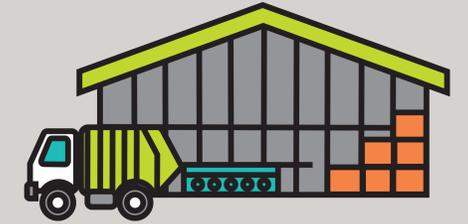


MANAGING OUR WASTE

We want to hear from you



The region's **Solid Waste Management Plan** is being updated. Thirteen strategies to help reduce garbage, and increase recycling, have been proposed. Tell us what you think. Visit us online to read the draft Plan, and fill out a Survey before September 14.

PlaceSpeak.com/SWMP
cvrd.bc.ca/SWMP

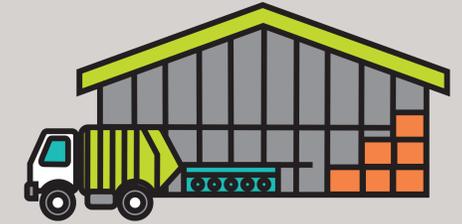


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MANAGING OUR WASTE

Process & Timeline



Stage 1

Initiate the Planning Process (complete)

Stage 2

Set the Plan Direction (complete)

Stage 3

Evaluate Strategies (in-progress)

Stage 4

Prepare and Adopt the Plan

Stage 1 and 2

Initiate the Process and Set Direction

- 1 Committee and planning team established, scope of work identified
- 2 Current system status report issued for review

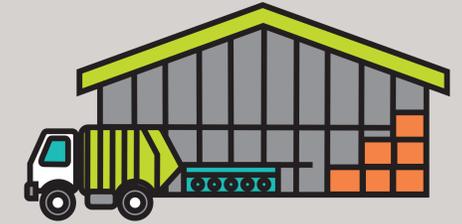
Stage 3

Evaluate Strategies

- 1 Develop strategies
- 2 Assess financial and administrative impacts
- 3 Review with Plan Advisory Committee to establish plan direction

MANAGING OUR WASTE

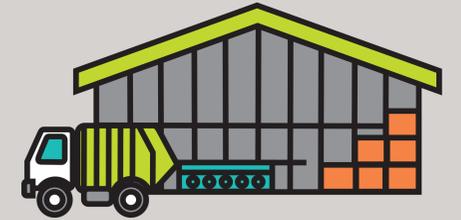
Estimated Disposal Rates By Sector



Sector	Percent of Total Disposed Materials (Garbage Only)	Quantity of Disposed Materials (tonnes)	Tonnes Organics	Tonnes Recyclables	Tonnes Building Materials	Tonnes Textiles	Tonnes Bulky Objects
 Single-Family (Municipalities)	10%	3,008	909	547	82	236	5
 Single-Family (Electoral Areas)	9%	2,584	1164	394	113	183	0
 Multi-Family	8%	4,998	947	592	38	125	0
 Industrial, Commercial, and Institutional	41%	12,262	6475	2257	315	549	50
 Drop-off	16%	2,340	240	623	924	369	622
 Construction and Demolition	16%	4,908	55	151	42	55	159
Total Disposal Rate	100%	30,100	9,790	4,564	1,514	1,517	836

