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# STAFF REPORT TO COUNCIL

PRESENTED:	April 23, 2024	<b>REPORT:</b>	24-041
FROM:	Transportation and Waste Management	FILE:	0620-20
SUBJECT:	ZERO WASTE ACTION PLAN 2024 PROGRESS REPORT		

# **RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER**

That the recommendation of the General Manager of Infrastructure Services be endorsed.

# RECOMMENDATION

That Council receive Information Report No. 24-041 – Zero Waste Action Plan 2024 Progress Report.

# PURPOSE OF REPORT

The purpose of this report is to highlight Whistler's progress towards achieving the 2021-2026 Resort Municipality of Whistler (RMOW) <u>Zero Waste Action Plan's</u> (Plan) goals. The report provides a summary of Whistler's community waste generation amounts for the calendar year 2023, an update on the priority actions from the Plan, a summary of a waste audit completed in April 2023 and a summary of related outreach and communication initiatives.

⊠ Information Report

□ Administrative Report (Decision or Direction)

# DISCUSSION

# Background

The municipal solid waste program includes guidance documents that shape staff decisions on effective waste management, including considerations for reducing associated greenhouse gas emissions. These guidance documents are comprised of the Squamish-Lillooet Regional District's (SLRD) Solid Waste and Resource Management Plan (SWRMP), attached as Appendix A, and the RMOW Zero Waste Action Plan (the Plan).

The SWRMP is a document that every community within the SLRD must follow to move their respective community toward the ultimate goal of zero waste. Priorities established in the SWRMP encourage community behaviour change to reduce waste. This behaviour change requires continued outreach and education to the community and incentives that support overall waste reduction.

In 2021, the Plan was developed by the Zero Waste Committee and endorsed by Council. The Plan set a target to decrease the amount of waste sent to landfill by 80 per cent from 2019 levels by 2030. This target requires Whistler's landfill waste to be decreased from 11,841 to 2,368 tonnes by 2030 to

achieve an 80 per cent reduction. The Plan includes strategies and actions to achieve our target. These actions include participating in available Extended Producer Responsibility (EPR) programs, advocating to higher levels of government for change to waste management programs and increasing diversion of industrial, commercial and institutional (ICI) as well as multi-family residential (MFR) waste from landfill. Work to achieve these goals is discussed later in this report.

To communicate progress towards the adopted targets in the Plan, annual performance reports are required. This is the second annual progress report to Council and it provides information directly related to the Plan's targets and actions. The first annual progress report was presented to Council on April 3, 2023 (Administrative Report No.23-038) (2023 Progress Report).

## Waste Management Facilities

The Resort Municipality of Whistler (RMOW) owns several facilities to collect waste for recycling and disposal. The Nesters and Function Junction Waste Depots provide access to residential landfill waste disposal, provincial EPR programs and organics (food scraps, yard waste and Christmas trees) collection. Bulk metal can also be dropped off at the Nesters Waste Depot. Non-municipal for-profit and not-for-profit businesses also operate out of the depots to collect EPR materials each sharing a mandate similar to the RMOW in keeping waste out of the landfill.

Private haulers collect landfill waste, recyclables and compostable material from the ICI sector, construction and demolition (C&D) sector, as well as MFR properties. Much of this material is taken to the Whistler Transfer Station (WTS) located in the Callaghan Valley.

The Whistler Landfill ceased operation in 2005 in preparation for the 2010 Olympic Games. Ongoing environmental monitoring programs have been established since closure with Morrison Hershfield and Norseman Engineering. Landfill environmental monitoring programs include ongoing observation of onsite surface water, groundwater, and migration of landfill gas. These landfill monitoring programs help to ensure and confirm the closed landfill is not causing negative impacts to the surrounding environment. These reports are submitted to BC Ministry of Environment and Climate Change Strategy by Morrison Hershfield on behalf of the RMOW on a yearly basis to confirm ongoing compliance to the provincial standards.

# Waste Hauling

Landfill waste collected at the WTS is compacted then loaded onto transport trucks before being hauled to the Campbell Hill landfill located in Cache Creek. The majority of food scrap organics and compostable packaging material generated in Whistler is collected and brought directly to Sea to Sky Soils located south of Pemberton, but periodically can be processed at the municipal composting facility located next to the WTS. Recyclable material collected from ICI and MFR properties is collected and compacted at the WTS then hauled to processors outside of Whistler to be recycled. Materials collected at the Function Junction and Nesters Waste Depots through the Recycle BC EPR program are sent directly to lower mainland processors, bypassing the WTS; this includes paper and packaging materials such as mixed containers, flexible plastics, foam packaging, paper and cardboard.

