



MORRISON HERSHFIELD

Draft Regional Solid Waste Management Plan for the Peace River Regional District

*Proposed Strategies to Consider
Part 1 of 2*



PEACE RIVER
REGIONAL DISTRICT

October 1, 2020

Outline



PEACE RIVER
REGIONAL DISTRICT

- Meeting purpose
- Background & recap on planning process
- Ministry requirements
- Proposed strategies to consider (Part 1 of 2)
- Next steps

Meeting Purpose

- Part 1 of 2 - Draft RSWMP (9 strategies)
 - Recent changes to proposed strategies
 - Covering **waste diversion** (reduce, reuse, recycling and composting) and **energy recovery** (organics)
 - Gain approval to include strategies in the Draft RSWMP
- Part 2 (8 strategies) - COW meeting October 16

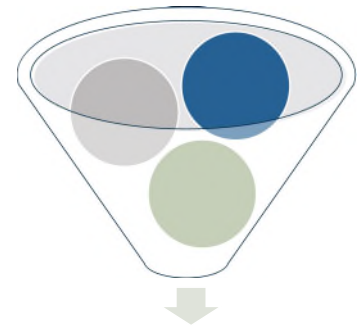


Background and Recap on Planning Process

- Environmental Management Act - all regional districts to have a solid waste management plan
- PRRD Regional Solid Waste Management Plan Update - process initiated in 2018
- Formation of the Public and Technical Advisory Committee (PTAC)
- Development of a Consultation plan

Background and Recap on Planning Process

- Assessment of the current system
- Undertook public survey
- Three major topics presented to COW and PTAC on potential strategies
 - Waste Diversion (reduce, reuse and recycling)
 - Energy recovery and residual waste management
 - Other issues and system financing



Proposed Strategies



Background and Recap on Planning Process

- Draft RSWMP with proposed strategies was presented to the Board on Aug 13
 - Concerns over level of input provided to the Plan
 - Some of the strategies too prescriptive
- The Draft RSWMP revised to provide flexibility
 - Only minor changes
 - 26 strategies consolidated to 17
 - General intent of the Plan has not changed



Ministry Requirements

- Regional districts mandated to develop a SWMP that provides a long term vision for managing solid wastes
- The Ministry's guidance highlights the important considerations:
 - The pollution prevention (5 R) hierarchy
 - Guiding principles
 - Locally relevant targets



Guiding Principles for the RSWMP

1. Promote the first 3Rs (Reduce, Reuse and Recycle) with targeted efforts

2. Promote zero waste approaches and support a circular economy

3. Prevent organics from going into the garbage wherever practical

4. Maximize beneficial use of waste materials and manage waste and divertible materials appropriately

5. Support polluter and user-pay approaches, and manage incentives to maximize behaviour outcomes where practical

6. Prevent recyclables from going into the garbage wherever practical

7. Collaborate with other Regional Districts and develop collaborative partnerships with interested parties wherever practical

8. Level the playing field within Regions for private and public solid waste management facilities

9. Ensure all waste materials are managed responsibly as technology or local options are developed



Proposed Strategies - Part 1 of 2

- 9 proposed strategies (first half of Plan)
- Refer to table in Agenda Package for original strategy numbering
- Proposed strategies:
 - Two (2) Reduce and Reuse
 - Four (4) recycling
 - Two (2) organics diversion
 - One (1) energy recovery for organics



Reduce and Reuse Strategies



1: Lobby for improved EPR programs in the PRRD

Considerations:

- Some products and materials problematic (e.g. single use plastics)
- Extended Producer Responsibility (EPR) programs (current and future) should be accessible to everyone and easy to implement



Reduce and Reuse Strategies



Strategy 1

This can include but is not limited to lobbying for:

- a) A provincial EPR program for single-use items
- b) Better service levels for existing EPR materials
- c) Industrial/commercial/institutional (ICI) to be included in current and future EPR Programs
- d) Inclusion of new materials, regardless of source (residential or ICI), under the Recycling Regulation

Implement programs at PRRD facilities, where feasible.



Reduce and Reuse Strategies



2: Promote and educate on the pollution prevention hierarchy

Considerations:

- Per-person waste generation is increasing
- Lowering waste generation reduces need for handling, transportation, processing, and disposal



Reduce and Reuse Strategies



Strategy 2

This can include but is not limited to:

- a) Adopt successful waste reduction campaigns used in other regions to target residents.
- b) Equip each share shed with a “share board” to encourage the reuse of bulky items.
- c) Host, organize and/or support repair activities through for example repair cafés, “maker spaces”, or similar in targeted communities.

