

SOLID WASTE MANAGEMENT PLAN PUBLIC & TECHNICAL ADVISORY COMMITTEE Wednesday, March 6th, 2024 1975 Field Road, Sechelt, B.C.

AGENDA

CALL	TO ORDER	3:30 p.m.	
AGEN	DA		
1.	Adoption of Age	enda	
MINU	ſES		
2.	Adoption of the	Meeting Minutes from November 21, 2023	Annex A Pages 2-4
PRES	ENTATIONS AN	D DELEGATIONS	
BUSIN	IESS ARISING F	ROM MINUTES AND UNFINISHED BUSINESS	
REPO	RTS		
COMN	UNICATIONS		
3.	Memo: Potentia residual waste <i>Morrison Hersh</i>	I strategies to consider for management of field	Annex B Pages 5- 13
4.	PTAC open dise	cussion	Verbal

NEXT MEETING: April 17th 2024

ADJOURNMENT:

SUNSHINE COAST REGIONAL DISTRICT SOLID WASTE MANAGEMENT PLAN PUBLIC AND TECHNICAL ADVISORY COMMITTEE

Tuesday, November 21, 2023

RECOMMENDATIONS FROM THE SOLID WASTE MANAGEMENT PLAN PUBLIC AND TECHNICAL ADVISORY COMMITTEE MEETING HELD IN THE CEDAR ROOM,1975 FIELD ROAD, SECHELT, BC

PRESENT:

(Voting Members) Chair J. Sutherland Vice Chair D. Reeve J. Walton Members N. Brenchlev P. Robson S. Selzer S. Van Poppelen M. Ernst Director, Electoral Area E D. McMahon ALSO PRESENT: M. Sole (Non-Voting) Manager, Solid Waste Services Solid Waste Operations Coordinator A. Patrao Recorder R. Newland **REGRETS: Members** A. Joe E. Machado CALL TO ORDER 3:40 p.m. AGENDA The agenda was adopted as amended.

MINUTES The minutes of the October 24, 2023, Solid Waste Management Plan Public and Technical Advisory Committee meeting were accepted as circulated.

REPORTSWaste Prevention and Diversion Strategies Memo 2: CDR and
Non-Sector Specific Issues was received as a supporting
document for the presentation given on this topic.

PRESENTATIONS AND DELEGATIONS

Potential Waste Prevention and Diversion Strategies to Address Construction, Demolition and Renovation Waste and Other Issues

Veronica Bartlett, representative of Morrison Hershfield, provided a presentation on the

Potential Waste Prevention and Diversion Strategies to Address Construction, Demolition and Renovation Waste and Other Issues, which included the following:

- Reviewed the feedback from the last meeting.
 - The feedback survey was well received by the Solid Waste Management Plan Public and Technical Advisory Committee (PTAC).
 - The graphs provided by Morrison Hershfield are preferred over the graphs provided in the feedback included in agenda package (Annex C).
- Improve Construction, Demolition and Renovation (CDR) waste prevention and diversion.
 - Discussion included:
 - The high cost and burden on businesses to comply with some example bylaws.
- Improve circular economy opportunities for local businesses.
- Reduce tourist and event waste and increase waste diversion.
 - Discussion included:
 - Part-time residents' may be grouped with tourists, information is limited at this time.
 - Diversion potential should be "unknown" not "low".
 - Michael Ernst discussed findings provided in the agenda package (Annex D).
 - Michael will be reaching out to Sunshine Coast Tourism for an informational meeting.
- Prevent and address illegal dumping.
 - Discussion included:
 - Opportunity for education, especially for items that are free to recycle.
- Prevent and address marine debris.
 - Unable to discuss due to time constraints.
 - Actioned to Committee members to review the presentation on their own time before the next meeting.
- Improve wildlife management related to waste management.
 - Unable to discuss due to time constraints.
 - Actioned to Committee members to review the presentation on their own time before the next meeting.

NEW BUISNESS

PTAC Meeting updates - Amened agenda item

- The Town of Gibsons has a standing meeting on the third Tuesday of the month and is unable to attend the PTAC meetings when held on these dates.
- Meeting invites may be moved to Teams platform instead of Zoom.

PTAC Feedback from October Meeting

This feedback was discussed as part of the presentation given by Morrison Hershfield.

Bylaw Discussion

This topic is being referred to the next Committee due to time constraints.

Tourism Waste

This topic was discussed as part of the presentation given by Morrison Hershfield.

• Michael Ernst has volunteered to do some research on this topic by meeting with Sunshine Coast Tourism.

ADJOURNMENT 5:35 p.m.

