

**Cariboo Regional District  
Solid Waste Advisory Committee (SWAC) – March 16, 2022 Meeting Minutes**

Present: Amanda Vibert, Sherri Jonkman, Peter Jarvis, Mary Forbes, Vince Benner, Joanne Doddridge, Oliver Berger, Leonard Cook, Pat Mahood, Tera Grady

Absent: Al Richmond, Cory Delves, Dan Harrison, Leslie Glen, Jared Taylor, Davee Palmantier, Enver Hrbinic, Roxanne Pop, Steve O'Hara, and Tyron Harry

Meeting was called to order at 1:00 pm.

**Agenda:**

1. Call to Order
  - a. Adoption of the Agenda
2. Adoption of Minutes
  - a. January 11, 2022
3. Guiding Principles
4. Current Reality Updates
5. Options Recap
6. Planning Process and Timeframe

**1. Call to Order**

The motion to approve the agenda was made by Pat and seconded by Leonard.

**2. Adoption of Minutes**

The minutes were approved; Pat made the motion to approve the minutes, Sherri seconded the motion, none were opposed, and it was carried.

**3. Guiding Principles**

The guiding principles were recapped for context and to inform options review.

1. Promoting zero waste approaches and supporting local circular economy opportunities
2. Minimize greenhouse gas emissions and protect the Cariboo's natural environment
3. Implement the 5-Rs hierarchy through new programs, extended producer responsibility, education, and partnerships to achieve regional targets
4. Manage residuals responsibly and prioritize hazardous substances diversion from landfill)
5. Move towards user-pay approach while recognizing rural limitations
6. Maintain cost effective system while optimizing diversion and local jobs

**4. Current Reality Updates**

Tera provided current reality updates for system costs, revenue, waste composition, and tonnages including distribution across the region.

### Costs

System costs from 2015 to 2021 were broken out by CRD and Quesnel operations, CRD capital. Total costs increased from just under \$7M to approximately \$9M starting 2018 due to an increase in transfer to reserves for future expenditures (e.g. landfill closures, capital costs). Revenue stream types and revenue of 2015 and 2021 are listed below. Over half of the CRD's solid waste system revenue is derived through taxation.

- CRD taxation - \$4M (2015) and \$4.7M (2021)
  - Based on \$55 per \$100,000 home value
- Tipping fees - \$1M and \$2M
  - Reflects commercial sector transition to tipping fees in Quesnel plus overall gradual increases
- Other recoveries - \$750,000 and \$1.2M
  - From commodity sales, FN agreements, City of Williams Lake contribution, and Red Cross funding
  - Of note is a peak to over \$1.5M in 2019 given fire-related Red Cross funding to manage wood waste
- Grants - \$500,000 and \$900,000
  - Significant variation by year
- Capital reserves - \$0 and \$100,000
  - Of note is a spike to \$800,000 in 2019
- Recycle BC incentives - \$200,000 and \$500,000
  - Incentive is currently @\$84 per tonne

### Tonnages and distribution across region

Waste landfilled fluctuated between 2015 and 2020 with a seven-year average of 45,000 tonnes resulting in a cost of \$196 per tonne and approximately 706 kilograms per capita per year. A two-year average from 2019 and 2020 equals 41,590 tonnes with \$212 per tonne and 652 kilograms per capita. Diversion will continue to be a priority but it is of note that lower tonnage results in a higher cost per tonne so the revenue sources type and ratio will need to continue to shift over time.

Recycling tonnages continue to increase in the region. The recycling that can be easily quantified from Recycle BC depots and curbside sources plus commercial cardboard and paper (from Williams Lake and Quesnel) totaled 1,300 in 2015 and increased to 2,700 in 2021. Products from extended producer responsibility programs add to the diversion count but are not as easily quantified at the regional district level. The impact of waste diversion of materials like concrete is reflect in the waste tonnage reduction over time. Due to forest fires and related fire smart wood waste abatement in the region, wood waste tonnes increased almost five times over with tonnages growing from 2,400 in 2015 to 11,145 in 2021.