# <u>Analysis</u>

## Waste Management Data

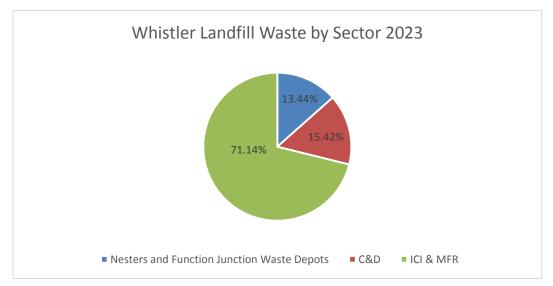
The RMOW collects waste disposal information to track progress towards waste reduction objectives. The data collected tracks waste generated from the residential and ICI sector as well as C&D sector

waste processed at the WTS. The data also includes some items recycled through Regional Recycling and textiles recycled by the Whistler Community Services Society.

The RMOW has consistent, historical data for most waste streams, but there are a few small gaps in the data collected as some waste materials leave Whistler directly without being reported to the RMOW. For example, some demolition waste generated by the C&D sector has been moving directly to the lower mainland, bypassing the WTS. Material collected by EPR programs, such as antifreeze containers recycled through the Interchange Recycling (formally B.C. Used Oil Management) program by local automotive shops, do not report back to the RMOW. Large volumes of mattresses disposed of by local hotels are transported directly to the city for recycling. Despite these gaps in the RMOW waste management data, differences in year-to-year waste stream data is still highly informative to the waste management program, and the data collected is useful for measuring our progress towards our goals.

# Tracking Community Progress

In 2023, approximately 13 per cent of the waste stream came from the Nesters and Function Junction Waste Depots (residential properties), approximately 71 per cent was generated by the ICI and MFR sectors and 15 per cent came from the C&D sector. As stated previously, not all C&D waste is included in these figures as some demolition waste is hauled directly to the lower mainland and loads categorized as mixed waste are captured in ICI and MFR.

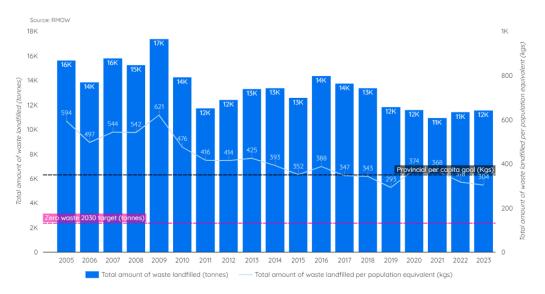


The 2023 breakdown of Whistler landfill waste by sector remains similar to 2022 proportions.

Figure 1. Whistler landfill waste by sector

As shown in Figure 2, the total amount of landfill waste generated in Whistler in 2023 was 11,561 tonnes and the per capita disposal rate was 304 kilograms (kg) per person. For reference, in 2021 the provincial per capita disposal rate was 506 kg per person and the SLRD per capita disposal rate was 440 kg per person. This indicator considers the total tonnage of solid waste material that was sent to the landfill from the Nesters and Function Junction waste depots and the WTS from sources within the RMOW divided by the Whistler 2023 population equivalent. The WTS processed a total of 14,067 tonnes of landfill waste in 2023 however this includes waste generated in Pemberton and other areas within the SLRD. The total amount of waste landfilled in 2023 is similar to the past four years but the per capita waste generation has decreased slightly due to a slight increase in population equivalent over the same period. This result is encouraging.

Total amount of waste landfilled (tonnes)





As shown in Figure 3, the estimated diversion rate in 2023 was 47 per cent. The diversion rate in 2023 is identical to the diversion rate in 2022 which means that although the community is generating more landfilled waste, more materials are also being recycled and composted. This indicator represents the estimated proportion of materials that was generated and not landfilled (i.e., the percent recycled or composted through the various programs offered in Whistler). Yard debris, land clearing and wastewater treatment biosolid compostable materials have not been included in the graph since 2008 as those materials are easily divertible and not generally included in diversion rate calculations. More focus will need to be made by the RMOW and the community to significantly reduce the amount of materials going to the landfill in order to meet the ambitious zero waste target by 2030.



