



MORRISON HERSHFIELD

Recycling and Composting Options to Consider for the Solid Waste Management Plan



Regional District of
Kitimat-Stikine

PTAC Meeting February 11, 2020

Outline

- Introduction
- Reduce and Reuse priorities
- Potential strategies to increase and improve recycling and composting
- Impacts of strategies
- Narrowing down strategies
- Next steps



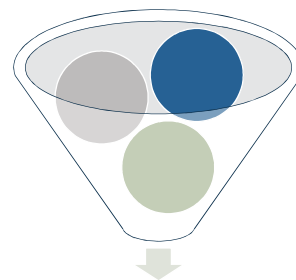
Where are we at in developing options?

- Priorities - Reduce and Reuse
- **Recycling and Composting**
- Residuals Management at Existing Facilities
- New Service Areas for RDKS
- Cost Recovery



Meeting Purpose

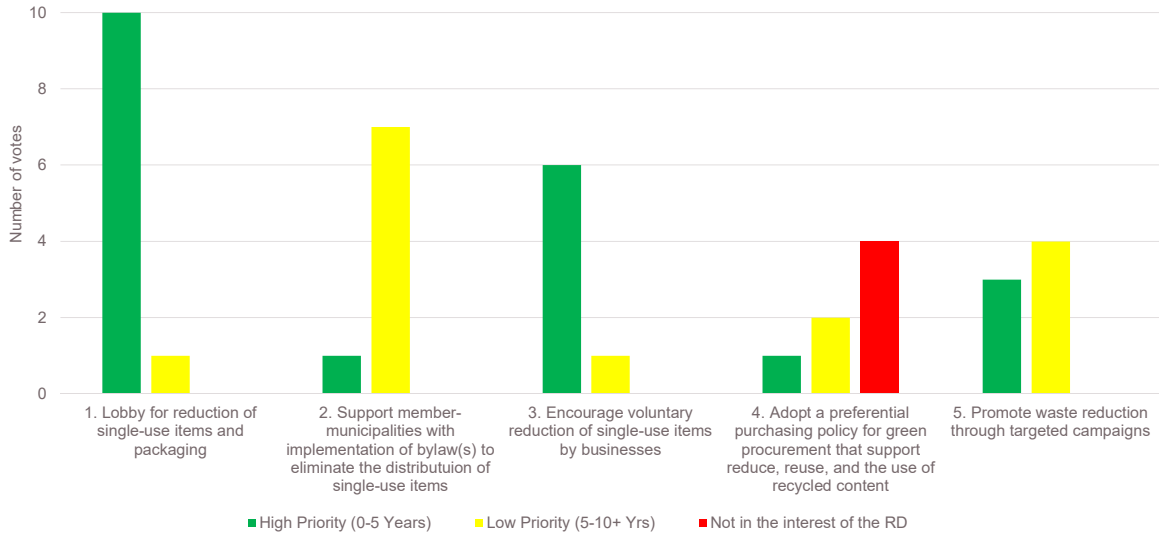
- Outline key recycling and organics diversion strategies and system efficiency strategies
- Narrow down these strategies which will form the Preferred Options



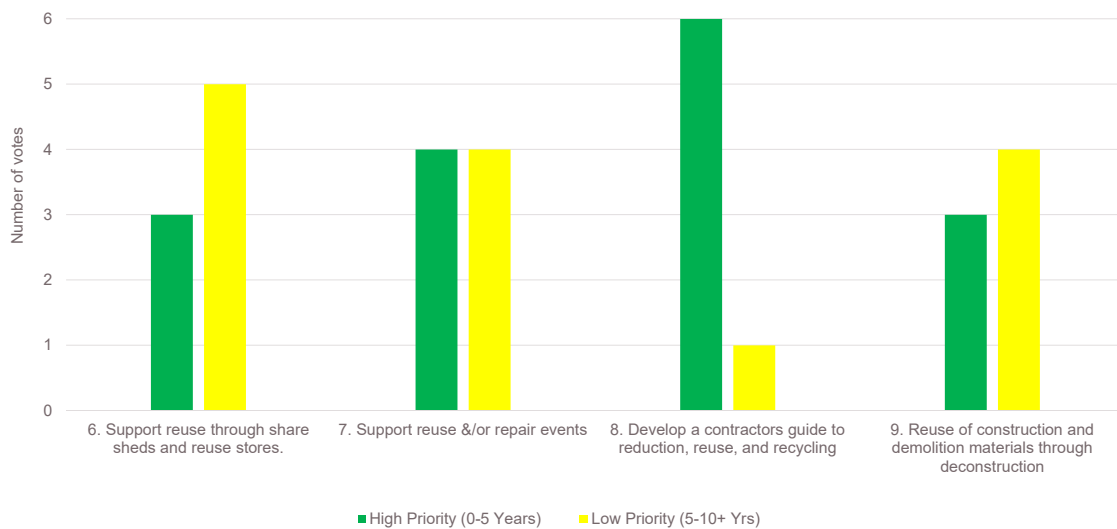
Preferred Options to be included in the Draft SWMP for Public Consultation