MEMORANDUM



TO:	Marc Sole	FROM:	Veronica Bartlett, Morrison Hershfield			
	Sunshine Coast Regional District	PROJECT No.:	220277800			
RE:	Potential strategies to consider for management of residual waste	DATE:	February 27, 2024			
X:\PROJ/2022\220277800-SCRD SWMP REVIEW AND UPDATE\08. WORKING\OTHER ISSUES_MEMO 3\2024-02-27_MEM_SCRD OPTIONS_RESIDUALS MGNT ISSUES_FINAL FOR						

X:\PROJ/2022\220277800-SCRD SWMP REVIEW AND UPDATE\08. WORKING\OTHER ISSUES_MEMO 3\2024-02-27_MEM_SCRD OPTIONS_RESIDUALS MGNT ISSUES_FINAL FOR PTAC DISCUSSION.DOCX

This Memorandum (Memo) discusses strategies that relate to the management residual waste, in particular the opportunity for energy recovery, as well as the management of invasive species and debris waste from natural disasters.

This memo includes a brief summary on the process of updating the Solid Waste Management Plan (SWMP) (Section 1), followed by summaries of three potential strategies (Section 2), potential impacts from strategies (Section 3), and next steps (Section 4).

1 BACKGROUND

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

The SCRD is updating the region's SWMP and commissioned Morrison Hershfield (MH) to support the planning process. MH is developing a series of technical memos to seek feedback from the Public and Technical Advisory Committee (PTAC).

MH presented the first Memo titled, "Current System Review" to the PTAC at its April 25, 2023, meeting. Many emerging issues and opportunities were identified by PTAC members and are reflected in the Memo. The SCRD has also gathered feedback from the public and interested parties via an online feedback form on key priorities and topics to cover in the SWMP update during Engagement Period 1. A combined list of issues and opportunities is summarized in the Memo titled, "What we heard on Guiding Principles and emerging issues and opportunities during Engagement Period 1 of the SWMP update", dated August 25, 2023, that will be considered as part of the SWMP update.

MH has presented to PTAC and members have had opportunities to provide feedback on the following solid waste topics:

- Waste prevention and diversion strategies for the residential and Industrial, Commercial, and Institutional (ICI) sectors (October 24, 2023).
- Waste prevention and diversion strategies to address the Construction, Demolition & Renovation (CDR) sector waste and other non-sector-specific issues (November 15, 2023).

The PTAC meeting on March 6, 2024, will provide opportunity for PTAC members to contribute and discuss ideas on any issues and opportunities of interest to them that may have not been addressed fully in other meetings. The meeting will first cover the strategies outlined in this memo, however these are strategies and actions to address relatively minor issues and there will be time for open discussion among PTAC members.

The PTAC is meeting on April 17, 2024, to discuss landfill disposal options, and system financing. This is an important discussion that will be held in-person during a 3-hr meeting.

Feedback on all Memos on potential strategies will be considered as MH develops a final Memo outlining "Preferred Strategies" that will support the SWMP update which will be brought back to the public for engagement.

2 POTENTIAL STRATEGIES AND INITIATIVES

Many emerging issues and opportunities were identified in the Current System Review undertaken by MH, by the PTAC and the public. The first 12 potential strategies for waste prevention and diversion were discussed at the PTAC meetings in October and November of 2023.

Figure 1 presents three potential strategies that relate to solid waste management funding and system efficiency and cost effectiveness. These are discussed in this memo (Strategies 13 -15). The strategy numbering builds on numbering in the previous two memos.

Each potential strategy is discussed in terms of the following questions. 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 4.



Figure 1: Overview of Potential Strategies Discussed in This Memo

6 of 13



Strategy 13: Assess Potential for Recovery of Energy from Residual Waste

Energy recovery refers to the capture of the energy embodied in non-recyclable waste. The recovery of energy from waste for useful purposes was supported in 5.5% of the Engagement Period 1 feedback comments gathered in an online survey conducted in 2023. In the SCRD's 2021 study on Future Waste Disposal Options, building a waste-to-energy facility was one of the four options initially under consideration. However, this option was the most expensive option reviewed and for this reason, has been regarded as cost-prohibitive for the size of the region.

Instead, the SCRD could consider small-scale recovery options (local and out-of-region) for certain materials, which are currently being landfilled. An operational landfill should be considered an asset and energy recovery may be an option to help reduce airspace consumption and preserve the lifespan of a landfill.

Rather than a large-scale process or technology, the SCRD may want to consider the use of "Waste to Fuel technologies". These are typically mechanical processes that prepare the waste for energy conversion by a third party. The product of this process is called refuse-derived fuel (RDF), or it is sometimes called "alternative fuel" by the industry using the product. RDF can be fluff or pellets and can be stored and transported. For this type of process to be viable, there must be a market for the RDF within a reasonable haul distance. Markets for this product in BC include cement kilns and pulp mills.