Figure 3. Proportion of materials diverted from landfill to be recycled or composted

In April 2023, the RMOW hired a consultant to conduct a composition audit of the landfill waste stream at Nesters and Function Junction Waste Depots. This composition audit was a continuation of the 2022 audit as the 2022 audit only included residential landfill waste that was self hauled to the WTS. The 2022 audit also looked at ICI and C&D material and was presented in the 2023 Progress Report.

The 2023 audit was carried out over a period of one day and provides a snapshot of the landfill waste that was generated at Nesters and Function Junction Waste Depot over that day. The audit involved analyzing two samples from the Nesters Waste Depot and two samples from the Function Junction Waste Depot.

Figures 4 and 5 show the residential landfill waste composition as well as the diversion potential respectively. The audit found that compostable organics is the largest category of material (by weight) in Whistler's residential landfill waste stream, accounting for approximately 31 per cent (Figure 4) of the total residential waste stream. For compostable organics, the largest component was avoidable food waste (20.4 per cent) followed by unavoidable food waste (7.8 per cent). Avoidable food waste is defined as edible food and some examples for this category were bread, fruit and meat. Unavoidable food waste is food waste that is not edible and examples for this category are eggshells and fruit and vegetable peels. Unfortunately, these results are an increase from the 2019 audit where compostable organics accounted for 27 per cent of residential landfill waste.

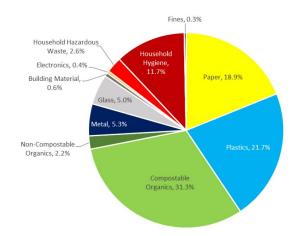


Figure 4. Whistler 2023 residential waste audit landfill waste composition

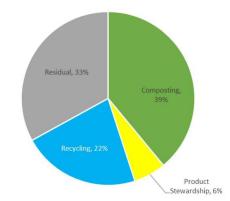


Figure 5. Diversion potential of residential landfill waste (2023 waste audit)

The audit found that approximately 67 per cent of the materials (1,098 tonnes) found in the residential landfill waste stream have the potential to be diverted through programs such as composting, recycling, and product stewardship depots. This means that over half of the waste that is currently going to the landfill (from the residential waste depots) could be diverted to more sustainable solutions. Removing compostable organics from the landfill waste stream will significantly increase the community's diversion rate and reduce the tonnage sent to landfill, especially as organics are typically heavy.

Audits are a snapshot in time to show the diversion potential available within the collected landfill waste stream. It is noted that removing 67 per cent of material from the residential waste stream will not get the community to the 2030 target. The RMOW Zero Waste goal is an 80 per cent reduction in waste weight from 2019 levels by 2030, which would result in only 2,368 tonnes of waste being generated in 2030. Removing 67 per cent of materials generated in the residential waste stream would get the community to 10,463 tonnes. It is therefore important to note that ICI and C&D sources are the greatest contributors to Whistler's waste stream and that is where the community has the greatest opportunity to reduce waste tonnage.

To achieve the 2030 target, more effort will be required by community stakeholders to reduce the amount of material purchased, consumed and then disposed of as waste. The community also needs to find more opportunities to upcycle waste materials that are generated. The RMOW will continue to support the community in achieving this goal by executing on the strategies and actions in the Plan.

## Zero Waste Action Plan – Priority Action's Update

Priority Action	Status	
1. Provide education and technical assistance to businesses to reduce waste in the commercial and accommodations sector	In 2023, a report titled ' <u>How to Achieve Zero Waste in Whistler Restaurants</u> ' (Restaurants Guide) was published by municipal staff in conjunction with the Association of Whistler Area Residents for the Environment (AWARE). The purpose of this guide is to assist restaurant owners, managers and employees reduce food waste and food waste packaging in restaurants. It is crucial that restaurants in Whistler reduce or avoid edible food waste and compost unavoidable food waste to help us reach our zero waste goals.	
	In 2023, 19 food service Solid Waste Management Plan's (SWMP) were reviewed by municipal staff. This is a requirement for food service operators to receive their business license and is an opportunity for municipal staff to ensure that food service operators have the correct waste streams and tools in place to separate waste.	
	Lastly, municipal staff hired a consultant to conduct a waste room assessment project (WRAP). This project involved assessing 53 waste rooms attached to restaurants in Whistler to ensure compliance with the RMOW "Solid Waste Bylaw No. 2139, 2017" (Solid Waste Bylaw) and assist businesses with identifying opportunities for improvement in their waste management systems. The next phase of this project involves presenting the findings to the property manager's and restaurant owners. This work is currently happening.	
2. Improve monitoring/data	The Plan progress report (this report) is an initiative to improve monitoring/data collection reporting.	

