



**Cowichan Valley Regional District  
2018 Solid Waste Management Plan  
Citizen's Document**

## **MESSAGE FROM THE CHAIR – SOLID WASTE MANAGEMENT PLAN – CITIZEN DOCUMENT**

When we think about the waste we create as an individual or household in the Cowichan Valley, it may be easy for us to identify the ways we are reducing the garbage we produce and recyclable materials we divert. However, when looking at the waste we create on a regional level, it can be more difficult to identify the ways that we are progressing towards our Zero Waste goal. While we remain within the provincial average for waste production by household, there are still many opportunities for us to improve, some of those being through new policy and services provided by the CVRD to make it easier for you as a resident to achieve your own goals, and contribute to our collective goals.

The CVRD Solid Waste Management Plan represents an opportunity for us to implement new ways to reduce our individual and collective footprint, from the residential waste we are each responsible for in our own homes, to the commercial and industrial waste that is created by the business sector in our region.

This plan is meant to act as our road map for tackling the complex challenges we face in managing our solid waste while still promoting a thriving local circular economy. It will take time, and it will take the participation of all of us to see meaningful progress and measured success. But we are committed to introducing and administering the best possible solutions to bring us to a point where we can be proud of our progress.

The Cowichan region continues to be a proven leader in many aspects of sustainability. We have been formally recognized for our approach to the protection of our drinking water and management of our public infrastructure, and we hope to carry that forward to the management of our solid waste.

It is our hope that you will embrace the plan we developed in collaboration with CVRD residents, businesses and interested parties, and help us move towards our goal of a Zero Waste future for the Cowichan region.

Sincerely,

Lori Iannidinardo

Chair, Cowichan Valley Regional District

## **ACKNOWLEDGEMENT**

We acknowledge that for thousands of years the Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Penelakut, Stz'uminus, Lyackson, Ditidaht & Pacheedaht Peoples have walked gently on the unceded territories where we now work.

## What is a Solid Waste Management Plan?

The Cowichan Valley Regional District (CVRD) has developed a [Solid Waste Management Plan](#) (SWMP) that will serve as the guide for solid waste management related activities and policy development in the CVRD. It provides a vision for managing waste and recycling for the next 20 to 30 years, with clear actions set out for the next ten years including strategies on collection, recycling and composting, processing, waste reduction, education, financing and disposal.

The province sets guidelines on how municipalities and regional districts manage solid waste through the BC Environmental Management Act, which requires regional districts to create SWMPs for more effective long range planning. CVRDs first SWMP was approved by the Minister of Environment (ENV) in November 1995, and since then, the SWMP has undergone three major amendments which took place in 1997, 2002 and 2006. The latest amendment was completed in 2018 and approved by ENV on August 14, 2020.

## What is solid waste?

The CVRD SWMP applies to all aspects of the municipal solid waste management in the CVRD. As per the BC Environmental Management Act, municipal solid waste covers garbage, recycling, compost and construction/demolition waste. It does not include agricultural, industrial, forestry, biosolids, liquid or hazardous waste.

### The waste managed within the CVRD is categorized into sectors:

- Residential (single family and multi-family)
- Institutional (schools, hospitals, offices)
- Commercial (restaurants, retail stores)
- Industrial (mechanic shops, landscaping)
- Construction and Demolition (new builds, renovations)

### Three types of waste collection exist in the CVRD:

- Public collection, or publicly contracted collection through the municipalities or participating electoral areas
- Private collection
- Self-haul by residents or small businesses to recycling centres.



The CVRD Waste Transfer Station Building, located at the Bings Creek Recycling Centre, can hold approx. 700 tonnes of garbage and recycling. (700 tonnes is about the weight of 13 school buses!)



2017 GHG (Greenhouse Gas) Summary tCO<sub>2</sub>e:

- CVRD Fleet Collection and Equipment: 567
- Contracted Services: 88
- Transport to Landfill: 161

Total CVRD Emissions: 2,098

Voluntary Offset Credits from Yard and Garden Diversion: 1456

The CVRD provided garbage collection to 5,300 single-family homes and recycling collection to 13,500 single-family homes in 2017



The CVRD is responsible for monitoring 3 closed garbage incinerator sites and 1 old landfill site



The CVRD has 3 Recycling Centres - Peerless Road, Meade Creek, and Bings Creek



CVRD Waste Collection Data 2017 (extracted from Solid Waste Management Plan) (in Tonnes)

