

The image features a scenic landscape with mountains in the background, a valley in the middle ground, and a town in the foreground. The sky is filled with soft, yellowish-green clouds. The foreground is dominated by tall, green grasses with small purple flowers. The overall color palette is dominated by greens and yellows, with a solid green bar at the bottom.

zero waste framework

TOWARD ZERO WASTE 2012



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EXECUTIVE SUMMARY

The Town of Cochrane provides weekly automated waste and recycling collection services through a contracted collection system to approximately 6000 households. The amount of waste collected and disposed has increased in conjunction with population growth, with approximately 2600 Metric Tonnes disposed of in 2011.

Cochrane residents disposed of 138 kg per capita in 2011, compared to the Alberta residential waste disposal average of 289 kg per capita.¹ This relatively low waste generation is largely due to the Town of Cochrane's waste limit, curbside recycling program and convenient Cochrane Eco Centre programs.

The waste limit encourages residents to take advantage of opportunities to reduce their waste as well as take advantage of waste diversion opportunities, such as recycling and composting. When the "Two Unit Limit" was instituted in 2005, there was a significant drop in waste generation, as Cochrane has continued to implement proactive waste management practices our waste generation rate has dropped from 224 kg per capita to today's 138 kg per capita.

Waste reduction programs in Cochrane are not directly targeted at the Industrial, Commercial, and Institutional (ICI) sector. The ICI sector does have access to the Cochrane Eco Centre and contributes to funding its operation through a monthly fee on utility bills. At this time there has been only limited measurement related usage of the Cochrane Eco Centre by the ICI sector – the volume of recyclables dropped off can only be estimated though it is likely that they contribute a relatively high proportion of the paper products collected at the facility.

Cochrane's recycling and composting activities in 2011 resulted in a net greenhouse gas (GHG) savings of CO₂ equivalent. This is the equivalent of the emissions from 767 passenger vehicles for one year.² Contributing significantly to the Town of Cochrane's commitment to "...contribute to a solution on climate change".³

The Town of Cochrane has embarked on the process of developing and implementing The Cochrane Sustainability Plan. The Cochrane Sustainability Plan "is a community plan to create shared action to build a common future."⁴ In keeping with the Vision and Pathways of the Cochrane Sustainability Plan, which encourages long-term thinking, looking at the whole and seeing the connection, it is suggested that the Town of Cochrane adopt this Zero Waste Framework and the 5 Pathways Toward Zero Waste.

A Zero Waste Framework would set clear direction for reducing waste to the highest degree possible, consistent with the global movement towards Zero Waste, while also encouraging a philosophical shift towards considering the elimination of waste in all design and planning decisions throughout the organization. This report outlines how Cochrane can achieve Zero Waste by focusing on reducing our environmental footprint by minimizing the amount of waste that must be landfilled through waste reduction, reuse, recycling, redesign, composting and other actions. The Town of Cochrane Zero Waste Framework, in harmony with the Cochrane Sustainability Plan will allow us to achieve our Zero Waste goals through continuous planning and flexible and responsive program implementation.

1 Statistics Canada, Environment Accounts and Statistics Division.

2 Environment Canada, GHG Calculator for Waste Management.

3 Town of Cochrane, Cochrane Sustainability Plan, 2009, p. 27.

4 Town of Cochrane, Cochrane Sustainability Plan, 2009, p. 3.

CONTEXT: A ZERO WASTE FRAMEWORK

1. FEDERAL – CCME

In 2009, the Canadian Council of Ministers of the Environment developed the Canada-wide Action Plan for Extended Producer Responsibility.⁵

“Despite efforts by all levels of government over the last three decades, Canada’s performance lags behind other G8 and OECD countries when it comes to municipal solid waste (MSW) diversion and disposal.”⁶

The CCME identified Extended Producer Responsibility as key to Canada’s ability to catch up to other G8 and OECD countries. Extended Producer Responsibility (EPR) is the concept of the producers of products being responsible for their end-of-life management.⁷ The objective of the Canada-wide Action Plan for EPR is to seek the adoption by producers of full life-cycle cost accounting for their products.⁸

Under the Canada-wide Action Plan for EPR:

Phase 1 – Jurisdictions commit to working towards managing the following products and materials in operational EPR programs within six (6) years of adoption of the Action Plan:

- Packaging
- Printed Materials
- Mercury containing lamps
- Other mercury containing products
- Electronics and electrical products
- Household hazardous and special wastes
- Automotive products⁹

Phase 2 - Jurisdictions commit to working towards managing the following products and materials in operational EPR programs within eight (8) years of adoption of the Action Plan:

- Construction materials
- Demolition materials
- Furniture
- Textiles and carpet
- Appliances¹⁰

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The Canada-wide Action Plan for EPR will have wide-ranging impacts and should be kept in mind throughout the implementation of Cochrane’s Zero Waste Framework. Based on the dates outlined in the Action Plan; Alberta will likely adopt a provincial EPR program for packaging, printed materials, florescent lamps and household hazardous waste by 2015. Construction and demolition, furniture, textile and carpet, EPR programs by 2020.

5 Canadian Council of Ministers of the Environment (CCME), Canada Wide Action Plan for Extended Producer Responsibility, 2009.

6 Canadian Council of Ministers of the Environment (CCME), Canada Wide Action Plan for Extended Producer Responsibility, 2009, p. ii.

7 Canadian Council of Ministers of the Environment (CCME), Canada Wide Action Plan for Extended Producer Responsibility, 2009, p. ii.

8 Canadian Council of Ministers of the Environment (CCME), Canada Wide Action Plan for Extended Producer Responsibility, 2009, p. ii.

9 Canadian Council of Ministers of the Environment (CCME), Canada Wide Action Plan for Extended Producer Responsibility, 2009, p. iii.

10 Canadian Council of Ministers of the Environment (CCME), Canada Wide Action Plan for Extended Producer Responsibility, 2009, p. iii.

2. PROVINCIAL

Over the past 35 years, Alberta has achieved significant results in waste management and has implemented a number of successful waste diversion programs, including:

- Beverage container collection system (1972)
- Pesticide container collection program (1980)
- Hazardous waste legislation (1985)
- Tire recycling program (1994)
- Used oil materials recycling program (1997)
- Electronics recycling program (2004)
- Paint stewardship program (2008)

In October 2007, the Government of Alberta announced its long-term waste strategy, *Too Good to Waste*, with a goal of reducing materials disposed of in landfills.¹¹

Presently, approximately 80% of waste in Alberta is disposed of in landfills with only 20% being recycled or recovered. The Government of Alberta has recognized that at least 80% of material currently disposed of at municipal landfills could be put to some productive use, resulting in less than 20% disposal in landfill. Strategies and actions to achieve this outcome would move Albertans towards greater sustainability.

The *Too Good to Waste* strategy discusses waste reduction and waste management in the province of Alberta. It identifies the opportunities, outcomes and strategies to help Alberta move forward with innovative waste management programs. Alberta's goal is to decrease the amount of material sent to landfills from 738 to 648 KG/capita (based on total waste generation) by the year 2014/15.¹² The *Too Good to Waste* strategy identifies three main objectives to help achieve this goal.

1. Albertans take responsibility for resource conservation and waste minimization.
2. Waste management systems are integrated to provide the capacity for processing and/or recovery of materials that would otherwise be disposed of as waste.
3. Facilities and practices to manage secondary materials and wastes are protective of air, land, water and human health.¹³

Alberta Environment is also looking at revising existing waste management legislation and policies to focus on achieving outcomes for waste recovery and waste management. This may include actions such as disposal bans, economic instruments and public awareness and education. Regarding their internal operations, in recognition that the Government of Alberta is the largest employer in the province and has significant purchasing power the GOA has developed the *Greening Government Strategy* with the goal:

*"To continuously reduce, in concrete and measurable ways, any detrimental environmental impacts that result from the Government of Alberta's operations and overall procurement practices."*¹⁴

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11 Alberta Environment, *Too Good to Waste*, 2007.

12 Alberta Environment and Water, *Business Plan 2012-15*, p. 28.

13 Alberta Environment, *Too Good to Waste*, 2007, p. 9.

14 Government of Alberta, *Greening Government Strategy*, p. 7.

The *Greening Government Strategy* includes the following policy statement that is meant to guide the decision making process:

“The Government of Alberta is committed to greening government operations by using services, processes, practices and products that:

- *minimize resource use;*
- *reduce or even prevent the generation and release of waste, greenhouse gases and other pollutants to air, water and land;*
- *manage waste (that cannot be avoided) in an environmentally responsible manner, and*
- *meet or exceed Government of Alberta’s business needs.”¹⁵*

The *Greening Government Strategy* sets a certain standard of operations for all levels of government operating within the Province of Alberta. By developing and adopting the *Greening Government Strategy*, the GOA has committed to setting an example of sustainable internal operations.



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¹⁵ Government of Alberta, *Greening Government Strategy*, p. 7.

3. CALGARY REGIONAL PARTNERSHIP

The Calgary Regional Partnership (CRP) established the Calgary Regional Waste Reduction Partnership as a subcommittee of the larger regional organization in the late 1990s. The CRWRP's mandate is to work with the CRP members to identify waste management opportunities where regional cooperation would be beneficial.

The Calgary Regional Waste Reduction Partnership identified organic waste as the most pressing of waste management matters in the Calgary region. Based on this, in 2006 the CRWRP engaged CH2MHill to complete the "Calgary Regional Organics Management Program Implementation Strategy".

The study concluded that organic waste (yard and leaf, food waste and other organics) comprises 25% by weight of the current overall solid waste stream in the CRP area; and that the collection and composting of these organic wastes represent a significant waste diversion opportunity.¹⁶ A series of multi-regional composting facilities were recommended to the CRP with facilities located in the City of Airdrie, MD of Foothills, City of Calgary and the Bow Valley Corridor.¹⁷ This multi-regional approach was unanimously endorsed by the CRP General Assembly in the fall of 2006.

The *Calgary Regional Organics Management Program Implementation Strategy* estimates that the Town of Cochrane produces 661 MT of residential yard waste, 854 MT of residential food waste and over 2000 MT of commercial organic waste per year.¹⁸ CH2MHill based these estimates on waste generation and composition studies completed in comparable sized municipalities.

At this time the CRP is continuing to look for organic diversion funding opportunities.

The completion of the Calgary Metropolitan Plan is the most recent contribution by the Calgary Regional Partnership to the matter of regional waste management. Strategy 4.d commits the CRP to "Investigate a regional waste management system".¹⁹ [Appendix 1](#) for further details.

¹⁶ CH2MHill, *Calgary Regional Organics Management Program Implementation Strategy*, 2007, p. 1-1.

¹⁷ CH2MHill, *Calgary Regional Organics Management Program Implementation Strategy*, 2007, p. 1-1.

¹⁸ CH2MHill, *Calgary Regional Organics Management Program Implementation Strategy*, 2007, p. 2-1.

¹⁹ Calgary Regional Partnership, *Calgary Metropolitan Plan*, 2012, p. 42.

Table 1:
Organic Waste Quantity Estimates Calgary Region



| | | | Population 2006 | Households | MT/Year Residential Waste | MT/Year Yard Waste | MT/Year Food Waste | Total Residential Organic Waste | WWTP Type | MT/Year Biosolids | MT/Year ICI Waste | MT/Year ICI Organic Waste |
|----------------|---------------------|----------|-----------------|------------|---------------------------|--------------------|--------------------|---------------------------------|-----------|-------------------|-------------------|---------------------------|
| SOUTH | Black Diamond | Town | 1900 | 756 | 799 | 144 | 186 | 329 | Lagoon | | 1367 | 342 |
| | High River | Town | 10716 | 4363 | 5476 | 986 | 1273 | 2258 | Lagoon | | 6491 | 1623 |
| | Longview | Village | 307 | N/A | 154 | 28 | 36 | 63 | Lagoon | | N/A | N/A |
| | Nanton | Town | 2055 | 853 | 493 | 89 | 115 | 203 | Lagoon | | 1230 | 308 |
| | Okotoks | Town | 17145 | 5927 | 11677 | 2102 | 2714 | 4816 | WWTP | 288 | 8529 | 2132 |
| | Turner Valley | Town | 1908 | 794 | 899 | 162 | 209 | 371 | Lagoon | | 1164 | 291 |
| | MD Foothills | MD | 19736 | 7460 | 12424 | 2236 | 2887 | 5124 | | | 12989 | 3247 |
| WEST | Banff | Town | 6700 | 2844 | 2927 | 527 | 680 | 1207 | WWTP | 113 | 6797 | 1699 |
| | Canmore | Town | 12039 | 6575 | 4422 | 796 | 1028 | 1824 | WWTP | 202 | 9380 | 2345 |
| | Ghost Lake | SV | 69 | N/A | 35 | 6 | 8 | 14 | | | N/A | N/A |
| | Waiparous | SV | 55 | N/A | 28 | 5 | 6 | 11 | | | N/A | N/A |
| | Kananaskis | ID | 429 | 183 | 215 | 39 | 50 | 88 | | | N/A | N/A |
| | Stoney First Nation | IRI | 1400 | N/A | 700 | 126 | 163 | 289 | | | N/A | N/A |
| | MD Big Horn | MD | 1264 | 676 | 773 | 139 | 180 | 319 | | | 962 | 241 |
| | | | | | | | | | | | | |
| CENTRAL | Airdrie | City | 28927 | 10768 | 7104 | 1279 | 1651 | 2930 | Pump | | 15062 | 3766 |
| | Crossfield | Town | 2648 | 960 | 41 | 7 | 9 | 17 | Lagoon | | 1701 | 425 |
| | Irricana | Village | 1243 | 443 | 393 | 71 | 91 | 162 | Lagoon | | 823 | 206 |
| | Rocky View County | County | 34171 | 11604 | 3417 | 615 | 794 | 1409 | Pump | | 23260 | 5815 |
| | Calgary | City | 988193 | 401389 | 344089 | 58426 | 83717 | 142143 | WWTP | 16602 | 656205 | 164051 |
| | Redwood Meadows | Townsite | 1150 | N/A | 575 | 104 | 134 | 237 | Lagoon | | N/A | N/A |
| | Tsuu Tina Nation | IRI | 1321 | N/A | 661 | 119 | 154 | 272 | Pump | | N/A | N/A |
| | Cochrane | Town | 13760 | 4969 | 3674 | 661 | 854 | 1515 | Pump | | 8416 | 2104 |
| | Chestermeme | Town | 9564 | 3165 | 4782 | 861 | 111 | 1972 | Pump | | 2766 | 692 |
| | Strathmore | Town | 10255 | 3943 | 850 | 153 | 197 | 350 | WWTP | 172 | 5390 | 1348 |

4. CITY OF CALGARY

Mission

Protecting our community's health and environment by providing excellence in waste management services.²⁰

Vision

Leading the community towards zero waste.²¹

Waste and Recycling Services is focused on taking action to protect Calgary's environment, with the goal of diverting 80% of waste from landfill by 2020.²²

With the launch of the City of Calgary Blue Cart co-mingled recycling program the City of Calgary has taken significant steps towards their zero waste goal. From Fall 2010 – Spring 2011 the City of Calgary implemented an automated waste collection program; the next stage in their implementation plan is to introduce a limit on the amount of residential waste allowed per household per week; continue to examine opportunities for organics diversion and to consider options for multi-family dwelling recycling.

As of spring 2012, the City of Calgary launched its "Green Cart Pilot" project. The green cart program provides weekly organics (food and yard waste) collection to single-family dwellings in four Calgary neighborhoods. Along with the organics collection, the City of Calgary is testing bi-weekly waste collection in these same neighborhoods. With the City of Calgary taking this important step in the direction of residential organics collection – the infrastructure and public support required for the implementation of a regional organics strategy will continue to build.

The City of Calgary is committed to achieving the 80% by 2020 goal. Stakeholder consultation and project planning are ongoing for the Residential Sector; Multi-family Sector; Construction & Demolition Sector; as well as, the Industrial, Commercial & Institutional Waste Sector.

20 The City of Calgary, Waste & Recycling Services Annual Review 2011, p. 4.

21 The City of Calgary, Waste & Recycling Services Annual Review 2011, p. 4.

22 The City of Calgary, Waste & Recycling Services Annual Review 2011, p. 4.

5. COCHRANE SUSTAINABILITY PLAN

The Cochrane Sustainability Plan offers our community a roadmap to a sustainable future. A Zero Waste Framework can only be built with the Cochrane Sustainability Plan in mind. By considering the 13 pathways as the framework and implementation plan are developed, the hierarchy of plans will remain intact.

The 13 Pathways to the Future are:

1. We are a socially responsible and empowered community.
2. We treat water as a precious resource.
3. We use energy responsibly and innovatively.
4. We contribute to the solution on climate change.
5. We consume the bounty of our local economy.
6. Our local economy is healthy and diverse.
7. Everyone has an opportunity to pursue their potential in Cochrane.
8. We are a caring community that lives and celebrates together.
9. Everyone has a roof over their head
10. There's enough room for everything a community should have.
11. Wherever you are in Cochrane, you're close and connected.
12. There are diverse options for getting around.
13. We build Cochrane on the strengths of our natural and cultural heritage.²³

The Town of Cochrane's Zero Waste Framework provides Cochrane with a pathway to sustainable waste management that incorporates the principles of the Cochrane Sustainability Plan and embraces the "pathway" approach and need for stakeholder engagement.

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ZERO WASTE – PRAGMATIC & VISIONARY

In keeping with the Cochrane Sustainability Plan, it is suggested that Cochrane adopt a Zero Waste goal.

WHAT DOES ZERO WASTE REALLY MEAN?

Rather than setting a specific quantitative target, Zero Waste is a goal that is both pragmatic and visionary – the Zero Waste International Alliance has adopted the following definition of Zero Waste:

“Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.”²⁴

There have been numerous jurisdictions around the world that have adopted Zero Waste goals.



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²⁴ Zero Waste International Alliance, 2010.

Table 2: Zero Waste Communities

| | Community | Population | Diversion Goal |
|---------------|---|------------|---|
| CANADA | Capital Regional District, BC | 345 164 | 2013 – 60% 2020 – 90% |
| | Cowichan Valley Regional District | 81 932 | Zero Waste Long Term Goal |
| | Nelson, BC | 9 258 | Zero Waste Goal |
| | Okotoks, AB | 17 145 | 2015 – 70 % - 80% Zero Waste Long Term Goal |
| | Regional District of Central Kootenay, BC | 61 016 | 2010 – 30 % 2015 – 60 % 2020 – 90 % |
| | Regional District of Kootenay Boundary, BC | 31 961 | 2010 – 60 % 2015 – 80 % 2020 – 100 % |
| | Regional District of Nanaimo, BC | 147 851 | 2010 – 75 % Zero Waste Long Term Goal |
| | Sunshine Coast Regional District, BC | 29 781 | 2010 – 50 % reduction per capita Zero Waste Long Term Goal |
| | Toronto, ON | 2 503 281 | 2003 - 30 % 2006 – 60 % 2010 Zero Waste |
| UNITED STATES | Albuquerque, NM | 518 271 | 2010 – 18 % 2015 – 40 % 2030 Zero Waste |
| | Boulder, CO | 91 685 | 2007 – 60 % 2012 – 70 % 2017 – 85 % Zero Waste Long Term Goal |
| | Fresno, CA | 486 171 | 2008 – 70 % 2012 – 75 % 2016 – 80 % 2020 – 85 % 2050 – Zero Waste |
| | Seattle, WA | 594 210 | 2010 – 60 % 2025 – 70 % |

Of particular interest to the Town of Cochrane are the following examples:¹³

1. Town of Okotoks: The Town of Okotoks 2009 Resource Recovery Plan is based on a “Zero Waste Philosophy.” The implementation plan includes a focus on organics diversion, increased recycling services and a reduction of the garbage collection limit.²⁵
2. Regional District of Kootenay Boundary: The Kootenay Boundary Solid Waste Master Plan developed in 2005 is based on a Zero Waste Strategy. The Zero Waste Strategy includes:
 - a. Building the concept of Zero Waste into all local government undertakings.
 - b. Invest in jobs through reuse and recycling.
 - c. Establish a centralized in-vessel composting facility.
 - d. Continue to promote Extended Producer Responsibility (EPR).
 - e. Encourage and suppose Design for the Environment.²⁶

So far, the Regional District of Kootenay Boundary has worked toward their Zero Waste goal by implementing material disposal bans and the initial steps towards an organics diversion strategy are well under way.



²⁵ Town of Okotoks, Resource Recovery Plan, 2009, p. 2.

²⁶ Regional District of Kootenay Boundary, Kootenay Boundary Solid Waste Master Plan, 2006, p. 4.

GLOBAL PRINCIPLES FOR ZERO WASTE COMMUNITIES

The Zero Waste International Alliance encourages all communities to adopt the following principles and practical steps towards Zero Waste:

1. ADOPT THE ZERO WASTE DEFINITION.
2. ESTABLISH BENCHMARKS AND A TIMELINE.
3. ENGAGE THE WHOLE COMMUNITY.
4. DEMAND DECISION MAKERS MANAGE RESOURCES NOT WASTE.
5. USE ECONOMIC STIMULUS FUNDS AND FEES LEVIED ON TONS OF WASTE HAULED OR AND FILLED.
6. EDUCATE RESIDENTS, BUSINESSES AND VISITORS.
7. PERFORM ZERO WASTE ASSESSMENTS.
8. BUILD RESIDUAL SEPARATION AND RESEARCH FACILITIES.
9. DEVELOP NEW RULES AND INCENTIVES TO MOVE TOWARDS ZERO WASTE.
10. ENACT EXTENDED PRODUCER RESPONSIBILITY (EPR) RULES.
11. REMOVE GOVERNMENT SUBSIDIES FOR WASTING.
12. SUPPORT ZERO WASTE PROCUREMENT.
13. EXPAND ZERO WASTE INFRASTRUCTURE.
14. CHALLENGE BUSINESSES TO LEAD THE WAY TO ZERO WASTE.²⁷

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These Global Principles for Zero Waste Communities have been incorporated throughout the recommendations made in this, Cochrane's Zero Waste Framework.

ZERO WASTE BUSINESS PRINCIPLES

In 2005, the Zero Waste International Alliance Planning Group adopted the following ten principles to guide and evaluate current and future Zero Waste policies and programs established by businesses. The Zero Waste Business Principles are the basis for evaluating company commitment to the achievement of Zero Waste.

It is recommended that the Town of Cochrane adopt these Zero Waste Business Principles as part of this Zero Waste Framework in order to assist achieving its waste minimization goals for internal operations. As well, the Town of Cochrane may well consider encouraging local business associations i.e. the Chamber of Commerce and its members to adopt the principles as well.

- 1. Commitment to the triple bottom line** - We ensure that social, environmental and economic performance standards are met together. We maintain clear accounting and reporting systems and operate with the highest ethical standards for our investors and our customers. We produce annual environmental or sustainability reports that document how we implement these policies. We inform workers, customers and the community about environmental impacts of our production, products or services.
- 2. Use Precautionary Principle** - We apply the precautionary principle before introducing new products and processes, to avoid products and practices that are wasteful or toxic.
- 3. Zero Waste to landfill or incineration** - We divert more than 90% of the solid wastes we generate from Landfill and Incineration from all of our facilities. No more than 10% of our discards are landfilled. No mixed wastes are incinerated or processed in facilities that operate above ambient biological temperatures (more than 200°F.) to recover energy or materials.
- 4. Responsibility: Take back products & packaging** - We take financial and/or physical responsibility for all the products and packaging we produce and/or market under our brand(s), and require our suppliers to do so as well. We support and work with existing reuse, recycling and composting operators to productively use our products and packaging, or arrange for new systems to bring those back to our manufacturing facilities. We include the reuse, recycling or composting of our products as a design criteria for all new products.
- 5. Buy reused, recycled & composted** - We use recycled content and compost products in all aspects of our operations, including production facilities, offices and in the construction of new facilities. We use LEED-certified architects to design new and remodeled facilities as Green Buildings. We buy reused products where they are available, and make our excess inventory of equipment and products available for reuse by others. We label our products and packaging with the amount of post-consumer recycled content and for papers, we label if chlorine-free and forest-friendly materials are used.
- 6. Prevent pollution and reduce waste** - We redesign our supply, production and distribution systems to reduce the use of natural resources and eliminate waste. We prevent pollution and the waste of materials by continual assessment of our systems and revising procedures, policies and payment policies. To the extent our products contain materials with known or suspected adverse human health impacts, we notify consumers of their content and how to safely manage the products at the end of their useful life.