The Plan was developed by the Zero Waste Select Committee of Council. The Plan includes eight priority actions. This update provides information on the current status of these actions.

Status	
The WRAP also improves monitoring and data collection as staff now have data on what streams these waste rooms have available and an understanding of their contamination level.	
AWARE has delivered a report detailing the feasibility of a reusable coffee cup program in Whistler. Municipal staff are in the process of determining next steps to make a reusable cup program successful in a tourist destination.	
The RMOW continued to participate in the Love Food, Hate Waste (LFHW) campaign. LFHW is an online campaign aimed to raise awareness of the need to reduce food waste. LFHW messages were shared through social media and zero waste tips on Whistler Today.	
Work continues on reducing the amount of food waste going to landfill. An example of such work is an ongoing project to enhance food security and resiliency within the SLRD. This project work is funded by the Union of BC Municipalities and led by Whistler Centre for Sustainability Engagement and Planning, working with the RMOW and several food distribution organizations operating in the corridor. The goal is to develop a system to ensure edible food reaches people in need and does not end up in the landfill.	
The Restaurants guide, food service SWMPs, WRAP and reusables report are also related to this priority action.	
Some of the WTS has been redesigned to better utilize the existing space and serve the community's changing needs. Staff will continue the redesign process in 2024 and the new design will include more space for materials to be dropped off and organized for re-use (not recycling or landfilling), as well as an area for sorting C&D waste.	
RMOW staff provided feedback on Environment and Climate Change Canada (ECCC) Pollution Prevention planning (P2) Notice regarding primary food plastic packaging. This P2 Notice would set requirements for Canada's largest grocery retailers to prepare and implement a pollution prevention plan with an aim towards zero plastic waste from primary food packaging. Municipal staff are strongly in support of this P2 Notice which has yet to be finalized.	
RMOW staff are currently working on an update to the Solid Waste Bylaw. This update will strengthen waste and diversion policies.	
The WRAP also improved enforcement of the Solid Waste Bylaw.	
Staff worked with a local contractor and a deconstruction contractor on the possibility of a pilot project to deconstruct a home in Whistler in 2023, unfortunately this project did not go ahead. Staff were able to determine cost differences between deconstruction and traditional demolition and identified items that are typically salvaged through traditional demolition. Staff are working with the building department to determine next steps in regard to improving C&D waste diversion.	

# Changes to Federal and Provincial Policy Regarding Single Use Plastics

## Federal Policy

In 2021, the federal government listed plastics under the *Canadian Environmental Protection Act* (CEPA) as a toxic substance. Designating plastics as a toxic substance allowed the federal government to enact policy on a plastics registry, recycled content and labelling rules for plastics and to create single-use plastics prohibitions. The first single-use plastic prohibitions came into effect for sale of material on December 20, 2023, and covered plastic checkout bags, plastic cutlery, foodservice ware (made of expanded polystyrene foam, polyvinyl chloride, carbon black or oxo-degradable plastics), stir sticks and straws; prohibitions on ring carriers and flexible straws packaged with beverage containers will come into effect June 20, 2024. Figure 6 Illustrates the plastic materials that will be prohibited in Canada and their reusable alternatives.

A successful legal challenge has occurred against the inclusion of all plastics under CEPA; however, the federal government has appealed this decision, and the regulation of single-use plastics remains in effect under the appeal.



Figure 6. Prohibited single-use items and reusable alternatives. Source: Environment and Climate Change Canada.

# Provincial Policy

The *Single-Use and Plastic Waste Prevention Regulation* came into effect December 20, 2023, regulating disposable foodservice accessories, shopping bags, foodservice ware and oxo-degradable plastics. It is similar to the federal regulation but also has fees for paper and reusable bags (with some exceptions), does not permit biodegradable or compostable plastics, and requires that foodservice accessories are given out on request only. There are also future prohibitions on PVC film wrap (2028) and polystyrene foam meat trays (2030). Figure 7 illustrates the provincial phase out of single use and plastic items.

This regulation will be enforced through the Report All Poachers and Polluters (RAPP) service.

