



COLUMBIA SHUSWAP REGIONAL DISTRICT

Solid Waste Management Public and Technical Advisory Committee Meeting

AGENDA

Date: Thursday, January 25, 2024
Time: 11:00 AM
Location: CSR D Office - Shuswap Room
555 Harbourfront Drive NE
Salmon Arm, V1E4P1

Pages

1. Land Acknowledgement

We acknowledge that we are meeting in service to the Columbia Shuswap Regional District which is on the traditional and unceded territories of the Secwepemc, Syilx Okanagan, Sinixt and Ktunaxa Nation. We are privileged and grateful to be able to live, work and play in this beautiful area.

Declaration on the Rights of Indigenous Peoples Act
Article 33:

1. Indigenous peoples have the right to determine their own identity or membership in accordance with their customs and traditions. This does not impair the right of indigenous individuals to obtain citizenship of the States in which they live.
2. Indigenous peoples have the right to determine the structures and to select the membership of their institutions in accordance with their own procedures.

2. Call to Order

3. Adoption of Agenda

Motion

THAT: the Solid Waste Management Public and Technical Advisory Committee meeting agenda be adopted.

4. Meeting Minutes

4.1 Adoption of Minutes

1

Motion

THAT: the minutes attached to the Solid Waste Management Public and Technical Advisory Committee meeting agenda be adopted.

4.2 Business Arising from the Minutes

None.

5. Tipping Fee Review

Verbal update by Chair regarding findings and recommendations presented to the CSR Board at the December Regular Board Meeting.

Click to view the [Solid Waste Tipping Fee and Regulation Amendment Bylaw No. 5871, 2023 Report.](#)

6. Waste Prevention and Diversion Strategies

4

Presentation by Veronica Bartlett, Senior Solid Waste Planner, Morrison Hershfield.

7. Next Meeting

For discussion.

8. Adjournment**Motion**

THAT: the Solid Waste Management Public and Technical Advisory Committee meeting be adjourned.



SOLID WASTE MANAGEMENT PUBLIC AND TECHNICAL ADVISORY COMMITTEE MEETING MINUTES

Note: The following minutes are subject to correction when endorsed by the Committee at the next Solid Waste Management Public and Technical Advisory Committee meeting.

Date: November 2, 2023
 Time: 11:30 AM
 Location: CSRD Boardroom
 555 Harbourfront Drive NE, Salmon Arm

Committee Members Present	J. Mills [^] G. Bau Baiges [^] D. Symbaluk ^{*^} M. Manson [^] C. Cochran [^] L. Baer [^] J. Taylor [^] B. Fairclough [^] R. Putney [^]	City of Salmon Arm City of Salmon Arm District of Sicamous City of Revelstoke Town of Golden Public Member (Golden) Public Member (Sicamous) Public Member (Shuswap) Seldom Silent
Committee Members Absent	C. Fennell N. Weston B. Hunchak A. Scales J. Peterson C. Dorward	Recycle BC Community Futures Revelstoke Public Member (Revelstoke) Public Member (Shuswap) VP Waste Cheap Garbage
Staff In Attendance	B. Van Nostrand [^] G. Casselman [^] K. Doussept [^]	Acting General Manager, Environmental and Utility Services Waste Reduction Coordinator Administrative Services Assistant II
* attended a portion of the meeting only		[^] electronic participation

1. Land Acknowledgement

We acknowledge that we are meeting in service to the Columbia Shuswap Regional District which is on the traditional and unceded territories of the Secwepemc, Syilx Okanagan, Sinixt and Ktunaxa Nation. We are privileged and grateful to be able to live, work and play in this beautiful area.

Declaration on the Rights of Indigenous Peoples Act

Article 23: Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions.

2. Call to Order

The Chair called the meeting to order at 11:32 AM.

3. Adoption of Agenda

Moved By B. Fairclough

Seconded By J. Taylor

THAT: the Solid Waste Management Public and Technical Advisory Committee meeting agenda be approved.

CARRIED

4. Meeting Minutes

4.1 Adoption of Minutes

Moved By J. Taylor

Seconded By C. Cochran

THAT: the minutes attached to the Solid Waste Management Public and Technical Advisory Committee Agenda be adopted.

CARRIED

4.2 Business Arising from the Minutes

None.

5. Overview

5.1 Plan Review Process Recap

6. Business General

6.1 Vision, Goals and Guiding Principles

Solid Waste Management Plan (SWMP) update with discussion.

Post Agenda - Morrison Hershfield presentation and jamboard added.

Veronica Bartlett, Senior Solid Waste Planner, Morrison Hershfield provided a presentation to the Committee.

6.2 Input and Feedback

Identified opportunities and issues from Public and Technical Advisory Committee (PTAC), Committee of the Whole (CoW) and public.

6.3 Tipping Fee Review

Findings and recommendations.

Discussion:

Chair advised that a review of the tipping fees would be presented to the Board of Directors at the November Regular Board Meeting.

7. Next Steps

Future meetings, communications and engagement approach.

Identified in the Morrison Hershfield presentation item 6.1 attached to the post agenda.

8. Next Meeting

TBD

9. Adjournment

1:00 PM.

Moved By B. Fairclough

Seconded By G. Bau Baiges

THAT: the Solid Waste Management Public and Technical Advisory Committee meeting be adjourned.

CARRIED

CORPORATE OFFICER

CHAIR



MORRISON HERSHFIELD

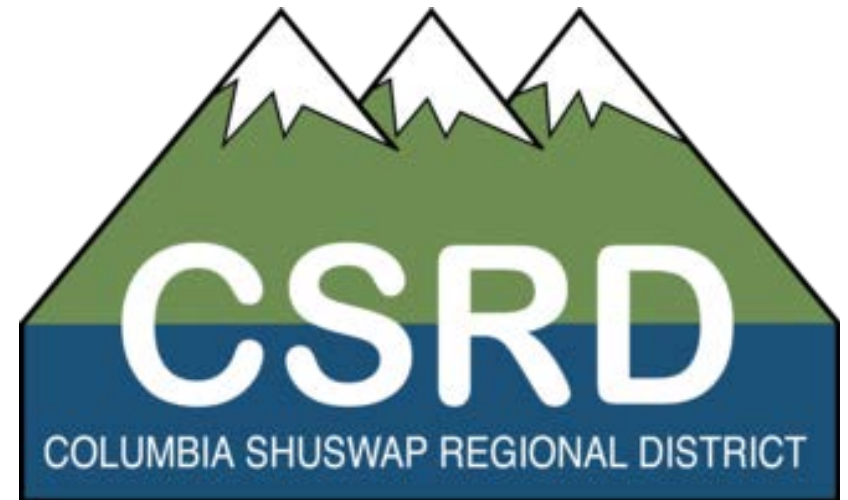
Potential Waste Prevention and Diversion Strategies for the CSRD's new SWMP

Presentation to PTAC on January 25, 2024

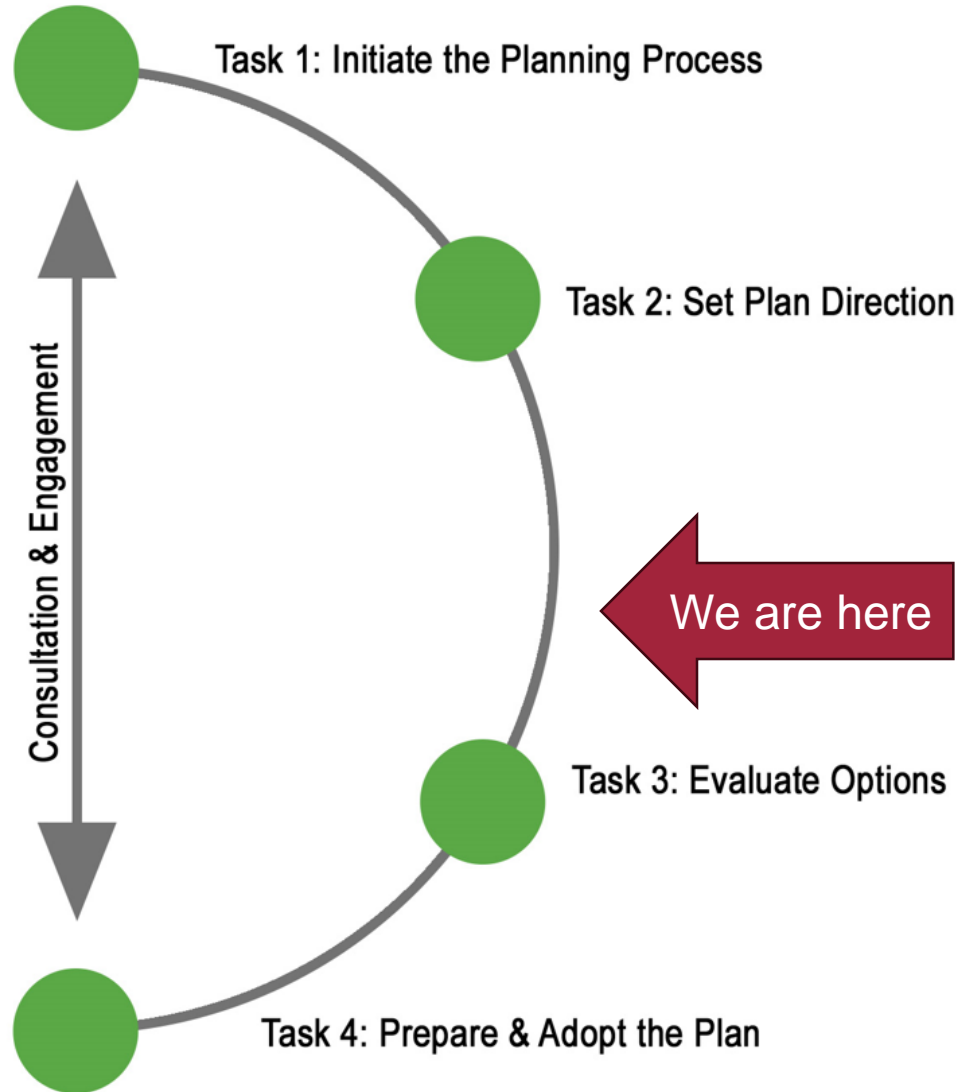


Meeting Outline

- Plan review process *(5 min)*
- Guiding principles
 - *Review and comments (15 min)*
- Four potential waste prevention and diversion strategies
 - *Review and brief discussions on each (60-80 min)*
- Potential impacts from strategies *(5 min)*
- Next steps *(5 min)*



Plan Update Process

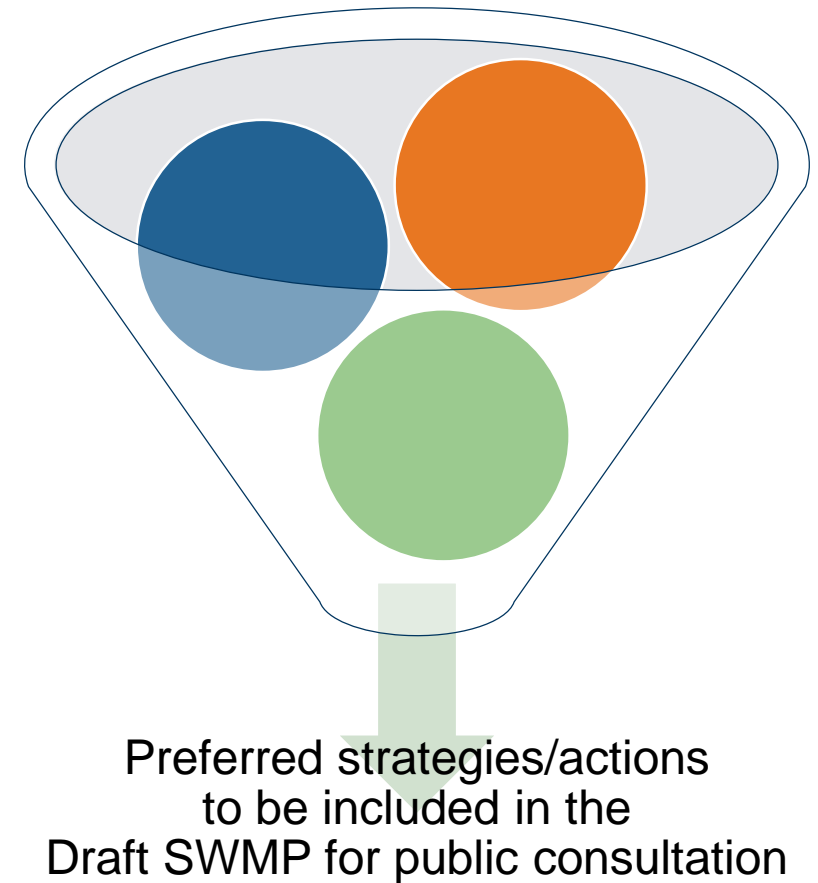


Meeting Purpose

- Outline possible key waste prevention and diversion strategies and potential impacts
- Narrow down these strategies which will form the preferred strategies and actions for the Plan

After Meeting:

Follow-up survey to gauge your priorities and any additional feedback



Proposed Guiding Principles

1: Promote zero waste approaches and support a circular economy

2: Focus on the first 3Rs with a priority for reducing waste (Reduce, Reuse, Recycle)

3: Maximize the beneficial use of waste materials and manage residuals appropriately

4: Support polluter & user-pay approaches and manage incentives to maximize behavior outcomes

5: Prevent organics and recyclables from going into garbage wherever practical

6: Develop collaborative partnerships with interested parties to achieve regional targets set in plans

7: Level the playing field within regions for private and public solid waste management

8: Develop a climate resilient solid waste management system

9: Improve operational efficiency of the current solid waste system

Comments? Questions?





Potential Strategies to Prevent Waste & Improve Waste Diversion

Overview of Potential Waste Prevention and Diversion Strategies

1	Improve Waste Prevention	30 min
2	Improve Access to Three-Stream Curbside Collection	20 min
3	Improve Organics Processing and Diversion Capacity	15 min
4	Improve Education and Enforcement	15 min

Strategy 1: Improve Waste Prevention



Food Waste
Prevention



Single-use
Items and
Packaging



Reuse
Opportunities

Why is Waste Prevention and Diversion Important?

- Shift thinking to waste as a resource
- Important to limit waste going to landfill
- Supported by the guiding principles

Average disposal per capita

BC: 499 kg in 2020

CSRD: 658 kg in 2021



Potential Waste Prevention and Diversion Strategies

1A – 1E:

- Food Waste Prevention

1A: Encourage and support residents and local businesses to reduce food waste.



- Single-use Items & Packaging

1B: Collaborate with member municipalities and local organizations to provide education and outreach to residents, schools and businesses on alternatives to single-use items and packaging.