7. ***Highest and best use*** - We continuously evaluate our markets and direct our discarded products and packaging to recover the highest value of their embodied energy and materials according to the following hierarchy: reuse of the product for its original purpose; reuse of the product for an alternate purpose; reuse of its parts; reuse of the materials; recycling of inorganic materials in closed loop systems; recycling of inorganic materials in single-use applications; composting of organic materials to sustain soils and avoid use of chemical fertilizers; and composting or mulching of organic materials to reduce erosion and litter and retain moisture.
8. ***Use economic incentives for customers, workers and suppliers*** - We encourage our customers, workers and suppliers to eliminate waste and maximize the reuse, recycling and composting of discarded materials through economic incentives and a holistic systems analysis. We lease our products to customers and provide bonuses or other rewards to workers, suppliers and other stakeholders that eliminate waste. We use financial incentives to encourage our suppliers to adhere to Zero Waste principles. We evaluate our discards to determine how to develop other productive business opportunities from these assets.
9. ***Products or services sold are not wasteful or toxic*** - We evaluate our products and services regularly to determine if they are wasteful or toxic and develop alternatives to eliminate those products which we find are wasteful or toxic. We evaluate all our products and offer them as services whenever possible. We design products to be easily disassembled to encourage reuse and repair. We design our products to be durable, to last as long as the technology is in practice.
10. ***Use non-toxic production, reuse and recycling processes*** - We eliminate the use of hazardous materials in our production, reuse and recycling processes, particularly persistent bioaccumulative toxics. We eliminate the environmental, health and safety risks to our employees and the communities in which we operate. Any materials exported to other countries with lower environmental standards are managed according to the current standards in the United States.²⁸

The Town of Cochrane should consider the adoption of the Zero Waste Business Principles as part of this Zero Waste Framework as a method of encouraging our local business community to commit to sustainable waste management practices.

COCHRANE'S ZERO WASTE GOAL

Consistent with the City of Calgary's goal of 80% by 2020 and with the Government of Alberta's *Too Good to Waste* Strategy; the Town of Cochrane's Zero Waste timeline is:

WASTE DIVERSION RATE: **2020: 80%**
LONG TERM GOAL: ZERO WASTE

As was discussed above, Zero Waste is a visionary concept. The 80% by 2020 is a tangible and measurable statistic. The 80% diversion rate would apply to all waste streams that the Town of Cochrane has jurisdiction over – most easily controlled and measured being the residential stream. The Multi-family, Commercial, Industrial & Institutional, and the Construction & Demolition sections – while not under the direct control of the Town of Cochrane can be influenced through policy and program direction. The 80% by 2020 and longer term Zero Waste goal would apply to all sectors.



BACKGROUND COCHRANE WASTE COLLECTION, DISPOSAL AND DIVERSION PROGRAMS

WASTE MANAGEMENT BYLAW

Waste Management Bylaw No. 26/2005 has been repealed and replaced by Waste Management Bylaw No. 09/2011 which regulates and controls the handling, collection and disposal of waste and recyclables in the Town of Cochrane. The Waste Management Bylaw addresses the following topics:

- Collection and removal of waste and recyclables
- Placement of waste and recycling containers
- Preparation for collection
- Weight, volume and size standards
- Materials accepted
- Commercial waste and recyclables management
- Industrial waste and recyclables management
- Accumulation of waste and recyclables
- Penalties

Appendix 2: Waste Management Bylaw No. 09/2011

LANDFILL LOCATION AND RATES

All waste collected through the Town of Cochrane residential waste collection program is taken to City of Calgary Spy Hill Landfill located at 69 Street and 112 Avenue. Tipping fees for the disposal of municipal solid waste are:

Table 3: Tipping Fees

| Year | \$/MT |
|------|-------|
| 2009 | \$75 |
| 2010 | \$85 |
| 2011 | \$95 |
| 2012 | \$98 |
| 2013 | \$102 |
| 2014 | \$107 |

The City of Calgary is striving for full cost accounting for all landfill services. As the costs associated with landfill operation continue to increase and the availability of landfill space decreases; the City of Calgary will continue to increase disposal rates to reflect the disposal atmosphere and to encourage waste reduction.

SINGLE STREAM RECYCLING PROCESSING LOCATION AND RATES

All recyclable materials collected through the Town of Cochrane’s single stream curbside recycling program are processed by a facility operated by RMW Consulting Inc. located in Crossfield, AB. The Town of Cochrane entered a multi-year contract for the processing of single-stream recyclable materials at the following rates:

Table 4: Processing Fees

| Year | \$/MT |
|------|-------|
| 2010 | \$90 |
| 2011 | \$90 |
| 2012 | \$90 |
| 2013 | \$90 |

The Material Recovery Facility (MRF) operated by RMW Consulting Inc. utilizes an 8 – person, manual sort line to separate the single-stream materials into the following categories for sale and transport to the recyclable commodity market:

- Cardboard/boxboard
- Newspaper
- Mixed Paper
- Beverage Containers (with deposit)
- Mixed Plastic
- Tin Cans
- Residual Materials

The contractor is responsible for coordinating with the Town of Cochrane Waste and Recycling Services a supervised inbound and residual auditing process. The audit process ensures that the contractor is sorting the single-stream materials to the Town of Cochrane specifications and assists both the Town of Cochrane to communicate to its residents any issues of contamination that may be occurring.

SPRING/FALL CLEANUP

From the late 1990s – 2011, the Town of Cochrane operated a Spring and Fall Clean Up campaign during the months of May and October. The program operated Thursday – Sunday, 10 am – 6 pm; offering residents on average 38 days/year to dispose of excess yard clean up materials.

In June 2011, the Town of Cochrane Council accepted a business plan to transition the Spring/Fall Clean Up program to the Cochrane Eco Centre beginning in 2012. The transition of the programs to the Cochrane Eco Centre would allow for an increased level of services – the program would instead run from April – November (at a minimum) with some portions of the program operating year round. Council also endorsed the implementation of a Pay-As-You-Throw (PAYT) program for the waste disposal portion of the Spring/Fall Clean Up.

[Appendix 3: Council Report – Cochrane Eco Centre Business Case June 2011](#)

WASTE & RECYCLING COLLECTION

Residential

BWI was the Town of Cochrane’s residential waste collector from 2006 until August 2010. Rocky Mountain Waste Inc. had held the waste collection contract for Cochrane from at least 2000 until 2006 when they were bought out by BWI and the contract was assumed and later extended. The waste collection contract with BWI ended in August 2010.

A Request for Proposal for both Waste & Recycling Collection was sent out in September 2010. The successful proponent for both Waste & Recycling Collection was, RMW Consulting Inc. RMW Consulting Inc. is owned and operated by Adrienne and Kelly Podmorroff, both originally from Canmore, AB; they owned and operated Rocky Mountain Waste Inc. who previously provided collection in Cochrane in the 1990s and 2000s. The contract with RMW Consulting Inc. for Residential Waste & Recycling Collection Services is in place from November 1st, 2010 – October 31st, 2015.

Until September 1st, 2011, the Town of Cochrane administered a weekly manual waste collection program for 5100 single family dwellings as well as collection for 200 attached townhomes, duplex and fourplexes.

On September 1st, 2011, the Town of Cochrane implemented the *Roll With It* Cochrane program – a weekly automated waste and recycling collection program. Table 5 lists the collection days by neighborhood.

Table 5: Residential Waste and Recycling Collection Schedule

| TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|--|--|--|---|
| Cochrane Heights Sunterra Sunset Ridge Gleneagles Hwy 1A Northside Heritage Hills Riversong River Heights Fireside | West Valley West Terrace West Pointe | Bow Ridge Bow Ridge Estates Glenbow Jumping Pound Estates | Bow Meadows Crawford Ranche Riverview Riverside Place Headlands East Cochrane Downtown McGonigle Heights |

Unit Limit

In 1995, the Town of Cochrane implemented a unit limit regulating the amount of residential waste each dwelling could put out for collection each week. From 1995 – 2005 the amount of waste was restricted to three units per household per week; in 2005 with the opening of the Cochrane Recycling Depot the limit was further reduced to two units per household per week.

With the implementation of the *Roll With It* Cochrane program the definition of what a Unit of Waste is changed:

Waste Management Bylaw No. 26/2005 Definition of a “Unit of Waste”:

What is a unit of waste? A unit of waste is one plastic garbage bag no larger than 66 cm x 91 cm (26 inch x 36 inch) or a waste container with a volume no greater than 80 litres (20 gallons); weighing no more than 15 kg. If residents choose to use larger bags or can they will be counted as one and a half units by the collector.

As the Town of Cochrane’s waste and recycling programs have evolved so with it has the expectations related to the unit limit. With the implementation of the *Roll With It* Cochrane program – the unit limit for waste was reduced once again by a total of 40 L – the unit limit definition was changed to the following:

Waste Management Bylaw No. 09/2011 Definition of a “Unit of Waste”:

What is a unit of waste? A unit of waste means one 120 litre residential waste collection cart weighing, including its contents, no more than 55 KG.

While the unit limit was reduced by 40 L – the overall amount of material permitted to be set out for collection was increased by the addition of 240 L of recycling capacity.

Excess Waste

For residents wishing to dispose of more the permitted units of waste or recycling, the following options are provided:

1. Town of Cochrane “Excess Waste Bag”
2. Additional Waste Cart
3. Additional Recycling Cart

Additional units can be placed out for collection only if they are contained within a Town of Cochrane “Excess Waste Bag” or an “Additional Cart”. The bags can be purchased at the Cochrane RancheHouse, Operational Services or at the Cochrane Eco Centre; the price per bag is \$3.00 (the price has been increased once, from 1995 – 2008 the price per bag was \$2). A household may place up to 3 “Excess Waste Bags” out for collection each week.

As demonstrated in Table 6, the Sale of Excess Waste Bags has continued to decline as the Town of Cochrane’s waste diversion programs have continued to evolve. 2012 is predicted to set an all time low for the number of Excess Waste Bags sold.

Table 6: Sale of Excess Bags

| Year | # of Bags Sold |
|------|----------------|
| 2008 | 2760 |
| 2009 | 1878 |
| 2010 | 1888 |
| 2011 | 1750 |

“Additional Cart” services for either waste or recycling can be set up through the Waste & Recycling Services section. A \$10/month fee for an “Additional Waste Cart” and \$7.00/month fee for an “Additional Recycling Cart” is applied to the residents monthly Utility Bill upon service set up. A household may place up to 1 “additional waste cart” and 1 “additional recycling cart” out for collection each week.

Table 7: Additional Waste Cart Service

| Year | # of Households with Additional Waste Cart Service |
|------|--|
| 2011 | 11 |
| 2012 | 13 |

The change to the Automated Waste Collection system has had an overall positive community impact. Complaints related to airborne litter and animal interaction with waste are at an all-time low. The implementation of the 120 L Waste Cart has improved collection efficiency (fewer missed collections), resulted in fewer workplace injuries for the contractor, and has allowed for consistent enforcement of the waste limit.

Waste Collection User Pay System

24

**ZERO WASTE
FRAMEWORK**

The Town of Cochrane’s waste collection program is not funded through the general tax revenue. The Waste Management Fee is charged on all Town of Cochrane residential utility bills on a monthly basis (for those single/multi-family residences that qualify for waste collection). The 2009 fee was \$9.45/dwelling/month, the 2010 fee \$10.58/dwelling/month and after the implementation of the *Roll With It* Cochrane program the 2011/12 fee became \$17.40/dwelling/month. Depending on expected operating increases the fee will generally increase between \$0.25 - \$1.00/dwelling/month annually. As of September 2011 the Waste Management Fee was renamed the Waste & Recycling Collection Fee.

The Waste & Recycling Collection Fee is meant to reflect the true costs associated with operating the waste and recycling collection program. The fee covers the waste and recycling collection contract, tipping fees, processing fees, and administrative expenses.

COLLECTION COMPLAINTS AND WASTE MANAGEMENT BYLAW ENFORCEMENT

The Waste & Recycling Collection components of the Waste Management Bylaw are typically enforced by the collector. The collector is provided with “Violation Stickers” that they apply to the bags; the stickers notify the resident that their waste or recycling was not collected for one of the following reasons:

Town of Cochrane Waste & Recycling Notification Stickers 2012

**WASTE & RECYCLING
COLLECTION NOTIFICATION**



This notice is to inform you that the Town of Cochrane did not collect this waste or recycling for the following reason:

- Overfilled Cart/Over Weight**
- Incorrect Cart Placement**
- Prohibited Materials**
- Waste Not Properly Contained (Must Be Bagged)**
- Recycling Not Properly Prepared (Must Be Loose)**
- Other** _____

Town of Cochrane
Waste and Recycling Hotline
403-851-2277
www.cochrane.ca

**WASTE & RECYCLING
COLLECTION PLACEMENT**

I moved your cart!
Place it here from now on for better collection.

| Placement | Spacing |
|--|---|
|  |  |
| Set carts out of edge of street or alley. | Leave enough space on all sides of your carts. |

Town of Cochrane
Waste and Recycling Hotline
403-851-2277
www.cochrane.ca

Waste & Recycling Services will engage Peace Officers in Municipal Enforcement only in the event of extreme cases and only when all other routes have been exhausted. Repeated violation notifications through the sticker program, letters, telephone conversations and home visits are all utilized prior to seeking Peace Officer support. Bylaw enforcement in the form of warnings and fines have been utilized for residential, construction and commercial violation incidents.

CUSTOMER SERVICE

In December 2009, the Town of Cochrane launched the Waste and Recycling Hotline as a convenient method of directing resident's calls regarding waste and recycling. The hotline also provided an avenue for the tracking of complaint calls. Prior to the launch of the Waste and Recycling Hotline, waste collection complaints were handled by the main Town of Cochrane line, Utility Services and Operational Services.

Examples of Waste Collection Complaints:

- Garbage Missed
- Drivers driving where they shouldn't be
- Garbage bag broke and the driver never cleaned it up

Table 8: Waste Collection Complaints

| Year | # of Complaints |
|------|-----------------|
| 2004 | 66 |
| 2005 | 137 |
| 2006 | 332 |
| 2007 | 472 |
| 2008 | 293 |
| 2009 | 177 |
| 2010 | 145 |
| 2011 | 142 |
| 2012 | 62 * YTD July |

Collection complaints have continued to decline as higher levels of service have been pursued. Waste & Recycling Services has also established a customer service standard for response time to concerns:

1. Calls Returned (for messages left): 2 hours (business days)
2. Missed Collection Addressed: 24 hours (call acknowledged within 2 hours)
3. Damage Repaired: 30 days of incident (investigation complete within 48 hours)
4. Cart Delivery or Repair: 48 hours of notification

Residential Satisfaction Survey – Waste Collection Program

Please tell me how satisfied you are with the overall level and quality of service and programs provided by the Town of Cochrane.

Waste Collection:
82 % Very Satisfied.
16 % Somewhat Satisfied.

How satisfied are you with the job the Town is doing in providing this program or service?

Waste Collection:
36 % Very Satisfied.
48 % Somewhat Satisfied.

In your opinion, do you get good value or poor value for the user fees that you pay for specific areas?

Waste Collection:
24 % Very good value.
57 % Good value.
14 % Poor Value.
4 % Very poor value.

The survey indicated that Town of Cochrane residents rank waste services quite high and that while there is an overall high satisfaction with the programs, some improvement is needed. As there have been significant changes to the Town of Cochrane Recycling programs in recent years – performing an updated Resident Satisfaction Survey would be of significant value.

WASTE COLLECTION STATISTICS

The following tables summarize and demonstrate the evolution of the Town of Cochrane's collection program from 3 bag limit to 2 bag limit to automated collection.

Table 9: Total Annual Residential Waste Collected

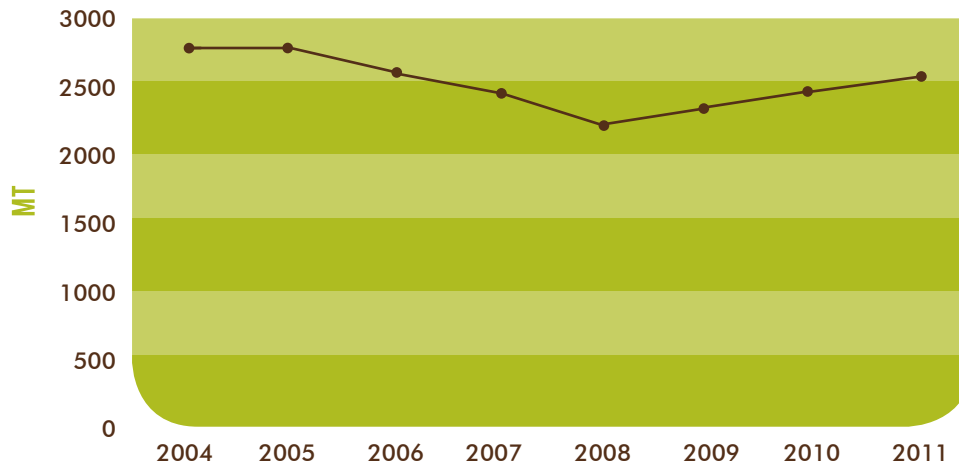


Table 9 demonstrates that in 2004 - 2800 MT of waste was collected through the manual waste collection program. By 2011 the amount of waste collected through the waste collection program had dropped to 2600 MT. These numbers are particularly relevant as this was a period of exponential growth for the Town of Cochrane with a 40% increase in the number of homes serviced through the collection program yet there was an 8 % decrease in the overall amount of waste collected at the curb.

Table 10 below demonstrates these same statistics in a KG/Household/Year metric. This again shows a steady decline in waste collected.

Table 10: Residential Waste Collection Per Household

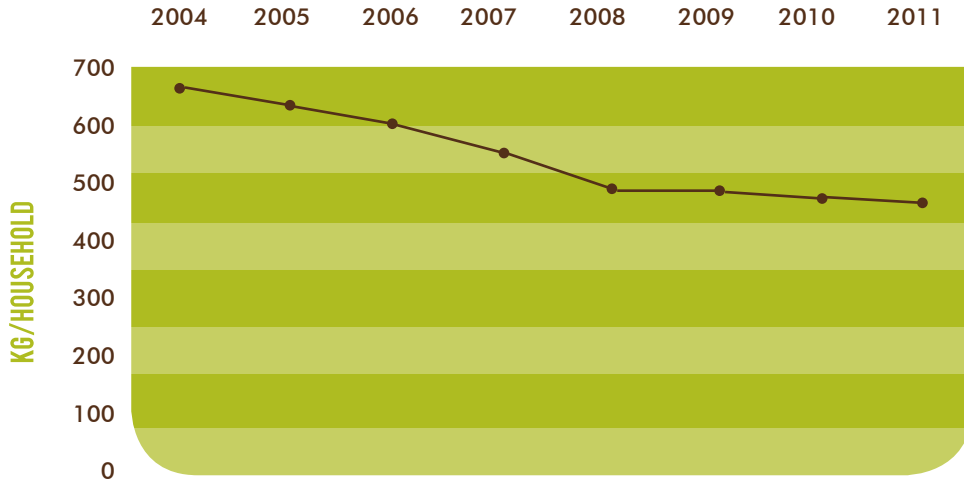


Table 11: Residential Waste Collected Per Capita

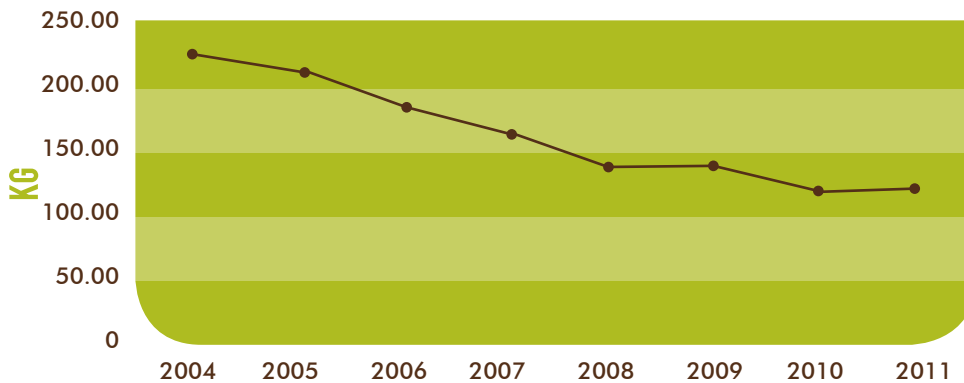


Table 11 depicts an overall reduction in residential waste collected per capita from 2004 to 2011. The reduction again is due to the introduction of the two unit limit, opening of the Cochrane Recycling Depot, implementation of the *Roll With It* Cochrane program and a community wide focus on waste reduction. A new trend appears to be starting in 2008 with a leveling out of the kg/year/capita.

The Alberta residential disposal average is 289 kg/capita (2008); if we were to include waste disposed of through the Spring and Fall Clean Up program the Town of Cochrane's average residential disposal average would be approximately 185 kg/capita (2009) still significantly below the provincial average.

Note: accurate calculation of the residential waste disposal average for Cochrane is difficult due to the kg/year/capita being based on total population not just population receiving waste collection therefore the waste tonnage generated by multi-family homes is not included; also, the data does not include residential waste self-hauled to landfill.

Table 12: Waste Collection Per Household Per Month 2011

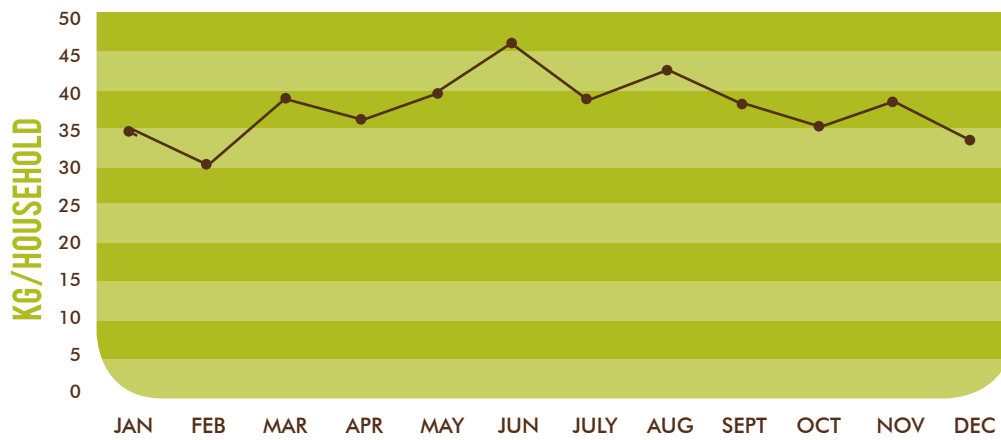


Table 12 demonstrates the correlation between seasons and waste collected at the curb. Year in and year out, the peaks in the summer months can be explained by yard waste disposal in the waste collection program. The peak in December is due to a corresponding annual increase that occurs during the holiday season.

