

**TO:** Larry Gardner  
Manager, Solid Waste Services

**DATE:** October 13, 2015

**FROM:** Jeff Ainge  
Zero Waste Coordinator

**MEETING:** RSWAC, November 5, 2015

**FILE:** 5370-01

**SUBJECT:** Curbside Collection Program – Compliance and Enforcement to Improve Diversion

**RECOMMENDATION**

That the report be received for information.

**PURPOSE**

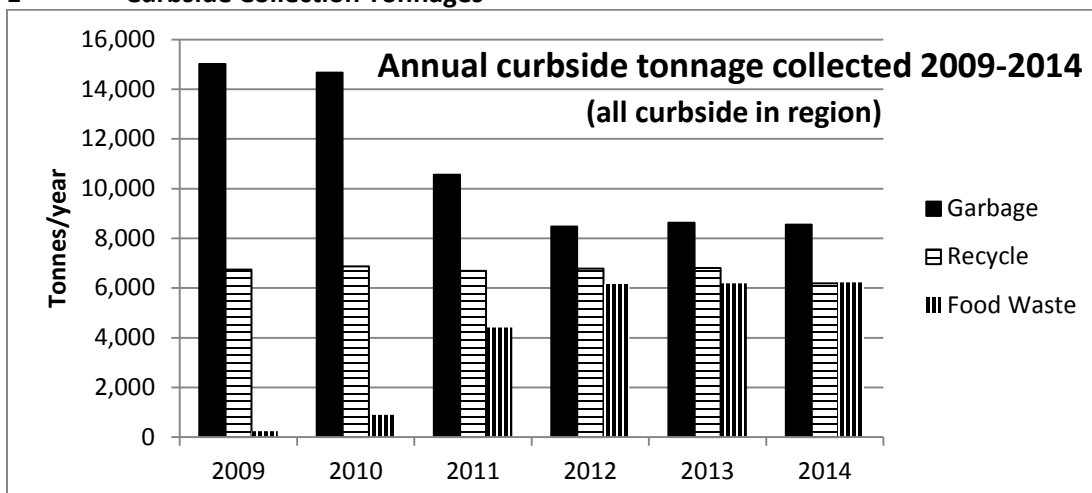
The Regional Solid Waste Advisory Committee (RSWAC) included improved enforcement of, and compliance with, existing residential collection program requirements as an option to be considered as part of the current Solid Waste Management Plan (SWMP) review.

**BACKGROUND**

The Regional District of Nanaimo (RDN) provides curbside collection of residential garbage, recycling and food waste to over 23,500 single family and equivalent homes located in the seven Electoral Areas, District of Lantzville and City of Parksville. A further 4,000 homes in the Town of Qualicum Beach receive garbage collection service from Town staff, with recycling and food waste collection provided by the RDN. The City of Nanaimo (CoN) provides collection services to 26,000 residences within their boundaries. In terms of the overall waste received at the Regional Landfill, the residential sector is the smallest at 17%.

Since the introduction of region-wide food waste collection in 2010 and 2011, single family homes now divert 60% of their garbage from the landfill through curbside food waste and recycling collection, as seen in Table 1. However, even with the convenience of curbside collection, the 2012 Waste Composition study calculated that compostable organic material remains the largest component of residential waste at 36% (made up of 26% food scraps + 8% compostable paper + 2% yard waste). A much smaller percentage of recyclable material also makes its way into household garbage and into the landfill as opposed to being recycled responsibly through curbside or depot programs.

**Table 1 Curbside Collection Tonnages**



To improve regional participation in diverting residential food waste from the landfill, the following actions could be considered for inclusion in the SWMP.

- Curbside Outreach and Education

Building on recent outreach activities undertaken by RDN Solid Waste Services staff in support of residential curbside recycling collection, a similar initiative could be made for the food waste collection.

Outreach and compliance efforts specific to curbside collection could be achieved by employing seasonal or temporary staff directly, or by creating a compliance or outreach staff position(s) which could be part-funded through the curbside utility fees. These would only apply to the RDN curbside program; the CoN program is funded and operated separately however similar actions and outreach efforts can be considered and implemented by CoN staff for their collection program.

