



Alberta Dairy Council

Plastic Milk Jug Recycling Program

Annual Report
2000-2001

Executive Summary

The *Alberta Dairy Council Plastic Milk Jug Recycling Program* was launched on July 1, 1999 to establish a voluntary stewardship program for High Density Polyethylene (HDPE) plastic milk jugs. The program is supported by funds contributed by Alberta Dairy Council member companies.

In its first year, the program established the province-wide infrastructure to support market-based plastic milk jug recycling. It was quickly recognized as a leader in milk container stewardship and a prominent example of cooperation between industry, municipalities and the provincial government.

While much of the activity in Year 1 revolved around establishing the program and creating awareness at the municipal level, Year 2 concentrated on program stabilization, development and operational improvement. During Year 2:

- ◆ Overall program emphasis shifted from launch, registration and implementation to meeting operational challenges and increasing public awareness.
- ◆ Registrations increased by ten percent to a total of 68 Recycling Authorities (defined as municipalities or organizations designated by municipalities to collect used plastic milk jugs) representing 162 cities, towns, villages, summer villages, municipal districts and counties.
- ◆ Eighty-seven percent of the province's population now has access to plastic milk jug recycling services through their Recycling Authorities.
- ◆ A total of nine new communities and two new Recycling Authorities in Calgary joined the program in Year 2. Since inception 68 'new' communities have joined the program. This has resulted in additional investments in municipal infrastructure.
- ◆ The total material recovered in Year 2 amounted to 1,294 tonnes, an increase of 97 tonnes (8%) over Year 1 and 384 tonnes (42%) since inception.
- ◆ The province-wide recovery rate for HDPE milk jugs increased from 40% to 42%. On a per capita basis the rate has increased from .48 kg/cap/year to .52 kg/cap/year. Among participating municipalities it has increased to .54 kg/cap/year.
- ◆ The program distributed over \$193,000 in top-up payments and transportation supplements to Recycling Authorities, a slight decrease over Year 1 that reflects higher market prices for used HDPE.

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- ◆ The Council held extensive and varied consultations with Recycling Authorities throughout the year. The purpose of these consultations was to identify opportunities for program improvement. Collectively, they identified three main areas of concern which will be addressed through program changes in Year 3, namely:
 1. Small and rural communities with less developed collection programs and infrastructures.
 2. Transportation costs for rural communities.
 3. Challenges of handling loose (as opposed to baled) containers.
 - ◆ Communications & Education expenditures exceeded \$340,000. During the year, the Communications & Education initiative shifted focus from increasing awareness and understanding of program mechanics to promoting milk jug recovery at the consumer level.
 - ◆ Relations with Alberta municipalities and Alberta Environment continued to strengthen, creating new opportunities for program improvement and promotion.

On June 18, 2001 the Minister of Alberta Environment expressed his continued support for the program by agreeing to renew the 1999 Memorandum of Understanding for another year. The renewal creates an opportunity to implement many of the operational improvements identified in Year 2, including expansion of the program to include paper-based polycoat (sometimes known as 'gable top') milk cartons.

As a result of this expansion, the program has been re-named the *Alberta Dairy Council Milk Container Recycling Program*. In the year ahead, the Council looks forward to working with Alberta municipalities and Alberta Environment, and to further build on the program's success.

Alberta Dairy Council

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Alberta Dairy Council

The Alberta Dairy Council (ADC) is the trade association for the province's dairy processors. Collectively, the Council's fourteen member companies process and market more than 95% of the raw milk produced in the Province of Alberta.

The Mission of the ADC is to represent Alberta dairy processors. It does so by serving as a liaison with other interested groups; analyzing and advancing legislation that is beneficial to the industry; holding meetings, distributing information and representing processors within related organizations; and improving the dairy processing industry while enhancing its image with the general public.

The Plastic Milk Jug Recycling Program

The *Alberta Dairy Council Plastic Milk Jug Recycling Program* was launched on July 1, 1999 after more than twelve months' consultation between Alberta Environment, Alberta municipalities and the Alberta Dairy Council. These consultations led to the implementation of a province-wide recycling program for used High Density Polyethylene (HDPE) plastic milk containers (or 'jugs' in industry terms). Through the program, ADC provides financial and technical support to community-based recycling programs that collect used jugs.

The details of the program are spelled out in a *Memorandum of Understanding* between the Alberta Dairy Council, its member companies and the Province of Alberta. The program is funded by the Council and provides top-up payments to approved Recycling Authorities (RAs). These payments help 'smooth out' fluctuations in the market prices of used HDPE. It also provides a 'transportation supplement' to RAs outside Edmonton and Calgary to help defray the costs of moving collected materials to recycling markets. Further, the program supports a public Communications & Education (C&E) program and finances its own administration and management costs.

The program is governed by the Alberta Dairy Council's Board of Directors and is administered by a Program Coordinator who reports to the Board. A multi-stakeholder Steering Committee provides feedback, direction and support to the Program Coordinator and the ADC Board of Directors. Program performance is reviewed and verified annually by an independent auditor.

The original memorandum expired on June 30, 2001, but was renewed for a one-year term by the province's Minister of Environment on June 18, 2001.

A provision of the renewal was that the program be expanded to include paper-based polycoat milk cartons. In accordance with this provision and a number of other improvements, the program has been re-named the *Alberta Dairy Council Milk Container Recycling Program*.



Bringing Milk Container Recycling to Albertans

LAST YEAR



But it didn't happen by itself.

The Alberta Dairy Council's Plastic Milk Jug Recycling Program (and its successor, the Milk Container Recycling Program) provides the financial foundation and program support to bring community-based milk container recycling to 87% of the Alberta population. This is a significant achievement.

It's possible thanks to the involvement of municipalities, recycling program operators, material processors, community groups and other stakeholders who play key roles in collecting, transporting and processing used milk containers. Without them, the program would not work. With them, it continues to get better.

"The participation of the dairy processors in the development of a stewardship program for the collection of plastic milk jugs has been very encouraging. The funding provided by this innovative program allowed us to enter into this program by ensuring stability and support in the marketing of the materials."