TABLE 13: RESIDENTIAL CURBSIDE WASTE COLLECTED 2004-2012

| | JAN | FEB | MAR | APR | MAY | JUN | JULY | AUG | SEPT | OCT | NOV | DEC | AVG KG/Household/Month |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------|
| 2012 | 36.19 | 31.69 | 34.99 | 34.86 | 46.04 | 39.58 | | | | | | | 37.23 |
| 2011 | 34.82 | 30.89 | 38.49 | 35.8 | 38.91 | 46.7 | 38.4 | 41.6 | 37.65 | 35.32 | 38.02 | 33.67 | 37.53 |
| 2010 | 36.65 | 31.96 | 36.36 | 37.55 | 37.53 | 42.20 | 36.40 | 37.50 | 41.50 | 37.84 | 36.02 | 41.90 | 37.78 |
| 2009 | 39.20 | 30.40 | 34.90 | 42.20 | 37.10 | 43.00 | 42.90 | 35.50 | 43.47 | 39.54 | 35.05 | 41.21 | 38.71 |
| 2008 | 42.70 | 35.60 | 34.60 | 38.20 | 41.80 | 42.40 | 39.50 | 37.80 | 38.80 | 40.80 | 35.40 | 38.40 | 38.83 |
| 2007 | 48.00 | 39.90 | 47.00 | 43.00 | 51.40 | 57.50 | 43.40 | 44.50 | 41.30 | 45.90 | 41.60 | 32.40 | 44.66 |
| 2006 | 47.30 | 39.50 | 50.20 | 44.20 | 52.00 | 54.80 | 47.30 | 52.30 | 48.30 | 53.10 | 51.80 | 51.30 | 49.34 |
| 2005 | 46.80 | 41.00 | 48.20 | 48.40 | 58.10 | 71.90 | 56.30 | 58.10 | 59.70 | 50.70 | 48.10 | 46.00 | 52.78 |
| 2004 | 49.70 | 42.10 | 49.00 | 55.90 | 51.70 | 69.40 | 68.50 | 60.90 | 52.90 | 52.90 | 48.60 | 51.00 | 54.38 |

Table 13 demonstrates the measurable change in waste collected at the curb per household per month over the 2004 – 2012 time period. Seasonal peaks can be observed as well as significant changes over time as new waste diversion programs were implemented.

TOWN OF COCHRANE WASTE DIVERSION PROGRAMS

RESIDENTIAL DIVERSION

TOWN OF COCHRANE RECYCLING DEPOT/ECO CENTRE

The Town of Cochrane Recycling Depot was originally established by the Cochrane Environmental Action Committee in 1989; funding and operating responsibility of this site was assumed by the Town of Cochrane in 1994.

The new Cochrane Recycling Depot located at 50 Griffin Industrial Point was opened in December 2005. The facility is a staffed drop off recycling depot where residents must sort their recyclable materials; the facilities operating hours are:

Table 14: Hours of Operation 2005 – 2011

| Day | Time |
|-----------|------------|
| MON - TH | 11am - 7pm |
| FRI - SAT | 9am - 4pm |
| SUN | Closed |
| STAT HOL | Closed |

Table 15: Hours of Operation Oct 2011 – Present

| Day | Time |
|-----------|-----------|
| WED - SAT | 8am - 6pm |
| SUN - TUE | Closed |
| STAT HOL | Closed |

Old Cochrane Recycling Depot (Railway St)



Cochrane Eco Centre (Griffin Rd)



Table 16: Cochrane Eco Centre Acceptable Materials



- Newspaper
- Mixed Paper
- Cardboard
- Tin Cans
- Scrap Metal
- Mixed Plastic
- Plastic Bags
- Drink Containers
- Expanded Polystyrene
- Glass Food Jars
- Leaves and Grass
- Oil, Oil Containers, Oil Filters
- E-Waste
- Tree Trimmings
- Food Waste Compost
- HHW & Paint
- Books
- Clothing
- Bicycles
- Pop Tabs
- Soup Labels
- Cell Phones
- Eye Glasses
- Printer Cartridges
- Fluorescent Bulbs
- Automotive Batteries
- Alkaline and Rechargeable Batteries
- Anti-Freeze
- PAYT Waste
- Cooking Oil

Appendix 6: Cochrane Eco Centre Brochure 2012

Each of the different materials collected are handled by the site in a different fashion.

Table 17: Cochrane Eco Centre Material Detail

| Material | Collection Frequency | Hauler | Processor | Revenue After Transportation |
|------------------------|--|----------------------------|------------------------------|---|
| Newspaper | Twice Annually | Various | Primary: Allied Paper | Yes |
| Mixed Paper | Quarterly | Bullet Transport | Capital Paper | Sometimes |
| Cardboard | Every 4-6 Weeks | Various | Varies on Market Opportunity | Yes |
| Tin Cans | Hauled with Mixed Paper | Bullet Transport | Various | Yes |
| Scrap Metal | Weekly | WM | Navajo Metals | Yes |
| Glass Food Jars | Monthly | Econopro | East Calgary Landfill | No: Processing Charges Apply |
| Mixed Plastics | Every 2 Months | Various | Various | Sometimes, and often Processing Charges Apply |
| Plastic Bags | Incorporated into mixed plastics bales | N/A | N/A | N/A |
| Drink Containers | Every 2 Days | Cochrane Bottle Depot | ABCRC | Yes |
| Expanded Polystyrene | 4 pallets quarterly | Various | Various | No |
| Leaves and Grass | 2-8 Bins Weekly | WM | Branched Out Nursery | No: Processing Charges Apply |
| Tree Trimmings | 2-4 Bins Weekly | RecycleWorx | RecycleWorx | Processing Charges Apply |
| Food Waste | Bi-Monthly | RMW | Olds College | Processing Charges Apply |
| Oil | Monthly | Custom Reclamation | Custom Reclamation | Yes |
| Oil Containers | Monthly | C & D Plastics | C & D Plastics | Yes |
| Oil Filters | Monthly | Custom Reclamation | Custom Reclamation | Yes |
| E-Waste | Weekly | E-Cycle | E-Cycle | Yes |
| Clothing | Weekly | Various | Various | N/A |
| Pop Tabs | Twice Annually | Canada Post | Ronald McDonald House | N/A |
| Soup Labels | Twice Annually | Mitford School | N/A | N/A |
| Cell Phones | Annually | E-Cycle | E-Cycle | N/A |
| Eye Glasses | Annually | Lion's Club | N/A | N/A |
| Printer Cartridges | Monthly | E-Cycle | E-Cycle | N/A |
| Fluorescent Bulbs | Monthly | EnviroSort | EnviroSort | No: Processing Charges Apply |
| Automotive Batteries | Every 2 Weeks | CCON Metals | CCON Metals | Yes |
| HHW | Monthly | EnviroSort | Various | No: Processing Charges Apply |
| Paint | Monthly | EnviroSort | Various | Yes |
| Alkaline Batteries | Annually | Toxco | Toxco | No: Processing Charges Apply |
| Rechargeable Batteries | Monthly | RBRC | RBRC | N/A |
| Anti-Freeze | Every 2 Months | Custom Reclamation | Custom Reclamation | No: Processing Charges Apply |
| PAYT Waste | Monthly | WM | City of Calgary | No: Tipping Fees Apply |
| Cooking Oil | Monthly | West Coast Reductions Inc. | West Coast Reductions Inc. | No |

Table 18: Cochrane Eco Centre Market Information 2009

| Material | Product Weights | Product Values | Transport | Net Revenue For All | Average Net \$/MT |
|-----------------------|-----------------|----------------|-------------|---------------------|-------------------|
| Cardboard | 313.05 | \$4,866.27 | \$2,288.66 | \$2,577.60 | \$2.65 |
| Mixed Paper | 355.67 | -\$2,988.73 | \$6,504.10 | -\$9,492.83 | -\$24.29 |
| Newspaper | 220.52 | \$15,438.74 | \$2,734.33 | \$12,704.40 | \$53.48 |
| Milk Cartons | 3.65 | -\$38.33 | \$0.00 | -\$38.33 | -\$2.63 |
| #2 Plastic | 6.75 | \$3,047.63 | \$0.00 | \$3,047.63 | \$112.88 |
| Plastic Film | 0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Mixed Plastic | 185.40 | \$0.00 | \$33,343.90 | -\$33,343.90 | -\$187.84 |
| Glass | 78.02 | -\$7,065.23 | \$3,315.00 | -\$10,380.23 | -\$133.34 |
| Metal | 66.16 | \$4,520.81 | \$4,500.00 | \$1,182.63 | \$10.68 |
| TOTAL: 1229.22 | | | | | |

Commodity Revenue

2009 is an example of a year with poor market conditions for the marketing of recyclable commodities. In 2009, the Cochrane Eco Centre received revenue after transportation costs for three commodities: Cardboard (\$2.65/MT), Newspaper (\$53.48/MT) and Scrap Metal (\$10.68/MT). 2010 and 2011 saw a slight recovery in the recyclable commodity markets but a drop off once again in 2012 has been hard on the bottom line.

Other Revenue

The Cochrane Eco Centre also receives revenue for other special waste products. Revenue for Electronic Waste is generated through the Alberta Recycling Management Authority (ARMA) Stewardship Program at a remitted incentive of \$100/MT of eligible material; as well, E-Cycle Solutions our electronics transporter and processor provide \$50/MT for eligible material as an incentive.

Oil, oil filters and oil containers also generate a small amount of revenue and do not require the payment of any transportation expenses. Oil = \$0.14/L; Oil Filters = \$0.30/ KG; Oil Containers = \$0.50/KG.

Automotive batteries are collected by CCON Metals; CCON Metals is paying roughly \$6.00/unit. Drink Containers also generate revenue from the redeemed deposit.

Household Hazardous Waste and Paint

The Town of Cochrane Fire Services Department was responsible for the delivery of the Household Hazardous Waste (HHW) and Paint Program. In previous years, Fire Services held annual or semi-annual Toxic Round Up events in order to provide a safe disposal opportunity for these products.

With the introduction of the *Roll With It* program it was proposed that the HHW/Paint program be relocated to the Cochrane Eco Centre – the one stop drop off for all waste and recycling materials. Both the HHW and Paint stewardship programs are offered on a year round basis with periodic Round Ups to encourage residents to dispose of this material safely. Resident response to the relocation and expansion of the HHW/ Paint program has been extraordinarily positive. From October 2011 – July 2012 over 60 000 L of paint have been collected for recycling and over 10 000 L of HHW collected for safe disposal.

Used Oil, Oil Filters and Containers

The Cochrane Eco Centre is home to an Alberta Used Oil Management Association (AUOMA) EcoCentre. The EcoCentre allows for the collection and safe disposal of used oil, oil filters, used oil containers and pails and glycol. Table 19 represents the volumes of these materials collected in 2011.

Table 19: Oil Product Volume 2011

| Material | Volume |
|-----------------------------|---------|
| Used Oil | 28 000L |
| Oil Filters | 1984KG |
| Used Oil Containers + Pails | 2800KG |
| Glycol | 750L |

Providing safe, convenient disposal for Used Oil, Oil Filters and Containers is essential to the protection of our watershed. 1 L of Used Oil disposed of incorrectly will contaminate 1 million L of fresh water.

Yard Waste

The Town of Cochrane Eco Centre accepts Leaves and Grass for composting from Spring – Fall each year. The materials are dropped off by residents, unbagged and hauled in a 30-40 yard roll of bin by Waste Management. The materials are hauled to the Branched Out Nursery site north of Cochrane on Hwy 22; the composted materials are used in the nursery and landscaping operations. Approximately, 150 MT of leaves and grass are collected and composted through this program each year.

As the new Compost Standards are developed and released by Alberta Environment (likely prior to 2014), Cochrane will need to monitor its yard waste program. The Town of Cochrane's current composting location is not a certified facility, as volumes increase and regulations change; modifications to the site or locating a different site may be required.

Tree Trimmings and Branches are also now accepted at the Cochrane Eco Centre from Spring – mid February. The expansion of the yard waste drop off program was launched on May 1st, 2012. Resident response to the program has been phenomenal – from May to July over 2000 cubic yards of Tree Trimmings and Branches have been hauled to the RecycleWorx site for chipping (the product is used as a compost amendment and as mulch).

Christmas Tree Chipping Program

The Christmas Tree Chipping Program is offered on an annual basis from the end of December - late January. Residents can drop off trees free of tinsel, ornaments, metal wire, bags and stands. In previous years, Fortis Alberta donated the use of the chipping equipment and the Town of Cochrane Roads section provided the staff time. The trees were chipped and the mulch disposed of at landfill (fear of possible spread of disease prevented the Town from using the mulch in its Parks operations).

In 2010, a local business, Spray Lake Sawmills offered to provide the chipping equipment and the staff for the Christmas Tree Chipping program. The switch to this local business was a resounding success as the materials were chipped faster and with no involvement of Town of Cochrane staff time (saving time and money). The materials were chipped into a 60 yard roll off bin and hauled to Branched Out Nursery to be used in their landscaping operations. 60 cubic yards of tree mulch was diverted in 2010 through this program.

For 2011, further changes were made to the Christmas Tree Chipping program – residents were required to drop off their Christmas Trees at the Cochrane Eco Centre. The trees were collected in a 30 – 40 yard bin; the trees were then hauled to the RecycleWorx site for chipping. Moving the Christmas Tree program from Mitford Park eliminated a very risky fire hazard that had kept building as Cochrane's population continued to grow. The addition of the Christmas Tree program at the Cochrane Eco Centre is consistent with the Cochrane Eco Centre becoming the one stop drop off for waste and recycling materials in Cochrane.

Cochrane Eco Centre Funding

Funding for the operation of the Cochrane Eco Centre and the waste and recycling education programs the facility delivers is provided through the monthly Eco Fee. The fee is used for operating expenses including: staffing, transportation of product, utilities, equipment repair etc. All Town of Cochrane businesses and residences that receive a Town of Cochrane Water Utility bill are required to pay the monthly Eco Fee.

Table 20: Eco Fee Rates

| Year | Monthly Fee |
|------|-------------|
| 2008 | \$5.00 |
| 2009 | \$5.25 |
| 2010 | \$5.57 |
| 2011 | \$5.57 |
| 2012 | \$4.75 |

The original capital grant for the building of the Cochrane Eco Centre was provided under the Resource Recovery Program through Alberta Environment. Future funding opportunities through Alberta Environment have been frozen indefinitely. Other funding for the future may include: Green Municipal Fund, Municipal Sustainability Initiative.

Residential Satisfaction Survey - Recycling

Three questions were asked in the 2009 Town of Cochrane Customer Satisfaction Survey that had a direct correlation to our Recycling Program:

Please tell me how satisfied you are with the overall level and quality of service and programs provided by the Town of Cochrane.

Recycling:
84% Very Satisfied.
13% Somewhat Satisfied.

How satisfied are you with the job the Town is doing in providing this program or service?

Recycling:
53% Very Satisfied.
29% Somewhat Satisfied.

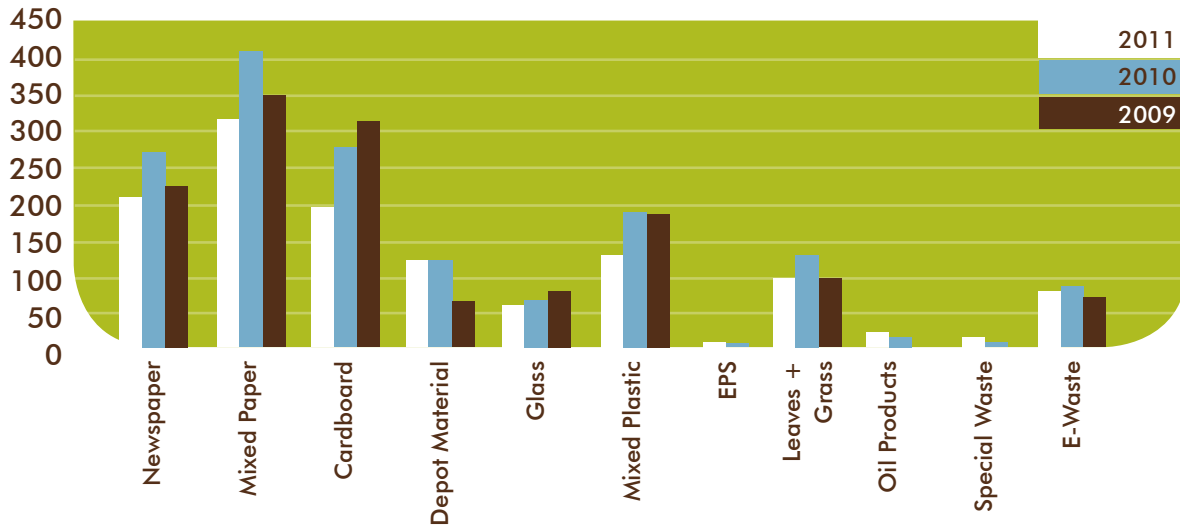
In your opinion, do you get good value or poor value for the user fees that you pay for specific areas?

Recycling:
35% Very good value.
47% Good value.
10% Poor value.
5% Very poor value.

Like the waste management questions mentioned above, the survey indicated that Town of Cochrane residents rank recycling services quite high and that while they are overall satisfied with the programs, some improvement is needed. As there have been significant changes to the Town of Cochrane Recycling programs in recent years – performing an updated Resident Satisfaction Survey would be of significant value.

WASTE DIVERSION STATISTICS

Table 21: Cochrane Eco Centre Material Diverted 2009 -2011



Note: Comparative data unavailable pre-2009.

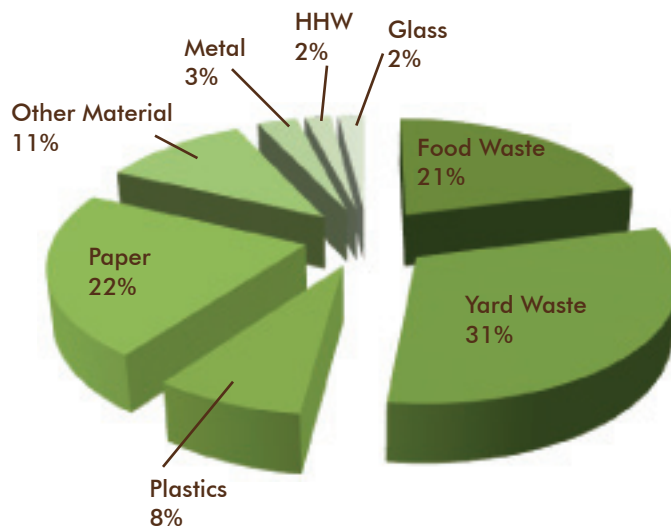
In 2009, per capita recycled material was approximately 83 kg/person/year and approximately 10 kg/person/year of yard waste was diverted from landfill. The per capita calculation does not take into account business/commercial users or users from outside of the Town of Cochrane. Town of Cochrane businesses are encouraged to use the Cochrane Eco Centre, however; it is difficult to calculate the percentage of materials being dropped off by businesses. The best estimate for business/commercial tonnage for 2009 is 10 % of total tonnage (minus yard waste which businesses are not permitted to use) equaling approximately 125 MT.

With the implementation of the *Roll With It* Cochrane program the 2011 per capita recycled material (both curbside and Cochrane Eco Centre) increased to 95 kg/person/year with only 4 months of curbside recycling collection included within the calculation.

Waste Diversion Potential

In order to understand future waste diversion potential there needs to be a comparison of residential waste composition to current and potential diversion estimates. The residential waste composition for the Town of Cochrane is assumed to be consistent with provincial averages for residential waste.

Table 22: Alberta Residential Waste Composition 29



In 2009, Town of Cochrane total residential waste composition including the Spring/Fall Clean Up, Curbside Residential Waste Collection and Recycling Depot volumes was 4041 MT.

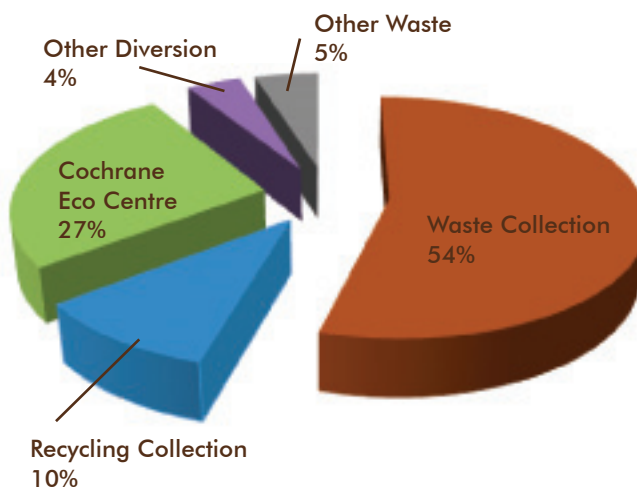
The Town of Cochrane’s actual waste diversion rate for residential waste as of 2009 was between 20- 25 %. An estimated 40 – 50 % of our residential waste is composed of recyclable material that can be accepted through a standard drop off or curbside recycling program. By implementing a curbside recycling program and further reducing the amount of waste residential households are permitted to dispose of each week Cochrane is inching ever closer to achieving 100% diversion of the recyclable materials within the residential waste stream.

The implementation of the *Roll With It* Cochrane program has brought Cochrane’s waste diversion rate to somewhere between 34 – 40 % as of July 2012 for the curbside program alone. With the addition of materials accepted at the Cochrane Eco Centre and Cochrane’s residential waste diversion rate is approximately 42 – 45 %.

Table 23: Waste & Recycling Services 2011

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ZERO WASTE FRAMEWORK



Reuse Opportunities

The impact of reuse opportunities on waste diversion is significant. The Cochrane Housing Society has embraced the opportunity to encourage reuse activities and generate revenue through a number of initiatives. Revenue generated from sales at Home Reno Heaven support affordable housing initiatives in Cochrane.

Home Treasures is run by the Treasures for Your Home Society it is a Not for Profit Community and Family Thrift Store providing a valuable reuse opportunity for Cochrane residents. Home Treasures accepts gently used household items.

Home Reno Heaven: Launched in 2010, Home Reno Heaven provides reuse opportunities for construction and renovation materials.

There are a number of consignment stores for both used books and clothing located throughout Cochrane.

Municipal Comparison

Table 24 provides detailed information on residential waste disposal and diversion programs available in other CRWRP municipalities and other similarly sized Alberta municipalities.

Table 24: Alberta Municipal Comparison Chart

| Community | Waste Collection | | | | Recycling | | Organics | | Fees | | |
|-------------------|------------------|--------|------------|--------------------|----------------|----------|---------------------|----------|------|--------------------------|---|
| | Automated | Manual | Unit Limit | Large Item Pick Up | Curbside | Drop Off | Yard Waste Curbside | Drop Off | | Yard/Food Waste Curbside | Drop Off |
| Cochrane | ✓ | | ✓ 120L | | ✓ 240L | ✓ | ✓ | ✓ | | | \$17.40 Collection \$4.75 Eco Fee |
| Airdrie | | ✓ | ✓ 2 Unit | | | ✓ | | ✓ | | | \$10.17 Collection \$6.40 Eco Fee |
| Okotoks | ✓ | | ✓ 120L | | ✓ Subscription | ✓ | ✓ Subscription | ✓ | | | \$9.09 Waste Collection \$9 Recycling Collection \$3/bag Yard Waste \$3.69 Eco Fee |
| Canmore | ✓ | | | ✓ | | ✓ | | ✓ | | | \$12.71 Collection \$5.97 Eco Fee |
| St. Albert | ✓ | | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | \$9.82 Waste Collection \$5.50 Recycling Collection \$5.77 Organics No Eco Fee (Tax Supported) |
| Spruce Grove | ✓ | | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | \$26.00 |
| Stoney Plain | ✓ | | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | \$25.00 |
| Sirathcona County | ✓ | | ✓ | | ✓ | ✓ | | | ✓ | ✓ | \$22.95 |



ACHIEVING ZERO WASTE

The vision is Zero Waste; the interim goal is 80 % by 2020. That is 80 % of waste diverted from landfill and only 20 % landfilled by the year 2020. How do we achieve these goals?

Based on the Cochrane Sustainability Plan and this, the Zero Waste Framework – we have successfully identified our vision and an interim goal that will allow us to achieve that vision.

Just as with the Cochrane Sustainability Plan, Pathways to our Zero Waste Future have been identified and represent an integrated approach to achieving our Zero Waste Vision. The background information related to our current waste and recycling reality has been provided in detail in the previous pages – each of the five pathways to success will be accompanied with a description of success (including targets); challenges and opportunities and outline the pathway to completion.

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ZERO WASTE
FRAMEWORK

3R'S HIERARCHY

Sustainable waste management strategies must move through the 3 R's Hierarchy. The hierarchy moves from most to least desirable (see Table 25). Strategies that support Reduce, Reuse and Recycle – in that order – are needed to create a Zero Waste future. The 5 pathways to our Zero Waste Future were based on and have been prioritized based on the 3 R's Hierarchy.

Table 25: Waste Hierarchy



Reduce

Reducing the amount of waste we create through waste prevention activities and more efficient use of natural resources is the best waste management option.

Reuse

Reusing items for the same or different purposes can lead to long-term savings both economically and environmentally.

Recycle

Recycling is a process used to make waste materials into new products to prevent the waste of useful materials, reduce the consumption of raw materials, reduce energy usage and pollution as compared to virgin production.

