



2024 Solid Waste Management Plan Progress Report



Prohibited from Disposal

- Drywall / gypsum / wallboard
- Propane tanks, fire extinguishers
- Smoke detectors / CO alarms
- Paint & paint cans (full or empty)
- Aerosol cans
- Effect for improper disposal of recyclables

CRD

Clean Wood



Making a difference...together

April 2025

TERRITORIAL ACKNOWLEDGEMENT

The CRD conducts its business within the Territories of many First Nations, including but not limited to BOŶEĆEN (Pauquachin), MÁLEXEĒ (Malahat), paaʔčiidʔatx (Pacheedaht), Spuneʼluxutth (Penelekut), Scʼianew (Beecher Bay), Songhees, STÁUTW (Tsawout), TʼSou-ke, WJOLĒĒP (Tsartlip), WSIŶEM (Tseycum), and xʷsepsum (Esquimalt) Nations, all of whom have a long-standing relationship with the land and waters from time immemorial that continues to this day.



Terms and Abbreviations

- 3Rs** - Reduce, Reuse, Recycle
- 5Rs** - Reduce, Reuse, Recycle, Recovery and Residual Management
- C&D** - Construction and Demolition
- CEC** - Compost Education Centre
- CRD** - Capital Regional District
- EPR** - Extended Producer Responsibility
- ENV** - Ministry of Environment and Parks
- GHG** - Greenhouse Gas
- ICI** - Industrial, Commercial and Institutional Sector
- MFD** - Multi-family Dwelling
- MSW** - Municipal Solid Waste
- PPP** - Packaging and Paper Products
- RNG** - Renewable Natural Gas
- SWAC** - Solid Waste Advisory Committee
- SWMP** - Solid Waste Management Plan

Organizational Overview

The Capital Regional District (CRD) delivers regional, sub-regional and local services to 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands. Governed by a 24-member Board of Directors, the CRD works collaboratively with First Nations and all levels of government to enable sustainable growth, foster community well-being, and develop cost-effective infrastructure, while continuing to provide core services to residents throughout the region.

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Cover image: In 2024, clean wood was banned from general refuse at Hartland Landfill. These residents are dropping off a pallet at Hartland’s Public Drop-off Depot in the clean wood bin, which will then be recycled or used in energy recovery.



Aerial view of the new Material Diversion Transfer Station at Hartland Landfill.

Overview

This SWMP Progress Report highlights activities undertaken by the CRD in 2024 and satisfies the regular reporting requirements associated with the CRD’s SWMP. The SWMP has a target of reducing waste in the region by more than one-third by 2031. Through zero waste and circular economy principles, the plan includes strategies for reducing all streams of solid waste to extend the life of Hartland Landfill to 2100 and beyond.

All costs associated with the CRD’s solid waste service are funded through tipping and user fee revenues at Hartland Landfill, collection agreements with product producers, the sale of landfill gas and the sale of recyclables.

Regulations and Commitments

The CRD became responsible for solid waste disposal for the region in 1973 when, at the request of the CRD Board, the Province of BC established solid waste disposal as a regional function of the CRD. In 1975, the CRD acquired Hartland Landfill and subsequently assumed direct operation of the site in 1985.

The site currently operates under a Design, Operations and Closure Plan, in accordance with an Operational Certificate issued by the ENV, as well as the BC Landfill Criteria for Municipal Solid Waste. There is also a provincial authorization in place for asbestos management.

Any solid waste originating from outside of Canada is managed at Hartland Landfill, in accordance with the International Waste Directive under the authority of the Canada Border Service Agency and the Canadian Food Inspection Agency.

Solid Waste Management Planning

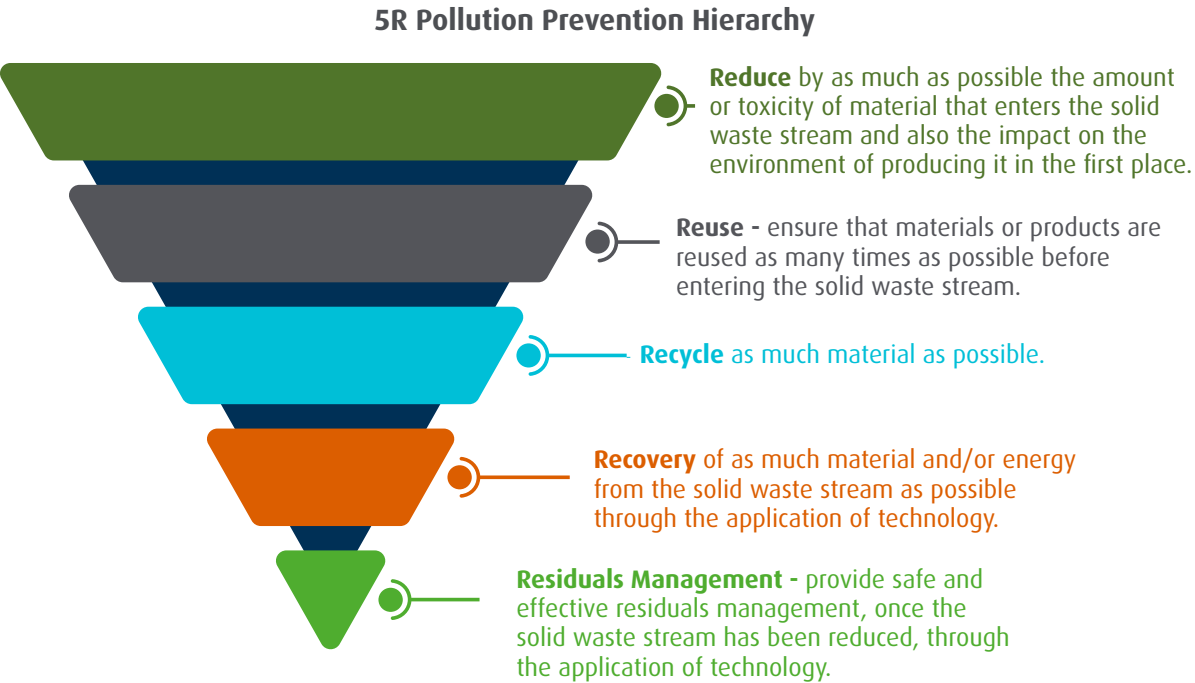
The *Environmental Management Act* requires all regional districts in BC to develop plans for the management of MSW and recyclable materials. Solid waste management planning is a proven way to reduce the amount of solid waste requiring disposal in a region, contributing to the protection of the environment.

Landfill Operating and Monitoring Requirements

Hartland Landfill is authorized through an Operational Certificate under the *Environmental Management Act*. The Operational Certificate specifies the relevant environmental legislation applicable to the site and sets out requirements for environmental monitoring and annual reporting. Under this regulatory framework, the CRD has established a comprehensive environmental monitoring program to ensure Hartland is not impacting the surrounding environment. More details can be found in the *Hartland Landfill Operating & Environmental Monitoring 2023/2024 Report*.

Solid Waste Management Plan

In BC, regional districts develop SWMPs under the provincial *Environmental Management Act* that are high-level, long-term visions of how the regional district would like to manage its solid waste in accordance with the 5R Pollution Prevention Hierarchy.



The SWMP for the region was endorsed by the CRD Board in May 2021, and was approved by the ENV in July 2023. The final Plan includes strategies and actions for reducing and managing all streams of solid waste—including recyclables, compostable material and garbage—with an eye to extend the life of Hartland Landfill to 2100 and beyond.

