



Committee of the Whole Report

For the Meeting of March 11, 2021

To: Committee of the Whole **Date:** March 5, 2021
From: Philip Bellefontaine, Director, Engineering & Public Works
Subject: Curbside Yard Waste Collection

RECOMMENDATION

That Council direct staff to:

1. Bring forward amendments to the Solid Waste Bylaw (No. 12-086) to enable curbside comingled organics (kitchen scraps and yard waste) collection.
2. Initiate service changes and user outreach to transition from backyard to curbside garbage and comingled organics collection.

EXECUTIVE SUMMARY

The City of Victoria's zero waste plan, *Zero Waste Victoria*, sets a target of 50% reduction in landfill disposal by 2040. The City's solid waste services play a critical role in helping to support waste reduction across the community. A waste composition study completed in 2020 revealed that 10% of the material collected through the garbage stream of the City's residential solid waste service is comprised of yard waste, which led to the prioritization of options to divert this material to address zero waste and climate action objectives.

Yard waste is currently prohibited from disposal in the residential garbage and organics carts while a drop-off option is available one day a week at the City's Public Works Yard. Staff have reviewed the considerations for a change to the residential solid waste service to enable yard waste to be comingled with kitchen scraps. Capacity for this service change can be accommodated through a shift from backyard collection to a curbside collection model. This service model is consistent with other municipal organics collection services in the region and provides an opportunity to address user demands, mitigate employee health and safety risks, provide a more equitable service for yard waste disposal, and increase organics diversion.

The change to a curbside "comingled organics" (kitchen scraps and yard waste) collection service is not expected to increase utility user fees.

PURPOSE

The purpose of this report is to provide Council with considerations and recommendations to enable residential yard waste collection through shifting the solid waste utility to a curbside collection model.

BACKGROUND

The City of Victoria provides biweekly residential solid waste collection of garbage and kitchen scraps to approximately 14,000 households across the community. The service is currently operated using three garbage trucks and requires refuse collectors to retrieve wheeled carts from residential properties, mount carts onto mechanical tippers on the garbage trucks, operate the tipping and packing mechanisms on the vehicle, return the carts to the curb and operate the vehicle. Households with accessibility requirements receive additional service where the carts are returned to the residential property instead of being placed at the curb after the contents have been emptied. Collection service is scheduled 5 days a week from Monday through Friday and not operated on Statutory Holidays.

The City's solid waste service is enabled through the Solid Waste Bylaw (No. 12-086). The bylaw defines requirements of users and the City, collection frequency, and fees. The bylaw currently prohibits the disposal of yard waste in either the garbage or kitchen scraps carts. To accommodate the demand for yard waste disposal, a drop-off service is operated out of the Public Works Yard on Saturdays from 7 a.m. to 2 p.m.

Solid waste collection and the Saturday drop-off service is financed as a utility with all expenses funded by the ratepayers receiving the service. Annual budget for the solid waste utility is approximately \$3.2 million. The tonnage of garbage, kitchen scraps and yard waste managed by the City's solid waste utility since 2013 is provided in Figure 1.

