



The Corporation of the City of Courtenay

# Briefing Note

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**To:** Council  
**From:** Director of Operational Services  
**Subject:** Solid Waste Automated Curbside Collection Update

**File No.:** 5360-02  
**Date:** July 31, 2024

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## **PURPOSE:**

To update Council on the transition to automated solid waste collection through the first six months of the service.

## **BACKGROUND:**

In January 2024, the City of Courtenay, in conjunction of the Town of Comox, transitioned the Solid Waste service to automated curbside collection. This Briefing Note will provide an update on the details of the service to date along with some of the successes and challenges of the program.

## **DISCUSSION:**

### *Automated Curbside Collection Transition*

All residents received carts by the end of December 2023, and automated curbside collection commenced January 2, 2024. Despite two major snow events in January, no service interruptions or failures have occurred in the curbside collection system. Generally speaking, residents were able to place carts in the recommended locations during both snow events and during regular collection with the most problematic areas being cul-de-sacs. In future years, the City will endeavour to focus on snow clearing on major roads and transit routes first, in alignment with the snow clearing levels of service, and accommodate local roads with solid waste collection on a prioritized basis while providing the expected levels of service throughout the City.

At the onset of automated curbside collection, 34 residents had requested the Assisted Set Out service, followed by another 14 within the first six weeks of the program. To date, a total of 51 residents are receiving Assisted Set Out services, with about 1 additional request per month. The number that are receiving the service is in alignment with industry averages (about 0.5% of the service).

In an effort to promote diversion of waste away from garbage toward recycling and organics, each household was provided a 120 L garbage cart on a bi-weekly collection schedule. From the onset additional garbage carts have been available, in the form of a regular cart or an additional cart for home health care waste. The only difference being the cost. After six months of service, 95 additional carts for home health care waste and 122 additional garbage carts have been provided to households producing additional waste volumes.

### *Successes*

From the onset of automated collection, garbage diversion has been a dramatic success, with garbage tonnage being reduced by 40% from 2023 through the first 6 months of 2024, see Figure 1. In addition, to the end of June, organics tonnages have increased by 54% over 2023. On the recycling front, two discretionary audits from Recycle BC in January and March indicate that Total Not Acceptable Material (NAM)

rates are 5.7% and 4.6% respectively which is in-line with the City’s all time NAM rate of 4.4%. The communication efforts, ambassador program, and general understanding of residents of the recycling system have all played a part in maintaining the low levels of recycling contamination.

The goal of the Comox Strathcona Waste Management Plan is to “produce less waste”, with a plan to work towards achieving the provincial target of 350 kg / person per year. The curbside collection program, serving an estimated 9,960 households or approximately 20,916 residents (based on Census Canada: 2.1 ppl/household) is on track in 2024 to have a waste disposal rate of 131 kg / person or 274 kg / household. This is a reduction from the 2023 rates of 165 kg / person or 348 kg / household through curbside collection.