Potential Waste Prevention and Diversion Strategies

1A – 1E continued:

■ Reuse Opportunities

1C: Adopt successful waste reduction, repair and diversion campaigns targeting residents.

1D: Pilot reuse or repair programs or events in partnership with local organizations and expand if deemed feasible.

1E: Establish grant funding to support local waste prevention and diversion initiatives.



1A: Encourage and support residents and local businesses to reduce food waste

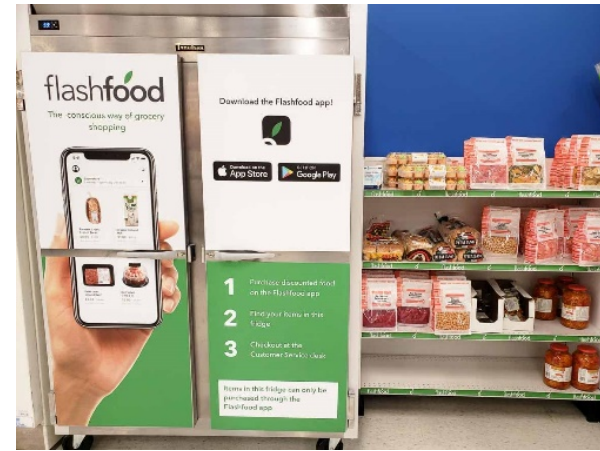
Current



Backyard Composter Program



Opportunities



- Partnerships
- Outreach
- Promotion
- Workshops



1B: Collaborate with member municipalities and local organizations to provide education and outreach to residents, schools and businesses on alternatives to single-use items and packaging

Example

Sustainable Takeout Guide




Product and Purchasing Guidelines for Victoria's Food Service Businesses



Disclaimer: This guide is not intended to inform food safety. Businesses must follow food safe procedures established by the local health authority.



City of Victoria Sustainable Takeout Guide developed for Residents

CUPS		
	COLD BEVERAGES	HOT BEVERAGES
BEST	<p>Reusable</p> <ul style="list-style-type: none"> ✓ Provide reusable cups for on-site dining ✓ Consider participating in a reusable cup-sharing program ✓ Choose durable reusable cups that can be used and washed many times ✓ Choose reusable cups that can be recycled at end of life 	
GOOD	<p>Recyclable plastic</p>  <ul style="list-style-type: none"> ✓ Choose products made from a single plastic material  ✓ Ask your supplier for products that meet the Association for Plastic Recyclers guidelines 	<p>Paper</p>  <ul style="list-style-type: none"> ✓ Choose paper cups lined with recyclable plastic ✓ Choose recyclable plastic or paper lids ✓ Choose a paper sleeve made with high recycled content
AVOID	<p>Compostable plastic</p> <ul style="list-style-type: none"> ✗ Avoid cups and lids that look like plastic but are labeled as compostable or biodegradable 	<p>Foam</p> <ul style="list-style-type: none"> ✗ Avoid foam cups 



Potential Waste Prevention and Diversion Strategies

1C: Adopt successful waste reduction, repair and diversion campaigns targeting residents.

1D: Pilot reuse or repair programs or events in partnership with local organizations and expand if deemed feasible.

Examples



Curb during Winnipeg's Giveaway Weekend



Tool library in Roberts Creek



Metro Vancouver's campaign

■ Examples

- RDN: Zero Waste Recycling Funding
- City of Vancouver: Greenest City Grant
- RDNO: ReTHINK Waste Project Grants
- SCR D: Waste Reduction Initiatives Program



Comments/ Questions on Strategy 1

Strategy 1: Improve Regulatory Requirements to Enhance Waste Diversion

1A: Encourage and support residents and local businesses to reduce food waste.

1B: Collaborate with member municipalities and local organizations to provide education and outreach to residents, schools and businesses on alternatives to single-use items and packaging.

1C: Adopt successful waste reduction, repair and diversion campaigns targeting residents.

1D: Pilot reuse or repair programs or events in partnership with local organizations and expand if deemed feasible.

1E: Establish grant funding to support local waste prevention and diversion initiatives.



Strategy 2: Improve Access to Three-stream Curbside Collection

2A: Support District of Sicamous to assess curbside collection costs and determine if a collection program is desirable by residents.

2B: Provide better access to curbside recycling and organics collection in densely population electoral areas, if deemed feasible.



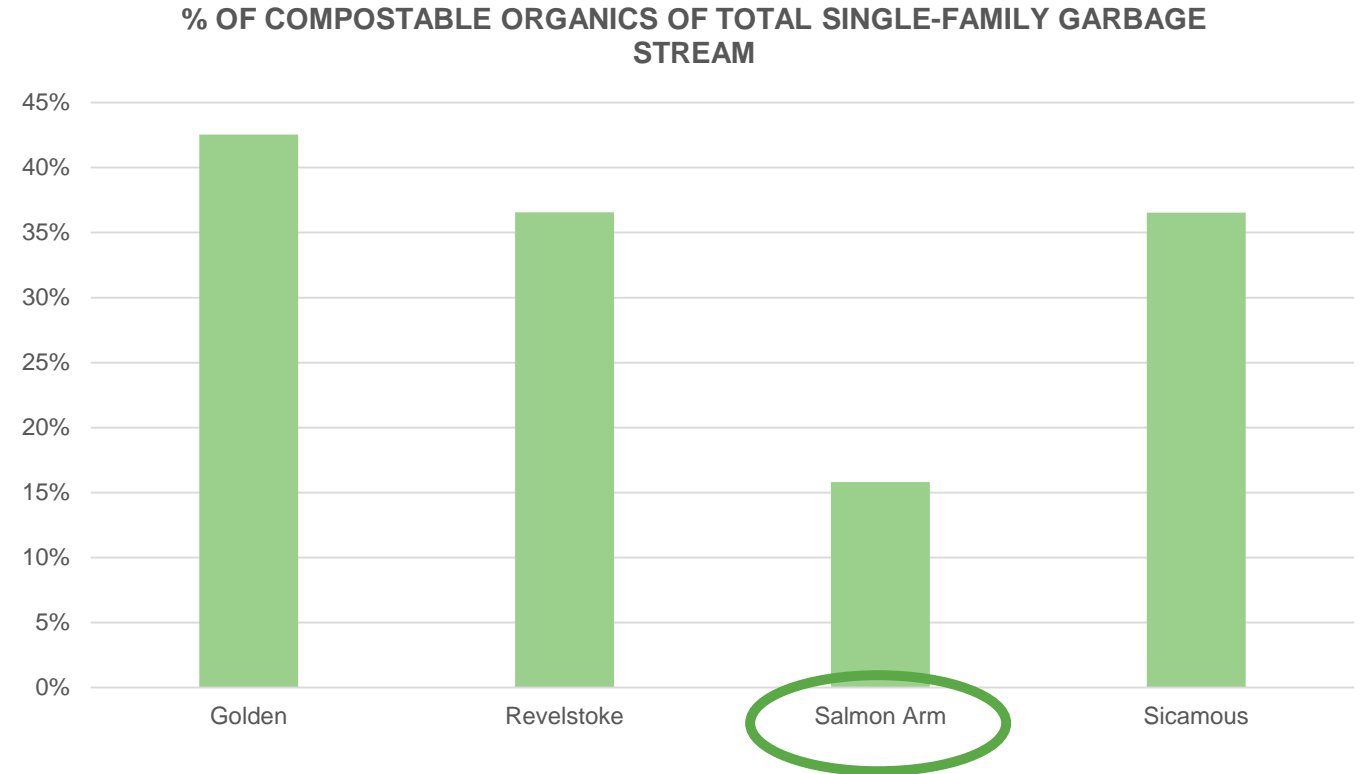
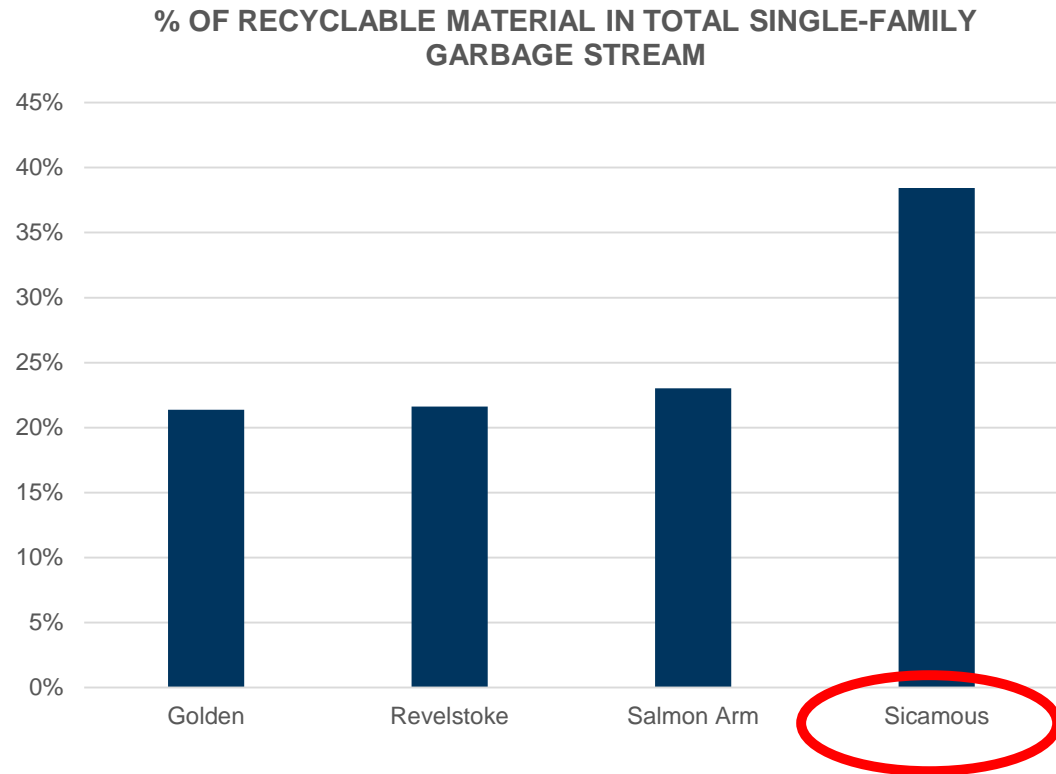
Improve Access to Three-Stream Curbside Collection

- ~60% of the region's population has access to curbside collection
- Service levels differ between member municipalities
- CSRD does not operate curbside garbage or recycling collection programs

Overview of Curbside Collection Services in the Region

Service Area	Service Provider	Recycling	Organics	Garbage
Town of Golden	Municipality	Biweekly	N/A	Weekly
City of Revelstoke	Municipality	Biweekly	N/A Self Backyard Compost	Weekly
City of Salmon Arm	Municipality	Biweekly	Food Waste (Weekly) Yard-waste (twice a year)	Biweekly
District of Sicamous	Municipality	N/A	Yard-waste (annually)	N/A
All electoral areas	Private	Self-haul	N/A	Self-haul

Improve Access to Three-Stream Curbside Collection



Improve Access to Three-Stream Curbside Collection

Pros

- Improved accessibility and convenience to recycling
- Improved waste diversion (recycling and organics)
- Ranked 3rd most important issue/opportunity in 2023 public survey



Improve Access to Three-Stream Curbside Collection



Cons

- Increased financial cost/risk from managing PPP on behalf of Recycle BC as contamination thresholds are enforced
- Only accept paper products and containers (plastic/tin)
- Need for an updated cost analysis may be needed to inform the cost impacts on residents

Questions/ Comments on Strategy 2

Strategy 2: Improve Access to Three-stream Curbside Collection

2A: Support District of Sicamous to assess curbside collection costs and determine if a collection program is desirable by residents.

2B: Provide better access to curbside recycling and organics collection in densely population electoral areas, if deemed feasible.

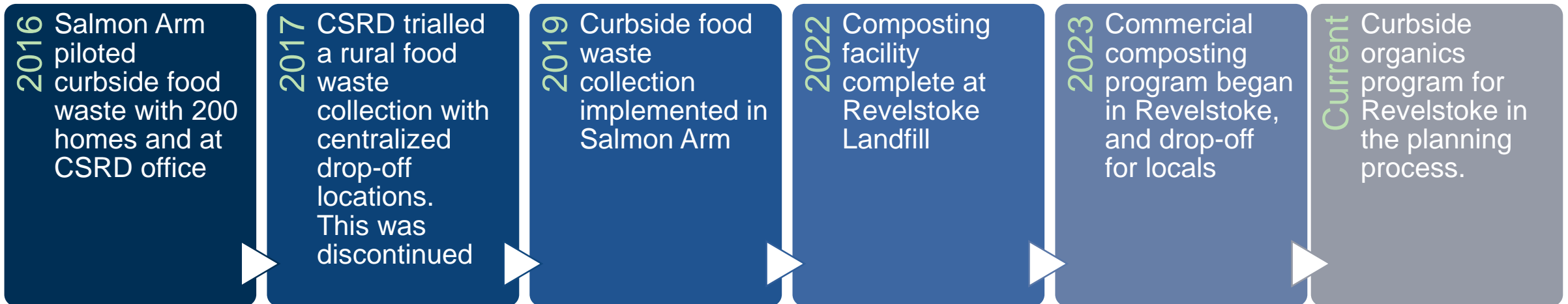


Strategy 3: Improve Organics Processing and Diversion Capacity

3A: Partner with relevant municipalities and assess feasibility of organics processing solutions and implement if deemed feasible

