

Requirement for a SWMP

What are the Provincial requirements related to solid waste management planning?

The multi-phased public engagement process outlined above is the regulatory requirement for solid waste management planning in BC and the CRD's work in this area is aligned with Provincial requirements under the Environmental Management Act. The CRD is also working collaboratively with the Province to determine whether or not specific projects within the plan require further review under the Reviewable Projects Regulation.

How did the CRD become responsible for garbage disposal?

In recognition of the health hazards associated with open dumps, the Province established garbage disposal sites as a regional function in 1973 at the request of the CRD Board. Given this authority, the CRD acquired Hartland Landfill in 1975 and assumed direct operation in 1985. The CRD's first solid waste management plan, approved by the Province in 1987, increased recycling efforts and redirected all landfilling in the region to Hartland where disposal management and safety would benefit from advanced engineering controls.

How have CRD residents been consulted on the draft plan?

The CRD carried out widespread public engagement that sought feedback on the [goals](#) and [strategies](#) proposed for a new regional solid waste management plan in late 2019. During this phase all capital region residents were invited to provide their input through a variety of channels, including an online feedback form and in-person opportunities at 21 open houses and stakeholder meetings.

Overall there was a high level of support for all plan elements. Detailed feedback from this first round of public consultation is available at www.crd.bc.ca/rethinkwaste. These comments informed the evolution of the draft plan and a second phase of consultation will take place from November 2020 to January 2021.

Waste composition

Can the CRD put more effort into making sure recyclable materials don't end up in the landfill?

Most of the strategies and actions outlined in the draft solid waste management plan are focused on reducing waste and keeping materials in the economy and out of the landfill.

Our regional model for waste management is built on separation at the source—on residents and businesses keeping banned and recyclable materials out of their garbage in their households and through operational practices—so the public education programs outlined in strategies one through four of the draft plan, including food waste and single-use items, are critical for the region to be successful in its target of reducing waste by at least a third to 250 kg per person per year. This

Frequently Asked Questions

Capital Regional District | December 2020

work will also require continued collaboration with other levels of government that have jurisdiction on material bans and extended producer responsibility programs.

Plastics make up 14.3% of Hartland waste; when will CRD ban plastics?

Plastic materials that are already part of the Province's Extended Producer Responsibility policy are banned from the garbage and the CRD will continue to advocate for the regulation of additional materials under this legislation. The CRD, in partnership with product producers, provides collection of plastic packaging and products that contain plastics such as electronics, through our depot and curbside collection programs.

Both the Provincial and Federal governments are currently developing approaches for dealing with plastic-based material and the CRD has provided input to these processes. In the end, Hartland Landfill is the recipient of the decisions consumers make and we have a responsibility to provide a disposal option for their materials that cannot be recycled.

Can the CRD implement a region-wide plastic bag ban?

The CRD doesn't have authority to ban specific products, but staff drafted a model bylaw that some municipalities leveraged locally until Federal and Provincial policy was developed.

Does the CRD work with Provincial or Federal governments for regulation to reduce non-recyclable packaging used in consumer products?

CRD staff work with both Provincial and Federal regulators on an ongoing basis to advocate for and provide input on potential regulations related to a range of packaging and products. The CRD recently responded to policy intentions papers related to reducing plastic waste and mandating more recycling through regulation and that's our role as a region in these policies. The CRD doesn't have jurisdiction to regulate design and distribution of packaging products regionally or create markets for these materials but we have a significant voice and opportunity to advocate for change on a provincial and national level and our responsibility for this work is outlined in strategies six and ten of the draft plan.

Are fines or disposal levies currently issued for food scraps or recyclables?

Material is inspected when it arrives at Hartland and, if a garbage load contains excessive amounts of recyclable or compostable materials, the hauler is subject to ticketing under CRD bylaw in addition to the cost of disposal. It is up to the hauler/collector whether they communicate this back to their customers or absorb the fine as a cost of doing business.

Frequently Asked Questions

Capital Regional District | December 2020

Would it be possible to divert the wood waste and any other burnables to an onsite incinerator for power generation?

There's significant opportunity to divert clean wood waste from the landfill—particularly from the construction sector—and strategy #12 in the draft plan is focused on this issue with an eye towards pursuing beneficial uses for this material. In terms of power generation, the CRD is currently pursuing a partnership with FortisBC to upgrade landfill gas to Renewable Natural Gas that could provide energy to up to 2,200 homes in the region and reduce the region's greenhouse gas emissions by about 264,000 tonnes of carbon dioxide equivalent over 25 years.