Disposal

Disposal should only be an option if none of the above are appropriate.



toward zero waste 5 PATHWAYS

1

ORGANICS STRATEGY (ALL SECTORS)

2

MULTI-FAMILY DWELLINGS RECYCLING

3

INDUSTRIAL, COMMERCIAL & INSTITUTIONAL (ICI) RECYCLING

4

CONSTRUCTION & DEMOLITION RECYCLING

5

EVENTS & PUBLIC SPACES

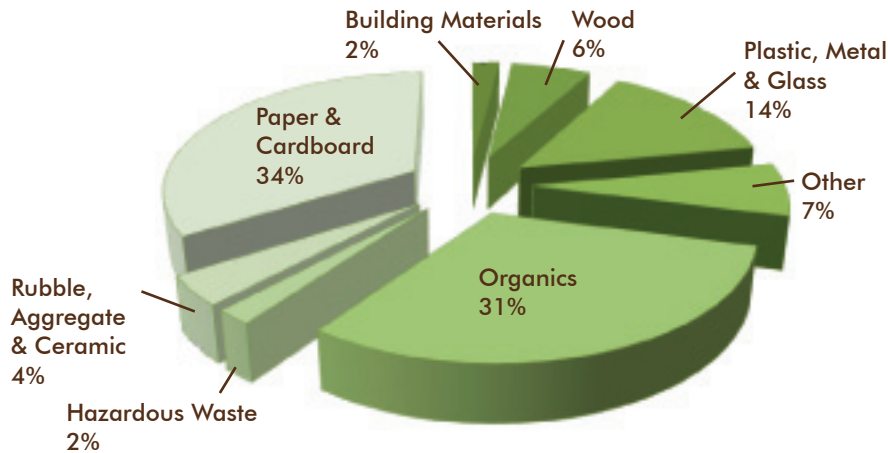
47

ZERO WASTE
FRAMEWORK

WHAT IS MUNICIPAL SOLID WASTE?

Municipal Solid Waste is any waste material for which the generator has no further use, and which is managed at waste disposal, recycling or composting facilities. This definition includes waste from residential, Industrial, Commercial & Institution, as well as, Construction, Renovation & Demolition sources.

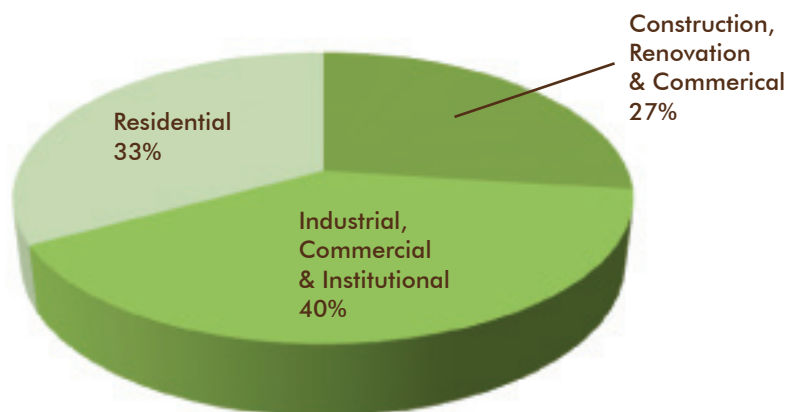
Table 26: Alberta Municipal Solid Waste Composition³⁰



Looking at the MSW Composition breakdown above it becomes apparent quite quickly that an 80% diversion goal is a realistic and achievable goal. Organics 31%, Paper & Cardboard 34%, Plastic, Metal & Glass 14% - that equals 79% already, without including the rubble and aggregate, wood and drywall – all materials that can be readily diverted from landfill.

By breaking the composition of MSW down further by materials and sectors, the 5 pathways to Zero Waste have been identified and prioritized.

Table 27: Alberta Municipal Solid Waste by Sector³¹



³⁰ Alberta Environment, Waste Not: Alberta's Approach to Waste Management, 2007, p. 3.

³¹ Alberta Environment, Waste Not: Alberta's Approach to Waste Management, 2007, p. 3.

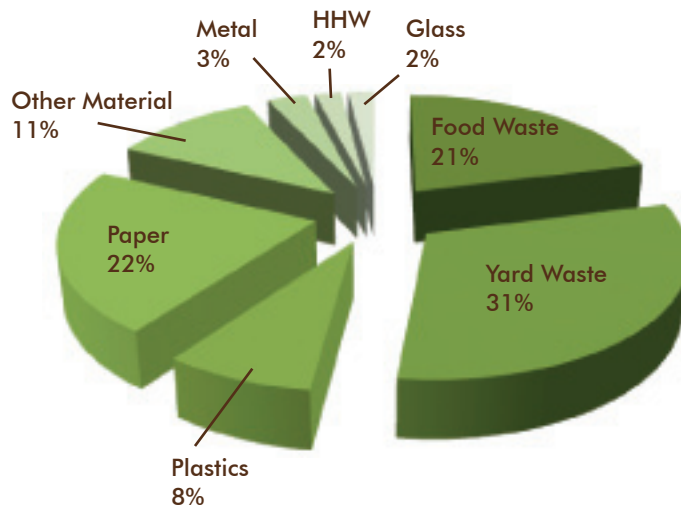
1 ORGANICS STRATEGY

Key to the achievement of the 80% diversion by 2020 goal and our Zero Waste future, is the development of an Organics Strategy which will address the over 1/3 of the waste stream that Organic Materials represent.

The composition of Municipal Solid Waste (MSW) is detailed in Table 26; the table demonstrates the importance of Organic Material (food & yard waste) in the overall MSW composition across all sectors. 31% of all MSW is classified as food or yard waste. This organic material can be diverted from landfill through anaerobic and aerobic compost systems.

The breakdown of food and yard waste by sector is provided in the following three tables.

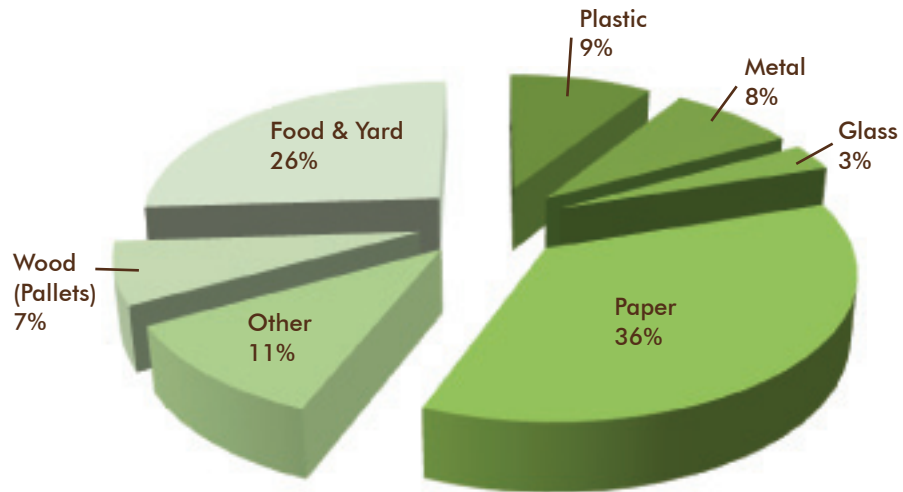
Table 28: Alberta Residential Waste Composition³²



Residential waste is waste generated from single family and multi family dwellings. Food waste represents 21 % of all residential waste and Yard waste represents 31%. A total of 52% of the residential waste stream is comprised of food and yard waste that can be diverted from landfill.

³² Alberta Environment, Waste Not: Alberta's Approach to Waste Management, 2007, p. 3.

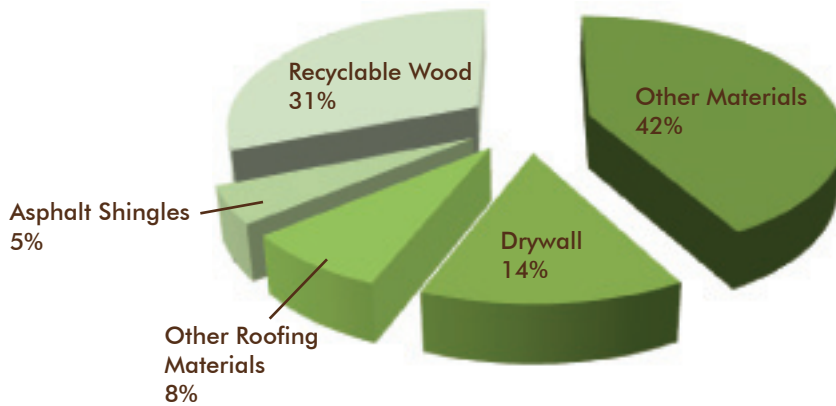
Table 29: Alberta Industrial, Commercial & Institutional Waste Composition³³



Food and yard waste also compose a significant portion of the Industrial, Commercial & Institutional waste stream – 26% of ICI waste is organic material. The vast majority of the organic material in the ICI stream is food waste from the food services industry.

³³ Alberta Environment, Waste Not: Alberta's Approach to Waste Management, 2007, p. 3.

Table 30: Alberta Construction, Renovation & Demolition Waste Composition³⁴



The third source of MSW - Construction, Renovation & Demolition waste represents the smallest source of organic material in MSW. While drywall and wood can be utilized as compost amendments – the impact of CRD waste as a source of organic materials is negligible compared to that of the Residential and ICI sectors.

It is essential that the Town of Cochrane work to reduce the amount of organic waste destined for landfill. Not only does this material take up valuable landfill space but also its contribution to climate change cannot be avoided.

³⁴ The City of Calgary, Industrial Commercial Institutional Waste Diversion Progress Update, 2011, p. 7.



You may think that when food and yard waste is buried in the landfill it breaks down quickly and becomes a part of the soil, but that's not what happens.

Landfills are giant storage capsules, most food and yard wastes like grass clippings and apple cores are identifiable even after several decades in the landfill and take up valuable space.

Food and yard waste need oxygen (aerobic environment) to decompose into compost. When organics are placed in a landfill, the material gets mixed up with other waste and is quickly buried. Landfills are airless (anaerobic) environments, which mean that in the absence of air; waste very slowly starts to break down – the process can take decades.

When organics do eventually break down in this aerobic environment, the food and yard materials release significant amounts of methane into the atmosphere. Methane is an extremely concentrated greenhouse gas that has 21 times the global warming potential of carbon dioxide. It also contributes to an increase in the production of leachate (toxic liquid), which has to be managed, collected and treated under strict environmental regulations.

While the Town of Cochrane encourages the diversion of organics through the promotion of grasscycling and backyard composting and the provision of yard and food waste drop off programs, there remains a staggering proportion of organics in our waste stream. It is crucial that we divert these organics not only for the economic benefits of saving valuable landfill space but for the significant progress we can make towards curbing the impacts of climate change.

1

ORGANICS STRATEGY

Current State

The Town of Cochrane offers drop off programs at the Cochrane Eco Centre for the following materials:

Tree Trimmings & Branches – Launched May 1st, 2012 annual volume unknown

Grass Clippings & Leaves – 150 MT/annually

Food Waste – Launched May 1st, 2012 estimated volume 70 MT/annually

The Town of Cochrane also actively promotes Grasscycling and Backyard Composting as alternatives to organics disposal. Promotions through all social media outlets, websites, brochures, advertisements, composter sales have been ongoing for many years.

The just over 200 MT of organics handled at the Cochrane Eco Centre represents a drop in the bucket – perhaps 5% of the organics generated by the Residential and ICI sectors are being handled at the Cochrane Eco Centre for composting. Best practices also estimate that an additional 5% of organic material in Cochrane is being diverted through Backyard Composting.

ORGANICS STRATEGY

Towards Zero Waste

Development of a Town of Cochrane Organics Strategy, including:

- Development of a business case for the expansion of the *Roll With It* Cochrane program to include automated organics collection.
 - Based on best practices present a range of program options to Cochrane residents for consideration and recommendation – program proposal to Council including capital and operating cost expenditure required for implementation.
- Examination of best practices related to the creation of Organics Diversion programming aimed at the Multi-Family Dwelling sector. Engagement with stakeholders and program proposal to Council.
- Examination of best practices related to the promotion of Organics Diversion within the ICI sector. Engagement with stakeholders and program proposal to Council.

Opportunities & Challenges

- Organics processing site access, processing fees and transportation
- Purchase and delivery of automated carts
- Space challenges – particularly Multi-Family Dwellings and Downtown Business Area
- End Use
- Promotion of Backyard Composting and Grasscycling
- Cochrane Eco Centre Capacity (growth considerations)
- Funding
- Community Buy In
- Enforcement

Stakeholder Engagement

In order to successfully work Towards Zero Waste, Cochrane residents and businesses need to be engaged regarding their preferred program delivery.

- Public Engagement (Single and Multi-Family Dwellings)
- Stakeholder Engagement (Industrial, Commercial & Institutional Sector)



2

MULTI FAMILY DWELLING RECYCLING

Current State

Multi-family dwellings represent approximately 12% of the residential dwellings in Cochrane. At this time, there are just under 1000 multi-family units that are not serviced by the Town of Cochrane Waste and Recycling collection program. These multi-family units are serviced through private contractors managed by the condo association and property management firms. While private recycling collection services are available through a number of companies in Cochrane, it was discovered that less than 50 multi-family units are utilizing such services. That is not to say that the residents of multi-family dwellings are not recycling – 50% of the client base at the Cochrane Eco Centre are multi-family residents.

Despite access to the Cochrane Eco Centre, waste assessments of Cochrane’s multi-family dwelling waste have confirmed twice as much recycling remaining in the waste of multi-family dwellings compared to that of single family dwellings. Over 25% of the waste being disposed of by multi-family residents in their shared dumpsters is actually recyclable material.

Immediately after the launch of the *Roll With It* Cochrane program in September 2011, the Town of Cochrane Waste & Recycling Services began receiving requests from the multi-family unit residents for the expansion of the *Roll With It* Cochrane program to include their homes. Waste & Recycling Services has continued to track these requests and to date has received 68 requests for inclusion in the program- the sheer number of these requests indicates a high level of interest in multi-family dwelling recycling opportunities in Cochrane.

In Cochrane, the multi-family residential sector is comprised of a variety of housing types ranging from higher density apartments to lower density structures that are part of a multi-family complex. For consideration in the Zero Waste Framework and multi-family recycling, these are dwellings that do not receive recycling services under the *Roll With It* Cochrane program.



MULTI FAMILY DWELLING RECYCLING

Towards Zero Waste

Development of a Town of Cochrane Multi-Family Dwelling Recycling Strategy, including:

- Program delivery options based on stakeholder engagement and best practices – program proposal to Council including capital and operating cost expenditure required for implementation.
- Review and revise the Land Use Bylaw to ensure that current and future developments facilitate Multi-Family Dwelling Recycling.
- Review and revise the Waste Management Bylaw to promote and enforce Multi-Family Dwelling Recycling.

Multi-family Dwelling Recycling Station Calgary, AB



Opportunities & Challenges

- Funding and billing
- Space requirements – uniqueness of each building
- Variety of collection methods required
- Contamination and enforcement
- Program delivery – public or private
- Disparity between single family and multi-family recycling services in Cochrane
- Administration of additional programming

Stakeholder Engagement

- Multi-Family Dwelling Residents
- Property Management Firms
- Condo Associations
- Recycling Collection Companies
- Developers
- Builders
- Town of Cochrane Internal Departments

3

INDUSTRIAL, COMMERCIAL & INSTITUTIONAL RECYCLING

Current State

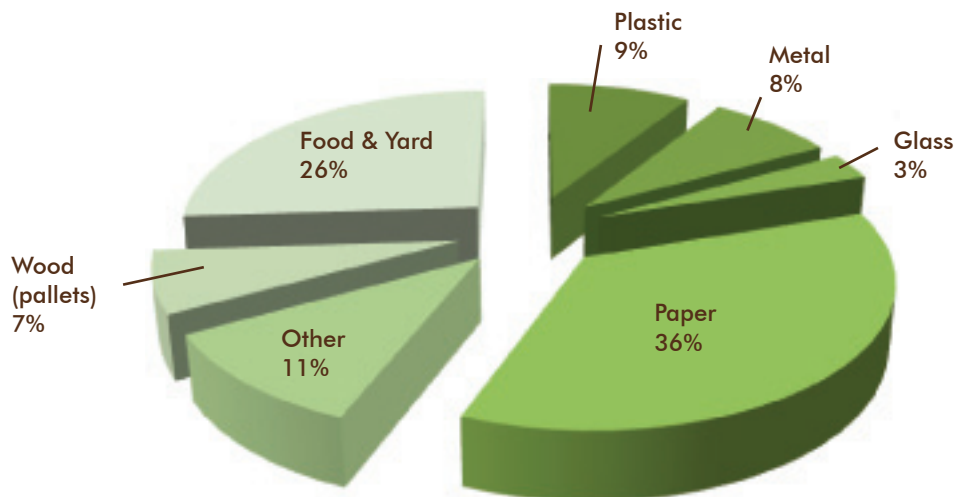
ICI waste is the waste material produced from industrial, commercial and institutional activities. The management, collection and transportation of ICI waste is more complicated than the residential or construction sectors due to the uniqueness of the waste produced by each generator. The waste generated from a restaurant and an office tower is very different - in turn they must be handled very differently.

40% of the MSW stream is comprised of waste generated from the Industrial, Commercial & Institutional (ICI) sector. The Town of Cochrane does not control or regulate the ICI waste sector and does not have any formal programs or policies in place for this sector.

The ICI sector does have access to the Cochrane Eco Centre. Many businesses and institutional take advantage of the over 25 material streams accepted at the Cochrane Eco Centre. All members of the Cochrane ICI community that are receiving a Town of Cochrane Utility Bill are paying the Eco Fee that supports the Cochrane Eco Centre operation. Cochrane is unique in its application of the Eco Fee to this sector and provision of recycling drop off services to the ICI sector. It is estimated that 10% of Cochrane Eco Centre users are from Cochrane's ICI sector.

Table 31 provides a detailed breakdown of the waste composition for the ICI sector. Recyclables (paper, metal, plastic and glass) represent 56 % and Organics 26%. By diverting just these materials alone from landfill – Cochrane's ICI sector would exceed the 80% by 2020 goal.

Table 31: Alberta Industrial, Commercial & Institutional Waste Composition³⁵



Town of Cochrane Internal Buildings

The Town of Cochrane does not have an internal waste management strategy or procedures. There has been some coordination of contracted services as collection contracts have expired; the co-mingled collection of recyclables from the Operations Shop, Bill Hill Leisure Pool and Protective Services Centre is an example of this coordination.

The Town of Cochrane does not have a sustainable purchasing program and has no procedures in place for ensuring the sustainability (including the production material, packaging and waste generated) of the products and services purchased for internal operation.

Table 32: Town of Cochrane Internal Buildings Waste & Recycling Practices

| COLLECTION | Building | RancheHouse | Cochrane Ranche & Clubhouse | FCSS & Parent Link | Big Hill Leisure Pool | Protective Services Centre | Operations Shop | Water Treatment Plant | Seniors Centre | Cookhouse | Cochrane Eco Centre |
|------------|---|-------------|-----------------------------|--------------------|-----------------------|----------------------------|-----------------|-----------------------|----------------------|-----------|---------------------|
| | Waste | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Self-haul | ✓ | ✓ | ✓ |
| Recycling | Co-mingled system - main floor Source separated - admin. level | Limited | Cardboard bin Self-haul | Co-mingled | Co-mingled | Co-mingled | Self-haul | Limited | Self-haul | Self-haul | |
| Organics | No | No | Backyard Composter | No | No | No | No | No | Green King Recycling | Self-haul | |

INDUSTRIAL, COMMERCIAL & INSTITUTIONAL RECYCLING

Towards Zero Waste

Development of a Town of Cochrane Institutional, Commercial and Industrial Recycling Strategy, including:

- Program delivery options based on stakeholder engagement and best practices – program proposal to Council including capital and operating cost expenditure required for implementation.
- Align strategy with Town of Cochrane Organics Strategy to ensure coordination of waste diversion efforts in the ICI sector.
- Review and revise the Town of Cochrane Waste Management Bylaw to enable, encourage and enforce waste diversion in the ICI sector.
- Review and revise the Town of Cochrane Land Use Bylaw to enable, encourage and enforce waste diversion in the ICI sector.
- Actively promote the Provincial Voluntary Plastic Bag Reduction Policy between the Government of Alberta and the retail associations – encourage and support the reduction of single use plastic bags.
- Actively lobby and promote Federal and Provincial levels of government to pursue Extended Producer Responsibility regulation.

INDUSTRIAL, COMMERCIAL & INSTITUTIONAL RECYCLING

Towards Zero Waste

Town of Cochrane Internal Buildings

Development of a Town of Cochrane Internal Waste Management Strategy, including:

- Program delivery options based on stakeholder engagement and best practices – program proposal to Council including capital and operating cost expenditure required for implementation.
 - Include office waste, hazardous waste and recyclables, food and yard waste.
- Development of a Town of Cochrane Sustainable Purchasing Policy and Procedures to promote the use of recycled, post-consumer and sustainable purchasing practices.

Opportunities & Challenges

- Single-stream (co-mingled) recycling capacity in Calgary region
- Organics capacity in Calgary region
- Willingness to pay and perception
- Enforcement
- Contamination
- Cost
- Possibility of franchising collection
- Uniqueness of such a wide range of ICI customers
- Training of custodial and other staff
- Understanding roles and responsibilities
- Need for regulatory approach
- Consistency of programming across industries - standardization
- Lack of available infrastructure
- Perception that organics and recycling are “extra” services, whereas, waste collection is “essential”
- Administration of programming
- Enthusiastic business community

Stakeholder Engagement

- Chamber of Commerce
- Private Waste & Recycling Collectors
- Internal Town of Cochrane Departments
- Rocky View School Division
- Alberta Health Services
- Government of Alberta
- Institutions
- Commercial businesses
- Industrial businesses



Example of Institutional Collection Containers and Labeling – University of Calgary

4

CONSTRUCTION, RENOVATION & DEMOLITION RECYCLING

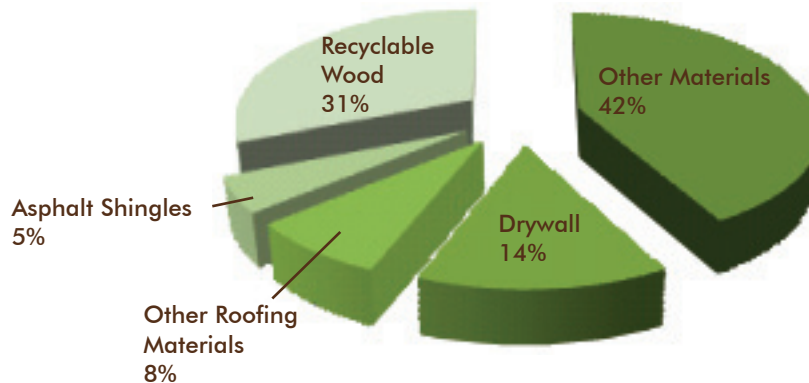
Current State

Alberta Environment had identified the CRD sector as an important player in the achievement of the goals outlined in their *Too Good To Waste* Strategy. Alberta Environment established the C&D Waste Reduction Advisory Committee in 1999. The committee was comprised of stakeholders from municipalities, industry, recyclers and others. After many years of consultation, loss of and regaining of momentum, in 2009 a framework for a provincial deposit-refund program was proposed.

It is now 2012, no such program has been established and the initiative appears to have lost all momentum and priority among Alberta Government officials. It is extremely uncertain whether the program will be brought forth again. Based on this delay, municipalities throughout Alberta have concluded that it is in their best interest to proceed with their own programs unique to their own communities.

With a high construction rate, Construction, Renovation & Demolition waste comprise over 20% of the waste generated in Cochrane that is destined for disposal in landfill. CRD waste is generated from construction, renovation and demolition activities at both a small and large scale. Table 33 provides a detailed breakdown of the CRD waste composition. The CRD recycling sector in the Calgary Region has expanded exponentially during the past decade. The CRD waste stream is an ideal candidate for waste diversion efforts as most of the materials can be readily reused or recycled in the Calgary region.