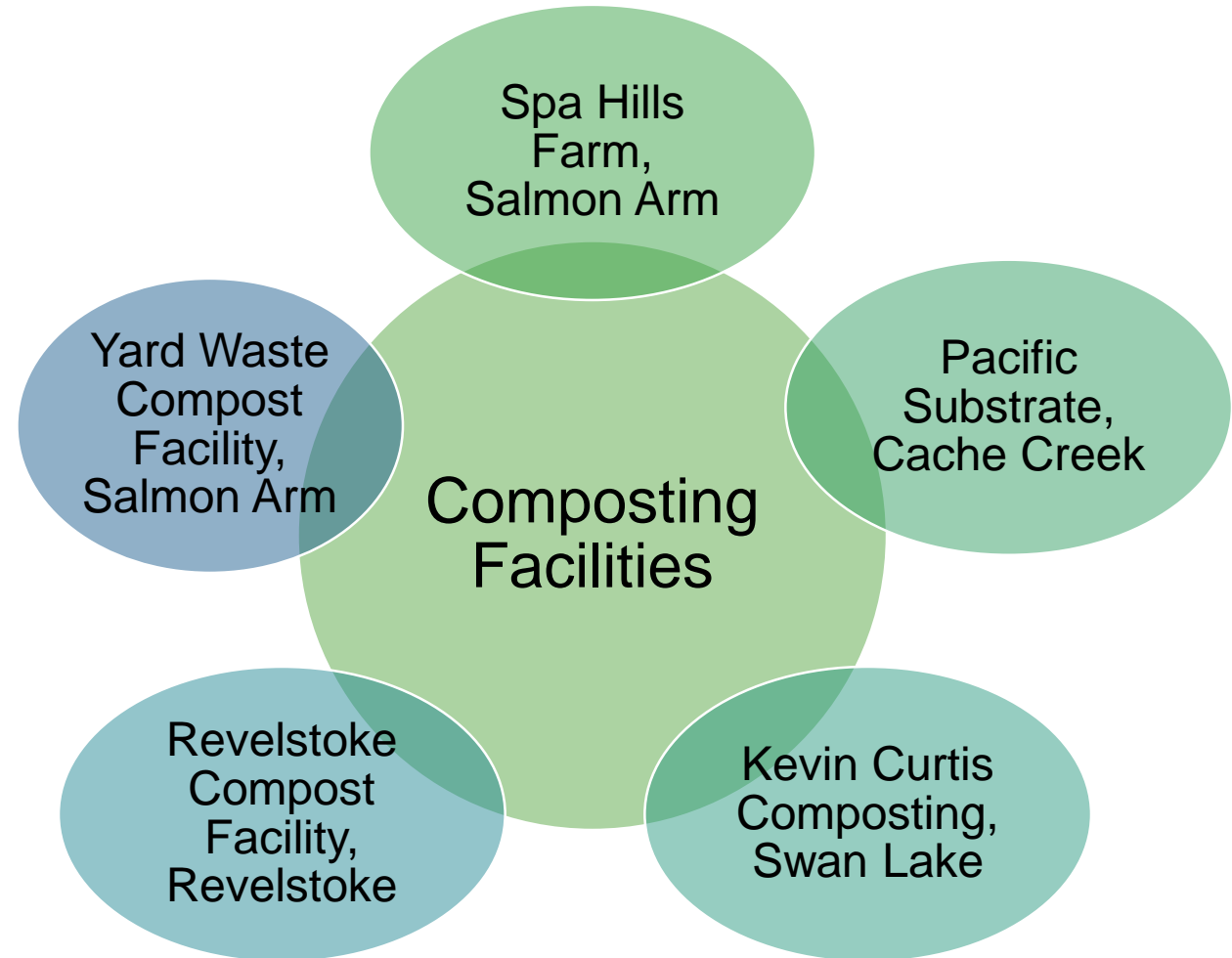


Strategy 3: Improve Organics Processing and Diversion Capacity



Improve Organics Processing and Diversion Capacity

- Some communities still lack access to composting facilities and organics collection



Organics Processing Facilities within the region (2023)

Questions/ Comments on Strategy 3

Strategy 3: Improve Organics Processing and Diversion Capacity

3A: Partner with relevant municipalities and assess feasibility of organics processing solutions and implement if deemed feasible



Strategy 4: Improve Education and Enforcement

4A – 4E:

4A: Partner with local, private service providers and organizations to provide better education on existing diversion opportunities and bylaws.

4B: Assess the cost-benefit of using contractor vs. in-house staff to operate CSRD facilities, and transition to in-house service if it is determined to be beneficial.



Strategy 4: Improve Education and Enforcement

4A – 4E: cont.

4C: Review contractor incentives for facilities operated by contractors to better encourage waste diversion.



4D: Increase CSRD enforcement capacity beyond current 2023 levels (e.g., staffing and equipment).



4E: Review feasibility of a clear bag requirement for landfill disposal and implement if deemed feasible.

4A: Partner with local, private service providers and organizations to provide better education on existing diversion opportunities and bylaws

- Partnerships to provide education:
 - Local business and service provider
 - Member municipalities



4B: Assess the cost-benefit of using contractor vs. in-house staff to operate CSRD facilities and transition to in-house service if it is determined to be beneficial

Pros

- Opportunities to share staffing and equipment resources between waste management facilities
- Greater control over the quality of accepted material
- Greater control over operational efficiencies and staff messaging to site users



Cons

- Risk of higher costs due to additional staff and resources to manage
- High initial capital investment to purchase equipment
- Additional staff required
- Exposure to greater liability through additional high-risk operations

Improve Education and Enforcement

4C: Review contractor incentives for facilities operated by contractors to better encourage waste diversion.

4D: Increase CSRD enforcement capacity beyond current 2023 levels (e.g., staffing and equipment).

4E: Review feasibility of a clear bag requirement for landfill disposal and implement if deemed feasible.

Example: Markham Clear Bag Requirement



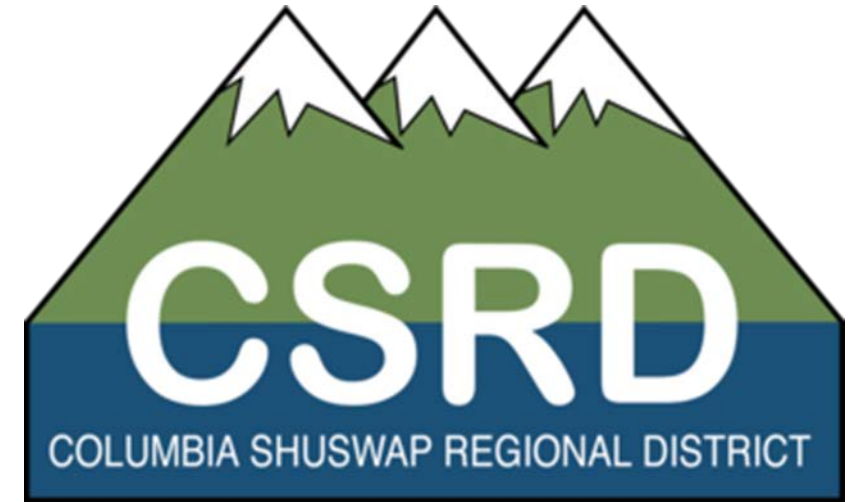
- Simplified inspection
- Reduced time for enforcement
- Increased waste diversion

Questions/ Comments on Strategy 4

Strategy 4: Improve Education and Enforcement

- 4A: Partner with local, private service providers and organizations to provide better education on existing diversion opportunities and bylaws.
- 4B: Assess the cost-benefit of using contractor vs. in-house staff to operate CSRD facilities, and transition to in-house service if it is determined to be beneficial.
- 4C: Review contractor incentives for facilities operated by contractors to better encourage waste diversion.
- 4D: Increase CSRD enforcement capacity beyond current 2023 levels (e.g., staffing and equipment).
- 4E: Review feasibility of a clear bag requirement for landfill disposal and implement if deemed feasible.





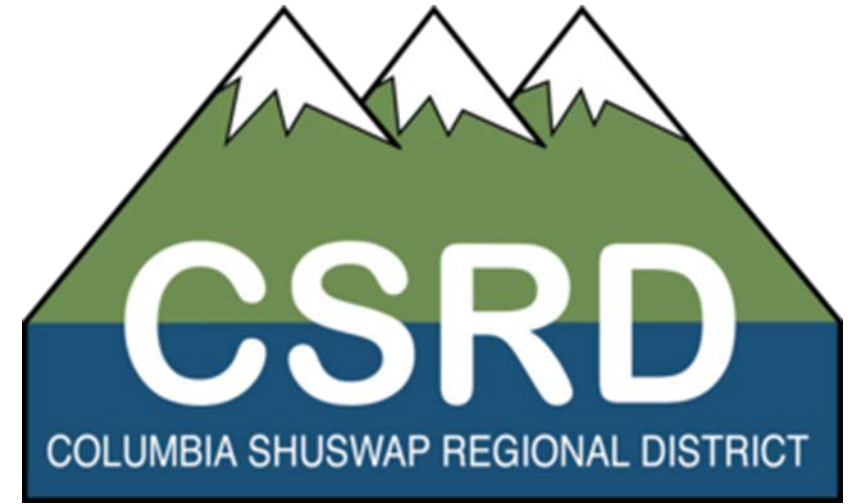
Potential Impacts from Strategies

Impacts from Strategies

Strategy #	Strategy Theme	Costs	Staffing	Waste Hierarchy	Diversion Potential
1	Waste Prevention	Low-Medium	Low-Medium	Reduce and Reuse	Low
2	Three-stream curbside collection	Medium - High	Low-Medium	Recycling	Medium - High
3	Organics Processing and Diversion Capacity	Medium - High	Medium - High	Recycling	Medium - High
4	Education and Enforcement	Medium - High	Medium - High	Recycling	Medium - High

Questions/ Comments on Impacts

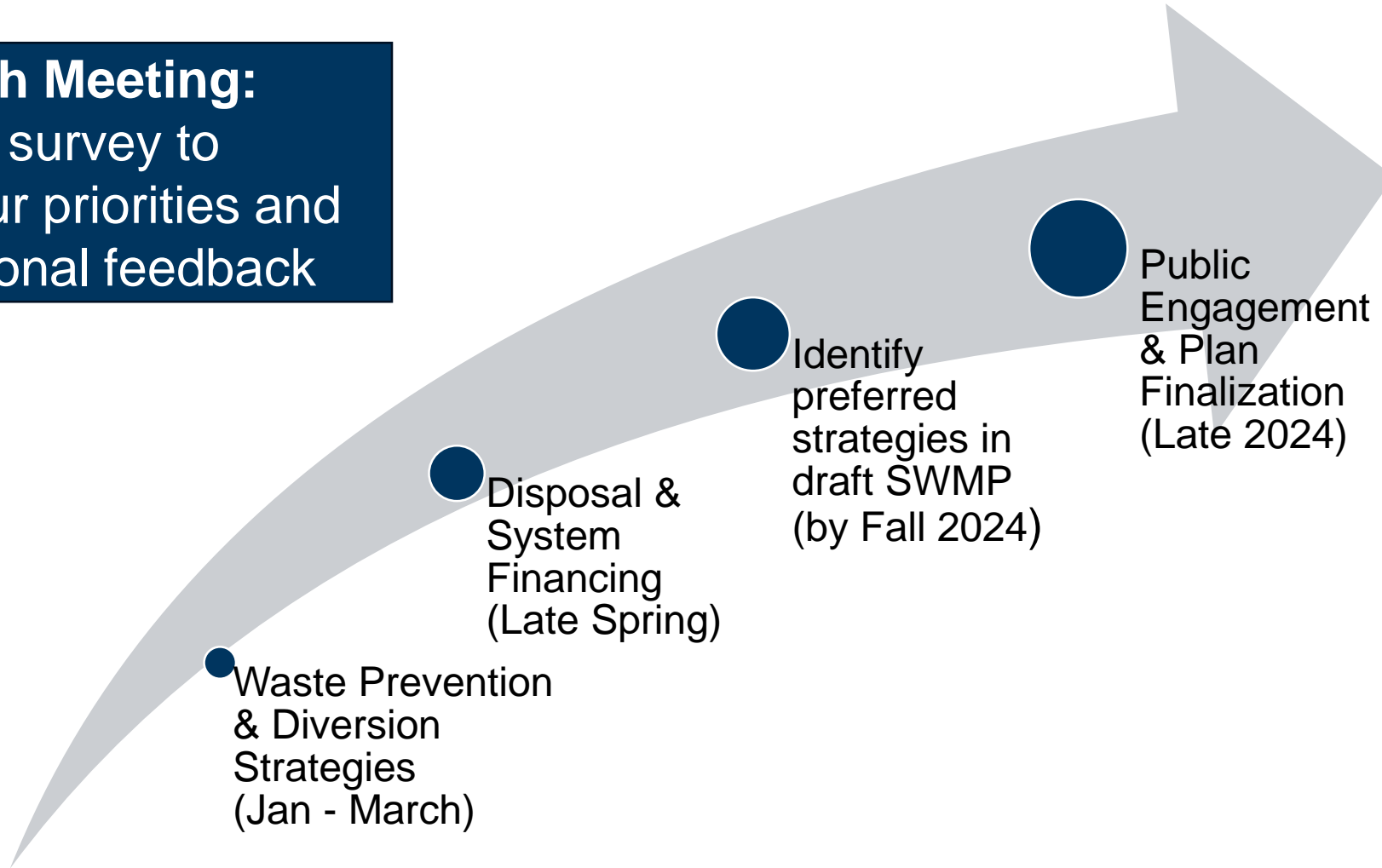




Next Steps

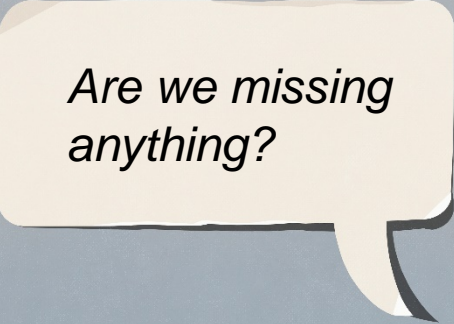
Next Steps – Future PTAC Meetings

After Each Meeting:
Follow-up survey to gauge your priorities and any additional feedback



Remaining Discussion Topics

- EPR material management
- ICI waste diversion
- Diversion of C&D wastes
- Improve transfer station network
- Emergency debris management
- Illegal dumping
- Invasive species management
- Recovery of energy/heat from waste for useful purposes
- Future disposal options
- System financing



Are we missing anything?

Thank you!

Veronica Bartlett
Senior Solid Waste Planner
vbartlett@morrisonhershfield.com

Alex Velsink
Solid Waste Planner
AVelsink@morrisonhershfield.com



MORRISON HERSHFIELD

People • Culture • Capabilities



MEMORANDUM



TO: Ben Van Nostrand
Columbia Shuswap Regional District

FROM: Veronica Bartlett,
Morrison Hershfield

PROJECT No.: 220276800

RE: Potential Waste Prevention and Diversion Options for the
CSRSD's New SWMP

DATE: January 16, 2024

X:\PROJ\2022\220276800-CSRSD SWMP REVIEW AND UPDATE\08. WORKINGMEMO 1_WASTE PREVENTION AND DIVERSION\2024-01-16_CSRD MEMO_WSTPREVENTION-DIVERSION_FINAL FOR PTAC.DOCX

1 BACKGROUND

Under the Environmental Management Act, regional districts are required to have a solid waste management plan (SWMP, or the Plan), which must be developed following the solid waste management planning guidelines provided by the Ministry of Environment and Climate Change Strategy (the MoE) for content and process.

The Columbia Shuswap Regional District (CSRSD) is in the process of developing a new SWMP. The planning process was initiated in 2022 resulting in the formation of the Public and Technical Advisory Committee (PTAC) in April 2023, the assessment of the current system as well as the development of the communication and engagement plan in June 2023. The current system and the engagement approach were discussed at the PTAC meeting on June 21, 2023.