This may be an opportunity for construction and demolition waste, such as roofing and wood waste with a high component of dimensional lumber. The process may be as simple as separating the woody component from other waste materials and chipping it to produce an RDF.

The Association of Vancouver Island and Coastal Communities (AVICC) has established a special committee on solid waste management with representatives from 9 regional districts, including the SCRD.¹ The committee is regularly revisiting and discussing options for energy recovery and long-term disposal for coastal communities. The SCRD may want to continue taking part in these discussions and spearheading the review of new energy recovery options for targeted waste materials that are currently landfilled.

Potential Action

13A: Collaborate with other regional districts to identify opportunities for energy recovery for nonrecyclable materials, such as clean wood waste.

Strategy 14: Improve Invasive Species Disposal

The SCRD clarifies on its website that the regional district is not responsible for the removal of invasive plant species. The website provides links to relevant resources for information on the types of invasive plant species and how community members can report them to the appropriate organizations.

The Coastal Invasive Species Committee (Coastal ISC) is a non-profit society serving large parts of the British Columbia coast, including the Sunshine Coast. In 2022 this organization registered 2,582 different sites with invasive species within the SCRD spanning a total of approximately 175 ha.

¹ AVICC is a body formed for the purpose of representing in one organization the various municipalities, regional districts and other local governments of Vancouver Island, Sunshine Coast, qathet/Powell River, the North Coast and the Central Coast.



Japanese knotweed, Himalayan blackberry and Scotch broom are amongst the most widespread invasives.²

The Sechelt Landfill accepts Giant hogweed and Scotch broom. These must be secured in clear bags and are accepted at the municipal solid waste tipping fee rate. The SCRD does not accept other species such as knotweed and leafy spurge.

There are currently limited options for destroying some invasive species. Howe Sound Pulp and Paper has been asked several times by non-profit organizations to destroy invasive plants, however, BC MOE has not given the facility temporary approvals to manage invasive plants and the facility was unable to accept and process the materials. Salish Soils is also unable to accept invasive species. There appears to be a need for disposal options for some invasive species in the SCRD.

Options to Improve Invasive Species Management

There is an opportunity for the SCRD to take a more active role in dealing with invasive species, either through education on available disposal options or through the development of disposal solutions for invasive plant materials.



Figure 2: qRD's 2021 Regional Invasive Plant Disposal Plan

qathet Regional District (qRD) developed an Invasive Plant Management Strategy in 2017. It establishes a framework for a collaborative approach to reducing and eradicating invasive plants. With input from a multiagency committee, the qRD also developed a Regional Invasive Plant Disposal Plan to ensure proper disposal of invasive plant species (Figure 2). The plan, developed in 2021, identifies actions and budget implications to educate, facilitate and remove barriers for the proper disposal of invasive plant material³.

The SCRD may want to develop an education and communication program that can help educate and motivate residents and landowners to take action to dispose of invasive species properly. Education can be provided on proper plant management, ways to report sites (e.g., the Coastal Invasive Species Committee weed hotline), available disposal options (e.g., disposal sites and on-site management options with backyard burning, etc.).

The SCRD can also be part of finding suitable solutions for the various invasive species. The SCRD may want to explore more disposal options in and outside the region. Is there an option to collaborate with Howe Sound Pulp and Paper to determine if their facility can destroy the material? Another option is to collaborate with the qRD to confirm the possibility to use the qRD Burn Boss. The Burn Boss is a certified Air Curtain Burning Technology, purchased by the qRD. Being portable, the unit can be



² List of all recorded invasive species as of February 10, 2022, in the SCRD including sites reported by government agencies, the public, and non-profits.

³ Invasive Plants in the Region | qathet Regional District.

transported to allow disposal on-site for larger infestations or collections. The qRD emphasizes the need to destroy plants on-site as transporting materials creates risk of seed or plant material distribution while transporting plant material to an off-site disposal location. It is a priority to avoid landfilling invasive plant materials to limit greenhouse gas emissions.

A PTAC member also raised the option to consider sending invasives to the waste-to-energy facility in Burnaby. Transportation out of the region may not be suitable for some plant species, as Japanese knotweed can re-grow from only a piece of a leaf with no stem attached. This is better manage on-site or locally.

Potential Action 14A: Develop a regional program for improved education on invasive plant disposal. 14B: Assess disposal options for invasive plant material and implement if deemed feasible.