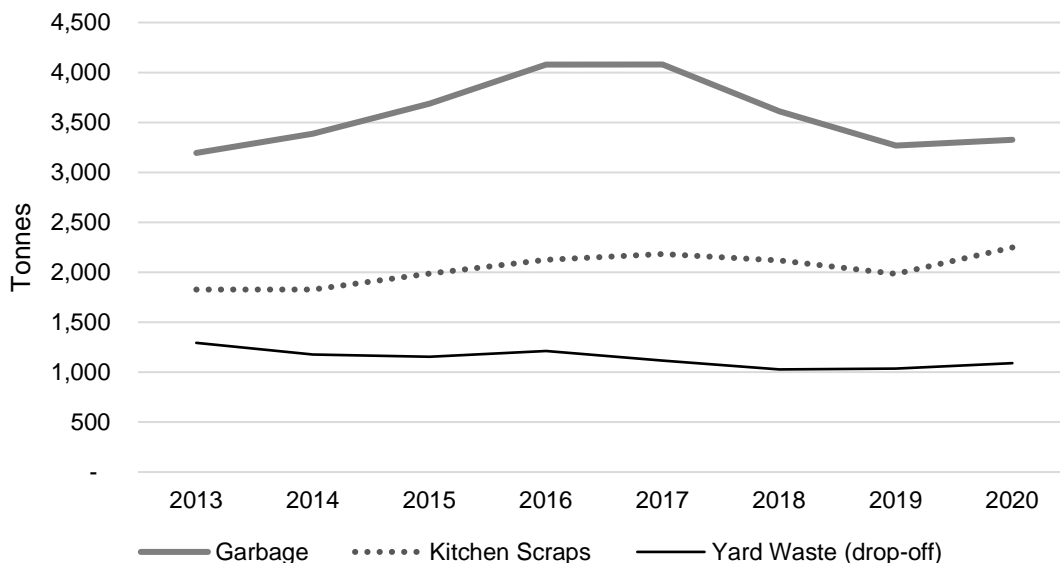


Figure 1. Material collected through the City's residential solid waste service.

In November 2019, Council directed staff to initiate a plan to enhance the City's residential collection program to improve the diversion of organic and recyclable material. A residential waste composition study was completed in 2020 revealing that a substantial amount of yard waste is being disposed in residential garbage bins, which led staff to propose the prioritization of options

to divert this material to address zero waste and climate action objectives. In December 2020, Council approved Zero Waste Victoria and a short-term action plan that included the assessment of curbside collection of yard waste in early 2021 and to plan for broader service changes to improve diversion over the next several years.

The garbage collection fleet has approximately 2-3 years of remaining service life and in anticipation of the large investments associated with replacing these assets and the multiyear process for specifications development, procurement and manufacturing, staff need to start to undertake a comprehensive review of the solid waste service. At the same time as the comprehensive service review there is an opportunity for immediate changes to meet user demands, increase service levels, and divert organics by enabling the collection of yard waste. This report outlines the considerations of shifting to a curbside collection model in 2021 to enable yard waste collection using existing equipment.

ISSUES & ANALYSIS

Considerations for changing the solid waste service to allow yard waste to be collected include user demand, employee health and safety, accessibility, equity of service, and environmental stewardship.

Service Comparison

A range of yard waste services are provided by municipalities across the Capital Region and Southern Vancouver Island. Six municipalities within the CRD manage waste collection services either in-house (Victoria, Saanich, Esquimalt) or contracted through a private hauler (Oak Bay, View Royal, Sidney). A comparison of municipal yard waste collection and drop-off services are summarized in the table below.

Municipality	Yard Waste Collection Service	Yard Waste Drop-Off Service
Victoria	No	1 day/week
Saanich	Comingled Curbside (Biweekly)	4 days/week
Esquimalt	No	6 days/week
Oak Bay	Comingled Curbside ¹ (Biweekly)	6 days/week
View Royal	No	6 days/week
Sidney	Curbside (Monthly)	No
Nanaimo (City)	Comingled Curbside (Biweekly)	No

¹ Oak Bay began comingled organics collection in January 2021.

The City of Victoria is the only municipality in the region that offers collection of garbage and kitchen scraps directly from residential properties as opposed to a curbside collection model.

In addition to regularly scheduled solid waste collection services, the City of Victoria offers annual residential leaf collection and branch chipping.

User Demand

Staff receive regular correspondence from solid waste service users with the most common request for service being additional options for yard waste disposal. Experience from neighbouring municipalities that have introduced a curbside option for yard waste collection indicate considerable outstanding demand for this service.

Service Equity

Community engagement for the development of Zero Waste Victoria during the Summer of 2020 raised concerns related to the equity and accessibility of the City's solid waste services. Specifically, stakeholders noted that residents who do not have access to a vehicle are limited in their ability to use the Saturday drop-off service. Applying an equity lens uncovers additional considerations related to yard waste drop-off including access limitations of the service to people with various disabilities and people working atypical hours or shift work.

Generally, collection services provide more options for equitable and accessible yard waste disposal compared to drop-off. However, community demand for drop-off services will persist for large bulky materials that cannot be accommodated through the collection system (branches and other large woody debris).

Health and Safety

The job demands associated with the collection of solid waste from residential properties places substantial physical strain on the solid waste collection staff. These physical strains are associated with repetitive push/pull and twisting motions associated with moving heavy garbage and kitchen scraps wheeled-carts from back-, side- and front-yards of residential properties to the curb. These injuries are often enduring, affecting the long-term wellbeing of employees.

Curbside collection significantly reduces the health and safety risks associated with the current collection model and is expected to reduce worker injury and WorkSafe BC (WSBC) claims costs.