A list of issues and opportunities is summarized in the memo titled, "Emerging Issues and Opportunities – What we have heard from the Public and Technical Advisory Committee and the Committee of the Whole." In addition, an online survey on community priorities for the SWMP update was available from August 15th to October 16th, 2023, and the results were summarized in the memo titled, "Public feedback gathered August 15 – October 16, 2023, to inform the CSRSD's SWMP update." The combined feedback documented in these two memos will be considered as part of developing an updated SWMP.

This is Morrison Hershfield's (MH's) first technical memo in a series of three or four, each presenting potential management options on key solid waste related topics:

- Waste Prevention and Diversion Options
- Residual Waste Management
- Cost Recovery and System Financing

The content of each memo will be presented and discussed with PTAC. The feedback on these memos will be considered as MH develops a last final memo outlining Preferred Strategies and Options to be included in the new draft SWMP brought to the public for consultation.

This memo sets out the proposed guiding principles for the solid waste management plan and provides context with respect to waste prevention and diversion, including recycling and composting, current initiatives undertaken by the CSRSD, and key challenges and opportunities that should be considered. The memo outlines a number of potential strategies and options the CSRSD may want to take to prevent waste and improve diversion.

- 2 -

2 PROPOSED GUIDING PRINCIPLES

The MoE has developed eight provincial guiding principles for regional districts to follow in developing their SWMPs. Regional districts can also include additional locally relevant guiding principles in their plans.

MH facilitated a PTAC discussion on November 2, 2023, about the suitability of the MoE's guiding principles. The PTAC discussed some alternative language to use in order to represent the region better. This includes climate change mitigation and resilience, waste prevention, accessibility for communities, operational efficiency, and collaboration.

Figure 1 shows a visual summary of the collective ideas generated by PTAC on the vision for the future of waste management in the region. These ideas have helped to inform the guiding principles.

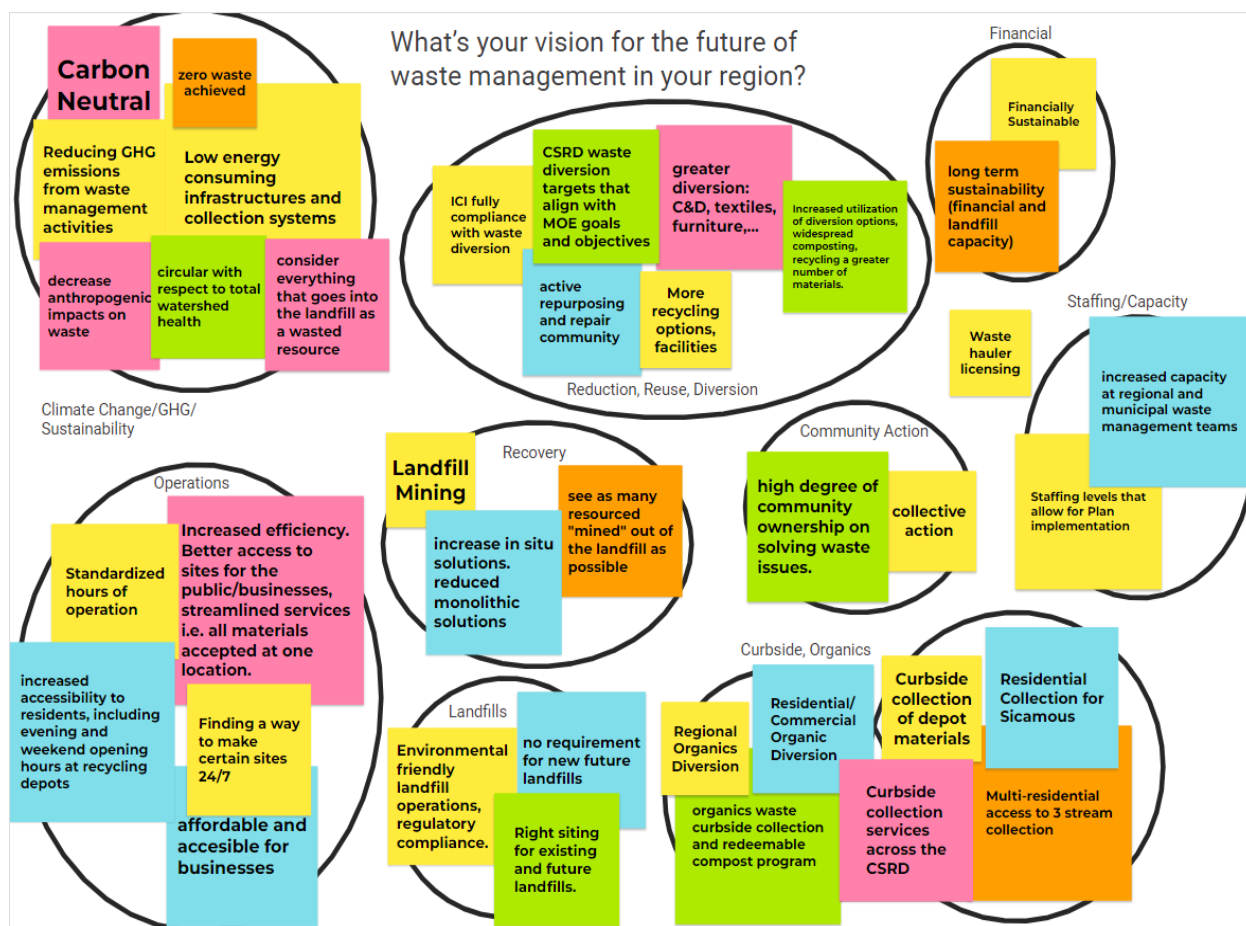


Figure 1: PTAC Member Responses Contributing to the Proposed Guiding Principles

MH recommends that all eight guiding principles proposed by the MoE are adopted in principle to guide the planning process with two modifications:

- Two of MoE's guiding principles are proposed to be consolidated into one (No. 6) as both relate to collaboration and partnership, and
- Two additional guiding principles are included (No. 8 and 9 below).

Figure 2 presents the proposed guiding principles which will direct the development of the region's new SWMP and its strategies and actions:

- 3 -

1: Promote zero waste approaches and support a circular economy

- The CSRD is committed to promoting waste reduction to help minimize waste generation and enable the sustainable use and reuse of products and materials. The CSRD wants to promote GHG mitigation and climate resilience and support a shift to thinking of waste as a resource rather than residual needing landfilling.

2: Focus on the first 3Rs with a priority for reducing waste (Reduce, Reuse, Recycle)

- The CSRD wants to emphasize the importance of waste prevention and diversion by prioritizing the first 3 Rs (reduction, reuse, recycle) and focusing heavily on reducing waste.

3: Maximize the beneficial use of waste materials and manage residuals appropriately

- The CSRD wants to maximize beneficial use of waste materials through local solutions, when possible. The CSRD wants to focus on increasing diversion options, such as repurposing, repairing items keeps them out of the landfill, as well as composting.

4: Support polluter & user-pay approaches and manage incentives to maximize behavior outcomes

- The CSRD supports having the system operated in accordance with the “user pay” principle. This requires a robust cost recovery system centered on the provision of user-fees. The CSRD wants to work to see collective actions and a high degree of community ownership in finding solutions.

5: Prevent organics and recyclables from going into garbage wherever practical

- The CSRD wants to discourage organics and recyclables from going into the garbage stream and the landfill. The new SWMP will reinforce behaviours that align with the 3 Rs and provide access to services relating to reduce, reuse and recycling, wherever practical.

6: Develop collaborative partnerships with interested parties to achieve regional targets set in plans

- The CSRD will collaborate and partner with interested parties during Plan implementation, such as member municipalities, Indigenous communities, non-profit organizations, waste and recycling sector service providers, local businesses (waste generators), product stewardship agencies, other regional districts. All these parties are key contributors for achieving the region’s targets. The Plan will identify opportunities to improve collaborations and partnerships to achieve regional targets.

7: Level the playing field within regions for private and public solid waste management

- Solid waste management facilities within a given region should be subject to similar requirements. This could be done through regulations and consistent bylaw enforcement.

8: Develop a climate resilient solid waste management system

- The CSRD wants to manage all waste materials to limit GHG emissions, protect the environment and improve the climate resilience of the solid waste management system.

9: Improve operational efficiency of the current solid waste system

- The CSRD places a high importance on improving the operational efficiency of the current regional solid waste system. System efficiency applies to all solid waste management services, facilities and other initiatives related to the waste hierarchy. For example, this includes access to facilities for residents and businesses, streamlining services, and assessing the need for capacity increases where necessary.

Figure 2: The Proposed Guiding Principles for the CSRD’s SWMP



3 CONTEXT

The Columbia Shuswap Regional District (CSRD) is a fast-growing region with a total population of more than 57,000 people. The four member municipalities, seven rural electoral areas and several First Nations communities each have important roles in providing solid waste management infrastructure and services.

Why is Waste Prevention and Diversion Important?

The CSRD operates four landfills, three of which are natural attenuation landfills and one having an engineered landfill component with a liner system. There have been compliance issues with the Landfill Criteria at some of the landfills, specifically Golden and Revelstoke. The Landfill Criteria identifies the need for an engineered liner and leachate collection system for new landfills, expansion of existing ones, and new landfill phases. This is important but very costly. The Golden Landfill has 2 years left with the current phase, meaning upgrades to the new phase will be required. The Sicamous Landfill is next at 13 years. In addition to determining the future of the CSRD's landfills, the CSRD needs strategies to reduce waste generation. Waste diversion and prevention will be key to limiting waste disposal and the need for landfilling.

Waste Prevention and diversion are supported by many of the CSRD's proposed guiding principles (Section 2). The guiding principles reflect the CSRD's commitment to finding local solutions that support waste prevention and diversion, and ways to shift our thinking from waste as garbage slated for landfilling to a valuable resource, where the community works together in partnership to utilize all waste materials as resources.

Where is Our Waste Coming from and What is it Comprised of?

The disposal rate per capita in the CSRD is higher than the average Provincial per-capita disposal rate at 499 kg (data from 2020). The disposal rates were 658 kg and 826 kg/capita in 2021 and 2022 respectively. MH's comprehensive current system review completed in May 2023 assessed the region's performance in more detail with disposal trends for each waste shed (Golden, Revelstoke, Salmon Arm and Sicamous). The per-capita disposal rate is based on permanent population and does not account for influx due to tourism or seasonal residents, which contribute significantly to the waste generation in Sicamous, and the areas serviced by Scotch Creek and Skimikin Transfer Stations.

The CSRD has conducted three comprehensive waste characterization studies since the 2009 SWMP was prepared, in 2013, 2018 and 2023. The waste characterization studies were completed for waste disposed from the residential sector (as curbside collection or residential self-haul to transfer stations) and the industrial, commercial, and institutional (ICI) sector.

The average 2023 CSRD waste composition across all waste streams is shown in Figure 3. Paper, plastic, and compostable organics made up approximately half of disposed waste stream.

- 5 -

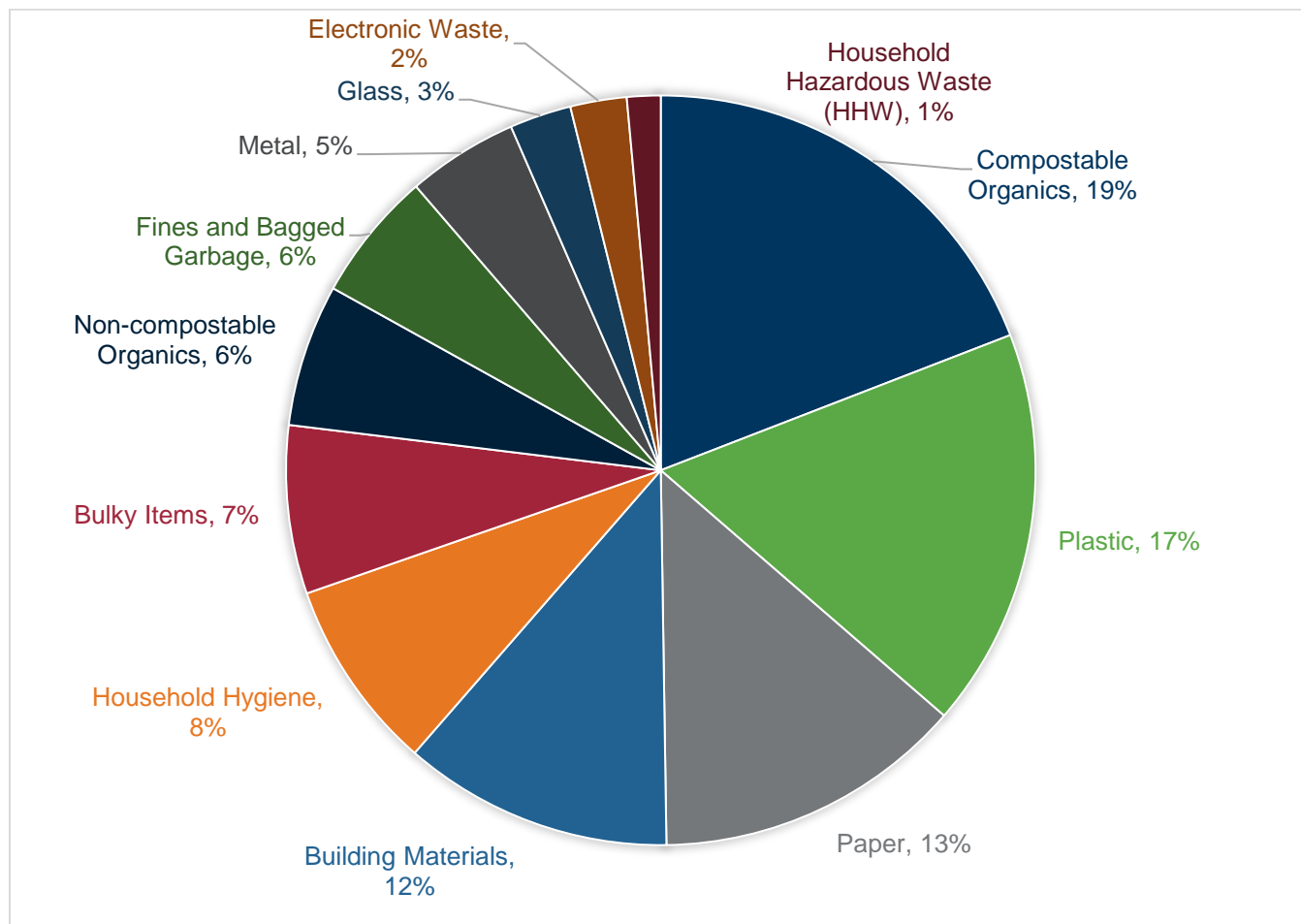


Figure 3: 2023 Average Waste Composition Across All Sectors.