How can the CRD make it feasible to add textiles to the recycling stream?

Textile recycling is an area of regulation and policy the Province is exploring and the CRD has provided input into. In the new management plan the CRD will continue advocacy in this area and maintain funding for [non-profit organizations](#) that provide services through which the public can keep their unwanted textiles and household items in the economy through donation, repair and reuse programs. Collection of reusable and recyclable textiles is also being piloted through [Return-it](#), the organization in BC responsible for beverage container and electronics recycling.

Why is cruise ship waste sent to Hartland Landfill?

In 2019, Hartland Landfill received approximately 2,100 tonnes of cruise ship waste—representing 1.3% of the waste landfilled that year. CRD staff have had discussions with the Greater Victoria Harbour Authority and their solid waste contractor and have made recommendations to the Province in an effort to increase the diversion of this material so less is landfilled in the future.

In Canada, solid waste from cruise ships is managed according to the International Waste Directive under the authority of the Canada Border Service Agency and the Canadian Food Inspection Agency.

What specific actions does the plan have in support of zero waste targets related to salvage businesses and more depots?

A number of strategies and actions in the draft plan are focused in these areas, including establishing a community-based waste reduction grant program under strategy #2, funding non-profits and investigating a free store at Hartland Landfill under strategy #4 and collaborating with municipal and private sector service providers to support depot diversion efforts in the region for non-curb-side materials under strategy #7.

Environmental controls

Does Hartland Landfill have a plastic liner to collect leachate?

All leachate is contained and collected at Hartland Landfill and then processed through the region's wastewater treatment system to protect human health and the environment. Groundwater, surface water and over 150 domestic wells are regularly tested through an extensive environmental monitoring program that's been in place since 1983.

How will Hartland Landfill ensure drinking water and agricultural lands near this facility are safe in the future?

Hartland routinely samples for key constituents in domestic wells that would be indicative of any leachate. The parameters do not necessarily align with all of the drinking water guidelines but allow staff to evaluate any groundwater impacts related to the landfill. Results of the annual domestic well monitoring program have indicated that the landfill leachate is not migrating off site and that leachate is effectively contained and controlled on site but this infrastructure has a leak detection system that would allow for a quick response in the event of a spill incident.

Is an Environmental Impact Assessment required for the Hartland 2100 design concept?

The CRD is currently working collaboratively with the Province to determine whether or not specific projects within the draft plan require further review under the Reviewable Projects Regulation.

The current language in the plan does not indicate that the CRD's Hartland 2100 design concept will be considered a reviewable project under the Environmental Assessment Act and CRD staff are working directly with this Province to confirm this interpretation.

How will nearby wetlands be impacted by the Hartland 2100 design concept?

Hartland Landfill is highly regulated, controlled and monitored to ensure Provincial standards are met under the Environmental Management Act.

Groundwater, surface water and over 150 domestic wells are regularly tested through an extensive environmental monitoring program that's been in place at Hartland Landfill since 1983 to protect human health and the environment. All monitoring results and groundwater flow trends are regularly reviewed by staff and are reported annually to the Province as a requirement of the CRD's Landfill Operation Certificate.

How will forested land be impacted by the Hartland 2100 design concept?

The CRD routinely conducts environmental inventories of previously undisturbed areas of the landfill to understand the impact of its operations. The Hartland 2100 design concept, intended to keep the landfill's footprint as small as possible,

Frequently Asked Questions

Capital Regional District | December 2020

will require the removal of second-growth trees from land already within the landfill property, excluding tree and fire buffers required by the Province. Tree removal will begin in approximately 2030 to prepare this space for future landfilling unless the region significantly reduces its waste per capita rate or new technology for waste management emerges.

The development of this land will be offset by the reforestation program already in place for all closed areas of the landfill, including 20 acres of reforested land now that will have grown to 50 acres by 2040. The final build-out of Hartland's filling area—the 2100 design concept—also includes a progressive reforestation plan that will reduce the greenhouse gas emissions generated by the landfill through carbon sequestration.

Climate change mitigation

Given the CRD's declared climate emergency and the goal of carbon neutrality by 2050, how is Hartland 2100 consistent with these goals?