Waste reduction, reuse and recycling can reduce GHG emissions both by lowering the demand for new materials and products (reducing upstream environmental impacts), and by minimizing downstream environmental impacts, such as transporting waste over long distances and disposing of it in landfills.

The SWMP’s progress is monitored by the SWAC, an advisory committee established by the CRD’s Environmental Services Committee to provide input on solid waste management matters and to meet the requirements of the ENV’s *Guide to Solid Waste Management Planning*. Members of the SWAC represent a diversity of backgrounds, interests and geographical location, representing a balance between technical and non-technical members and industry and public members.

Goals

The Province’s guidelines for solid waste management planning require SWMPs to have goals—the long-term aims to be achieved as an outcome of the plan. A goal may be achieved within the timeframe of this plan, but a goal may also be aspirational, something for the CRD to strive for beyond the timeframe of this plan. The CRD’s SWMP goals are:

- To surpass the provincial per capita waste disposal target (350 kg/capita/year) and aspire to achieve a disposal rate of 125 kg/capita/year
- To extend the life of Hartland Landfill to the year 2100 and beyond
- To have informed citizens that participate effectively in proper waste management practices
- To ensure that the CRD’s solid waste services are financially sustainable.

Focus Areas

The SWMP identifies three focus areas consisting of 15 strategies with 72 actions. Over the lifetime of the SWMP, the strategies and actions contained within form the basis of service plans and work plans that are approved by the Board annually as part of the financial planning process. Collaboration with First Nations Governments, municipalities, other solid waste services, CRD divisions and stakeholders will be integral to this process.

The 15 strategies with 72 actions and associated timelines are divided into the following focus areas:

- Reduce and Reuse
- Recycling
- Recovery and Residuals Management

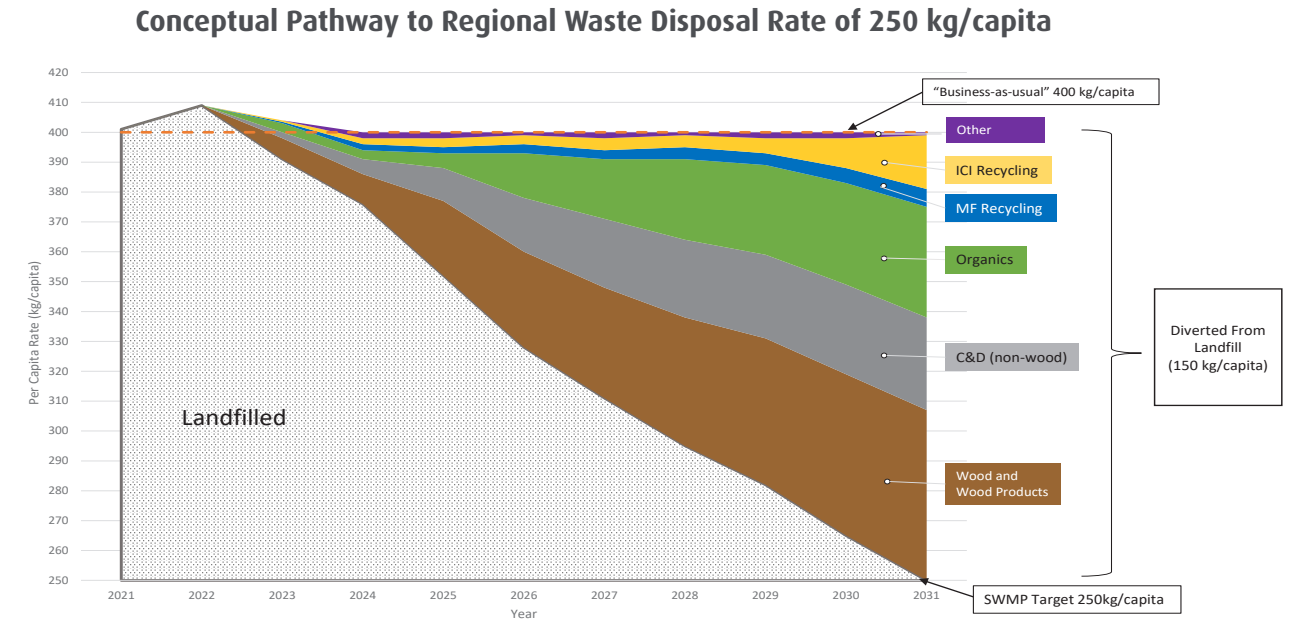
For more details on the SWMP’s 15 strategies, consult *Appendix A: SWMP Report Card*.



Targets and Tracking

The targets established for this plan are focused on reducing the amount of waste landfilled on a per capita basis. By the end of the 10th year of this plan, the capital region’s per capita disposal rate target is 250 kg or less, surpassing the Province’s long-term target of 350 kg per capita.

Below is a chart plotting one conceptual pathway to reducing the regional per capita disposal rate from 2021 levels to 250 kg per capita. The actual path taken to achieve waste reduction targets will depend on the actions the community takes to reduce waste, and the work the CRD does to support diversion activity and redirect waste material back into the economy. The chart represents an aggressive timeline to divert materials from the landfill in accordance with the strategies and actions in *Appendix A: SWMP Report Card*.



The metrics used to track and monitor progress for SWMP targets in 2024 are the regional per capita disposal rates, results from studies including the Solid Waste Market Research and Engagement Study and the most recent Solid Waste Stream Composition Study. In 2025, a waste generator study will provide additional data to track and monitor progress for SWMP targets.

Per Capita Disposal

In the SWMP, the per capita waste disposal rate is used to help the CRD, and residents of the region understand progress towards reaching the plan’s waste reduction goals and targets. The per capita disposal rate reported in 2024 is 338 kg per capita.

This year saw significant progress in reducing the region’s per capita disposal rate. The reduction can, in part, be attributed to the introduction of new material bans from the general refuse stream, an increase in materials used for on-site beneficial use at Hartland Landfill, an increase in food scraps moving through the kitchen scraps transfer station and the implementation of the Waste Stream Collector Incentive Program.