Garbage: 30,608  
Recycling: 44,000  
Compost 12,065

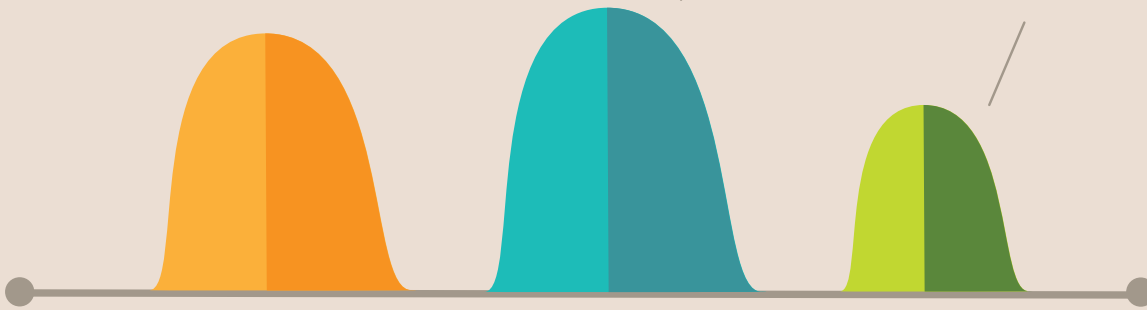


### Waste Disposal Goals & Rates

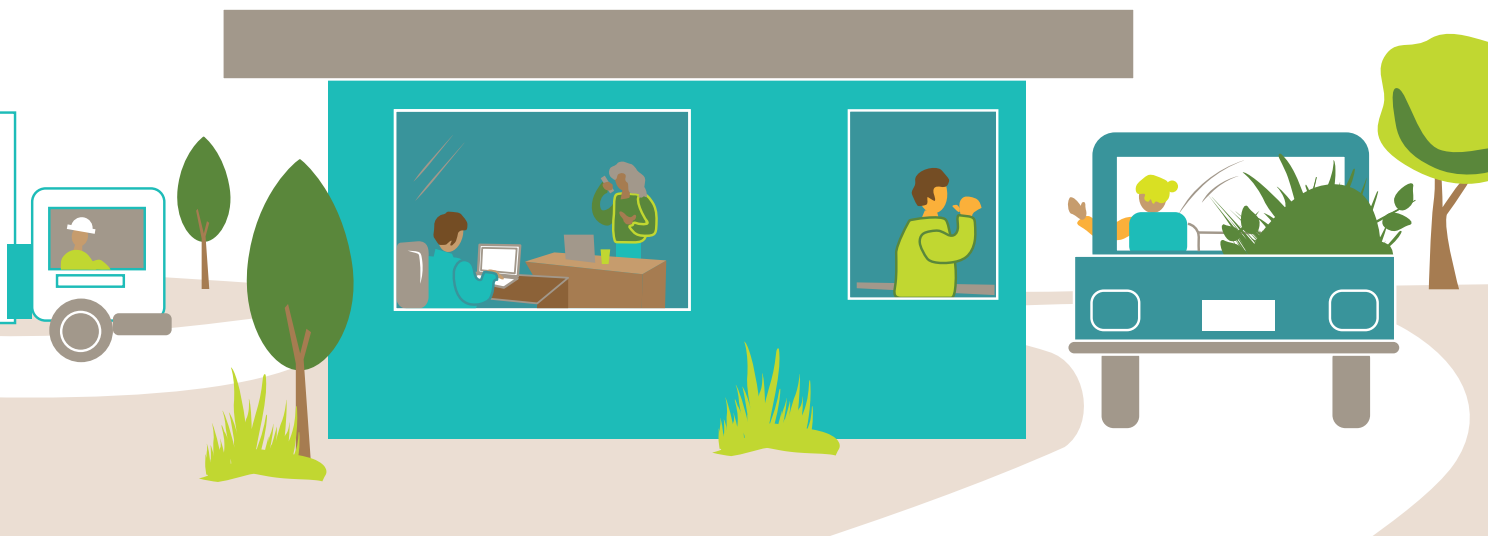
BC Disposal goal - 350 kg/capita

CVRD Disposal rate (2017) - 358 kg/capita

CVRD 2030 goal - 250

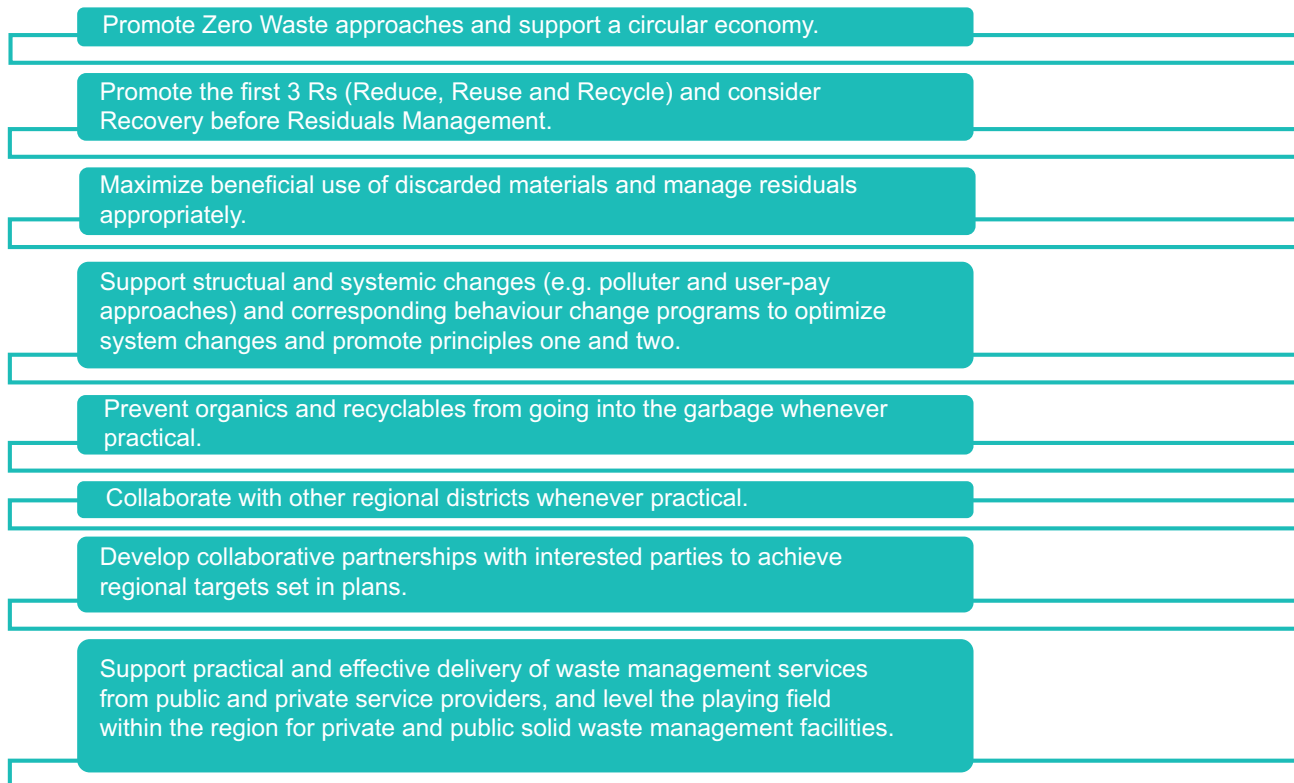


The CVRD has 25 staff members managing waste and recycling



## How does the CVRD set waste management goals?

A SWMP provides regional districts with clear direction on how they will achieve their solid waste goals. The province has eight guiding principles to assist regional districts in the development of their goals and strategies.



*Fig. 1 - Provincial Guiding Principles*

## What are CVRD's waste management goals?

CVRD's solid waste disposal rate in 2017 was 358 kg per person per year (or per capita). The SWMP outlines a commitment to reduce the solid waste disposal rate to 250 kg per capita by 2030 and ultimately to reach the goal of Zero Waste. To achieve this goal, the SWMP outlines four categories of strategies:

1. Improve Waste Reduction/Diversion;
2. Support Transport and Processing Infrastructure;
3. Improve Recovery and Residuals Management; and
4. Supporting System Resilience.

## What does Zero Waste mean?

Zero Waste means moving toward a circular economy, meaning “waste” is viewed as a resource, and maximum value is extracted from all waste before it is eventually recovered or repurposed.

The CVRD has also adopted the 5 R pollution prevention hierarchy – Reduce, Reuse, Recycle, Recovery, and Residuals Management - to help prioritize strategies and encourage the behavioural change needed to achieve the Zero Waste goal.