Dave Griffiths, Manager of Solid Waste Services for the City of Calgary, which since joining in the program has significantly expanded its collection infrastructure for used milk containers.

"The program has a double benefit. It provides a stable revenue stream for Recycling Authorities even when prices are volatile, and as a result it creates a steady flow of material to the recyclers. This increases the viability of the recycling system and diverts more material from landfill."

Ralph Acres, President of Precision Plastics, a registered Recycling Authority and material processor in Edmonton.

"Our members have long supported industry stewardship initiatives that help reduce the impact of used packaging on our landfills. The Alberta Dairy Council program is an innovative and cost-effective way to provide Alberta consumers with access to viable recycling services for used milk containers. We're pleased to be working with the dairy industry to make the program a success."

Bryan Walton, Vice President, Western Region for the Canadian Council of Grocery Distributors.

“By focusing on a single item, the milk jug recycling contest greatly increased the students’ awareness of recycling in general. By looking at the number of milk jugs our school collected, and comparing that to provincial consumption, the students saw the numbers in a much more meaningful light. In addition, most of the students were previously unaware of both what to do to recycle the milk jugs, and what they were finally recycled into.”

Matthew Hiebert, a teacher at Rundle College Elementary School in Calgary, who participated in the Year 2 Milk Jug Return Contest and uses the School Education Program materials in his classroom.



Ralph Acres

“It’s important to meet consumer expectations on all fronts. What was needed was a program that provided effective, sustainable recycling opportunities for consumers without discouraging the consumption of milk which, as producers, has a direct impact on our incomes.”

Rients Palmsma, milk producer in Ponoka and Director of Alberta Milk Producers, the trade association for the province’s dairy farmers.



Dave Griffiths

“The program balances industry’s commitment to take responsibility for the stewardship of its containers with the economic and technical demands of marketing a staple food product. Most of all, it responds to the needs and expectations of Alberta consumers. We’re proud to be industry leaders in this area.”

David Krol, Director of Supply Chain Operations, Western Canada for Parmalat Canada, and Chair of the ADC Milk Container Recycling Program.



Rients Palmsma

In fact, every single person who drops a used milk container into a blue bag, municipal recycling bin or private recycling depot in the Province of Alberta contributes to the program’s success. By working together, we can continue to increase participation and remove even more material from our landfills.

Program Coordinator's Report

Program Coordinator's Role & Activities



Roberta Windrum
Program Coordinator

The advent of the Alberta Dairy Council's Plastic Milk Jug Recycling Program in 1999 broke new ground in environmental stewardship, creating the most comprehensive voluntary recycling program for used milk jugs in North America. And despite developments in other jurisdictions since that time, it remains a model for industry-managed stewardship programs.

In its first year, the program successfully established a funding mechanism to bring milk jug recycling to more than 80% of the province's population.

Year 2 of the program, which began on July 1, 2000 and ended June 30, 2001, was marked by continued high levels of municipal participation, a Communications and Education effort more tightly focused on reaching Alberta consumers, and various activities to address operational challenges and opportunities for improvement. There was probably less fanfare for the program than in Year 1, but more emphasis on improving day-to-day operations.

By year end, we had seen a ten per cent increase in the number of municipal registrations (i.e., 68 registered authorities representing 162 cities, towns, villages, summer villages, municipal districts and counties), giving 87% of Albertans access to plastic milk jug recycling services in their communities.

The year end recovery rate of 42% represents 1,294 tonnes of used material, a small increase over Year 1. The number reflects increased returns offset by a natural 'settling' of the participation rate following the first year launch and a degree of under-reporting, particularly from municipalities that, while having registered with the program, had not shipped collected jugs to market by June 30. Per capita recovery increased from .48 kg to .52 kg (.55 kg excluding municipalities that registered but did not ship).

By year end the program had expended \$193,222 in top-up and transportation supplement payments to registered Recycling Authorities, a decrease of four percent over Year 1. The difference is attributable to higher market prices for used HDPE, which had the effect of reducing top-up payments despite higher volumes of material.

The program's performance is impressive when measured against milk container recycling programs in other provinces, but still short of the Ministry of Environment's desire to achieve a 75% recovery rate for used jugs. We continue to believe that diversion from landfill can be increased through program refinements and further collaboration with Recycling Authorities.

This belief led us to identify a number of operational improvements for implementation in Year 3. In May 2001, following a series of 'Round Table' consultations with benchmark municipalities and discussions with the Capital Region Waste Minimization Committees, the Alberta Dairy Council proposed

several changes to the program for 2001-2002. In addition to maintaining the existing top-up formula, the Council proposed to:

- ◆ Offer an alternative collection option under which municipalities would have containers picked up and transported by a third party carrier. This option improves program economics for smaller rural communities.
- ◆ Include paper-based polycoat milk cartons in the program. This is a significant and ambitious commitment made possible by the availability of domestic recycling capacity that was not available before.
- ◆ Increase the transportation supplement to recycling authorities outside Edmonton and Calgary from \$15 to \$25 per tonne, retroactive to January 1, 2001.
- ◆ Initiate two new advisory committees – a technical advisory committee and a Communications & Education strategy committee — to assist with the implementation of further operational improvements.

These proposals will form a significant part of the program for Year 3.



The expansion of municipal recycling infrastructure — such as community drop-off bins in Calgary — has been a consequence of the Plastic Milk Jug Recycling Program

During Year 2, our approach to Communications & Education shifted from raising awareness and understanding of program mechanics to promoting recovery at the consumer level. In this vein, the Communications & Education effort included a series of television ‘infomercials’ (reaching an estimated 2.5 million viewers province-wide), an expanded school program (which was incorporated into the Grade Four curriculum province-wide) and a pilot door hanger program to raise awareness and activity levels in more than 480,000 Alberta households (representing almost 1.3 million residents province-wide).

