



April 4, 2024

**Technical Memo #2
Community Education, Communications,
and Outreach within CSWM**



TO: Regional Solid Waste Advisory
Committee (RSWAC)

TO: April 4, 2024
RSWAC:

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TO: Presented at a future CSWM
BOARD: Board Meeting

COMPANY: Let's Talk Trash

FILE: 5360-30 SWMP

Strategy Description

Community education, communication, and outreach play a pivotal role in shaping the Strategic Goals and priorities outlined in the Solid Waste Management Plan (SWMP) renewal process. Supporting community education, communication and outreach is an approach that aligns most closely with Goal #5 - to have informed residents, businesses and community partners empowered to participate effectively and consistently in proper waste management practices.

Applicable Guiding Principles

- ✓ *Promote and support zero waste approaches and support a circular economy*
- ✓ *Promote the first 7 R's*
- ✓ *Prevent organics and recyclables from going into the garbage*

A key strategy for boosting diversion and participation rates is to equip every sector of the community with the know-how to optimize waste diversion and make the most of available services and facilities. Acknowledging the geographically large and diverse service area that the Comox Strathcona Waste Management (CSWM) encompasses, it's difficult to convey a single message that will be applicable to each region when service levels vary and facilities are not standardized. This strategy offers tools to guide CSWM towards lowering the current average annual waste generation of 551kg per person to the targeted 350 kg per person through a diverse approach that addresses the unique characteristics of the various service area

By focusing efforts on education, communication, and outreach, from a customized, regionally specific approach, the CSWM holds a significant and wide-ranging opportunity to impact and reshape individuals' and entities' perspectives on waste. A recent study undertaken and published by the University of British Columbia in 2023 that was funded through the Government of Canada's Zero Plastic Waste Initiative, found that a number of educational interventions and outreach approaches can effectively influence behavioural change and most notably, make an impact in reducing consumption ([link](#)). This study also highlighted that people respond to different approaches, providing experimental evidence that supports the need to have a multifaceted approach to education and outreach efforts. Creating awareness, encouraging engagement, and ensuring ongoing communication can therefore assist with overall waste reduction and enhance the use of waste management services.

Citizen engagement and understanding of the CSWM services supports regional resilience and proves invaluable during the introduction of new programs or changes to the system, whether temporary or long-lasting.

It's important to recognize that community education, communication, and outreach do not operate in isolation; they are interconnected and impact the other five draft Goals outlined in the SWMP. The interconnectedness of these elements underscores their essential role in forming a holistic and effective waste management strategy.

CSWM Background

The landscape of waste management is anything but clear and intuitive. Across the province and federally, there continues to be confusion with Extended Producer Responsibility (EPR) programs, what services are provided depending on if you live in a municipality or electoral area and understanding that service levels vary depending on where recycling is generated (e.g. business vs. single-family home vs. apartment). Addressing contamination also remains to be a challenge due to the large variance in plastics, bioplastics and nuances within EPR programs.

Since the previously approved SWMP in 2012, CSWM has implemented a robust educational strategy in an effort to drive behaviour change and to increase waste

diversion efforts. This is outlined in a recent staff report from November 2023 titled, 'School Educator Summary 2018-2023 and 2024-2025 Initiatives' ([link](#)). During this time, the approach has focused on promoting presentations within schools, organizing landfill tours, and providing community education through a variety of outreach efforts. These educational initiatives have proven to be cost-effective and are a valued service that actively promote waste diversion.

There are currently three educator roles; school, urban and rural. The CSWM curriculum educator supports school-based education programs for delivery to elementary school students (Grades K-9), to deeply engage in place-based inquiry and learn about waste in the region. They provide teachers and schools with an option to enhance their lesson plans while also developing and preparing program content of their own. This curriculum is implemented in School Districts 71, 72, 84 and 47. From an equity standpoint, the CSWM contracted curriculum educator has visited nearly all schools in the CSWM service area over the course of the five-year contract, even during the pandemic. The following are a snippet of what the CSWM curriculum objectives include:

- Create awareness that we can be mindful about what we put into the landfill to ensure its life is extended as much as possible.
- Promote sustainable practices through the Power of R program.
- Promote waste prevention through making sustainable choices.
- Focus on waste avoidance rather than end-of-life management of products.
- Explore key concepts about waste disposal and food loss, reduction, reuse, recycle, repair, reuse, reduce and its impact on the livability of the region.
- Provide field trips to tour CSWM facilities.