The programs available for organics collection and diversion, curbside recycling, depot collection of recyclables and other EPR materials are different in each community. More can be done to ensure that communities have access to recycling options and that residents and businesses are educated on available options.

This Memo explores potential strategies and actions to help prevent waste from being generated and to increase recycling and organics diversion to minimize the need for landfilling. More details on the waste composition from each sector (curbside, self-haul and ICI) are highlighted throughout this Memo to provide better context for potential strategies.

4 POTENTIAL STRATEGIES TO PREVENT WASTE AND IMPROVE WASTE DIVERSION

MH's review of the current system identified a range of emerging issues and opportunities in the region and this list was complemented with input from PTAC, CoW members and the public. The public was invited to respond to a brief online survey during a 9-week period, from August 15, 2023 – October 16, 2023¹.

¹ In this memo referred to as the 2023 public survey on the SWMP update.

- 6 -

Four potential strategies for waste prevention and diversion are presented in this Memo (Figure 4). Each potential strategy is discussed in terms of: Why is this issue important? Are there relevant examples of successful strategies/ actions from elsewhere? What would the strategy involve?

The potential impacts of each strategy are identified at a high-level in Section 5.



Figure 4: Overview of Potential Waste Prevention and Diversion Strategies Discussed in the Memo



Strategy 1: Improve Waste Prevention

Governments at both the regional and municipal levels can support waste prevention through various local initiatives within communities. Reducing waste generation is crucial for lowering the impact on the environment and future generations. Unique initiatives have emerged in municipalities across Canada that help to prevent waste, enable reuse and repair. From local repair workshops, giveaway weekends, tool libraries, to financial support through grants, there are many ways municipalities can move towards a more sustainable future. Many examples are described below and can be replicated in the CSRD.

Waste Reduction

Waste reduction is at the top of the Pollution Prevention Hierarchy and is the highest importance for actions going forward. The MoE's guide to solid waste planning emphasizes the importance of investments that are at the top of the hierarchy.

The following sections go through various waste reduction initiatives, including single-use plastics (SUP) and packaging and food waste, looking at both current initiatives in the CSRD and member municipalities, as well as opportunities going forward.

Food Waste Prevention

The following table demonstrates the distribution of compostable organics in 2023 for single-family, ICI, and drop-off in Golden, Revelstoke, Salmon Arm and Sicamous. The table also shows the percentage of total waste that is considered edible food waste and is avoidable as a waste requiring disposal.

- 7 -

Table 1: Distribution of Compostable Organics in 2023 Waste Composition Study

	Single-Family	ICI	Drop-Off
Compostable Organics	30%	20%	19%
Edible Food Waste	18%	11%	11%

Food rescue initiatives are becoming more common to divert food from entering the waste stream and a regional district can play a role by making local businesses aware of local opportunities and helping them pilot and support food waste prevention initiatives.

Some current food waste prevention initiatives in the CSRD include:

- **Local Food Initiatives** across the CSRD
 - **Revelstoke Local Food Initiative** is a local non-profit with a mission to enhance local food production and utilization through community education, facilitation and advocacy.² This organization provides education on food waste prevention and food recovery to Revelstoke residents.³
 - **Local Food Matters** is a local non-profit serving Golden and Area A aimed at supporting food producers, increasing access to local food, and education around food security.⁴ This organization is working with the CSRD to look at the feasibility of a compost facility in Golden and Area A.
- The CSRD's **Backyard Composter Incentive Program** allows residents to apply for a discounted purchase of a FreeGarden Earth composter.⁵ The composter can manage food scraps and yard waste.
- The District of Sicamous is considering a **FoodCycler** pilot program.⁶ This program would be funded by grants from the Local Government Climate Action Incentive Program and the pilot would cover 100 homes. The FoodCycler is an in-kitchen appliance that can process small amounts of food producing a sterile biomass.⁷

Opportunities to Reduce Food Waste in the CSRD

There are many other opportunities for the CSRD to expand food waste reduction initiatives through education and promotion of programs and existing opportunities. Although it is typically up to the businesses to participate in food rescue initiatives, the regional district can play a role by making local businesses aware of the opportunities and helping them establish initiatives.

Some examples of food rescue initiatives include:

² [Food Recovery and Food Waste Reduction — Revelstoke Local Food Initiative](#)

³ [Food Recovery and Food Waste Reduction — Revelstoke Local Food Initiative](#)

⁴ [About — Local Food Matters \(Copy\) \(localfoodmattersgolden.com\)](#)

⁵ <https://www.csr.bc.ca/169/Composting-Programs>

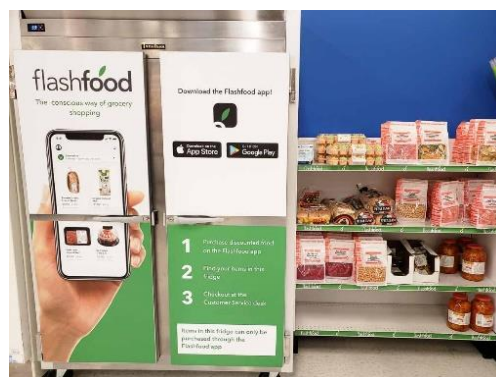
⁶ [Sicamous council considers kitchen alternative to 'rat drive-thrus' - Penticton Western News](#)

⁷ [FoodCycler help | FoodCycler](#)



- 8 -

- **Flashfood** partners with grocery stores to help consumers save money and divert food waste.⁸ Grocery stores receive a fridge outfitted with Flashfood’s decals which are placed by the tills. Grocery stores then place food in the fridges with a minimum 50% discount. This could be food close to or on the best before date, ugly food, food that is not selling well, and more. Consumers then go on the app, purchase the food through the app, and go to the fridge to grab the items they have purchased. A representative will look over what they have purchased on the app and what they have picked up to confirm they have the correct items and are not taking more than they have paid for. Grocery stores can email Flashfood to discuss partnerships. There are currently over 1,000 locations across the US and Canada.
- There is currently one grocery store in the CSRD that has partnered with Flashfood, which is Brad’s No Frills in Salmon Arm.⁹
- **Too Good to Go** is a food reduction app developed in partnership with local businesses, cafes, restaurants, corner stores, and more, to prevent waste from unsold food at the end of the day.¹⁰ The goal is to provide surplus food at a discount to consumers to reduce food waste. Businesses can post “surprise bags” on the app under a general category such as ‘ready to eat’ or ‘pastries’ or grocery essentials’ with a discounted price and an approximate value of all items in the bag.¹¹ There are currently no businesses in the CSRD that have partnered with Too Good To Go.
- **Leftovers Foundation** and **Food Mesh** are non-profits, both with a goal of diverting large-scale quantities of food from entering the landfill.^{12,13} They work with retailers to donate unsalable food to those most in need in communities. Food Mesh also works with farmers to donate food for animal feed, while Leftovers works with residents to divert food from gardens and fruit trees.
- The **Love Food Hate Waste** campaign is a behaviour change campaign aimed at reducing unnecessary food waste.¹⁴ The CSRD has promoted the campaign and general waste reduction through social media and through the website in the past, although they have not participated directly in this campaign.



The Fraser Valley Regional District (FVRD) and Regional District of Northern Okanagan (RDNO) have independently collaborated with FoodMesh. Both districts hope to educate businesses about the opportunities to prevent food waste through food donation using the FoodMesh service. The RDNO announced in January 2024 that it will provide \$30,000 in funding to Foodmesh with the aim to develop a comprehensive food recovery system in the region.¹⁵ The FVRD collaborated with FoodMesh to help

⁸ [Flashfood | Save money and reduce food waste](#)

⁹ [Flashfood | Locations | British Columbia](#)

¹⁰ [Save Food - Help The Planet - Too Good To Go](#)

¹¹ [Too Good To Go review: What's in the Magic Bag? - More Than A Mummy](#)

¹² [FoodMesh | Managed retail food diversion service](#)

¹³ [Leftovers – Leftovers Foundation \(rescuefood.ca\)](#)

¹⁴ [LFHW Canada - Love Food Hate Waste Canada](#)

¹⁵ [2024 RDNO ReTHINK Waste Grant Recipients Named | Regional District of North Okanagan](#)

- 9 -

educating businesses about the FVRD's waste sorting bylaw and about food prevention and diversion opportunities.¹⁶

The CSRD's regulatory options, such as a waste sorting bylaw, will be discussed in the next memo. In terms of food waste prevention, the CSRD may want to take a more active role in encouraging and supporting local businesses to reduce food waste (e.g., education and promotion of programs and existing opportunities via the website, targeted workshops, or outreach to businesses).

Potential Action

- 1A: Encourage and support residents and local businesses to reduce food waste.

Single-Use Items and Packaging

Plastic waste is a leading source of environmental pollution and poses a serious threat to the health of our oceans, waterways, and well-being. Paper and cardboard products do not persist in the environment; however, their production consumes non-renewable resources and is energy intensive. Since both plastic and non-plastic single-use items have environmental consequences, the reduction of single-use items and packaging is important.

In the CSRD plastics made up 20% of the entire disposed waste stream in 2018. This includes more than single-use plastics (SUP), such as textiles. However, the portion of SUP going to landfill was not identified specifically in the waste composition studies.

Locally, the City of Revelstoke adopted a SUP and Other Items Ban. Bylaw 2263 was adopted in January 2022, and it bans plastic checkout bags, plastic straws, and foam containers.¹⁷ Enforcement began on January 1, 2023, with some exemptions, such as for charitable organizations. They were given 6 months to adapt and all exemptions ended July 1, 2023.

The City of Salmon Arm also banned SUP Bags (Bylaw No. 4478) as of July 1, 2022.¹⁸ SUP bags were not allowed to be distributed after June 30, 2022, and customers must ask for a paper or reusable bag for a fee - businesses may not offer bags. The fee is minimum \$0.25 for a paper bag and \$2 for a reusable bag.

Regional Districts cannot regulate business in pursuit of a ban on single-use plastics and packaging as such action is outside of the CSRD's legislative authority. However, the CSRD can advocate for reduction in single-use items and packaging, and educate on alternatives and recycling options for SUPs. For example, SUPs such as plastic forks and cups are recyclable at Recycle BC depots as of Date January 1, 2023.¹⁹

Other levels of government are addressing single-use items and packaging reduction through regulations that aim to complement and harmonize SUPs bylaws of individual municipalities.^{20,21}

¹⁶[FoodMesh | The Fraser Valley Regional District Food Recovery Network](#)

¹⁷[Single Use Items | Revelstoke, BC - Official Website](#)

¹⁸[Single-Use Plastic Bags | Salmon Arm, BC - Official Website](#)

¹⁹[Recycle BC now accepts single-use and packaging-like products for recycling - Recycle BC](#)

²⁰[Single-use Plastics Prohibition Regulations: Overview - Canada.ca](#)

²¹[Summary of Federal and Provincial Regulatory Updates \(metrovancover.org\)](#)



- 10 -

To-date, multiple levels of government have started looking into and regulating single-use items and packaging reduction. This includes the following initiatives.

The Government of Canada

- Environment and Climate Change Canada (ECCC) has set out goals for zero plastic waste by 2030 and developed the Single-use Plastics Prohibition Regulations (SUPPR), which was released in December, 2021. These regulations prohibit the manufacture, import and sale of single-use plastic checkout bags, cutlery, foodservice ware made from or containing problematic plastics, ring carriers, stir sticks, and straws. To-date, the following regulations are in place:
 - Checkout bags, cutlery, foodservice ware, stir sticks, straws: prohibited for manufacture and import for sale in Canada (Dec 20, 2022) and Sale (Dec 20, 2023)
 - Ring carriers: prohibited for manufacture and import for sale in Canada (June 20, 2023)

Province of BC

- In 2019 the BC MoE released the CleanBC Plastics Action Plan, which identified key areas for action to address plastic waste and pollution.
- In April 2022, the MoE released the Preventing Single-Use and Plastic Waste in British Columbia Intentions Paper, which outlined proposed restrictions for several problematic waste items in the province. The BC MoE has published a guide that helps to clarify the provincial policy.
- The Provincial Single-Use and Plastic Waste Prevention Regulation, published on July 14, 2023, will help address hard-to-recycle single-use and plastic items. This includes banning single use plastic bags, utensils, and oxo-degradable packaging and products. The regulation also limits the use of problematic plastics, including foodservice ware, packaging, and foodservice accessories. The CSRD and member municipalities can continue promoting reduction in single-use items and packaging, and member municipalities are able to enact bylaws regulating single-use items and packaging that are approved by the MoE.

22,23,24

Opportunities to Reduce Single-use Items and Packaging in the CSRD

PTAC members highlighted the opportunity to increase public education on topics including waste reduction, composting, and the impact on the environment. The CSRD may want to provide more education and outreach on federal and provincial bans on single-use packaging and items and continue to explore options to support member municipalities to reduce the use of these materials.

²² [BC single-use bylaw updates - Retail Council of Canada](#)

²³ [Local Government Guide for Bylaws Regulating Single-use Plastics](#)

²⁴ [Summary of Federal and Provincial Regulatory Updates \(metrovancover.org\)](#)



In the 2023 public survey on the SWMP update, some residents commented on importance of in-school programming in Revelstoke and Golden to educate students on all waste reduction and diversion topics.

The CSRD has recently partnered with WildSight to provide a waste reduction program called “Communities of the Future” which is delivered online. In the partnership, the CSRD purchased 12 subscriptions, allowing teachers to access and use this program free of cost in their own classrooms. Depending on the success of this initiative, the CSRD may want to scale up this program.

Business organizations such as the Shuswap Economic Development Society, and the Golden Community Economic Development may be good partners for the CSRD to reach out to in the business community.²⁵ The education can cover other important waste management topics too, such as new bylaws, food prevention and rescue, etc. For example, the Sustainable Takeout Guide from the City of Victoria²⁶ is described in more detail in the call out box to the right.

Sustainable Takeout Guide

The City of Victoria has created a Sustainable Takeout Guide aimed to help businesses transition away from single-use items. The guide is promoted by the Capital Regional District. There is opportunity for the CSRD to collaborate with member municipalities and the local compost facility to develop a similar takeout guide that encourages the reduction of single-use packaging and the use of materials that can be composted by the local facility.

There are many programs and businesses with SUP reduction models that can be replicated in the CSRD. Table 2 provides examples to encourage SUP reduction.