Figure 1-2: Pollution Prevention Hierarchy Source: (BC Ministry of Environment and Climate Change Strategy, n.d.)

## Why is solid waste management important for the CVRD?

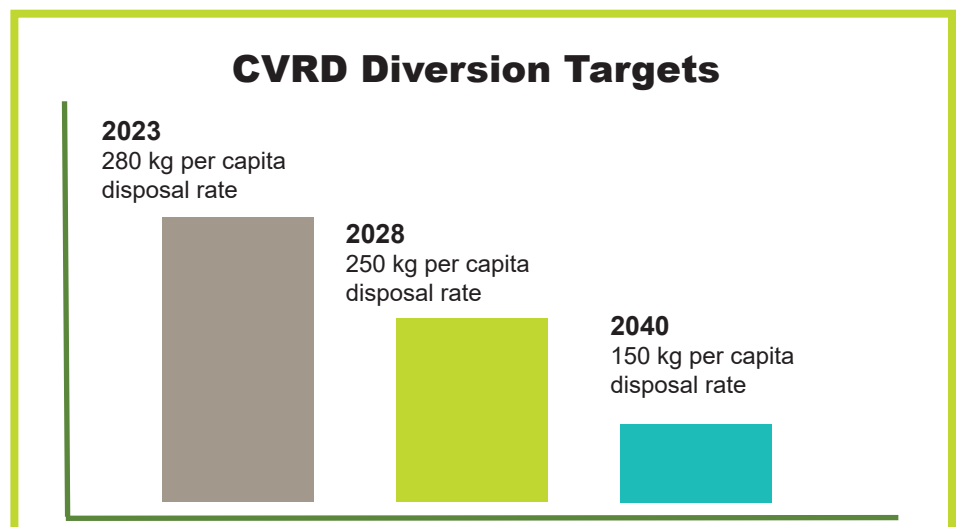
The CVRD has one of the lowest disposal rates in the province and is well below the average provincial disposal rate of 498 kg of waste per capita. In 2013, the province set a waste disposal target for 350 kg of waste per capita by 2020, and in 2017 the CVRD’s disposal rate was 358kg of waste per capita.

**The Cowichan Valley** population is expected to grow to over 100,000 by 2040. If the current disposal rate was to stay at 358 kg of waste per capita, the total disposal would increase to over 36,000 tonnes. Therefore, we need to find ways to reduce waste so that we are not paying more money to landfill waste, especially waste that could be redirected.

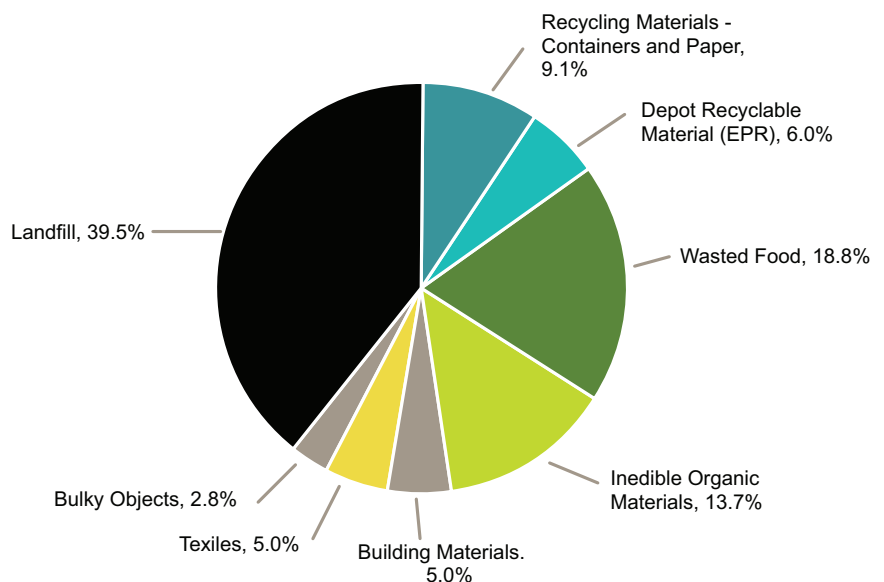
### What does per capita mean?

It's the average waste disposed per person over the year.

It is calculated by dividing the total waste disposed in the region by the total population.