We enjoyed an increasingly constructive working relationship with Alberta municipalities. In addition to helping identify specific areas for improvement,

this relationship opened up new opportunities to promote public participation. Late in the year we began to work closely with municipalities to engage their residents in increasing milk jug recovery. We look forward to working even more closely with them in Year 3, and are planning to make community outreach a central part of our Communications & Education activity.

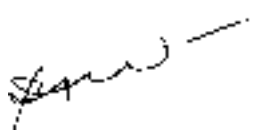
These activities made for a busy year. On May 23, we shared our plans and accomplishments with the Hon. Lorne Taylor, Minister of Alberta Environment, and on June 18 the Minister expressed his support by extending the program for another year, with the opportunity to extend further based on program performance. This includes a recovery rate target of 55% for plastic jugs in Year 3.

The extension allows us to implement the aforementioned operational improvements and expand the program to include polycoat containers. Accordingly, the program has been re-named the Alberta Dairy Council *Milk Container Recycling Program*.

Because of its groundbreaking nature, there is no real road map for the program's success. But thanks to the direction we have received from the Alberta Dairy Council, Alberta Environment, the program's Steering Committee and all of the Recycling Authorities that take part, we have a clear sense of where we want to go and how we want to get there.

This program could not work without the support of the municipalities and Alberta Environment. I am pleased to say that our relationship has strengthened to the point where we consider ourselves partners working toward the mutual goal of increased stewardship and milk container recovery.

On behalf of the Alberta Dairy Council, I would like to thank all participants for their support. I would especially like to thank Doug Schroeder, who has recently passed the torch after chairing the program for the past year, for his support and counsel.



Roberta Windrum
Program Coordinator

Year 2 Operational Highlights

While much of Year 1 was spent developing the program and registering Recycling Authorities, the major focus of Year 2 was on refining operations to improve performance and increase material recovery. To this end, the bulk of program activity focused on working with the organizations that collect and recycle used milk jugs at the ‘ground level.’

The Program Coordinator represents the Plastic Milk Jug Recycling Program and exemplifies the Alberta Dairy Council’s commitment to milk container stewardship, all while managing program operations and relations with key stakeholders.

Program Coordinator’s Activities

Throughout the year, the Program Coordinator’s activities included:

- ◆ Working with Recycling Authorities to improve collection logistics, material handling and accounting procedures. Much of this work was conducted in conjunction with major community organizations such as Northern Coordinated Action for Recycling Enterprises (CARE) and the Capital Region Waste Minimization Committee’s technical committees.
- ◆ Constantly promoting the program through community activities, public outreach and management of the Communications & Education program.
- ◆ Leading the program through a series of community and public consultation processes including the Beverage Container Management Board’s review of the Province’s *Beverage Container Recycling Regulation*.



Communities such as Sherwood Park have been major supporters and beneficiaries of the Plastic Milk Jug Recycling Program

Program Participation

- ◆ Working directly with the Alberta Dairy Council's Board of Directors and the program's Steering Committee to meet the requirements of the July 2, 1999 Memorandum of Understanding and implement ongoing improvements in all aspects of the program.

The Program relies on community and municipal participation to drive the collection of used milk containers. Municipalities have the option of registering with the program directly or designating separate entities to register on their behalf. The registered entities are known as Recycling Authorities, or RAs, and in Year 2:

- ◆ A total of 68 Recycling Authorities participated in the program (a ten percent increase over Year 1), representing 162 cities, towns, villages, summer villages, municipal districts and counties.
- ◆ Eighty-seven percent of Albertans now have direct access to plastic milk jug recycling services in their communities through these authorities.

New registrations have started to slow as the majority of the province's population is now covered by collection services. Still, these numbers constitute incremental increases over Year 1.

Top-Up Support

The program's key financial instrument is the 'top-up' payment, which helps deliver a guaranteed 'floor price' to Recycling Authorities for milk jugs that are collected and shipped to market. Top-up payments help offset the volatility in market prices for used HDPE, thereby ensuring Recycling Authorities' revenues are constant and predictable. This provides a level of insurance against market price fluctuations not available to other recyclable commodities.

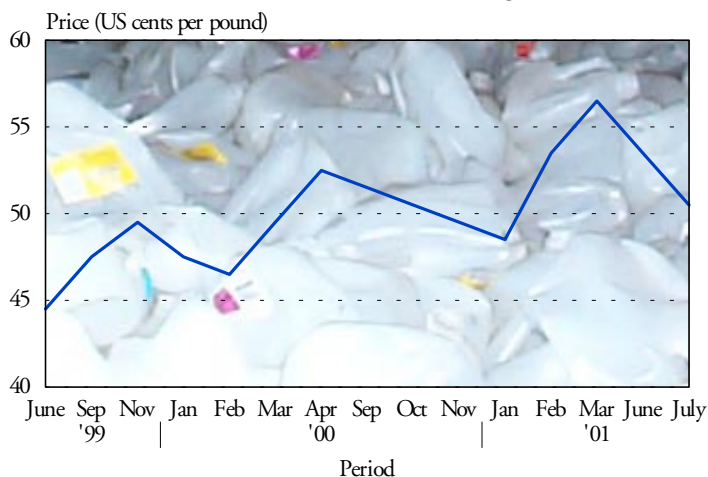
In addition, the program offers a transportation supplement to Recycling Authorities outside Edmonton and Calgary. This payment helps offset the costs of moving material to markets.

Over the course of the year,

- ◆ The program paid \$175,406 to recycling authorities in the form of top-up payments and \$17,816 in transportation supplements for a total of \$193,222.
- ◆ Of this total, top-up payments were actually down seven percent versus Year 1 while transportation supplement payments were up by 36%. Total payments were four percent lower than in Year 1.
- ◆ The difference in the top-up total is mainly attributable to higher market prices for used HDPE. Under the top-up formula, higher market prices reduce top-up requirements as they approach the targeted floor price. Chart 1 illustrates increases in market prices since program inception.

- ◆ The increase in transportation supplements reflects higher shipment volumes and an increase in the supplement from \$15 to \$25 per tonne, effective (retroactively) January 1, 2001.