Working with the collection staff (contracted in the case of the RDN and municipal employees in the case of the CoN), staff could assess the participation levels (set outs of green bins, or lack of green bin set outs, in particular) over a period of time, with seasonal variations accounted for, to give statistically valid data. With that data on hand, barriers to participation can be investigated, targeted compliance messages created, and varied targeted delivery mechanisms employed to promote and encourage participation. This is a methodology known as Community Based Social Marketing which has proven to be very effective in establishing social norms and encouraging positive behaviour change.

- Enforcement through a Disposal Ban

Residential food waste is considered Unacceptable Waste in the RDN and CoN collection bylaws so is not permitted to be included in the garbage container.

When launching their food waste diversion programs within the past year, both Metro Vancouver and the Capital Regional District took the step to ban this material from disposal at their facilities. The RDN did not take this step when introducing residential food waste collection, in large part because the multi-family housing sector is not serviced by local government collection programs but by commercial haulers. Commercially generated food waste is however banned from landfill disposal.

The reality of banning materials from curbside collection is that enforcement is challenging. Collection staff do not open bagged waste for curbside inspections (for health and safety reasons as well as time management constraints). Food Waste is listed as an Unacceptable Waste per RDN Bylaw No. 1591 which applies to the RDN curbside program and therefore not permitted in household garbage, but it is not actually banned from disposal so enforcement is a moot point.

Implementing a disposal ban on residential food waste can be viewed as a regulatory approach to increase use of the green bin and improve food waste diversion. For this to work, education and awareness of the existing program needs to happen – in effect a Community Based Social Marketing program to support the ban's implementation.

- Multi-Family sector collection

Given that the residential sector makes up the smallest component of the region's waste stream, and that residents receiving curbside service have made important steps in achieving 60% diversion through participation in food waste and recycling programs, the opportunity to achieve greater overall levels of diversion and compliance is attainable by having the multi-family sector receive the same level of service as the single-family housing sector. Leveling the playing field in terms of service levels and

materials collected across all housing sectors is expected to have a greater impact on landfill diversion than focusing efforts solely on curbside collection.

### **IMPACT ON DIVERSION**

With respect to the three possibilities introduced above, the impact to landfill diversion rates would vary.

- **Curbside Outreach and Education**

Implementing targeted education and outreach efforts to improve householders' participation in the curbside collection of residential food waste would likely result in modest increased diversion rates of that material. For example, based on the 2012 Waste Composition Study findings, if a 20% improvement in curbside green bin waste capture was made, an additional 615 tonnes of food waste per annum (or eleven kilograms per household) would be diverted to an organics processing facility.

- **Enforcement through a Disposal Ban**

In terms of actively enforcing a curbside residential food waste disposal ban, while it may be somewhat effective in improving diversion rates, it is just as likely to "turn off" a percentage of residents and it will be difficult to enforce. The existing disposal ban in place for Commercial Organic Waste results in approximately 3,500 tonnes going to organics processing facilities, but there is room for greater diversion improvement in the commercial sector (a sector which generates far more waste than the residential sector). Focusing efforts on this sector, along with the multi-family housing sector is likely to have greater impact than imposing a disposal ban on food waste in the residential curbside collection.

- **Multi-Family sector collection**

Over the years this region has seen an increase in this type of housing stock. A staff report prepared in 2012 discussing recycling services available to this sector showed there were 13,430 multi-family dwelling units in the region, of which 12,300 were located in the CoN. The waste from this sector is typically collected by, and viewed as coming from, the Commercial sector. As the amount of multi-family type housing increases, so do the expectations that service levels should equate to those provided for single-family housing. Because of the inclusion of multi-family in commercial loads it is difficult to have hard numbers to work with, but the 2012 Waste Composition Study estimated 29 per cent of multi-family waste was food waste and compostable paper.

Multi-Family waste generation assumptions:

- A multi-family household would set out the same amount of garbage and food waste (excluding recyclables) as a single family household (280 kg/yr) with no allowance made for garbage use, lack of domestic livestock or backyard composter use, household size or demographic differences.
- $280 \text{ kg} \times 29\% = 81 \text{ kg/dwelling unit}$  of green bin material a year available for capture.
- $81 \text{ kg} \times 13,430 \text{ households}$  (based on the 2012 staff report) = 1,088 tonnes of material available for capture.
- 75% participation rate (similar to single family curbside set-outs) = 815 tonnes of material diverted.