Environmental Stewardship

The City of Victoria's zero waste plan, *Zero Waste Victoria*, sets a target of 50% reduction in landfill disposal by 2040. Organic material continues to represent a major share of waste sent to the landfill from Victoria and is responsible for 6% of community greenhouse gas emissions. Approximately 10% of the material collected in the garbage stream of the City's residential solid waste service is yard waste. Changes to the collection service are being assessed within the context of both waste reduction and climate benefits.

OPTIONS & IMPACTS

This report describes the considerations for a change to the solid waste collection service to enable users to dispose of yard waste in their existing green carts linked with a shift from "backyard" to curbside collection.

The impacts of a service change to comingled curbside collection are compared to the current service model and discussed in terms of user requirements and costs. The comingled curbside option is also described in terms of how it positions the City's solid waste utility for future service designs with the upcoming retirement of the existing garbage fleet.

User Requirements

Changing residential solid waste collection to a curbside model will require some users to adjust how they interact with the service. The main change for users will be the requirement to bring their garbage and organics carts to the curb on collection day. Staff estimate that 10 - 15% of users already do this as normal practice under the current service. Most users are also familiar with this

requirement when in 2020 users were requested to bring their carts to the curb to mitigate health concerns for refuse collectors from COVID-19. All users of the City’s solid waste service are also served by the CRD-managed Bluebox program for recyclable materials operating as a curbside collection model. Both the City of Victoria and CRD provide users with notification options and scheduling information through the ReCollect app.

Users with accessibility requirements will continue to be offered additional assistance through the Helping Hand Program. Under this enhanced service users can opt-in to have their carts collected and returned to their property. The Saturday drop-off service will also continue to be offered as an option for users with yard waste that cannot be accommodated in the green carts.

Costs

Organics processing costs are anticipated to increase with the provision of curbside yard waste collection. Staff estimate this service will result in a net increase of 1,000 to 1,500 tonnes of additional organic material at a cost of \$135,000 to \$200,000 a year for composting. However, the service change is expected to have no impact on the user fees for the solid waste utility given reduced labour costs would be expected to offset increased processing charges (Figure 2). Over time, a curbside collection model would also be expected to reduce injury claims with the potential for cost savings to annual WSBC premiums.

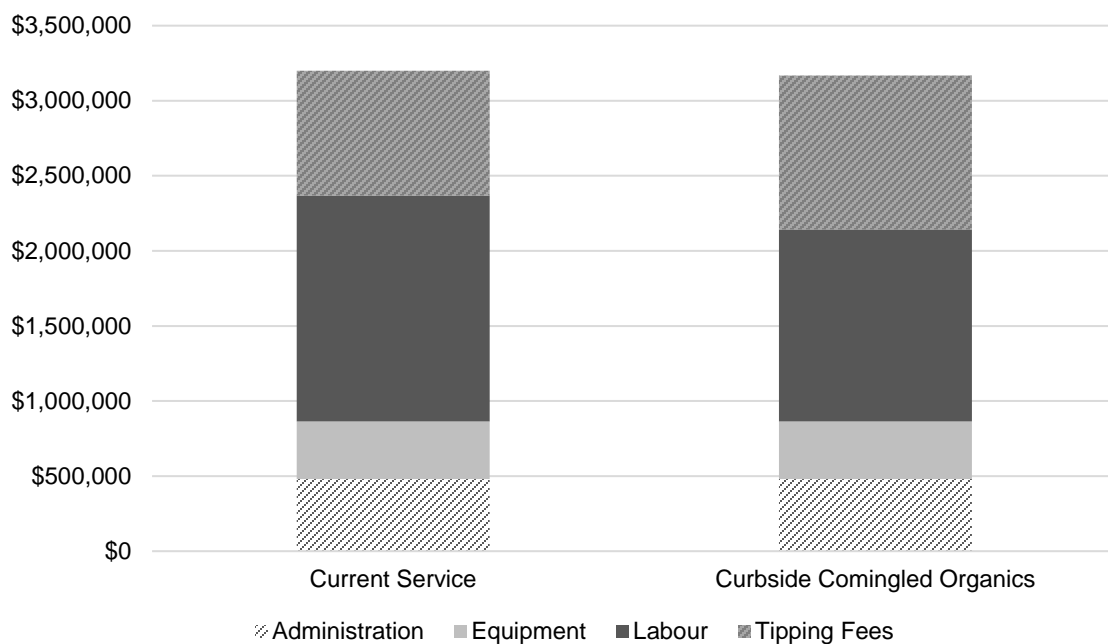


Figure 2. Expenses for current solid waste service and comingled collection option.