**Chart 1: High Density Polyethylene Price
(Natural Colour Milk Jugs)**



- ◆ The program recovered 1,294 tonnes of used HDPE in Year 2, an eight percent increase over Year 1 and a 42% increase since the program's inception.
- ◆ Put into perspective, the increased volumes in Year 2 represent the equivalent of 1.5 million four litre milk jugs.
- ◆ The end-of-year recovery rate was 42%, a small increase over Year 1. The rate was affected by growth in milk jug sales during the year and to some extent by 'settling' of collection activity following the program launch.
- ◆ In addition, the rate may be slightly understated since some Recycling Authorities had not shipped their collected jugs to market by the end of the fiscal year.
- ◆ The per capita recovery rate increased from .48 kg to .52 kg, and was actually higher (.55 kg) when adjusted for RAs that were registered but did not ship.

Material Recovery



Each collected bale weighs approximately 550 kg and consists of more than 8,300 used milk jugs

Year 2 Summary Table

Authority Name	Population	Year 2 Totals	Recovery (kg/cap)
Calgary (Consolidated)	860,749	413.12	0.48
Edmonton, City	648,284	269.70	0.42
Precision Plastics	126,350	78.98	0.63
Recycle Plus	108,469	33.95	0.31
Canadian Waste (Lethbridge)	68,712	42.35	0.62
Red Deer, City	65,701	82.87	1.26
St. Albert, City	51,716	34.52	0.67
Redi Recycle	50,152	65.57	1.31
Okotoks, Town	36,486	25.90	0.71
Canadian Waste (Rocky Mountain House)	28,993	73.78	2.54
RRD Waste Management	23,320	11.28	0.48
Newell Recycling Association	20,822	9.95	0.48
Airdrie, City	19,165	17.40	0.91
GPS Recycling Ltd.	17,682	14.27	0.81
Wutzke Garbage & Recycle	17,067	1.23	0.07
Leduc, City	14,540	17.39	1.20
Centra Cam Vocational Training Association	14,290	13.00	0.91
Fort Saskatchewan, City	13,346	9.84	0.74
Pass Recycling	13,187	3.26	0.25
Drayton Valley/Brazeau Recycling	12,993	5.22	0.40
Stettler Waste Management	11,416	1.70	0.15
Bea Fisher Enterprises	11,317	7.76	0.69
Cochrane Recycling Depot	11,173	6.35	0.57
Canmore, Town	10,517	6.57	0.62
Edson & District Recycling Society	9,899	4.35	0.44
Falcon Waste Recovery	9,263	1.83	0.20
Stony Plain Town	8,274	7.67	0.93
Drumheller Recycling	7,833	0.51	0.06
Banff, Town	7,716	0.50	0.06
Big Jim's Recycling Centre	7,434	2.73	0.37
Willow Creek Recycling	7,340	1.81	0.25
Taber Container Depot	7,331	2.52	0.34
Vegreville Association for Living in Dignity	7,292	0.61	0.08
Blue Heron Vocational Training	6,813	2.88	0.42
Vulcan Recycling Depot	6,611	2.45	0.37
Ponoka, Town	6,149	3.24	0.53
St. Paul Abilities Network	4,970	1.42	0.28
Westlock Waste Management Centre	4,817	3.39	0.70
Didsbury Lion's Recycling	3,782	1.35	0.36
Lion Club of Bow Island	3,589	1.80	0.50
Picture Butte Bottle Depot	2,669	6.19	2.32
Sundre, Town	2,190	2.65	1.21
Totals	2,370,419	1,293.81	0.55

Collected But Not Shipped In Year 2

Authority Name	Population
Regional Municipality of Wood Buffalo	51,406
Urlacher Electric	12,128
Big Country Regional Recycling	11,275
Three Hills, Town	8,439
Elk Point Bottle Depot	7,827
Innisfail Bottle Depot	6,789
Olds, Town	6,230
Sunrise Bottle Depot	5,941
Bonnyville, Town	5,397
Paintearth Resource Recovery Centre	4,583
Vermillion, Town	4,356
Vauxhall, Town	4,015
Cardston Recyclers	3,417
Bill Jenkins Enterprises Ltd.	3,093
Carstairs Lions Club	2,086
Standstone Waste	1,669
Irricana Recyclers	1,016
Holden/Bruce & District Recycling	862
Beiseker Recycling Society	795
Totals	141,324

Throughout the year, the Alberta Dairy Council consulted broadly with stakeholders in an effort to identify the program's strengths, weakness and most importantly, opportunities for improvement.

Opportunities for Program Improvement

Ongoing discussions were held between the Program Coordinator, Recycling Authorities, plastic processors and other organizations including Alberta Environment. Of these, three sets of consultations were particularly helpful in identifying opportunities for program improvement:

- ◆ A series of 'Round Table' meetings held with benchmark municipalities in January 2001. These meetings were intended to identify 'best practices' among successful operators and in the process defined three particular challenges for Recycling Authorities: 1) transportation costs in rural areas; 2) immature collection infrastructures in some regions; 3) the difficulties of handling loose (as opposed to baled) materials.

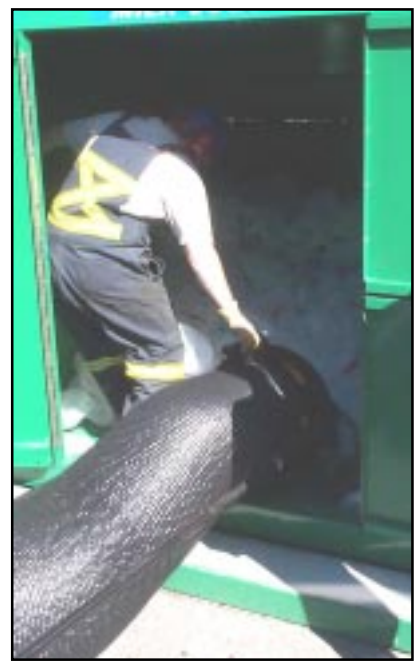
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- ◆ A survey of selected Recycling Authorities to gauge levels of satisfaction with the program after one year of operation.
 - ◆ Meetings with the Capital Region Waste Minimization Technical Committee in the early spring. These meetings highlighted the challenges for program operations in small communities with underdeveloped recycling infrastructures as well as the difficulties of reaching multi-family dwellings and promoting municipal collection in areas where waste disposal costs are low.