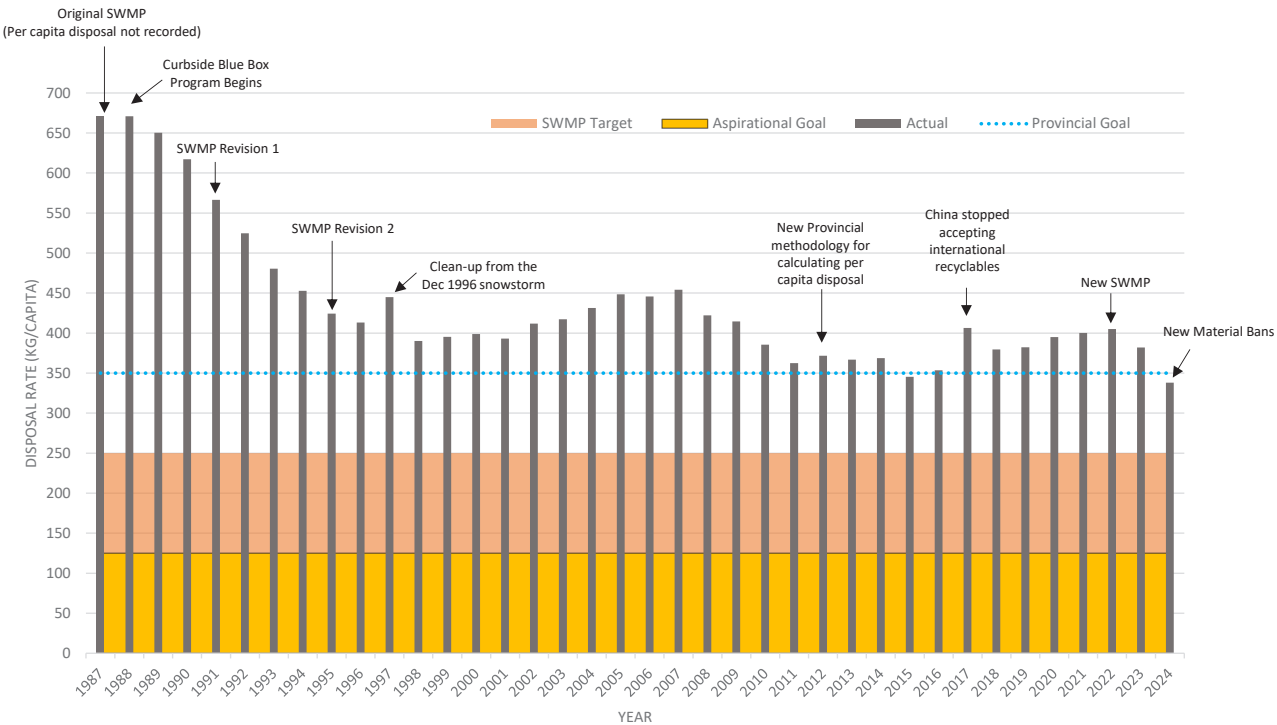
In 2012, the Province of BC began using per capita disposal rates as the standard solid waste metric. Regional disposal rates reported to the ENV include general refuse from the residential sector and ICI sources, as well as waste from construction, demolition and renovation activities. Disposal rates do not include controlled waste like asbestos, biomedical, agricultural waste, heavy industry or contaminated soil. In 2022, the most recent year with provincial data, BC’s per capita disposal rate was 479 kg, while the capital region’s rate was 409 kg—the fourth lowest in the province. The ENV requires the CRD to report this 409 kg rate, which includes blended biosolids. However, for SWMP reporting, the CRD excludes blended biosolids, reflected in the chart below, as beneficial use strategies for diverting biosolids are not part of the SWMP’s strategies or actions.

General Refuse Disposal - Per Capita Disposal Rate for the Capital Region

Year	Population ²	Hartland Landfill ¹			Disposal Rate kg/ person	Percentage Change from 2021
		Received	Beneficial Use ³	Landfilled ⁴		
2021	432,062	173,899	-1,013	172,886	400	N/A
2022	439,950	183,397	-5,107	178,290	405	+1.3%
2023	455,092	179,075	-5,100	173,975	382	-4.5%
2024	464,934	168,055	-10,866	157,189	338	-15.5%

1 Excluding blended biosolids; see pg. 11 for more information
2 BC Stats
3 Onsite beneficial use of material based on ENV guidelines
4 The figure for 2021 includes 6,730 tonnes landfilled at Tervita Highwest Landfill

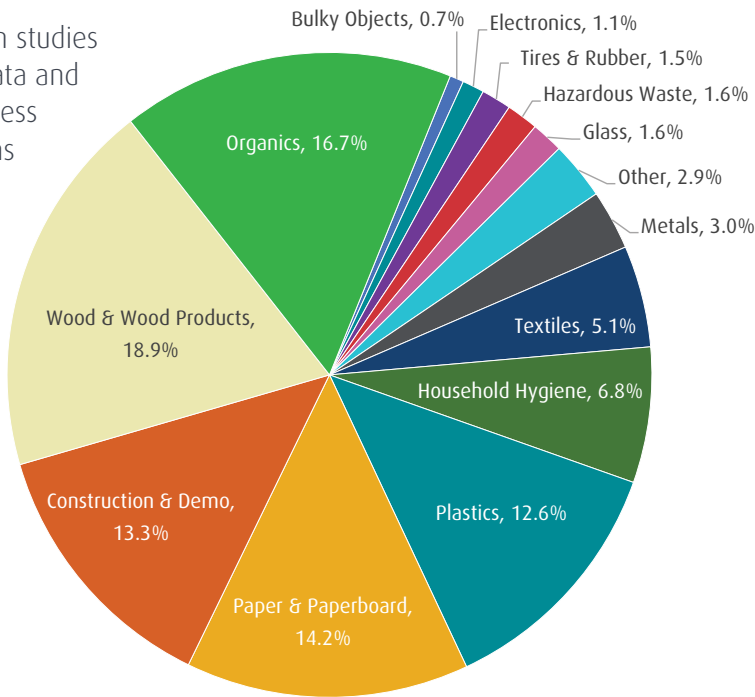
CRD Historic Per Capita Disposal Rate



Solid Waste Stream Composition Study

Solid waste stream composition studies provide valuable benchmark data and analysis for evaluating the success of existing solid waste programs and SWMP initiatives.

Since 1990, the CRD has commissioned seven studies to assess the composition of waste being landfilled at Hartland. The most recent analysis took place in 2022; the next study will take place in 2026.



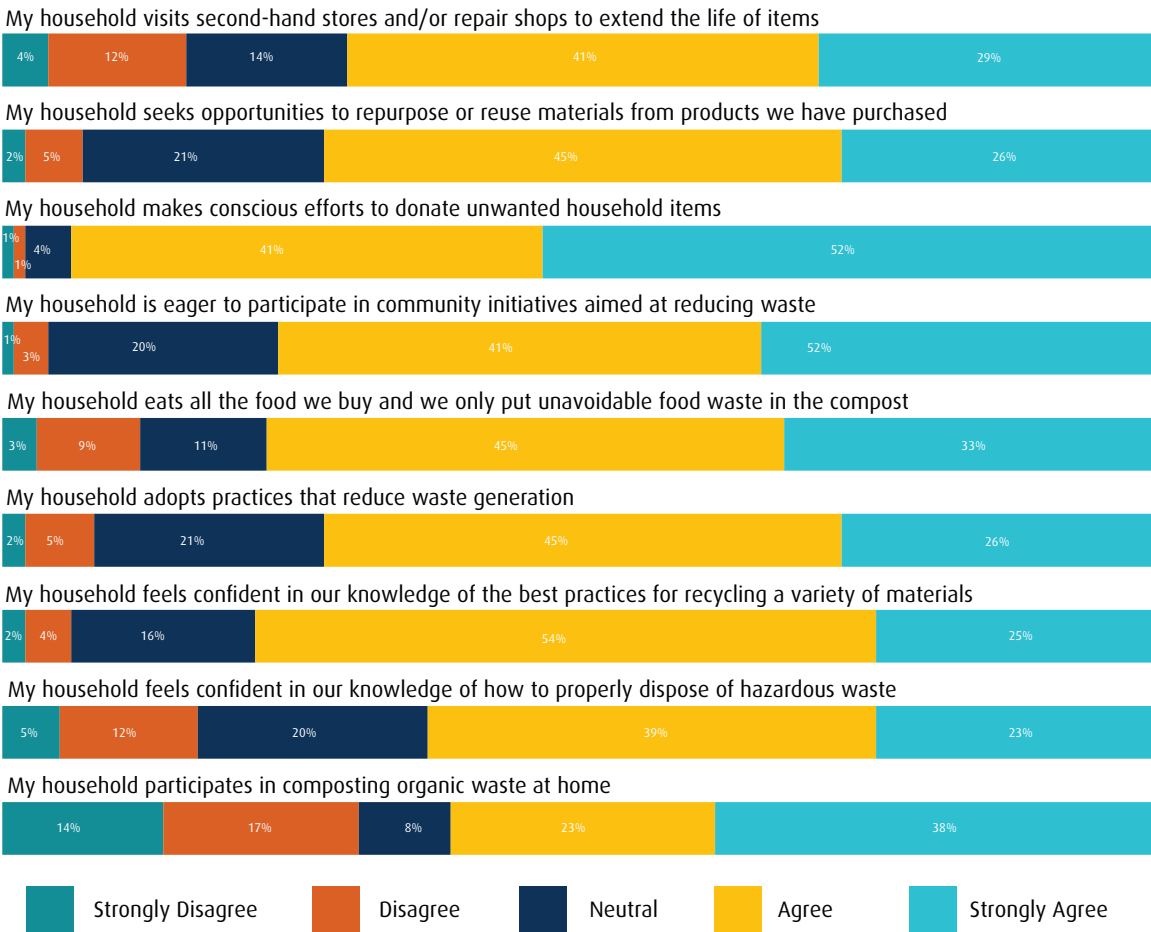
2022 Solid Waste Stream Composition Study Results