In parallel, a second contractor has been engaged by CSWM to spearhead community education and outreach endeavors. The community educator engages with approximately 5,000 residents each year across the service area through participation at large community events, home shows, mall displays, recycling depots, community clean ups and Repair Cafés. Free presentations and workshops to support waste reduction efforts are also available upon request for organizations, strata's and other community groups. The community educator has

a rural and urban focus to ensure that these two community demographics receive ample attention and support.

The work of the community educator is intended to support CSWM residents on waste diversion initiatives ranging from participating in municipal curbside collection programs, to education on available facilities and zero waste alternatives to common single-use household items. This position also works to provide outreach on recycling options for the 22 various EPR programs, home diversion tips and prevention of illegal dumping. A new area of outreach includes addressing renovation, construction and demolition waste to highlight the importance of proper waste management at the job site, including asbestos awareness, outlining cost implications and fines for improper waste handling, repurposing opportunities and potential partnerships for assistance with waste diversion.

The CSWM also has a dedicated webpage where residents can find what services and facilities are available within their region, information on what can be recycled, what to do with household hazardous materials, details for food and yard waste diversion, educational videos and downloadable resources for both residents and teachers. Tours and presentations can also be booked through this site.

Recognizing that residents prefer various methods of communication, the CSWM continues to evolve and diversify modes of communication. CSWM is embarking on a website revamp to improve usability and accessibility via chatbot, as well as a partnership with the Recycling Council of British Columbia to provide improved response time and easier access to information. To improve access, our CSWM website has the ability to translate into any commonly spoken language through a single click online. The CSWM has also established a [Facebook](#) (Meta), [YouTube](#), and [Instagram](#) pages that provide different mediums of digital information sharing such as videos, bite size news blast and social media posts.

The most recent addition to the digital communication suite is the ReCollect app. In early 2024 the CSWM finalized involvement with ReCollect. This new tool provides residents in the Village of Cumberland and the Royston curbside service area with a new way to be notified of waste collection days and alerted for service disruptions. The app can be expanded to include other areas with curbside

collection services at a later date. For all CSWM residents, the app provides a Waste Wizard function that allows the user to submit queries for specific materials or items to find where they can properly dispose, divert or recycle and receive local answers. This app is consistent with the apps in Courtenay, Campbell River and Comox using the same platform to deliver a consistent regional message across the service, while still maintaining the ability to tailor messaging for specific communities as needed. This was best demonstrated through the recent launch of the curbside organics campaign.

Recognizing that the first call or inquiry a resident may make regarding their local recycling service could be to their municipality, local government staff are an important partner in the front line educating in diversion from answering phones, sending out educational materials, to providing ambassadors that go door to door; all important to the efforts of CSWM.

Behaviour change is a gradual process that typically demands a long-term investment with sustained efforts to gradually raise the baseline for the majority of the population over time. Research has demonstrated that the traditional approach of using ads, brochures or websites on their own to encourage behaviour change simply doesn't work. An integrated, diverse approach that uses a variety of communication methods and engagement tools to encourage behaviour change is required if the goal is to reach and effect change within a wide-spread and varied population, such as the CSWM service area.

Initial engagement with residents through Step 1 and Step 2 of the Plan renewal process have indicated strong support for education and increasing capacity within this landscape. The role of solid waste education, outreach and communication can be summarized as such:

- empowers communities;
- raises awareness for proper waste disposal;
- encourages responsible consumption habits;
- builds a culture of placing importance and value on diversion;
- establishes effective utilization of waste management programs;
- enhances public participation;

- increases community involvement in waste reduction initiatives; and
- fosters partnerships with local businesses and organizations.

Throughout the Step 2 engagement process, a consistent theme that emerged was a strong desire for increased solid waste outreach and recognition that education is a fundamental catalyst for behavioral change.