BRITISH COLUMBIA SINGLE-USE & PLASTIC WASTE PREVENTION REGULATION

# **Provincial Phase Out of Single-Use and Plastic Items**

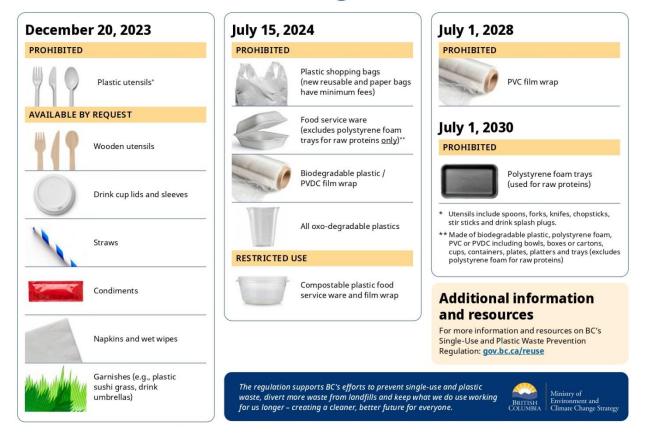


Figure 7 British Columbia Single Use and Plastic Waste Prevention Regulation. Source. British Columbia Ministry of Environment and Climate Change Strategy.

Staff are in the process of determining how to best promote and ensure compliance with these regulations in Whistler.

# **Communications and Outreach Overview**

The key outreach and communication initiatives that the solid waste team have been working on are outlined below. The goal of any outreach is to create community awareness and the required behavior change to ultimately reduce the amount of waste material generated each year by the community.

## RMOW Social Media and Whistler Today

18 social media posts were created in 2023 to promote waste management which reached 20,245 people. This is a significant improvement from 2022 posts which only reached 11,941 people. Reach is the number of people who saw the content published. The most viewed social media post was regarding operational changes to drywall disposal procedures. The second most viewed post was about the Repair Café event.

Two paid advertisements were run on Meta in 2023. One was about Pitch-In Day which had a reach of 8,048 people and 399 link clicks. The second was about proper hazardous waste disposal and had a reach of 11,078 people and 539 link clicks.

In addition, 40 zero waste tips were shared through the Whistler Today newsletter. These posts aim to educate the community on how to reduce landfill waste and to provide an update to solid waste operational changes they should be aware of. The most successful zero waste tip was regarding Recycle BC changes to the flexible plastics stream. This tip had 30 per cent of people click on the link (which is what makes it the most successful).

# Recycling Council of British Columbia (RCBC) Recyclepedia Widget

In 2021, a Recyclepedia widget, hosted by the Recycling Council of British Columbia (RCBC), was added to the RMOW website. This widget (search portal) helps residents search for where to recycle their household items. In addition, the RCBC operated a recycling hotline where people can call someone directly to ask questions about recycling.

# 2023 data from Recyclepedia is summarized below:

Total hotline and Recyclepedia inquiries from Whistler:	888
Total number of hotline inquiries:	9 calls, representing 24 material requests
Recyclepedia web searches (RMOW Website):	641
Recyclepedia Web Searches (all sources):	864

# Top 10 materials searched for (RMOW website):

- 1. Plastic Bags and Overwrap
- 2. Clothing Non-Reusable
- 3. Other Flexible Plastic Packaging
- 4. Ferrous Metal
- 5. Car or Light Truck Tires
- 6. Paint
- 7. Cardboard
- 8. Plastic (Packaging) Foam
- 9. Plastic Packaging Container
- 10. Food Scraps

# Events

Solid waste staff conducted outreach at six community events in 2023 including two clothing swaps and two garage sales organized by AWARE, the Canada Day pancake breakfast and the Inside Scoop. These events were chosen because they were run by partner organizations and have a strong local turn out. The RMOW also financially supported AWARE to host zero waste stations and conduct outreach at the weekly farmer's market.

In addition, staff organized a Repair Café with the library and AWARE as partners. Repair Café provides an opportunity for people to bring in broken items to have them fixed by volunteer fixers. Repair Cafés are a great way to keep items out of the landfill to promote a community culture of repair. This event was very successful, and staff will be organizing four Repair Cafés in 2024.

Solid waste staff had a presence at RMOW events in 2023 and hosted Zero Waste stations at the Pitch-In Day Barbeque (BBQ), staff pizza day and the Years of Service BBQ. These events all achieved a diversion rate of over 95 per cent.

Lastly, staff engaged with youth by speaking to a fourth-grade class at Spring Creek Elementary School on Local Government Awareness Day about waste in Whistler. Staff were also a mentor for Project NOW which is a youth mentorship program centered around climate action and engagement. Staff worked with youth on a project related to fast fashion.