MANAGING OUR WASTE

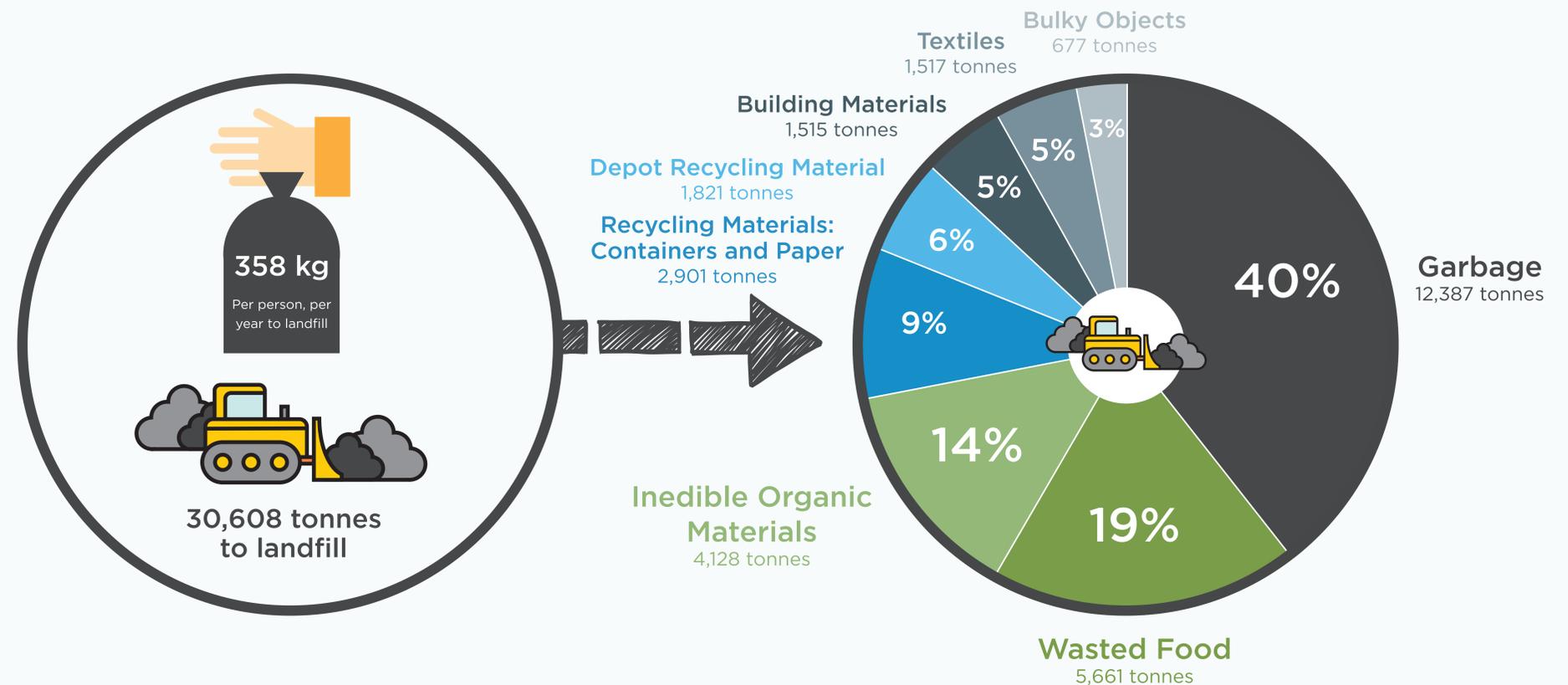
How much waste do we produce?



What's going to the landfill?

Our region produced 77,000 tonnes of material in 2017, all of which needed recycling or disposal. Almost 60% of this material was recycled, but 40%, or **30,608 tonnes**, was still sent to the landfill. This works out to **358 kg per person** of landfilled material.

We know we can do better. **More than 50%** of the material currently sent to landfill is recyclable or compostable; **33%** is wasted food and inedible organic material. Many of the strategies proposed in the Solid Waste Management Plan are designed to reduce the amount of food waste and organics being landfilled.

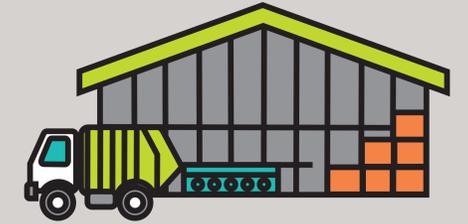


Residential Organics

Service Level Description	Areas	Proportion of Organics in Garbage
Mandatory organics collection	All municipalities	23%
Optional organics collection	Electoral Areas A-C	30%
No organics collection	Electoral Areas D-I	36%

MANAGING OUR WASTE

Guiding Principles



Guiding Principles

- Promote zero waste approaches and support a circular economy
- Promote the first 3 Rs (Reduce, Reuse and Recycle)
- Maximize beneficial use of waste materials and manage residuals appropriately
- Support polluter and user-pay approaches and manage incentives to maximize behaviour outcomes
- Prevent organics and recyclables from going into the garbage wherever practical
- Collaborate with other regional districts wherever practical
- Develop collaborative partnerships with interested parties to achieve regional targets set in plans
- Support practical and effective delivery of waste management services from public and private service providers, and level the playing field within the region for private and public solid waste management facilities

Goals



1

Reduce All Material Generation



2

Maximize reuse and recovery of materials



3

Maximize beneficial use of discarded materials and promote responsible and sustainable Residual Management