Table 2: Reduction Examples for Single-Use Items and Packaging

Initiative	Examples
<p>Reusable Container Initiative: Reusable container companies are becoming more common as more municipalities are introducing SUP bans.</p>	<p>The Nulla Project is an initiative on Vancouver Island where Nulla partners with coffee shops to provide reusable cups and containers for customers.²⁷ Customers pay a \$5 refundable deposit, received their drink or meal in the cup or container, and can return it to any participating location to get their refund back or a clean cup/container. Reusables.com in Vancouver is an example of a recent start-up focused on SUP reduction.²⁸</p>
<p>Refilleries and Bulk Stores: Refilleries and self-serve refill stations are becoming more popular and help to reduce SUP by requiring customers to bring their own containers and bags to shop.</p>	<p>There are two refilleries in Revelstoke and one in Salmon Arm that provide a range of items from bulk cleaning supplies, personal care, and some providing food for residents.</p> <p>Forge & Fill provides a Residential Refill Program, in which residents can order large quantities of cleaning products in containers that are filled and delivered.²⁹ When they need a refill, Forge picks up the containers, refills, and delivers them back to the resident.</p> <p>Sustainable & Circular Accommodation Program (S.C.A.P.): A program that makes refilling accessible for tourist accommodations and helps tourists identify what accommodations are committed to sustainable practices.</p>

²⁵ [Economic Development | CSRD, BC](#)

²⁶ [Victoria Sustainable takeout guide \(victoria.ca\)](#)

²⁷ [The Nulla Project - Reusable Cup Service](#)

²⁸ [New 'zero waste' B.C. businesses battle tide of pandemic packaging | CBC News](#)

²⁹ [Forge & Fill – Forge & Fill \(forageandfill.ca\)](#)



- 12 -

The CSRD may want to help advance the transition away from single-use items and packaging by collaborating with member municipalities and suitable local organizations, such as the Shuswap Economic Development Society and the Golden Community Economic Development. The CSRD can partner with these organizations to educate residents and businesses on federal and provincial regulations and provide education on suitable alternatives to single-use items and packaging. This could include developing a takeout guide that considers alternatives that are compatible with the local infrastructure for recycling and organics processing.

Potential Action

- 1B: Collaborate with member municipalities and local organizations to provide education and outreach to residents, schools and businesses on alternatives to single-use items and packaging.

Current Reuse Efforts

CSRD staff and facility contractors often hear of complaints from users of transfer stations and landfills wishing to salvage re-usable items that have been dropped off for recycling or landfilling. Sought-after materials often include dimensional lumber from the wood disposal pile, bikes from the scrap metal, and items/products still in workable and good condition dropped off as mixed waste for landfill disposal.

Scavenging is prohibited from the active landfill face under the BC Landfill Criteria. Scavenging is defined as “unauthorized and/or uncontrolled removal of municipal solid waste or recyclable material from a landfill site.” This does not encompass material recovery within the buffer zone of the landfill site, so separation of reusable goods and materials is not prohibited under the criteria. From a risk/insurance perspective the CSRD cannot allow people to access and salvage from landfill or transfer station sites.

There are many reuse initiatives in the CSRD, including the following examples:


- **Annual Trunk Sales:** The CSRD organizes “Trunk Sales” annually, where residents can sell or give away items. This concept of an event like a community garage sale encourages reuse.
- **Clothing Donations:** CSRD partners with Big Brothers Big Sisters Central and Southern Interior of BC for clothing donations. There are bins placed at the Salmon Arm Landfill, Sicamous and Malakwa Transfer stations for collection. Items collected include clothes, shoes and boots, bedding and linens, draperies, and towels.³⁰
- **Consignment Stores:** There are many consignment stores in the CSRD and member municipalities. One area of consignment that is lacking in the CSRD is that for household items and building materials, such as Habitat for Humanity. Salmon Arm previously had a Habitat for Humanity, but since it has closed there is a lack of access to used building materials.³¹ The CSRD may want to explore options to fill this gap.

³⁰ [Clothing Donations | CSRD, BC](#)

³¹ [Habitat for Humanity Salmon Arm ReStore - Salmon Arm, BC | Okanagan Local \(okanagan-local.ca\)](#)



- 13 -

- **Re-Use Centres** can be found at five of CSRD transfer stations and at all four landfills. A tipping fee was introduced to prevent free dumping but may be a disincentive for residents to drop off items at the Re-Use Centres. These fees are \$80 per metric tonne for bulk loads at scaled facilities, or \$3 per bag. At unscaled sites the fees are \$12 per cubic meter or \$3 per bag. CSRD staff has tried to track the quantities diverted at the Re-Use Centres but have found it time consuming and challenging to maintain good records. The Re-Use Center also requires a significant amount of time from staff to clean and maintain.
- 
- **Repair Cafés.**³² There are multiple repair initiatives using a Repair Café model in the CSRD:
 - ReFest is a Repair Café in Revelstoke with pop up locations around Revelstoke providing various material repairs around Revelstoke.³³ The last events were in May 2023. The CSRD promotes this as well.
 - There is a Repair Café in Salmon Arm, which began in 2022 and runs in partnership with The Shuswap Makerspace.³⁴ There were three events planned for the fall of 2024 which are listed on the Repair Café website. Residents can also find information on The Shuswap Makerspace Facebook page and website. The CSRD promotes this Repair Café in Salmon Arm.

Although there are already repair initiatives there is still opportunity to help expand throughout the region.

Opportunities for Reuse Initiatives in the CSRD

Recognizing the strong public support for more reuse options, the CSRD may want to explore different options that encourage and support reuse and repair. The CSRD may want to focus on supporting local non-profits and organizations involved in these areas.

Some examples of local governments that have developed programs to divert reusable materials include:

- The City of Winnipeg hosts two **Giveaway Weekends** per year with the goal of reducing waste and keeping items out of the landfill. Residents can place unwanted, reusable household items on the curb in front of their house and anyone can come by and take them.³⁵ See Figure 5, to the right.³⁶ Residents are expected to remove any items that are not taken by the end of the weekend and the city



Figure 5: Curb during Winnipeg's Giveaway Weekend

³² This is a foundation that was started in Amsterdam and now has locations worldwide, include throughout Canada. More information via [Repair Café FAQ - Frequently Asked Questions \(repaircafe.org\)](https://www.repaircafe.org/)

³³ [Revy Re-fest](#)

³⁴ [Salmon Arm Repair Café, auteur op Repaircafe](#)

³⁵ [Giveaway Weekends - Water and Waste - City of Winnipeg](#)

³⁶ [Spring giveaway weekend this Saturday and Sunday – Winnipeg Free Press](#)

- 14 -

provides a list of organizations that they may want to donate the items to.

- **Tool Libraries** are becoming more common to give locals access to tools that they either do not own or cannot afford so that they can fix anything needing repair. This is a way to help prevent broken items from ending up in the landfill. There was discussion in 2019 about developing a tool library in Revelstoke, but nothing came to fruition. Golden does have a tool library that is run by the Golden Foodbank and all equipment is food-based, such as dehydrators and food mills.³⁷
- Urban Repurpose hosted a **Re-use It & Upcycle Fair** in North Vancouver in July 2023, with the purpose of changing attitudes around waste and to educate the public for reuse and upcycling. The fair included an upcycling market, kids crafting, and an art competition for artists that use waste to create art.³⁸
- Metro Vancouver has developed several **public outreach campaigns for waste reduction and reuse**, such as “Think Thrice” which focuses on textile waste reduction and reuse and “Create Memories, Not Garbage”. Metro Vancouver provides many of its developed campaigns to other local governments at no or low cost.

The CSRD may want to use successful household waste reduction, repair, and diversion campaigns, which are available at low cost. Depending on partnerships in the region, the CSRD may want to pilot some programs, such as the Give-away weekends, re-use fairs or expand repair cafés in suitable areas, in partnership with local organizations.

Potential Action

- 1C: Adopt successful waste reduction, repair and diversion campaigns targeting residents.
- 1D: Pilot reuse or repair programs or events in partnership with local organization, and expand if deemed feasible.

Opportunities for Grant Funding to Support Local Waste Prevention and Diversion Initiatives

There are a few examples in BC of specific funding created by a regional district to support local waste prevention and diversion initiatives. Funding can be provided to support community groups, and organizations such as non-profits, and school groups for projects that contribute to waste reduction. The following are examples of local governments providing waste reduction funding:

- The Regional District of Nanaimo (RDN) identified \$300,000 in annual grant funding in the recent SWMP by means of a **‘Zero Waste Recycling Funding’ program** aimed to foster ingenuity and growth in the waste industry. Non-profit organizations were eligible to apply for the RDN’s project funding that focuses on sustainable waste diversion and related activities that support the development of a circular economy in our region. The following organizations received RDN’s grant funding:
 - Gabriola Island Recycling Organization (\$92,000) “will use the funds for phase 2 of their textile recovery and clothing recycling program that diverts up to 23,600 kilograms of textile waste from landfill.”

³⁷ [COMMUNITY TOOL LENDING LIBRARY — Golden Food Bank](#)

³⁸ [Re-Use It and Upcycle Fair | Urban Repurpose](#)



- 15 -

- Loaves and Fishes Community Food Bank (\$92,000) “will continue their infrastructure and facility expansion to divert 50,000 to 120,000 kilograms of food waste annually.”
- Habitat for Humanity Mid-Vancouver Island (\$68,000) “will initiate a workspace mentorship program and continue their ReVive program that repurposes, and fixes donated items, both of which will generate revenue and divert material from the landfill.”
- Nanaimo Recycling Exchange (\$45,500) “will deliver industry specific best practice models and provide education and training across the industrial, commercial, and institutional sectors.”
- Island Futures Society (\$2,500) “will use the funds for their Waste Vegetable Oil Initiative to carry out research and market analysis for repurposing vegetable oil on Gabriola Island.”³⁹
- The Sunshine Coast Regional District also has a Waste Reduction Initiatives Program, and the Capital Regional District has the Rethink Waste Community Grant since 2022.
- The **Greenest City Grant program** through the City of Vancouver offers up to \$50,000 per project for “place-based, community-driven initiatives that help advance climate action.”⁴⁰ The first grants were given out in 2016 and while they do not have to be specifically related to waste, the grant has been awarded to many waste-related initiatives. In 2022 the Vancouver Food Runners Society was granted \$41,000 to redirect food, increasing food recovery, and supporting individuals experiencing food security.
- The RDNO has a ReTHINK Waste Project Grants for innovative projects in the region that are focused on the circular economy and waste reduction.⁴¹ There is an emphasis on reduce and reuse in the grant funding and aspects such as research, community sharing/reuse/repair initiatives, and technology development can be funded. In 2023 a total of \$67,200 was given out in grant funding.⁴²

There is opportunity for the CSRD to develop an on-going grant program that supports local waste reduction and reuse initiatives.

Potential Action

- 1E: Establish grant funding to support local waste prevention and diversion initiatives.



Strategy 2: Improve Access to Three-Stream Curbside Collection

The CSRD’s 2009 SWMP identified that having access to curbside services in all member municipalities and in higher density electoral areas was a priority. Some progress has been made and approximately 60% of the region’s population has access to curbside collection. Curbside recycling collection options are still limited or not available in some areas of the region and residents are required to self-haul materials to the depot/ transfer station.

³⁹ [News Release Template \(rdn.bc.ca\)](https://rdn.bc.ca/news-releases/news-release-template)

⁴⁰ [Green grants | City of Vancouver](https://www.vancouver.ca/green-grants)

⁴¹ [ReTHINK Waste Project Grants | Regional District of North Okanagan \(rdno.ca\)](https://rdno.ca/rethink-waste-project-grants)

⁴² [2023 ReTHINK Waste Grant Recipients Named | Regional District of North Okanagan \(rdno.ca\)](https://rdno.ca/2023-rethink-waste-grant-recipients-named)

- 16 -

Areas without curbside recycling collection include the **District of Sicamous** and **Area G** (including the community of Sorrento⁴³), which is one of the higher density electoral areas. For the District of Sicamous and Area G, residents who responded to the 2023 public survey on the SWMP update ranked access to three-stream curbside collection as 3rd most important topic out of 9.

The **District of Sicamous** discussed a curbside collection service for recycling in 2010. Based on public opposition, council decided to pull support on the partnership model negotiated with the City of Salmon Arm for curbside collection. Council members were concerned that Sicamous has many seasonal residents and that all households may not want to pay for weekly collections. In 2015, this was brought back to the table, but nothing transpired.⁴⁴

Sicamous and **Area G** residents were consulted in 2018 on a potential curbside program but residents showed low interest at the time. The program offered weekly food waste collection and a bi-weekly recycling and garbage collection. Residents would have paid an annual flat fee plus pay-as-you-throw fees based on how much garbage was picked-up. Having a pay-as-you-throw model was proposed to accommodate seasonal residents, so that they were only paying when they used the services.

At the time the curbside collection was being explored for Sicamous and Area G residents, it was not certain if Recycle BC would fund recycling collection. That has since changed and Recycle BC would likely fund recycling in Areas E, A, C, and Sicamous. As well, public interest may have changed since then and should be reviewed again.

The CSRD trialed a 6-months food waste collection pilot program in 2017 with focus on Area C and F, as well as Salmon Arm. The CSRD established centralized drop-off bins at transfer stations/recycling depots and Salmon Arm Landfill. Residents who registered received kitchen catchers and access using a key to the secure drop-off bin. Only 50 residents signed up and the trial was discontinued after some time. The majority of the interest was from residents of Salmon Arm and uptake in other areas was poor. Due to the expensive and ineffective trial, it was decided to not pursue this any further. Rural residents were, however, encouraged to divert organics through backyard composting.

The **Town of Golden** and **City of Revelstoke** both offer 2-stream curbside collection with weekly garbage collection and biweekly recycling collection. Neither have expanded to a three-stream curbside collection including organics (food and yard waste).

In the 2023 public survey on the SWMP update residents ranked local composting options for communities without curbside collection as 2nd most important and improving access to three-stream curbside collection as 3rd most important, as previously mentioned. Waste prevention was ranked as the most important issue. This demonstrates the support for recycling and composting in the CSRD.

In the survey, residents were provided the opportunity to add additional comments if they wanted. Some of the specific comments relating to curbside collection from residents in **Sicamous** and **Area G** included support for better recycling and composting and making sure that a collection service is more affordable than using private collectors.

⁴³ In April 2022, a referendum determined that Electoral Area G will be split into two electoral areas, C and G. Electoral Area G will include the communities of Sorrento, Blind Bay, Balmoral and Notch Hill.