Solid Waste Market Research and Engagement Study

The first study was conducted from May to October 2024 using three surveys targeting residents, Hartland Public Drop-Off Depot users and businesses. Surveys were developed to assess behaviours, attitudes, programs, resources and communication strategies related to solid waste within the capital region. Key highlights of the study are as follows:

Residential: Over 1,000 residents were surveyed to assess behaviours and attitudes towards solid waste management themes such as reducing waste, knowledge of best practices and disposal habits. Of residents surveyed, 74% reported positive attitudes (i.e., agree or strongly agree) across five waste management behaviours, including reducing waste, supporting circular economy, composting, confidence in their waste disposal knowledge and supporting community initiatives. Barriers identified by residents included lack of knowledge on where and how to dispose of materials such as foam and flexible plastic packaging.

2024 Solid Waste Market Research and Engagement Study:
Residential Waste Reduction Behaviours and Attitudes



Hartland Public Drop-off Depot: Over 100 surveys were completed by Hartland Public Drop-Off Depot users. Results provide a snapshot of the types of materials being brought to the depot. The most common materials included metals (63%), plastic products (59%) and foam packaging (55%).

Scale data revealed visits to Hartland to dispose of general refuse have increased by about 5% annually, slightly higher than population growth, while visits related to recyclables have increased by an average of 20% annually.

Business: Over 200 business representatives were surveyed and asked about the types of waste their businesses produce, their disposal methods and ability to comply with local regulations. Most businesses produce paper (92%), plastic (75%) and organic waste (62%). Challenges identified by businesses included difficulty complying with local waste management regulations, citing limited disposal options and high costs.

Results from this study identified areas for improvement, and gauged the effectiveness of existing engagement activities.

Waste Generator Study

The waste generator study will help the CRD gather data on where waste is generated, such as a household, business, industry or community. The purpose of such a study is to gain insights into the patterns of waste generation, understand the composition of the waste stream and identify opportunities for waste reduction, recycling or proper disposal.

Currently, the CRD’s diversion data is limited to the recyclable and reusable items accepted at the Hartland Landfill and through administering PPP contracts on behalf of Recycle BC for the curbside blue box program and the Electoral Area depots. Along with identifying where waste is generated and the composition of waste streams, the waste generator study will help offer a complete picture of diversion activities happening across a variety of sectors. This study will provide valuable data and analysis for evaluating the success of existing solid waste management programs and for planning future initiatives.

The waste generator study will be the first of its kind for the CRD. The first study will take place in 2025, and results will be included in the 2025 SWMP Progress Report.

Diversion Programs Funded or Administered by the CRD

CRD Program Diversion (tonnes)	2021	2022	2023	2024
Hartland Diversion	17,525	16,642	18,924	31,135
Curbside Blue Box	18,613	17,293	17,438	16,716
Electoral Area Depots	915	929	907	978
Total tonnes diverted	37,053	34,864	37,269	48,829

Challenges and Opportunities

As the management of unwanted materials is a shared responsibility, successful implementation of the SWMP will require involvement from the entire community, including residents, businesses, institutions, First Nations, municipalities and non-profit associations, as well as the local waste management industry. Each of the stakeholders involved in solid waste management has a unique role to play, but there are many competing priorities.



The main policy levers the CRD has control of are limited to what is accepted at Hartland Landfill. In 2023, the CRD Board approved bylaw changes at Hartland Landfill, including new material bans, adjusted tipping fee structure and increased bylaw fines. In early 2024, after consultation with stakeholders, the introduction of new material bans and tipping fee changes were divided into 3 phases. Phase 1 began January 1, 2024 and included a ban on clean wood from the general refuse stream, an increase in the general refuse and high-risk international waste tipping fees, and an increase in fine rates. Phase 2 began on July 2, 2024 and included a ban on treated wood and asphalt shingles from the general refuse stream. Phase 3, which includes a ban on carpet and underlay, as well as a \$300/tonne tipping fee for general refuse containing unsorted renovation and demolition materials, will be introduced in the future, once end markets are available and industry has had time to adjust their operations. Staff recommended the CRD begin

consultation on policies to restrict the flow of general refuse outside the capital regional ahead of Phase 3 implementation.

Along with policy changes in 2024, the CRD introduced the Waste Stream Collector Incentive Program. The program seeks to promote multi-stream waste collection (i.e., source-separated organics, recyclables and general refuse) and incent voluntary self-reported collection data sharing. For the first year of the program (2024), 20 Hartland commercial customers, representing approximately 85% of Hartland’s total general refuse tonnages, participated.

Blended Biosolids Disposal at Hartland Landfill

In 2024, the CRD landfilled 918 tonnes of Class A biosolids as 4,352 tonnes of blended biosolids (biosolids and sand) as general refuse at Hartland Landfill. Factoring this material into the 338 kg per capita disposal rate for 2024, it increases 2.8% to 347 kgs per capita. The ENV requires the CRD to report the 347 kg per capita disposal rate for the region, even though beneficial use strategies for biosolids are not included within the SWMP.

In June 2024, the CRD Board approved a Long-Term Biosolids Management Strategy that outlines the beneficial uses for Class A Biosolids as required by the provincial government. Under this strategy, options will be utilized under a prioritization structure. Tier 1 of the strategy is the development of an advanced thermal demonstration plant, while Tier 2 is the development of additional combustion and non-agricultural, out-of-region, land application options. Landfilling blended biosolids has been used as an emergency measure and was not considered as a long-term management option.

Beneficial Use

Through shredding activities, approximately 10,867 tonnes of material was beneficially used on-site in place of virgin materials, as per the ENV guidelines. This year saw an increase in resources dedicated to shredding of specific material streams at Hartland Landfill in an effort to further densify incoming waste materials and extend the life of the active landfilling area (Phase 2, Cell 3) while the new landfilling area (Phase 2, Cell 4) was being prepared to accept general refuse at the north end of the site. Construction of the new landfilling area continued throughout 2024 in preparation to receive general refuse in January 2025.