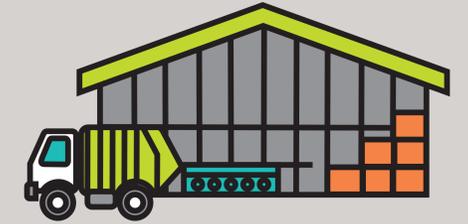


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MANAGING OUR WASTE

Goals and Targets

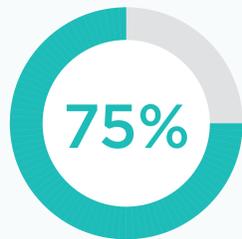


Provincial Targets



75% of BC's Population covered by Organic Waste Disposal Restrictions

Organic Waste Disposal Restrictions mean using tools like landfill bans to reduce the amount of recyclable organics that end up in the landfill.



75% Recovery of Materials Covered by Extended Producer Responsibility Programs

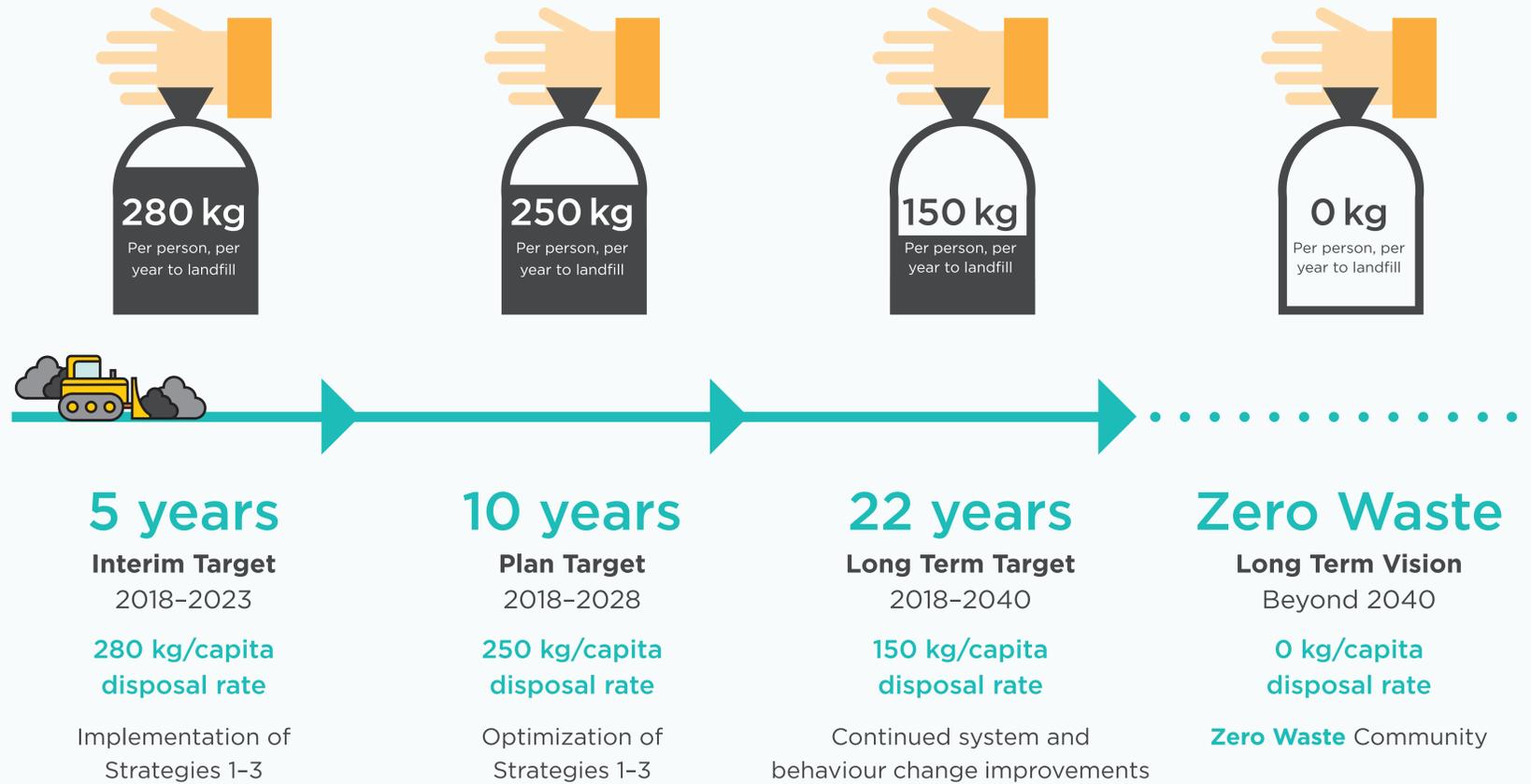
Extended Producer Responsibility means that producers of a product are responsible for its end of life management. It's a way for industry to manage the environmental impact of products during all stages of the product lifecycle, from "cradle-to-grave".



