

# BEST MANAGEMENT PRACTICES

## FOR CURBSIDE COLLECTION OF RESIDENTIAL ORGANIC WASTE



BRITISH  
COLUMBIA

Ministry of  
Environment and  
Climate Change Strategy

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## Acronyms and Abbreviations

<b>BC</b>	British Columbia
<b>AD</b>	Anaerobic digestion
<b>EMA</b>	Environmental Management Act
<b>GHG</b>	Greenhouse gas
<b>ITT</b>	Invitation to Tender
<b>ENV</b>	Ministry of Environment and Climate Change Strategy
<b>OMRR</b>	Organic Matter Recycling Regulation
<b>RFID</b>	Radio-frequency identification
<b>RFP</b>	Request for Proposal
<b>SWMP</b>	Solid Waste Management Plan
<b>UBCM</b>	Union of British Columbia Municipalities

## Definitions

**Anaerobic digestion:** the breakdown of organics into digestate in the absence of oxygen

**Biogas:** renewably sourced gas that is produced through anaerobic digestion

**Circular Economy:** An alternative to a traditional linear economy (make -> use -> dispose). The circular economy keeps resources in use for as long as possible, extracts the maximum value from them while in use, then recovers and regenerates products and materials at the end of their service life

**Commingled organics collection:** yard and food waste are collected in the same collection container as mixed organics waste

**Compost [Organic Matter Recycling Regulation, BC Reg. 18/2002]:** a product that is:

- a) a stabilized earthy matter having the properties and structure of humus,
- b) beneficial to plant growth when used as a soil amendment,
- c) produced by composting, and
- d) only derived from organic matter

**Composting [Organic Matter Recycling Regulation, BC Reg. 18/2002]:** The controlled biological oxidation and decomposition of organic matter specified in Schedule 1 of the Organic Matter Recycling Regulation

**Food waste:** food scraps, such as fruit and vegetable peels, meat, bones, fats, cooked food leftovers, etc.

**Organic waste:** biodegradable waste of plant or animal origin from domestic or industrial sources. Eligible organic waste includes materials defined as Organic Matter in Schedule 12 of the Organic Matter Recycling Regulation. Examples include food scraps, grass clippings and garden waste, clean wood, animal, and human waste (biosolids only, not unprocessed sludge, sewage, or municipal wastewater)

**Pollution prevention hierarchy:** The 5R provincial pollution hierarchy described in Section 1.2 of this guide

**Processing:** Any activity necessary for preparing a component of the solid waste stream for reuse, recycling, recovery, or residual management

**Yard waste:** Small yard waste, leaves, tree or shrub prunings / small branches, and grass clippings

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# 1. Introduction and Background

## 1.1 Purpose of the Guide

In British Columbia (BC), organic waste currently represents 40% of material sent to landfills. In turn, as this material decomposes, it generates a significant amount of greenhouse gases (GHG), which contribute to climate change. To support diversion of organic waste from landfills and to reduce GHG emissions, the Ministry of Environment and Climate Change Strategy (ENV) has worked with Morrison Hershfield to develop best management practices to guide the design, implementation, and operation of residential organic waste curbside collection programs across the province.

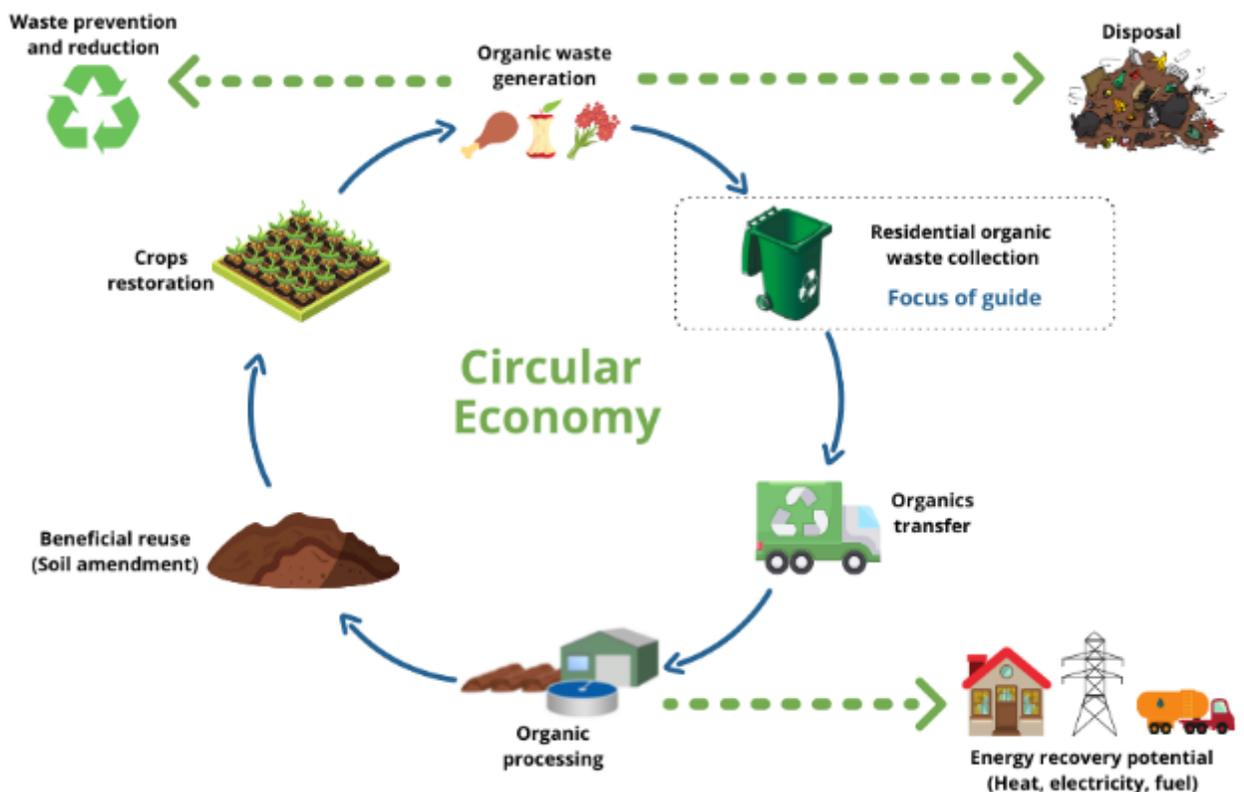


Figure 1-1: Organics life cycle

Residential organic waste collection is an important step towards achieving a circular economy. As shown in the figure above, there are many aspects to organics waste management. In this guide, 'organics' refers to food waste (food scraps) and yard waste.

### What do we mean by 'Organics'?



**Food waste or scraps**, such as fruit and vegetable peels/cores (suitable for backyard composting) and meat, bones, fats, and cooked food leftovers, etc. (unsuitable for backyard composting)



**Yard waste**, such as small yard waste, leaves, tree or shrub prunings, small branches, and grass clippings.

This guide is for local governments who want to start collecting organic waste at the curb or expand their existing collection programs. The focus is on best management practices for curbside collection of residential organic waste in BC. It describes the important factors essential to designing, implementing, and operating a successful collection program and provides step-by-step guidance.

The guide applies to communities of all sizes—local governments and regional districts (e.g., solid waste managers, planners, coordinators, operation managers)—and is based on successful programs that have already been implemented in BC.

## 1.2 Solid Waste Management Planning in BC

Under the Environmental Management Act, regional districts must develop solid waste management plans (SWMP) based on the 5Rs hierarchy: reduce, reuse, recycle, recovery and residuals management (Figure 1-2) and follow provincial guiding principles for solid waste management.

Solid waste management, including organics, should first focus on actions at higher levels in the pollution prevention hierarchy, such as reducing and reusing products as a prime strategy. These actions can



Figure 1-2: Pollution prevention hierarchy

eliminate or reduce the costs to manage the waste at the lower hierarchy levels.

Organic waste management relates to all levels of the hierarchy except residuals management. Prevention and reduction of residential food waste is covered by the first two Rs. Composting (both backyard and at processing facilities) is considered recycling (the third R), and energy recovery (the fourth R) can be achieved through anaerobic digestion (AD) for organics. Combined, these work together to prevent organics going to the landfill.

### 1.2.1 Prevention and Reduction of Residential Food Waste

Food waste reduction or prevention is a strategy for preventing food waste from being created in the first place. A growing number of regional districts, local governments, and community groups throughout the province are taking steps to prevent or reduce food waste. We encourage you to check with your regional district to find out whether any support is available for local food waste prevention or reduction programs.

ENV has produced a Residential Food Waste Prevention Toolkit to help local governments or non-governmental organizations address the issue of preventable post-consumer residential food waste. The toolkit can be found at: <https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/prevent-food-waste/prevent-residence-food-waste>

Many local governments support reducing organics at the source through home (backyard) composting. Even after an organics collection program is introduced, home composting is an important way to reduce organics needing to be collected, processed, and marketed.

Home composting can still be actively supported through initiatives including providing subsidized compost units, and encouraging residents who wish to further reduce their waste through compost coaching or educational materials.

## 1.3 Benefits of Diverting Organic Waste from Landfill

Preventing organic waste generation and diverting organic waste from landfills to produce valuable products, such as compost, contributes to communities' sustainability. These efforts offer significant environmental, economic, and social benefits, helping underpin a circular economy.

## Benefits of Organic Waste Diversion



### Environmental

- Reduces GHG emissions
- Preserves landfill capacity
- Reduces landfill leachate
- Improves soil



### Social

- Protects human health
- Reduces landfill safety risks
- Contributes to land preservation through compost use
- Contributes to healthy local soils and agriculture



### Economic

- Extends landfill life
- Produces marketable products
- Provides employment
- Reduces costs for leachate and landfill gas management

For more information about compost use and the associated benefits, please see ENV's website at: <https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/regulations-guidelines/compost>

For more information on typical compost systems, including composting and AD and their end products, refer to Environment Canada's "Technical Document on Municipal Solid Waste Organics Processing" (2013), available at: <https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/municipal-solid/environment/organics-processing-technical-document-summary.html>

## 1.4 Regulatory Considerations

To achieve an effective organic waste management system, it is important that residential organic waste collection programs are designed to support the operations of organic processing facilities.

The Organic Matter Recycling Regulation (OMRR) governs the construction and operation of compost facilities and the production, distribution, storage, sale and use of biosolids and compost in BC. It provides guidance to local governments and compost producers on how to use organic material while protecting soil quality and drinking water sources. For more OMRR information and guidance, visit <https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/regulations-guidelines>

ENV prepared the following guidelines to help proponents with developing and operating a compost facility in compliance with the OMRR:

- Summary of General Composting Best Management Practices, July 2016, <https://www2.gov.bc.ca/assets/gov/environment/waste-management/organic-waste/compost-best-practice-info-notice.pdf>
- Compost Facility Requirements Guideline: How to Comply with Part 5 of the Organic Matter Recycling Regulation, March 2004 (Forgie, Sasser and Neger 2004), <https://www2.gov.bc.ca/assets/gov/environment/waste-management/organic-waste/biosolids/compost-facility-req.pdf>

Other applicable regulations that fall under the EMA and that apply to organics processing and compost production include, but not limited to:

- Code of Practice for Agricultural Environmental Management (AEM Code) (BC Reg. 8/2019)
- Code of Practice for Soil Amendments (BC Reg. 210/2007)

## 2. Conditions to Support a Successful Collection Program

Several conditions contribute to the success of a residential organics waste curbside collection program. Figure 2-1 below highlights these.

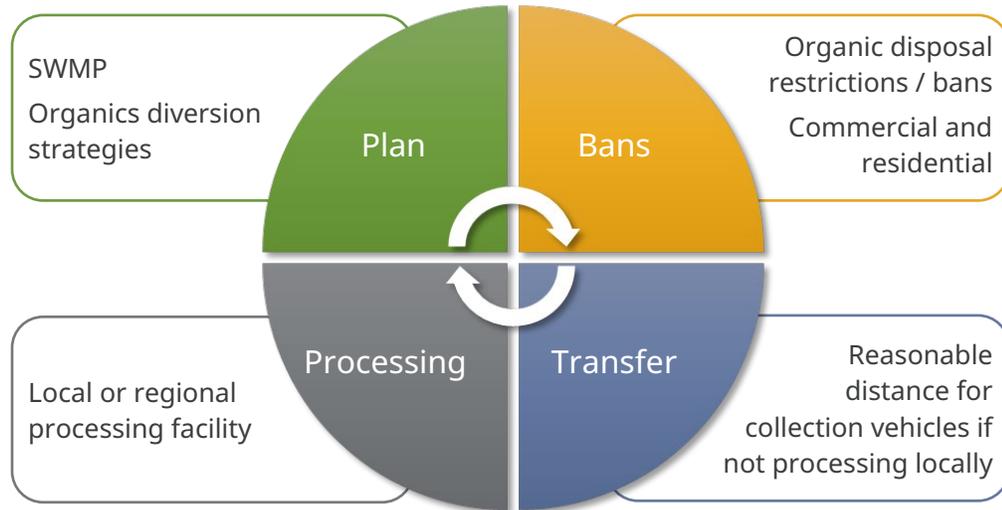


Figure 2-1: Key conditions for a successful collection program

### 2.1 Alignment with Plans

The program needs to be developed to be consistent with the regional district's SWMP, existing organics diversion strategies and sustainability goals.

### 2.2 Presence of Disposal Bans or Restrictions

When processing facilities are established, regulatory tools, such as organics disposal restrictions or bans, can help influence source segregation and increase waste diversion. Considerations for bans and restrictions are covered in Section 4.1.

### 2.3 Access to Transfer/Processing Facilities

Local governments are encouraged to contact their regional district to understand which organics processing facilities exist. The facilities operating in the local region should be listed in the SWMPs, as per ENV guidance.

If the organics processing facility is located a significant distance from the collection area, it is often more economical to deliver the organic waste to a

transfer station as an intermediate collection location. At the transfer station, the organic waste is temporarily stored and consolidated before being hauled to a processing facility. Transfer stations are typically operated by regional districts.

Appendix A includes a checklist to help program designers during early program planning.

## 3. How to Design a Collection Program

Aspects to consider when planning to introduce organics collection include what and how much will be collected, collection type and frequency (“program design”), strategies to encourage uptake and participation, and the financial implications of introducing a new collection stream to the system.