Landfill Gas Collection

In 2024, landfill gas collection efficiency was calculated at 43% using the ENV model and 50% using the UBCi model, down from 64% (ENV) and 78% (UBCi) in 2023. This decline is due to challenges in expanding the reach of the existing gas collection system, which includes the design, procurement and construction required to connect new gas wells. Once the expanded system is complete in early 2025, the gas wells will be connected, leading to improved landfill gas collection efficiency.



Eagle View Elementary used funding from the Rethink Waste Community Grant to build a lending library to inspire reading while reducing waste through reuse.

Progress Summary

The following sections are intended to provide a high-level, easy-to-understand overview of the CRD's progress related to implementing the SWMP and to summarize progress made in 2024 as it relates to the plan's goals and focus areas.

Goals

The four goals of the SWMP may be achieved within the timeframe of this plan, but a goal may also be aspirational, something for the CRD to strive for beyond the timeframe of this plan. Measures of success and progress status definitions for the goals were developed with the SWAC in 2023.

Focus Areas

The focus areas form the basis of service plans and work plans that are approved by the Board annually as part of the financial planning process. Collaboration with First Nations governments, municipalities, other solid waste services, CRD divisions and stakeholders will be integral to this process. The 15 strategies and 72 actions contained within the SWMP are divided into three focus areas:

- Reduce and Reuse
- Recycling
- Recovery and Residuals Management

For more details on the SWMP's 15 strategies, consult *Appendix A: SWMP Report Card*.



2024 Overall SWMP Progress

On track

Goal Areas



Goal 1: To surpass the provincial per capita waste disposal target (350kg/capita/year) and aspire to achieve a disposal rate of 125 kg/capita/year.



Goal 2: To extend the life of Hartland Landfill to the year 2100 and beyond.



Goal 3: To have informed citizens that participate effectively in proper waste management practices.



Goal 4: To ensure that the CRD's solid waste services are financially sustainable.

Focus Areas



Reduce and Reuse



Recycling



Recovery and Residuals Management

Focus Area Icon Legend



On Track: 75% or greater of yearly target progress



Opportunity for Improvement: 50%-75% of yearly target progress



Attention Required: less than 50% of yearly target progress



Future Action

Goal Area Icon Legend



On Track



Opportunity for Improvement




Attention Required

Developed in collaboration with the SWAC, each goal has a unique definition for "On Track", "Opportunity for Improvement" and "Attention Required." Review the following section for definitions.



Goal Area Progress Summary



On Track


Goal 1

To surpass the provincial per capita waste disposal target (350kg/capita/year) and aspire to achieve a disposal rate of 125 kg/capita/year.


Indicators and Inputs Summary:

- Calculated a disposal rate of 338 kg/capita, a decrease of 15.48% or 62 kg/capita from when the plan began in 2021.
- 2022 Solid Waste Stream Composition study indicated 47% of the garbage sent to Hartland Landfill could have been diverted through reuse, recycling or energy recovery.
- In 2025, the CRD will complete a waste generator study to further analyze where and how waste is generated.


Icon Definitions



Community is trending towards a per capita disposal rate to be **less than 350 kg/capita** over the life of the plan.



Community is trending towards a per capita disposal rate of **350 kg/capita** over the life of the plan



Community is trending towards a per capita disposal rate **above 350 kg/capita** over the life of the plan.



Opportunity for Improvement

Goal 2

To extend the life of Hartland Landfill to the year 2100 and beyond.

Indicators and Inputs Summary:

- Calculated a 2024 compaction density rate of 0.98 tonnes of general refuse per cubic metre, surpassing the landfill guideline target of 0.85 tonnes per cubic metre by 15.29%.
- Calculated a 5-year average (2020-2024) Airspace Utilization Factor (AUF) of 0.68 tonnes of material per cubic metre of airspace, missing the target of 0.76 tonnes of material per cubic metre by 11.76%. AUF is the total volume of general refuse, controlled waste and cover material landfilled.
- Landfilled 157,188 tonnes of general refuse at Hartland Landfill, a decrease of 15,698 tonnes (15.48%) from when the plan began in 2021.

Icon Definitions



Air space utilization is on track to extend the life of Hartland Landfill to the year **2100 and beyond**.



Air space utilization is only trending to extend the life of Hartland Landfill to the year **2100**.



Air space utilization will not extend the life of Hartland Landfill to the year **2100**.



On Track

Goal 3

To have informed citizens that participate effectively in proper waste management practices.

Indicators and Inputs Summary:

- The 2024 Solid Waste Market Research and Engagement Study reported 74% of residents show positive attitudes across five waste management behaviours, including reducing waste, supporting circular economy, composting, confidence in their waste disposal knowledge and supporting community initiatives.
- Provided \$312,152 in funding for non-profit waste reduction organizations, organics diversion education and the Rethink Waste Grant, a 54% increase from when the plan began in 2021.
- Delivered 273 waste reduction workshops and tours (landfill tours, 3Rs, composting) to 6,014 children and adults in the capital region, a 70.63% increase from when the plan began in 2021.

Icon Definitions



Engagement and participation in proper waste management practices is **higher** than previous years.



Engagement and participation in proper waste management practices is **equivalent** to previous years.



Engagement and participation in proper waste management practices is **less** than previous years.



On Track

Goal 4

To ensure that the CRD's solid waste services are financially sustainable.

Indicators and Inputs Summary:

- Solid waste service continues to be a self-funded and achieve a surplus.

Icon Definitions



Solid waste service self-funding model is **financially sustainable** for the remainder of the plan.



Solid waste service self-funding model is **trending in the wrong direction**, adjustments may be necessary.



Solid waste service self-funding model is trending in the wrong direction and is currently **not sustainable** for the remainder of the plan.



Focus Area Progress Summary



Reduce and Reuse

Governments, residents, non-profits and businesses all have an important role to play in reducing and diverting waste from the landfill. Reducing the amount of waste created, and finding ways to repurpose and reuse waste, eliminates the need to dispose of items later.



Overall Status
On Track

CRD Roles

Municipal collaboration

Provincial and Federal
Government advocacy

Funding and supporting
non-profits

Education and outreach

This focus
area includes

6

SWMP strategies

Progress Summary

- The 2024 Solid Waste Market Research and Engagement Study reported 74% of residents show positive attitudes across five waste management behaviours, including reducing waste, supporting circular economy, composting, confidence in their waste disposal knowledge and supporting community initiatives.
- Between the Hartland Landfill Public Tours, Hartland Landfill Technical Tours, 3Rs K-12 program, and attending community events, the CRD connected with 4,631 residents. New this year, the CRD introduced a downtown Victoria pickup option for public landfill tours to improve accessibility for those without cars and partnered with the CEC to host two Composting Basics Workshops in conjunction with landfill tours.
- The CRD provided funding to 24 community-based projects, totalling \$70,300, under the Rethink Waste Community Grant.
- Continued to provide support (\$86,974) for 9 local non-profit reuse organizations to assist them in managing unusable donations and partnered with five non-profit reuse organizations for the redistribution of 38 tonnes of usable textiles, bicycles and large appliances collected at the Hartland Depot.
- Supported Light House with their building material exchange program (BMex), which connects construction and manufacturing businesses with surplus materials or ones looking for materials to reuse.



Galiano Island Recycling
Resources Society



CEC Composting Basics
Workshop at the Hartland
Learning Centre.