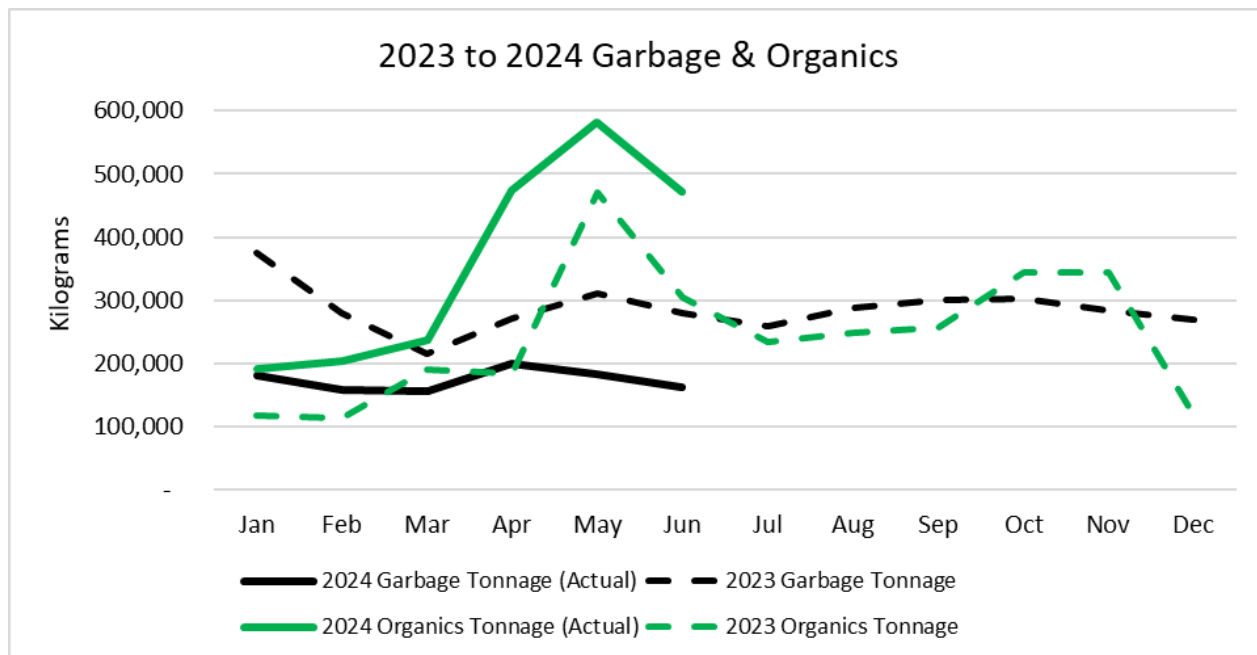
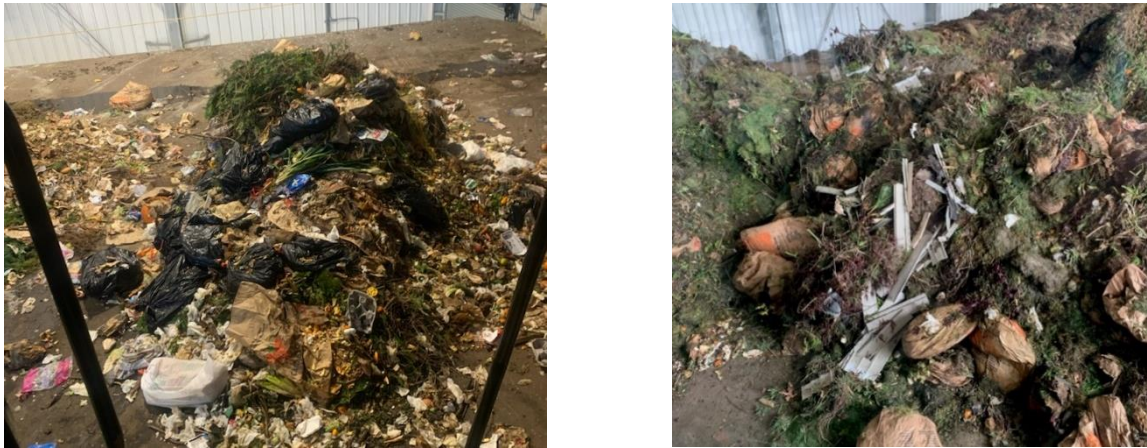


Figure 1. Garbage and Organics tonnages

### Challenges

The transition from a weekly garbage collection to bi-weekly has correlated with increased organics contamination at the Comox Valley Waste Management Centre’s (CVWMC) organics transfer station. Staff at the CVWMC report that some collection truck loads have been so contaminated that the entire load had to be landfilled as efforts to separate the garbage from organics would have been impossible. The City and CVRD are working to determine a pattern related to collection areas or contamination material. Diapers, plastic bags, and flexible plastics seem to be the main issue, but vinyl siding, foam, and drywall have also shown up in the loads, see Figure 2. In response to this increased organic contamination, an enhanced contamination management effort was introduced by sending additional operational staff to check organics carts for contamination. These additional staff allowed the City to inspect a larger daily number of carts in the overall effort to identify the sources of the contamination. Anecdotally, the organics processor reports that increased contamination seems to occur on recycling weeks, likely when garbage carts are nearly full for some homes, and some residents may be using the organics carts to dispose of garbage. The City has requested more data on organics contamination from the CVRD and once received, staff will tailor a future communication based on the patterns that are determined. Staffing issues along with some equipment issues have unfortunately hampered efforts of the CVRD to report data back to the City.



*Figure 2. Organics contamination*

Resident response to the conversion to automated collection has been generally positive; after six months of the service call volume to the Operations Centre has declined significantly compared to that during the launch period. Unfortunately, negative interactions between some residents and our Student Ambassador staff have trended upwards in both occurrence and relative significance. Curbside cart checks fulfil a requirement to verify the waste streams in conjunction with the City's automated collection transition plan with Recycle BC and Solid Waste Management Bylaw 3113. For reference, from 2019 to 2022 there were an average of 1.5 incidents with Student Ambassadors per year. Acknowledging that during the implementation phase of the new program, the City was the subject of some negative press in the form of two opinion pieces in the local print news. During the 2024 cart check season, both field and Operations Centre Assistant staff have been subjected to increased discontent around parts and / or mis-information related to the residential curbside collection program. In the newspaper, online, and through in-person confrontation, some residents see the Student Ambassadors presence as an opportunity to air their concerns.