The greenhouse gas emissions produced by Hartland Landfill are less than 5% of the region's total—well below the national average of 20% for similar facilities. Operational staff are doing everything possible to further minimize this number, including improving landfill gas collection efficiency and beneficially using this gas as RNG. The CRD is currently conducting a fugitive emissions monitoring study at Hartland Landfill and the results of this work will inform operational practice to address the <5% and move our region closer to the CRD's carbon neutrality goals.

Why hasn't a climate impact study been done for the Hartland 2100 project?

The CRD is currently conducting a fugitive emissions monitoring study at Hartland Landfill and staff will be taking the results of this work and putting them into operational practice to move our region closer to the CRD's carbon neutrality goals.

Disposal capacity

Why does Hartland Landfill need to last beyond 2045?

Provincial legislation requires the CRD to provide a safe, secure and sustainable disposal option for regional solid waste now and in the future. If waste trends and population growth across the region continue along the path they're projected to, Hartland Landfill's active filling area will be at capacity by 2045—even sooner in the event of a major earthquake—yet the Province requires the CRD to responsibly manage waste in perpetuity. Additional land already within the Hartland Landfill property will need to be used for landfilling by approximately 2045 unless more waste is diverted or a new technology for managing waste becomes available and economically feasible for the CRD.

What land will be used for landfilling beyond 2045?

The proposed Hartland 2100 design concept is not an extension or expansion of the landfill's existing boundaries—it's a filling plan that maximizes the use of land already within the property boundary for the region's one and only landfill.

If approved as part of the region's new solid waste management plan, the Hartland 2100 design includes using a strip of land within the current landfill boundary for waste disposal starting approximately 20 to 25 years from now, with preparations for this work beginning around 2030.

Although this land has always been reserved for future landfilling, it was temporarily leased to CRD parks from the 1990s until 2019 in recognition that it wouldn't be required for landfill operations until at least 2020.

Why did the CRD reject the recommendation to adopt a higher waste reduction target of 125 kg per capita?

The CRD incorporated the solid waste advisory committee's recommendation of a 125 kg per capita target as an aspirational goal in the draft plan in the event that the region hits its one third reduction target quickly over the next 10 years. The plan is flexible and it allows us to incorporate additional actions if Provincial and Federal policies change and if residents start throwing less garbage away.

Will this draft plan keep the CRD amongst the lowest disposal rates in the province?

The CRD has been a leader in the province in terms of lower than average per capita disposal rates for the past 30 years

The new plan continues this legacy with an ambitious target of reducing the region's waste by one third to 250 kg per capita within the next 10 years and includes an aspirational goal to reduce waste by another third if we achieve our target quickly. The Province must approve the regional plan and they'll only do so if the target is realistic and based on good research about what's truly possible within the timeframe of the plan—and that is the work that's been done so far in evaluating the tools available in our region to get to a one third reduction by 2030.

The City of Victoria has just released their own Zero Waste strategy and their reduction target of 50% by 2040 aligns with the overarching target for the capital region. Collaborating with the City of Victoria and all municipalities and electoral areas within the capital region on their zero waste goals is strategy #5 of the CRD's draft plan.

Alternative technology

What alternatives to landfilling has the CRD considered?

In addition to exploring gasification and tri-region waste disposal options, the CRD Board considered possibilities for implementing an Integrated Resource Management (IRM) model at Hartland Landfill. IRM is a process that promotes

Frequently Asked Questions

Capital Regional District | December 2020

integrated management of solid and liquid waste residuals to maximize resource recovery through combined processing of some or all of these materials.

The CRD concluded its IRM procurement process in January 2018 and, as a result, no longer has an IRM mandate. At the direction of the Board, staff are pursuing two discrete resource recovery opportunities for both the beneficial use of biosolids generated by the Wastewater Treatment Project and organics collected in the capital region.

The CRD's draft solid waste management plan currently being considered by the public includes the commitment to continue researching and investigating emerging technologies under strategy #15, "Enhance Hartland disposal capacity".

Why not make waste-to-energy mandatory in all municipalities?

Although the CRD can't mandate waste-to-energy projects in every municipality, strategy #15 of the draft plan is focused on exploring alternatives to landfilling as they emerge and become feasible for the region.