Recycling

By participating in recycling programs, residents and businesses take responsibility for the products they've purchased, and support a system where these materials can be used repeatedly.



Overall Status
On Track

CRD Roles

Hartland Depot

Landfill bans

Provincial and Federal
Government advocacy

Curbside recycling contract

Recycling in Electoral Areas

Education and outreach

This focus
area includes

7

SWMP strategies

Progress Summary

- New bylaw changes at Hartland Landfill, including material bans, adjusted tipping fee structure and increased bylaw fines, came into effect in 2024. Material bans on wood (clean and treated) and asphalt shingles resulted in approximately 9,600 tonnes of material diverted from the general refuse stream for reuse, recycling or energy recovery.
- Continued the MFD Waste Diversion Project by hiring two outreach assistants to conduct site visits and offer advice, signage and resources on best practices and setup for the waste collection area. In the end, 40 buildings totalling 2,730 units across seven municipalities participated and the project will continue in 2025.
- Registered 20 Hartland commercial customers, representing approximately 85% of Hartland's total general refuse tonnages, for the Waste Stream Collector Incentive Program, which offers a \$25/tonne rebate on general refuse for commercial customers who provide multi-stream collection services (source-separated organics, general refuse and recyclables, including glass) and voluntarily report waste collection data.
- Continued administration of the solid waste local service for the Port Renfrew community, including completing site upgrades and efficiencies, as well as hiring staff to implement updated operations.
- Launched an expanded hours pilot at Hartland, extending Saturday hours by three to enhance accessibility to the Hartland Depot and reduce site access wait times.
- New contractor began service for the CRD blue box program.



Hartland Depot



Celebrating the launch of the new curbside recycling collection contractor for single-family homes in the capital region.



Recovery and Residuals Management

Once material has been reduced and technology has been applied to recover as much energy as possible, residuals management provides a safe and effective way to manage materials that don't have a next and best use.



Overall Status
Opportunity for Improvement

CRD Roles

Landfill bans and enforcement

Hartland Landfill

Technology research

Landfill Gas Management

This focus area includes

2

SWMP strategies

Progress Summary

- Calculated a disposal rate of 338 kg/capita, a decrease of 11.6% or 44 kg/capita from 2023.
- On January 2, 2024, increased Hartland Landfill's general refuse tipping fee from \$110 to \$150/tonne.
- Constructed the Material Diversion Transfer Station (MDTS) at Hartland Landfill. The MDTS processes wood (clean and treated) and asphalt shingles for reuse, recycling or energy recovery.
- Conducted additional shredding trials with specific material streams in an effort to manage incoming volumes and further densify material and extend the life of the landfill.
- Continued with onsite beneficial use opportunities with 10,867 tonnes of select waste material streams processed and utilized onsite in place of virgin material, as per the ENV guidelines.
- Issued 476 tickets and 84 warnings, primarily related to banned materials in general refuse.
- Completed construction of the new landfilling area (Cell 4) and began construction of the future landfilling area (Cell 5) in December 2024.
- Calculated a landfill gas collection efficiency of 43% based on the ENV model, and a 50% gas collection efficiency based on the UBCi model.



Active Face



The Material Diversion Transfer Station at Hartland Landfill.

Looking Ahead

The CRD will continue to show a leadership role by supporting local, municipal and federal waste diversion efforts, and will continue to move waste up the 5R Pollution Prevention Hierarchy to its next and best use.

Some activities planned for 2025 include:

- **Monitor New Policies and Continue to Divert Waste from Hartland Landfill:** Changes to the Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881 and Ticket Information Authorization Bylaw No. 1857 came into effect in two phases in 2024. Staff will monitor the impact of changes and investigate additional policies to promote continued diversion.
- **Expanded Hours at Hartland Landfill:** Evaluate expanded Hartland Landfill hours pilot. Analyze whether additional hours on Saturdays supported waste reduction and diversion activities. This project will continue into 2025 and recommendations on next steps will be provided at the end of 2025.
- **Analyze Waste Stream Collector Incentive Program Data and Investigate Waste Flow Management:** A full-time staff member will be hired to analyze waste stream collector incentive data and explore how the capital region can feasibly implement waste flow management to increase the diversion of recyclable materials, as well as prevent disposal of out-of-region MSW at Hartland Landfill.
- **MFD/ICI Sector Strategy:** Develop and launch waste and recycling area guidelines to streamline waste area storage design requirements and criteria targeting MFD and ICI buildings across the capital region. Staff will explore beginning a business waste reduction coaching program to help businesses reduce waste by incorporating circular economy and zero waste principles where possible.
- **Waste Generator Study:** This study will gain insight into the patterns of waste generation at the source; provide a deeper understanding of the waste stream composition; and identify opportunities for waste reduction, recycling and/or proper disposal across the capital region.
- **Rethink Waste Community Grant Program:** Increase per project funding from \$3,000 to \$5,000 per application; this program will be expanded in 2025 to include several different funding streams to meet the needs of the community, while supporting the goals of the SWMP.
- **Disaster Debris Management Planning:** The CRD, in partnership with the City of Victoria, will draft a Request for Proposal to develop a Regional Disaster Debris Framework, as well as City-specific and common-use disaster debris management plans.
- **Options for Residential Flexible Plastics Collection:** CRD staff will investigate and report on options for flexible plastic packaging collection from single-family and from multi-family buildings (apartments and condos) in the capital region.
- **Hartland Landfill Operations:** Open the new landfilling area at the north end of the site, including the north entrance and scales for commercial traffic and open the new kitchen scraps transfer station at the north.
- **Completion and Commissioning of the Hartland Landfill Biogas Upgrading Facility:** landfill gas will be upgraded in the new facility and sold to FortisBC as RNG to displace use of fossil fuels.



Electronics recycling at the Hartland Public Drop-off Depot.

Appendix A: Solid Waste Management Plan Report Card

The SWMP Report Card is intended to provide a high-level, easy-to-understand overview of the CRD's progress related to implementing the SWMP and to summarize progress made in 2023.

Methodology

The SWMP identifies specific strategies and actions to guide the CRD's efforts over the lifespan of the Plan. Over the lifetime of the SWMP, the strategies and actions contained within will form the basis of service plans and work plans that are approved by the Board annually as part of the financial planning process. Collaboration with First Nations governments, municipalities, other solid waste services, CRD divisions and stakeholders will be integral to this process.

These include 15 strategies with 72 actions and associated timelines divided into the following three focus areas:

- Reduce and Reuse
- Recycling
- Recovery and Residuals Management



2024 Overall
SWMP Progress
On track

The 15 strategies with 72 actions contained within the SWMP are divided into three focus areas. Scores are based on the current status of each strategy with their focus area.



Focus Areas

Reduce and Reuse



Recycling



Recovery and Residuals
Management

Focus Area Icon Legend



On Track: 75% or greater of yearly target progress



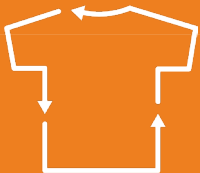
Opportunity for Improvement: 50%-75% of yearly target progress



Attention Required: less than 50% of yearly target progress



Future Action



Reduce and Reuse

Reducing the amount of waste created and finding ways to repurpose and reuse waste, eliminates the need to dispose of items later.