### 3.1 Typical Organics Capture Rates

The amount of organics collected may be influenced by the number of occupants in each home (i.e., average household size as reported by Statistics Canada), yard size and length of growing season (for yard waste collection), and whether backyard composting or other home-based organics management is common.

In the past, program managers relied on waste composition studies to estimate how much organic waste could be collected from a residential curbside collection program. However, with several curbside organic collection programs operating in BC, capture rates can be estimated based on these programs’ performance.

Typical organics capture rates for these existing programs throughout BC range from 120 to 140 kg of food waste per household per year. The amount of yard waste collected varies greatly but can exceed 250 kg per household per year.

To learn what capture rates can be expected, program managers should contact neighbouring local governments that either have organics collection in place or have a similar program to what is being considered.

Though some food waste will likely still enter the residential garbage stream, program managers can expect a significantly reduced garbage capture rate.

### 3.2 Program Design Considerations

Program design considerations include whether collection will be manual or semi/fully automated, weekly, or biweekly, and whether limits will be placed on how much waste (garbage or organics) can be set out at the curb. Some program managers have used the introduction of organics collection as the opportunity for wholesale program change, switching collection frequencies, phasing out manual collection by moving to cart-based semi/fully automated collection, or expanding collection to include recycling or yard waste.

In BC, best practices for residential curbside collection consist of three-stream collection programs: garbage, organics, and recycling. Collecting organics weekly and garbage biweekly greatly assists in building participation for organics diversion. Many successful programs provide waste diversion incentives through garbage can limits and user-pay approaches, where residents who generate more garbage pay more for the service. Best practices also include ongoing education and engagement and opting for collection vehicles that run on biodiesel or alternative fuels to reduce emissions and address climate change concerns.

Some of the key objectives that drive program design are highlighted in Section 3.3. Sections 3.4 to 3.8 guide the program designer through the process of designing a residential organics curbside collection program (shown in Figure 3-1). If your local government is already collecting garbage and recycling at the curb, some of this content may be redundant; however, it may serve as a refresher or a solid introduction to those who are new to setting up and operating a curbside collection program.

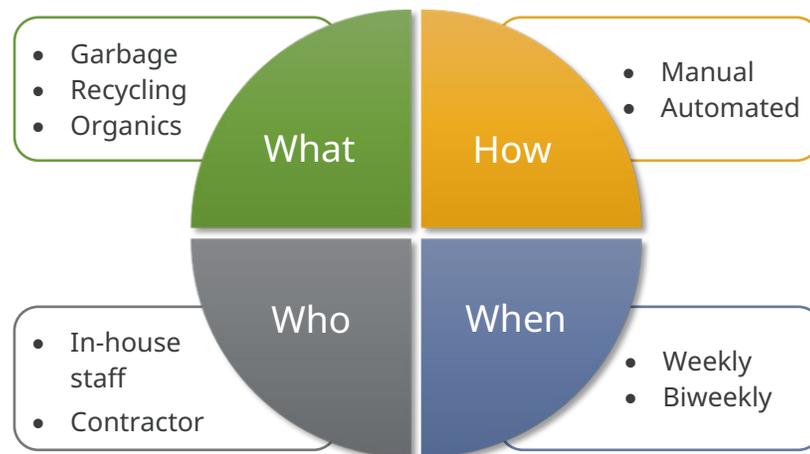


Figure 3-1: Collection system considerations

## 3.3 Drivers for a Successful Program Design

### 3.3.1 Convenience

#### For Residents

The collection program needs to provide improved convenience for residents. This can be achieved through adding curbside organics collection, expanding an existing program (e.g., adding food waste to existing yard waste collection), adjusting collection frequency to reduce the need to self-haul organics to

transfer or disposal facilities, or adding curbside recycling collection as part of the system change. Providing standardized containers to each home both improves convenience and eliminates a barrier to participation.

### **For Administration**

The curbside collection program should also be convenient for the local government providing the service. This can manifest itself through reduced efforts and costs required to manage organics that are disposed of as garbage at the landfill. Providing standardized containers to homes can make collection easier for collection staff and simplify compliance once the program is underway. A local government may choose to switch up collection systems from manual to automated in response to occupational health and safety concerns.

## **3.3.2 Sustainability**

### **Environmental**

Collecting and diverting organics for processing will reduce landfill generated GHGs. This is often a key driver for local governments' climate change action plans or sustainability plans and is often an important aspect of a regional district's SWMP. Keeping organics out of the landfill helps extend its useful lifespan, conserving the resources that would be required to replace the landfill.

### **Social**

Requiring residents to sort and separate their waste can create a new personal awareness of household consumption trends, leading to reduced disposal rates.

### **Financial**

Including organics in the regular curbside collection system means the program becomes "business as usual" for annual budgets, long-term financial planning, and program sustainability. Implementing a utility fee (user fee or cost recovery mechanism) for curbside collection allows for the true costs of operating the collection program to be understood and budgeted for. This would encompass the costs to collect and dispose of garbage and to process organics, along with support mechanisms such as education and outreach, asset replacement, and program oversight.

### 3.3.3 Effectiveness and Efficiency

Through good design, the collection system should meet the program objectives, achieving a high level of effectiveness. Efficient service delivery through scheduling, collection routing, and use of appropriate collection assets (vehicles and containers) will help achieve the required objectives.

While assessing the needs and options for introducing organics collection, staff should also recognize their individual community's needs and local government commitments with respect to regional waste diversion targets. Involving residents in program planning helps stimulate interest and enthusiasm for program changes. For more on this topic, see Section 4.2.

## 3.4 Waste Types Collected

Larger urban centres commonly collect yard waste as part of their curbside collection systems, and many regional district collection programs also provide yard waste collection. Considering the introduction of organics collection as part of a new or existing curbside program offers the opportunity to consider:

- collecting food waste by itself,
- collecting yard waste by itself (if it is warranted and will assist in meeting diversion goals and sustainability objectives), or
- including curbside collection of yard waste and food waste if the organic processing facility is willing and able to handle both types of organics (yard waste provides a great source of carbon for an effective composting process).

Some processing facilities can handle mixed food and yard waste, while others may need them delivered separately. Yard waste processing by itself tends to be done for a lower cost, as the infrastructure and operating requirements are not as involved or expensive. Including food waste with the yard waste may increase processing cost, resulting in a higher cost for collection.

Some manual collection programs collect yard waste separately in kraft bags or easily identified containers; however, collecting it commingled with food waste is more common with automated collection programs. This can reduce negative perceptions associated with food waste collection (odour, insects), but also increases the amount of material collected.

Whether changing an existing program or introducing a new program, the following decision points are recommended:

- Confirm processor is able and permitted to take food waste, whether it is to be collected and delivered separate from yard waste or if commingled is acceptable, and the new tipping fee for processing.
- Confirm collector can handle the increased material and will be able to collect as per processor's requirements.
- Decide on the container types as per the proposed collection method (cart based or manual collection).

For manual collection, make sure the containers are suitable for manual handling. If a yard waste collection using carts is expanded to include food waste, are they suitable for food waste? For more information about the collection methods and collection bin selection, refer to Section 3.6.

### 3.5 Service Area Considerations

When offering a residential curbside organics collection program to a service area, many considerations can influence selection of the collection area and the type of collection to be provided.

#### Housing Type



- Single family and equivalents that can be serviced with curbside collection vehicles (duplex, triplex, and four-plex units, mobile homes in mobile home parks, and strata housing complexes). A discussion with the local government's Planning (for zoning definitions), Building Inspection, and Finance departments can help with defining service recipients.

#### Climatic Considerations



- Shorter yard waste seasons in areas with longer winters may only require seasonal collection (Spring through Fall)
- Long winters with sub-zero temperatures that can risk organics freezing and sticking to the collection container
- Hot summers causing odours and attracting insects to stored organics. This can be mitigated by increasing collection frequency

### Service Area Size



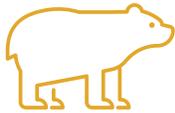
- Urban, suburban, or rural
- Ease of travel for collection vehicles to access all areas

### System Efficiency



- Location of post-collection facilities (transfer station or organics processing facility)
- Distance between garbage/recycling tipping location and organics tipping location, which may be a factor for split compartment trucks travelling with an unbalanced load

### Risk of Wildlife Interactions



- History of wildlife interactions may require wildlife-resistant containers and a focus on mitigation education for residents and collectors

## 3.6 Collection Methods and Collection Bin Selection

This section describes the difference between manual, automated and semi-automated collection methods, and the types of containers compatible with each method.

### 3.6.1 Manual Collection

In a manual collection system, the collector leaves the truck's cab to lift and empty the containers into the truck hopper.

Curbside collection containers tend to be smaller and less expensive and are often available at local retail stores.

- Best practice for residential food waste collected manually will be a 45-55 litre curbside container. This size has enough capacity to hold a typical household's weekly food waste and is ideally sized for collection personnel.



Figure 3-2: District of North Cowichan manual collection truck

- For residential yard waste, best practice is to use Kraft bags or 80-120 litre containers (likely similar in size to the maximum garbage container size).

Manual collection is also applicable to multi-stream collection using split-body trucks (Figure 3-3). This style of truck has a partition that allows two material streams to be collected on a single pass while keeping different materials separated. Collection scheduling for a three-stream program might involve food waste and recycling collection one week, and food waste and garbage the next. This type of efficiency means two material streams can be set out at the curb for collection on the same day, requiring only one pass of the truck.



*Figure 3-3: Regional District of Nanaimo (RDN) split-body truck*

### 3.6.2 Cart-based Automated Collection

Many local governments and private sector collectors have switched recently to automated cart-based collection. For automated collection, the operator stays in the cab and has no direct contact with the cart or its contents. A mechanical arm on the side of the collection vehicle reaches out, grasps, lifts, and empties the collection cart. This switch is often precipitated by a desire to reduce worker injuries, retain an aging workforce, increase the size of labour pool for waste collection staff and create opportunities to diversify the workforce.

Over time, cart sizes and lift mechanisms have changed to cater to collection programs with smaller carts that promote waste diversion. The move to smaller carts has shown that worker safety through automation is compatible with promoting greater waste diversion.



*Figure 3-4: RDN automated cart collection truck*

Switching to carts can be attractive for communities considering the expansion of their collection system to include organics. The larger cart sizes and the ability for the lift arms to handle bulkier and heavier containers makes this type of collection suitable for yard waste if desired by the community and acceptable to the organics processing facility.

With semi-automated collection, the truck does not have a mechanical lift arm. Though the carts are the same as those used in an automated program, the collector needs to exit the truck cab and manually position the cart at the tipper mechanism to be lifted and emptied. The collector then replaces the cart and re-enters the truck. Trucks equipped for this collection method have a drop frame that puts the hopper in reach of a manual lift. Though not common, a combination of cart-based and manual collection is possible. If the motivation to switch to cart-based collection is to reduce worker injuries, collection of bulky and heavy yard waste could be included in curbside pickup using automated carts, with separate manual food waste collection. This results in a lot of curbside containers for residents (and collectors) to manage.

As with manual collection trucks, split compartment bodies are also available for cart-based (semi and fully automated) collection systems

Best practice for cart-based collection is to ensure the carts are compatible with the lift system. This can mean working closely with both vehicle manufacturers/suppliers and cart providers.

Some of the benefits of and possible barriers to automated collection include:

### Benefits

- Fewer worker injuries and easier for residents to move (no lifting)
- Increases labour pool for collection staff by being less reliant on manual skills and physical strength
- Often lower operating cost per household
- Carts are more wildlife resistant. Carts can be bear resistant or retrofitted with clips for bear resistance
- Suitable for commingled yard and food waste collection
- Improved data gathering is possible through Radio-frequency identification (RFID) tagged carts and trucks fitted with RFID readers
- Standardized (uniform) carts simplify collection for collection staff
- Can include cart procurement, maintenance, exchanges, and storage as part of the collection contract

### Barriers

- Capital cost of containers (\$50-\$240 depending on size, purchase quantity, and hardware, such as bear-resistant components)
- Space required for maintenance and storage of carts
- Can be challenging to collect carts in areas with steep or narrow streets or in communities where roadside parking is prevalent
- Residents must set containers out properly to allow automated pick up
- Minimum cart size (80 litre) is not well suited for food waste, as residents may be tempted to fill cart to capacity with non-food-waste material or only set cart out when it contains several weeks of waste
- Challenging for residents who usually drive their containers to the end of the driveway (long, rural driveways)
- Significant staff time required to implement and administer a cart-based collection system
- Service providers must have a cart-compatible back-up truck for days when primary trucks are out of action

### 3.6.3 Container Types and Sizes

#### The Curbside Container

Manual program containers, such as garbage cans and green bins, are relatively easy to locate in retail stores but cannot be picked up with the mechanical arm of an automated collection truck. Best practice for a manual organics collection program is for every home to receive a standard curbside container (as shown in Figure 3-6), rather than allowing residents to purchase their own or repurpose other containers. This ensures the collector knows the correct materials are out for collection, removes confusion for residents as to which container is used for what items, and creates a social norm by promoting participation in the program. If standard containers are a program requirement but are not being supplied by the local government, arrangements should be made with local retailers to stock only the permitted container types.



Figure 3-5: RDN curbside containers

Automated collection carts range in size and capacity from 80 to 360 litres. Best practice for a cart-based program collecting only food waste in the organics stream is for a small cart (80, 100, or 120 litres); however, program managers need to be aware that even these smaller carts may have too much capacity for food-waste-only programs. Automated collection programs that include yard waste typically promote larger sized carts. If yard waste collection will be a new service for residents, discussions with managers of existing yard waste collection programs are recommended to best gauge collection quantities and comparable cart sizes.

Selecting the appropriate containers is an important component of program design. Ease of storage and use, consistency at the curb for the collector, appropriate sizing for the different material streams to reflect waste diversion goals, and aesthetics can influence the decision-making process. Wildlife interactions, particularly with bears, can influence collection methods and container type (see Section 4.5).

Some local governments have offered residents the option of select-a-size for yard waste and/or garbage carts so residents can choose a container that's appropriate for their needs. For programs offering cart-size exchanges, swap-

out fees are usually applied for residents who request a cart size different from the default being initially provided, and the local government would tailor utility bills accordingly so those who have larger carts pay a higher user fee.