Table 33: Alberta Construction, Renovation & Demolition Waste Composition³⁶



CONSTRUCTION, RENOVATION & DEMOLITION RECYCLING

Towards Zero Waste

Development of a Town of Cochrane CRD Waste Diversion Strategy - program proposal to Council, including:

- Develop a standardized CRD Material Recovery Plan – to accompany building and development permits
- Continued exploration of best practices
- Continue to advocate for the Province of Alberta to take a leadership role in the development of a province wide CRD diversion program and for the Province of Alberta to implement a deposit-refund program for CRD waste.
- Review and revise Town of Cochrane Bylaws and Policies to accommodate the development of temporary and permanent CRD Transfer Stations and Material Recovery Facilities
- Review and revise Town of Cochrane Bylaws and Policies to establish requirements related to Construction, Renovation & Demolition collection bin design, storage of bins on roads and active building zones to encourage waste diversion and prevent airborne litter.
- Prepare and provide a list of recyclers for CRD material in the Calgary area to all builders and developers.
- Develop promotional material, education and awareness program for CRD waste diversion.
- Review and revise (if necessary) Town of Cochrane Policy #1501-01 “Construction/Demolition Waste Recycling – Municipal Projects” for compliance and best practices.
- Completion of a Town of Cochrane “Green Building Framework” which would establish expectations related to waste diversion, use of recycled material and locally sourced material in construction projects within the Town of Cochrane.
- Implement a deposit-refund program for CRD waste whether provincially supported or unique to the Cochrane municipality.

Opportunities & Challenges

- Lack of CRD transfer station infrastructure within the Town of Cochrane boundaries
- Administrative time and expense
- Difficulty in obtaining accurate data (private hauling)
- Absence of provincial consistency
- Lack of incentives
- Amending Bylaws and Policies
- Easy to handle material
- Enthusiastic developers and building community
- Trades people training, turnover and participation

Stakeholder Engagement

- Developers
- Builders
- Trade Associations
- Recyclers
- City of Calgary and other regional municipalities
- Town of Cochrane Internal Departments – Planning, Engineering, Facilities

EVENTS & PUBLIC SPACES

Current State

2012 saw the Town of Cochrane and a number of community organizations take huge steps towards waste diversion at events and in our public spaces. A Recycle Ranger – recycling trailer was acquired by the Stockmen’s Memorial Foundation in coordination with the Town of Cochrane through funding from Sustainable Partners Uniting Resources (SPUR) and a grant from the Alberta Beverage Container Recycling Corporation (ABCRC). The trailer is operated by the Town of Cochrane on behalf of these community organizations and can be requested through the Recreation & Culture section. The Recycle Ranger trailer will be officially launched in Fall 2012.



A second grant was also acquired from ABCRC for the purchase of 12 Hide-A-Bag style Beverage Container Recycling Bins. The bins have been delivered to the Town of Cochrane Operations Shop and are awaiting installation at sports fields throughout the Town.



At this time, the Recycle Ranger trailer and the 12 beverage container recycling bins are the extent of the waste diversion programs implemented at the Town of Cochrane. The Town has no procedures and no policy in place related to waste diversion at events or in our public spaces.

Waste diversion at Special Events and in Public Spaces is an important next step in advancing towards our Zero Waste future. Event and Public Space waste diversion serves to reinforce the recycling behaviors typically practiced at home. These programs raise the profile of waste diversion in the community and present a positive statement and image of community pride and sustainability.

Towards Zero Waste

Development of Toward Zero Waste Events – Guidelines for Special Event Waste Management in the Town of Cochrane

- program proposal to Council including capital and operating cost expenditure required for implementation.

Development of Toward Zero Waste Public Spaces – Guidelines for Public Spaces Waste Management in the Town of Cochrane

- program proposal to Council including capital and operating cost expenditure required for implementation.

Opportunities & Challenges

- Cost – capital and operating
- Balancing aesthetics and utility
- Contamination
- Vandalism
- Reduce litter
- Increase awareness

Stakeholder Engagement

- Town of Cochrane Internal Departments
- User Groups
- Non-profit organizations
- Chamber of Commerce
- Downtown businesses
- Public



CONCLUSION

A zero waste approach, if applied in Cochrane, would work to not only maximize our waste diversion from landfill, but would also actively promote waste prevention and reduction throughout our community. The goal of zero waste is not to continue to “manage” our waste after it has already been produced, but to eliminate the very concept of waste from our society. Instead of considering discarded materials as waste, we need to change our thinking to view them as potential resources that can form the basis for a new and sustainable future for Cochrane.

Getting serious about our Zero Waste Future will require a concerted effort and coordination between a vast number of community stakeholders. We will only achieve the Zero Waste goals as described throughout the Zero Waste Framework with the support of Cochrane residents, industry, business, developers, Administration and Council.

The Zero Waste Framework provides the Town of Cochrane with 5 Pathways toward a Zero Waste Future. The identification of the 5 Pathways now allows us to set clear time frames, discuss costs and budgetary considerations – set the pace and direction of our Zero Waste Future.



zero waste framework
TOWARDS ZERO WASTE
2012





APPENDICES

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| Calgary Metropolitan Plan | 66 |
| Waste Management Bylaw | 67 |
| Eco Centre Business Plan | 93 |
| Roll With It Cochrane brochure | 119 |
| Eco Centre brochure | 121 |

Strategy 4.d



Investigate a regional waste management system

Working collaboratively, it is possible to develop waste management and recycling services that benefit citizens all across the region. In addition to maximizing financial resources, these solutions protect and preserve our natural resources and environment.

The Calgary Metropolitan Plan (CMP) aims to make our region greener and cleaner for everyone.

- 4.d.1 Integrated waste management.** Calgary Regional Partnership (CRP) and member municipalities will develop an integrated and coordinated system for waste management across the region to encourage efficiencies, economies of scale and innovation.
- 4.d.2 Recycling.** Member municipalities should recognize waste as a resource and encourage local reuse and recycling through programs, education and incentives.





TOWN OF COCHRANE

Bylaw No. 09/2011

Being a Bylaw of the Town of Cochrane, in the Province of Alberta to regulate the collection, disposal and handling of waste within the Town of Cochrane and maintaining, in the Province of Alberta.

Whereas: Pursuant to the *Municipal Government Act*, R.S.A. 2000 and amendments thereto, a Municipal Council may pass Bylaws establishing and maintaining a waste management system throughout the municipality.

and Whereas: The Municipal Council of the Town of Cochrane, in the Province of Alberta, deems it desirable to pass a Bylaw to establish and maintain a waste management system and to operate this system as a public utility.

Now Therefore Council, duly assembled, hereby enacts, as follows:

1.0 TITLE

1.1 This Bylaw may be cited as "The Waste Management Bylaw".

2.0 INTERPRETATION

2.1 For the purposes of this Bylaw the following terms, phrases, words and their derivations shall have the meanings given herein.

- (a) "additional recycling collection cart" means the additional 240 L Town owned automated recycling collection cart provided at an additional cost to the customer by the Town at the customer's request to a maximum of one (1) additional recycling collection cart per dwelling house;
- (b) "additional waste collection cart" means the additional 120 L Town owned automated waste collection cart provided at an additional cost to the customer by the Town at the customer's request to a maximum of one (1) additional waste collection cart per dwelling house;

- (c) "alley" means a road intended primarily for access to the rear yard of adjacent premises, "lane" shall have the same meaning;
- (d) "apartment house" means a residential building which is occupied or intended to be occupied by more than four families living independently of each other and includes, but is not limited to:
 - (i) Structures known as townhouses or rowhouses;
 - (ii) Seniors Citizens' self contained units in a complex of more than four units;
 - (iii) Licensed boarding houses, lodging houses and rooming houses, terraces of dwellings and any other type of premises where more than four families reside or dwell;

which is neither a dwelling house nor a condominium as defined in this Bylaw;
- (e) "ashes" means cold residue from burning of wood, coal or other like material;
- (f) "automated collection" means the collection of Residential Waste and Recycling by a system of mechanical lifting and tipping of containers into specially designed vehicles;
- (g) "base rate" means the rate established by the Town from time to time for the collection of one unit of waste and one unit of recycling to be collected from each dwelling house each week;
- (h) "billing period" shall be the same as the one month period for which the customer is charged for water and sewer service;
- (i) "biomedical waste" is as defined under the Waste Control Regulation;
- (j) "boulevard" means that part of a highway in an urban area that:
 - (i) is not a roadway, and
 - (ii) is not that part of the sidewalk that is specially adapted for the ordinary use of pedestrians;
- (k) "Chief Administrative Officer" means the Chief Administrative Officer of the Town of Cochrane or his designate;

- (l) "church" means a place of worship;
- (m) "collector" means a person who collects waste or recyclable material within the Town as an agent, contractor or employee of the Town;
- (n) "collection cart or carts" means residential waste and recyclable material collection carts;
- (o) "collection point" means a location where the waste and recyclable material collection carts and any "Excess Waste" bags are placed for collection;
- (p) "collection utility" means the system of collecting and disposing of residential waste and/or recyclable material from dwelling houses within the Town;
- (q) "commercial bin" means any container for the storage of commercial waste or recyclable material;
- (r) "commercial premises" means any premises that are designated as "commercial" under the Town's Land Use Bylaw, and includes any premises that are exempt from municipal assessment or taxation;
- (s) "commercial waste and recyclable material" means waste that would normally be generated and discarded from a commercial premises, including stores, cafes, eating houses and wholesale or retail business places and office blocks where the establishment occupies all or part of a building having mixed uses and also includes material from the work of decorating, cleaning or repairing of a building or premises;
- (t) "condominium" means a building divided into individually owned units as described in the *Condominium Property Act* and amendments thereto, and for the purpose of this bylaw only each unit shall be deemed to be a single family dwelling;
- (u) "construction, renovation and demolition waste" means all waste produced in the process of constructing, altering, renovating, repairing, or demolishing a building; including earth, vegetation, and rock displaced during the process of building, all of which is acceptable for disposal at an approved disposal site;
- (v) "contaminated" means that the recyclable materials have been compromised by the presence of food residue, blood, soil, or other prohibited materials, "soiled" shall have the same meaning;

- (w) "Council" means the Municipal Council of the Town of Cochrane;
- (x) "customer" means any applicant, Owner, builder, person, persons, corporations, or associations whose dwelling house is eligible for waste and recyclable material collection by the Town or any lessee or occupant of such a dwelling house who has applied to the Town for a collection utility account or is otherwise responsible for paying such a collection utility account for waste and recycling collection services from the Town;
- (y) "Dangerous Goods" means Dangerous Goods as defined in the Transportation of *Dangerous Goods Transportation and Handling Act* and its regulations;
- (z) "Director" under the *Environmental Protection and Enhancement Act* is a person designated as a Director for the purpose of the *Environmental Protection and Enhancement Act* by the Minister of Environment;
- (aa) "disposal" includes disposition or intended disposition by discarding, discharging, dumping, throwing away, dropping, or abandoning and "dispose" shall have a comparable meaning;
- (bb) "disposal site" means a sanitary landfill or another site approved by the Town for waste disposal;
- (cc) "dwelling house" means any building occupied for residential purposes, other than a condominium, multiple family dwelling or apartment house, that is included within the Town's collection utility;
- (dd) "eco fee" means that rate established by the Town from time to time and charged to all utility accounts for the establishment and operation of waste and recycling programs not including residential waste and recyclable material collection;
- (ee) "excess rate" means the rates established by the Town for the purchase and use of "Town of Cochrane – Excess Waste" bags and for the collection of excess waste;
- (ff) "excess waste" means residential waste placed out for collection in excess of the one – 120 litre waste collection cart.
- (gg) "excess residential recyclable materials" means residential recyclable materials placed out for collection in

excess of the one – 240 litre residential recycling collection cart.

- (hh) "hazardous waste" as defined under *the Environmental Protection and Enhancement Act* and its regulations;
- (ii) "highway" is as defined in the *Traffic Safety Act*;
- (jj) "industrial waste" means all waste generated by industrial activities and, or, properties and includes waste that presents health, safety or environmental concerns;
- (kk) "industrial properties" means any places that carry on one or more of the following activities; the manufacturing, processing, assembling, cleaning, repairing, servicing, testing, storage, warehousing, distribution or shipment of materials, goods, products and ,or, equipment;
- (ll) "multiple family dwelling" means a building designed and built to contain five or more dwelling units separated from each other by firewalls;
- (mm) "Peace Officer" as defined in the *Peace Officer Act*, and includes a duly appointed Community Peace Officer employed by the Town;
- (nn) "plastic garbage bag" means a sturdy plastic bag specifically marketed to store waste for collection, and excludes plastic bags that are intended for other purposes;
- (oo) "premises" means land, including any buildings erected thereon;
- (pp) "processing site" means a facility for the processing of recyclable materials;
- (qq) "prohibited materials" means all materials listed in Section 9.0: Prohibited Materials and herein defined;
- (rr) "reasonably clean" means not contaminated or soiled;
- (ss) "recyclable materials" means those materials determined by the Town from time to time to be acceptable through the Town's residential recycling collection program or the Town's Recycling Depot;
- (tt) "recycling depot" means a public drop off facility for recyclable materials and special waste materials;
- (uu) "residential recyclable materials" means those materials determined by the Town from time to time to be

acceptable for collection through the Town's collection utility;

- (vv) "residential recycling collection cart" means a 240 L cart owned and supplied by the Town to dwelling houses in order to contain residential recycling and be rolled to a collection point where it will be emptied by an automated collection vehicle;
- (ww) "residential waste" means all non-recyclable solid waste generated through ordinary day-to-day activities of the occupants of a dwelling house, and does not include materials generated as a result of construction, renovation, roofing, demolition, landscaping, installation or removal of lawns or sprinkler systems, installation or removal of concrete or asphalt, or automotive or recreational vehicle work of any kind;
- (xx) "residential waste collection cart" means a 120 L cart owned and supplied by the Town to dwelling houses in order to contain residential waste and be rolled to a collection point where it will be emptied by an automated collection vehicle;
- (yy) "Senior Manager of Infrastructure Services" means the Senior Manager of Infrastructure Services for the Town or his designate;
- (zz) "Senior Manager Protective Services" means the Senior Manager of Protective Services for the Town or his designate;
- (aaa) "service change request" includes but is not limited to:
 - (i) a request by a customer to increase residential waste collection services from one residential waste collection cart per week to two residential waste collection carts per week;
 - (ii) a request by a customer to increase residential recycling collection services from one residential recycling collection cart per week to two residential recycling collection carts per week;
- (bbb) "service change/set up fee" means the fees set by the Town from time to time and specified in Schedule 'B' and charged for new waste and recycling collection account set up and bin delivery for all dwelling houses that do not have waste and recycling carts already assigned; the fee charged for a service change request and delivery of the requested carts;

- (ccc) "street" means a public thoroughfare within the Town and includes where the context so allows, the sidewalk and borders of the street and all parts appearing in the records of the Land Titles Office as having been set aside for a public thoroughfare; when used in distinction to an alley, it means the public thoroughfare on which the premises in question fronts;
- (ddd) "Town" means the municipal corporation of the Town of Cochrane, or the area contained within the boundaries thereof, as the context requires;
- (eee) "unit of waste" means one 120 litre residential waste collection cart weighing, including its contents, no more than 55 KG;
- (fff) "unit of recycling" means one 240 litre residential recycling collection cart weighing, including its contents, no more than 110 KG;
- (ggg) "utility right of way" means the area of land acquired for or devoted to the provision of a utility;
- (hhh) "waste" is as defined under the *Environmental Protection and Enhancement Act* and its regulations;
- (iii) "Waste Control Regulation" means Regulation 192/96 pertaining to waste under the *Environmental Protection and Enhancement Act*;

2.2 The caption and headings in this Bylaw are for convenience of reference only, and shall not affect the interpretation of any provision.

3.0 APPLICATION

- 3.1 This Bylaw applies to all waste and recyclable material produced or transported within the boundaries of the Town.
- 3.2 Nothing in this Bylaw shall operate to relieve any person from complying with any Federal, Provincial or other Town Law, Order, Regulation or Bylaw and such person shall comply with all conditions or obtain any necessary consent at his or her own expense.
- 3.3 Except as provided in this Bylaw, no person shall;
 - (a) Store or deposit any waste or-recyclable material in or on any premises owned or occupied by the Town or on any street or boulevard; or

- (b) Store or place any collection cart or commercial bin on any street or boulevard.
- 3.4 Section 3.3 shall not apply:
- (a) In respect of any waste or recyclable material stored or deposited at any disposal site designated pursuant to this Bylaw;
 - (b) In respect of any collection cart placed or stored on a street for use by the public by or with the consent in writing of the Senior Manager of Infrastructure Services;
 - (c) To a person who is actively engaged in loading or unloading any collection cart or commercial bin.
- 3.5 Any person who deposits any waste or recyclable material on a street or boulevard contrary to this Bylaw shall forthwith remove such waste or recyclable material from the street at his or her own expense.
- 3.6 No person shall scavenge waste or recyclable material from a collection cart or a commercial bin.
- 3.7 No person shall damage, tamper with or vandalize a collection cart or commercial bin owned by or operated by the Town.

4.0 SERVICE

- 4.1 The Town shall not collect waste or recyclable material from:
- (a) condominiums: unless approved in writing by the Senior Manager of Infrastructure Services;
 - (b) apartment houses;
 - (c) commercial premises, industrial and institutional operations;
 - (d) churches;
 - (e) unserviceable property.
- 4.2 An owner or occupant of a premises listed in subsection 4.1 shall:
- (a) arrange for waste and, or, recyclable material collection and disposal, at the expense of the owner or occupant, by a private collection service that disposes of waste at a disposal site; and

- (b) ensure that waste and, or, recyclable material is collected on a regular basis to prevent the development of noxious odors and the accumulation of waste and recyclable material.

5.0 PROVISIONS FOR DISPOSAL OF WASTE AND RECYCLABLE MATERIAL

- 5.1 The Town may provide the necessary vehicles for the public collection and removal of waste and recyclable material within the limits of the Town.
- 5.2 The Town may provide, supervise and operate the facilities and equipment necessary or desirable for disposal and processing of waste and recyclable material collected by the Town.
- 5.3 The Town may:
 - (a) supervise the collection, removal and disposal of waste and recyclable material;
 - (b) direct the days and times that collections will be made from different portions of the Town; and
 - (c) decide as to the quantities and types of waste and recyclable material to be removed from any dwelling house included within the Town's collection utility or accepted by the Town for disposal or processing.

6.0 TOWN COLLECTION AND REMOVAL OF RESIDENTIAL WASTE AND RECYCLABLE MATERIAL

- 6.1 Subject to the provisions of this Bylaw, the Town:
 - (a) shall cause one unit of residential waste to be collected from each dwelling house once per week;
 - (b) shall cause one unit of residential recyclable material to be collected from each dwelling once per week;
 - (c) shall approve the equipment used for residential waste and recyclable material collection and the manner in which waste and recyclable material is collected and disposed or processed;
 - (d) shall own all collection carts;
 - (e) may enter into a contract with a person for the collection of the whole or a portion of the waste and, or, recyclable material accumulated within the Town limits;

- (f) may decide the collection point from which waste and recyclable material will be collected from a dwelling house, either front or rear collection; and
 - (g) may carry out any inspections required to determine compliance with this Bylaw.
- 6.2 The Town may, at the time of collection or any other time, remove, repair or replace any obsolete, damaged or non-serviceable collection carts.
- 6.3 An owner or occupant of premises in districts designated as "residential" under the Town's Land Use Bylaw, who is served by the Town's collection utility shall pay for the collection, removal and disposal of residential waste and recyclable material in accordance with the base rates, excess rates and other rates established from time to time by the Town.

7.0 EXCESS RESIDENTIAL WASTE AND, OR RECYCLING FOR COLLECTION

- 7.1 Excess waste will be collected provided the excess waste is contained:
- (a) within a "Town of Cochrane – Excess Waste" bag purchased at a rate established from time to time by the Town and to a maximum of three (3) excess waste bags per week; or
 - (b) within an additional waste collection cart provided to a customer pursuant to a service change request and subject to payment of the applicable excess rate to a maximum of one (1) additional waste collection cart per week.
- 7.2 Excess residential recyclable material will be collected provided the residential recyclable material is contained:
- (a) within an additional recycling collection cart provided to a customer pursuant to a service change request and subject to payment of the applicable excess rate to a maximum of one (1) additional recycling collection cart per week.
- 7.3 The "Town of Cochrane – Excess Waste" bags referred to in Section 7.1 (a), may be offered for sale in locations specified by the Senior Manager of Infrastructure Services.
- 7.4 The additional waste collection cart and additional recycling collection cart referred to in Section 7.1 (b) and Section 7.2 (a), may be requested through the locations specified by the Senior Manager for Infrastructure Services.

8.0 PREPERATION OF RESIDENTIAL WASTE AND RECYCLABLE MATERIAL FOR COLLECTION

8.1 No person shall set waste out for collection unless it is thoroughly drained and securely wrapped in sufficient paper to absorb any moisture or placed in plastic garbage bags which are properly tied before being put in waste collection carts for collection.

(a) an owner or occupant of a dwelling house must ensure that residential waste material:

(i) is bagged prior to deposit into the collection cart;

(ii) consists only of permitted waste materials as determined by the Town from time to time;

(iii) consisting of light, dusty or objectionable materials including cooled ashes, powders, sawdust, vacuum cleaner bags, furnace filters, animal feces and absorbants and disposable diapers is double bagged.

(b) an owner or occupant of a dwelling house using a "Town of Cochrane – Excess Waste" bag must ensure prior to collection:

(i) the bag is water tight and securely tied;

(ii) the bag is capable of holding the contents without breaking; and

(iii) that the total weight of a bag does not exceed 15 kilograms (33 pounds).

8.2 No person shall set out for waste collection from a dwelling house objects such as glass, nails, knives, metal, or wood splinters unless properly contained in a puncture resistant receptacle before being placed in a waste collection cart.

8.3 No person shall place for collection ashes which are not properly quenched.

8.4 All residential recyclable material set out for collection will be:

(a) reasonably clean; and

(b) placed loosely into the collection cart without bagging or bundling, bagging of recyclable material is permitted for the preparation of plastic bags and shredded paper.

8.5 Upon written approval by the Senior Manager of Infrastructure Services, the owner, occupant or person in charge of a condominium shall comply with the provisions set forth for residential waste and recyclable material collection in this Bylaw.

9.0 PROHIBITED MATERIALS

9.1 No person shall place any of the following items in any collection cart or plastic garbage bag for collection by the Town or its contractor:

- (a) unquenched ashes;
- (b) hazardous waste;
- (c) commercial or industrial waste;
- (d) dead animals;
- (e) construction, renovation and demolition waste;
- (f) gas/propane liquids or any other liquid based petroleum product;
- (g) rocks;
- (h) automobile waste including automobile parts, tires and batteries;
- (i) engine oil;
- (j) oil filters;
- (k) building materials and furniture;
- (l) sod;
- (m) compressed cylinders;
- (n) waste that is unsafe for the collector to access or handle;
or
- (o) waste that could cause environmental impairment;
- (p) any recyclable materials that are not reasonably clean.

9.2 No person shall place any of the following items in any residential recycling collection cart for collection by the Town or its Contractor:

- (a) any waste;
- (b) any materials that are not recyclable materials;
- (c) any recyclable materials that are not reasonably clean.

9.3 Any material listed in Section 9.1 and 9.2 set out for collection by the Town's waste and recyclable material collection program shall not be collected.

10.0 PROVISION OF WASTE AND RECYCLING COLLECTION CARTS

10.1 Residential waste and recyclable material collection carts will be provided by the Town at the expense of the customer for a fee determined by the Town from time to time and specified in Schedule 'B' if:

- (a) the customer establishes a new collection utility account for a new dwelling house where no collection carts have been previously assigned;
- (b) for the replacement of lost, stolen or damaged collection carts; and
- (c) for the provision of an additional waste or recycling collection cart.