In addition, program operations benefited from:

- ◆ Consultations with the City of Calgary. These discussions were held frequently throughout the year in the lead-up to the implementation of a city-wide collection program.
- ◆ Regular meetings of the Plastic Milk Jug Recycling Program Steering Committee.
- ◆ Periodic meetings with individual RAs, recyclers and other industry sources to identify opportunities for operational and program improvement.

Collectively, these discussions were instrumental in the development of four key proposals for program improvement. The proposals are described in more detail in the Action Plan for Year 3 beginning on page 20. The discussions also helped provide a new community-oriented focus for the Communications & Education program in Year 3. This is described on pages 21 and 22.

In Calgary, the City's unique 'twister truck' literally 'vacuums up' empty milk jugs and densifies them inside the vehicle



Year 2 Communications & Education

Communications & Education (C&E) continues to be an essential part of the Plastic Milk Jug Recycling Program and the largest component of the program budget. In Year 2, a total of \$342,891 (including \$126,000 for the cap label program, which was prepaid at the end of Year 1)¹ was invested in the Communications & Education activities described below.

While the main emphasis of C&E activities in Year 1 was on program startup, municipal awareness and the creation of a program identity, in Year 2 the emphasis shifted to encouraging public participation and promoting increased recovery rates. Practically, the program channeled available resources into C&E activities that supported overall strategy and helped individual communities reach Alberta residents.

Television - Four 15-second 'infomercials' and one 60-second vignette were aired province-wide on ACCESS TV for a thirteen week period beginning in March 2001. Each segment was designed as an educational tool to raise public awareness of simple facts relating to milk jug recycling, such as the number of jugs sold each year, the number recycled and landfilled each year, the end use of recycled jugs, and the proper way to recycle them.

Door Hangers - In late spring, 'door hangers' (printed cut-outs in the shape of a four litre plastic milk jug) were distributed to 480,600 households in Calgary, Edmonton, Grande Prairie, Lethbridge, Lloydminster, Wetaskiwin, and Fort McMurray. The purpose of the campaign was to raise awareness of the program and promote milk jug recycling at the household level, including difficult-to-access multi-family residences where possible. The campaign proved to be an effective tool for reaching residents directly at their homes. For example, the campaign helped kick off the city-wide expansion of Calgary's milk container collection program.

Mass Promotion



Media - During the year, display ads appeared in the *Calgary Sun* and the *Calgary Herald* to support the expansion of milk jug collection in the City of Calgary. In addition, media releases were distributed to The Alberta Weekly Newspapers Association and informative articles were published in the Environmental Plastics Institute of Canada (EPIC) newsletter, *Solid Waste & Recycling* magazine, Recycling Canada's monthly report and *Urban Perspective Newspaper*.

Media and Special Activities



Trade Shows and Professional Conferences - Trade shows continued to play an important role in promoting increased recycling at the community level. Participation in these events (such as Calgary Aggie Days, Farm Fair at Canadian

¹ Excluding the expense for cap labels, total expenditures were \$216,891.

In Year 1, total expenditures were \$332,000 or \$206,000 excluding the prepaid expense for cap labels.

Finals Rodeo, AUMA, AAMD&C, Masters at Spruce Meadows, Cold Lake, Fort McMurray and Northern Alberta International Children's Festival) provided exposure to over 350,000 attendees.

Other – The Alberta Dairy Council was a Bronze Sponsor at the Northern Alberta Children's International Festival in St. Albert, a commitment that provided additional exposure through festival promotional materials. A teacher kit consisting of School Program material (see below) and samples of pelletized recycled milk jugs were provided to all teachers visiting the booth.

School Education Program – Building on the success of the pilot program in Year 1, the school program was expanded for inclusion in *Waste And Our World*, which was offered by Alberta Environment as part of the grade four curriculum. The program provided support materials to help science students make informed decisions about milk jug recycling. The materials are designed to be fun and informative and include:

- ◆ A Plastic Milk Jug Crossword Puzzle to reinforce understanding of the vocabulary related to the recycling of plastic milk jugs.
- ◆ A 'Find the Jug' word search for students completing assignments early or for use at an interest centre.
- ◆ 'Design a Poster' cut-outs to help students promote understanding of milk jug recycling with other students or in the home.
- ◆ 'A Day in the Life of a Plastic Milk Jug,' a rebus story connecting the use of plastic milk jugs with decisions about disposal.
- ◆ 'Recycle Plastic in Our Home,' an investigation to explain the role of HDPE plastic in our lives when we recycle.
- ◆ 'The Life Story of a Plastic Milk Jug,' an ordering activity that presents the life cycle of a plastic milk jug from its manufacture to its re-birth as a new product.
- ◆ 'The Milk Jug Stomp' a song that teaches students the proper way to recycle the plastic milk jugs.

Within the program, these activities are outlined in a set of presentation materials that introduce recycling concepts and stimulate classroom discussion.

School Milk Jug Return Contest – A major success in Year 1, The Great Milk Jug Round Up was reprised during Alberta Environment week. A total of 12,502 students representing 43 schools collected 34,802 plastic milk jugs during the June 5 contest. Each participating school received \$100, while the community that collected the most jugs per student (Edson at 4.9 jugs per student) received a \$2,500 cash prize. The contest was promoted and covered by ACCESS TV.

3 Programs

Cap Labels — Transparent cap labels for one, two and four litre milk jugs, introduced in the first year of the program, were utilized over a nine month period ending March 2001. While an effective vehicle for reaching consumers, the costs of this initiative in relation to budget preclude their renewal in Year 3.

