent full cost recovery for the sewer utility resulting in zero net impact to revenues. To achieve this, the sewer rates are proposed to be redistributed across all customer classes.

The sewer rate options are outlined below.

Option 1 – Average Using Two Quarters

The sewer charges in Q2 and Q3 are stabilized by applying an average of the water consumption in Q4 and Q1. Sewer usage is based on an average of the two previous winter quarter water usage.

Key considerations:

- Conservative winter water users can reduce sewer charges for the rest of the year.
- Introduces inequity for customers with variable usage patterns (e.g. absence in winter months).

Option 2 – Average Using Three Quarters

The highest usage is observed in Q3 compared to the rest of the year. The sewer charges in Q3 are stabilized by applying an average of the water consumption recorded in Q4, Q1, and Q2.

Key considerations:

- Conservative water users can reduce sewer charges for Q3.
- Equity is more balanced than Option 1.
- Introduces inequity for customers with variable usage patterns (e.g. absence in winter months).
-

Option 3 – Sewer Rate Cap (Recommended Option)

Sewer charges are billed based on water usage up to a cap. The cap is equivalent to the sewer flat rate and only applied in Q3.

Key considerations:

- Maintains the principle of a user-pay system.
- Manages equity by only affecting high water users.
- For Q3, high water users would pay the same rate for sewer as unmetered properties being charged the flat rate.
- Aligns with existing First-Year Guarantee Program for new water meters. The City offers an adaptation period where customers can apply for a credit if the metered rate exceeds the flat rate over the first year of meter installation.

Option 4 – Status Quo

Sewer charges remain the same, using water meter readings as the proxy for sewer consumption with no cap.

Key considerations:

- Higher incentive for water conservation during the summer season.
- Irrigation and outdoor uses, which do not typically flow into the sewer system, is charged for sewer use.

The rate impacts associated with each option all represent full cost recovery for the sewer utility. Staff expect zero impact to net revenues from the proposed rate structure change; however, costs will be redistributed amongst the customer classes.

Depending on the option, costs are expected for additional customization to the tax and utility billing system beyond existing functionality. These costs will be included when the 2020 utility rates are brought forward for consideration later this year and are estimated to be approximately \$20,000.

Implementing a new sewer rate structure will impact all property classes and rates. A comparison of the estimated sewer rate impacts based on the approved 2019 rates is provided in Table 2.

Table 2. Average Annual Sewer Charges

Options for Sewer Charges	Metered				Flat Rate			
	Residential	Townhouse	Apartment	Industrial, Commercial, Institutional	Residential	Townhouse	Apartment	*Industrial, Commercial, Institutional
Approved 2019 Rates	\$349	\$233	\$177	\$3,093	\$455	\$416	\$347	N/A
Option 1	\$290	\$243	\$183	\$3,229	\$475	\$434	\$362	N/A
Option 2	\$296	\$241	\$182	\$3,204	\$471	\$431	\$359	N/A
Option 3 (Recommended)	\$299	\$241	\$181	\$3,196	\$470	\$430	\$358	N/A

*ICI is fully metered

Staff recommend that Option 3 - Sewer Rate Cap be used as the basis for preparing the 2020 utility rate options that will be brought forward for consideration later this year.

Financial Impact

There are no financial impacts.

Conclusion

Residential water meter programs have had continued success, improving the City's sustainability efforts while reducing costs for residents. The City remains a leader in metering infrastructure in the Metro Vancouver region. By the end of 2019, Richmond will have successfully metered approximately 82% of water use in the City and the fixed base network will be fully deployed. The industrial, commercial, and institutional (ICI) and single-family residential sectors are universally metered. Remaining flat rate multi-family dwellings can participate in the volunteer multi-family meter program at their discretion; however current uptake on this program is low. Water conservation initiatives implemented by the City have played a significant role in reducing the amount of drinking water consumed daily. Having greater control over water consumption extends the life of existing infrastructure and defers the need for new capacity-based capital infrastructure projects.

March 21, 2019

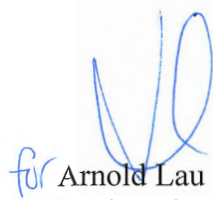
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Various options for single family sewer rates have been analyzed, and staff recommend that Option 3 - Sewer Rate Cap be used as the basis for preparing the 2020 utility rate options that will be brought forward for consideration later this year.



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