Creating a level playing field for all residential sectors will improve diversion rates however the biggest impact by far can be achieved by targeting the commercial sector which makes up the largest component of waste generators in the region.

## **FINANCIAL IMPLICATIONS**

- **Curbside Outreach and Education**

Costs associated with curbside outreach and education would typically be factored into the curbside programs' operating budgets which are funded through annual utility (user) fees. Implementing an enhanced outreach program for curbside customers could be achieved through employing temporary, seasonal or Co-operative Education program students. Based on recent work completed on the RDN curbside collection program, a summer outreach team of two temporary staff employed for 16 weeks would require a budget line item of approximately \$36,000 (wages, benefits, and administrative overhead costs all included).

A financial implication related to curbside service is the reduced price differential between the landfill disposal fee and organics processing fee meaning collecting increased amounts of curbside organics material may result in slight increases in residential annual utility fees.

- **Enforcement through a Disposal Ban**

The process to implement a disposal ban for any material would require a one to two year timeframe for planning and stakeholder engagement, followed by consultation and preparation of resource materials. A longer term temporary person could be employed to spearhead the project, or the task could form part of a Compliance or Outreach position. Funding to achieve a disposal ban on compostable material from all sectors could be in the order of \$100,000 per year for the duration of the timeframe to phase it in. Following implementation, an ongoing commitment to enforcement and compliance of the ban is important for ensuring adherence and monitoring of the ban's effectiveness. An equivalent 0.3 FTE contribution to a Compliance or Outreach staff person (in the RDN), based on a CUPE level 11 classification, would require a budget line item of approximately \$27,000 (wages, benefits, and administrative overhead costs all included).

- **Multi-Family sector collection**

In this region, as with most other jurisdictions, the multi-family sector presents many challenges when it comes to collection service levels, diversity of housing types (town home strata, multi-level, multi-owner, etc.), resident engagement and participation in diversion programs, bans compliance, and service provider involvement. Food waste diversion is offered by the private haulers servicing the multi-family sector however uptake is limited and collection systems are not standardized. It is very unlikely that the existing RDN or CoN curbside collection system can change to accommodate servicing multi-family dwellings. In response to requests for assistance, work is currently underway in preparing a food waste collection tool-kit for building managers, haulers and residents to make use of when considering setting up a food waste diversion and collection program.

Reviewing the range of current service levels, and developing a strategy to include food waste (and perhaps standardized recycling) collection across the region could be accomplished with dedicated staff time. For this particular sector, with over 90% of the multi-family units located within the City, a region-wide coordination position may make sense. A temporary person could be employed for a year to spearhead the project (at an estimated total wage cost of \$85,000), or the task could form part of a Compliance or Outreach position. Ongoing program support could be accomplished by an equivalent 0.3 FTE contribution to a Compliance or Outreach staff person, based on a CUPE RDN level 11 classification, would require a budget line item of approximately \$27,000 (wages, benefits, and administrative overhead costs all included).

## **REGULATORY AUTHORITY**

None of the three options discussed require additional authority for implementation.

With regards curbside compliance and enforcement, solid waste trade journals recently have included articles regarding the legality of garbage inspections by collectors to identify those placing food waste or

recyclable materials in garbage cans. For this reason, outreach and education can be a less contentious and softer approach to achieve the desired behaviour changes. At the time of preparing this report staff knows of one legal challenge underway in Seattle (see Attachment 1 for information).

**SUMMARY/CONCLUSIONS**

The residential sector contributes the smallest amount of waste to landfill at 17%. Households receiving curbside collection service throughout the region are achieving a 60% diversion rate through their participation in the curbside recycling and food waste collection programs. Despite this laudable achievement, compostable organic waste still enters the waste stream.

Options to improve curbside compliance and participation in diversion programs include targeted outreach and education activities focusing on organics and other recyclable materials, extending the organics disposal ban to include food waste from residential sources, and ensuring the multi-family sector receives a similar level of collection service.

Focusing efforts on the commercial sector, along with the multi-family housing sector is likely to have greater impact than targeting curbside collection.