Provincial Disposal Rate of 350 kg per capita, per year

The BC Ministry of Environment and Climate Change Strategy wants all Regional Districts to achieve these goals by **2020**, this means we need to reduce our waste even more than we already have.

CVRD Targets

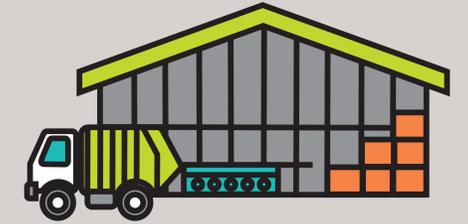


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MANAGING OUR WASTE

Areas for Improvement



Reduce, Reuse, Recycle

- Food is wasted in cowichan valley
- Reuse opportunities are limited
- Service levels for institutions, businesses, and apartments and condominiums are inconsistent
- Access and use of depots is inconsistent
- 20,000 residents don't have mandatory garbage collection at the curb
- More than 33,000 residents don't have mandatory organics collection at the curb

Processing of Recyclables

- As the quantity of organics being composted in CVRD increases, odour complaints may worsen
- There are no local facilities for handling recyclables from businesses and institutions
- There is no strategy for recycling or managing construction and demolition waste

Disposal & Operations

- There is no local place to dispose of waste, all garbage is shipped to landfill in Washington State, USA.
- Illegal dumping occurs throughout CVRD
- There are limited options for difficult-to-dispose items
- Old landfill sites in the region must continue to be monitored
- The CVRD does not have a disaster waste management plan

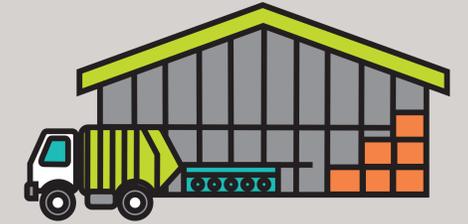


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MANAGING OUR WASTE

Strategies



Improve Waste Reduction and Diversion



1. Enhance Reduce and Reuse Potential

- a. Reduce wasted food from residential and institutional, commercial, industrial (ICI) sectors
 - b. Enhance and improve local reuse opportunities
 - c. Support bans on single-use items
 - d. Advocate for expansion of Extended Producer Responsibility (EPR) programs
-



2. Reduce Disposal from institutional, commercial, industrial (ICI) and Multi-Family Residential

- a. Mandate source separation for multi-family residential and ICI sector
 - b. Adopt organics disposal ban and enhance enforcement of existing disposal bans
-

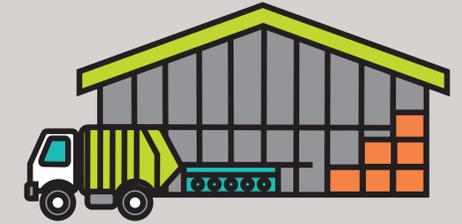


3. Reduce Disposal from Residential Sector

- a. Assess opportunities for access to recycling programs at depots
 - i. Evaluate opportunities to increase accessibility for public depots
 - ii. Continue to assess depot service levels for the south end
- b. Adopt universal curbside collection services across the region

MANAGING OUR WASTE

Strategies



Support Transport and Processing Infrastructure



4. Improve Organics Processing

- a. Ensure best management practices for odour management
 - b. Ensure capacity for local organics processing
-



5. Investigate Processing and Transfer Capacity for Recyclables

- a. Assess gaps and recommend further opportunities for institutional, commercial, industrial (ICI) transfer capacity and processing within the CVRD
-

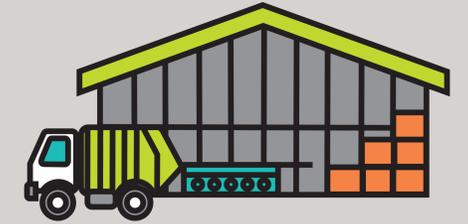


6. Improve Management of Construction and Demolition (C&D) Materials

- a. Monitor C&D disposal and recycling activities in the region
- b. Develop a C&D Waste Management Strategy
- c. Reduce barriers to disposing hazardous materials (asbestos, gypsum wallboard)