Options for Implementation

Strategy 2a: Maintain Education and Engagement Levels

This strategy approach will continue to provide educational opportunities throughout the school districts of the CSWM region (SD71, SD72, SD84 and SD47) in addition to having a presence at various regional events throughout Comox Valley Regional District (CVRD) and Strathcona Regional District (SRD). An additional staff member is joining the service in 2024 which will add capacity for more direct oversight of communications work, and reduce the need for consultants to support engagement. The creation of new initiatives, program improvement, and broadening demographic reach will be challenging to attain as time and budget will be concentrated on maintaining the status quo.

Operational and Staffing Impacts Anticipated

This strategy would not require a significant change in current operational and staffing time as current levels would be maintained, including the new position.

Estimate of Diversion Impact

The impact of maintaining the current service level is expected to produce results that equate to the current level of diversion being seen across the service area with anticipated incremental improvements each year. The current diversion rate for the CSWM service area is estimated to be 51%.

Financial Implications

The total cost to maintain this current level of service has been budgeted at: \$111,125 for 2024 (inclusive of urban and rural community educator, school educator and landfill tour education).

Regulatory Authority Required

There is no specific service that would need to be established to execute this strategy.

Diversion Potential

Low

Current diversion rate is estimated to be 51%

Operational Impacts

Low

Maintain staffing levels with the addition of the approved position.

Financial Implications

N/A

No increase in cost to CSWM

Strategy 2b: Increase Education, Outreach and Communications Capacity

This approach presents an opportunity to diversify outreach strategies, engage more sectors within communities, provide more regionally specific content and increase support to assist with new waste reduction and behaviour change initiatives. Expanding the reach of the current service level could start to target new demographics and sectors within the CSWM service area that have presently received low engagement and support.

During Step 2 engagement, respondents emphasized the need for education and the recognition of barriers to diversion and participation as one approach to strengthen the six Goals. Among the five themes identified for enhancing the draft Guiding Principles, education and communication emerged as key elements. Looking ahead at how solid waste is managed over the next ten years, increased education to encourage positive behavioural change was highlighted by stakeholders. At the fifteen community events that were hosted, twelve of the events identified an increase in educational aspects as a key action that residents felt could be considered.

Demographics that could be focused on with increased capacity are the tourism sector, seasonal workers, non-permanent residents such as those of the Air Force Base, college students, new residents, immigrants and lower socio-economic populations, some of which require more visual educational material due to varying degrees of literacy.

Added capacity could also start integrating tailored content for local residents and communities through local publications, such as island newsletters, monthly bulletins, or social media platforms which can provide more focused information to regionally specific areas. This could involve engaging with local residents and facility staff in a collaborative approach to lend an authentic voice from each regional community that speaks more specifically to challenges or concerns of the area.

Various regions (Capital Regional District, Regional District of Nanaimo, Regional District North Okanagan) provide monthly, seasonal or annual newsletters from their solid waste service to relay various initiatives, highlight new services and to provide a current pulse on what is taking place, often times behind the scenes. These newsletters provide community members with a more fulsome understanding of what services are available and where efforts are taking place, all of which assist in increasing education, awareness and garnering support for the service and associated costs.

The Step 2 engagement process highlighted a lack of interaction with the business and institutional sector which represented 1.8% of the surveyed respondents. Despite contributing significantly to the regional waste stream, the business and institutional sector remains to be an untapped demographic within the current approach to education, outreach and communication.

Within schools, increased capacity could involve working with School Boards and administrative staff to develop and adopt a systems-based approach to waste management to establish more consistent waste diversion programming and infrastructure across school districts and schools. For instance, work towards district-wide waste management plans can be developed to establish recycling and composting collection systems that are identical in each school. If students, teachers or janitorial staff change schools, the diversion system remains the same.

Expanding the current educational service level capacity opens doors to new demographics, service sectors and facilitates a smoother on-boarding process for new initiatives, such as the food and yard waste diversion program. While early adopters may require minimal encouragement, achieving broader participation

necessitates a concerted effort through a multi-pronged approach. Increasing capacity can start to address more diverse points of interest through creative outreach approaches and added focus can be given to initiating behavioral change actions across the wide and varied audience within the CSWM service area. By investing time and effort to identify perceived and actual barriers, targeted campaigns can be designed to drive regional and demographic-specific participation rates and ultimately, waste diversion.