Waste tonnages broken out by regional zones were reviewed and discussed. North Cariboo has the highest percentage of total waste at 40% followed by Central Cariboo (33%), South Cariboo (24%), and West Chilcotin (3%).

Waste tonnage distribution across region was conveyed as follows:

- 74% - delivered to the three controlled regional facilities in Quesnel, Williams Lake, and District of 100 Mile House
- 17% - dropped at nine controlled rural sites
- 9% - generated from 20 non-controlled rural sites

### Composition

Based on a 2019 waste composition study, 35% of the waste stream comprises compostable organics followed by paper (22%), plastic (17%), household hygiene (5.9%), textiles (4.2%), metals (3.9%), and building materials (3.6%), and smaller items and residuals. When juxtaposed against the current options under consideration, most options address the materials representing the largest percentage of the waste stream – organics, paper, and plastic. Diversion Reuse Recycling Centres, User Pay, and Landfill Disposal Bans address all items except for household hygiene. See Materials to divert by option table below for more information.

## Materials to divert by option

Option	Organics 35%	Paper 22%	Plastic 17%	Textiles 4.2%	Metals 3.9%	Building Materials 3.6%	Glass 1.9%	Electronics 1.7%	HH Hazardou s 1.7%	Non- Compost able Organic 1 .7%	Bulky Objects .5%
<b>Diversion Reuse Recycling Centres</b>	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Multi-unit Building Recycling</b>	-	Y	Y	-	-	-	-	-	-	-	-
<b>Commercial Recycling</b>	Y	Y	Y	-	-	-	-	-	-	-	-
<b>Food Waste Diversion</b>	Y	-	-	-	-	-	-	-	-	-	-
<b>Upgrades to Rural Sites</b>	-	-	-	-	-	-	-	-	-	-	-
<b>User Pay</b>	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Curbside Garbage Collection including recycling</b>	Y	Y	Y	-	-	-	-	-	-	-	-
<b>Landfill Disposal Bans</b>	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

### 5. Options Recap

The eight options under consideration reviewed and update feasibility factors were shared and discussed.

1. **Diversion Centres** – Diversion Centres can host multiple functions to collect and process (as relevant) recyclables, compostables, construction materials, ICI recyclables, re-usable items, and hard-to-repair items. Reuse and repair along with other education events can be hosted. A taxation-subsidised facility is most likely to succeed, and municipal partners are eager to move forward on these facilities, which greatly increases the feasibility, since municipalities will be responsible to fund their portion of the capital and operating costs.

*Feasibility Considerations* – It will be important to consider Cariboo context and potential public/private partnerships. Function and facility type depends on land availability; infrastructure components; material types; upstream initiatives and community engagement; resources available and community partners. This option will be further assessed based on municipal partners, land, and funding.

2. **Multi-unit Residential Building (MURB) Recycling**– provide packaging and paper recycling for apartment buildings and condominiums. Communication or applications to support participation will need to be in place.

*Feasibility Considerations* – With Recycling BC incentives for Quesnel, Williams Lake, and 100 Mile along with required recycling municipal bylaws (and enforcement over time) in place, the most optimal scenario for MURB recycling can be established. There are 2,300 MURB units in the region and it is estimated that 52 kilograms of recycling is available for capture per unit. Program cost implementation would vary and has not been fully accessed.

3. **Commercial Recycling** – establish commercial recycling options for commercial businesses and institutions. Determine available recyclable materials, collection options, education, processing, storage, shipping, and marketing aspects. Sponsor a commercial recycling pilot to help determine region-specific costs. BC MOECCS is working on a ICI PPP report for the province, but no commitment has been made to include this material into an EPR program. Region specific data will help to move this issue forward.

*Feasibility Considerations* – Given that neither a timeframe nor a commitment to include commercial packaging and paper products in the Recycling Regulation has been provided by MOECCS, it is recommended that a pilot is run to better understand the diversion potential and costs for commercial recycling (cost per tonne). There is strong interest in commercial recycling for products and materials that residents are used to recycling at home.

4. **Food Waste Diversion** – use the food recovery hierarchy to prevent wasted food, support source reduction via home and community composting, and explore options for centralized facilities and municipal curbside collection. Prioritize multiple ways to collect and manage food scraps depending on population density, geography, cost, and other factors.