### The Kitchen Catcher

A convenient kitchen food scrap collection option is to provide each home with a small container where kitchen and food scraps can be collected before being transferred to the curbside collection container. Providing a container can support program uptake and participation by removing perceived barriers to food scrap collection and storage.

These are often branded as a kitchen caddy, collector, catcher, or compost pail. Most curbside container manufacturers also produce these smaller (7 litres +/-) containers, which are designed for ease of use. Typically, including these with the curbside container procurement process only adds a small cost to the overall program start-up costs.

A local government may want to promote the reuse of readily available containers inside residents' homes. When program-specific kitchen catchers are not provided, residents can be encouraged to repurpose regular kitchen containers like empty yoghurt, ice cream or other dairy containers, Tupperware containers, and coffee cans. Alternatively, residents can purchase a container of their choice from a retailer.



*Figure 3-7: Example of a potential kitchen catcher*

## 3.7 Collection Frequency

Best practice for collection frequency is to collect food waste weekly, with garbage and recyclables collected every-other-week. Adjusting collection frequency can be an effective tool for building participation for organics diversion, as well as allowing the acceptable garbage limit to be reduced.

Under such a program, the collection frequency for a three-stream program could look like that shown in Figure 3-8.



Figure 3-6: RDN collection frequency schedule

*Example from the RDN. The schedule follows an add-a-day system. After each statutory holiday that falls on a weekday (Monday - Friday), the scheduled collection day advances by one day.*

If yard waste is co-collected with food waste, there may be a short period with less yard waste, such as in winter. Weekly organics collection would continue, just with less material (food waste predominantly) in the curbside containers.

### 3.8 Service Delivery Options

Just as collection programs and methods differ across local governments, so too do the personnel who are doing the collecting. When redesigning or renegotiating collection programs, a local government can consider who is best positioned to provide the service at the curb. Local governments who bring the service in-house usually already provide some component of curbside collection and have the capacity to expand the service.

An example where a municipality opted for a different solution includes:

- **City of Nanaimo.** Until 2018, the City collected garbage and organics with City crews, with recycling collection done by a contractor. When introducing their new automated collection system, the City brought recycling in-house and now provides collection of all three curbside streams. The move to an automated system was largely driven by the improving occupational health and safety.

Moving to an in-house delivery model involves many benefits and risks, such as:

### Benefits

- Opportunities for shared staffing and equipment between service areas
- Greater flexibility to modify services (including/excluding materials)
- Greater control over collection and the nature of organics collected (important if the collector is driven to minimize contamination levels)
- Greater control over operational efficiencies
- Greater control over messaging to participating households

### Potential Risks

- Risk of higher administrative, management, coordination costs compared to contracted delivery model if additional staff and resources are required for program management
- High initial capital investment to purchase equipment
- Additional staff required, which may be challenging to attract due to labour market conditions
- Exposure to greater liability through additional high-risk operations

Considerations include vehicle capital costs and the capacity to provide ongoing maintenance on complex machines (especially the lift arm mechanisms for automated collection trucks). Relations with the municipal workers' union and the ability to have guarantees of service may influence a decision on whether to bring a service in-house. Having experienced staff available, or the ability to staff up and manage those staff to provide the service, may prove challenging if this will be a new service for a local government.

Keeping service costs affordable to taxpayers needs to be weighed, particularly where competitive procurement could result in several private firms bidding on the work. Finally, economies of scale come into play, where a private firm will have mechanics, spare drivers, spare trucks, and support staff who can all be quickly deployed to respond to any incidents to quickly address client needs.

For programs where collection is done under contract, best practices include regularly scheduled meetings between the local government program manager and the contractor. Meetings will likely be annual for established programs, but when changes are being planned under the current contract or in the first year of a new contract, the meetings will need to be more frequent to ensure the anticipated service changes can be met.

### 3.9 Program Cost Considerations

Financial implications and costs associated with a new curbside organics collection program will be influenced by many factors. The table below presents the cost factors that should be considered when scoping a budget to plan and implement a curbside organics collection program.

*Table 3-1: Program cost factors and considerations*

Factor	Considerations
<b>Community size</b>	<ul style="list-style-type: none"> <li>▪ The greater the number of households, the higher the total cost to implement a new program</li> <li>▪ A more widespread service area may require additional collection vehicles to complete the routes within set timeframes</li> </ul>
<b>Magnitude of change</b>	<ul style="list-style-type: none"> <li>▪ Introduction of manual food waste collection will likely cost less than for a cart-based automated organics collection program</li> <li>▪ Switching from an existing manual garbage program to cart-based automated for all waste streams will require significant investment in carts for all waste streams including organics, and new collection vehicles</li> <li>▪ Is the new program only introducing food waste collection, or will other new waste streams also be collected as part of the program change, such as yard waste or curbside recycling collection? Additional waste streams may impact operating costs</li> </ul>
<b>Transfer requirements</b>	<ul style="list-style-type: none"> <li>▪ Requiring a new or retrofitted transfer facility will add capital costs to the program implementation</li> </ul>
<b>Marketplace variability</b>	<ul style="list-style-type: none"> <li>▪ For programs that rely on contracted collectors, there are geographic surcharges to consider when going to the marketplace. A Request for Proposal (RFP) in more populated areas of BC would likely generate interest from many proponents while a lesser populated area may get fewer proposals. The lack of competition can drive up collection prices</li> </ul>

Factor	Considerations
<b>In-house capacity and ability</b>	<ul style="list-style-type: none"> <li>▪ Aspects of program planning, design and implementation can either be done by local government staff or require external help (consultants or contractors)</li> <li>▪ Will an externally authored study or report be required to gain political support?</li> </ul>
<b>Collection vehicles</b>	<ul style="list-style-type: none"> <li>▪ The price of a new collection truck is dependent upon truck capacity, specifications, type of packer, collection method (manual, semi or fully automated), currency fluctuations, and more. As a sample price (2021) a smaller (e.g., 19 cu yard) single packer truck starts at \$250,000</li> <li>▪ For programs delivered by local government staff, will new collection vehicles be required?</li> <li>▪ Will a collection contractor be required to have new trucks at the commencement of a new contract?</li> </ul>
<b>Collection containers</b>	<ul style="list-style-type: none"> <li>▪ Current sample price (2021) ranges: <ul style="list-style-type: none"> <li>– Manual container (45-55 litre): \$30 - \$40 per unit</li> <li>– Cart (semi or automated collection) \$50 - \$240 per unit (cart size and need for animal resistance features will influence price)</li> <li>– Kitchen catchers \$4 - \$6 per unit</li> </ul> </li> <li>▪ Will the local government provide new curbside containers required or will residents provide their own?</li> <li>▪ What type of containers will be specified to match the collection method?</li> <li>▪ How many containers are required?</li> <li>▪ Will all, or a portion of the containers need to be wildlife and/or bear resistant?</li> </ul>

Factor	Considerations
<b>Communications and consultation</b>	<ul style="list-style-type: none"> <li>▪ Will Council or Regional Board require an extensive public consultation process to assist in the program planning and decision making?</li> <li>▪ Will First Nations consultation be required? Will the program provide collection services to a First Nation reserve? Will Indigenous rights be affected from an increase in traffic across the service area and/or affect a First Nation reserve? Is the organics processing or transfer facility located near a First Nation reserve?</li> <li>▪ What extra considerations are required for the communications plan? Will language interpretation be required?</li> <li>▪ Will any of the suggested components and tools in the communication plan need to change to meet the approved budget? What is the implication of doing that?</li> <li>▪ More households can result in higher total costs for implementing the communications plan.</li> </ul>

### 3.10 Funding Opportunities

To lessen the burden on the local government's tax base, external funding opportunities may be available. Examples include:

- **Regional district funding opportunities.** Partnership opportunities may exist with the regional district to access funds such as solid waste reserve funds set aside for waste diversion or alternative disposal methodologies.
- **Provincial government funding opportunities.** The Province of BC has made grant funding available in recent years to assist local governments with developing and implementing organics collection programs and to establish organics processing facilities.
- **Union of British Columbia Municipalities (UBCM) administers Community Works Fund allocations as part of the Federal Gas Tax Agreement.** Solid Waste is an eligible category for use of these funds. The projected allocation amounts have been assigned through to 2023-2024 (Year 10 of the program).

- **Internal reserve funds or operating surpluses.** With a longer planning horizon, local governments may choose to build up their own reserve funds or generate operating surpluses from previous years' operating budgets to fund part or all of a new organics collection program.

### 3.11 Cost Recovery

Section 2 described some of the conditions that support a residential curbside program's success. Many SWMPs support user-pay approaches to maximize behaviour outcomes. In the context of curbside collection, the user-pay approach means that residents who generate more waste pay more for the service in form of a utility or user fee.

This fee should capture all costs associated with delivering the collection service (see Section 3.9 Program Cost Considerations). An example of costs captured in a utility fee (for a contracted-out collection model) are shown below.

#### Breakdown of Utility Fee Expenditures

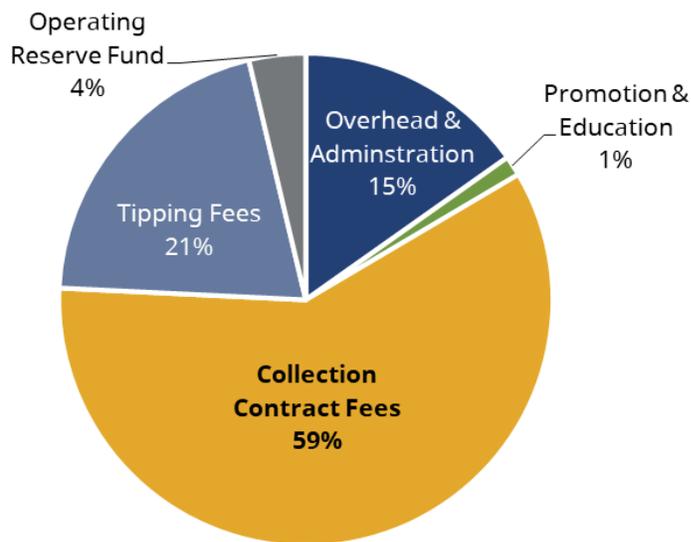


Figure 3-7: Breakdown of utility fee expenditures

Annual budgeting that accounts for anticipated program expenditures will guide the calculation of the utility or user fee.

## 4. Supporting Mechanisms

### 4.1 Regulatory Support

Best practices show that for a collection program to be successful it needs to be set up and supported by regulations such as bylaws and enforcement as well as effective public engagement and education.

#### 4.1.1 Bylaws

Specifics and language of a bylaw to provide the collection service may differ between local governments, but the following main points are found in the bylaws of successful programs.

- Making participation in the collection program mandatory for all residences where curbside collection is feasible (i.e., single family homes and their equivalent such as mobile homes, patio homes etc.).
- Establishing limits (e.g., container sizes and quantities) for how much garbage and organics is to be collected each collection day (note that Recycle BC does not currently set limits on the amount of residential recycling permitted for collection under its program).
- Setting collection frequency for each material stream being collected.
- Defining acceptable materials to match the processor's requirements.
- Defining unacceptable or prohibited materials in the various streams (e.g., liquids, hot ashes, rocks, animal carcasses, pet waste, or soil). Prohibitions should include organics in the garbage and recycling containers, garbage in the organics and recycling containers, and recyclables in the organics and garbage containers.
- Setting the utility (user) fee for the collection service.
- Setting penalties (e.g., fines) for non-compliance with the bylaw.

#### 4.1.2 Disposal Bans

Organics disposal bans are becoming a common and effective policy tool to accelerate organics diversion for local governments operating disposal facilities. If there are organics disposal bans at the disposal facility, a collection bylaw would need to define these materials as being accepted at the curb for diversion to an organics processor.

Landfills with disposal bans stipulate a maximum threshold of organics allowed in garbage arriving at the landfill for disposal. The threshold is typically set as a percentage of the total material and is enforced by landfill staff spot checking trucks as their loads are tipped. Setting a progressive threshold over a defined period (e.g., two to three years) can incentivize continued improvement. For example, when first implementing a disposal ban, a 25 % threshold for organics can be set, and it can gradually be tightened to a 5 % threshold.

### 4.1.3 Enforcement

Monitoring curbside containers for separation of material streams and compliance with collection prohibitions can be done through curbside container audits and inspections during collection. See Section 6.2 for more information.

## 4.2 Public Education and Outreach

### 4.2.1 Planning for Change

Changing service levels can be a challenging and frustrating experience, especially if reasons for the change are not fully understood. To build enthusiasm and understanding before changes are implemented, a meaningful consultation strategy is recommended.

Best practice includes involving residents in the decision-making process, which can include items like preferred container types/sizes, need for yard waste collection, and collection methodology and frequency. This will help the local government identify barriers to participation while providing residents with information on the benefits of the change being considered. With public input, the planned collection service can be fine-tuned to match the collection service with the community's needs and expectations, which in turn assists with program planning and equipment procurement. Understanding the community's reactions to or preferences on the proposed service changes can be used to develop strategies to overcome reluctance in accepting the new service and foster community buy-in when the program is implemented.

An example of community consultation undertaken by a smaller community can be seen in Appendix B.

## 4.2.2 Communicating the Change

For a new collection service to launch successfully, a comprehensive Communications Strategy is recommended to identify and describe the purpose, target audience, key messages, tools, and timing for communications.

Key messages include describing why the changes are needed and creating interest and enthusiasm for the new program. A suite of tools can be used, from traditional and social media, outreach events, and curbside ambassadors to online and printed information and advertising.

Timing should encompass lead-up to the program launch and continued outreach beyond the launch, possibly by way of an ambassador working with residents and collection staff. This would help residents gain familiarity and knowledge through compliance actions (e.g., container inspections and compliance notices), and to assist with questions and direct personal contact.

A useful tool for changes in collection service is the preparation of answers to anticipated frequently asked questions (FAQs). These can be provided with information packages, set up on posters at display booths, and made available on the relevant solid waste pages of the local government website.

ENV has resources available to assist with communicating program information, including posters for communicating change:

<https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/regulations-guidelines/compost>

Appendix B includes some templates and examples for public education and outreach, including:

- A sample Communications Plan based on successful program launches in other BC municipalities.
- A generic template for Communications Tasks for Program Planning and Implementation.
- An example of FAQs prepared and used by the City of Salmon Arm before food waste collection was implemented in 2019.