In mid-June, while Student Ambassadors were conducting routine cart checks, concurrent and escalating negative interactions with residents resulted in a requirement for staff to modify the Student Ambassador program for the remainder of the 2024 season. This modification was directly impacted by the resulting safety review of the program and in concert with an increase in reported incidents. Staff safety is paramount, as such the Student Ambassadors have been redeployed within the Utilities Division to perform other meaningful tasks outside of the cart check program, yet still in support of the City's water conservation and waste diversion efforts. Moving forward, contamination management tools (hopper cameras) will be operationalized on all of the new EV collection vehicles (August 2024), thus allowing contamination to be monitored and actioned with a more passive approach avoiding the need to interact with residents directly at the curbside.

### *Old Container Collection*

Following the delivery of nearly 30,000 new automated carts to nearly 10,000 households to effectively operate this new efficient service, the City was able to divert a significant number of old, mainly plastic, containers away from the landfill. The City offered two free options to residents: curbside collection and an exchange depot at the City's Operational Services facility. The curbside pickup occurred over a three-week period from January 15<sup>th</sup> to February 2<sup>nd</sup>, while the depot ran to February 15<sup>th</sup>. Residents were encouraged to take old containers from the depot in an effort to reuse the old containers. At the end of the program,

the remaining containers were delivered to Merlin Plastics in New Westminster for recycling. The Town of Comox ran a similar drop-off and exchange program and delivered the remaining containers to Courtenay for delivery to the recycling facility with a prorated reimbursement paid to the City.

Merlin Plastics weigh scale records indicate that 5,500 kgs of plastic was received for recycling, and while it isn't possible to determine the level of old container reuse through the exchange depot, it is estimated that nearly 2,000 kgs of containers were reused locally. At the end of the program, the CVRD reported that only 287 containers were landfilled at the CVWMC.

#### *Excess Yard Waste pilot project*

Additionally, a free excess yard waste drop-off pilot project was developed and deployed this spring, providing residents with convenient options to dispose of additional yard waste produced during the start of the spring growing season that exceeded the volume the automated carts provided. The program ran from March 15 to May 31, 2024 and was located adjacent to the McKenzie Ave gate to the Operational Services Centre utilizing a 30-yard roll-off bin. The bin was hauled weekly to the SkyRocket Compost facility at the CVWMC, dropping off a total of 29,770 kgs of clean, contamination-free yard waste. This represents about 10% of the monthly average collected through the curbside organics program.

As mentioned, contamination was low, and while usage was aimed at a few extra bags of yard trimmings, staff saw numerous trailers with trees and hedges which filled the 30-yard bin quickly. While not against the 'rules' of the program, those loads would have been better received at the landfill as historically an entire hedge would not have been collected manually at the curbside.

Due to the low cost (2024 budget allocation of \$20,000) and the general satisfaction from Courtenay residents, the program will continue this fall, in a modified basis, as the goal of the program the fall program is for excess leaf litter drop-off.

#### **Upcoming changes**

##### *Electric Vehicles (EV) for Solid Waste Collection*

On July 16, 2024, Emterra Environmental, the curbside collection contractor for the City of Courtenay and the Town of Comox, held a launch event at Comox Marina Park for the fleet of electric collection vehicles. The event was attended by the members of K'ómoks First Nation, the Minister of Energy, Mines and Low Carbon Innovation, Honourable Josie Osborne, MLA Ronna Rae Leonard, the Mayors and members of Council from the City and Town, along with representatives from Emterra Environmental, Mack Trucks, and BC Hydro. To date, five electric collection trucks have been delivered to Emterra, with three more being assembled. The contractor will charge the fleet at their Cumberland transfer and sorting facility. The anticipated operational commencement of the EV fleet is expected in August 2024. It is understood that this will be the first fully electric vehicle fleet for solid waste collection in Canada, and the largest fleet of its kind in North America.

Local news outlets attended the event, with plans for Emterra to issue a news release for trade media to pick up for publication. A Key Messages / FAQ document was provided to Council to prior to the event.



*Figure 3 Curbside EV Collection truck*

#### *Cart Exchange Portal*

From the launch of automated collection, the most common query has been for an exchange of carts as residents were not offered a choice at the onset of the service. A number of cart exchanges have been provided to residents reporting issues moving the carts, which have been classified as a 'mobility accommodation'.

The messaging has been consistent that a cart exchange portal will be available on September 1 with residents being directed to a City web portal that will guide them through a cart exchange. Staff are working on programming the website with a plan for completion in August. The goal will be for as many residents as possible to use the website as it is anticipated (based on public inquiries) that the exchanges could be in the range of 1,500-2,000 dwelling units.

**RECOMMENDATION:** THAT Council receive the "Solid Waste Automated Curbside Update" briefing note for information.

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