*Feasibility Considerations* – an initial assessment of available organics tonnage for processing was completed for Quesnel, Williams Lake, South Cariboo, and 150 Mile based on 35% and 70% food scraps capture for current waste streams. Depending on capture, Williams Lake and Quesnel are estimated to have 2,000 to 4,000 tonner per year of combined food scraps, food soil, and yard and garden material feedstock for centralized composting. The capital costs for regional facilities at a similar scale are \$3-4M per regional facility. There are provincial and federal grant opportunities available to

support capital costs that can be pursued. Operational costs will also need to be factored but could be as low at \$30/tonne.

5. **Upgrades to Rural Sites** – augment rural site features such as lighting and cell boosters for short term safety and to lay the groundwork for fences/gates with a future gate card system, which supports a future shift to user pay systems.

*Feasibility Considerations* – The cost to upgrade the region’s 20 non-controlled sites to controlled sites would result in a \$2M increase (from \$943,000 to \$2.9M), assuming that the hours of operation stayed the same across facilities. None of the 20 non-controlled sites have power, and five do not have access to power even if the cost barriers could be overcome (\$460,000 for 15 sites). Capital and ongoing operational costs would be high, for 9% of the waste generated in the region, and there could be unintended consequences associated with improving sites and increasing the garbage flow – especially for sites without onsite recycling options. There are still safety, convenience/equity, access, and political will factors to consider for rural sites over time.

6. **User-Pay** – as feasible, transition high priority sites from non-controlled to controlled sites to help support a user pay approach so those who generate more garbage pay more. Capital and direct costs need to be factored in as well as balancing revenue from tax requisitions and tipping fees over time.

*Feasibility Considerations* – aside from upgrades to rural sites, there are several ways to move user pay forward. The existing user pay programs for commercial customers at regional sites and residents who pay into municipal utilities can be adjusted over time to align with industry norms. At controlled sites, a pre-set amount of garbage drop off can be established so that a specific weight or number of bags is covered by existing taxation, and then a fee for additional waste is charged. For full user pay over time, noncontrolled sites would need to be switched over to controlled.

7. **Curbside Garbage Collection** – provide ‘fringe’ areas proximate to municipalities (with high enough housing density) to receive garbage collection. Assess the GHG emissions for current self-haul vs curbside collection. Take into consideration any unintended consequences for recycling if recycling cannot be added to the collection. Communication with Recycle BC required for new “adjacency criteria” will be required. Factor in potential for organics to be added over time.

*Feasibility Considerations* – The primary feasibility consideration is if Recycle BC’s adjacency criteria will allow for the CRD’s municipal fringe areas to be added to their collection program. A greenhouse gas (GHG) analysis showed that collecting garbage curbside vs having each household self-haul reduced GHGs by half. The other assumption factoring into this option is that recycling and organics will be collected over time. Three stream curbside required collection has been shown to be the most effective way to reduce garbage tonnage for residences.

8. **Landfill Disposal Bans** – establish and monitor disposal bans to restrict specific materials from landfill. Further research and consideration is needed given the resources that would be needed to staff sites and enforce the ban. Need to determine potential diversion as well as the costs.

*Feasibility Considerations* – Disposal bans for recyclable items that have an alternate drop off option are an effective way to reinforce diversion efforts. The launch would need to be funded to include robust education and monitoring efforts and would likely require existing staff training and new staff at sites. Ongoing staff, at approximately \$70,000 per position, would be needed for sites already particularly busy so monitoring and enforcement could occur over time. In more densely populated areas of the region, roaming inspectors would be beneficial.

## **6. Planning Process and Timeframe**

The SWMP planning process with estimated timeframe updates was discussed. Step 3 Options evaluation has included strategy development and will continue with financial and administrative impacts plus partnership exploration in spring 2022 leading to a fall 2022 public consultation.

Step 4 Prepare and adopt the plan will entail writing up the draft plan in summer 2022 consulting the public and incorporating edits in fall 2022 and submitting to the Ministry of Environment and Climate Change Strategy for review and approval in winter 2023.

The meeting concluded at 2:47pm