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Solid Waste & Recycling



Minimize waste disposal and maximize waste diversion

01 Strategy

STRATEGIES & PLANS

- › [Solid Waste Management Plan](#)
- › Hartland Environmental Programs
- › [Regional Growth Strategy](#)
- › [Climate Action Strategy](#)
- › [Special Task Force on First Nations Relations](#)
- › [CRD Corporate Plan](#)

CORPORATE PLAN GOALS

- 3a Maximize solid waste diversion & resource recovery from waste materials
- 3b Outreach & engagement with communities

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03 Operating Context

ACHIEVEMENTS IN 2025

1. Decreased waste disposal rate by 12% to 338kg/capita in 2024, a decrease of 44kg over 2023.
2. Full operation (12 months) of tipping fee changes and material diversion transfer station resulting in additional progress towards the CRD's waste disposal targets.
3. Construction of Cell 5 at Hartland Landfill.
4. Commission of Renewable Natural Gas (RNG) processing facility at Hartland.

FACTORS THAT WILL AFFECT OUR OPERATIONS IN 2026 AND BEYOND

- **Solid Waste Management Plan (SWMP):** The SWMP was endorsed by the CRD Board in May 2021, and approved by the Ministry of Environment & Climate Change Strategy (ENV) in July 2023. The SWMP has a target of reducing waste in the region by more than one-third over the next decade. Though the ENV approved the SWMP, the Board expressed a desire in its deliberations to achieve waste reduction levels greater than the targets laid out in it.
- **Collaboration on Waste Diversion Targets:** Despite the progress towards SWMP targets, achieving the targets will require significant dedication and effort by the CRD, along with behaviour change by the public, and complementary actions by other jurisdictions and entities, including the Province of B.C., federal government, municipalities and stewardship agencies such as Recycle BC.
- **Material Stream Diversion:** New policies implemented in 2024, including landfill bans on wood waste, carpet and underlay and asphalt shingles, along with a modernization of the tipping fee structure and increased bylaw enforcement have resulted in waste diversion in support of meeting the SWMP targets. Continued implementation of the material diversion policies will involve management of the material diversion transfer site at the Hartland Landfill, transport and processing contracts for newly diverted materials, and increased resourcing requirements to account for additional materials handling, processing and, in future years, increased bylaw enforcement. Note: Increased material diversion results in lower solid waste tipping fee revenue and increased operating costs to facilitate the market price of material diversion alternatives.
- **Material Diversion Depots:** The Hartland public drop-off area continues to experience increased customer volumes. There are increased WorkSafe BC requirements when receiving homeowner renovation and demolition materials at the landfill. As part of the SWMP, staff will be investigating options to increase access to depots, including expanding Hartland Depot operating hours, and establishing new depots.
- **Organics/Kitchen Scraps:** Organic waste made up 16.7% of the material received at Hartland Landfill in 2022. The kitchen scraps transfer station has been relocated on-site and will require continued staffing to ensure diversion and processing of the segregated food waste materials. Increased organics collection would require evaluation of processing capacity in region and on the island.

- **Resource Recovery/Landfill Gas Utilization:** The existing electricity generation plant has reached end-of-life and the CRD has entered into a 25-year agreement to upgrade landfill gas generated at Hartland Landfill to RNG and sell it to FortisBC. An RNG upgrade facility, to be operated by Waga Energy through its subsidiary Hartland Renewable Resource Group, came online in 2025 and is expected to reduce the capital region's greenhouse gas (GHG) emission by approximately 450,000 tonnes of carbon dioxide equivalent over the next 24 years (equivalent to removing 3,900 cars from the road).
- **Landfill Operations:** Landfilling waste in Cell 4 has begun and commercial traffic has moved to the North access point from Willis Point Road to accommodate the fill plan and better ensure safe commercial truck traffic movement as the North end of the landfill becomes the primary waste disposal area. Cell 5 construction is underway in preparation to receive refuse once Cell 4 is full.

OPERATIONAL STATISTICS (2024 DATA)

- Received and disposed of **161,541 tonnes of waste**, 338 kg/capita, a decrease of 62 kg/capita over 2021.
- Issued **476 tickets and 84 warnings**, primarily related to banned materials in garbage.
- Achieved a **43% gas collection efficiency** based on the generic ENV landfill gas model outline in the provincial regulation, and a 50% gas collection efficiency based on the UBCi Hartland specific model in 2021. We expect the collection efficiency to increase to 70%+ for 2025 with the installation of a critical landfill gas header early in 2025.

04 Services

The services listed below rely on the support of several corporate and support divisions to operate effectively on a daily basis. More information about these services is available in the Corporate Services and Government Relations Community Need Summaries.

SERVICE BUDGET REFERENCES¹

- › 1.521 & 1.525 Environmental Resource Management

STAFFING COMPLEMENT

Environmental Resources Management Division: **31.7 FTE (including 3 Managers and 1 Administrative Support)**

1. DIVERSION SERVICES

Description

Responsible for solid waste management planning in the capital region, including policy and program development to increase waste reduction or recycling.

What you can expect from us

- ▶ Planning and policy development activities include the SWMP and the administration of 49 contracts and agreements and Compost Facilities Bylaw.
- ▶ Delivery of the recycling programs, including curbside collection from 132,232 households and packaging, printed paper and glass collection from six electoral area depots. Today, the Hartland recycling facility collects more than 80 items from 28 product categories.
- ▶ Implementation of new diversion policies that will reduce the amount of waste received at Hartland Landfill and increase reuse, recycling, recovery and beneficial use.
- ▶ Delivery of material stream diversion transfer service for wood waste and asphalt shingles. With opportunities to potentially add other materials as markets develop.