⁴⁴ <https://www.eaglevalleynews.com/news/councillor-investigating-curbside-waste-collection-program-for-sicamous-3775547>



- 17 -

Diversion Potential from Increased Curbside Collection

Waste composition studies from Salmon Arm show that organics curbside collection, implemented in 2019, is working and has helped to reduce the amount of food waste being landfilled. Figure 6 below shows the percentage of total waste collected in the garbage stream that is compostable organics. Salmon Arm has the lowest portion of compostable organics at approximately 16%, compared to 36% in Sicamous and Revelstoke, and 42% in Golden where organic waste, such as food waste, is not collected at the curb like Salmon Arm. It will be important to continue expanding organics curbside collection across the region and look for opportunities to improve recycling collection.

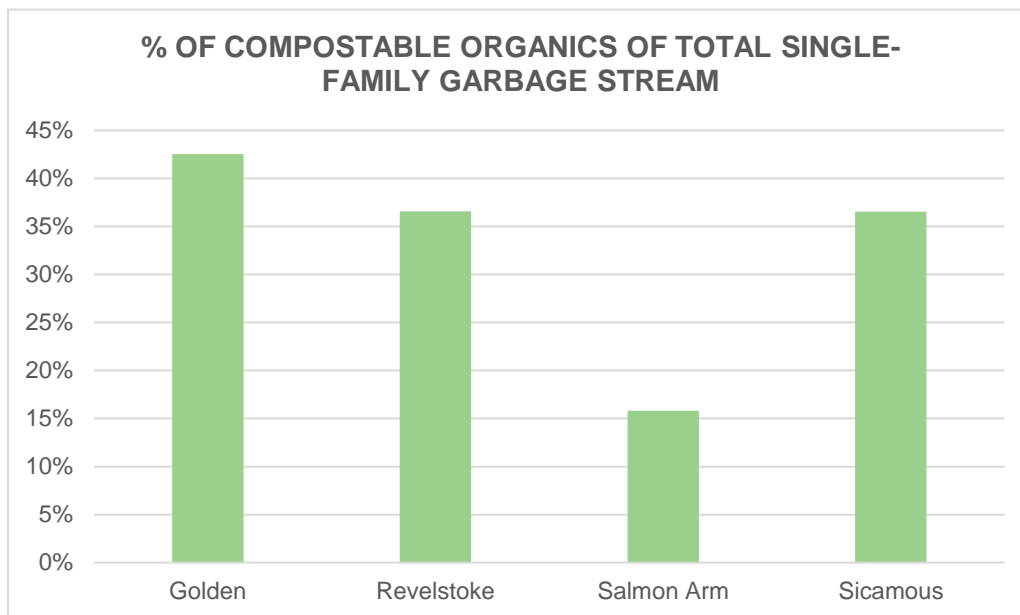


Figure 6: The Percentage of Compostable Organics in The Garbage Stream for The Single-Family Sector

As discussed, service levels are different between the four-member municipalities (Golden, Revelstoke, Salmon Arm and Sicamous) and the curbside collection services are delivered using different service models:

- Golden and Salmon Arm contract out their collection services
- Revelstoke uses in-house staff for its curbside garbage collection and the recycling collection is undertaken directly by Recycle BC.
- Residents in the District of Sicamous, as well as the more densely populated electoral areas, have access to private collection services which offer curbside garbage and recycling collection services.

The proportion of total curbside recyclable material in the residential garbage stream is shown in Figure 7 and is notably higher (with more recyclables being landfilled) in Sicamous than the three other municipalities. As mentioned, Sicamous does not have curbside recycling collection, which emphasizes the importance of a curbside collection service to reduce the amount of recyclables ending up as garbage.

- 18 -

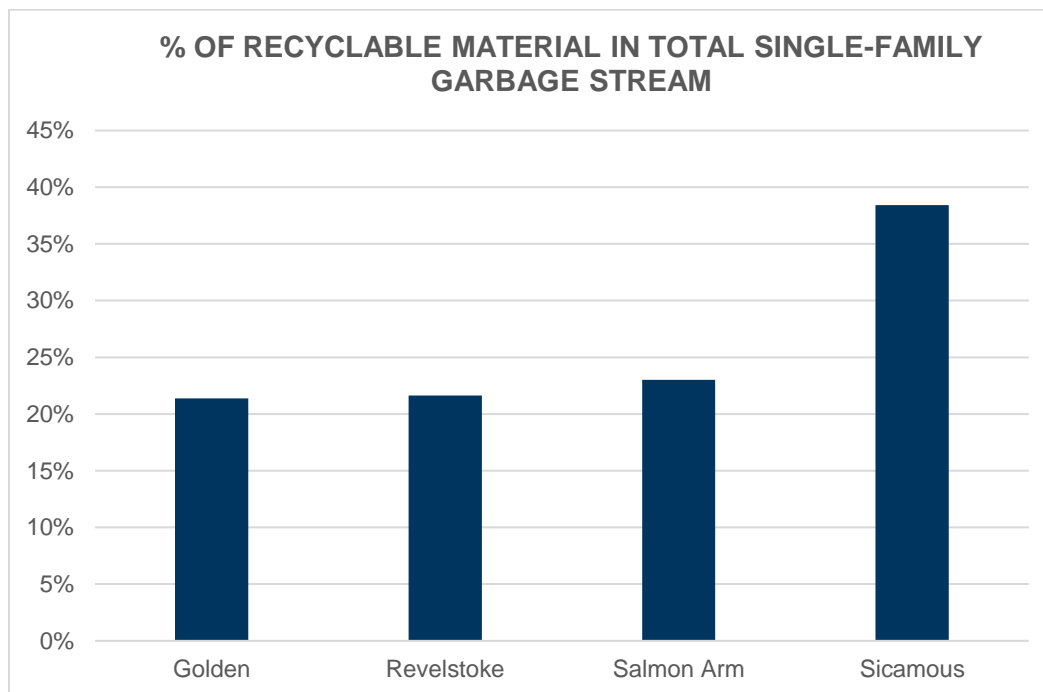


Figure 7: The Percentage of Curbside Recyclables in the Garbage Stream for the Single-Family Sector⁴⁵

Overall, the region's average disposal rate was 826 kg/capita in 2022. When looking at the four main waste sheds in the CSRD, it is evident that the areas with access to residential curbside collection of recycling and organics (in Salmon Arm only) have lower disposal rates. Table 3 below illustrates the impact of offering these curbside programs based on the proportion of compostable organics and recyclables found in the garbage streams in the four waste sheds.

Sicamous residents have no access to a municipal curbside collection service and has a disposal rate of 827 kg/capita relating to residential garbage. Sicamous also shows a higher proportion of recyclables in the garbage compared to the other three municipalities (as shown in Figure 7).

Salmon Arm has the lowest proportion of organics the garbage (16%), which can be attributed to being the only area that offers curbside organics collection.

Table 3: 2022 Solid Waste Composition of Residential Waste Sent to Landfill

Waste Shed	Services Provided	Single-Family Compostable Organics (2023) ⁴⁶	Single-Family Curbside Recyclables (2023) ⁴⁷	Residential Disposal (Kg/Capita 2022)
Golden	Recycling and Garbage Collection	43%	21%	205
Revelstoke	Recycling and Garbage Collection	37%	22%	147

⁴⁵ Based on materials accepted by Recycle BC in curbside collection in Revelstoke.

⁴⁶ Percent of total waste from single-family sector.

⁴⁷ Percentage of total waste from single-family sector.

- 19 -

Waste Shed	Services Provided	Single-Family Compostable Organics (2023) ⁴⁶	Single-Family Curbside Recyclables (2023) ⁴⁷	Residential Disposal (Kg/Capita 2022)
Salmon Arm	Recycling, Organics and Garbage Collection	16%	23%	190
Sicamous	Private Subscription or Self-Haul	37%	38%	827

Opportunities to Improve Access to Three-Stream Curbside Collection

The CSRD currently does not operate curbside garbage or recycling collection programs. However, the regional district staff have noted that member municipalities are sometimes not well resourced to manage their curbside collections. There may be an opportunity for the regional district to play a more central role in undertaking curbside collection in the future to provide harmonization of services and achieve economies of scale for curbside services.

Although curbside collection provides improved accessibility and convenience for recycling, a curbside recycling program would only accept paper products and containers (plastic/tin). Other recyclables (e.g., flexible plastics, Styrofoam and potentially glass) would still have to be self-hauled to a depot.

As part of the Recycle BC collection agreement, a collector is obligated to limit the amount of “Not Accepted Material” collected to less than 3% of collected materials by weight. High contamination increases the costs of sorting to maintain the bale quality and marketability of the materials. Over the last year, Recycle BC has begun to issue fines for unacceptable contamination in curbside recyclables. The City of Kamloops was penalized for contamination a dozen times, totaling \$60,000.⁴⁸ West Kelowna was fined in 2023 for \$55,000 for contamination.⁴⁹

With Recycle BC clamping down on contamination, it may become riskier (costly) to manage recyclables for a curbside collection program. The District of Sicamous would benefit from undertaking a cost analysis of a curbside service and engaging residents on their program acceptance.

The CSRD and/or the District of Sicamous may want to commit to providing curbside collection services to households that do not yet have mandatory curbside recycling, organics, and garbage collection, wherever the service is desirable by residents and feasible.

The CSRD may want to support Golden and Revelstoke and densely populated rural areas (Area G) to provide better access to curbside recycling and organics collection, if deemed feasible.

Potential Action

- 2A: Support member municipalities to assess and implement three-stream curbside collection programs, if deemed feasible.
- 2B: Provide better access to curbside recycling and organics collection in densely populated electoral areas, if deemed feasible.

⁴⁸ For more information refer to this [Kamloops this week -news article](#) dated January 30, 2023.

⁴⁹ [Kelowna, West Kelowna fined \\$55K for exceeding contaminated recycling levels: RDCO - Okanagan | Globalnews.ca](#)





Strategy 3: Improve Organics Processing and Diversion Capacity

Although the region has made great strides in organic waste diversion to-date, additional diversion hinges on establishing more organics processing capacity and a subsequent expansion of curbside collection programs for compostable organics. When processing facilities are established, the CSRD and/ or member municipalities can implement regulatory tools, such as organics disposal restrictions/bans, or mandatory source separation bylaws, which can help influence source segregation and increase organics diversion. As well, the CSRD would have the ability to charge the higher disposal fees for mixed loads, as food would be deemed marketable.

Revelstoke

The Revelstoke Composting Facility at the Revelstoke Landfill opened in the fall of 2022.⁵⁰ This facility provided new opportunities to accept food waste from both commercial and residents in addition to yard and garden waste, which was already processed.⁵¹

The commercial program is open to restaurants, hotels, offices, schools, multi-family developments, daycares and any other commercial operations that produce food waste.⁵² The CSRD partnered with the Revelstoke Local Food Initiative, a non-profit group promoting food security and education, to assist businesses with making the transition to commercial composting. A few weeks later, the CSRD introduced direct drop-off of compostable organics at the landfill for local citizens and commercial self-haul.

A marketable compost is not currently produced at the Revelstoke Composting Facility until volumes increase; however, the end product is beneficially used as landfill closure cover material.

There is no curbside organics collection program available currently. An organics collection program has been discussed since 2014. However, the municipality was unsuccessful in securing provincial funding in 2023 which would have helped to reduce cost impacts on residents. Revelstoke has been interested in becoming a certified “Bear Smart” community by the BC Conservation Foundation, which influences the selection of curbside carts and resulting program costs.

Curbside organics collection is still a high priority and will be important to reduce the amount of compostable materials being landfilled (in 2023 at 36%).

Golden and Sicamous

An organics collection for Golden and Sicamous residents is not available and there is no local organics processing facility. Golden residents have access to a free yard waste collection service twice a year when residents can place yard waste on the curb for pickup.⁵³ Sicamous residents have access to an annual yard waste collection service.⁵⁴

CSRD has provided funding to Local Food Matters to assess food waste collection with focus on the commercial sector, but also to work with the Town of Golden to gain more insight on progress and barriers to providing an organics curbside collection. The CSRD’s funding also allows Local Food Matters to start looking at an optimal location for a compost facility that meets MoE and all other regulatory requirements.

⁵⁰ [Compost Information and Updates — Revelstoke Local Food Initiative](#)

⁵¹ [Kickin' Compost Sales | CSRD, BC](#)

⁵² [2022-10-25-Revelstoke-Composting-Facility \(csrd.bc.ca\)](#)

⁵³ [Golden's free yard waste roundup to take place May 3 | Town of Golden](#)

⁵⁴ [Curbside Waste Pick-Up May 1 & 2, 2023: News - District of Sicamous](#)

- 21 -

Local Food Matters will work with the Town of Golden, the main local waste hauler (VP Waste) and other community players.

There is potential for the CSRD to partner with the Town of Golden to secure a suitable site for an organics processing facility, or review options that include a transfer station with hauling to Revelstoke for composting or for a private processor to accept residential curbside organics. If an organic 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 step. At the transfer station, the organic waste is temporarily stored and consolidated before being hauled to a processing facility. The development of suitable organics diversion options needs to consider GHG impacts relating to hauling in the context of what is diverted from landfill.

There are private organics processing facilities in or close to the CSRD. Spa Hills Farms, is a facility outside of Salmon Arm, which processes food waste and organic material to make chemical-free fertilizer.⁵⁵ They also offer collection to local businesses and institutions in the North Okanagan/Shuswap community.

Strategy 2 refers to how the CSRD can partner with member municipalities to support them in implementing a three-streams curbside collection, including food waste. The focus on this strategy is on improving the capacity of organics processing, which is essential for considering more organics collection at the curb.

As was voiced by the public in the 2023 survey on the SWMP update and by the PTAC members, identifying local organics processing options for communities without a curbside organics collection program is a priority for the region.

Opportunities to Increase Organics Diversion

The CSRD may want to partner with municipalities (Golden and Sicamous) to undertake research on suitable composting technologies for organics quantities (food and yard waste) that can be sourced locally (curbside collection and ICI sources) and potential processing sites. A request for qualification process may be suitable to use to seek technology suppliers who can provide high-level designs and costs for a potential facility/facilities, or who are able to propose alternative solutions (transfer to a private facility).

There are pros and cons with both options; having a local government-owned facility or using a private processing facility. Through the procurement process, potential collaboration partners can be identified who are able to reduce overall costs and increase the project feasibility.

PROS with using a private facility:

- Uses existing permitted facility that has already been sited.
- Likely to receive competitive offers from nearby facility operators via an RFP/RFQ process.
- Can commence food waste collection within short time frame.

CONS with using a private facility:

- The region would become dependent on third-party for food waste processing.
- Potentially longer distance and higher collection/transport costs as compared to a more local facility.