<b><i>Option Discussed</i></b>	<b><i>Estimated Costs to Implement</i></b>	<b><i>Diversion Impact</i></b>
Curbside Outreach to improve food waste diversion	\$36,000 staffing costs (annually employed seasonal staff).	Assuming capture of 20% (615 tonnes) of food waste from curbside garbage = <ul style="list-style-type: none"> <li>▪ 7% diversion increase for the curbside program</li> <li>▪ 1.15% diversion increase for the overall region’s disposed waste</li> </ul>
Enforcement through a disposal ban	<p>\$100,000-\$200,000 to prepare and implement a disposal ban (staffing costs and development of supporting outreach resources).            \$27,000 annually (staffing costs to monitor compliance and enforcement at the curb only).</p> <p>To be most effective, inclusion of food waste from all sectors in a re-launch of the existing commercial sector ban along with enforcement could be considered. The above costs could be applied to this approach.</p>	<p>If enforcement applied to curbside collection, diversion could increase when coupled with the option above; for example capture 40% (1,230 tonnes) from curbside garbage =</p> <ul style="list-style-type: none"> <li>▪ 14% diversion increase for the curbside program</li> <li>▪ 2.3% diversion increase for the overall region’s disposed waste</li> </ul> <p>The best achievable result is to enforce the current ban on commercially generated organic waste.</p> <ul style="list-style-type: none"> <li>▪ 15% - 25% diversion increase possible for the region’s overall diversion rate</li> </ul>
Multi-Family sector collection	\$85,000 to prepare a region-wide multi-family collection strategy, and to commence with implementation. \$27,000 annually (staffing costs to monitor and provide ongoing support for multi-sector collection programs).	Assuming capture of 815 tonnes of food waste from multi-family garbage = <ul style="list-style-type: none"> <li>▪ 20% diversion increase for the multi-family sector</li> <li>▪ 1.5% diversion increase for the overall region’s disposed waste</li> </ul>

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# Courthouse News Service

Monday, July 20, 2015 Last Update: 1:34 PM PT

## **Seattleites Call Trash-Inspection Law Garbage**

By JUNE WILLIAMS

SEATTLE (CN) - Seattle is illegally searching trash cans without warrants looking for recycling scofflaws, a group of residents claim in court.

Although Seattle has one of the highest recycling and composting rates in the nation, the city passed a law in September 2014 that fines residents for discarding food or recyclables in their personal garbage bins.

"The ordinance directs garbage collectors and Seattle Public Utilities (SPU) inspectors to search both residential and business garbage cans, without suspicion or a warrant, in order to estimate whether compostable materials or recyclables make up a 'significant amount' of a garbage can's contents," according to the complaint filed on July 16 in King County Superior Court.

Richard Bonesteel and seven other plaintiff residents contend that the city's new garbage-inspection law "violates privacy rights on a massive scale."

If garbage collectors find a can has more than 10 percent of food or recyclables, Seattle Public Utilities places a warning sticker on the can. Fines will allegedly start in 2016.

"The city's garbage inspection law violates privacy rights on a massive scale. Seattle has an estimated population of 652,500," the complaint states. "The ordinance directs garbage collectors to invade the private affairs of each and every Seattle resident and business on a weekly basis. The city and its agents began enforcing the ordinance in January 2015. From January through April 2015, the city issued an estimated 9,000 notices of violation."

Bonesteel and the other plaintiffs say that Seattle will enforce the ordinance without notice to residents and businesses or an opportunity to challenge violations resulting from the "warrantless inspections."

The residents want an injunction against the warrantless inspections, a judgment that the ordinance is unconstitutional, and damages for invasion of privacy and violation of due process.

Their attorney at Pacific Legal Foundation, Ethan Blevins, issued a statement about the lawsuit.

"Seattle can't place its composting goals over the privacy and due process rights of its residents," Blevins said in a statement. "This food waste ban uses trash collectors to pry through people's garbage without a warrant, as Washington courts have long required for garbage inspections by police."

For the City Attorney's Office, the the Seattle Public Utilities program "fully complies with the law, including the enhanced privacy protections afforded by the Washington constitution."

"SPU believes the instructions we've given to our collectors upholds the Washington state Constitution and civil liberties," SPU said in a statement. "There is no intention of opening trash bags. Containers are only tagged if the contamination is clearly visible. The guidelines state: if you can't see, don't report it and don't tag it."

- END -

Source: <http://www.courthousenews.com/2015/07/20/seattleites-call-trash-inspection-law-garbage.htm>