¹ Service budget(s) listed may fund other services

2. LANDFILLING SERVICES

Description

Ensure regional landfill capacity with the operation of the CRD's Hartland Landfill. Ongoing capital and operating investments are made at Hartland to ensure compliance with the ENV landfill regulations, including leachate and landfill gas management infrastructure.

What you can expect from us

- ▶ Administration of five contracts and agreements
- ▶ Residential service at bin area (9 am–5 pm weekdays, 7 am–5 pm Saturdays)
- ▶ Commercial service at Hartland Landfill active face (7 am–5 pm weekdays and Saturdays)

3. RESOURCE RECOVERY SERVICES

Description

Installation and operation of landfill gas collection and utilization infrastructure at Hartland Landfill to ensure landfill gas (methane) destruction, and compliance with provincial environmental regulations. Seek to maximize the environmental and financial benefits of Hartland Landfill gas utilization.

What you can expect from us

- ▶ Production of RNG from upgraded landfill gas for sale to FortisBC, reducing GHG emissions by approximately 450,000 tonnes carbon dioxide equivalent over the next 25 years (beginning in 2024).

4. HARTLAND ENVIRONMENTAL PROGRAMS

Description

Monitoring, assessment and technical reporting to support regulatory compliance and contaminant reduction at Hartland Landfill.

What you can expect from us

- ▶ Regulatory compliance monitoring of surface water, groundwater, landfill gas and leachate

05 Initiatives

Below are the initiatives listed in the [Capital Regional District 2023-2026 Corporate Plan](#) and the related initiative business cases (IBCs). For an overview of the financial impacts, including cost of staffing, please refer to the Provisional Budget report.

Initiative	Implementation year(s)
3a Goal: Maximize solid waste diversion & resource recovery from waste materials	
3a-1 Develop and implement new and enhanced waste diversion policies	Ongoing
▶ IBC 3a-1.1 Hartland 2100	2024-ongoing
▶ IBC 3a-1.2 Hartland 2100	2025-ongoing
▶ FUTURE IBC 3a-1.3 Hartland 2100 (Revised)	Planned for 2027
▶ FUTURE IBC 3a-1.5 Port Renfrew Transfer Station Attendant	Planned for 2027
3a-2 Investigate regional waste flow management	2025
3a-3 Increase multi-family dwelling and industrial, commercial and institutional sector waste diversion	Ongoing
3a-4 Explore beneficial uses for solid waste residuals	Ongoing
▶ <i>RELATED IBC see 1b-4.2 Innovative Projects Work Unit in Wastewater Community Need Summary</i>	2025-ongoing
3a-5 Financially sustainable service delivery	Ongoing
3b Goal: Outreach & engagement with communities	
3b-1 Ongoing engagement and outreach on all major policies and new diversion programs and plans	Ongoing

06 Performance

GOAL 3A: MAXIMIZE SOLID WASTE DIVERSION & RESOURCE RECOVERY FROM WASTE MATERIALS

Targets & Benchmarks

The landfill and recycling metrics focus on minimizing waste disposal and maximizing waste diversion (Metric 1) while ensuring they are done efficiently (Metric 3) and environmentally sustainably (Metric 2).

Measuring Progress

	Performance Measure(s)	Type	2024 Actual	2025 Forecast	2026 Target
1	Solid waste disposal target rate of 250 kg/person per year by 2030 ¹	Quantity	338 kg/capita	321kg/capita	285 kg/capita
2	Capture 75% of landfill gas at Hartland Landfill ²	Quantity	43%	75%	75%
3	Airspace Utilization Factor (AUF) at Hartland Landfill of 0.76 MT/m ³	Quantity	0.73 MT/m ³	0.75 MT/m ³	0.76 MT/m ³

¹ Annual kilograms of solid waste per capita; calculation based on provincial Municipal Solid Waste methodology

² Percentage of landfill gas captured at Hartland Landfill; data from CRD staff measurement and calculation

³ Tonnes of waste per cubic metre of airspace including cover materials; data from CRD staff measurement

Discussion

- **Metric 1:** Per capita disposal rate has decreased significantly, in part, due to the introduction of new material bans from the general refuse stream, an increase in materials used for on-site beneficial use, an increase in food scraps moving through the kitchen scraps transfer station and the implementation of the Waste Stream Collector Incentive Program.
- **Metric 2:** Landfill gas capture decreased due to challenges in expanding reach of the existing gas collection system. These challenges are expected to be resolved in 2025 leading to improved landfill gas collection efficiency.
- **Metric 3:** Airspace Utilization continues to improve with increased focus on cover material usage and improved landfilling compaction techniques. Hartland engineering is working with our heavy equipment contractor to continually improve compaction and reduce cover usage.

GOAL 3B: OUTREACH & ENGAGEMENT WITH COMMUNITIES

Targets & Benchmarks

- A new Solid Waste Market Research and Engagement Study was completed in 2024 to establish baseline data and assess behaviours, attitudes, programs resources and communication strategies. This study will be completed every three years to measure effectiveness of solid waste education and communication programs.

07 Business Model

PARTICIPANTS	Service users (no requisition)
FUNDING SOURCES	Fee-for-service: landfill tipping fees, Extended Producer Responsibility and recycling programs, biogas sale revenue
GOVERNANCE	Environmental Services Committee