Operational and Staffing Impacts Anticipated

This strategy would require an increase in current operational and staffing time that is associated with the implementation of new programs and service providers, which is estimated to be incremental to the increase in added capacity.

Estimate of Diversion Impact

There is opportunity for low to medium diversion impacts that could result from increasing the current level of education, communication, outreach. The federal government summarized in a 'National Waste Characterization Report' ([link](#)) that overall, there is significant diversion potential within the Industrial, Commercial and Institutional (ICI) sector with food (25%), plastics (16%), paper (14%), metal (4%), yard/garden (3%) and glass (2%) equating to 64% of ICI waste disposed of in Canada being potentially divertible. Enhancing capacity building within the CSWM for education, outreach and communication services has a high probability of reaching large-scale waste generators to impact change in addition to reaching new sectors, demographics and working to increase the overall waste diversion rate.

Financial Implications

The cost to increase capacity with this strategy could be addressed through a variety of approaches. An incremental increase could be used or a predetermined increase of \$40,000 could be established to make an intentional commitment to address the actions outlined within this strategy.

Regulatory Authority Required

There is no specific service that would need to be established to execute this strategy.

Diversion Potential

Low to Medium

National study estimates a 55% diversion opportunity within the ICI sector

Operational Impacts

Low

Maintain current operational and staffing levels

Financial Implications

N/A

No increase in assets owned by CSWM

Strategy 2c: Invest in Portable Waste Diversion Infrastructure

During the Step 2 engagement process input related to improving waste diversion associated with community events was received. Large public events commonly generate a substantial amount of waste and are often associated with inadequate waste diversion infrastructure, making it challenging for events to reduce waste. It is estimated that on average only 8% of waste from festivals is being diverted from landfill ([‘Sustainability in Canadian Festivals’](#), Ryerson University, 2017). Providing support and resources to facilitate waste diversion for events could result in significant waste reduction. Reduction outcomes can be exponential the larger the event. The size of a ‘large public event’ may differentiate between communities, but is expected to attract over 1,000 people in a single day.

Using local examples; RibFest 2018 served as a special event waste diversion pilot project. This event was supported by the CSWM Services Coordinator, utilized regional signage and collection bins and reported 64% waste diversion as a result. Relay for Life Comox 2019 employed similar waste reduction efforts and reported 75% diversion from landfill.

Increasing diversion opportunities through investment in infrastructure and signage, providing support for event coordinators and resource material for event vendors are examples of approaches that could be undertaken within this strategy.

By offering appropriate infrastructure, a consistent and standardized system can be established, benefiting a diverse range of users. This ensures that both event attendees and organizers have access to efficient waste reduction and diversion

equipment. Implementing such infrastructure can enhance the overall sustainability of both sites and events in addition to providing a recognized framework that helps reduce contamination and streamline the process for everyone involved. An additional benefit to standardizing waste diversion at events provides an informative, recognizable, hands-on educational tool with interaction opportunities for the public, organizers and vendors to engage with.

In the event of a natural disaster, this infrastructure could also be used by emergency planning staff to equip recreation complexes or other facilities that may need to temporarily house large groups of people.



Existing CSWM infrastructure infrastructure



Examples of standardized, portable, standalone



Operational and Staffing Impacts Anticipated

This strategy would require an increase in current operational and staffing time. Research would be required to select collection bins and create complimentary signage. Additional resource creation and development to assist event coordinators and vendors would require increased time, graphic design and publication costs. On average, the CSWM Services Coordinator spends 20 hours per event to on-board, support and train event coordinators. Hiring a zero-waste event coordinator could assist staff to increase engagement and outreach efforts and ultimately, reach more events. A portion of staff time would still be required to implement, train, oversee, administer and manage this strategy.

Estimate of Diversion Impact

There is opportunity for low diversion impacts through increasing diversion at events. Although large bursts of volume can be created over a short period of

time, these annual or one-off events, do not significantly impact the overall diversion rate within the greater CSWM service.