11.0 RESIDENTIAL WASTE AND RECYCLING COLLECTION CARTS

11.1 The owner or occupant of a dwelling house:

- (a) shall utilize for waste and recyclable material collection only the Town provided residential waste and recycling collection carts required for automated collection;
- (b) shall utilize only "Town of Cochrane – Excess Waste" bags for the collection of excess waste;
- (c) shall clean up any spillage originating from the waste or recyclable material collection carts assigned to their premises;
- (d) shall not set out for collection any waste or recyclable material that is not generated by the occupants of his own dwelling house;
- (e) shall not tamper or interfere with any waste or recyclable material set out for collection that is not generated by the occupants of his own dwelling house;
- (f) shall ensure that the collection carts:

- (i) are not filled in such a manner that the manufacturer's rated weight limit is exceeded;
 - (ii) are not filled higher than the upper rim of the cart or in a manner which prevents full closure of the cart lid;
 - (iii) do not have its contents compressed in such a manner that it inhibits the waste or recyclable material from falling freely from the collection cart during the regular tipping process;
 - (iv) do not contain any material which might adhere to the inside of the collection cart, such material to be separately wrapped prior to being placed in the collection cart;
 - (v) are maintained in good repair and in a reasonably clean and sanitary condition;
- (g) shall ensure that the collection carts are:
- (i) stored on the premises from which the collection cart is assigned and shall not encroach upon or project over any street, lane or public place except when placed on such street or lane for the purpose of collection under this Bylaw; and
 - (ii) stored with the lid closed in order to reduce odors and prevent litter;
- (h) shall ensure that collection carts are set out for collection:
- (i) no later than 7:00 am on the day of collection; and
 - (ii) no earlier than 7:00 pm on the day before collection
- (i) shall ensure that all collection carts assigned to the dwelling house are returned to their storage area no later than 7:00 pm on the day of collection;

11.2 A collector shall not be required to remove or empty:

- (a) a collection cart which together with its contents exceeds the manufacture's rated weight limit;
- (b) a "Town of Cochrane – Excess Waste" bag that exceeds 15 kilograms in weight (33 pounds);

- (c) a collection cart containing prohibited materials;
- (d) a collection cart filled higher than the cart's upper rim causing the cart lid to not fully close.

12.0 PLACEMENT OF RESIDENTIAL WASTE AND RECYCLING FOR COLLECTION

12.1 All collection carts set out for collection shall conform to the following standards:

- (a) be placed in such a manner that automated collection may occur without collectors being required to manually move the collection carts in order to allow pick up;
- (b) be placed in a manner that the front of the collection cart is facing the street or alley/lane;
- (c) where any dwelling house is served by an alley/lane, all collection carts from such premises shall be placed adjacent to the alley and, or, lane with clearances of at least 0.3 metres to the rear, 0.3 metres between the carts and 1 metre from any obstacles such as cars or utility boxes;
- (d) in cases where no alley or lane exists, all collection carts from such a dwelling house shall be placed for collection along the roadway at the edge of the curb with clearances of at least 0.3 metres to the rear, 0.3 metres between the carts and 1 metre clearance from any obstacles such as cars or utility boxes;
- (e) in cases where Town of Cochrane "Excess Waste" bags are set out for collection, the bags must be placed at least 0.3 metres to either side of any collection cart to provide clearance for automated collection;
- (f) collection carts must not be placed on the sidewalk or in such locations as to interfere in any way with vehicle or pedestrian traffic;
- (g) collection carts must be placed on a level surface not more than 150 mm above the road elevation;
- (h) collection carts must be placed for collection in a way that they cannot easily be tipped over;

12.2 No collector shall be required to make a collection of waste or recyclable material from inside any building or be required to pass through a building in order to collect waste or recyclable material.

- 12.3 Waste and recycling collection carts from units in a residential condominium shall be placed in a centralized location for collection at or near a traveled portion of the access road on the common property or elsewhere with the written approval of the Senior Manager of Infrastructure Services.
- 12.4 The owner or occupant of a dwelling house from which waste and recyclable material is to be collected shall not cause or permit the alley/lane in the rear of the dwelling house to the centre of the alley/lane thereof, and including the waste and recycling storage location on the common property, to be maintained in an untidy or disorderly condition.
- 12.5 No collector shall be required to make a collection of waste or recyclable material if the waste or recycling collection cart is not placed according to the standards specified in this Bylaw.

13.0 COLLECTION INTERFERENCE

- 13.1 No person shall willfully hinder or interrupt or cause or procure another to hinder or interrupt, the Town or its contractors, servants, agents, or employees, in the exercise of powers and duties under this Bylaw.
- 13.2 No person shall deposit waste or recyclable material in a collection cart without the consent of the owner or occupant of the premises on which the collection cart is located.
- 13.3 Unless special arrangements for collection are made with the Town, the Town shall not be obliged to collect waste or recyclable material from any building or premises the owners of which are exempt from general taxation.

14.0 REFUSAL OF RESIDENTIAL WASTE AND RECYCLABLE MATERIAL COLLECTION

- 14.1 Collectors may refuse to collect residential waste and, or, recyclable material which has not been securely placed in a collection cart, if the collection cart lid is not fully closed, if the collection cart is improperly placed for collection, if the collection cart is overflowing with materials, if the collection cart has become overturned or if "Excess Waste" bags have been torn, ripped or broken so as to allow spillage or scattering of the contents.

15.0 COMMERCIAL WASTE

- 15.1 An owner or occupant of commercial premises shall provide at his own expense a sufficient number of commercial bins to contain the waste expected to be generated by users of such premises and shall ensure that all such commercial bins are:

- (a) maintained in good condition;
 - (b) kept in a clean and sanitary condition;
 - (c) suitably weighted and anchored so that they cannot be inadvertently overturned;
 - (d) constructed and covered so that they are weatherproof and animal proof;
 - (e) of a suitable size to contain all waste generated from the premises and from the uses thereof; and
 - (f) placed in locations convenient for the use of users or occupants of the premises to discourage litter or the accumulation of uncontained waste
- 15.2 All waste generated is to be disposed of at a disposal site at the expense of the owner and, or, occupant of the premises at a frequency that prevents the accumulation of waste referred to in Section 16.0.
- 15.3 No person shall use any commercial bin that is not equipped with a tight fitting lid which shall be kept closed except when the bin is being loaded or unloaded.
- 15.4 Commercial bins used for commercial waste shall not be placed on any alley, lane, street, sidewalk, boulevard, utility right-of-way or highway within the Town unless written approval has been granted by the Senior Manager of Infrastructure Services.

16.0 INDUSTRIAL WASTE

- 16.1 An owner or occupant of industrial premises shall be responsible at the expense of the owner and, or, occupant of the premises, for disposal of the waste generated by it.
- 16.2 Industrial waste must be kept in an area blocked from public view and stored in such a way that it does not become a nuisance.
- 16.3 Industrial waste shall not be placed or kept on any alley or lane, street, sidewalk, boulevard, utility right-of-way or highway within the Town unless written approval has been granted by the Senior Manager of Infrastructure Services.

17.0 ACCUMULATION OF WASTE AND RECYCLING PROHIBITED

- 17.1 Except for waste or recyclable materials which is placed in containers required and in a manner complying with the provisions of this Bylaw and in a location designated or allowed by this Bylaw, no person who is the owner, occupant or person

in charge or responsible for any land or building in the Town shall allow waste or recyclable material of any kind to accumulate:

- (a) outside of a building or inside of a portion of the building to which the public or part of the public has access; or
- (b) on any land.

17.2 Notwithstanding anything in this Bylaw contained, no person shall dispose of waste or recyclable material or allow waste or recyclable material to accumulate anywhere in any manner which contravenes a provision of the *Environmental Protection and Enhancement Act*, the regulations made thereunder or a Bylaw of the Town relating to health, sanitation or nuisance, unless:

- (a) there is a written agreement with the owner, occupant or person in charge of upon which the waste or recyclable material is to be deposited; and
- (b) the waste or recyclable material is deposited and covered as to comply with all the applicable provisions of this and all other Bylaws of the Town and of the *Environmental Protection and Enhancement Act*, the regulations made thereunder.

17.3 No person shall dispose of waste or recyclable material elsewhere than at a disposal or processing site of a type appropriate for that type of waste or recyclable material.

17.4 A person who has disposed of waste or recyclable material on any land contrary to the provisions of Section 16.2 (a) shall remove the same at his expense upon being requested to do so by the owner, occupant or person in charge of the land, by the Town, the Director under the *Environmental Protection and Enhancement Act* or by the Senior Manager of Protective Services, but such removal shall not prevent him from being prosecuted for a contravention of this Bylaw.

17.5 If the person who has placed waste or recyclable material on land contrary to the provisions of this Bylaw is not known or neglects or refuses to remove the waste or recyclable material therefrom, the owner, occupant or person in charge of the land shall remove the waste or recyclable material or cause the waste or recyclable material to be removed, at his expense, upon being directed to do so by a Peace Officer of the Town, the Director under the *Environmental Protection and Enhancement Act* or the Senior Manager of Protective Services.

18.0 HYPODERMIC NEEDLES

- 18.1 No person shall in any circumstances place any type of hypodermic needle in waste set out for collection by the Town or a private disposal service unless properly contained in a puncture resistant container.
- 18.2 No person shall in any circumstances place any type of hypodermic needle in recyclable material set out for collection by the Town or a private disposal service.

19.0 LUMINESCENT OR FLORESCENT TUBUES

- 19.1 No person shall put luminescent gas filled electric discharge tubes or florescent tubes in any waste or recyclable material set out for collection by the Town. Residential florescent tubes shall be disposed of at a designated Town facility.
- 19.2 Luminescent or florescent tubes from commercial or industrial premises are to be disposed of in a manner which will prevent explosion of the tube or scattering of any of the particles therefrom and shall be disposed of at the owner's expense, at an appropriate disposal site.

20.0 HAZARDOUS WASTE

- 20.1 No person shall place or mix with any waste or recyclable material set out for collection by the Town or delivery to any Town facility any dangerous goods, hazardous waste or biomedical waste.
- 20.2 Any person, firm, partnership, corporation or like enterprise that breaches any part of the hazardous waste provisions of this Bylaw shall be responsible for all costs incurred by any other person in eliminating any pollution or contamination on any other site in the Town and shall make payment thereof to the Town or any other person who incurs any such costs on demand, and any such payment will not exclude the payor from prosecution for contravention of this Bylaw.
- 20.3 A person responsible for the existence or accumulation of hazardous waste shall cause the hazardous waste to be transported to a disposal site designated by the Province of Alberta for such purposes and be disposed of as prescribed by the Director under the *Environmental Protection and Enhancement Act*.
- 20.4 All hazardous waste as defined under the *Environmental Protection and Enhancement Act* and its regulations shall only be disposed of under the supervision of the Director under the *Environmental Protection and Enhancement Act*.

21.0 CONSTRUCTION, RENOVATION AND DEMOLITION WASTE AND RECYCLING

- 21.1 The owner of any premises producing construction, renovation and demolition waste and recyclable material shall:
- (a) provide and maintain on the premises in good condition, a sufficient number of waste and recycling containers or commercial bins to store the construction, renovation and demolition waste and recyclable material;
 - (b) not allow the premises or adjacent premises to become untidy or unsightly because of accumulated construction, renovation and demolition waste and recyclable material
 - (c) periodically at the owner's expense deliver to and dispose of all building waste and recyclable material at an appropriate disposal site;
 - (d) contain any construction, renovation and demolition waste and recyclable material and not allow it to spill over or accumulate on any street, lane or other public property;
 - (e) recapture any construction, renovation and demolition waste and recyclable material which is blown off the premises and immediately place same in a container or commercial bin; and
 - (f) pursuant to the instructions of the Senior Manager of Infrastructure Services fence the whole or any part of such premises or construct any structure necessary to contain the construction, renovation, and demolition waste.

22.0 PRIVATE DELIVERY OF WASTE OR RECYCLABLE MATERIAL

- 22.1 Subject to this Bylaw, a person may deliver to a disposal or processing site or a sanitary landfill, waste or recyclable material collected from property in the Town, owned or occupied by himself.

23.0 TOWN RECYCLING DEPOT

- 23.1 All utility accounts will be charged an "eco fee" based on the utility billing cycle for the establishment and operation of waste and recycling programs not included within the residential waste and recycling collection program;

- 23.2 A person delivering recyclable materials to a Town recycling depot shall comply with the following rules and any other rules posted in writing at the recycling depot:
- (a) only acceptable recyclable materials as may be determined and specified from time to time by the Senior Manager of Infrastructure Services shall be deposited;
 - (b) recyclable materials delivered for disposal shall be deposited in places designated and in a manner prescribed by the Senior Manager of Infrastructure Services; and
 - (c) material that is not acceptable under Section 22.2(a) shall not be deposited and it will be the responsibility of the individual to dispose of the items at an approved disposal or processing site.

24.0 HEALTH AND FIRE BYLAW NOT SUPERSEDED

- 24.1 Nothing in this Bylaw shall be deemed to nullify, amend or repeal any provisions of Town Bylaws relating to fires or to public health. In the event of any conflict between such Bylaws and this Bylaw the provisions of this Bylaw shall be modified only to the extent necessary to give effect to the fire or health requirement as the case may be.
- 24.2 Notwithstanding Section 23.1, where the provisions of this Bylaw are more stringent than the provisions of the fire and health Bylaws, the more stringent provisions of this Bylaw shall be followed.

25.0 DELEGATION OF POWERS

- 25.1 The Council hereby delegates to the Chief Administration Officer the power to:
- (a) establish regulations for the general maintenance, management or conduct of the collection system and of the officers and other employees employed in connection with the collection system;
 - (b) fix, in connection with the collection system, the times and places where rates or charges under this Bylaw are payable;
 - (c) collect the rates or fees as established by Council in relation to this Bylaw;
 - (d) enforce payment of those rates or fees by all or any of the following methods, namely by:

- (i) action in any court of competent jurisdiction;
 - (ii) distress and sale of goods and chattels of the person owing the rates or charges wherever they may be found in the municipality; or
 - (iii) any other lawful means of collection available;
- (e) enforce the terms and conditions under which the collection system is supplied either by:
- (i) enforcing this Bylaw, or
 - (ii) enforcing any agreement made between the Town as service provider and the customer, and
- (f) authorize, for the purposes of performing the duties assigned by this Bylaw, every collector appointed by the Town to enter land from which the Town is required to remove waste or recyclable material during usual hours of operation of the collection system.

26.0 PENALTIES AND ENFORCEMENT PROCEDURES

- 26.1 Any person who contravenes any provisions of this Bylaw is guilty of an offense and is liable upon Summary Conviction to a fine of not more than Two Thousand Five Hundred Dollars (\$2,500.00) and not less than Fifty Dollars (\$50.00) and in default of payment is liable to imprisonment for a term not exceeding six (6) months.
- 26.2 Where a Peace Officer has reasonable grounds to believe that a person has contravened any provision of this Bylaw, the Peace Officer may commence proceedings against such person by:
- (a) Issuing the person a Violation Ticket pursuant to the provisions of Part 2 of the Provincial Offences Procedure Act; or
 - (b) Swearing an Information and Complaint against the person.
- 26.3 Where a Peace Officer issues a person a Violation Ticket under this Bylaw, the Peace Officer may either:
- (a) Allow the person to pay the specified penalty as provided for in Schedule "A" of this Bylaw by indicating such specified penalty on the Violation Ticket; or
 - (b) Require a Court appearance of the person where the Community Peace Officer believes that such appearance is in the public interest, pursuant to the provisions of Part 2 of the Provincial Offences Procedure Act, in which case the

minimum penalty amounts shall be no less than the specified penalty amounts. Notwithstanding Section 26.3, a Peace Officer may issue a Bylaw violation tag, in a form as approved by the Town, to any person alleged to contravene any provision of this Bylaw.

- 26.4 Service of such Bylaw Tag shall be sufficient if it is:
- (a) personally served upon the property owner or occupant of the property;
 - (b) served by regular mail upon the owner of the property at the address shown on the Town's tax rolls; or
 - (c) placed on or attached in a conspicuous location on the property.
- 26.5 The Bylaw violation tag shall specify a penalty in lieu of prosecution in the amount provided for in Schedule "A" of this Bylaw.
- 26.6 A person who pays the amount specified on a Bylaw violation tag in respect of a contravention of a provision of this Bylaw, within the time allowed for payment as specified on the Bylaw violation tag, shall not be liable for prosecution for the contravention.
- 26.7 The specified penalty payable in respect of a second or subsequent contravention of this Bylaw shall be double the amount set out in Schedule "A" of this Bylaw.
- 26.8 The levying and payment of any penalty, or the imprisonment for any period as provided for in this Bylaw, shall not relieve a person from the necessity of paying any fees, charges or costs for which the person is liable under the provisions of this Bylaw.
- 26.9 A Peace Officer is not required to issue a Bylaw Tag pursuant to Section 26.4 but may in his sole discretion issue a Violation Ticket to prosecute such contravention.
- 26.10 It is the intention of the Council that all offences created pursuant to this Bylaw be construed and considered as strict liability offences.

27.0 GENERAL

- 27.1 It is the intention of the Council that each provision of this Bylaw should be considered as being separate and severable from all other provisions. Should any section or provision of this Bylaw be found to have been improperly enacted, then such section or provision shall be regarded as being severable from

the rest of this Bylaw and that the Bylaw remaining after such severance shall be effective and enforceable.

- 27.2 Schedule "A" and "B" may from time to time, be amended by resolution of Council.
- 27.3 Whenever the singular and masculine gender is used in this Bylaw, the same shall included the plural, feminine and neuter gender whenever the context so requires.
- 27.4 Bylaw No. 26/2005 is rescinded in its entirety.
- 27.5 This Bylaw shall take effect upon third and final reading.

Read a first time June 13, 2011
Read a second time June 13, 2011
Read a third time June 13, 2011



Mayor



Manager, Legislative Services

SCHEDULE "A"

To Bylaw no. 09/2011

CONTRAVENTION FINES

| SECTION | DESCRIPTION OF OFFENCE | TAG AMOUNTS | SPECIFIED PENALTY |
|---------------------|---|--------------------|--------------------------|
| General Penalty | All Bylaw sections not specified in this Schedule | \$50.00 | \$50.00 |
| Section 4.2(b) | Accumulation of Waste or Recycling – unserviced premises | \$100.00 | \$300.00 |
| Section 13.1 | Collection Interference | \$50.00 | \$100.00 |
| Section 13.2 | Waste or recycling deposited without consent | | \$100.00 |
| Section 12.1 | Improperly located collection containers | \$50.00 | \$100.00 |
| Section 9.1 | Setting out prohibited materials for collection | \$50.00 | \$100.00 |
| Section 9.2 | Setting out prohibited materials for recycling collection | \$50.00 | \$100.00 |
| Section 11.1(a) | Failure to use appropriate containers | \$50.00 | \$100.00 |
| Section 11.1(f)(ii) | Failure to keep lid closed | \$50.00 | \$100.00 |
| Section 11.1(g) | Failure to store containers appropriately | \$50.00 | \$100.00 |
| Section 17.1 | Accumulation of Waste or Recycling – serviced premises | \$100.00 | \$500.00 |
| Section 20.1 | Placing hazardous waste, dangerous good, or biomedical waste for collection | \$100.00 | \$500.00 |
| Section 21.1(a) | Failure to provide sufficient containers | \$100.00 | \$500.00 |
| Section 21.1(b) | Accumulation of building waste | \$100.00 | \$500.00 |
| Section 21.1(d) | Failure to contain construction, renovation and demolition waste | \$100.00 | \$500.00 |

SCHEDULE "B"

To Bylaw no. 09/2011

ADDITIONAL FEES

| SERVICE | FEE |
|---|---|
| New Account Set-up | \$65.00/each new account set-up |
| Lost/Stolen/Damaged Waste Cart Replacement | \$25.00/each |
| Lost/Stolen/Damaged Recycling Cart Replacement | \$37.00/each |
| Additional Waste Cart – Excess Rate | \$25.00/each \$10.00/monthly/additional cart |
| Additional Recycling Cart – Excess Rate | \$37.00/each \$7.00/monthly/additional cart |
| Excess Waste Bags | \$3.00/each |



TOWN OF COCHRANE

**COCHRANE RECYCLING DEPOT
BUSINESS PLAN**

2011

Background

The Town of Cochrane will be launching its curbside Automated Waste and Recycling Collection program as of September 1st, 2011. The program provides weekly waste and recycling collection to over 5800 homes for less than \$225/household/year. 104 times a year the Town of Cochrane's waste and recycling collection contractor will visit each and every household included within the program and haul away their waste and recycling so they don't have to!

But where does the implementation of the Automated Waste and Recycling Collection program leave the Cochrane Recycling Depot?

Since opening in 2005, the popularity of the Cochrane Recycling Depot has continued to grow... exponentially in fact, hence the implementation of the automated recycling collection program. In 2010, an average of 375 vehicles visited the facility everyday – with 700 vehicles visiting the facility every Saturday. Over the past two years, additional programming has been added to the facility including the addition of an EPS Cold Compactor, Cooking Oil Recycling (pilot), Alkaline Battery Recycling (pilot), in order to meet the demands of our users.

As of September 1st, 2011, 64 % of the Recycling Depot's current users will be provided with automated waste and recycling collection, so why should they continue to pay for the operation of the Cochrane Recycling Depot? ...Because the Cochrane Recycling Depot, is more than just a place to recycle your cardboard and plastic. The scenarios described below demonstrate the continued value of the Cochrane Recycling Depot – from the most basic service level to an integrated "One-Stop Drop-Off" facility providing Council with a menu of options from which to choose.

Waste and Recycling Fees & Budget Key Points

Waste & Recycling Collection Fee:

Collection Only. This Fee is charged to those households included within the Town of Cochrane's Waste & Recycling Collection Program for the weekly curbside collection of acceptable waste and recycling. We need to better communicate this to our residents that it is a fee strictly for Waste & Recycling Collection.

Recycling Depot Fee:

Fee charged to all utility accounts within the Town of Cochrane to fund the operation of the Cochrane Recycling Depot. The Recycling Depot Fee provides funding for the disposal of a range of items that cannot feasibly be collected at the curb but represent approximately 30 – 40 % of the residential waste stream.

It is essential that we distinguish the difference between the Fees that fund the Waste & Recycling Section of the Town of Cochrane and clearly communicate this difference to our residents. Our residents need to be informed that they will continue to utilize the Cochrane Recycling Depot– not only for its current Waste Diversion and Special Waste programming but for the expanded programs that may be implemented over the next few years depending on the direction that administration and Council decide to take.

Spring/Fall Clean Up Funding:

Historically, the expenses associated with the Spring and Fall Clean Up events have been split between the Waste Collection Budget and the Recycling Depot Budget. The Recycling Depot Budget has provided for the staffing of these semi-annual clean up events meaning, the expenses associated with the staffing of the clean up's can be found within the Recycling Depot Budget. With the Recycling Depot being responsible for providing the staff to operate the clean up's for the months of May and October, the result has been the need for the Recycling Depot to carry additional staff year round in order to ensure that there would be adequate staffing levels available for these peak times.

The Waste Collection Budget has provided the funding for all other expenses related to the clean up events. The Waste Collection Budget includes all hauling and disposal, tree grinding, and in addition pays the equipment operator overtime wages for those Roads Operator's providing equipment operation services throughout the clean up period.

The vast majority of the expenses related to the clean up events can be found within the Waste Collection Budget. It is essential to consider who pays the Waste Collection Fee and who does not. 5800 utility accounts (dwellings) pay the Waste Collection Fee, only those residents that receive

waste collection services from the Town. However, it is more than just these 5800 utility accounts that utilize the Spring and Fall Clean Up program. There are 6800 utility accounts that pay the Recycling Depot fee – the scenarios below consider the possibility of moving the expenses associated with the Spring and Fall Clean Up over to the Recycling Depot Budget where the expenses of the program are spread across a wider range of users. This change would better reflect who is using the program and would integrate well with the goal of this business case – justifying the Recycling Depot Fee.

PAYT:

Pay-As-You-Throw garbage disposal is the direction that administration would recommend the “garbage” disposal portion of the Spring/Fall Clean Up program head, if this portion of the program is maintained (only 15 % of Spring/Fall Clean Up user utilize the garbage disposal portion of the program). PAYT is mentioned throughout a number of the scenarios below. PAYT garbage disposal could be provided for set periods i.e. May and October, or on a permanent or semi-permanent basis if the right infrastructure were in place. Efficient and cost effective handling of PAYT garbage disposal based out of the Recycling Depot would require the installation of a garbage compactor bin (\$40 000 - \$80 000 price range for purchase and installation).