MANAGING OUR WASTE

Strategies



Improve Recovery and Residuals Management



7. Explore Options for Local Disposal

- a. Explore options for local disposal; review available alternatives and do feasibility study if needed (e.g. Waste to energy)



8. Reduce Illegal Dumping

- a. Augment illegal dumping prevention strategies

9. Implement Collection/Drop-off for Household Hazardous Waste (HHW), Bulky Items, and Organic Debris

- a. Develop collection program(s) for residential unlabelled liquid HHW
- b. Improve recycling opportunities for bulky items
- c. Assess effective ways to reduce open burning of wood waste



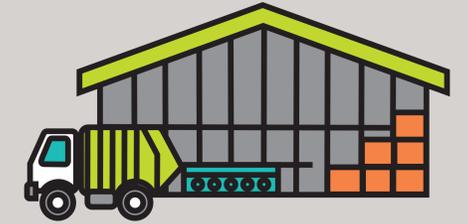
10. Monitor Historic Disposal Sites

- a. The CVRD needs to continue monitoring and assessing the state of these historic disposal sites



MANAGING OUR WASTE

Strategies



Supporting System Resilience

11. Implement Asset Management Plan

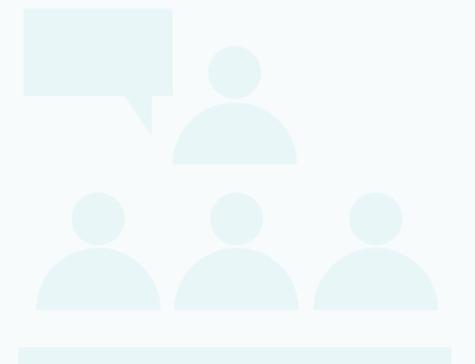
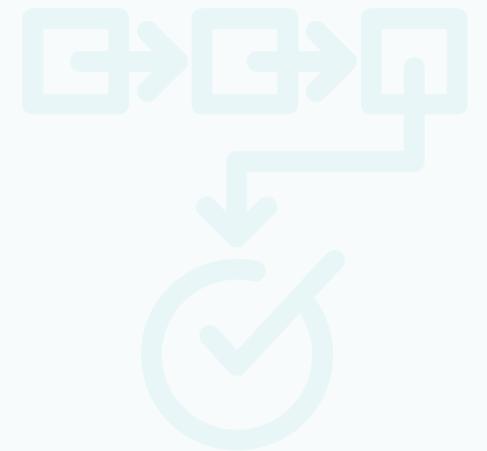
- a. Implement Asset Management Plans at CVRD Recycling Centres and solid waste facilities
 - b. Develop Bings Creek Transfer Station 10-year plan
-

12. Develop Disaster Management Plan

- a. Develop a Disaster Debris Management Plan for solid waste services and infrastructure
-

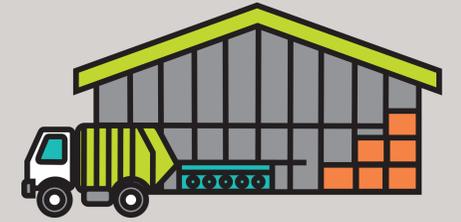
13. Education and Behaviour Change Considerations

- a. Continued public outreach and community-based social marketing tools
 - i. Commitments
 - ii. Prompts
 - iii. Norms
 - iv. Social Diffusion
 - v. Communication
 - vi. Incentives
 - vii. Convenience
- b. Continue to support and encourage recycling education through ongoing promotion of Zero Waste Events program