## 4.2.3 Implementation Information

Providing as much information as possible in a variety of formats will support a successful program launch. An important tool in the Communications Plan is the program launch information. This information may include several items

and may be best provided when new collection containers are distributed to homes.

#### 4.2.4 Monitoring the Message

Keeping track of resident responses is important. Change can be uncomfortable for some people and changing how their garbage is collected may trigger a strong reaction. However, if the communications plan has worked well, tracking those responses may present some surprises.

In the example of the RDN's program launch in 2010, the curbside collection program changed for over 27,000 homes. The communications plan was extensive and used all communications tools available. Based on lessons learned by other larger urban centres (outside BC) when implementing curbside food waste collection programs, RDN staff set up a temporary call centre using casual staff from the landfill and transfer facilities. Over a 10-week period, over 3,560 calls and emails were received.

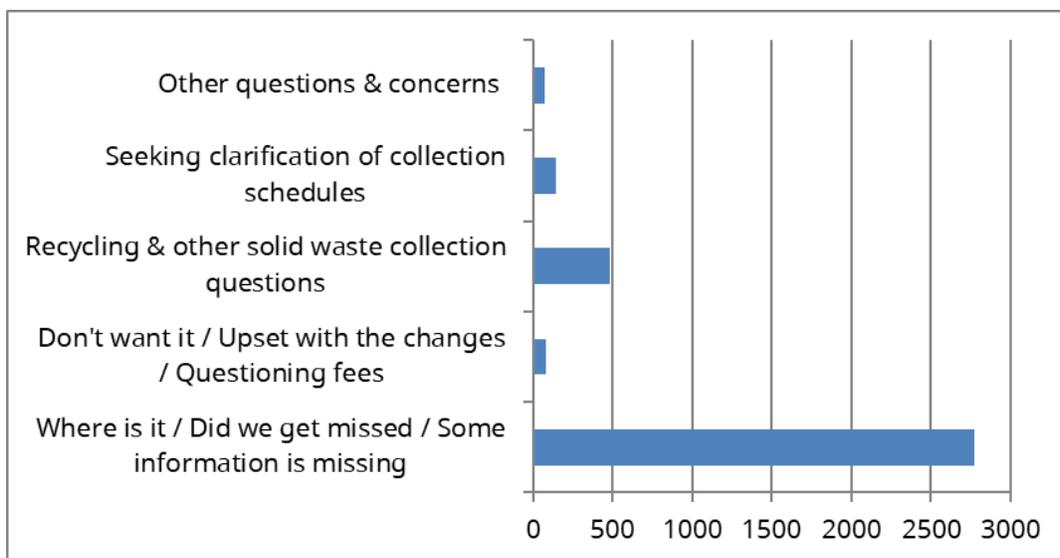


Figure 4-1: Summary of topics received by RDN call centre

The data showed that the communications plan was successful in that 78 % of calls or emails were from people concerned that they had not yet received their new container, or their information package was missing an element. Only 85 calls (2.4 %) were from people expressing their displeasure with the change.

While that program was launched when social media was not as widespread, moderating social media platforms is recommended. If you are using social

media platforms, you need to have the resources to respond to comments and monitor what is being said about the program.

#### 4.2.5 Ongoing Communications

Ongoing communication with residents is important to keep them engaged and promote participation. This also lets program staff remind residents of the program requirements and report on program successes and milestone achievements.

Five weeks after the Sunshine Coast Regional District launched their curbside food waste collection program in 2020, a local media article provided a comprehensive summary of the start-up, highlighting examples of what was and was not being done correctly by residents. Reminders on material preparation and waste reduction tips were also included, along with data explaining participation rates and positive resident feedback.

For its curbside collection program, the RDN sends newsletters out to residents two to three times a year. In the 16 months between June 2010, when program communications began in earnest, and October 2011 (the one-year mark), five newsletters or communication pieces were sent to homes receiving the collection service.

Newsletter content ranged from introducing the program changes and generating enthusiasm to celebrating residents' efforts in achieving the program's diversion and participation goals. RDN continues to send regular newsletters and post on social media to promote the program, update residents on program achievements, and remind them of correct waste sorting and preparation practices.



Figure 4-2: RDN newsletter example

## 4.3 Compliance and Encouragement

Promoting curbside collection program participation and establishing desired behaviours are an extension of public outreach and education. While “enforcement” is always possible and may be needed from time to time, many programs use a softer “encouragement” approach as an as an effective tool.

### 4.3.1 Compliance Protocol

As with RecycleBC requirements and best practices for curbside recycling collection, keeping unacceptable items (contamination) out of the organics stream is important to the composting process. RecycleBC has reported that curbside stickering (notices) and active enforcement are most effective in keeping contamination levels low. Contamination enforcement is generally done by collection personnel, where the driver observes what’s in containers before depositing their contents into the collection vehicle. The following is an example of a proposed enforcement protocol

- **1<sup>st</sup> incident:** driver removes non-compliant material and leaves it behind with a sticker/notice. A record is kept by the driver of each infraction
- **2<sup>nd</sup> incident:** the same process is repeated
- **3<sup>rd</sup> incident:** the whole container is left behind with another notice. A letter is sent by the collection contractor (cc’d to the Municipality) or by Municipal program staff stating that ongoing incidents may result in the cessation of the collection service
- **If contamination continues:** collection personnel will ask the Municipality to withdraw the collection service until the resident meets with Municipal staff and agrees to participate properly in the program.



Figure 4-3: RDN and District of Kitimat’s compliance notice examples

Experience in other BC communities indicates that compliance often improves after the first incident notice is received by a resident, contamination rarely continues after the 3<sup>rd</sup> incident (when the container is left uncollected).

### 4.3.2 Recognition Program

The RDN created a “Thanks” sticker for its ambassadors to use when the District began auditing curbside recycling in 2014.

A recognition program like this recycling example could be expanded to include Organics collection.



Figure 4-4: RDN “Thanks” sticker

## 4.4 Public Education and Outreach Costs

The communication costs associated with adding organics to curbside collection fall into two categories: Lead-up communications prior to program launch, and ongoing program communications after the program launch.

The cost estimates and assumptions below are based on estimated costs (2021) to prepare and develop the communications tools described in the sample Communications Template.

Table 4-1: Estimated public education and outreach costs

Communications Cost / Household	Assumptions
<b>Lower cost</b> \$10.00/household	<ul style="list-style-type: none"> <li>▪ High in-house ability / capacity to plan and implement the tools and actions described in the communications template</li> <li>▪ No extensive public consultation required to determine program design</li> <li>▪ In-house capacity for producing materials</li> </ul> <p>Or:</p> <ul style="list-style-type: none"> <li>▪ Reduction in communications activities to meet budget requirements</li> </ul>

Communications Cost / Household	Assumptions
<p><b>Medium cost</b> \$15.00/household</p>	<ul style="list-style-type: none"> <li>▪ Moderate in-house ability / capacity to plan and implement the tools and actions described in the communications template</li> <li>▪ Contracted or consultant assistance needed</li> <li>▪ Public consultation required for program design but can be done as part of regular communications</li> <li>▪ Some in-house capacity to produce materials</li> <li>▪ Able to have communications budget approved</li> </ul>
<p><b>Higher cost</b> \$20.00/household</p>	<ul style="list-style-type: none"> <li>▪ Limited level of in-house ability and capacity to plan and implement the tools and actions described in the communications template</li> <li>▪ Contracted or consultant assistance needed</li> <li>▪ Extensive public consultation required to determine program design</li> <li>▪ Limited in-house capacity to produce materials</li> <li>▪ Require outside resources and expertise</li> <li>▪ Able to have communications budget approved</li> </ul>

**Additional Cost Considerations for Program Launch**

<p><b>Communications coordination</b></p>	<p>Suggested 16-week role to implement the tools and actions described in the communications template and to supervise and support program ambassadors. Options to consider:</p> <ul style="list-style-type: none"> <li>▪ Dedicate a staff person to this role if possible</li> <li>▪ Hire a temporary staff person</li> <li>▪ Contract the role out</li> </ul>
<p><b>Curbside ambassadors</b></p>	<p>Suggested 10-week role to host information booth at events, attend community group meetings, give school presentations, liaise with collection staff and residents in initial weeks post launch, and answer public inquiries. Options to consider:</p> <ul style="list-style-type: none"> <li>▪ Offer the positions to existing casual staff (perhaps from other departments)</li> <li>▪ Create then hire summer or temporary staff positions</li> <li>▪ Contract the role out</li> </ul>

**Communications  
Cost / Household**

**Assumptions**

**Container and  
launch package  
distribution**

\$5.00/household  
*(suggested budget)*

Coordinating the container and program launch package distribution can be part of the communications coordination or ambassador roles. Tasks include ensuring all pieces of the launch package have been received, coordinating distribution activities, tracking, and monitoring distribution, and liaising with distribution personnel. Options to consider:

- Require package assembly and container distribution as part of container supply RFP and agreement
  - Contract these tasks out to a logistics firm
  - Bundle the tasks and offer as a fundraiser to a local organisation (better suited to a smaller community); coordinated by staff
  - Complete these tasks with existing staff (better suited to a smaller community)
-

The example communications budget shown below is for the communications tools typically needed to reach a medium-sized community, based on 4,000 households at \$15.00 per household.

Table 4-2: Example communications budget

<b>Tools</b>	<b>Cost</b>	<b>Includes</b>
<b>Communications development</b>	\$ 4,000	Branding to create program identity and recognition
<b>Communications and outreach (external)</b>	\$ 22,000	Newsletters, advertising and media releases, community displays, presentations and events, promotional items
<b>Communications and outreach (internal channels)</b>	\$ 4,000	Municipal website, Municipal monthly newsletter, website content
<b>Digital communications</b>	\$ 20,000	Social media, How-to video creation, set up app-based tool for collection reminder
<b>Retail liaison</b>	\$ 250	Informing retailers of new program and invitation to learn more re acceptable containers and liner bags (cost for preparing and mailing information)
<b>Program launch Package</b>	\$ 6,000	Brochure, calendar, notice about info sessions and possibly sample bags
<b>Post-launch encouragement</b>	\$ 3,750	Notice and recognition tools, providing point of contact for residents
<b>TOTAL</b>	<b>\$ 60,000</b>	<b>\$15.00 per household (4,000 households)</b>

In addition to these identified costs, a local government should also budget for distribution of containers and program launch package (typically \$5.00 per household). If including temporary staff in the communications budget, funds will be required for a communications coordination position and/or temporary curbside ambassador position(s) for the lead-up to, and immediately after the program launch.

#### 4.4.1 Ongoing Communications Costs

As discussed in Section 4.2, ongoing communication is important to keep residents engaged and promote participation. This also lets program staff remind residents of the program requirements and report on program successes and milestone achievements.

A budget to prepare and distribute information via newsletters, social media posts, media releases, and other publications need not be a large financial undertaking. For example, \$2.00 per household per year may be enough to fund two newsletters and an insert into the local leisure guide.

#### 4.5 Preventing Wildlife Interactions

Preventing wildlife interactions is a key consideration for many communities throughout BC. Interactions can range from pests, birds, dogs, and raccoons tipping over containers and creating an annoying mess, to bears accessing improperly stored or set-out containers and becoming conditioned to feeding on garbage or organics.



It is essential to develop a curbside collection program that protects the environment and ensures wildlife, such as bears, cannot access waste materials.

The Bear Smart Community program was designed by ENV in partnership with the BC Conservation Foundation and the UBCM. It is a voluntary, preventative conservation measure that encourages communities, businesses, and individuals to work together.

Its goal is to address the root causes of human-bear conflicts, reducing risks to human safety and private property, as well as the number of bears having to be destroyed each year. This program is based on a series of criteria that communities must meet to be recognized as being "Bear Smart".

Currently, ten BC communities have successfully attained official Bear Smart status. To learn more about this initiative, see the Bear Smart page at: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/human-wildlife-conflict/staying-safe-around-wildlife/bears/bear-smart>

Regardless of efforts to achieve the “Bear Smart” status, there are best practices to implement where wildlife interactions, such as bears, are common. These include specifying storage requirements for organics containers and collection-day practices.

- **Storage requirements for organics containers:** Organic waste containers (carts/bins) must always be kept in a bear-resistant location, except during the day of pick-up. This means keeping organic waste inside, in the basement, or in a bear-resistant outbuilding.
- **Collection-day practices:** For a collection program where wildlife interactions are a known issue, residents can be required to set out organics at the curb at a specific time on curbside pick-up day.

High rates of user compliance with storage and collection day practices is required for there to be any significant reduction in human-bear conflicts. Bylaws can set strict regulations around storage and collection-day practices. Bylaws enable a local government to enforce requirements if wildlife interaction escalates. See Section 4.1 for more information.

For more information on other wildlife conflict reduction visit WildSafeBC at: <https://wildsafebc.com/species/>

### 4.5.1 Bear-resistant Collection Containers

In some BC municipalities where bears commonly access waste, local governments have provided bear-resistant residential collection containers to residents for garbage and organic waste. Bear-resistant carts can be broadly split into two categories: retrofitted lock systems and off-the-shelf bear-resistant cart systems.

Numerous manufacturers claim to have bearproof collection containers. However, only a few are certified as bear-resistant by the BC Conservation Foundation’s WildSafeBC program. Together, WildSafeBC and the BC Wildlife Park test products to determine their resistance to either black bears or grizzly bears. A complete list of certified bear-resistant products is posted on WildsafeBC’s website at: <https://wildsafebc.com/programs/bear-resistant-bin-testing>.

A bear-resistant container needs to be durable, easy to use, and compatible with the curbside collection truck. For communities with harsh winters, a container must also work in winter conditions.

Containers are available that are compatible with automated cart collection, lock automatically, and do not rely on user compliance. When reviewing options, confirm with the supplier that containers are compatible with existing collection trucks and test compatibility before placing the full order.

See Section 3.6 for further information on bin selection.

An existing container can be retrofit with locks to make it bear-resistant. Figure 4-5 shows one common lock system that costs \$50 to \$100 per container, including labour and installation (2021). See Appendix F for information on how the City of Port Coquitlam has successfully retrofitted its collection containers.



*Figure 4-5: 240 litre gallon poly cart with bear-resistant kit*

For carts with locks, best practice is to require residents to unlock their container on collection day. For most communities having the collection crew unlock each container during pick-up is too time consuming. Residents may only be required to use the locks during the snow-free season when bears and other wildlife are active.