Biosolids

How will biosolids be used beneficially at Hartland Landfill?

For the next five years the CRD will transport most biosolids produced from treated wastewater to the Lower Mainland where they will be used as an alternate fuel source to power cement manufacturing at Lafarge Canada.

During the annual cement plant shut-down periods (approximately four to six weeks per year) the biosolids will be used at Hartland Landfill as a nutrient additive to improve vegetation growth. This material will also be beneficially used as an engineered cover to reduce future greenhouse gas emissions.

Are biosolids safe to use on land?

Across Canada, public regulators have reviewed the scientific research and data and have concluded that land application of biosolids is safe. With provincial and federal regulatory oversight, staff have done the due diligence to ensure wastewater treatment meets the provincial requirement under the Organic Matter Recycling Regulation to protect human health and the environment. This treatment allows the Class A biosolids produced in the capital region to be beneficially used in accordance with regulations and will exceed the standards set by the provincial and federal governments.

How will the CRD ensure biosolids don't impact areas outside the landfill?

The biosolids growing medium produced at Hartland Landfill will not be applied to any areas outside of the landfill footprint—itsself a highly controlled and monitored property under the Environmental Management Act.

Frequently Asked Questions

Capital Regional District | December 2020

Containment measures already in practice at Hartland Landfill include a dust suppression plan, a requirement of our Landfill Operating Certificate.

An extensive, well-established environmental monitoring program to protect human health and the environment is already in place at Hartland Landfill to ensure there are no negative impacts associated with land application of Class A biosolids either on site or in the surrounding area

Funding

Zero waste targets will eliminate tipping fees—where is the incentive to reduce waste and what financial model will Hartland use in a zero waste environment?

The CRD's solid waste function is not solely dependent on tipping fee revenue for its operating budget. Significant funding is also derived from extended producer responsibility (EPR) contracts where the CRD receives payment from EPR agencies such as Recycle BC and Encorp Pacific to collect recyclable materials on their behalf. Revenues are also produced from the collection and utilization of landfill gas and from the sale of recyclable materials such as scrap metals. Finally, should it become necessary, solid waste services could also be funded through tax requisition, as it is in most other jurisdictions.

Managing resources

Does activity at the Hartland site include rock mining?

There is no commercial mining activity at Hartland. A historical and ongoing activity, aggregate is extracted within the landfill operating boundary to create air space for waste. This rock is processed on site for use as a construction material for building internal roads and as a cover for portions of the landfill. The CRD will not truck excess material offsite and is committed to storing rock for future landfill activities on site.

The CRD has recently partnered with the Habitat Acquisition Trust to conserve land near Prospect Lake yet it will be removing trees to expand the landfill. How does the CRD explain this differing approach to conservation?

The CRD has a long history of conserving land for park use, including transferring large parcels of Hartland Landfill property to CRD parks in 1994 (210 hectares) and 2003 (40 hectares) to permanently protect these areas as part of Mount Work Regional Park. The CRD also needs to use land to support other service areas apart from parks and we have a responsibility to provide a safe and sustainable option for waste disposal for the region.

Frequently Asked Questions

Capital Regional District | December 2020

How will parks users be impacted by the Hartland 2100 design concept?

The strip of Hartland Landfill property leased temporarily by CRD Parks has been used primarily by mountain bikers. As the Hartland operating area develops, the mountain bike trails extending beyond Mount Work Regional Park will be impacted.

These temporary trails will continue to be accessible for the next 10 years, allowing time for consultation and construction of new or improved trails in permanent park land through the Mount Work management planning process. The CRD anticipates needing to permanently close these trails around 2030 and is already working closely with the South Island Mountain Biking Society on alternative options.

Implementing the Hartland 2100 filling plan will not result in health or safety risks for Mount Work Regional Park users or residents living near Hartland Landfill.

Has any thought been given to mining the existing landfill for at least the metals for recycling?

Metal has been banned from Hartland Landfill since 1993 and it's a material stream that tends to self-regulate because there's such a profitable market for recycling it. Hartland Landfill and the regional plan is based on a model of source separation so we've been successful at keeping this material out of the landfill for the past 30 years and it's not economically feasible to go mining for those minimal residuals at this time. Strategy #15 in the draft plan is focused on exploring new technologies for residuals management so a process may emerge that allows for the efficient recovery of excess metal or other materials from the landfill in the future.