MANAGING OUR WASTE

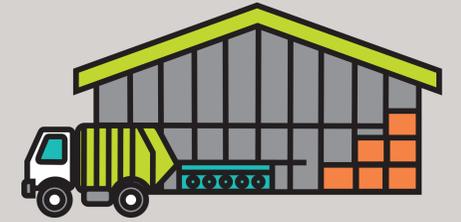
Budget



Year	1	2	3	4	5	6	7	8	9	10
CVRD FINANCIAL PLAN	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE										
Debt Proceeds	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Grants	\$33,765	\$33,940	\$34,119	\$34,302	\$34,488	\$34,678	\$34,871	\$35,069	\$35,270	\$35,475
Other	\$929,977	\$943,260	\$956,756	\$970,470	\$984,406	\$998,569	\$1,012,959	\$1,027,582	\$1,042,444	\$1,057,548
Proposed Requisition/Parcel Tax	\$4,694,622	\$4,805,002	\$4,987,643	\$5,245,618	\$5,205,432	\$5,575,274	\$5,493,935	\$5,688,298	\$5,895,110	\$5,937,514
Surplus/(Deficit)	\$340,284	\$170,855	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Transfer from Capital Reserve	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Transfer from Operating Reserve	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
User Fee	\$3,964,624	\$4,012,670	\$6,904,030	\$6,973,792	\$7,045,146	\$7,118,128	\$7,192,770	\$7,269,105	\$7,347,164	\$7,426,984
TOTAL OPERATING REVENUE	\$9,963,272	\$9,965,727	\$12,882,548	\$13,224,182	\$13,269,472	\$13,726,649	\$13,734,535	\$14,020,054	\$14,319,988	\$14,457,521
EXPENDITURES										
Existing Operating Expenditures										
Curbside Collection - Garbage	\$781,205	\$796,829	\$812,765	\$829,020	\$845,601	\$862,514	\$879,764	\$897,359	\$915,306	\$933,612
Curbside Collection - Recycling	\$376,212	\$234,964	\$239,663	\$244,456	\$249,344	\$254,330	\$259,419	\$264,610	\$269,902	\$275,300
CVRD Internal Allocations	\$544,066	\$556,401	\$568,984	\$581,818	\$594,910	\$608,263	\$621,882	\$635,774	\$649,943	\$664,396
Debt	\$786,318	\$786,318	\$741,228	\$741,228	\$741,228	\$741,228	\$741,228	\$741,228	\$741,228	\$741,228
Garbage Disposal	\$2,455,344	\$2,504,451	\$2,554,540	\$2,605,631	\$2,657,744	\$2,710,899	\$2,765,117	\$2,820,420	\$2,876,828	\$2,934,365
Legal & Administrative	\$202,113	\$206,155	\$210,276	\$214,482	\$218,771	\$223,145	\$227,609	\$232,161	\$236,804	\$241,543
Operations - Disposal	\$2,994,462	\$2,935,359	\$2,992,066	\$3,049,908	\$3,108,908	\$3,169,087	\$3,230,466	\$3,293,076	\$3,356,937	\$3,422,075
Operations - Recycling	\$1,182,591	\$1,206,244	\$1,230,368	\$1,254,975	\$1,280,076	\$1,305,679	\$1,331,792	\$1,358,428	\$1,385,595	\$1,413,305
Planning, Operations Support, and Execution	\$117,224	\$119,568	\$121,960	\$124,399	\$126,887	\$129,424	\$132,012	\$134,652	\$137,345	\$140,090
Reduction and Recycling Programs	\$30,015	\$30,616	\$31,228	\$31,853	\$32,490	\$33,140	\$33,803	\$34,479	\$35,169	\$35,873
Transfer to Reserve	\$320,000	\$324,000	\$328,080	\$332,242	\$336,487	\$340,817	\$345,233	\$349,738	\$354,333	\$359,020
Total Annual Existing Operating Expenditures	\$9,789,550	\$9,700,905	\$9,831,158	\$10,010,012	\$10,192,446	\$10,378,526	\$10,568,325	\$10,761,925	\$10,959,390	\$11,160,807
Existing Capital Expenditures										
Capital Expenditures	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Total Annual Existing Capital Expenditures	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Total Existing Expenditures	\$9,789,550	\$9,700,905	\$9,831,158	\$10,010,012	\$10,192,446	\$10,378,526	\$10,568,325	\$10,761,925	\$10,959,390	\$11,160,807
Revenue - Expenditures	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
PROPOSED Operating Expenditures										
01 Enhance Reduce and Reuse Potential	\$18,000	\$36,000	\$21,000	\$3,000	\$3,000	\$20,000	\$-	\$-	\$-	\$-
02 Reduce Disposal from ICI and Multi-Family Residential	\$5,000	\$27,500	\$45,000	\$20,000	\$-	\$-	\$-	\$-	\$-	\$-
03 Reduce Disposal from Residential Sector	\$-	\$-	\$2,695,348	\$2,739,248	\$2,784,026	\$2,829,700	\$2,876,287	\$2,923,806	\$2,972,275	\$3,021,714
04 Improve Organics Processing	\$15,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
05 Investigate Processing and Transfer Capacity for ICI Recyclables	\$-	\$15,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
06 Improve Management of Construction and Demolition Materials	\$-	\$-	\$100,000	\$115,000	\$115,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
07 Explore Options for Local Disposal	\$20,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
08 Reduce Illegal Dumping	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
09 Implement Collection/Drop off For HHW, Bulky Items, and Organics	\$-	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
10 Monitor Historic Disposal Sites	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
11 Implement Asset Management Plan	\$115,722	\$11,322	\$15,042	\$146,922	\$-	\$223,423	\$14,923	\$59,323	\$113,323	\$-
12 Develop a Disaster Debris Management Plan	\$-	\$-	\$-	\$15,000	\$-	\$-	\$-	\$-	\$-	\$-
13 Integrate Education and Behaviour Change Best Practices	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Total Annual Proposed Operating Expenditures	\$173,722	\$264,822	\$3,051,390	\$3,214,170	\$3,077,026	\$3,348,123	\$3,166,210	\$3,258,129	\$3,360,598	\$3,296,714
PROPOSED Capital Expenditures										
No proposed capital expenditures	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Total Annual Proposed Capital Expenditures	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Total Annual Proposed Expenditures	\$173,722	\$264,822	\$3,051,390	\$3,214,170	\$3,077,026	\$3,348,123	\$3,166,210	\$3,258,129	\$3,360,598	\$3,296,714
TOTAL OPERATING EXPENDITURES	\$9,963,272	\$9,965,727	\$12,882,548	\$13,224,182	\$13,269,472	\$13,726,649	\$13,734,535	\$14,020,054	\$14,319,988	\$14,457,521
TOTAL CAPITAL EXPENDITURES	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
TOTAL EXPENDITURES	\$9,963,272	\$9,965,727	\$12,882,548	\$13,224,182	\$13,269,472	\$13,726,649	\$13,734,535	\$14,020,054	\$14,319,988	\$14,457,521
Revenues - Expenses	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-