Recycling Depot Staffing:

All scenarios and fees below are based on the elimination of the Recycling Coordinator position from the Recycling Depot Budget. Some of the funds used for this position are to be reallocated in order to promote one of the current Recycling Depot Operator I staff to a Recycling Depot Operator II (Lead Hand). This change in staff structure has been identified as an efficiency to be implemented in 2011.

It is essential when considering the future of the Cochrane Recycling Depot and the desire to reduce the user fee associated with the operation of the facility to fully understand the core expenses associated with the facility. The Recycling Depot Budget is 66.7 % staff expense (salaries, benefits, casual wages, overtime); any attempts to reduce the user fee associated with the Recycling Depot must realize the impact that any reduction may have on our ability to staff the facility.

Other Budget Implications:

With the above noted information in mind, it is important prior to any decision making regarding a change to the Recycling Depot Fee to know that any change to this fee has a corresponding impact on the Waste & Recycling Collection Fee. The salary of the Solid Waste Manager, the operational and staffing costs of the Spring/Fall Clean Up and the staffing commitments at the Recycling Depot are all budget items that impact the fees in the scenarios presented below. At the end of each scenario there is a summary table demonstrating the impact of that scenario fee on the Waste & Recycling Collection Fee.

Scenario's

Waste and Recycling Services has developed a menu of options for Council to consider regarding the future of the Cochrane Recycling Depot. The scenarios range from the Status Quo, to facility closure, or the development of an integrated waste management facility.

Scenario 1 - \$5.57 Status Quo

Fee:

\$5.57/Account/Month

- Gradual fixed cost increases over time.
- Fee continues to include staff expense for operation of the Spring/Fall Clean Up.

Description:

Scenario 1 provides for the option to maintain Cochrane Recycling Depot operations as Status Quo with no reduction in hours of operation or the monthly Recycling Depot Fee charged to all Town of Cochrane Utility Accounts. This scenario also provides for the continued operation of the Spring/Fall Clean Up as a separate program run out of the Town of Cochrane Old Lagoon location.

Hours of Operation:

No change. 46 Hours per week.

Monday – Thursday: 11 am – 7 pm

Friday and Saturday: 9 am – 4 pm

Advantages

- Maintenance of current service level.
- Regional partners, business community and multi-family residents have a convenient facility to meet their recycling needs.
- Due to lower traffic and material volumes there is opportunity for the facility to explore commercial processing opportunities.
- Potential Waste & Recycling Section reserve funding would be generated creating a stable revenue stream for the Town to fund future Waste & Recycling Capital and Operating projects.

Implications

- Overall, increase in user fees continues.
- Hours of Operation do not reflect the needs/wants of our community and regional partners. A formal review of the hours of operation would need completed if this scenario were implemented, hours of operation change has been incorporated into some of the other scenarios.
- With the expected drop in traffic and material volumes at the Recycling Depot, this scenario does not necessarily represent the best use of staff resources.
- Under this scenario, the Recycling Depot budget would still be required to provide the staffing for the Spring/Fall Clean Up program – requiring the Recycling Depot to carry additional staff throughout the year to ensure appropriate staffing levels for these peak times.
- Under this scenario, the Spring/Fall Clean Up program costs would continue to be allocated within the Waste & Recycling Collection Budget. The Spring/Fall Clean Up program is not consistent with the

intention of the Waste & Recycling Collection budget, which is to truly reflect to our users the costs associated with Waste and Recycling Collection for the 5800 homes that participate in that program. Instead, the Waste & Recycling Collection budget becomes inflated with the expenses of the Spring/Fall Clean Up program and cannot reflect the true costs of our collection programs.

Budget Implication:

1. Recycling Depot fee remains the same.
2. Waste & Recycling Collection fee increases \$0.95 from Budget 2011.
3. Net difference +\$0.95/month.

| BY REVENUE OR EXPENDITURE TYPE | \$5.57 Depot | \$18.35 Collection |
|--|--------------------|-----------------------|
| REVENUE | | |
| User Fees/Rentals/Permits | \$(467,800) | \$ (1,299,180) |
| Other Gov't repayments | \$ (38,886) | |
| Commodity Revenue | \$ (42,600) | \$ (15,000) |
| TOTAL REVENUES | \$(549,286) | \$ (1,314,180) |
| EXPENDITURES | | |
| Personnel Costs (GL 110-148) | \$ 309,014 | \$ 89,032 |
| General Purchases | \$ 175,628 | \$ 1,225,393 |
| Contribution to Capital (762) | \$ 30,000 | |
| Contribution to Reserves (764) | \$ 34,000 | |
| Other | | |
| TOTAL EXPENDITURES | \$ 548,642 | \$ 1,314,425 |
| NET COST/GAIN | \$ (644) | \$ 245 |
| <p>Scenario leaves all staff hours and positions in place - eliminates the Recycling Coordinator position and changes one Recycling Depot Operator I to a II as per the business plan.</p> | | |
| <p>Spring/Fall Clean Up Still Offered in its Current Form at Lagoon Staffed by Recycling Depot Staff. "Free" garbage disposal remains at the Spring/Fall Clean Up and a large contribution to both operating and capital reserves can be made.</p> | | |

Scenario 2 - \$0 Closure

Fee:

\$0.00/Account/Month

Description:

Scenario 2 provides for the option to completely close the Cochrane Recycling Depot thus eliminating the monthly Recycling Depot Fee charged to all Town of Cochrane Utility Accounts. Scenario 2 would require the continued funding of the Spring/Fall Clean Up programs from the Waste & Recycling Collection Budget or the elimination of the Spring/Fall Clean Up program. If Scenario 2 was implemented and the Spring/Fall Clean Up program continued, funding for staffing of the program would need to be allocated. Scenario 2 would also require an additional increase in the Waste & Recycling Collection fee in order to absorb the portion of the Solid Waste Manager salary that is presently allocated for in the Recycling Depot Budget.

Hours of Operation:

0 days per week

Advantages

- Overall decrease in Waste & Recycling User Fees.
- Municipal infrastructure including a large shop would be available for retrofit for other purposes or sale.

Implications

- Overall, less community participation in Waste Diversion – More waste to landfill as there would no longer be a recycling facility available to the community.
- Cochrane residents would no longer have access to recyclable material drop-off within Cochrane.
- Business Community would no longer have access to recyclable material drop-off within Cochrane.
- Multi-family dwelling residents would no longer have access to recyclable material drop-off within Cochrane.
- Regional partners including Rocky View County, MD Big Horn and Summer Villages would no longer have access to recyclable material drop-off within Cochrane.
- No longer able to provide Special Waste Program i.e. Used Oil disposal, Electronics Recycling etc. to any users – all of this waste would either need to be transported by individual residents to other disposal facilities or will end up being disposed of in an inappropriate manner (illegal dumping, sewer disposal).
- HHW/Paint program would need to remain at the Protective Services Centre.

- Appliance Disposal program would need to remain at the Operations Shop; space pressures at the Operations Shop could result in the elimination of this program if it were to remain there.
- Spring/Fall Clean Up Staff – Recycling Depot staff provide the staffing for the clean up programs; staffing or contract staffing would need to be budgeted for using either user fees or general tax revenue (increases).
- Under this scenario, the Spring/Fall Clean Up program costs would continue to be allocated within the Waste & Recycling Collection Budget. The Spring/Fall Clean Up program is not consistent with the intention of the Waste & Recycling Collection budget, which is to truly reflect to our users the costs associated with Waste and Recycling Collection for the 5800 homes that participate in that program. Instead, the Waste & Recycling Collection budget becomes inflated with the expenses of the Spring/Fall Clean Up program and cannot reflect the true costs of our collection programs.
- Waste & Recycling Collection Budget would need to increase (meaning increasing the monthly fee) to absorb Waste & Recycling Manager Salary that is partially allocated to the Recycling Depot.
- Loss of a number of quality staff 3 – 1.0 FTE; 1- 0.8 FTE; 40 Hours per week Casual employee hours.

Budget Implication:

- 1. Recycling Depot fee completely eliminated.**
- 2. Waste & Recycling Collection fee increases \$2.05 from Budget 2011.**
- 3. Net difference of -\$3.52/month.**

| BY REVENUE OR | \$0.00 | \$19.45 |
|---|---------------|-----------------------|
| EXPENDITURE TYPE | Depot | Collection |
| REVENUE | | |
| User Fees/Rentals/Permits | \$ - | \$ (1,377,060) |
| Other Gov't repayments | \$ - | |
| Commodity Revenue | \$ - | \$ (15,000) |
| TOTAL REVENUES | \$ - | \$ (1,392,060) |
| EXPENDITURES | | |
| Personnel Costs (GL 110-148) | \$ - | \$ 125,939 |
| General Purchases | \$ - | \$ 1,225,393 |
| Other - Clean Up Staff | | \$ 40,000 |
| TOTAL EXPENDITURES | \$ - | \$ 1,391,332 |
| NET COST/GAIN | \$ - | \$ (728) |
| Scenario eliminates (3) FT Operator I positions; (1) FT Recycling Coordinator Positions; (1) 0.8 FTE Operator | | |

and 40 Hours of Casual. Scenario requires moving Solid Waste Manager Salary fully over to Collection Budget - increasing the fee.

Spring/Fall Clean Up Still Offered in its current form at Lagoon Staffed By Contract Staff

Scenario 3 – \$3.50 Reduced Service Level

Fee:

\$3.50/Account/Month

- Gradual fixed cost increases over time.

Description:

Scenario 3 presents an opportunity to continue basic operations at the Cochrane Recycling Depot with a reduction in hours of operation, staffing, and fees but with no expansion of services. Under Scenario 3, the Spring/Fall Clean Up program could not be staffed from the Recycling Depot Budget – funds for staffing the clean up programs would need to be allocated for elsewhere. The Waste & Recycling Budget could continue to allocate funds for the operation (not including staffing) of the clean up programs; however, this leads to a more volatile fee and does not reflect the intention of the user fee system (as explained in earlier scenarios).

Hours of Operation:

24 Hours per Week

Thursday – Saturday: 9 am – 5 pm

Advantages

- Reduction in fee by over \$2.00/account/month.
- Residents, businesses and regional partners have access to basic recycling and special waste services 3 days per week.

Implications

- Staff attraction and retention would be difficult based on a 3 day per week schedule as there would not longer be any full-time staff positions available.
- Staff reduction – at this fee level only 3 or 4 staff (depending on negotiation) would be maintained meaning that 3 to 4 staff would need to be laid off.
- Compression of all users into a 3 day time slot could result in very similar traffic and material volume congestion issues as are currently present at the facility that are meant to be addressed by the introduction of the Automated Waste and Recycling Collection program.
- Convenience level significantly decreased as the facility would be open only 3 days per week for limited hours.
- Only the most basic recycling services would be made available with this staffing level, some reduction in programming may be required including the elimination of the alkaline battery recycling program and the florescent light bulb recycling programs due to the high expense of these programs.

- No expansion of services would be possible at this fee level. HHW/Paint program and the appliance dispose program could not be accommodated at this staffing and budget level.
- Spring/Fall Clean Up staffing could not be funded under this fee level.
- If the Spring/Fall Clean Up program were to continue, contracted staff or staff from other departments would need to be hired in order to staff the program. The Recycling Depot budget presently absorbs the costs of staffing these semi-annual clean up events; the staff budget funds would not be available under this scenario.
- Under this scenario, the Spring/Fall Clean Up program costs would continue to be allocated within the Waste & Recycling Collection Budget. The Spring/Fall Clean Up program is not consistent with the intention of the Waste & Recycling Collection budget, which is to truly reflect to our users the costs associated with Waste and Recycling Collection for the 5800 homes that participate in that program. Instead, the Waste & Recycling Collection budget becomes inflated with the expenses of the Spring/Fall Clean Up program and cannot reflect the true costs of our collection programs.
- Regional partners may not support a 3 day per week schedule and may wish to negotiate Cost Share arrangements.

Budget Implication:

- 1. Recycling Depot fee decreased \$2.07.**
- 2. Waste & Recycling Collection fee increases \$2.05 from Budget 2011.**
- 3. Net difference of -\$0.02/month.**

| BY REVENUE OR | \$3.50 | \$19.45 |
|--|---------------------|-----------------------|
| EXPENDITURE TYPE | Depot | Collection |
| REVENUE | | |
| User Fees/Rentals/Permits | \$ (294,000) | \$ (1,377,060) |
| Other Gov't repayments | \$ (38,886) | |
| Commodity Revenue | \$ (32,000) | \$ (15,000) |
| TOTAL REVENUES | \$ (364,886) | \$ (1,392,060) |
| EXPENDITURES | | |
| Personnel Costs (GL 110-148) | \$ 216,000 | \$ 125,939 |
| General Purchases | \$ 148,878 | \$ 1,225,393 |
| Contribution to Capital (762) | | |
| Contribution to Reserves (764) | | |
| Other | | \$ 40,000 |
| TOTAL EXPENDITURES | \$ 364,878 | \$ 1,391,332 |
| NET COST/GAIN | \$ (8) | \$ (728) |
| Scenario eliminates (1) FT Recycling Coordinator Position; (1) 0.8 FTE Operator Position and a reduction to 16 Hours | | |

of Casual per week and requires moving Solid Waste Manager Salary Completely over to Waste & Recycling Collection budget impacting that fee significantly.

Spring/Fall Clean Up Still Offered in its current form at Lagoon Staffed But By Contract Staff.

Scenario 4 - \$1 Reduction

Fee:

\$4.57/Account/Month

- Gradual fixed cost increases over time.
- Includes cost of Spring/Fall Clean Up programming (if the program is moved to the Recycling Depot).

Description:

Scenario 4 provides for a \$1.00 decrease in the Recycling Depot Fee (Eco Fee) charged to all Town of Cochrane Utility Accounts, a maintenance of the current level of service and the transfer of a number of waste & recycling programs presently provided at other Town facilities (that cannot be maintained at those facilities in the long run).

Scenario 4 recommends the movement of the Spring/Fall Clean Up program to the Cochrane Recycling Depot. Movement of the Spring/Fall Clean Up program to the Recycling Depot requires the implementation of Pay-As-You-Throw (PAYT) waste disposal. The costs associated with the “free” garbage disposal portion of the Spring/Fall Clean Up are not sustainable. The “free” garbage disposal portion of the program represents $\frac{3}{4}$ of the program budget but only 15% of the program users utilize this particular part of the program.

Scenario 4 moves Cochrane in the direction of an integrated waste management system consistent with the Cochrane Sustainability Plan and the Town’s Strategic Plan. The scenario transitions the Cochrane Recycling Depot to the Cochrane Eco Centre where our residents, businesses and regional partners can access a facility which meets their “One Stop Drop-Off” Waste and Recycling needs.

Hours of Operation:

40 Hours per week.

Wednesday – Saturday: 8 am – 6 pm

Advantages

- The Recycling Depot Fee (Eco Fee) is reduced by \$1.00/month decreasing the perception of a duplicate fee.
- Increased Services Level– more diversion opportunities and programs again decreasing the perception that residents are paying twice for the same service.
- 4 day per week operation with modified hours encourages efficient use of resources and better reflects the desires of the facility users to be open earlier on all operating days and open later on Friday and Saturday.

- Spring and Fall Clean Up Programming would be provided at the Recycling Depot (Eco Centre). The programming would be offered on a seasonal basis (Spring – Fall) increasing access to this programming from 40 days annually to 100 days annually.
- Integrating the costs of the Spring/Fall Clean Up program into the Eco Fee means that all Cochrane Utility Accounts are paying for this service (as they all have access to the program and use it) whereas, at the present time, the Spring/Fall Clean Up programming is funded through the Waste & Recycling Collection budget meaning 1000 Utility Accounts receive access to the program without paying for it.
- Increased Level of Service – all waste, recycling and special waste programming currently spread out and offered at a number of Town facilities would all be centralized at the Recycling Depot (Eco Centre) under both Scenario's 4 and 5, including:
 - Household Hazardous Waste and Paint Disposal
 - Appliance Disposal
 - Spring/Fall Clean Up programming: tree trimmings disposal, scrap metal disposal, Sod/Rock/Dirt disposal (pending a secure disposal location is found), and extra garbage disposal (see note below).
 - Christmas Tree Recycling

Implications

- The staff reductions required to achieve this fee level would leave the Recycling Depot in a precarious staffing position, risking not enough coverage for holiday, sick time and peaks.
- Perception around having to reduce staff hours.
- The Scenario 4 fee does not reflect the continuous volatility of the recyclable commodity market and does not provide any contingency for the volatility of these markets. The Recycling Depot budget in previous years has always had a built in contingency to prevent financial overrun in the event of poor market conditions.
- Some minor site modifications would need to be made at the Recycling Depot (Eco Centre) prior to transitioning the Spring/Fall Clean Up programming to the facility, including modifications to the drop-off retaining wall.

Budget Implication:

1. Recycling Depot fee decreased \$1.00.
2. Waste & Recycling Collection fee increases \$0.85 from Budget 2011.
3. Net difference -\$0.15/month.

| | | |
|------------------|--------|------------|
| BY REVENUE OR | \$4.57 | \$18.25 |
| EXPENDITURE TYPE | Depot | Collection |

| REVENUE | | |
|---|---------------------|----------------------|
| User Fees/Rentals/Permits | \$ (383,880) | \$(1,292,100) |
| Other Gov't repayments | \$ (38,886) | |
| Commodity Revenue | \$ (35,000) | \$ (6,500) |
| TOTAL REVENUES | \$ (457,766) | \$(1,298,600) |
| EXPENDITURES | | |
| Personnel Costs (GL 110-148) | \$ 262,000 | \$ 125,939 |
| General Purchases | \$ 190,000 | \$ 1,171,393 |
| Contribution to Capital (762) | \$ 2,500 | |
| Contribution to Reserves (764) | \$ 2,500 | |
| Other | | |
| TOTAL EXPENDITURES | \$ 457,000 | \$ 1,297,332 |
| NET COST/GAIN | \$ (766) | \$ (1,268) |
| <p>Scenario requires a reduction in hours for the 0.8 FTE Operator Position to a 0.3 FTE position and a reduction of Casual hours. This Scenario also requires moving the portion of the Solid Waste Manager Salary that is in the Recycling Depot budget completely over to Waste & Recycling Collection budget impacting the fees associated with it.</p> | | |
| <p>Spring/Fall Clean Up Still offered but needs to move to the Recycling Depot. At this staffing level we need to implement PAYT garbage disposal or eliminate the garbage disposal portion of the program.</p> | | |

Scenario 5 – \$0.82 Reduction

Fee:

\$4.75/Account/Month

- Gradual fixed cost increases over time.
- Includes cost of Spring/Fall Clean Up programming (if the program is moved to the Recycling Depot).

Description:

Scenario 5 provides for a 15 % or \$0.82 decrease in the monthly Recycling Depot Fee (Eco Fee) charged to all Town of Cochrane Utility Accounts, a maintenance of the current level of service, a transfer of a number of waste & recycling programs presently provided at other Town facilities (that cannot be maintained at those facilities in the long run), and; an expansion of the current programming offered at the facility.

Scenario 5 moves Cochrane in the direction of an integrated waste management system consistent with the Cochrane Sustainability Plan and the Town's Strategic Plan. The scenario transitions the Cochrane Recycling Depot to the Cochrane Eco Centre where our residents, businesses and regional partners can access a facility which meets their "One Stop Drop-Off" needs.

Hours of Operation:

40 Hours per week.

Wednesday – Saturday: 8 am – 6 pm

Advantages

- Monthly Fee is reduced by 15 % or \$0.82.
- Fee Stability – the Recycling Depot Fee tends to rise steadily overtime as there are many fixed cost increases. There is a need for contingency in the budget due to commodity market volatility and a need to begin contributing to both a capital and operating reserve for waste and recycling programming, the 15 % discount scenario builds contribution to reserve and contingency planning into the budget.
- Financial Sustainability: At this fee level a substantial and sustainable contribution to both a capital and operating reserve can be made.
- 4 day per week operation with earlier opening hours and later closing hours (on Friday and Saturday) reflects the hours that our users would like to see at the facility.
 - This option allows for a change to the facility hours of operation to better reflect the needs of our community. Open until 6 pm – 4 days per week allowing for after work facility access. Open earlier, our rural users and business community have indicated a desire for the facility to open earlier in the morning.

Elimination of opening hours until 7 pm. Historically, only 1 -2 users access the facility from 6 pm – 7 pm each day.

- Efficient Use of Staff Resources: Changing the facility Hours of Operation also allows for a more efficient use of staff resources, the facility will no longer need to carry extra “casual” staff in order to meet a 6 day per week schedule.
- Spring/Fall Clean Up Programming would be provided at the Recycling Depot (Eco Centre) in this Scenario. The programming would be offered on a seasonal basis (Spring – Fall), increasing access to this programming for 40 days annually to 100 days annually.
- Integrating the costs of the Spring/Fall Clean Up program into the Eco Fee means that all Cochrane Utility Accounts are paying for this service (as they all have access to it) whereas, at the present time, the Spring/Fall Clean Up programming is funded through the “collection” budget meaning 1000 Utility Accounts receive access to the program without paying for it.
- Increased Level of Service: by providing more diversion opportunities and programs we again decrease the perception that residents are paying twice for the same service. Scenario 5 means that all waste, recycling and special waste programming currently spread out and offered at a number of Town facilities would all be centralized at the Eco Centre including:
 - Household Hazardous Waste and Paint Disposal
 - Appliance Disposal (free of charge, except Freon containing appliances)
 - Spring/Fall Clean Up programming: tree trimmings disposal, scrap metal disposal, Sod/Rock/Dirt disposal (pending a secure disposal location is found), and extra garbage disposal.
 - Christmas Tree Recycling
- Commercial Expansion: Scenario 5 provides all of the resources necessary for the Town to explore providing commercial recycling opportunities. Commercial recycling opportunities may include: fee for service EPS recycling for outside of Cochrane businesses, fee for service plastic and cardboard baling services for the commercial sector etc.
- Increased Waste Diversion Options: Scenario 5 provides the resources necessary for the Town to continue to explore the provision of expanded recycling and waste diversion services that the other scenarios would not allow for. Future programming that could be provided under Scenario 5 includes:
 - Community Food Waste (organics) drop-off program
 - Christmas Light Recycling Program
 - Mattress & Box Spring Recycling Round Up
 - Tire Recycling Program
 - Expansion of Electronics Recycling Program
 - Community Fundraising Programs including:
 - Sale of Reusable Shopping and Gift Bags
 - Sale of Rain Barrels & Water Conservation Packages

- Sale of other Sustainable Products
- Partnerships with Home Reno Heaven and Home Treasures
- Bicycle Maintenance and Repair Workshops
- Reusable Art partnerships
- Town wide garage sale
- Paper making Workshops
- Backyard Composting Workshops

Implications

- Some minor site modifications would need to be made at the Recycling Depot (Eco Centre) prior to transitioning the Spring/Fall Clean Up programming to the facility, including modifications to the drop-off retaining wall.
- Decisions regarding the Spring/Fall Clean Up garbage disposal programming would need to be made. At this funding level the garbage disposal programming could be maintained as a “free” service (if offered for a very short period of time), however, it is recommended that this “free” garbage disposal service be replaced by a PAYT system within the next couple of years pending the installation of the appropriate infrastructure.

Budget Implication:

1. Recycling Depot fee decreased \$0.82.
2. Waste & Recycling Collection fee increases \$0.30 from Budget 2011.
3. Net difference of -\$0.52/month.

| BY REVENUE OR | \$4.75 | \$17.70 |
|--|--------------|----------------|
| EXPENDITURE TYPE | Depot | Collection |
| REVENUE | | |
| User Fees/Rentals/Permits | \$ (399,000) | \$ (1,253,160) |
| Other Gov't repayments | \$ (38,886) | |
| Donations/Refunds/Other | \$ (42,600) | \$ (6,500) |
| TOTAL REVENUES | \$ (480,486) | \$ (1,259,660) |
| EXPENDITURES | | |
| Personnel Costs (GL 110-148) | \$ 273,000 | \$ 89,032 |
| General Purchases | \$ 190,000 | \$ 1,171,393 |
| Contribution to Capital (762) | \$ 8,700 | |
| Contribution to Reserves (764) | \$ 8,700 | |
| Other | | |
| TOTAL EXPENDITURES | \$ 480,400 | \$ 1,260,425 |
| NET COST/GAIN | \$ (86) | \$ 765 |
| Scenario provides for a reduction in hours for the 0.8 FTE position to 0.5 FTE (the employee filling this position has | | |

requested this change).