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Reduce and Reuse Strategies



Strategy 2, continued

- d) Provide clear information on recycling options, including how to segregate materials, what happens to them, and the benefits of recycling.
- e) Educate on the cost of recycling in the Region and on ways costs can be reduced.
- f) Adopt a green procurement policy that supports the waste hierarchy.

Implement reuse and recycling programs at PRRD facilities, where feasible. Promote and educate on the programs.





3: Research options for recycling agriculture plastics

Considerations:

- This is an agriculturally intensive region
- Only a small portion of agricultural plastics are being recycled - lack of available recycling options



Strategy 3

This can include but is not limited to:

- a) Continue to investigate attainability of recycling agricultural plastics. PRRD will implement pilot when deemed feasible.
- b) If the pilot demonstrates promising results, implement larger scale recycling of agricultural plastics in the Region.

Implement programs at PRRD facilities, where feasible.



4: Increase waste diversion in the ICI sector through promoting the waste hierarchy

Considerations:

- The ICI sector contributes a significant portion of the waste tonnages received at PRRD's landfills
- A large portion of the landfilled waste is divertible material
- ICI waste diversion efforts have mainly focused on the construction and demolition sector



Strategy 4

This can include but is not limited to:

- a) Establish an ICI Waste Working Group to develop an overall ICI waste diversion strategy that identifies specific waste diversion initiatives supported by members as needed.
- b) Support or organize a waste reduction forum or workshop for targeted businesses.

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Recycling Strategies



Strategy 4, continued

- a) Develop guidance information for organizations on how to redistribute food to people in need rather than wasting.
- b) Gradually increase ICI disposal fees for sorted waste, unsorted waste, controlled, and restricted waste and carry out education and outreach program(s) to implement changes and improve waste diversion.

Implement programs at PRRD facilities, where feasible.



Recycling Strategies



5: Improve collection of hazardous waste and targeted EPR materials

Considerations:

- Many hazardous waste materials are covered by current EPR programs
- However, there are limited drop-off options for many of the hazardous wastes produced by smaller generators and residents in some parts of the Region





Strategy 5

This can include but is not limited to:

- a) Identify cost-effective ways of offering mobile or periodic hazardous wastes and targeted EPR materials collection at locations where service gaps exist.
- b) Investigate potential partnerships with stewardship organizations to offer permanent drop-off of hazardous wastes and targeted EPR materials at locations where service gaps exist. PRRD will pilot a permanent collection option and establish more permanent drop-off locations if it is deemed feasible.

Implement programs at PRRD facilities, where feasible.

Recycling Strategies



6: Increase diversion of construction and demolition (C&D) waste through promoting the waste hierarchy

Considerations:

- The C&D sector contributed 21% of the annual waste tonnages at PRRD landfills
- PRRD segregates clean wood waste and asphalt shingles
- However, divertible is still being landfilled
- Option for local governments to regulate construction, alteration, repair and demolition of buildings to encourage more waste diversion

Recycling Strategies



Strategy 6

This can include but is not limited to:

- a) Encourage reduction and reuse of C&D materials.
- b) Investigate feasibility of recycling additional C&D materials such as drywall and carpets, and implement pilot when deemed feasible.
- c) Increase differential tipping fees and/or introduce disposal bans for landfilled C&D waste to encourage source separation of divertible C&D materials through education and enforcement.

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Recycling Strategies



Strategy 6, continued

This can include but is not limited to:

- d) Support member municipalities that have permitting processes to require source separation of C&D wastes for acceptance at PRRD's landfills.
- e) Review PRRD permitting process to require source separation of C&D wastes for acceptance at PRRD's landfills and implement if deemed suitable.

Implement programs at PRRD facilities, where feasible.



Organics Diversion Strategies



7: Establish organics processing capacity in the Region

Considerations:

- Limited processing capacity in the Region
- Compostable organics often make up the largest part of landfilled waste (31% overall)
- The PRRD is piloting composting of cardboard, mixed paper and food waste using a vermicomposting process



Organics Diversion Strategies



Strategy 7

This can include but is not limited to:

- a) Pilot small-scale composting processes at PRRD's facilities and establish larger scale processes at suitable sites if pilot is deemed successful and cost-effective.
- b) Reassess the feasibility of a large scale organics processing facility (such as a Regional AD Facility) and how it compares with small-scale solutions
- c) PRRD will implement small-scale composting processes and/or a large scale organics processing facility if deemed viable.