MANAGING OUR WASTE

Schedule



	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
01 Enhance Reduce and Reuse Potential										
A Reduce Wasted Food from Residential and Industrial, Commercial, and Institutional (ICI) Sectors										
B Enhance and Improve Local Reuse Opportunities										
C Support Bans on Single-Use Plastic Bags or Other Single-Use Items										
D Advocate for Expansion of EPR Programs										
02 Reduce Disposal from ICI and Multi-Family Residential										
A Mandate Source Separation for Multi-family and ICI										
B Adopt a Full Organics Disposal Ban and Enhance Enforcement of Existing Material Disposal Bans										
03 Reduce Disposal from Residential Sector										
A Assess Opportunities for Access to Recycling Programs at Depots										
B Adopt Universal Curbside Collection Services Across the Region										
04 Improve Organics Processing										
A Ensure Use of Best Management Practices for Odour Management										
B Ensure Capacity for Local Organics Processing										
05 Investigate Processing and Transfer Capacity for ICI Recyclables										
A Perform a Feasibility Assessment for Development of ICI Transfer Capacity										
06 Improve Management of Construction and Demolition Materials										
A Monitor C&D Disposal and Recycling Activities in the Region										
B Develop a C&D Waste Management Strategy										
C Reduce Barriers to Disposing Hazardous Materials (asbestos, gypsum wallboard)										
07 Explore Options for Local Disposal										
A Explore Options for Local Disposal										
08 Reduce Illegal Dumping										
A Augment Illegal Dumping Prevention Strategies										
09 Implement Collection/Drop off For HHW, Bulky Items, and Organics										
A Implement Collection for HHW										
B Improve Recycling Opportunities for Bulky Items										
C Assess Effective Ways to Reduce Open Burning of Wood Waste										
10 Monitor Historic Disposal Sites										
A Monitor Historic Disposal Sites										
11 Implement Asset Management Plan										
A Implement Asset Management Plan										
B Develop Bings Creek Transfer Station 10-Year Plan										
12 Develop a Disaster Debris Management Plan										
A Develop a Disaster Debris Management Plan										
13 Integrate Education and Behaviour Change Best Practices										
A Consider Best Management Practices for Education and Behavior Change Programs										



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