Retrofitted locks help prevent wildlife from opening the container lid but does not reinforce or protect the collection container itself. For communities with significant wildlife issues, use of certified bear-resistant containers is recommended.

## 5. Program Implementation

Previous sections in this guide describe ways program staff can determine how to set up and implement a successful curbside organics collection program for their communities. Program development can and should include working with organics processors to ensure they are permitted and equipped to handle the incoming materials. Once a local government has chosen a curbside collection program for residential organic waste, the preparation, planning and program launch will generally take around 12 to 18 months. Resource planning (finance and staffing) and project management plan development are required. Planning and implementation of a new program will likely increase the temporary workload for local government staff, which can be lessened by outsourcing some of the associated tasks. Resourcing post-program launch is essential to manage increased call volumes.

This section highlights some key considerations to help ensure a successful program launch and implementation. Table 5-1 below shows suggested planning tasks and timelines for program implementation. Example timelines for service and container procurement are provided in Appendix C.

Important aspects are described below, along with guidance on addressing customer service issues and troubleshooting challenges that may arise during program implementation.

*Table 5-1: Planning tasks and timelines*

Timing	Tasks to Consider	Guide Section(s)
<b>8-12 months pre-launch</b>	<ul style="list-style-type: none"> <li>Start collection services procurement process. Council approval is usually required for contract award.</li> </ul>	5.1
<b>6-9 months pre-launch</b>	<ul style="list-style-type: none"> <li>Start collection container procurement. More time is needed if Council approval is required for contract award.</li> </ul>	5.2
<b>3-9 months pre-launch</b>	<ul style="list-style-type: none"> <li>Implement Communications Plan initial steps to generate interest and enthusiasm.</li> <li>Develop targeted outreach materials (newsletters, FAQs, social media posts, web page updates, displays, advertisements, launch package, app-based tool for collection reminder, how-to video).</li> </ul>	4.2

Timing	Tasks to Consider	Guide Section(s)
<b>6 to 8 weeks pre-launch</b>	<ul style="list-style-type: none"> <li>Continue applying Communications Plan tools. Hire communications staff, use tools to raise awareness of upcoming changes, prepare/host displays at events, engage with local media, etc.</li> <li>Train local government’s call centre staff and provide a list of FAQs.</li> <li>Train collection staff so they can relay key messages to the public during collection.</li> </ul>	4.2
<b>6 to 8 weeks pre-launch</b>	<ul style="list-style-type: none"> <li>Prepare associated bylaw amendments for review and approval by Council/Board.</li> </ul>	4.1
<b>3 to 7 weeks pre-launch</b>	<ul style="list-style-type: none"> <li>Receive collection containers and coordinate distribution logistics.</li> </ul>	5.2
<b>1 to 4 weeks pre-launch</b>	<ul style="list-style-type: none"> <li>Communicate program specifics: what does the upcoming change look like; when is it happening; how will it happen?</li> <li>Communicate detailed instructions to in-house staff and collection crew.</li> <li>Distribute collection containers to each household with launch package. Conduct door-to-door communications.</li> </ul>	4.2
<b>Launch week</b>	<ul style="list-style-type: none"> <li>Hold public events and/or media interviews to create public awareness.</li> </ul>	4.2
<b>1-4 weeks post-launch</b>	<ul style="list-style-type: none"> <li>Use ambassadors as needed to audit containers for contamination, work with collection staff to respond to their concerns, and be prepared to use social media or other media to respond to issues.</li> <li>Obtain transfer and processor feedback on operational issues requiring attention.</li> </ul>	4.2 4.3 5.3 5.4
<b>5 to 6 weeks post-launch</b>	<ul style="list-style-type: none"> <li>Continue communicating encouragement to residents; report good news and provide program performance updates (e.g., tonnes organics diverted from landfill).</li> </ul>	4.2 4.3 5.3 5.4

Timing	Tasks to Consider	Guide Section(s)
<b>3 months post-launch</b>	<ul style="list-style-type: none"> <li>Monitor and evaluate participation and capture rates as well as contamination levels.</li> </ul>	6.2
	<ul style="list-style-type: none"> <li>Consider conducting a survey to assess the understanding, acceptance, and support for the changes. Compare with a pre-change survey if one was done.</li> </ul>	6.3
<b>Maintain program</b>	<ul style="list-style-type: none"> <li>Continue curbside engagement and compliance efforts.</li> </ul>	6.1
	<ul style="list-style-type: none"> <li>Track capture rates for all collected material streams to help calculate diversion rates and to guide ongoing operational requirements.</li> </ul>	6.2
	<ul style="list-style-type: none"> <li>Deploy ongoing communications tools, such as newsletters, social media, and web updates.</li> </ul>	6.3

## 5.1 Service Procurement

This section is primarily applicable to procurement of contractor-provided curbside collection service.

For contracted collection programs with existing contracts in place, it may be possible to negotiate contract changes to include organics collection in the existing contract. The local government’s legal counsel can help identify whether this is possible or preferred.

It may be more practical to plan the launch of the new program around the start of a new collection contract that includes the new organics collection service. Procurement of a new contract will require going to the marketplace with an RFP or an Invitation to Tender (ITT). If the local government has in-house staff assigned to coordinate purchasing, collaborating with them is recommended.

An RFP process is particularly well suited for local governments who haven’t yet determined collection method (manual or automated) or container types.

Key features of the RFP/ITT will include some or all of the following:

- Proposed term and any options for extensions
- Commencement date

- Existing service
- Number of households to service with maps of service areas
- Materials to be collected (e.g., food scraps, yard waste)
- Actual/estimated quantities of each material stream to collect
- Location(s) for tipping the material(s) collected
- Proposed service frequency
- Proposed collection methodology
- Collection fee (a fixed annual fee or a per household/month)
- Requirements can include:
  - ◆ backup resources for when primary trucks are out of action
  - ◆ OMRR-compliant organics processing facilities
  - ◆ monthly meeting during the first year and annual (or more frequent) reviews with the collection contractor afterwards
  - ◆ Purchase of organics collection containers as part of the collection contract
- Proponent's role in:
  - ◆ distributing collection containers prior to program launch
  - ◆ issue management (e.g., responding to customer calls and inquiries)
  - ◆ enforcement of regulations (e.g., disposal bans/ restrictions)
  - ◆ reporting (e.g., tracking participation and set-out rates, capture rates / collection tonnages, contamination rates, customer feedback logs for negative and positive comments)
- **RFP only** ► Invitation for alternative collection methodologies, such as manual or automated systems; phased-in start dates; pricing models for different options; different collection frequencies; alternative processing/transfer locations, alternative fueled vehicles; use of split-compartment collection trucks, etc.

Holding a proponents' pre-bid meeting is a helpful way to provide information and answer questions from those interested in submitting proposals.

The collection services procurement process typically takes six to nine months from reviewing options and developing procurement documents to awarding the collection contract. Involvement by the local government's legal counsel is recommended. They may also have experience with other local government

clients who can provide samples of RFPs/ITTs and sample contracts. Council approval is usually required for contract award. An example timeline of typical main procurement tasks is provided in Appendix C.

## 5.2 Container Procurement

Many local governments have in-house expertise or procurement staff who will prescribe best practices for each individual organization. As with procurement of collection services, container selection and procurement can take six to nine months, with up to three months typically needed to review options, develop procurement documents, and award the contract. More time may be needed if Council approval is required for contract award. A typical timeline for container procurement and associated tasks is provided in Appendix C.

### Step 1: Review Procurement Options with Government Staff

Generally, local governments can either initiate procurement for curbside collection containers, kitchen catchers, or build the requirement for specific container types, sizes, and exchange options into the agreement with their existing collection contractor. Local government policies may require reviewing options with procurement staff to discuss other procurement priorities, such as requiring products that are made locally, are sustainably sourced, or are made of recycled or recyclable materials. This can help support policies driven by sustainability or circular economy principles.

### Step 2: Determine Responsibility for Container Ownership and Maintenance

The next step is to determine who will own the containers and be responsible for their ongoing maintenance. Asset management procedures may categorize collection containers as assets to be tracked or as consumables that won't be managed in the asset management system. Program developers should discuss this with finance and asset management staff for clarity, then establish the appropriate container management protocols.

To ensure standardized collection across the service area, best practice for curbside collection containers is to provide them to residents, with the requirement that containers stay with the property and repairs or exchanges are the responsibility of local government staff (or the collection contractor for contracted programs). A supply of containers and parts needs to be maintained to provide containers to new properties and to repair damaged units post

launch. A larger automated collection program cart has a typical lifespan of approximately ten years, though wheels and lids may require replacement during that time. Containers for smaller manual programs (green bins) tend to have similar lifespans, though failure points may be the lid latch mechanism or container top rim.

## Step 3: Initiate Procurement

### Container Supply Logistics

A container supplier/manufacturee needs to know the delivery location and timing. It typically takes up to two months from contract award to receipt of containers, but this should be confirmed with potential suppliers before the RFP or ITT is issued and when awarding the contract. The time required to receive containers will depend on supplier/manufacturee location, freight mode, and the receiving community's location within BC. Container quantities will have an impact on the timeframe; it can take up to two weeks for smaller communities (<5,000 households) to receive all their containers once shipped from the supplier, three to four weeks for medium sized communities (>5,000 households), and upwards of four to six weeks for larger communities (>15,000 households).

For communities with larger populations, the supplier may need to stagger container delivery and the local government may need to provide secure storage, such as a works yard or warehouse.

### Container Branding Options

The container supply contract could include having the collection program's branding or the local government logo hot stamped onto the containers. The local government would need to provide the graphics for the supplier to have hot stamped during manufacture.

### Container Distribution / Exchange

Container distribution to households can be done by the collection contractor, a local logistics contractor, a community organization fundraiser (with local government staff support), local government



*Figure 5-1: Containers hot-stamped with City of Salmon Arm branding*

staff, or included in the procurement process as a requirement of the container supplier.

Before containers are distributed, residents should already have been advised of the upcoming program changes and container size options (if this is being offered) through an extensive communications campaign. This information should also be available in the launch package distributed with the containers. More information about container sizes is in Section 3.6, and communications tools and key messages are described in Section 4.2.

If a container exchange option is offered to residents, the local government will need to prepare by having an adequate supply of new containers on hand. This can be quite challenging, time consuming, and onerous to manage. Requesting residents to pre-select a size before the program launch will help mitigate the challenge of having enough containers on hand at program start-up. Not allowing subsequent exchanges for a while after the program launch will give residents time to get accustomed to the new container and its capacity and usefulness. As discussed in Section 3.6, local governments that offer exchanges typically charge an exchange fee, limit the number of exchanges for any one residence, and tie the container size in with the annual solid waste utility bill. For programs with contracted collection, this process is typically more suited for local government staff to handle, rather than the collection contractor.

Maintenance of the collection containers, delivering containers to new homes, and handling replacement requests for damaged or lost containers will be a role for the local government, if collecting in-house, or something to negotiate in detail with the organics collection contractor.

### 5.3 Customer Service

Program success requires active support from residents. Gaining residents' buy-in is critically important—they need to be well informed about the new service and motivated to participate. Problems caused by lack of information or misinformation among residents can be difficult to rectify.

Section 4.2 highlighted the importance of ongoing communication. The communication and community engagement strategy needs to be long term, starting well before program launch and continuing until consistent program participation and quality of collected materials have become 'business as usual'.

Regardless of collection service provider (in-house or contracted), roll-out of the service (delivery of containers and launch information package) needs to run

smoothly and residents' grievances dealt with promptly. Major problems with the roll-out or first collections can result in dissatisfied residents and negative press, putting acceptance of the organics collection program at risk, at least in the short term.

As discussed in Section 4.2.4, tracking the nature and reasons for customer interactions can provide program staff with useful information and help in correcting misinformation or hesitation at program launch. A sample call tracking log is provided in Appendix D for local governments to adapt to their needs.

In the longer term, as the program matures and becomes business as usual, it can be helpful to continue keeping records of resident feedback, including what collection staff report. This can help improve messaging and keep FAQs relevant for current and future program participants. This continuous improvement can be an ongoing, routine part of program operations.

## 5.4 Troubleshooting

This section addresses some of the common issues encountered when introducing a curbside residential organic waste collection program, along with suggestions for potential mitigations.

Although yard waste collection has been a part of some local government services for some time, curbside collection of residential food waste has only more recently become business as usual for residents in over 60 municipalities and regional districts across BC.

As with any source-separation recycling system, the success of organics collection depends on residents' support and active participation. Participation rates and impurity levels often reflect the collection program's level of community support. Continuous improvement and a willingness to acknowledge concerns or complaints about the program, coupled with offering solutions, will go a long way to make the program a success.

The FAQs (discussed in Section 4.2) can be added to and kept relevant by noting feedback and concerns from collectors and residents. The FAQs displayed on a program webpage or in a newsletter can also be complemented with a troubleshooting chart specific to residents.

Some common concerns and potential solutions are provided in the table below.