Implement programs at PRRD facilities, where feasible.





8: Facilitate collection of compostable organics in the Region

Considerations:

- Limited drop-off options in the Region
- Contamination of feedstock (organic waste)
- Organic waste is costly to haul

Organics Diversion Strategies



Strategy 8

If organics processing capacity is available:

- a) Work closely with member municipalities to investigate the feasibility of improving organic waste collection in the region from residents and the ICI sector.
- b) Investigate the feasibility of accepting organics at suitable solid waste sites for on-site processing or transfer to a central facility.

Implement programs at PRRD facilities, where feasible.

Organics Diversion Strategies



9: Assess suitability of technologies for energy recovery for organics in the Region

Considerations:

- RFP issued in 2018 for Anaerobic Digestion (AD)
- Preliminary costs appeared to be prohibitively expensive
- Vendors required guaranteed feedstock



Organics Diversion Strategies



Strategy 9

This can include but is not limited to:

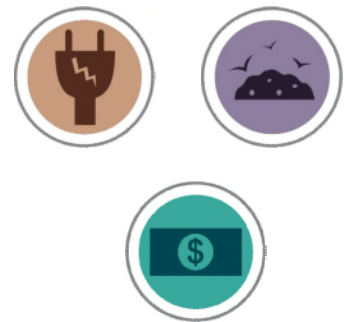
- a) Re-assess option to process organic waste (including biosolids) at a Regional AD facility after small-scale composting pilot results are available. If deemed feasible, pursue AD facility with procurement process to canvas interest from vendors.
- b) If deemed necessary, collaborate with member municipalities to implement bylaw amendments in order to secure organic feedstock for an AD facility

Implement programs at PRRD facilities, where feasible.

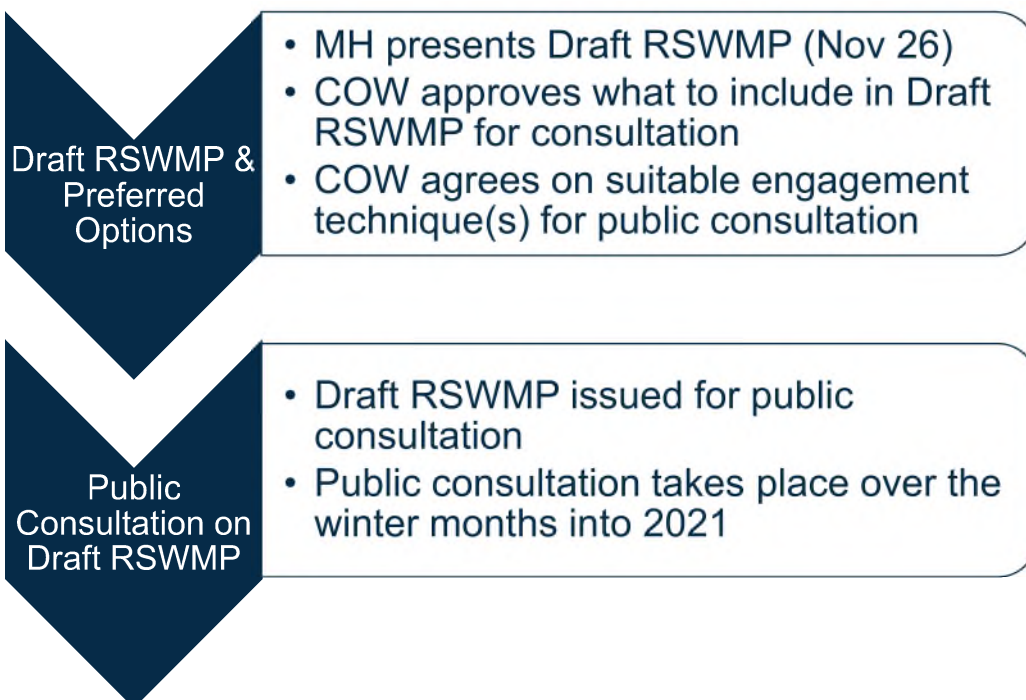


Next Steps

- Remaining strategies to cover at October 16 COW meeting:
 - Energy Recovery (non-recyclable materials and residual waste)
 - Residual Management
 - Cost Recovery
- COW recommendations will inform the final revisions to the draft RSWMP for review on November 26 2020



Next Steps



Questions? Comments?

Thanks for your time and input!



MORRISON HERSHFIELD

People • Culture • Capabilities

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