Overall Focus Area Status
On track

Status

Strategy

Update

Progress on Strategies



1 Continue and enhance education programs

- Sent 4 issues of the CRD Rethink Waste Newsletters to 423 residents and businesses; and sent 3 CRD Educators Newsletters to 582 teachers
- Delivered 79 3R programs to 2,053 students and held professional development workshop for 20 teachers who will continue 3R education with their 400 students
- Created new circular economy lesson plan for schools
- Delivered 6 public landfill tours to 189 residents, 17 community group tours/workshops to 376 residents, and 18 technical landfill tours to 450 industry partners
- Offered a downtown Victoria pickup for a public landfill tour to increase accessibility and partnered with the CEC to deliver 2 Composting Basics Workshops (55 residents) in combination with landfill tours
- CEC delivered 135 composting workshops to 2,742 K-12 students and 17 composting workshops to 184 adults on behalf of the CRD
- CRD staff attended 20 community events with solid waste messaging, including Love Food Hate Waste, household hazardous waste and Rethink Waste/3Rs
- Incorporated new engagement tools and surveys at community events booths to increase accessibility and provide immediate assistance using online waste management resources
- CEC staff attended 37 community events on behalf of the CRD to promote at-home composting and organics diversion
- Conducted 5 solid waste public education campaigns, including advertorials, movie theatre pre-roll, digital advertising, print advertising and bus advertising
- Partnered with Saanich Fire to produce educational videos raising awareness on how residents can help prevent landfill fires by safely recycling their batteries
- Hired a communications officer, increasing engagement for solid waste public education campaigns and reaching 621,856 people across all CRD social media platforms—including a viral Instagram post
- Responded to 23,365 Infoline inquiries via phone and email and received 215,195 visits to myrecyclopedica.ca
- Received 8,584 new RecycleCRD app installs, received 6,827 Ready, Set, Sort! game plays by residents
- Added 13,015 residents to receive reminders and alerts via RecycleCRD app, email, voicemail and mobile calendar for the Curbside Recycling Program
- Continued participation in Coast Waste Management Association communications/educators working group
- Continued sponsorship of Ecostar awards
- Procured a new platform to host myrecyclopedica.ca, which will launch in 2025
- Conducted a Solid Waste Market Research and Engagement Study to evaluate the effectiveness of the CRD's waste reduction programming and behaviour change initiatives annual outreach campaigns
- The City of Victoria - Implemented a Reuseable Cup Stamp Card Contest and Marketing Campaign from September 2024 to October 2024



Reduce and Reuse

Status	Strategy	Update
Progress on Strategies		
	2 Encourage waste prevention	<ul style="list-style-type: none">Continued to provide funding under the Rethink Waste Community Grant and supported 24 projects (\$70,300)City of Victoria - Final adoption and Phase 1 implementation of the City of Victoria's Single Use Items Bylaw (September 2024)City of Victoria - Zero Waste Event Guide was designed and launched in May 2024Provincial Government - Added items to the Single Use and Plastic Waste Prevention Regulations and implemented restrictions on food service accessories, plastic shopping bags, food service ware and oxo-degradable plastics.
	3 Support reduction of avoidable food waste	<ul style="list-style-type: none">Conducted a fall Love Food Hate Waste education campaign, which featured movie theatre ads, social media, local print and digital media adsContinued partnership investment (\$22,000) with the national Love Food Hate Waste campaign for access to national resources and educational materialsProvided \$96,160 in funding to the CEC to deliver waste diversion and composting programs to adults and children in the region
	4 Support reuse activities in the region	<ul style="list-style-type: none">Continued to provide support (\$86,974) for 9 local non-profit reuse organizations to assist them in managing unusable donationsCollected 38 tonnes of reusable goods at Hartland Depot for redistribution by local non-profit reuse organizationsProvided Light House with \$49,000 in funding to support their building material exchange (BMex) program, which connects construction and manufacturing businesses with surplus materials or looking for materials for reuse
	5 Support local governments in working towards zero waste and a circular economy	<ul style="list-style-type: none">Continued leading the Local Government Waste Reduction Working Group: 12 municipalities participated, 7 meetings held in 2024Continued work with W̱SÁNEĆ Leadership Council/CRD Solid Waste Working GroupContinued discussions with Pacheedaht First Nation on future, mutually beneficial long-term waste management for the broader Port Renfrew communityCRD's elected representative participated in the Vancouver Island and Coastal Communities Committee's meetings.Enacted modified tipping fee structure at Hartland Landfill by increasing the general refuse rate and lowering the rate for divertable materials (clean wood, treated wood, asphalt shingles) to incent more diversion (e.g., clean wood, treated wood, asphalt shingles)
	6 Continue and enhance policy development	<ul style="list-style-type: none">Amended Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881 and Ticket Information Authorization Bylaw No. 1857 to include new material bans, adjustments to the tipping fee structure and increased bylaw finesIn January 2024, clean wood was banned from general refuse; the general refuse tipping fee increased from \$110 to \$150/tonne; segregated clean wood is accepted at a reduced tipping fee of \$80/tonne and transferred offsite for recycling or energy recovery; rates for various offences increased (some up to \$500)In July 2024, treated wood and asphalt shingles were banned from general refuse; segregated treated wood and asphalt shingles are accepted at a reduced tipping fee of \$110/tonne and transferred offsite for recycling or energy recoveryReceived Board approval to delay the implementation of banning carpet and underlay from general refuse and accepting salvageable wood for freeRegistered 20 Hartland commercial customers, representing approximately 85% of Hartland's total general refuse tonnages, for the Waste Stream Collector Incentive program, which offers a \$25/tonne rebate on general refuse for commercial customers who provide multi-stream collection services (source-separated organics, general refuse, and recyclables including glass) and voluntary report waste collection dataDeployed a communications plan to educate and inform the public about the 2024 policy and bylaw changes at Hartland LandfillContinued administration of the solid waste local service for the Port Renfrew community, including completing site upgrades and efficiencies, as well as hiring staff to implement updated operationsReviewed Request for Expressions of Interest for Disaster Debris Management Planning in collaboration with the City of Victoria and initiated the Request For Proposal processCity of Victoria - Staff continued to attend Canadian Collaboration for Sustainable Procurement event and learning opportunities to improve understanding of sustainable procurement as it relates to waste reduction and climate action



Recycling

By participating in recycling programs, residents and businesses take responsibility for the products they've purchased and support a system where these materials can be used repeatedly.