Point of Purchase

4

Theme – The program’s simple but catchy theme, ‘Capless, Clean and Crushed,’ continued to resonate with Alberta communities and residents. The theme describes actions individuals need to take to ensure their used jugs are properly recycled. The theme will still be appropriate when polycoat cartons are included in the program, and will be continued in Year 3 with an updated logo.

Collateral Materials – New refrigerator magnets of the logo were designed with a centre ‘pop-out’ to enhance visibility in the household.

Web Site – The program’s web site (www.milkjugrecycling.com) continued to be a primary source of information for all parties interested in collecting and recycling used milk jugs.

Toll Free Telephone Number – Albertans continued to have direct access to the program coordinator through the program’s toll free telephone number, 1-877-414-JUGS (5847).

Program Profile
and Support

5

In June 2001, the program was named one of five finalists for not for profit associations (operating budget more than \$500,000 category) at the Emerald Awards, a major event celebrating environmental stewardship province-wide.

Other

6

Action Plan For Year 3

This section describes the Alberta Dairy Council's Action Plan for Year 3 of the Milk Container Recycling Program. The Plan reflects various consultations held with program stakeholders in 2000-2001, the details of which are described previously in this report. It also incorporates the results of ongoing program performance reviews. The main elements of the Action Plan are as follows:

1 Renew the Program

The original Memorandum of Understanding was set for a two-year term expiring on June 30, 2001. Consequently a top priority for all stakeholders entering Year 3 was to renew the program. This was achieved through a letter from the Minister of Environment on June 18, 2001 and subsequent Addendum to the Memorandum. The agreement continues the program for another year and provides for future renewal as long as performance objectives are met, including a 55% recovery rate target for plastic jugs in Year 3.

2 Maintain the Top-Up Program

Both the survey of RAs and the Round Table interviews indicated broad support for the top-up mechanism. The target price on which top-up payments are based will remain constant in Year 3, reflecting projected market prices.

3 Increase the Transportation Supplement

A number of Recycling Authorities (particularly in remote rural areas) expressed concern over the costs of transporting materials to market, some claiming transportation costs that exceed the value of top-up payments. As a result, ADC has agreed to increase the transportation supplement to eligible Recycling Authorities from \$15 to \$25 per tonne, retroactive to January 1, 2001.

4 Offer Recycling Authorities an Alternative Collection Option

Experience shows that while widely supported, the top-up program does not benefit all municipalities equally. In particular, small and rural communities that do not have adequate equipment or facilities experience some frustration at having to absorb the costs of transporting undensified jugs to the nearest market or processor.

With this in mind, ADC will offer a 'collection only' option under which existing and future RAs have the choice of receiving top-up payments or foregoing those payments in favour of no-fee container pick up and transportation services provided by a third party carrier. To facilitate this option, ADC proposes to make available rack- and-bag collection equipment for programs that do not have the required infrastructures.

While polycoat milk cartons account for only 0.4% of the residential waste stream,¹ they are the largest milk packaging format other than plastic jugs. In addition, the development of recycling capabilities at the Norampac Paper Mill in Burnaby, BC provides domestic processing capacity that did not exist prior to this year. This development, along with the plastic milk jug program's success in supporting an effective collection infrastructure, has created the opportunity to make meaningful milk carton recycling a reality.

Expand the Program to Include Polycoat Cartons

ADC will include polycoat cartons in the program effective January 1, 2002. Under the expanded program, RAs will have the option of collecting used cartons in much the same manner as used plastic jugs. A top-up program will be implemented following the plastic milk jug model, and RAs will be offered the opportunity to participate in the alternative collection system described in Item # 4 (above).

Polycoat cartons have very different technical properties than HDPE. Consequently ADC expects the collection of polycoat material to lag behind the collection of HDPE for some time. This has been the experience in other jurisdictions where polycoat containers are collected.

Develop Opportunities for Further Efficiencies in the Long Term

The increased volume and mix of materials creates opportunities and incentives to reduce operation costs. ADC will actively explore opportunities to generate further operational efficiencies. For example, under the rack and bag option described in Item 4, we will consider the feasibility of allowing RAs to collect used jugs and cartons together. ADC anticipates that these kinds of initiatives will encourage closer collaboration with RAs at the operations level, building on the progress made in Year 2.

ADC will continue to commit funding for C&E activities to support the plastic milk jug recycling program and the new milk carton recycling program.

Implement New C&E Initiatives

For Year 3, ADC will focus on 'hands on' C&E support and work with municipalities to educate and inform the public about where and how milk containers can be recycled. The centrepiece of this approach is a Community Investment C&E Plan, the main elements of which are described in Items # 8-10 below.

The door hanger program was developed in conjunction with municipalities and has been a notable success so far. It is particularly effective in cities and towns with densely populated urban centres.

Expand the Door Hanger Program

The introduction of milk cartons to the program will provide the opportunity to roll out a 'second wave' using a combined carton and jug-shaped door hanger or cut-out.

¹ *City of Calgary 1999 Residential Waste Study*, Calgary Solid Waste Services Division, January 2000, p. 3-2.

9 Implement A Community Print Promotion Campaign

ADC will work with the Alberta Weekly Newspaper Association (AWNA) along with local municipalities and Recycling Authorities to implement an extensive newspaper advertising plan. The AWNA represents approximately 98 Alberta weekly newspapers.

Generic advertisements will be designed to incorporate local information as needed. ADC will work with Recycling Authorities and municipalities to coordinate the showcasing of print ads in their communities.

The print promotions campaign is designed to reach rural populations in Alberta (towns, villages, hamlets, MDs & counties).

10 Support Community Milk Container Drives

Community Milk Container Drives provide communities with an opportunity to strengthen relations with their own constituents. ADC will, on a phased-in basis, invite Recycling Authorities to participate in milk container 'Round-up' drives with partners such as local 4-H Clubs, which can use the events as a fundraisers. The goal is to increase awareness about milk container recycling while complementing existing community initiatives.