Financial Implications

A one-time capital investment of \$40,000 is estimated to be required to purchase portable event diversion infrastructure. This could include:

- portable potable water station for bulk water distribution;
- portable collection bins for easy setup/takedown;
- leak-proof collection containers for food waste diversion; and
- signage and resources to facilitate proper use of assets.

It is recommended to require a damage deposit but no user fee to remove barriers, increase accessibility and encourage their use.

Hiring a contracted zero waste event coordinator is estimated to be \$1,000- \$1,500 per event.

Regulatory Authority Required

Recommend CSWM request an update to policies for local government run facilities to require waste management considerations for any booking requests, reservations or users including events or special functions, which can be supported through lending zero waste event infrastructure and resources. Allowing for ICI organics diversion would also support this strategy.

Diversion Potential

Low

Events contribute a small percentage to the overall tonnage total

Operational Impacts

Low to Medium

Educational services add-on, or additional contract

Financial Implications

Medium

\$40,000 plus \$1,000 to \$1,500 per event

Strategy 2d: Invest in Regional District Facility Diversion

Outfitting SRD and CVRD owned and/or operated facilities with more than one disposal stream option would ensure each facility has options for container and refundable stream recycling, potentially organics, and garbage. Many public events are held at local government facilities and equipping these spaces with permanent waste diversion infrastructure could standardize and start to normalize waste diversion in large public spaces. Examples of public facing waste diversion infrastructure are included and illustrate uniform sets of 3 or 2-stream collection containers.



Operational and Staffing Impacts Anticipated

This strategy would require an increase in current operational and staffing time associated with waste disposal. Added collections would require oversight to mitigate contamination and coordination for pickup would increase. Refundables could be donated to a local charity or used to subsidize costs associated with the added collections.

Estimate of Diversion Impact

There is opportunity for low diversion impacts overall, but high level of engagement and education through interaction with the facility bins. Suggested facilities would include Strathcona Gardens Recreation Complex, Comox Valley Aquatic Centre, Comox Valley Sports Centre, Comox Valley Exhibition Grounds.

Financial Implications

Refundable collection containers can be acquired free of charge through the Encorp EPR program. The cost of a 2 or 3 stream set is estimated at \$800 - \$3,000 and \$100 - \$350 for one. Estimate 4 to 6 sets per location, at a cost of \$2,000 per set is \$40,000 plus signage costs.

Regulatory Authority Required

There is no specific service that would need to be established to execute this strategy, however collaboration with both regional districts would be required. A commitment from the facility managers to increase waste management service levels and incorporate signage would be needed to support this investment from CSWM.

Diversion Potential

Low

Education of the public in relatively controlled environment

Operational Impacts

Low to Medium

Increase to service level requirements from Regional District partners

Financial Implications

Medium

\$40,000 in bin costs estimated, plus signage and staff time

Summary of Strategic Actions

Table 1 Strategy Summary Table

Strategy	Diversion Potential	Ops. & Staffing	Financial Impacts	Comments
2a. Maintain Education and Engagement Levels	Low	Low	N/A	Associated with CVWM staff oversight
2b. Increase Education, Outreach and Communications Capacity	Low to Medium	Low	Low	Increase cost for staff or contractor time to encourage ICI diversion
2c. Invest in Portable Waste Diversion Infrastructure	Low	Low to Medium	Medium	\$40,000 in Portable event infrastructure plus staffing costs

2d. Invest in Regional District Facility Diversion	Low	Low to Medium	Medium	Collection bin investment for CVRD and SRD public facilities
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Solid waste education, outreach and communication holds immense importance due to its multifaceted impact on communities and the environment. Fostering awareness and understanding can assist in driving participation and diversion, which is crucial for effective waste management and directly translates into:

- preservation and conservation of natural resources;
- reduced greenhouse gas emissions;
- landfill life expansion;
- economic advantages;
- improved public health; and
- long-term sustainability and resiliency.

Awareness building and consistent effective communication is a contributing factor to motivate and mobilize citizens, organizations and industries within the CSWM service area. Since citizen engagement is crucial for effective solid waste management, it is necessary to understand concerns and equally necessary to educate members of the public regarding their role in waste management.

By prioritizing solid waste education, outreach and communication, not only are immediate environmental concerns addressed but groundwork is also laid for a more sustainable and resilient future.