Overall Action Status
On Track

Status	Strategy	Update
Progress on Strategies		
	7 Increase residential diversion	<ul style="list-style-type: none">Partnered with Recycle BC for local collection of 18,499 tonnes of residential PPP through the Hartland Depot, the curbside single-family home recycling program and depot services for rural/island residentsNew collection contractor began work for the 2024-2029 curbside single-family home recycling programBegan pilot of expanded Saturday hours at Hartland Landfill to increase accessibility in order to better support residential and commercial waste reduction and recyclingReceived 4,780 tonnes of recyclable material and 67 tonnes of orphan household hazardous waste at the Hartland DepotContinued to support the Southern Gulf Islands Recycling Coalition as they deliver waste reduction and diversion services for their communities
	8 Increase multi-family diversion	<ul style="list-style-type: none">Continued the MFD Waste Diversion Project, by hiring 2 term outreach assistants to conduct site visits to offer advice, signage and resources on best practices and setup for the waste collection area; 40 buildings totalling 2,730 units across 7 municipalities participatedInstalled 512 signs in MFDs and provided over 2,700 education materials for residents living in MFDs, including sorting guides, move-in and move-out guides, Hartland Depot sorting guide, and the kitchen scraps guide to promote proper waste disposal; resources available on the CRD websiteInvestigated options for soft and flexible plastic collection for MFDs and single-family homesBottle Depot and RecycleBC - Began a pilot project to offer collection of flexible plastics to MFDs
	9 Increase diversion from industrial, commercial and institutional facilities	<ul style="list-style-type: none">Hired a waste initiatives coordinator who will focus on increasing diversion from the ICI sectorInitiated the procurement process to hire an external consultant to develop of space, access and source-separation guidelines/toolkit for the ICI sectorSurveyed businesses as part of the Solid Waste Market Research and Engagement to gather baseline information on challenges and barriers encountered by the ICI sector
	10 Support existing and new extended producer responsibility programs	<ul style="list-style-type: none">Continued to partner with 12 EPR stewards for local collection of 20,114 tonnes of provincially-regulated recyclables through the Hartland Depot, Gulf Islands and Port Renfrew Depot and the Curbside Blue Box ProgramA CRD staff member is now chairing the Major Appliance Recycling Roundtable's Local Government Advisory CommitteeContinued to engage in opportunities to refine the EPR system in BC by participating on the BC Product Stewardship Council, working with program stewards to support and enhance their services offered in the capital region
	11 Support existing and new extended producer responsibility programs	<ul style="list-style-type: none">Provided consolidation, transfer and processing services for 13,463 tonnes of kitchen scraps collected by municipalities and private service providers at Hartland LandfillAwarded contract for hauling and processing of kitchen scraps for 2025-2030 at Hartland LandfillProvided transfer and processing services for 2,250 tonnes of yard and garden material received at Hartland LandfillBegan construction of the new Kitchen Scraps Transfer StationContinued to support restoration activities by offering reduced tipping fees for safe disposal of source-separated invasive species materialObtained an external legal opinion and reported to CRD Board on pathways to support mandatory separation of curbside collection and diversion of organicsStaff participated in Environment and Climate Change Canada consultation on single-family home organic waste management in CanadaTown of View Royal - extended a multi-year agreement with the Township of Esquimalt to drop off yard and garden waste at Esquimalt's depotTown of View Royal - completed a Bear Safe Bin pilot program to encourage separation of organics from garbage bins



Recycling

Status	Strategy	Update
Progress on Strategies		
	12 Increase construction, renovation and demolition material diversion	<ul style="list-style-type: none">• In January 2024, clean wood was banned from general refuse; segregated clean wood is accepted at a reduced tipping fee of \$80/tonne and used for recycling or energy recovery;• Increased fine rates for various offences (some up to \$500)• In July 2024, treated wood and asphalt shingles were be banned from general refuse; segregated treated wood and asphalt shingles are accepted at a reduced tipping fee of \$110/tonne and used for recycling or energy recovery• Diverted about 1,250 tonnes of clean wood, 5,800 tonnes treated wood and 2,500 tonnes asphalt shingles for recycling and energy recovery• Received Board approval to delay the implementation of the \$300/tonne mixed C&D waste rate, banning carpet and underlay from general refuse and accepting salvageable wood for free• Communication campaigns on new material diversion rules at Hartland, which include reno demo waste like wood (clean and treated) and asphalt shingles• Hartland staff completed the Asbestos Foundational Awareness Course and the Surveying Safety Course, and an Emergency Response Plan was developed for the Port Renfrew Garbage and Recycling Depot• Submitted updated operational/contingency plans for hazardous waste and stewardship programs for both Hartland and Port Renfrew Garbage and Recycling Depot to comply with new ENV regulations• City of Victoria - In 2024, of 9 permits falling under the Demolition Waste and Deconstruction Bylaw, 7 were successful deconstructions and salvaged over 48 tonnes (total) of wood for reuse, in addition to one full structure move
	13 Encourage proper public space waste management activities	<ul style="list-style-type: none">• Conducted an education campaign on illegal dumping/abandoned waste, highlighting how residents and college students can dispose of unwanted items according to the 5R Pollution Prevention Hierarchy• Provided \$3,594 in funding for the Community Clean-up Program• In 2024, staff worked with the Pacheedaht First Nation to decommission a temporary waste and recyclables transfer station that had been in place on the First Nation's lands while working with the Nation on a long-term approach to managing solid waste and recyclables as part of the broader Port Renfrew community.• Responded to 8 inquiries regarding illegal dumping activity in Electoral Areas• City of Victoria - installed 4 zero waste stations in 2024, making a total of 39 stations throughout city streets and parks



Recovery and Residuals Management

Once material has been reduced, and technology has been applied to recover as much energy as possible, residuals management provides safe and effective ways to manage materials that don't have a next and best use.



Overall Action Status
Opportunity for improvement

Status	Strategy	Update
Progress on Actions		
	14 Optimize landfill gas management	<ul style="list-style-type: none">• Calculated a decreased landfill gas collection efficiency down to 43% (ENV model) and 50% (UBCi model), compared to 64% (ENV) and 78% (UBCi) in 2023• Lower landfill gas collection efficiency is due to a delay in the design, procurement and construction of the expanded well system; once the expanded system is complete in early 2025, the gas wells will be connected, leading to improved landfill gas collection efficiency• During the commissioning of the new Biogas Upgrading Facility for RNG and the decommissioning of the gas to electricity facility, the old flare system continued to work until a new enclosed flare was installed in 2024 to support the gas destruction• Continued to implement strategies to improve gas collection and mitigate fugitive emissions• Continued annual installation of landfill gas collection infrastructure
	15 Enhance Hartland disposal capacity	<ul style="list-style-type: none">• Calculated a disposal rate of 338 kg/capita, a decrease of 11.6% or 44 kg/capita from 2023• Received CRD Board approval to increase Hartland Landfill's general refuse tipping fee from \$150 to \$155/tonne, beginning January 1, 2025• Received CRD Board approval to increase tipping fees controlled waste, and asbestos, from \$157/tonne to \$214/tonne, beginning January 2025.• Commenced operation of a Material Diversion Transfer Station at Hartland Landfill, effectively diverting of approximately 9,500 tonnes wood (clean and treated) and asphalt shingles from being landfilled• Conducted additional shredding trials, with specific material streams, in an effort to manage incoming volumes and further densify material and extend the life of the landfill• Continued with onsite beneficial use opportunities, with 10,866 tonnes of select waste material streams processed and utilized onsite in place of virgin material, as per the ENV guidelines• Achieved a landfill utilization factor of 0.68 t of refuse/m³ of airspace• Phase 2, Cell 4 construction was completed and prepared to receive garbage in January 2025; Cell 5 construction began in December 2024 and will be completed in 2025• Landfilled 4,352 tonnes of blended biosolids at Hartland as general refuse as the Long-Term Biosolids Planning solutions were developed in 2024• CRD Board approved the Long-Term Biosolids Management Strategy, defining priorities and options, including advanced thermal demonstration plant, developing additional combustion and non-agricultural, out-of-region, land application• Received 22,671 tonnes of controlled waste and 2,314 tonnes of asbestos-containing material• Issued 476 tickets and 84 warnings, related to several offences, including recyclable materials being found commingled in the garbage; failure to follow site Regulations, and deposition of hazardous materials, etc.• Developed and issued a detailed Request for Proposals for an advanced thermal demonstration plant at Hartland Landfill, which included biosolids, and any other components of the waste stream as feedstock



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