Future Service Design

The City’s current residential solid waste collection fleet has approximately 2-3 years of remaining service life. Staff are in the early stages of assessing future equipment and operational needs to improve waste diversion, deliver equitable service levels and to meet corporate greenhouse gas targets. The change to curbside organics collection considered in this report supports the longer-term service review and future fleet requirements through an incremental change that will provide experiential evidence of equipment capacities, collection logistics, organics diversion performance and potential residual user demands for service enhancements.

Solid waste service enhancements and improvement to source-separation performance for multifamily and commercial properties have both been identified as priority actions under Zero Waste Victoria. Modernization of the existing city waste collection service presents an added opportunity for staff to refine understanding of the considerations for potential expansion of City solid waste services to other sectors of the community. Options analyses are in early stages of planning with a view to bringing forward future reports to Council on these opportunities and the associated financial implications of additional staffing and equipment requirements.

Next Steps

Subject to Council's considerations and recommendations in this report, next steps for implementing a change to the residential solid waste utility for curbside comingled organics collection include:

- Proposed amendments to the City's Solid Waste Bylaw (No. 12-086) to:
 - Remove yard waste as a prohibited material for disposal in the kitchen scraps/organics carts.
 - Provide additional details related to acceptable yard waste materials and characteristics.
 - Require users to place garbage and organics carts at the curb on collection days.
- Determine an effective date for the service change.
- Initiate development of broad user outreach to advise users of changes including:
 - Timing and placement of the carts at the curb.
 - Permitted organic materials.
 - Details and documentation for opting into the Helping Hand Program for users with accessibility needs.

Option 1 – Direct staff to bring forward amendments to the Solid Waste Bylaw and to initiate service changes and user outreach to transition from backyard to curbside garbage and comingled organics collection (Recommended).

This option would support the City of Victoria's environmental and equity objectives and establishes a higher level of service for yard waste disposal while reducing health and safety risks for city employees. The Saturday drop-off service will continue in the near-term under this option and staff will monitor residual user demand for yard waste drop-off as part of the longer-term service enhancement review.

Option 2 – Maintain the current backyard collection model prohibiting yard waste disposal in garbage and organics carts while continuing to offer the Saturday yard waste drop-off service (Not Recommended).

This option would maintain the current backyard collection service which is considered an outdated model that negatively impacts employee wellbeing, sustains inequitable yard waste disposal options, and constrains fleet planning and opportunities for future service enhancements.

Staff have not assessed the option to provide yard waste collection through a backyard service model due to operational constraints for completing collection within scheduled shifts and the increased hazard and risk of injuries to employees.

Accessibility Impact Statement

Curbside collection services generally provide a more accessible option than drop-off services. The shift from backyard to curbside collection of garbage and comingled organics contemplated in this report would maintain the existing Helping Hand Program where refuse collectors collect and return wheeled carts to residential properties for those people with additional accessibility requirements.

2019-2022 Strategic Plan

The considerations in this report relate to the Climate Leadership and Environmental Stewardship Strategic Objectives to implement a robust Zero Waste Strategy (#16) and implement the Climate Leadership Plan (#2).

Impacts to Financial Plan

The option considered in this report for a service change to the residential solid waste utility to enable yard waste to be comingled with kitchen scraps through a curbside collection model is not anticipated to have impacts to solid waste utility user fees as increased processing charges will be offset by reduced labour costs within the utility.

Official Community Plan Consistency Statement

Waste reduction is consistent with Plan Goals related to Infrastructure and Climate Change and Energy in the City of Victoria's Official Community Plan (OCP No. 12-013).

CONCLUSIONS

Staff have assessed the considerations of enabling yard waste collection through a curbside collection service as consistent with the short-term action plan of the City's 2020 Zero Waste Strategy. Change from the current backyard collection service to a curbside model provides the opportunity to address user demands, mitigate health and safety risks for staff, provide a more equitable service for yard waste disposal, and increase organics diversion. This change is expected to have no impact on user fees for the solid waste utility.

Respectfully submitted,

Rory Tooke
Manager, Sustainability, Assets &
Support Services

Philip Bellefontaine
Director, Engineering & Public Works

Report accepted and recommended by the City Manager