

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, APRIL 21, 2021**

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**SUBJECT**    Environmental Resource Management - 2020 Progress Report

**ISSUE SUMMARY**

To present a summary of 2020 activities, results and accomplishments of the Capital Regional District's (CRD) solid waste function.

**BACKGROUND**

Based on the 5R hierarchy of Reduce, Reuse, Recycle, Resource Recovery and Residual Management, the CRD's solid waste services strive to minimize waste generation and disposal needs, and maximize diversion and recovery opportunities. Work in the first three areas focuses on conserving airspace in an effort to ensure enough landfill capacity to meet the residuals disposal needs of the community in the future.

Highlights from the 2020 report include:

**Developing a New Solid Waste Management Plan**

- Building on the strategies and actions for the new Solid Waste Management Plan endorsed by the Board in 2019, a draft Solid Waste Management Plan was developed.
- Engagement on the draft plan took place between November 2020 and February 2021. The engagement results and the final version of the plan is the subject of a separate staff report at this meeting.

**Reduce, Reuse, Recycle (Diversion Services)**

- Expanded and focused web content related to reducing consumption and accessing reuse and repair opportunities available in the community.
- Residents have recycled over 500,000 tonnes of recyclables since the curbside program's inception in 1989.

**Recovery (Energy Recovery Services)**

- A field-level landfill gas quantification study was completed, the results of which indicate that fugitive (uncaptured) emissions from the landfill are significantly lower than what had been calculated using previous modeling.
- Work continued on a plan to upgrade landfill gas to renewable natural gas for sale to FortisBC for beneficial use which will displace conventional natural gas and reduce the region's greenhouse gas emissions.

**Residual Management (Disposal Services)**

- The region's per capita disposal rate climbed from 382 kg/capita to 395 kg/capita in 2020.
- The beneficial use of materials received at Hartland increased in 2020 with 5,476 tonnes of ground yard and wood waste material used for controlled waste cover and site restoration.
- Over 25,400 trees and bushes have been planted on closed areas of the landfill.

British Columbia has set provincial waste disposal targets with a goal of lowering the municipal solid waste disposal rate to 350 kg per person by 2020/21. The provincial average in 2019 was 500 kg per person. Provincial initiatives which are expected to decrease waste disposal rates include the Plastics Action Plan, organics diversion, food waste prevention, and extended producer responsibility programs. The CRD continues to maintain one of the lowest disposal rates in the province.

## **IMPLICATIONS**

### *Environmental & Climate Implications*

The environmental monitoring program for Hartland confirms that regulatory requirements were met. Monitoring results confirm that effective measures are in place to ensure environmental impacts are mitigated and that leachate is effectively being controlled and contained on site. A detailed report and monitoring data is posted annually to the CRD website in the fall.

### *Social Implications*

With in-person gatherings paused for the majority of the year, efforts were placed on creating and updating online activities, resources and lesson plans for teachers and parents. As well, a live streamed tour of Hartland Landfill was piloted in 2020.

The number of inquiries to the CRD Infoline increased by 26% in 2020. This is a reflection of residents spending time cleaning out their homes and conducting renovation activities.

While the volume of material received at the Hartland public drop off depot was not dramatically affected in 2020, the number of transactions (customers) increased substantially. The average number of customers to the site per day rose 15% from 355 (2019) to 407 (2020). The previous one day transaction record of 680 (2007) was broken three times in 2020 – first in May (712), then in August (750) and again in December with 794 transactions.

### *Financial Implications*

Solid waste services continued to be self-funded in 2020 with surplus funds held in reserve for future capital works, operating shortfalls and closure/post-closure work. Year end balances are as follows:

<b>Fund</b>	<b>Balance</b>
Sustainability Reserve	\$38,784,614
Landfill Closure	\$11,281,092
Capital Reserve	\$2,428,503
Equipment Replacement	\$3,240,062
Airspace Reserve	\$1,000,000

**CONCLUSION**

The roles and responsibilities for managing solid waste include a combination of government, private and non-profit sectors and the consumers themselves. The CRD continues to safely operate and maintain Hartland Landfill and meet its regulatory commitments to protect human health and the environment from potential impacts associated with solid waste disposal services. Staff have prepared an annual progress report with updates on solid waste programs, operations, capital projects, environmental monitoring and other activities. Based on the 5R hierarchy, the CRD's solid waste services continue striving to minimize waste generation and disposal needs, and maximize diversion and recovery opportunities.

**RECOMMENDATION**

The Environmental Services Committee recommends to the Capital Regional District Board:

That the Environmental Resource Management 2020 Progress Report be received for information.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT**

Appendix A: Environmental Resource Management – 2020 Progress Report