Priorities - Reduce Strategies



Priorities - Reuse Strategies



Strategies for Recycling & Composting

- Recycling (7)
 - Accessibility
 - Education & outreach programs
 - ICI waste diversion
 - Reduce recycling costs
 - Hazardous waste
 - Recycling of mattresses and construction and demolition waste
- Organics (1):
 - Organics capacity
- System Efficiency (3):
 - Bylaws
 - Curbside collection
 - Contractor relationship



Context – Current Recycling Initiatives

RDKS recycling services

- Drop-off locations for selected recyclable materials and EPR products
- Curbside recycling in the electoral areas in the Terrace service area
- Carry transportation and processing cost for commercial cardboard from Hazelton and Hwy 37 North Service Area
- Promotion, education and outreach

Additional curbside recycling is offered by individual communities



Context – Recycling Challenges

- National Sword program – limited access to end markets
- Incurred cost for managing of commercial cardboard
 - High transportation and processing cost
 - Low-value product
- Limited cardboard and paper processing capacity in Hazelton and Hwy 37 North Service Area
- Requests for support from Recycle BC for printed paper and packaging recycling have been challenging and had limited success



Potential Recycling Strategies

1: Lobby for improved accessibility to EPR programs

- A. Lobby for better service levels for existing EPR materials in rural areas.
- B. Lobby for inclusion of new materials, regardless of the source (residential or ICI), under the Recycling Regulation, in particular, ICI packaging and printed paper.



Potential Recycling Strategies

2: Provide continuous diversion education and outreach programs coupled with enforcement

- A. Regularly update existing communication plan and monitor performance.
- B. Perform audits of participation rate or waste composition. Follow up in-person education and out-reach and fines if warranted.



Potential Recycling Strategies

2: Provide continuous diversion education and outreach programs coupled with enforcement

- C. Provide contractor education (bylaw / contract requirements) and introduce performance incentives.
- D. Develop common approach allowing haulers to pass down fines for contaminated waste loads to waste generator.



Potential Recycling Strategies

3: Support ICI to encourage waste diversion

- A. Support private collectors with an updated hauler information package to encourage better ICI recycling amongst its customers.
- B. Promote available waste diversion opportunities and provide or support diversion coaching.
- C. Establish an ICI waste diversion working group.



Potential Recycling Strategies

4: Reduce Recycling Cost

- A. Maximize the partnership opportunities with stewardship organizations.
- B. Undertake an efficiency review of the management of recyclables within the region.
- C. Pursue composting of paper products at locations where deemed feasible.
- D. Set cost threshold when alternative lower cost options are pursued until recycling is no longer cost prohibitive.



Potential Recycling Strategies

5: Improve drop-off options for household hazardous waste where gaps exist

- A. Offer recurring roundup collection events for hazardous waste in potential partnership with stewardship organizations.
- B. Offer permanent drop-off options for targeted EPR materials at suitable transfer stations through partnership with stewardship organizations.



Potential Recycling Strategies

6: Consider options for mattress recycling

- A. Investigate feasibility of recycling mattresses (or parts of them) in the region, and implement pilot when deemed feasible.



Mattresses accepted by the Regional District of Central Okanagan



Potential Recycling Strategies

7: Increase diversion of Construction & Demolition waste

- A. Create a C&D waste working group.
- B. Perform a waste composition study of commercial C&D waste.
- C. On a regular basis conduct research
local diversion options: asphalt shingles,
drywall and clean wood.



Potential Recycling Strategies

7: Increase diversion of Construction & Demolition waste

- D. Explore the need for operational material at landfills (e.g. shingles and/or concrete).
- E. Include identified materials as restricted materials. Amend tipping fee structure to encourage segregation.



Context – Current Organics Diversion

- Curbside organics collection in Greater Terrace Area
- Composting facility (Forceman Ridge Waste Management Facility)
- Yard waste processing (City of Terrace and District of Kitimat)
- First Nation communities trialing composters



Context – Current Organics Diversion

Current challenges

- Contamination
 - Biodegradable bags, plastic bags, and plastic wrap
 - ICI sector waste
- Product end-use
- Rural capacity



Context – Current Organics Diversion

- Provincial goal of having organic waste disposal restrictions in place for 75% of the provincial population by 2020
- Up to 50% of the RDKS population is covered by such restrictions
- The RDKS has disposal restrictions where organics diversion options are available



Potential Composting Strategy

8: Establish organics processing capacity at suitable facilities

- A. Issue a request for qualifications to assess suitable designs and costs to establish a composting facility at Hazelton Waste Management Facility, and implement if deemed feasible.