In addition, ADC will provide participating municipalities with one-page handbills for distribution to residents via utility bill stuffers. The handbills will provide important information such as the locations of local recycling centres and procedures for recycling the containers, as well as the program's web site address and toll-free telephone number.

The information piece will also be designed to give community partners the opportunity to place promotional information about their organizations. This program is targeted at both large and small communities throughout Alberta.

11 Create Two New Advisory Committees

In keeping with the program's increased focus on operational improvement, the Alberta Dairy Council will establish two new advisory committees in conjunction with municipal participants.

The Technical Advisory Committee will bring together a core group of municipal recycling officials to provide advice and technical support for issues related to the collection, handling, processing and marketing of used milk jugs and cartons. The Advisory group will be an important feedback mechanism that allows ADC to respond quickly to important operational issues.

The *C&E Strategy Advisory Committee* will bring together a selection of municipal communications specialists and program representatives to provide counsel on methods and initiatives to enhance public education and promotion efforts, particularly on a community basis. The group will explore opportunities to develop a 'tool box' of C&E activities that will help boost community support for the recovery of all milk containers. It will also bring together trade repre-

sentatives to explore in-store point of sale initiatives, further distribution of C&E materials and side panel advertising opportunities.

Input and recommendations from the two advisory committees will be reported through the existing Milk Container Recycling Program Steering Committee. The establishment of these two advisory committees capitalizes on the expertise and involvement of municipalities in increasing recovery rates.

In keeping with Section I of the Memorandum of Understanding, the Alberta Dairy Council will continue to work with provincial and municipal government officials to identify and implement program enhancements and achieve mutual stewardship goals. Relations between all parties improved in Year 2, and we look forward to continued collaboration and support as the program matures.

**Continue to Work
With Alberta
Environment,
Alberta
Agriculture and
Municipalities to
Make the
Program A
Success**



The door hanger campaign was a major success, reaching more than 400,000 Alberta households

Conclusions

The Alberta Dairy Council's Plastic Milk Jug Recycling Program is the leading milk container stewardship program in North America. Over the past two years it has allowed the Council and Alberta municipalities to establish an effective and sustainable program infrastructure that stabilizes community-based milk jug recycling.

- ◆ In Year 2 of the program, Albertans recycled 1,294 tonnes of used plastic milk jugs. This represents 42% more material than at program inception. The Year 2 recovery rate – also 42% — ranks among the highest in Canada for used milk containers (only British Columbia is higher). Nevertheless, we can still do better. The opportunities for operational improvement identified in Year 2 and planned for implementation in Year 3 will help in this regard.
- ◆ Because of the program, 68 more municipalities are now involved in milk jug recycling than in 1999. Many have made significant investments in collection equipment and infrastructure as a result of the stable returns provided by the program.
- ◆ Expansion of the program to include polycoat containers will further extend the dairy industry's commitment to container stewardship. While this component of the program will likely generate slower results than the plastic jug component at the outset (reflecting the unique properties of the polycoat material), we anticipate progressive improvements thereafter, building on the success of the Plastic Milk Jug Recycling Program.
- ◆ Extensive consultations with Recycling Authorities in Year 2 helped us identify opportunities to refine the program's operations. Planned improvements for Year 3 are designed to address important concerns such as the limitations of small/rural community recycling infrastructures, transportation costs and material handling requirements. The Alberta Dairy Council hopes to build on stronger relationships with Recycling Authorities in Year 3 and continue to identify opportunities for program improvement, including opportunities to expand community-based Communications & Education initiatives.
- ◆ The support of, and increasingly collaborative relationship with Alberta Environment is both appreciated and required to achieve further improvements in program performance. The development of closer working relations in Year 2 was capped by the Minister's agreement to renew the program. We look forward to building on these relations, and equally improving relations with the province's municipalities, to create an even more successful program in the years to come.

The addition of polycoat cartons in Year 3 will mark a significant expansion of the program. As a result, the program has been re-named the *Alberta Dairy Council Milk Container Recycling Program*.

Appendix 1
Steering Committee Members

Appendix 2
List of Registered Authorities

Appendix I

Alberta Dairy Council

Milk Container Recycling Program
Steering Committee Members
As of June 30, 2001

Co-Chair: Doug Schroeder
Alberta Sales Manager
Parmalat Canada
Alberta Dairy Council Representative

Jack Reader
Councilor, Town of Morinville
Urban Municipal Representative

Co-Chair: Shirley Jolly
Councilor, Strathcona County
Rural Municipal Representative
Edmonton

Doug Flood
President, Alberta Plastic
Recycling Association,
Recycling Representative

Bill McLeod
Vice President, Sales & Marketing
Saputo Milk, Calgary
Alberta Dairy Council Representative

Bryan Walton
V.P., Canadian Council of
Grocery Distributors, Calgary
Grocery Retailer Representative

Brian Miller
Plant Manager
Lucerne Foods Milk Plant, Edmonton
Alberta Dairy Council Representative

Jane Carlyle
Calgary
Consumer Representative

Bill van Rootselaar
Director, Alberta Milk Producers, Fort McLeod
Producer Representative

Judy Morris
Alberta Environment
Action on Waste
Government Rep.—Non-voting

Rients Palsma
Director, Alberta Milk Producers, Ponoka
Producer Representative

Debbie Hofstra
Executive Secretary/Treasurer
Alberta Dairy Council
Non-voting

Roberta Windrum
Program Coordinator
Alberta Dairy Council Plastic Milk Jug Recycling
Non-voting