Table 5-2: Common concerns and potential solutions

Concern	Potential Solution
<b>Residents report odours from collection container</b>	<ul style="list-style-type: none"> <li>▪ Provide targeted educational materials for keeping containers odour free, and encourage residents to:               <ul style="list-style-type: none"> <li>– Keep collection container away from direct sunlight in a shady area or inside a shed/garage.</li> <li>– Freeze food scraps (especially meat, fish, and poultry scraps) before placing them in the collection container close to the collection day.</li> <li>– Rinse the container occasionally with a garden hose and mild detergent or vinegar and water solution.</li> <li>– Set container out for collection weekly so contents do not sit for a long time and begin decomposing.</li> </ul> </li> <li>▪ If food waste is collected separately, consider collecting comingled food and yard waste or collecting food waste on a more frequent schedule.</li> <li>▪ Where available, encourage residents to hire a private company to clean the container on a regular basis.</li> </ul>
<b>Bears and other wildlife accessing organics</b>	<ul style="list-style-type: none"> <li>▪ Provide targeted educational material to help reduce the risk of attracting wildlife. In addition to the odour reduction examples described above, remind residents of requirements to:               <ul style="list-style-type: none"> <li>– Store the container in a building such as garage or shed until the morning of collection.</li> <li>– Only set-out organics at the curb at a specified time on the morning of curbside pickup.</li> </ul> </li> <li>▪ Consider retrofitting collection containers with locks. See Section 4.5.1 for more information.</li> </ul>
<b>Damaged rim on manual program container</b>	<ul style="list-style-type: none"> <li>▪ Determine whether this is caused by the collector hitting the container to dislodge stuck food waste. Remind collectors to avoid this and discuss responsibilities for replacing damaged containers.</li> </ul>

Concern	Potential Solution
<b>Organics become frozen and are not emptied easily</b>	<ul style="list-style-type: none"> <li>▪ Provide targeted educational material to help residents ensure organics containers are easy to empty, and encourage residents to:               <ul style="list-style-type: none"> <li>– Line the bottom of the container with newspaper if this is acceptable to the organics processor.</li> <li>– In colder climates, spraying the inside walls with a vegetable oil spray can help.</li> <li>– Drain liquids before placing organics in the bin.</li> <li>– If liner bags are permitted by the organics processor, loosen them from the sides when the container is set out for collection.</li> </ul> </li> </ul>
<b>Ongoing contamination of collected organics</b>	<ul style="list-style-type: none"> <li>▪ Ascertain type and magnitude of contamination with the collector or processor.</li> <li>▪ Provide targeted educational material to reiterate which materials are acceptable and the benefits of producing a marketable and clean compost product.</li> <li>▪ Promote website/program app/other resources to identify what is allowed in the organics container.</li> <li>▪ Encourage residents to contact program staff if they have questions about what is permitted.</li> </ul>
<b>Disposal of invasive plant species</b>	<ul style="list-style-type: none"> <li>▪ Confirm handling and disposal requirements with the regional district, Invasive Species Council of BC, and the organics processing facility. Invasive plants are typically NOT permitted in yard waste collection programs.</li> <li>▪ Provide targeted educational material to help residents identify common local invasive plant species plants (e.g., links to online resources, tips to manage and dispose of invasive plants).</li> </ul>
<b>Transient populations</b>	<ul style="list-style-type: none"> <li>▪ Provide targeted educational material for holiday lettings or short-term accommodation to encourage correct use of the collection program.</li> </ul>

## 6. Program Operation

Once organics collection has launched and collection staff and residents are familiar with the set-out and collection requirements, ongoing operation should become an integrated component of the regular curbside collection system.

### 6.1 Long-Term Operational Management Plans

For a residential organic waste curbside collection program to be successful in the long term, the local government needs to factor in capital and operational needs when preparing the overall collection program's annual budgets and five-year financial plans.

If the collection service is delivered in-house using municipal crews, asset management or fleet replacement procedures may require annual contributions to capital replacement reserves for the renewal and eventual replacement of the collection vehicles. Collection containers may also need to be classified and tracked as assets per discussions and direction received from finance and asset management staff during the planning stage.

Once the program is launched and has overcome early problems, local government staff should review the program on a regular basis (annually is recommended) and adjust the program as it matures. If collection is contracted out, annual (or more frequent) reviews with the collection contractor should already be part of best practices. The curbside collection program for all streams being collected may require new route planning to accommodate population growth and new housing developments within the community.

Annual business plans for local government services should include information on the curbside collection program. Even if this is not the local government's standard operating practice, program staff can use the indicators to monitor program performance and set objectives to maintain the status quo or plan improvements. An example business plan for a local government is included in Appendix E for reference.

### 6.2 Maintaining and Monitoring Compliance

Local governments who collect residential recyclables on behalf of Recycle BC will be familiar with their obligations to limit the amount of non-acceptable (contamination) materials in the recycling stream. Ensuring the organics stream is as clean as possible is equally important.

Some of the tools available to support monitoring and compliance (to limit or mitigate contamination in any collection stream) are shown in the table below.

Table 6-1: Tools for monitoring and maintaining compliance

Tool	Considerations
<p><b>Curbside container audits</b></p>	<ul style="list-style-type: none"> <li>▪ Inspect set-out containers before the collection truck arrives</li> <li>▪ Remove non-compliant material and leave a compliance notice or move container away from the curb and leave a notice</li> <li>▪ Record and track non-compliance</li> <li>▪ Consider additional action, such as written notices or visits to repeat offenders</li> </ul>
<p><b>Collection vehicle camera</b> <i>(More common on trucks outfitted for cart-based automated collection)</i></p>	<ul style="list-style-type: none"> <li>▪ Train collection staff to monitor the container as it is tipped and capture images of obvious non-compliances</li> <li>▪ Have collector record the address (if installed, onboard GPS or other data capture tools such as an RFID reader can be used to record the address and generate non-compliant reports for action)</li> </ul>
<p><b>Curbside container RFID technology</b> <i>(Carts need tags embedded during manufacture and the delivery address scanned into a database. Trucks must be fitted with tag readers and software to read the tag as it tips to match the address)</i></p>	<ul style="list-style-type: none"> <li>▪ Carts fitted with RFID tags scanned by RFID readers for each container as it is tipped. When paired with the onboard camera, non-compliance can be recorded through installed onboard technology, tracked, and follow up action taken as required.</li> <li>▪ Audit personnel can use hand-held RFID readers to scan and record compliance.</li> </ul>
<p><b>Communications tools</b> <i>(Similar to planning and implementation, a suite of communications tools can be used to address compliance issues and remind residents of program requirements)</i></p>	<ul style="list-style-type: none"> <li>▪ App-based collection reminder campaigns</li> <li>▪ Social media platforms</li> <li>▪ Newsletters</li> <li>▪ Webpage updates and notices</li> <li>▪ Media releases</li> <li>▪ Other local government publications (e.g., leisure guide or tax notice inserts)</li> </ul>

## 6.3 Monitoring Performance and Participation

A variety of useful data can be monitored to help program managers measure program performance. These metrics are useful for planning purposes (e.g., budgeting) and to find operational efficiencies.

### Potential Messaging to Residents

- Garbage disposal rates per capita and per household:
  - pre organics collection
  - post organics collection
- Organics collection weights: Per capita and per household
- Set-out (participation) rates: Households per route; Total households being serviced
- Contamination rates: Percentage of loads as reported by organics processor
- Wildlife interactions: Reported by BC Conservation office or WildSafe BC
- Number of non-compliance notices given to residents by collection staff.

In addition to the data directly related to the collection program, other metrics can be useful for other purposes, such as sustainability and GHG emission tracking.

### Greenhouse Gas Reductions

- GHG emissions avoided based on organics diverted from disposal.
- Vehicle emissions avoided based on operational efficiencies such as use of split compartment collection vehicles, use of biodiesel or alternative fuel in new vehicles.

## 6.4 Program Operating Costs

The following factors influence program operating costs and are helpful in supporting discussions with local government finance staff. Some costs will apply if the collection is contracted out, while others apply to in-house services.

- Collection costs (fuel, insurance, parts and maintenance, staff wages)
- Contractor fees
- Disposal costs (tipping fees)
- Transfer costs
- Staffing costs (program administration and management)
- Contributions to asset replacement and/or reserve funds
- Ongoing communication costs

## APPENDIX A – Checklist for Collection Program Conditions

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# Checklist for Baseline Conditions



- SWMP Alignment.** Contact your regional district to determine how a new collection program aligns with the current SWMP.
  - ◆ Are there any specific organic diversion strategies or other policies or bylaws to consider?
- Availability of Infrastructure.** Find out what infrastructure is available in your region to support the collection program:
  - ◆ Which transfer stations can accept organics?
  - ◆ Which organics processing facilities are available in the region?
  - ◆ What is the hauling distance to the processing facility relative to collection points and the closest transfer station that can manage organics?
- OMRR Authorization Status.** Check OMRR authorization status (i.e., notification, permit or operational certificate) of the processing facility (authorized capacity and output, type of wastes accepted, known operational issues, etc.).

Authorization documents, such as the OMRR notifications, can be viewed on the public Authorization Management System at <https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/find-authorization>
- Receiving Facility's Interest.** Verify the receiving facility's interest (i.e., the facility owner) in accepting food waste.
  - ◆ Is it to be collected and delivered separately from yard waste or commingled?
- Acceptance Requirements.** Check receiving facility's specific acceptance requirements (minimum feedstock requirements, contamination levels, type of organics, pre-treatment required before acceptance, etc.).
- Costs.** Confirm costs involved:
  - ◆ What is the tipping fee for processing (cost per tonne)
  - ◆ How long is the agreement for?
- Facility Contingency Planning.** Ensure the processor has a contingency plan in case the processing facility is unable to accept organic waste for a set period.
- End Products & Beneficial Use.** Confirm the end products and beneficial use of materials (e.g., compost for soil amendment, landfill cover, closure material, etc.):
  - ◆ Does this align with your sustainability goals and key drivers for the program?
- Existing Collection Contract.** If you have an existing contract and want to expand the collection service, confirm that your collection contractor can handle the increased material:
  - ◆ Can they collect to the processor's requirements (yard and food separately or commingled)?

## APPENDIX B – Education and Outreach Templates and Examples

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## Community Consultation Example: Town of Creston

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In 2019, the Town of Creston committed to collecting residential food scraps and sending them to a planned composting facility being built by the Regional District of Central Kootenay (RDCK) at the Creston landfill. To do this, the Town needed to switch up its existing contracted-out collection program from weekly garbage service. Staff and Councillors were also interested in expanding service to provide not only food scraps collection, but also to join with Recycle BC to include curbside recycling and possibly yard waste collection.



### Community Consultation & Survey

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The first step involved a competitive Request for Proposal process to obtain collection costs for several options being considered. With these in hand, a community consultation process was approved by Council that sought to understand the community's curbside collection service needs and expectations.

A widely promoted survey asked about residents' experience and satisfaction with the current service. A "recommended enhanced service scenario" was presented that included weekly food scraps collection, switching to alternating every-other-week garbage/recycling collection, implementing new garbage container limits, and the anticipated annual cost for the service.

Residents were asked if they thought the new service would meet their needs and to provide feedback on estimated cost, with specific questions about yard waste and related service scenarios to consider. Comments and suggestions were welcomed.

The survey results suggested enthusiasm for service enhancement and an appetite for the recommended enhanced service scenario. Few respondents expressed opposition to the recommended scenario. The survey also revealed that respondents found the estimated cost to be a reasonable value, though increased cost of service was a concern for some.

When it came to yard waste collection, residents' needs and preferences were varied. The survey responses suggested that yard waste service enhancement warrants further engagement.

The survey gathered rich insight into residents' expectations, priorities, values, and concerns. This information gave Council a level of comfort to continue planning the new collection program

(slated for implementation in 2022) and supported the development of thoughtful, targeted public engagement and education efforts to support the service changes.



For more information on the Town of Creston's curbside consultation, visit <https://www.creston.ca/2417/Curbside-Collection>

## Launch Package Example: Regional District of Nanaimo

In 2010, the Regional District of Nanaimo (RDN) prepared a program launch package that contained seven elements. These were collated by collection route to ensure the correct collection schedule (calendar) was provided for each individual collection route. The items in each package were put into a white paper bag, boxed, labelled, and stored, then given to distribution crews at the start of each day. As each container was delivered, the program launch package was dropped into the container, along with a kitchen catcher.

### RDN Program Launch Package

The launch package was packaged into a white paper bag and included:

- Curbside Collection Guide (24-page booklet)
- Route-specific collection schedule
- Large adhesive information decal (intended for green bin)
- Small adhesive information decal (intended for kitchen catcher)
- Fridge magnet
- New large yellow recycling bag for household papers

No instruction was left with the container, such as a temporary decal placed on the lid inviting the resident to open the container. Program staff relied on communications plan messaging and expected residents to be curious enough to open the lid. When rolling out a new cart-based program, attaching the information package to the lid, inner rim, or handles of the cart (in a recyclable waterproof bag) is recommended to avoid the potential for injuries resulting from reaching down into the cart to retrieve the package.



# Education & Outreach Example: Sunshine Coast Regional District

In October 2020, the Sunshine Coast Regional District (SCRD) expanded its existing curbside garbage collection service to add curbside food waste collection. The information package given to residents included a Program Guide (image below) that clearly laid out the changes in collection frequency and defined acceptable items for the “Green Bin”.

## Green Bin

WEEKLY

## Green Bin

WEEKLY

## Garbage

BI-WEEKLY

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**How to set it out**



Place your Green Bin at your curb on your collection day by 8:00 a.m.  
Keep the lid closed and lock engaged.  
Bring your bin inside after collection as soon as possible.

**What's In**

<b>food waste</b> ✓ All uneaten food and plate scrapings	<b>dairy</b> ✓ Dairy products ✓ Cheese ✓ Eggs/ Shells	<b>bread and pasta</b> ✓ Bread ✓ Cakes ✓ Pastries	<b>meat and bones</b> ✓ Raw meat ✓ Cooked meat ✓ Bones
<b>tea &amp; coffee grounds</b> ✓ Paper tea bags, tea leaves ✓ Coffee grounds ✓ Coffee filters	<b>fruit and vegetables</b> ✓ Raw vegetables ✓ Cooked vegetables ✓ Whole fruit ✓ Peelings	<b>fish</b> ✓ Cooked fish ✓ Bones ✓ Soft shells from lobster, crab or shrimp	<b>food soiled paper</b> ✓ Paper towels, plates, napkins ✓ Food soiled cardboard, newspaper

**What's Out**

- ✗ Garbage
- ✗ Liquids of any kind
- ✗ Dryer lint, vacuum contents, hair, pet waste
- ✗ Elastics, staples, twist ties or produce stickers
- ✗ Plastics of any kind, including compostable or biodegradable
- ✗ Hard shells from clams or oysters
- ✗ Yard or garden green waste

**Reducing Food Waste**

Did you know that wasted food costs an average Canadian household over \$1,100 per year? Check out [www.scrd.ca/reduce-food-waste](http://www.scrd.ca/reduce-food-waste) for how these three mottos can help you at home!

PLAN IT OUT

USE IT UP

KEEP IT FRESH

**How to set it out**



Place your Garbage Can at your curb on your collection day by 8:00 a.m.  
Keep the lid on.  
Bring your can inside after collection as soon as possible.

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**Green Bin**

- Collected weekly
- Limit: 1 Green Bin per household
- Maximum weight: 20kg (44lbs)
- Place accepted materials loose in the Green Bin or in paper bags placed inside the Green Bin
- Keep your bin clean by wrapping food waste in newspaper or using paper bags. The moisture in the food waste will be absorbed by the paper, helping to eliminate odours.