Potential Composting Strategy

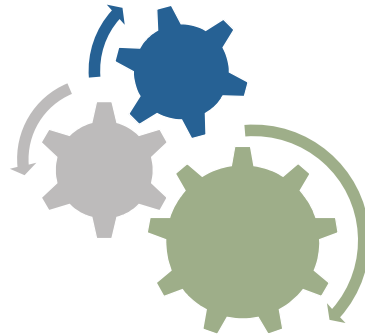
8: Establish organics processing capacity at suitable facilities

- B. Support District of Stewart to assess feasibility of a small-scale compost facility.
- C. Lobby for Provincial regulation to include uncontaminated paper products as approved feedstock where recycling is cost prohibitive.



Context – System Efficiency

- RDKS' solid waste management system has undergone major changes over the past few years.
- Optimizing operations to get maximum benefit from the infrastructure and services is a priority.



Potential System Efficiency Strategies

9: Amend solid waste bylaw to encourage waste diversion

- A. Amend definition of organic materials and develop separate category for clean wood waste. Include wood waste under restricted material under both Bylaw 671 and 688.
- B. Amend the list of prohibited materials to be as consistent as possible between the two service areas.



Potential System Efficiency Strategies

9: Amend solid waste bylaw to encourage waste diversion

- C. Adjust the current fee schedule to encourage increased diversion.
- D. Adjust the current fee schedule at the Thornhill Transfer Station to allow agreements with stewards such as MARR.



Potential System Efficiency Strategies

10: Support communities to introduce curbside collection

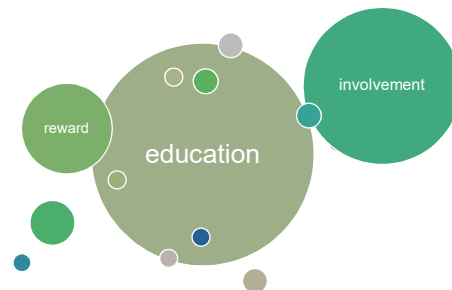
- A. Support the implementation of curbside collection of recyclables and/or organics in communities in the region.



Potential System Efficiency Strategies

11: Incentivize improved contractor and diversion performance

- A. Explore the option of introducing an incentive based program to improve contractor and diversion performance through a combination of education, increased contractor involvement and potentially financial rewards.



Impacts of Potential Recycling Strategies

#	Strategy	Operational costs	Capital Costs
1	Lobby for improved accessibility to EPR programs	Low	Low
2	Provide continuous diversion education and outreach programs coupled with enforcement	Low-Medium	Low
3	Support ICI to encourage waste diversion	Low-Medium	Low
4	Reduce recycling costs	Low	Low
5	Improve drop-off options for household hazardous waste where gaps exist	Medium-high	Low-Medium
6	Consider options for mattress recycling	Low-Medium	Low
7	Increase diversion of C&D waste	Low-Medium	Low-Medium



Impacts of Potential Remaining Strategies

#	Strategy	Operational costs	Capital Costs
8	Establish organics processing capacity at suitable facilities	Low-High	Low-High
9	Amend solid waste bylaw to encourage waste diversion	Low	Low
10	Support communities to introduce curbside collection	Low-Medium	Low
11	Incentivize improved contractor and diversion performance	Low-Medium	Low



Impacted Stakeholders

#	Strategy	RDKS	Member municipalities	Residents	Waste haulers and recycling facilities	ICI sector	Non-profit organizations	Comments
1	Lobby for improved accessibility to EPR programs							
2	Provide continuous diversion education and outreach programs coupled with enforcement							Additional contractor involvement will likely be required to monitor accepted loads.
3	Support ICI to encourage waste diversion							
4	Reduce recycling costs							
5	Improve drop-off options for household hazardous waste where gaps exist							
6	Consider options for mattress recycling							
7	Increase diversion of C&D waste							All stakeholders generating, hauling or managing C&D waste are affected.
8	Establish organics processing capacity at suitable facilities							
9	Amend solid waste bylaw to encourage waste diversion							Amendments to bylaws are likely to affect all stakeholders and waste generators
10	Support communities to introduce curbside collection							
11	Incentivize improved contractor and diversion performance							



Exercise – Narrowing Down Strategies

- Which ones are the most impactful strategies?
- Are there any that the RDKS should not pursue?



Next Steps

- Consolidate today's result and make formal decision next PTAC meeting
- Work with PTAC to develop strategies and options for:
 - Residual waste management at existing facilities
 - Residual waste management at new facilities
 - Cost recovery
- May 2020: Meet with PTAC and Board to agree on Preferred Options to include in the new SWMP



Questions? Comments?

Thank you



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