Overall, these initiatives are intended to increase public awareness, promote best practices, and ultimately reduce the amount of waste generated in Whistler.

## POLICY CONSIDERATIONS

## **Relevant Council Authority/Previous Decisions**

April 3, 2023: Administrative Report No. 23-038, Zero Waste Action Plan Progress Report

August 17, 2021: Administrative Report No. 21-096, Whistler Zero Waste Action Plan 2021-2026

## 2023-2026 Strategic Plan

The 2023-2026 Strategic Plan outlines the high-level direction of the RMOW to help shape community progress during this term of Council. The Strategic Plan contains four priority areas with various associated initiatives that support them. This section identifies how this report links to the Strategic Plan.

## **Strategic Priorities**

□ Housing

Expedite the delivery of and longer-term planning for employee housing

 $\boxtimes$  Climate Action

Mobilize municipal resources toward the implementation of the Big Moves Climate Action Plan

□ Community Engagement

Strive to connect locals to each other and to the RMOW

Smart Tourism

Preserve and protect Whistler's unique culture, natural assets and infrastructure

□ Not Applicable

Aligns with core municipal work that falls outside the strategic priorities but improves, maintains, updates and/or protects existing and essential community infrastructure or programs

## **Community Vision and Official Community Plan**

The Official Community Plan (OCP) is the RMOW's most important guiding document that sets the community vision and long-term community direction. This section identifies how this report applies to the OCP. The Zero Waste Action Plan 2024 Progress Report aims to provide transparent access to relevant waste management data, as well as to provide an update on actions listed in the Plan. The progress report is strongly aligned with the goals, objectives and policies in Community Vision Chapter

2, Climate Action and Energy Chapter 10 and Infrastructure Chapter 12. Specifically, the report supports the following goals:

- Goal 10.4 Substantially reduce GHG emissions with solid waste management
- Goal 12.3 Move progressively towards zero waste

## **BUDGET CONSIDERATIONS**

The tracking and reporting of Whistler's zero waste progress does not have direct budget implications beyond the dedication of staff time. An annual Solid Waste Depot Operations fee is charged each year to properties allowed to use the depots as per the Solid Waste Bylaw. Capital improvements made at solid waste facilities and projects dedicated to achieving zero waste are paid for by the solid waste reserve which is funded by waste generators through tip fees paid at the WTS. Tip fees are reviewed annually to ensure that taxpayers are not subsidizing the waste management program.

# LÍĽWAT NATION & SQUAMISH NATION CONSIDERATIONS

The RMOW is committed to working with the Lílwat People, known in their language as *L'il'wat7úl* and the Squamish People, known in their language as the *Skwxwú7mesh Úxwumixw* to: create an enduring relationship; establish collaborative processes for Crown land planning; achieve mutual objectives; and enable participation in Whistler's resort economy.

There are no specific considerations to include in this report.

## **COMMUNITY ENGAGEMENT**

Level of community engagement commitment for this project:

 $\boxtimes$  Inform  $\Box$  Consult  $\Box$  Involve  $\Box$  Collaborate

Empower

There was no specific engagement required to develop the Zero Waste Action Plan 2024 Progress Report, but all levels of engagement have been utilized as part of implementing the Zero Waste Action Plan. Engagement that has occurred as part of implementing the Zero Waste Action Plan is detailed throughout this report.

## REFERENCES

Appendix A – SLRD Solid Waste and Resource Management Plan

## SUMMARY

The RMOW relies on several guidance documents to ensure an effective waste management program is maintained. The Plan is the most recent plan adopted by Council and this progress report highlights Whistler's annual waste generation performance and provides an update on the Plan's eight priority actions. Most of the waste is generated by the ICI and MFR sectors which is expected as Whistler is a destination resort community. Compostable organics still make up the largest fraction of waste that could be diverted from the landfill.

New educational tools continue to be developed that will help the community to more effectively manage the waste that they generate each day. Regular messaging occurs through various social channels to remind the community they have an important role and responsibility to think about the waste they generate.

A waste audit was completed to provide a snapshot understanding of what waste is still making its way to the landfill. Additional work will be done by staff and the community to reduce the amount of waste generated or to direct more waste towards recycling. Progress has been made to implement changes that will move the community toward achieving the adopted zero waste target, but the work continues into 2024.

#### SIGN-OFFS

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