**Coexisting with Wildlife**

Help keep wildlife wild, and communities safe. Just like your garbage can, keep your Green Bin indoors until the morning of collection day.

- Keep Green Bin locked when at the curb so wildlife do not access bins and become habituated in the community.
- Clean your Green Bin (and garbage can) regularly.
- Find more information: [www.wildsafecb.com/live](http://www.wildsafecb.com/live)

**Garbage**

- Collected bi-weekly (every other week)
- Limit: 1 Garbage Can per household
- Maximum weight: 20kg (44lbs)
- Place accepted material in a sealed bag and place inside garbage can
- Extra garbage tags can be purchased from: Sunshine Coast Regional District, 1975 Field Road, Sechelt  
Gibsons Home Hardware, 921 Gibsons Way, Gibsons

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**What's In**

- Garbage generated by residential premises from typical household use
- Municipal solid waste (garbage) of a non-toxic nature
- Garbage capable of being contained in a garbage can

**What's Out**

- Yard and garden green waste, branches, logs
- Land clearing waste
- Construction/demolition waste such as wood, scrap metal or gypsum
- Liquids of any kind
- Commercial, industrial, institutional waste
- Hot or burning material
- Hazardous, explosive, chemical waste
- Waste oil, petroleum by-products
- Paint, batteries of any kind

What can be recycled?

[www.scrd.ca/recycling-directory](http://www.scrd.ca/recycling-directory)



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[www.scrd.ca/curbside-food](http://www.scrd.ca/curbside-food)

[www.scrd.ca/curbside-food](http://www.scrd.ca/curbside-food)

[www.scrd.ca/curbside-garbage](http://www.scrd.ca/curbside-garbage)

## Communications Package - Generic Template for new Curbside Program Launch

Item & Timeline	Description & Purpose	Notes
<b>12 MONTHS PRE-LAUNCH</b>		
<b>Communications Coordination</b>	Appoint and/or retain a individual to facilitate the communication planning process and the implementation of the communications plan, including budget sign off, liaising with internal personnel, and coordinating communications efforts.	Local government staff resources may be limited for coordinating program launch communications. If contracted out, have staff provide input throughout, and where noted take a leadership role. Overall budget approval lies with municipal staff.
<b>Communications Plan</b>	Prepare a plan to establish the purpose, message, audience, timing, communications tools and channels, resource and budget confirmation, and allocate roles and responsibilities.	Reminder to also establish the tone and style for the program communications.
<b>Program Brand</b>	Develop a brand with logo, tagline, and graphics.	Graphic and Communications and/or Public relations input will be needed. Public and/or staff focus group(s) can be used to refine program brand.
<b>3 - 9 MONTHS PRE-LAUNCH</b>		
<b>Newsletter</b>	Introduce the new program or changes coming to the current program in the first newsletter. The newsletter should create awareness and provide rationale, expected benefits, costs, proposed timing, general frequently asked questions (FAQs), and other information sources such as a website link.	If in-house capacity is not available, consider contracting to a contract writer or communications consultant.
<b>Newsletter</b>	Organize newsletter printing and distribution.	Options include direct addressed mail or unaddressed aemail (i.e. neighbourhood postal codes). Rates will vary with quantity and dimensions of postal items. Make available on the local government website (if available).
<b>FAQs</b>	Develop FAQs for use with all communications formats.	Make available on the local government website and to front-end staff. Keep FAQ's updated as new common questions and/or concerns are received.
<b>Social media posts</b>	Develop social media posts in support of the program. For example, use posts to link to a web version of the newsletter (if available), promote events, and direct to FAQs.	Where possible, work with in-house communications staff or other departments that frequently use social media to create and post the content.
<b>Web page</b>	Update or create a curbside program web page(s) on the local government website.	Include website link to the program's newsletter and FAQs.
<b>Information Display</b>	Prepare information displays that can be staffed or unstaffed at high traffic locations such as recreational centres, malls, retail stores, etc. This can include poster boards, examples of curbside containers, kitchen containers, or other props as appropriate.	Use staff or temporary staff (i.e. ambassadors) to set up and/or take down, and host as appropriate.
<b>Media</b>	Create print and broadcast content such as advertorial, or make use of regular feature space in local papers or community TV or radio broadcasting.	An engaged media can assist in keeping the messaging positive. Where possible, work with in-house communications staff to create the content and to access their media contacts.
<b>Advertising and Awareness</b>	Use in-house and community resources to build awareness.	These will be prepared for insertion into local recreation guides or other local government publications, reader boards and signs (digital and non-digital), and inserts in tax notices.
<b>Launch Package</b>	Plan the launch package: how-to guide, collection calendar, accompanying resources such as decals.	Obtain quotes for all items to be printed and/or produced.
<b>Digital Tool</b>	Opportunity to use a digital tool, such as an app-based tool, used by many local governments to assist residents with collection day reminders, waste preparation and sorting information.	App-based tools' cost will vary dependent on size of community. Discuss needs and budget with a software developer, and identified what is required to build the platform.

Item & Timeline	Description & Purpose	Notes
<b>How-to Video</b>	Create program How-To video(s) with promotion on the local government website and social media (if applicable).	Consider filming locally and involving local talent: staff, politicians or local personalities, students, and/or public volunteers. Alternatively, create an animated video with a voice-over.

## LAUNCH

<b>Newsletter &amp; FAQs</b>	Develop a new newsletter (e.g., a "Change is Coming newsletter") to build on previous communications. Communicate information including the timing for container deliveries, what to expect with the new containers, collection schedule changes, FAQs, promotional events, app-based tools, website links and any other information resources your program intends to include.	Feedback received in response to the communications efforts can direct the content of this newsletter, in addition to laying out the information necessary to achieve a successful launch.
<b>Newsletter</b>	Organize newsletter printing and distribution.	Options include direct addressed mail or unaddressed aemail (i.e. neighbourhood postal codes). Rates will vary with quantity and dimensions of postal items.
<b>FAQs</b>	Refine FAQs for use with all communications formats.	Make available on the local government website and to front-end staff. Keep FAQ's updated as new common questions and/or concerns are received.
<b>Launch Package</b>	Finalize and organize printing and/or production of program material. Assemble into packages for each participating household.	Confirm contents of launch package, and the plan and resources required for assembling and distributing. Have staff finalize collection schedule and calendar production. The labour commitment for assembling the launch package could involve the Ambassadors (if applicable). Working with a local logistics firm (or container supplier) may be required for larger programs or for communities with limited capacity to manage this themselves.
<b>Social Media posts</b>	Develop social media posts in support of the program. For example, use posts to link to a web version of the newsletter (if available), promote events, and direct to FAQs.	Where possible, work with in-house communications staff or other departments that frequently use social media to create and post the content.
<b>Ambassador Program</b>	Hire temporary ambassadors who can help to host information booth at events, attend community group meetings, facilitate community presentations, liaise with collection staff and front-end staff in lead up to program launch.	Advertise, interview and hire temporary Ambassadors, at a minimum of six weeks prior to the program launch.
<b>Information Display</b>	Host event(s) to promote and provide information about the program to build awareness and level of comfort with the impending changes.	Use staff or temporary staff (i.e. Ambassadors) to set up and/or take down, and host as appropriate.
<b>Web Page</b>	Update the curbside collection web page(s) on the local government website.	Update the website content to reflect the program launched and provide website links to the program's updated newsletter and FAQs.
<b>Media</b>	Create print and broadcast content such as advertorial, or make use of regular feature space in local papers or community TV or radio broadcasting.	Continue involving the media to create interest and enthusiasm, as well as understanding of the program.
<b>Paid Advertising</b>	Use paid advertising to support media articles and promote events.	Weigh the benefits of traditional media advertising with social media. Paid traditional media advertising can help support the interest and time invested by reporters.
<b>Advertising and Awareness</b>	Use in-house and community resources to build awareness.	These can be prepared for insertion into local recreation guides or other local government publications, reader boards and signs (digital and non-digital), and inserts in tax notices.

Item & Timeline	Description & Purpose	Notes
<b>Customer Point of Contact</b>	Familiarize front-end staff at all municipal locations with the new program. Target staff who have interactions with public, and contracted personnel (e.g., collectors and contractor front-end staff). Provide knowledge to answer questions and give consistent information. Set protocols in place for hard-to-answer questions and for those requiring escalation to senior staff.	Compile information reference manuals and give to front-end and collection staff. Staff, or a relevant collection contractor, should finalize complaint management/response protocols, and familiarize collection personnel with their compliance and enforcement responsibilities. This is ultimately an operational requirement with a communications component.
<b>Retailers</b>	Familiarize local retailers regarding upcoming program including information on acceptable program materials and containers.	Prepare and send letters explaining upcoming program changes and the impact this may have on retail items.
<b>Compliance Notices</b>	Design compliance notice for use by Ambassadors and collection staff when program has launched.	Design the notice using the program brand (if one has been developed). If using temporary peel and stick notices, ensure that the printing is done with peel-off adhesive backing and that temporary adhesion is specified.

LAUNCH & POST-LAUNCH (3 MONTHS)		
<b>Launch Package</b>	Coordinate program launch materials (e.g., how-to guide, collection calendar and accompanying resources) with container distribution logistics.	This assumes the launch package is distributed with the containers. The Communications Coordinator can facilitate this, working closely with the distribution team.
<b>Ambassador Program</b>	Undertake door-to-door liaison to assist in promoting correct sorting and set out behaviours, apply compliance notices in the early weeks, liaise with collection staff and front-end staff.	Hired Ambassadors can assist.
<b>Social Media Posts</b>	Develop social media posts in support of program roll out. Promote the use and direct website traffic to app-based tools (if applicable), online newsletters and FAQs.	Social media posts can be effective with simple waste sorting tips to address concerns and confusion with the changes.
<b>Web Page</b>	Update the curbside program web page(s) on the local government website.	Update the website content to reflect that the program is now launched, and provide website links to the program's updated newsletter and FAQs.
<b>Media</b> (articles generated by communications staff, press releases)	Create print and broadcast content such as advertorial, or make use of regular feature space in local papers or community TV or radio broadcasting. Support and encourage behaviour and publicize initial organics diversion successes (e.g., participation, kilograms collected and diverted from landfill, etc.).	Use the opportunities to congratulate residents on the successes achieved in the first few weeks of the program. Provide opportunities for local government politicians to highlight the reasons for the program changes and to thank residents for their support in accomplishing organic waste goals.
<b>Paid advertising</b>	Develop paid advertising to communicate final reminders that program has launched, collection changes, recognition, etc.	
<b>Finalize Service Addressing</b>	Finalize data set required for setting up the app-based tools (if applicable).	Local government staff across departments may need to collaborate to compile this information. Accurate data sets will be required for app-based tools, container distribution program, and container inventory, which will be assigning carts to specific addresses (utility accounts).

# Sample Communications Tasks Template

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*This communication template is intended to provide a description of tools and actions to support the introduction of a residential organics curbside collection program. Suggested messages, tools, and timing are provided below. Some may not be relevant to every community or program but can provide inspiration to help communities tailor strategies and messages for individual programs.*

## Purpose

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- ◆ To inform residents of the upcoming changes to the curbside collection services (what's happening and when)
- ◆ To build excitement and enthusiasm for the curbside collection service
- ◆ To educate residents on how to participate properly in the collection service
- ◆ To inform residents about opportunities to learn more about the upcoming curbside collection program changes

## Audiences

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- Residents with residential curbside collection service

## Key Messages

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1. The curbside collection service is expanding and will come in line with many other BC communities, like **[name of neighbouring local government]**, that have embraced reducing the amount of garbage sent to landfill.
2. Recycling, food scraps and yard waste collection is coming this **[Month Year]** to a curbside near you!
3. With all the opportunities to recycle and compost at the curbside, there shouldn't be much to throw into the garbage!
4. Food scraps **[and yard waste]** will be collected every week; while recycling and garbage will be collected every other week (alternating weeks), just like **[name of neighbouring local government]**.
5. Cost implications to each household.
6. Your new garbage collection program will include the collection of ONE can of garbage every other week. Additional cans will cost **[\$X]** each and will require a pre-paid tag. You can put up to **[X]** extra cans out at each garbage collection.
7. Have questions? You can find more information at the **[local government]** website, or you can attend an Information Drop-in Event at **[XX LOCATION]** on **[XX DATE]**.

## Tools

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**Branding:** A brand should be an instantly recognizable aesthetic that conveys the spirit that is the foundation of the program. Branding often incorporates a logo, tagline and colour scheme. To develop a brand, a local government has the option of borrowing a brand created by another organization or creating its own unique brand. Examples of local government curbside collection program brands are shown here:



As part of selecting a brand, staff could work with in-house resources, such as the Economic Development office or Communications staff, to develop ideas (that could build on existing branding or images) or retain marketing and communications consulting advice. Staff in other departments could be used as a focus group to review and help shortlist the options.

**Newsletter:** Announcing program improvements and schedule, focused on the changes (“what you need to know”). Newsletters would be delivered to each home, with extras available at community locations (e.g., library, arena).

**Newspaper advertising:** Focused on the changes (“what you need to know”) and opportunities to learn more / get more information. Posted for a period of four weeks.

**Media release: 1<sup>st</sup> release:** Sent to paper, radio, and online broadcast media covering all key messages. Also informs about where/how to get more information. **2<sup>nd</sup> release:** The week before the launch. **3<sup>rd</sup> release:** A few weeks after the launch to report on how the program is functioning and address any emerging issues. **4<sup>th</sup> release:** Six to nine months into the program to report on program performance (successes and challenges).

**Social media posts:** Posted on the local government’s social media feeds at the same time as the media releases. Ask Council members to post on their social media feeds.

**Social media advertising:** Paid social media blast targeting local government addresses.

**Posters in public spaces:** Coloured posters providing high-level information on program changes and where to find more information.

**Information drop-in events:** Staffed drop-in events where residents can:

- ◆ See displays on proper set out of garbage, yard waste, food scraps and recyclables
- ◆ Ask questions about the curbside collection program changes
- ◆ Pick up information to take home
- ◆ Try their hand at sorting recyclable packaging and papers, including which items go to the depot (participants could be given a program-branded hat or mug)



**Curbside collection program webpage:** Update the webpage with content about the program changes, starting dates, information about public information events, downloadable information (newsletter, how-to brochure, frequently asked questions (FAQ), collection calendar).