Strategy 15: Improve Debris Waste Management

As BC is experiencing more frequent extreme weather events and natural disasters leading to emergencies such as forest fires and flooding, the SCRD has identified the need to develop a debris management plan to manage unpredictable surges in waste materials, including hazardous wastes resulting from events. Emergencies can also include an animal epidemic, human pandemic, dam failures or earthquakes.



The SCRD is part of a joint program, the Sunshine Coast Emergency Program (SCEP), with all three member municipalities. The SCRD is the lead agency for emergency management on the Sunshine Coast. The Sunshine Coast Regional District, authorized under "Sunshine Coast Regional District Emergency Measures Plan and Administration Bylaw No. 564, 2005" provides a comprehensive management program for the entire Sunshine Coast to prepare for, respond to and recover from emergencies and disasters.

The SCEP has a full-time emergency program coordinator whose

responsibility is to prepare for, respond to and recover from natural and man-made disasters. The "Initial Response" usually takes place within 72 hours of impact, includes debris removal and cleanup of area as one of the main activities⁴.

The province developed a Debris Waste Management Guidance (DWMG) document in response to the atmospheric river event in the fall of 2021.⁵ This document provides information on debris clean up, including safety, working in a watercourse, creating a temporary waste management plan, sorting and handling the waste, transporting the waste, and where you can go for additional help. There is an opportunity for the SCRD along with the three member municipalities to add a waste plan component to the SCEP, using the DWMG to provide guidance.



⁴ <u>Sunshine Coast Emergency Response & Recovery Plan (3rd revision January 2017)</u>

⁵ Debris Management Guidelines (gov.bc.ca)

The SCRD may also want to consider developing a debris waste management guide for residents after a plan is developed to educate them on best practices in the event of extreme weather. The goal is to equip residents with the knowledge and information needed to respond in the best way to these events.

The SCRD may want to develop plans for operating waste sites in an emergency event. For example, a Coastal forest fire may result in disaster related waste, but the Sechelt Landfill may also be impacted. The SCRD will need to develop emergency response plans for its SCRD's solid waste facilities alongside the development of a debris waste management plan.

Potential Action

15A: Develop a debris waste management plan and emergency response plans for SCRD facilities to manage unpredictable surges in waste materials from natural disasters.

3 POTENTIAL IMPACTS FROM STRATEGIES

Evaluation criteria were agreed upon with PTAC members on June 8, 2023. The following criteria will be used to better compare how the strategies perform (financially, environmentally and in relation to their community impact).

At this preliminary stage, the relative performance of each strategy is simply highlighted with the potential impact of implementing each strategy in the region (Table 1). Impacts have not been quantified and are simply rated as low, medium and high impacts.

A more detailed analysis of the impacts will be presented to PTAC at a later date when preferred strategies and actions are determined.





MEMORANDUM



Table 1: Anticipated Impact Related to the Identified Strategies

#	Strategy	Potential Actions	Costs	Staffing	Diversion Potential	Waste Hierarchy	GHG reducti on	Local Employment
13	Assess Potential for Recovery of Energy from Residual Waste	13A: Collaborate with other regional districts to identify opportunities for energy recovery for non-recyclable materials, such as clean wood waste.	Medium - High	Low- Medium	Low – Medium	Recovery & residual management	Low	Low
14	Improve Invasive Species Disposal	14A: Develop a regional program for improved education on invasive plant disposal.14B: Assess disposal options for invasive plant material and implement if deemed feasible.	Low- Medium	Low- Medium	Low - Medium	Recycling & residual management	Low - Medium	Low
15	Improve Debris Waste Management	15A: Develop a debris waste management plan and emergency response plans for SCRD facilities to manage unpredictable surges in waste materials from natural disasters.	Low	Low	Low	Residual management	Low	Low

MEMORANDUM



4 NEXT STEPS

PTAC members have discussed many different potential strategies that can be considered for inclusion in the updated solid waste management plan. Each meeting has included time for discussion and PTAC members have also had the opportunity to provide feedback on their priorities of individual strategies and actions, in terms of:

- high priority (to be completed within 5 years),
- low priority (to be addressed after 5-10 years of plan implementation, or
- no interest to pursue a particular strategy/ action.

The content of this memo will be discussed at the PTAC meeting on March 6, 2024. The next PTAC meeting on April 17, 2024, will cover landfill disposal options and system financing.

The strategies that are favoured by PTAC will be part of a final memo of all Preferred Strategies, which will be considered by the same committee during Summer of 2024. Committee members will then have another chance to review 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 during Fall of 2024.

5 CLOSING

The Sunshine Coast 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 Sunshine Coast Regional District's. If you have any questions or need addition details, please do not hesitate to contact one of the undersigned.

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

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