**A waste composition study** was completed during the SWMP amendment to see what is currently being landfilled. It was identified that over 45% of the waste sent to landfills could be diverted. This SWMP intends to implement strategies to promote more diversion of this waste so it can be utilized as a resource and get us closer to our Zero Waste goal.



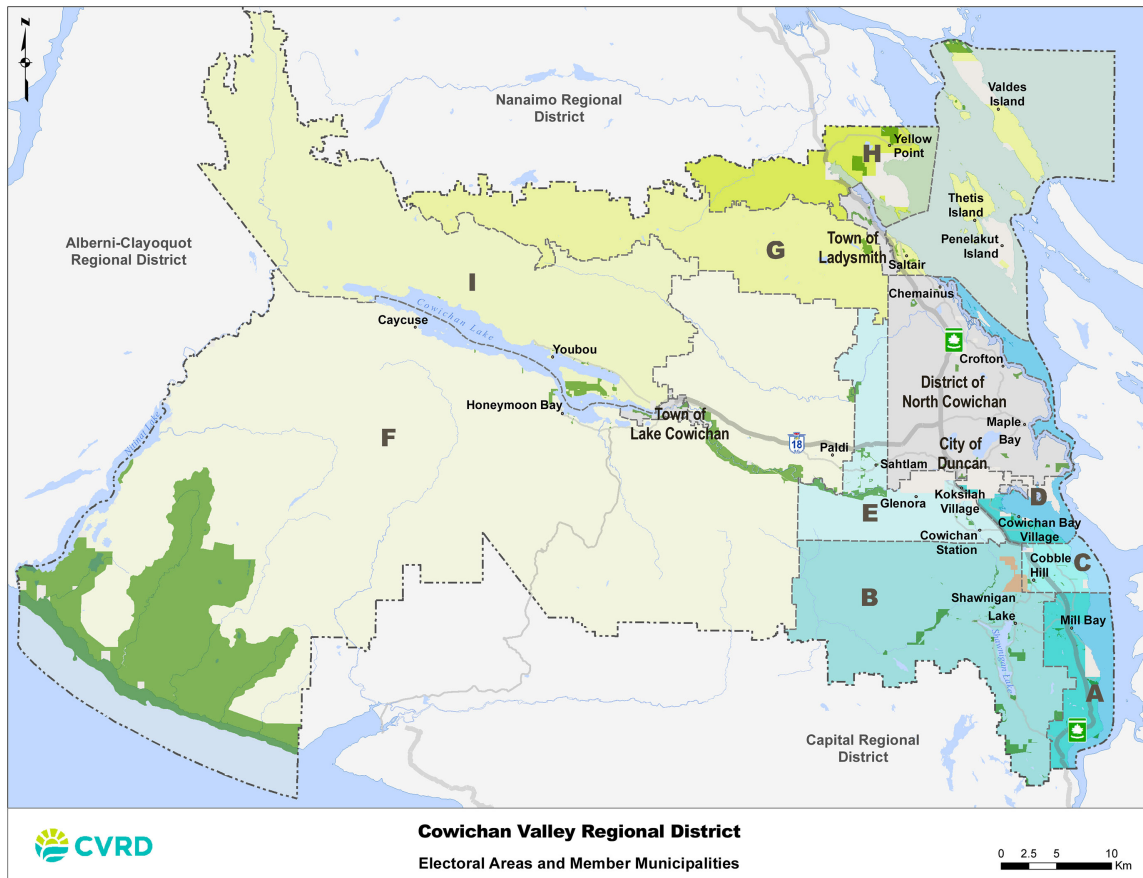
*Diversion Potential of CVRD Waste Stream*



## How is solid waste managed now in the CVRD?

### Plan Area

The SWMP applies to the entire CVRD region, including all nine Electoral Areas (A-I) and four municipalities (City of Duncan, Town of Ladysmith, Town of Lake Cowichan, and District Municipality of North Cowichan).



*Map of the Cowichan Valley Regional District*

The CVRD operates within the traditional territories of 10 First Nations in the Coast Salish and Nuu-chah-nulth tribal regions. First Nations have autonomy over their utility infrastructure, including solid waste and are therefore not part of the plan area. However, First Nations communities rely on regional solid waste services and infrastructure including waste transfer stations and recycling centres. The CVRD acknowledges and supports opportunities for First Nations and CVRD communities to work together to improve solid waste management in the region, including reducing illegal dumping on the First Nation lands.