Spring/Fall Clean Up still offered and is moved from the Lagoon to the Recycling Depot. PAYT garbage disposal could be offered, the staffing required to maintain current service levels and to consider the expansion of services is available at this fee level.

Recommended Scenario

The Recommended Scenario is Scenario 5 – \$4.75. The recommended scenario integrates all waste and recycling programming into the new Cochrane Eco Centre resulting in a more efficient use of staff time, equipment and facility resources. Essential to the future success of the recommended Scenario is our ability to progress towards moving all Town of Cochrane provided waste and recycling services to one facility location. A “One Stop Drop – Off” experience for our users increases not only the convenience of accessing Cochrane’s waste and recycling programs but it introduces a number of efficiencies that will save both financial and human resources.

The Recommended Scenario balances the desire to reduce the Recycling Depot fee without having a corresponding negative impact on the Waste & Recycling Collection fee, as some of the other scenarios do. The Recommended Scenario decreases the Recycling Depot fee by \$0.82/month with a corresponding increase in the Waste & Recycling Collection fee of \$0.30/month – a net impact of -\$0.52/month between the two fees.

The Recommended Scenario is the only scenario presented here that presents itself as financially sustainable. The Recommended Scenario manages to find that all important balance between our ability provide a service and our ability to fund that service into the future. The Recommended Scenario also provides for the opportunity for the creation of a long term sustainable operating and capital reserve for future waste and recycling programs.

The Recommended Scenario is consistent with the Cochrane Sustainability Plan. The Recommended Scenario provides for a long-term vision for the Cochrane Recycling Depot (Eco Centre). The Scenario integrates all of the Town’s Special Waste and Recycling programs into one convenient facility – saving our residents time and energy as they will no longer be required to seek out multiple disposal locations. The Recommended Scenario demonstrates the connections between convenience and participation in sustainable behavior.

The Recommended Scenario envisions a Cochrane Eco Centre that is consistent with the guiding themes of the Town’s Strategic Plan. The Recommended Scenario demonstrates Sustainable Community Building, as it provides for a facility that will be able to accommodate the Town’s exponential growth for many years to come. It is a plan that meets the needs not only of our residents and businesses but the needs of our regional partners while at the same time increasing the level of service provided.

The Town’s Strategic Plan focuses on the importance of Communications and Relationships. The Recommended Scenario is a scenario

that has taken into consideration the needs of other Town departments including Community and Protective Services, as well as, Infrastructure Services, recognizing the need to centralize all waste and recycling programming to one facility in order to better manage resources. The Scenario has incorporated the recommendations, wants and needs of our residents, businesses and regional partners. Services are expanded, short-term programs offered for longer periods and hours of operation modified.

Organizational Excellence and People and Potential are integrated throughout the Recommended Scenario. The Cochrane Eco Centre plan promotes innovation, responsibility and accountability – using an existing facility with existing staff to expand upon and continually improve upon these Town services.

The Town of Cochrane Waste and Recycling Services strives to provide the most efficient, convenient and cost effective waste and recycling programs. The Recommended Scenario, a 15% reduction in the Eco Fee and the transition to the Cochrane Eco Centre is the only scenario that can balance the needs of our users (convenient One Stop Drop-Off) with fiscal responsibility.

Conclusion

With the implementation of the Automated Waste and Recycling collection program the Town of Cochrane has been provided with an opportunity to transition our waste and recycling services into an integrated system that is consistent with the Cochrane Sustainability Plan and the Town's Strategic Plan.

The scenarios provided above outline the options available to Council. Waste and Recycling Services has identified a recommended scenario upon thorough review of the options. The recommended course of action is consistent with both the Cochrane Sustainability Plan and the Town of Cochrane Strategic Plan.

The recommended scenario builds upon our current waste and recycling system to develop an integrated waste management system whereby the Town of Cochrane Recycling Depot or Eco Centre is considered a core community service that is financially sustainable.

Scenario Comparison Chart

| Details | Scenario 1 Status Quo | Scenario 2 Closure | Scenario 3 Reduced Service | Scenario 4 \$1 Reduction | Scenario 5 \$0.82 Reduction |
|--|--------------------------|------------------------|----------------------------------|--|---|
| Fee/Month | \$5.57/month | \$0/month | \$3.50/month | \$4.57/month | \$4.75/month |
| Net Difference (2011 Fees – Scenario Fees) | +\$0.95/month | -\$3.52/month | -\$0.02/month | -\$0.15/month | -\$0.52/month |
| Operating Hours/Week | 46 Hours per Week | 0 Hours per Week | 24 Hours per Week | 40 Hours per Week | 40 Hours per Week |
| Excess Residential Recycling | Yes | No | Yes | Yes | Yes |
| Business Community Recycling | Yes | No | Yes | Yes | Yes |
| Multi-Family Recycling | Yes | No | Yes | Yes | Yes |
| Regional Recycling | Yes | No | Yes | Yes | Yes |
| Used Motor Oil Program | Yes | No | Yes | Yes | Yes |
| HHW/Paint | No | No | No | Yes | Yes |
| Paint Exchange | No | No | No | Yes | Yes |
| E-Waste Recycling Program | Yes | No | Yes | Yes | Yes |
| Cooking Oil Recycling | Yes | No | Yes | Yes | Yes |
| EPS (Styrofoam) Recycling | Yes | No | Yes | Yes | Yes |
| Special Waste Items <ul style="list-style-type: none"> • Florescent Bulbs • Automotive Batteries • Household Batteries • Printer Cartridges • Cell Phones • Clothing • Eye Glasses | Yes | No | Yes | Yes | Yes |
| Book Exchange | Yes | No | Yes | Yes | Yes |
| Bicycle Exchange | Yes | No | Yes | Yes | Yes |
| Appliances ¹ | No | No | No | Yes – Charges still apply | Yes – Charges still apply |
| Fridges/Freezers | No | No | No | Yes – Freon Removal Charge Required | Yes – Freon Removal Charge Required |
| Yard Waste Composting (seasonal) | Yes | Yes – at Lagoon | Yes | Yes | Yes |

| | | | | | |
|---|--|--|--|--------------------------------|--------------------------------|
| Food Waste Composting (seasonal) ² | No | No | No | No | Yes |
| Backyard Composter Sales & Education | No | No | No | Yes | Yes |
| Tree Trimmings Recycling (seasonal) | Yes – at Lagoon | Yes – at Lagoon | Yes – at Lagoon | Yes | Yes |
| X-mas Tree Recycling (seasonal) | No | No | No | Yes | Yes |
| Dirt/Sod Disposal ³ (seasonal) | Yes – at Lagoon (disposal location needed) | Yes – at Lagoon (disposal location needed) | Yes – at Lagoon (disposal location needed) | Yes (disposal location needed) | Yes (disposal location needed) |
| Garbage Disposal (i.e. Spring/Fall Clean Up) ⁴ | Yes – at Lagoon | Yes – at Lagoon | Yes – at Lagoon | No | No |
| PAYT Waste Disposal ⁵ | No | No | No | Yes | Yes |

¹ **Appliances:** Under Scenario’s 1, 2, 3 the Appliance Disposal Program remains at the Operations Shop where it cannot be maintained in the long run due to space constraints. Regardless of where the Appliance Drop Off program is located fees will apply.

² **Food Waste Composting:** CEC is currently investigating a number of Food Waste Composting technologies that could be implemented at the Cochrane Eco Centre. Implementation of such a program will be highly dependent on the capital costs associated. Due to the staff required to maintain a food waste drop off program, it is assumed that food waste drop off could only be provided if there were a full compliment of Recycling Depot staff. Food waste drop off could then only be offered under Scenario 5.

³ **Dirt/Rock/Sod:** The disposal of Dirt/Rock/Sod is dependent on our ability to find a disposal location for these materials. Regardless of whether these products are accepted at the Spring/Fall Clean Up or at the Cochrane Eco Centre, we may have no choice but to eliminate this portion of the program if no cost effective disposal location can be found.

⁴ **Garbage Disposal:** Scenario 1 is the only scenario that provides enough funding to allow for the continuation of the “free” garbage disposal program at the Spring and Fall Clean Up. The “free” garbage disposal program is expensive and unsustainable to fund in the long run. A change to PAYT garbage disposal is highly recommended.

⁵ **PAYT:** Regardless of the scenario supported by Council, it is recommended that the “Free” garbage disposal portion of the Spring/Fall Clean Up be eliminated within 1-2 years as the cost to operate this portion of the program continues to grow exponentially and is continually abused. If Council were to support the elimination of the “free” garbage disposal part of the program and wanted to move in the direction of a PAYT program – additional infrastructure, primarily the installation of a waste compactor at the Recycling Depot/Eco Centre would be required for successful implementation.

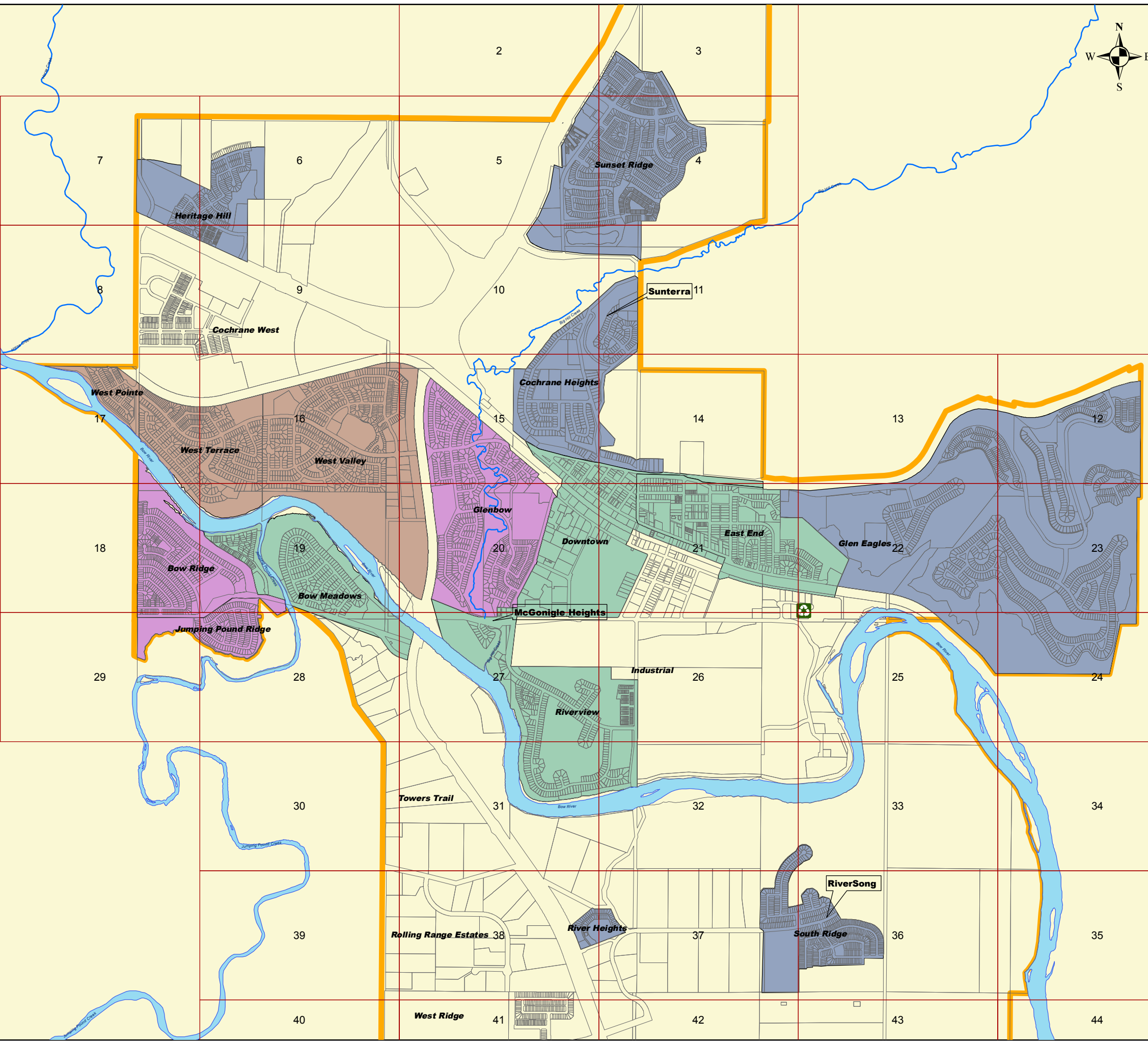
RESIDENTIAL WASTE COLLECTION SCHEDULE

Pick Up Day

- Tuesday
- Wednesday
- Thursday
- Friday



The Town of Cochrane provides this information in good faith but it provides no warranty, nor accepts any liability arising from any incorrect, incomplete or misleading information or its improper use. This information may be updated on a daily basis as changes occur. Current as of September, 2011.



Cochrane ECO Centre



Hours of Operation

Wednesday - Saturday:
8am - 6pm

Closed:
Sun, Mon, Tues & Statutory Holidays

Address:
50 Griffin Industrial Point

Look here for all you need to know about using your **WASTE** and **RECYCLING** carts!



Cart Placement Instructions

How you place your carts is important — the mechanical arms that pick up the carts need room to operate safely and effectively.

1. Place your household waste and recycling in the carts. Lids must close completely.
2. Roll your carts to the curb or alleyway. Park them on flat ground and make sure they are not blocking traffic.
 - Curb placement: Place cart wheels against the front curb.
 - Alleyway placement: Place cart wheels at least 30 cm (1 ft.) from your back hedge or fence.
3. Point arrows on the lids toward centre of road or alleyway.

Other placement notes:

- Carts should be at least 30 cm (1 ft.) apart.
- There should be at least three metres (10 ft.) of space above your carts.
- Please ensure carts are at least 1 m (3 ft.) from obstacles on either side (parked cars, power poles, utility boxes, fences, downspouts and garages).

What To Include

- **Waste cart:** your usual household waste, bagged and tied securely.
- **Recycling cart:** use the list on the recycling cart as a guide. All recyclables should be clean and free of debris.

Your carts should **never** include:

- Household hazardous waste — household chemicals, used paint and other household hazardous waste can harm your collector and the environment.
- Other materials — yard waste, construction and demolition waste, household appliances and furniture should not go in your carts.

For more information on disposal of these items, go to www.cochrane.ca/waste

or call the Waste and Recycling Hotline at **403-851-2277**.

More Information

Collection day

Check out the Town of Cochrane website for the full residential collection schedule and your waste pick-up day. Remember to set your carts out by 7am.

Glass and styrofoam

Although glass and styrofoam can not be included in your recycling cart, you can still recycle these items at the Recycling Depot.

Identify your cart

Record your cart serial numbers on the enclosed magnet and write your address on the carts with a permanent marker. This will help identify your carts if they ever go missing or need repairs.

Cart storage and cleaning

You are responsible for taking care of your carts and keeping them clean.

Damaged or missing carts

If your cart is damaged or missing, call the Waste and Recycling Hotline at 403-851-2277 immediately.

Waste enclosures

You can store your waste cart in an enclosure between collection days, but you must set it out for pick-up.

Carts will **NOT** be collected from enclosures.

Moving?

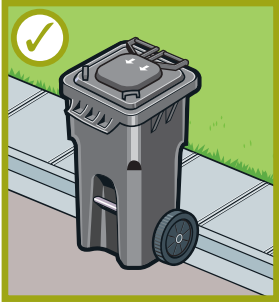
Carts are the property of the Town of Cochrane and are assigned to residences rather than people. Please **DO NOT** take your carts with you when you move. If you need carts at your new residence, call the Waste and Recycling Hotline at 403-851-2277.

Get more information on Cochrane's Automated Waste and Recycling pick-up program at www.cochrane.ca/automatedwaste

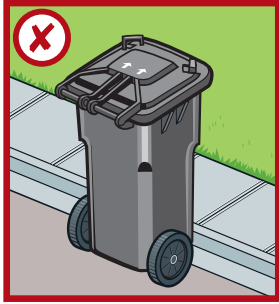
or call the Waste and Recycling Hotline at [403-851-2277](tel:403-851-2277).

Cart Placement

Arrows



Point lid arrows towards centre of street or alley.



Don't face carts backwards.

Placement

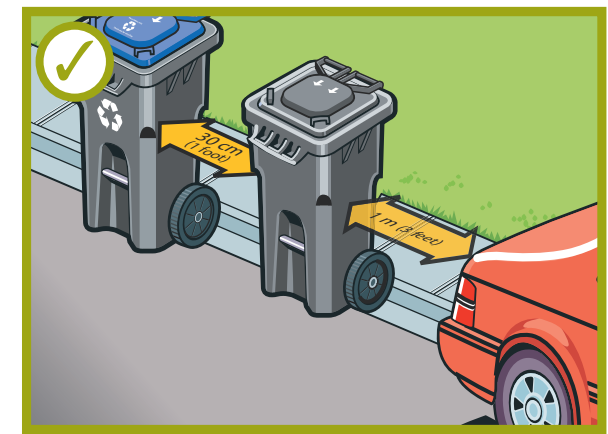


Set carts out at edge of street or alley.



Carts cannot block traffic or alley.

Front Street Collection



If your waste is collected on the street, place your automated waste and recycling carts as shown for collection.

Excess Waste

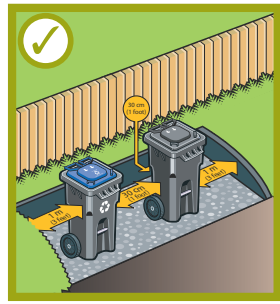


Excess Waste Bags can be purchased for \$3 and set out for collection (30 cm from cart).

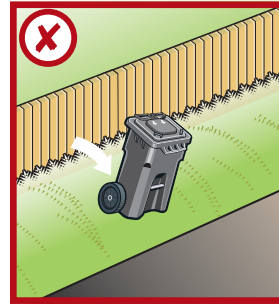


Don't leave materials against or on top of carts.

Level Ground

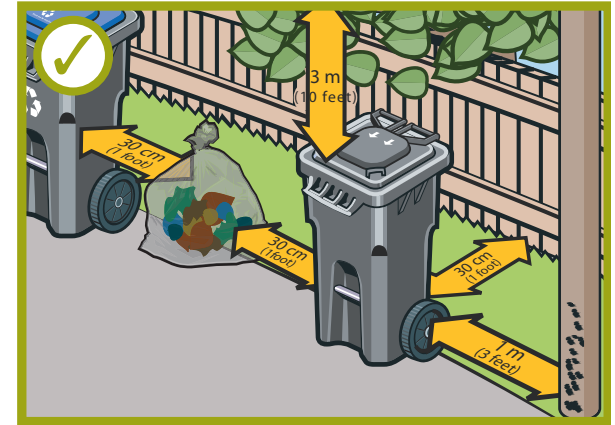


Place carts on even ground.



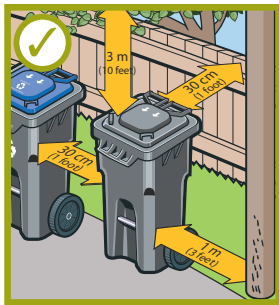
Don't place carts on a slope or hill.

Alley Collection



If your waste is collected in the alley, place your automated waste and recycling carts as shown for collection.

Spacing

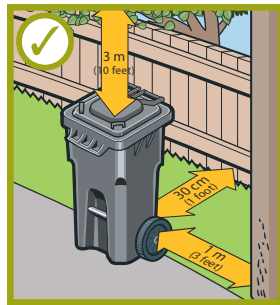


Leave enough space on all sides of your carts.

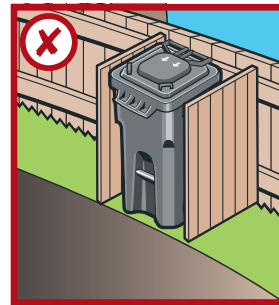


Don't place carts too close to other objects.

Collection



Only waste that is properly set out will be collected.



Carts will not be collected from enclosures.



Fluorescent Bulbs



- Fluorescent tubes
 - CFLs
- Please handle all bulbs with care as they contain mercury

Automotive Batteries



- Car batteries
 - Motorcycle batteries
- Please handle with care

Household Batteries



- Rechargeable & alkaline

Used Oil & Antifreeze



- Used motor oil & antifreeze
- Used oil filters
- Oil containers
- Do not mix oil & antifreeze

Food Waste



- Fruit & vegetable waste
 - Egg shells
 - Tea bags, coffee & filters
 - Pasta & bread
 - Meat bits & bones
- No bags



Spring & Fall Clean Up

Spring & Fall Clean Up is now at the Eco Centre! Leaves & grass, as well as tree trimmings & branches are accepted from Spring through Fall. Bagged household waste and small waste items i.e. old garden hoses, broken lawn chairs etc. can be disposed of for a fee.

Appliance Disposal

Appliances including fridges, freezers, washers, dryers, ranges, dishwashers, microwaves and hot water tanks are accepted for a fee at the Eco Centre.

Cooking Oil Recycling

Grease & cooking oil are accepted for recycling. Please dispose of these oils in the tank labelled Used Cooking Oil Only.

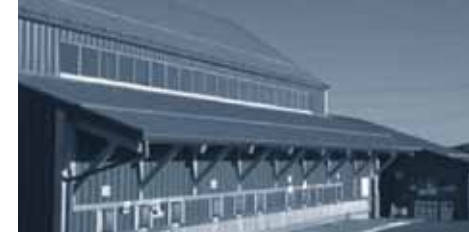
Household Hazardous Waste (HHW) & Paint

Household chemicals & paint are now accepted at the Eco Centre for disposal throughout the year. Includes all aerosols & propane tanks.

The Town of Cochrane commits to helping residents & businesses reduce their environmental impact.

Waste & Recycling Hotline
403-851-2277

cochrane.ca/ecocentre



Wed - Sat 8am - 6pm
Closed Sun, Mon, Tue
& statutory holidays

50 Griffin Industrial Point

Waste & Recycling Hotline
403-851-2277

cochrane.ca/ecocentre

Cochrane Eco Centre
Keep it rolling Cochrane!
MORE SERVICES FOR YOU





Newspaper



- Clean, dry, loose newsprint
- No glossy flyers or magazines.

Mixed Paper



- Coloured paper
- Wrapping paper
- Brown paper
- Envelopes
- Junk mail
- Magazines

Cardboard



- Clean, dry cardboard
- Corrugated cardboard
- Boxboard

Tin Cans



- Tin food cans
 - Pie plates
 - Tin foil
- No propane tanks or aerosol cans.

Scrap Metal



- Ferrous and non-ferrous scrap metal
- No wire, appliances, propane tanks or sharp objects.

Mixed Plastic



- Plastic jugs & bottles
- Plastic tubs & pails
- Clamshell containers
- Toys

Plastic Bags



- Grocery bags
- Resealable bags
- Plastic wrap
- Plastic sheeting

Drink Containers



- Milk jugs & cartons
- Pop & beer cans
- Pop bottles
- Juice cartons

Expanded Polystyrene



- Clean white packing foam
- No coloured foam, egg cartons, meat trays



- Food jars only
- No light bulbs, ceramics, mirrors, pottery, windshields or plate glass.

E-Waste



- Monitors
- CPUs & laptops
- Printers & faxes
- Cables & mice
- Keyboards
- TVs

Book Exchange



- Trade your old but still readable books for new ones.
- Please no encyclopedias or Reader's Digest

Clothing



- Clothing
 - Blankets, towels, linen
 - Shoes
- All items must be clean and gently used

Bicycles



- Give that old bicycle a new home! Bicycles donated are free for the taking.

Miscellaneous



- Campbell's soup labels
- Pop can tabs
- Cell phones
- Eyeglasses
- Printer cartridges

Please ensure all recyclables are clean with lids and labels removed.



Keep it rolling Cochrane!
MORE SERVICES FOR YOU