PROS with a local government-owned facility:

CONS with a local government-owned facility:

⁵⁵ [Spa Hills Compost – Okanagan & Shuswap Food Waste Composting](#)



- 22 -

- Potential to access government/provincial funding to establish facility.
- Have control of the processing facility and costs.
 - Might be closer than an existing facility (i.e., less transport and lower related hauling costs).
- An organics processing facility is often difficult to site, even at a landfill.
- Time and resource intensive to plan, permit, and establish new facility.
- Significant increase in capital costs to fully enclose a composting operation.

Processing at a private facility may be an option for Sicamous, which is within reach of two composting facilities within an hour's drive. Accessibility is sometimes a challenge in the winter due to heavy snow. As mentioned in Strategy 2, there is also an opportunity to review alternative collection and processing models, such as the in-kitchen organics processing option used by the City of Nelson.

Golden has a population of approximately 4,000 (2021 Census) and the community is often isolated in the winter due to road closures. Golden may need a local small-scale solution and the CSRD and the Town of Golden could assess the cost of small-scale solutions, such as the vermicompost or in-tunnel solutions. Vermicomposting has already been successfully adopted by the town of Fort Nelson (with half of Golden's population) in the cold climate of the Northern Rockies.⁵⁶

Vermicomposting

The Northern Rockies Regional Municipality has vermicomposting at a local landfill and is run by a local company called the Northern Rockies Vermicompost.¹ Vermicomposting is an economical processing option as it does not require buildings, heat, or electricity and is feasible in cold climates. To participate, residents collect their food scraps, take it to the landfill (or they can hire a pickup service), and place it in the vermicompost bin. The Northern Rockies Vermicompost also offers consultation services for other interested in composting at that scale.

Potential Action

- 3A: Partner with relevant municipalities and assess feasibility of organics processing solutions and implement if deemed feasible.

Strategy 4: Improve Education and Enforcement

Regulatory requirements for waste diversion, such as disposal bans, and waste management bylaws only result in significant improvements to diversion and disposal rates if all parties involved are well informed about waste diversion options and if the regulatory requirements are well enforced.

In the CSRD, differential tipping fees have been used since 2018 to incentivize waste diversion through Bylaw No. 5835. Once a waste stream is deemed "marketable" in an area, the waste generator pays a significant surcharge for bringing marketable wastes in a load of waste destined for landfilling (referred to as refuse in the bylaw). Marketable waste means the waste can be directed to a provincial product stewardship program, a regional district program or a commercial market through waste reduction, reuse or recycling opportunities (including composting).

The CSRD manages eight transfer stations, two compost facilities (the Revelstoke Compost Facility and a yard and garden compost at the Salmon Arm Landfill), 18 Recycle BC depots and four landfills in

⁵⁶ [Northern Rockies Vermicompost \(nrvermicompost.ca\)](http://nrvermicompost.ca)

- 23 -

four different waste sheds. Currently there are four staff who are responsible for administering the CSRSD's waste reduction and solid waste management programs (Manager, Environmental Services, a Waste Reduction Coordinator, a Facilities Superintendent, and a Financial Services Assistant). A summer student is also employed each year to support the team. Staff salaries and benefits are funded under both the Solid Waste and Recycling functions.

The CSRSD conducted a tipping fee review in 2023, which was approved in December 2023. Starting in 2024, mixed waste loads that contain over 10% marketable materials will be charged at \$270 per tonne (compared to \$90 per tonne without). In 2022, approximately 25% of the loads accepted at the scaled sites were mixed loads (comprising 15% by total weight). At the Sicamous Landfill only 1% of the loads were recorded as mixed loads (4% by weight). Due to staffing constraints at the CSRSD facilities, scale attendants are mainly focusing charging the Mixed Load-rate when it is easy to detect marketable materials, such as wood waste in mixed loads.

The 2023 waste composition study showed that approximately half of the disposed waste stream was made up of paper, plastic, and compostable organics across all waste streams (Figure 3 in Section 3). Inadequate staffing has been noted as a major factor in effectively encouraging waste diversion through bylaw education and enforcement. There is an opportunity to further improve organics diversion through improved education of residents and businesses as well as enforcement at the CSRSD facilities.

The Bylaw No. 5835 specifies which materials are regarded as marketable waste. Once there are readily available diversion options for a product/ material, the CSRSD has the ability to include these as marketable wastes. The Bylaw is updated on an as needed basis.

Education on Past Bylaw Changes in Salmon Arm

In 2017 when a commercial organics market became available in the Salmon Arm area via the Spa Hills Composting facility, the bylaw was updated so that food waste mixed with refuse in the Salmon Arm Waste shed triggered significantly higher Mixed Load-tipping fees.

Prior to covering food waste as 'marketable waste' in the Salmon Arm's waste shed, CSRSD staff consulted with all local waste collectors/haulers to collaborate on the program implementation. Waste haulers were notified about the upcoming bylaw requirements and the CSRSD's plan to work with commercial food waste producers to implement a collection program. CSRSD staff also visited many local businesses (e.g., restaurants and larger food producers) to provide in-person education and relay information to the waste haulers on the barriers to implementing food waste diversion. This collaborative approach was met with enthusiasm for participating in the program.

Although the CSRSD undertook a significant outreach and engagement campaign for the food waste diversion program, the presence of food waste in mixed waste (refuse) is still not actively enforced within the Salmon Arm waste shed. The significantly higher tipping fee for Mixed Loads is never applied to loads containing food waste. Staffing levels are not sufficient to enable effective enforcement of incoming loads, such as inside curbside trucks or at the active face of the landfill.

Food waste has not yet been included as 'marketable waste' in Revelstoke as the CSRSD is waiting for the municipality to first offer a residential curbside organics collection. Once organics processing capacity is identified for Sicamous and Golden (refer to Strategy 3) and collection options are established (refer to Strategy 2), the CSRSD will be able to include food waste as marketable waste across all waste sheds.



Opportunities for Education in the CSRD

There is opportunity for the CSRD to partner with local, private waste service providers, to improve the education of residents, including schools, and businesses on existing diversion options and bylaws. The CSRD may want to consider whether volunteer committees can support CSRD staff with education on waste prevention and diversion.

For the roll-out of changes to tipping fees in new areas (Revelstoke, Golden or Sicamous when food waste can be considered a marketable material) or new bylaws, waste haulers play a particularly important role as they become the on-the-ground bylaw enforcers. The next Memo will discuss additional regulatory options (e.g., mandatory waste sorting) that can complement the CSRD's current bylaws.

The CSRD may want to work closely with member municipalities and local businesses to provide targeted education. It is important that all parties are able to work together to understand the barriers limiting success and how to overcome these barriers. The Fraser Valley Regional District promoted food waste donation and rescue options at the same time as it promoted its new waste sorting bylaw. The webinar delivered in 2022 in collaboration with FoodMesh featured short presentations from the regional district, FoodMesh, and other local organizations involved in food waste prevention, rescue or diversion.⁵⁷

Potential Action

- 4A: Partner with local, private service providers and organizations to provide better education on existing diversion opportunities and bylaws.

Opportunities for Improved Enforcement

Although CSRD facilities are managed by CSRD, they are ultimately operated by contractors on three to five-year terms. Currently CSRD facilities are operated by about ten different contractors, all of which are important for education and bylaw enforcement.

To increase bylaw enforcement beyond current levels, the CSRD would need to hire more staff, as relying on contracted staff to administer CSRD bylaw enforcement is a challenge. The CSRD may want to review if the operational contracts are sufficiently incentivizing the contractors to encourage waste diversion amongst facility users and enforce bylaws.

Furthermore, the CSRD may choose to explore the cost benefits of moving operations of CSRD's facilities from contractors to CSRD staff. There are potential benefits of having CSRD staff as front-line staff at the CSRD landfills instead of contractors, making it easier to ensure consistent staff messaging and enforcement of site users. However, the cost implications of such a change may be too substantial to implement. Moving to an in-house model would involve a significant change which would require a large expansion of the department.

The CSRD may also want to consider options to simplify enforcement of bylaws:

- The CSRD may want to introduce a requirement for waste generators to use transparent (clear) bags for garbage destined for landfill. The benefits of using transparent bags are that it allows

⁵⁷ [FoodMesh | The Fraser Valley Regional District Food Recovery Network](#)

- 25 -

for a simplified inspection process with less staff time required for enforcement of landfill bans and can help with improving waste diversion.

Having clear bags allows staff to see what is in the bag, ensuring there are no materials such as hazardous or recyclables. This is not a common requirement within BC but is in other parts of Canada. In Ontario, it is considered an essential tool for waste diversion and enforcement.

- The CSRSD may want to consider collaborating with member municipalities to apply smart technologies, such the use of artificial intelligence (AI) technology, to simplify enforcement, where possible. The Regional District of Central Okanagan is currently conducting a pilot using AI (see more info below).⁵⁸

AI To Detect Recycling Contamination

The Regional District of Central Okanagan announced a new pilot program at the end of 2023, which will use AI technology to detect recycling contamination. They are partnering with Recycle BC, Environmental 360 Solutions, and Prairie Robotics to install cameras on recycling collection trucks. These cameras will have the ability to identify and track items that are not accepted and report back with real-time feedback. When items that do not belong are detected, a picture is taken, and those items are highlighted, and the rest of the image is blurred. This information is then sent to the household where the contaminated recyclables were collected, either via a postcard or via the Recycle Coach app, if the household is registered for the app, which provides information on what goes where and collection schedules), they are notified through the app as well.

Potential Action

- 4B: Assess the cost-benefit of using contractor vs. in-house staff to operate CSRSD facilities, and transition to in-house service if it is determined to be beneficial.
- 4C: Review contractor incentives for facilities operated by contractors to better encourage waste diversion.
- 4D: Increase CSRSD enforcement capacity beyond current 2023 levels (e.g., staffing and equipment).
- 4E: Review options to simplify enforcement (e.g., clear bag requirement for landfill disposal, or us of AI technology), and implement if deemed feasible.

5 POTENTIAL IMPACTS

MH has identified the high-level impacts from the proposed strategies included in this memo. The waste diversion impact refers to how a strategy can reduce the disposal rate when considering waste materials targeted, current waste composition data and a best guess as to how successful the proposed strategy will be to divert waste. The table also identifies the potential high-level costs of implementing a strategy. These include operational costs (e.g., staffing) and capital costs.

⁵⁸ [Pilot program uses AI to improve residential recycling - Regional District of Central Okanagan \(rdco.com\)](https://rdco.com)

- 26 -

Table 4: Anticipate Impact Related to the Identified Strategies

#	Strategy	Potential Actions	Costs	Staffing	Waste Hierarchy	Diversion Potential
1	Improve Waste Prevention	<p>1A: Encourage and support residents and local businesses to reduce food waste.</p> <p>1B: Collaborate with member municipalities and local organizations to provide education and outreach to residents, schools, and businesses on alternatives to single-use items and packaging. 1C: Adopt successful waste reduction, repair and diversion campaigns targeting residents.</p> <p>1D: Pilot reuse or repair programs or events in partnership with local organization, and expand if deemed feasible.</p> <p>1E: Establish grant funding to support local waste prevention and diversion initiatives.</p>	Low-Medium	Low-Medium	Reduce and Reuse	Low
2	Improve Access to Three-Stream Curbside Collection	<p>2A: Support member municipalities to assess and implement three-stream curbside collection programs, if deemed feasible.</p> <p>2B: Provide better access to curbside recycling and organics collection in densely populated electoral areas, if deemed feasible.</p>	Medium-High	Low-Medium	Recycling	Medium - High
3	Improve Organics Processing and Diversion Capacity	<p>3A: Partner with relevant municipalities and assess feasibility of organics processing solutions and implement if deemed feasible.</p>	Medium-High	Medium - High	Recycling	Medium - High
4	Improve Education and Enforcement	<p>4A: Partner with local, private service providers and organizations to provide better education on existing diversion opportunities and bylaws.</p> <p>4B: Assess the cost-benefit of using contractor vs. in-house staff to operate CSRD facilities, and transition to in-house service if it is determined to be beneficial.</p> <p>4C: Review contractor incentives for facilities operated by contractors to better encourage waste diversion.</p> <p>4D: Increase CSRD enforcement capacity beyond current 2023 levels (e.g., staffing and equipment).</p> <p>4E: Review options to simplify enforcement (e.g., clear bag requirement for landfill disposal, or use of AI technology), and implement if deemed feasible.</p>	Medium-High	Medium - High	Recycling	Medium - High



6 NEXT STEPS

At the PTAC meeting on January 25, MH will present to committee members on the potential strategies that are highlighted in this Memo. There will be an opportunity to provide feedback to ensure that all feasible options have been explored and that we discuss the suitability of these potential strategies with PTAC members. Committee members will also be asked to identify if there are any options that are not in the interest of the region to pursue.

This Memo has only addressed some of the issues and opportunities that were identified by the Current System report, PTAC and through Engagement Period 1. The following are the remaining issues and opportunities which PTAC will have time to discuss in the upcoming meetings:

- EPR material management (e.g., issues with current programs and need for more)
- ICI waste diversion (e.g., space requirements or other municipal permitting and bylaws, lack of recycling and waste collectors for ICI in some areas)
- Diversion of C&D wastes (e.g., through municipal permitting and bylaws)
- Improve transfer station network (accessibility in terms of location and services)
- Emergency debris management
- Illegal dumping
- Invasive species management
- Recovery of energy/heat from waste for useful purposes (e.g., innovative technologies to reduce need for landfilling)
- Future disposal options
- System financing

The strategies that are favoured by PTAC will be part of a final memo of all Preferred Strategies, which will be drafted later in the Spring for the Committee's consideration. Committee members will then have another chance to review and finalize the list of preferred strategies. This process will inform the content of the updated Draft SWMP, which will be brought to the Public for consultation by the end of 2024.

- 28 -

7 CLOSING

The Columbia Shuswap Regional District retained Morrison Hershfield to conduct the work described in this report, and this report has been prepared solely for this purpose.

This document, the information it contains, the information and basis on which it relies, and factors associated with implementation of suggestions contained in this report are subject to changes that are beyond the control of the author. The information provided by others is believed to be accurate and may not have been verified.

Morrison Hershfield does not accept responsibility for the use of this report for any purpose other than that stated above and does not accept responsibility to any third party for the use, in whole or in part, of the contents of this document. This report should be understood in its entirety, since sections taken out of context could lead to misinterpretation.

We trust the information presented in this report meets Client's requirements. If you have any questions or need addition details, please do not hesitate to contact one of the undersigned.

Morrison Hershfield Limited

Prepared by:



Veronica Bartlett, M.Sc.
Senior Environmental Planner
vbartlett@morrisonhershfield.com

Reviewed By:



Todd Baker, P.Eng.
Senior Environmental Engineer
Global Waste Practice Lead
tbaker@morrisonhershfield.com