## Policies and Regulations

The CVRD has adopted bylaws that promote sound environmental management for regional waste systems and support the CVRD's waste reduction and diversion goals. Solid waste bylaws adopted by the CVRD include bylaws that determine the management of curbside waste collection, the management of waste at private waste processors and the rules for burning of yard and land clearing waste to minimize negative health impacts from wood smoke:

- Bylaw No. 1958 – Garbage and/or Recyclable Materials Collection, 1999;
- Bylaw No. 3716 – Smoke Control Regulation Bylaw, 2013;
- Bylaw No. 2020 – Landclearing Management Regulation Bylaw, 2006;
- Bylaw No. 2570 – Waste Stream Management Licencing Bylaw, 2004; and
- Bylaw No. 2108 – Solid Waste Management Charges & Regulations Bylaw, 2000.

## Operational Facilities

Municipal waste in the region is managed at authorized facilities. There are three public Recycling Centres in the CVRD and several private processing facilities, some which are required to be licensed under CVRD Bylaw 2570.

There are no landfills in the CVRD, so waste destined for disposal is currently exported to an out-of-region landfill. Because there is limited landfill capacity on Vancouver Island and in the Lower Mainland, CVRD waste is currently exported to Washington State, USA. The waste is transported there via truck, barge and rail service.

For recyclable materials, processors are facilities that sort and sell (or use) recycled materials. Organics processors are facilities that recover nutrients from waste organic material through composting or another process (for example, anaerobic digestion). There are no processors for comingled (mixed) recyclables in the CVRD; these materials are transported to a materials recycling facility (MRF) in either Nanaimo or Victoria.



## Historical Facilities

Until the late 1990s, the region relied on three municipal solid waste incinerators and one municipal landfill for waste disposal. These sites are currently being monitored, except the Koksilah Road Incinerator Site which is currently under mediation.



*The CVRD Meade Creek Recycling Centre -  
Encapsulated Garbage Incinerator Ash*

## Residential Curbside Collection

All municipalities provide curbside collection of garbage, recycling and compost. In the CVRD Electoral Areas, curbside collection services levels vary. The CVRD provides curbside garbage collection to approximately 5,300 households in Electoral Areas D, E, F, G, and I. Areas A, B, C, and H currently have no mandatory garbage collection service, but residents in these areas can access a private hauler and subscribe to a garbage collection service. Subscription service is not available to all residents. Recycling collection is provided to all the Electoral Areas by the CVRD, however no compost service is provided by the CVRD, instead it is available by subscription from a private hauler in some areas.

## Industrial, Commercial and Institutional (ICI) Collection

Except for the Town of Lake Cowichan, the ICI sector is serviced by the private sector for garbage, recycling and organics collection. Services vary from three-stream (garbage, recycling, and organics) to garbage only. Small-volume commercial generators may choose to self-haul waste materials to collection facilities. Public and private collection facilities can accommodate small quantities of commercial material.



## Recycling Centres Collection

Materials not collected by curbside programs are typically self-hauled by residents and businesses to recycling centres. Residents and businesses that may use these recycling centres include:

- Residents who do not receive curbside garbage collection (i.e., residents in Electoral Area A, B, C, and H);
- Residents who occasionally produce more garbage than they can dispose of at curbside; and
- Residents who wish to recycle materials that are not accepted in their curbside recycling program.

The Recycling Centres in the region include three CVRD-owned and operated facilities (Bings Creek, Peerless Road, and Meade Creek) and three private facilities. The southern Electoral Areas (A, B, and C) are served by private facilities. In lieu of a public recycling centre, the CVRD partners with a private facility to offer free drop-off for packaging and printed paper, and yard waste, for south end residents.



*CVRD Curbside Collection Trucks*

## How is the CVRD implementing the solid waste management plan?

The SWMP identified key issues within the region related to waste management which lead to four major theme categories. The issues were identified through input from the public and stakeholder groups and technical and public advisory groups. The issues identified key areas of improvement that led to the endorsement of 13 strategies to be actioned to address the issues.