**FAQ:** Detailed information sheet identifying all the program details (who, what, where, when, why, etc.) and posted on the program's webpage. Hard copies to be made available at the municipal office(s), information displays, and drop-in events.

**Information displays:** A staffed or un-staffed display about program changes set up in spaces frequently visited by the public, such as recreation centres, arenas, and community events.

**Picture block on local government's main web page:** With hyperlink to the curbside program changes.

**Retailer notice:** A letter to local retailers of waste containers and container liners to notify them of the upcoming changes to the curbside program and the types of liners that can and cannot be used for organics (as relevant).

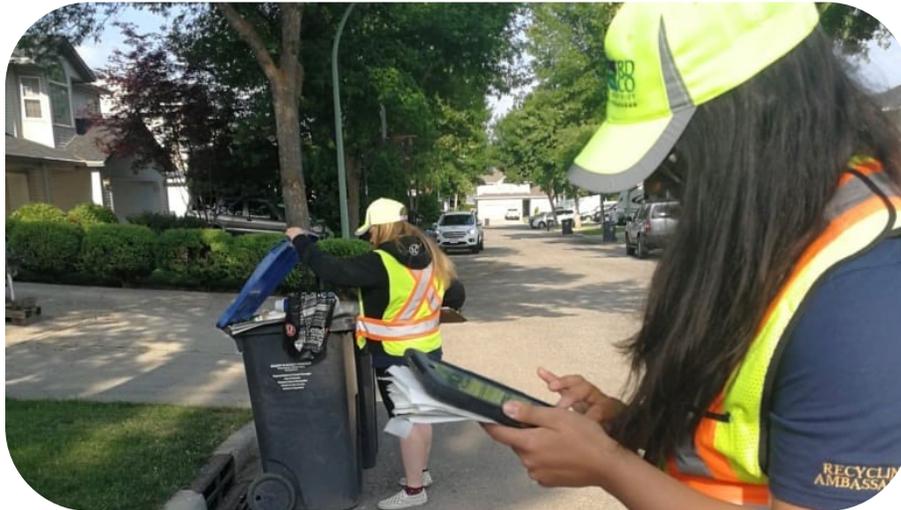
**Shelf-talker:** For posting where container liners are sold (if acceptable in your program).

**Downloadable calendar:** For residents who would like a curbside collection schedule showing the collection dates, provide a downloadable calendar on the program webpage.

**Front-end staff:** Front-end staff are likely to receive a lot of phone calls with questions about the program changes. Front-end staff will be provided with detailed program information (developed by program staff) and undergo a training session on the program changes.

**Ambassadors:** Community liaison personnel who visually inspect curbside containers on set-out day to observe levels of contamination and engage directly with the resident to provide feedback. Ambassadors can also engage with residents on other community issues such as water conservation.

In the photo below, Central Okanagan Regional District summer staff are auditing curbside recycling carts for non-compliant contents.



This program would be operational for two to four months and only repeated if an ongoing need is identified. Ambassadors can also undertake other community engagement endeavors, like staffed displays and recognition programs. An ambassador program provides the opportunity to engage directly with residents and answer questions (i.e., resolve issues before they come up). These types of social marketing approaches are recognized as having the greatest long-term impact on behaviour.

The local government could continue using ambassadors to conduct annual curbside audits to gather critical performance information for all three curbside collection streams and identify potential issues. Auditing could be both random and targeted (i.e., if there are known problem areas within the community).

**Compliance notices:** Compliance notices provide immediate feedback when left on the collection containers by collection drivers (or ambassadors), indicating incorrect program participation (overweight container, contamination, excess containers). A call-in number and website link are included to direct residents to where they can learn more.

**Program brochure:** A professionally designed program brochure that clearly lays out how to participate in the program will accompany the containers when they are delivered to each home.

**Calendar:** Given the multiple collection streams and possible changes in collection frequency, a collection calendar that indicates which items are being collected during which week is useful to residents. This calendar, which most residents keep and refer to throughout the year, can also be a platform for other program-related reminders (e.g., how to prepare materials for set-out, what

## Example Frequent Asked Questions

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*Below is an example of frequently asked questions (FAQ) from the City of Salmon Arm's Food Waste Collection program change. Residential food waste collection was launched in July 2019. Some questions and answers (Q&A) may not be relevant to your program but can serve as a useful reference for developing information for your residents.*

### **Q: I already use a backyard composter; do I have to use my Food Waste Cart?**

**A:** Backyard composting is a great way to discard of kitchen scraps, and we encourage homes to continue to compost in their own yards. However, there are many items that can go in your Food Waste Cart that do not usually go in a residential composter including:

- ◆ Meat and bones
- ◆ Fat and grease
- ◆ Dairy products
- ◆ Dry and cooked pasta
- ◆ Soiled cardboard
- ◆ Paper towel
- ◆ Facial tissue
- ◆ Any other food items that are leaving your composter too wet or too dry.

Use the Food Waste Cart for all of the organic items that you cannot put in your composter to further decrease the amount of garbage in your bi-weekly collection.

### **Q: How big are the Food Waste Carts?**

**A:** The City Food Waste Carts have a volume of 57 L. A typical large sized garbage can is approximately 120 L. The size of the Food Waste Carts helps to ensure they are not over filled and can still be manually lifted by the collectors. A limit of 10 kg (22 lb) of food waste can be put out each week in the cart.

### **Q: Can I put yard waste in my Food Waste Cart?**

**A:** Yard waste is not permitted in the Food Waste Carts. The City provides two yard waste collection events each year as a part of the Curbside Collection program – one in the spring and one in the fall.

Yard waste can also be taken to the Salmon Arm Landfill year-round, free of charge.

### **Q: Where does the curbside food waste go?**

**A:** The food waste is sent to a transfer station at the Salmon Arm Landfill that is owned and operated by the Columbia Shuswap Regional District. From the transfer station, the Food Waste is taken to Spa Hills Composting at 2223 Yankee Flats Road SW, Salmon Arm, BC. Visit their website at [www.spahillscompost.ca](http://www.spahillscompost.ca)

### **Q: Do I have to line my Food Waste Cart/kitchen catcher?**

**A:** No, you do not have to use liners for your food waste. However, should you choose to line your Cart or kitchen catcher, you must use a material that is also compostable including: news

paper and compostable paper bags.

**Q: What do I do if I have more food waste than the one (1) cart per week that we are allowed?**

**A:** If you have extra food waste on your collection day that will not fit in your Food Waste Container, you may place an extra Kraft paper bag of food waste at the curb for collection with an Extra Food Waste Tag. These tags can be purchased at City Hall or the Salmon Arm Recreation Center (swimming pool). It would be a good idea to double bag your extra organic material to ensure your bag does not break upon collection.

If you find you are consistently over the limit of weekly food waste collection, you may wish to purchase a second food waste container and service. This is a great option for households with large families, or with secondary suites. You will be charged a onetime fee of \$25 for the new cart, and \$60 per year will be added to your property tax bill for the additional weekly collection. \$60 per year works out to be an extra \$1.15 per week for the extra collection.

**Q: What do I do if my Food Waste Cart breaks?**

**A:** If your Food Waste Cart breaks due to vandalism, wildlife or a manufacturing defect, you may request a new cart, and return the damaged cart to City Hall. If you accidentally damage your cart you may purchase a new cart at City Hall and the cart will be delivered to your residence.

**Q: Can I put pet waste or kitty litter in my food waste container?**

**A:** No, pet waste is not accepted in the curbside food waste collection. Please bag all pet waste and cat litter and put it in your garbage.

**Q: Are there other communities that have curbside organics collection?**

**A: Yes!** There are many municipalities in BC that collect organics as a part of their curbside collection program. There are case studies that outline programs in a number of municipalities and can be found on the Government of British Columbia website at under Residential Organic Waste Diversion:

<https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/organic-waste-diversion/residential-organic-waste-diversion>

### **Q: What happens if I miss a Food Waste collection day?**

**A:** If you do not get your food waste collected on your collection day you can:

- ◆ Purchase an Extra Food Waste Sticker to put on an additional bag of food waste on your next collection day or,
- ◆ Take your Food Waste to the Landfill. Your food waste will be deposited in the landfill with other garbage, so make sure you get it to the curb for collection so it can be composted!

If you do miss your collection day, consider freezing your food waste (if possible) until the next collection.

### **Q: If I can't determine if an item is compostable, should I put it in my curbside Food Waste Cart anyway?**

**A: WHEN IN DOUBT, THROW IT OUT!**

We can appreciate wanting to do your best to keep compostable materials out of the landfill; however, contamination is difficult to separate and leads to clean compostable material being sent to the landfill.

*Get the RecycleCoach app on your mobile device to assist you with what goes where.*

## APPENDIX C – Implementation Timeline Templates

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## APPENDIX D – Sample Call Tracking Log

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# Sample Call Takers' Tracking Log

*Call takers' log for organics collection launch.*

**Name of Caller:** \_\_\_\_\_ **Call taker (initials):** \_\_\_\_\_

**Contact Info:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Location:** \_\_\_\_\_ **Route No.:** \_\_\_\_\_

**Issue/reason for call** *(check boxes below):*

- When will container be delivered?
- Concern they were missed in the distribution
  - Tracking deliveries by distribution contractor – we can check if it has been delivered
  - Will not be home
  - Have a seasonal residence
- Incomplete information package received
- Don't want the organics container
  - Already compost
  - Don't have any food waste for collection
  - Don't want to pay more for it
- Upset with change to garbage collection (down to one can bi-weekly)
- Questions regarding recycling
  - Question reason to go to depot for non-curbside items
  - Specific curbside material(s)
- Questions about collection trucks (e.g., split packer collection truck)
- Concern with increase in fees/costs
  - Why charged for organics collection if processor will sell end product for money?
  - Why will utility fees go up?
- Questions about organics processor
  - Odours
  - Composting process
  - Location
  - Free compost because residents are providing the raw material
- Clarification of open house events
- Clarification of collection schedule
- Complimenting the program
- Other solid waste related question
- Animals and pests

**Notes** *(if you want to record anything about the conversation):*

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## APPENDIX E – Annual Business Plan Template

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# Annual Business Plan Template

**LEGEND:** /y = per year    kg/hh/y = kilogram per household per year

<b>AREA</b>	SOLID WASTE SERVICES		
<b>SERVICE</b>	RESIDENTIAL GARBAGE, FOOD WASTE & RECYCLING COLLECTION PROGRAM		
<b>CURRENT SERVICE LEVEL WITH EXISTING RESOURCES</b>	<p>Curbside collection service of residential waste (garbage, recycling, and food waste) is provided to over [xx,xxx] single family and equivalent homes throughout the service area. The collection is provided through a private sector contractor.</p> <p>The program prepares and distributes public education materials to promote Zero Waste as a reduction goal.</p>		
<b>PERFORMANCE INDICATORS</b>			
<b>MEASUREMENT INDICATOR</b>	<b>BENCHMARK</b>	<b>YEAR 20[xx] CURRENT PERFORMANCE</b>	<b>20[xx] PERFORMANCE OBJECTIVE</b>
<b>User Rates</b>	Adjacent municipalities providing a comparable level of service range (20[xx] rates) <ul style="list-style-type: none"> <li>◆ \$[xxx]/y: [Municipality]</li> <li>◆ \$[xxx]/y: [Municipality]</li> <li>◆ \$[xxx]/y: [Municipality]</li> </ul>	\$[xxx]/y	\$[xxx]/y
<b>Food Waste Capture Rate</b>	125 kg/hh/y	[xxx] kg/hh/y	[xxx] kg/hh/y
<b>Waste Disposal Rate</b>	[xxx] kg/hh/y	[xxx] kg/hh/y	[xxx] kg/hh/y
<b>Total Program Disposal Rate</b>	350 kg/hh/y	[xxx] kg/hh/y	[xxx] kg/hh/y
<b>KEY ACTIONS TO ACHIEVE 20[xx] PERFORMANCE OBJECTIVES (Examples)</b>			
<ul style="list-style-type: none"> <li>◆ Work with collection contractor and organics processor to improve quality and quantity of food waste collected.</li> <li>◆ Continue meeting our obligations for collecting packaging and printed paper in accordance with the agreement with Recycle BC.</li> <li>◆ Promote and monitor the implementation of the online collection schedule and collection reminder system.</li> <li>◆ Prepare and distribute three (3) editions of the collection program newsletter.</li> <li>◆ Maintain web content for the curbside collection program.</li> <li>◆ Meet twice a year with the collection contractor to review operational efficiency.</li> </ul>			

## APPENDIX F – Bear Resistance Example

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## Bear Resistance Example: City of Port Coquitlam

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In 2015, the City of Port Coquitlam (Port Coquitlam) developed an in-house solution to make residential curbside carts bear-resistant and keep costs low. The locking mechanism (see photo) secures the cart lid, making it difficult for the bear to access the contents. These locks are now Wildsafe BC approved.

With many other locking systems, the lock is riveted to the cart, necessitating a full lid replacement if a bear damages the cart and lock (costing about \$75-\$100 per cart). Instead, the Port Coquitlam lock uses two metal bands that clip under the rim on either side of the cart. The two parts clasp together across the cart lid to form a rigid barrier that keeps the lid tightly closed. Port Coquitlam has witnessed bears taking almost an hour of persistent effort to dislodge the lock. In the six years the municipality has used these locks, not a single lock has been damaged in a bear incident. Cart lids have been damaged, but their replacement cost is minimal (\$20 in 2021). This in-house designed and manufactured lock costs \$50 per unit.

Port Coquitlam also has extensive education strategies to minimize bear conflicts. Key messages include:

- **LOCK IT UP.** Secure garbage and food scraps in a wildlife-resistant enclosure (garage or shed) or by using the city's wildlife-resistant cart lock or a lock certified by Wildsafe BC.
- **SET IT OUT.** Cart set-out times are between 5:30 and 7:30 am on collection day, and carts must be re-secured by 7 pm.



Port Coquitlam provides instructions for proper lock installation and use at [www.portcoquitlam.ca/lock](http://www.portcoquitlam.ca/lock). At [www.portcoquitlam.ca/bears](http://www.portcoquitlam.ca/bears), the municipality also communicates a variety of information about the regulations and how to keep homes and the community safe from bears and safe for bears.