### Solid Waste Management Plan Strategies

<u>Theme Category</u>	<u>Issue</u>	<u>Strategy Action</u>
<b>Improve Waste Reduction and Diversion</b>	<ul style="list-style-type: none"> <li>• Insufficient program and behaviour change resources</li> <li>• Low diversion rates from ICI (Institutional, Commercial, Industrial) and multi-family sectors</li> <li>• Limited access to collection services for some areas</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance reduce and reuse potential</li> <li>• Reduce disposal from ICI and multi-family residential</li> <li>• Reduce disposal from residential sector</li> </ul>
<b>Support Transport and Processing Infrastructure</b>	<ul style="list-style-type: none"> <li>• Limited organics processing putting pressure on existing facilities</li> <li>• No transfer or processing capacity for co-mingled (mixed) materials</li> <li>• Significant Construction and Demolition (C&amp;D) material in garbage</li> </ul>	<ul style="list-style-type: none"> <li>• Improve organics processing</li> <li>• Investigate processing and transfer capacity for ICI recyclables</li> <li>• Improve management of Construction and Demolition (C&amp;D) material</li> </ul>
<b>Improve Recovery and Residuals Management</b>	<ul style="list-style-type: none"> <li>• No local disposal capacity, waste exported out-of-region</li> <li>• Illegal dumping of material on-going</li> <li>• Limited disposal options for household hazardous liquids</li> <li>• Number of closed disposal sites that require monitoring and management</li> </ul>	<ul style="list-style-type: none"> <li>• Explore options for local disposal</li> <li>• Reduce illegal dumping</li> <li>• Implement collection / drop-off for HHW, bulky items and organic debris</li> <li>• Monitor historic disposal sites</li> </ul>
<b>Support System Resilience</b>	<ul style="list-style-type: none"> <li>• No Asset Management Plan to support long-term sustainable service delivery</li> <li>• No Disaster Management Plan in event of natural disaster</li> <li>• Additional resources needed to support behaviour changes to incorporate best practices</li> </ul>	<ul style="list-style-type: none"> <li>• Implement Asset Management Plan</li> <li>• Develop a Disaster Management Plan</li> <li>• Integrate education and behaviour change best practices</li> </ul>



In addition to addressing the issues identified through public outreach and stakeholder engagement, the strategies are also intended to:

- Meet provincial regulations and goals;
- Align with requirement of RecycleBC and other contractual agreements;
- Meet health and safety requirements;
- Protect the environment and promote sustainability; and
- Move towards the goal of Zero Waste.

The strategies have the potential to significantly reduce the amount of solid waste disposed in the CVRD.

The SWMP lays out the high-level goals, costs and timelines for the solid waste program implementation in the CVRD and is intended to be flexible in the implementation of plan components, either directly, or in cooperation with municipalities, or through private firms and/or non-profit organizations.



*CVRD Peerless Road Recycling Centre*

## How will CVRD monitor progress?

A Plan Monitoring Advisory Committee (PMAC) will monitor the implementation of the plan and make recommendations to increase its effectiveness. A description of the PMAC will be included in a Terms of Reference, which will be developed with public and stakeholder input, based on the template provided in the Ministry's Guide.

The CVRD will compile data from CVRD sites on all residual disposal activities in the regional district and provide annual information to the Ministry's online disposal calculator.

A five-year review will be carried out by the CVRD to track the SWMPs implementation and effectiveness, as prescribed by ENV. This review may include:

- Overview of all programs or actions undertaken in the first five years to support the plan's goals and targets, including status and implementation costs for each;
- Description and forecasted budget for programs or actions not yet started and status, including explanations for delays or cancellations of plan components;
- Five-year trend information for waste disposal per person;
- Five-year trend of greenhouse gases emitted and avoided, if available; and
- Any significant changes that might impact the solid waste management system over the subsequent five years.

For full details of the CVRDs Solid Waste Management Plan and progress updates, visit this link: <https://www.cvrld.ca/2979/Solid-Waste-Management-Plan>



## How do I stay engaged?

The CVRD offers several learning tools for residents to use.

You can visit the [CVRD website](#) to learn more about garbage and recycling and get great tips on how to lower curbside contamination.

Download the **Cowichan Recycles** mobile app to access your collection schedule, and get reminders sent directly to your phone.

Learn how to dispose of items using the [Cowichan Recyclopeda!](#) Or watch a [video](#) to learn what should not go into your curbside recycling tote and what is considered contamination.

Explore information about food waste reduction and the reFRESH Cowichan food recovery program on the CVRD [food waste webpage](#).

Contact the CVRD Recycling Hotline if you have questions or concerns.

Phone: 250.746.2540 or 1.800.665.3955

Email: [curbside@cvr.bc.ca](mailto:curbside@cvr.bc.ca)