Appendix II: List of Registered Municipalities

Jurisdiction	Authority Name	Population of Communities
Airdrie	Airdrie, City	19,165
Arrowwood, village	Vulcan Recycling Depot	176
Athabasca, county	Blue Heron Voc Training	4,500
Athabasca, town	Blue Heron Voc Training	2,313
Banff, town	Town of Banff	7,716
Barnwell, village	GPS Recycling Ltd.	552
Barrhead, County of	Wutzke Garbage & Recycle	5,870
Barrhead, town	Wutzke Garbage & Recycle	4,239
Bashaw, town	Town of Sylvan Lake	775
Bassano, town	Newell Recycling Ass'n	1,272
Beaverlodge, town	Recycle Plus	1,997
Beiseker, village	Beiseker Recycling Society	795
Berwyn, village	Recycle Plus	606
Big Lakes, MD	Recycle Plus	4,479
Big Valley, village	Stettler Waste Management	308
Birch Hills, County	Recycle Plus	1,682
Black Diamond	Town of Okotoks	1,857
Blackfalds, town	Canadian Waste Services	2,001
Bonnyville, town	Town of Bonnyville	5,397
Botha, village	Stettler Waste Management	194
Bow Island, town	Lion Club of Bow Island	1,688
Brazeau, MD #77	Drayton Valley/Brazeau Recycling Centre	6,589
Breton, village	Drayton Valley/Brazeau Recycling Centre	521
Brooks, town	Newell Recycling Ass'n	11,584
Bruderheim, town	Precision Plastics	1,198
Burdett, village	Lion Club of Bow Island	286
Calgary, city	Recycle Calgary Inc.	860,749
Calgary, city	Awax Manufacturing Co	
Calgary, city	City of Calgary	
Calgary, city	Residential Recycling	
Calgary, city	C & C Enterprises	
Calmar, town	Precision Plastics	1,797
Camrose, city	Centra Cam Voc. Training Assn	14,290
Canmore, town	Canmore, Town	10,517
Cardston, town	Cardston Recyclers	3,417
Carmangay, village	Vulcan Recycling Depot	258
Caroline, village	Canadian Waste Services	472
Carstairs, town	Carstaris Lions Club	2,086
Castor, town	Paintearth Res. Recvry Ctr	970
Cereal, village	Big Country Reg. Recycling	188
Champion, village	Vulcan Recycling Depot	384
Claresholm, town	Willow Creek Recycling	3,427
Clearwater, MD No 99	Canadian Waste Services	2,886
Coaldale, town	Sunrise Bottle Depot	5,941

Coalhurst, town	GPS Recycling Ltd.	1,465
Cochrane, town	Cochrane Recycling Depot	11,173
Cold Lake, town	Urlacher Electric Ltd.	12,128
Consort, village	Big Country Reg. Recycling	696
Coronation, town	Paintearth Res. Recvry Ctr	1,166
Coutts, village	GPS Recycling Ltd.	386
Crowsnest Pass, Mun. of	Pass Recycling	6,356
Delburne, village	Canadian Waste Services	661
Devon, town	Precision Plastics	4,808
Didsbury, town	Didsbury Lion's Recycling	3,782
Donalda, village	Stettler Waste Management	241
Donnelly, village	Recycle Plus	403
Drayton Valley, town	Drayton Valley/Brazeau Recycling Centre	5,883
Drumheller, town	Drumheller Recycling	7,833
Duchess, village	Newell Recycling Ass'n	845
East Peace #131 M.D.	Recycle Plus	2,552
Edmonton	Edmonton, City	648,284
Edson, town	Edson & Dist Recycling Soc	7,399
Elk Point, town	Elk Point Bottle Depot	1,492
Fairview, town	Recycle Plus	3,316
Falher, town	Recycle Plus	1,149
Foothills, MD # 31	Okotoks, Town	16,122
Forty Mile, county 8	Lion Club of Bow Island	1,615
Fort Saskatchewan, city	City of Fort Saskatchewan	13,346
Fox Creek, town	Recycle Plus	2,321
Gadsby, village	Stettler Waste Management	40
Girouxville, village	Recycle Plus	332
Glenwood, village	GPS Recycling Ltd.	295
Grande Cache, town	Recycle Plus	4,441
Grande Prairie #1, C	Recycle Plus	15,320
Grande Prairie, city	Recycle Plus	35,962
Greenview # 16, M.D.	Recycle Plus	5,516
Grimshaw, town	Recycle Plus	2,661
Halkirk, village	Paintearth Res. Recvry Ctr	131
Hanna, town	Big Country Reg. Recycling	3,001
High Level, town	Bill Jenkins Ent. Ltd.	3,093
High Prairie, town	Recycle Plus	2,907
High River, town	Okotoks, Town	8,554
Holden, village	Holden/Bruce Dist Recycling	397
Hythe, village	Recycle Plus	712
Innisfail, town	Innisfail Bottle Depot	6,789
Irricana, village	Irricana Recyclers	1,016
Kinuso, village	Recycle Plus	258
Kneehill, County of	Town of Three Hills	5,064
Lac La Biche, town	Big Jim's Recycling Centre	2,611

Lacombe, town	Canadian Waste Services	9,128
Legal, town	Precision Plastics	1,095
Lakeland County	Big Jim's Recycling Centre	4,823
Leduc	Leduc, City	14,540
Lethbridge, city	Canadian Waste	68,712
Lethbridge, county	Picture Butte Bottle Depot	721
Lethbridge, county	GPS Recycling Ltd.	8,569
Lloydminster, city	Bea Fisher Enterprises	11,317
Lomond, village	Vulcan Recycling Depot	170
Manning, town	Recycle Plus	1,295
Mayerthorpe, town	Standstone Waste	1,669
McLennan, town	Recycle Plus	957
Medicine Hat, city	Redi Recycle	50,152
Milk River, town	GPS Recycling Ltd.	929
Millet, town	Wetaskiwin, City	1,894
Milo, village	Vulcan Recycling Depot	117
Minburn, County #27	V.A.L.I.D.	1,955
Morinville, town	Precision Plastics	6,226
Nampa, village	Recycle Plus	427
Nanton, town	GPS Recycling Ltd.	1,923
Newell, county	Newell Recycling Ass'n	6,421
Nobleford, village	Picture Butte Bottle Depot	279
Nobleford, village	GPS Recycling Ltd.	279
Okotoks, town	Okotoks, Town	9,953
Olds, town	Didsbury Lion's Recycling	6,230
Oyen, town	Big Country Reg. Recycling	1,078
Paintearth, county 18	Paintearth Res. Recvry Ctr	2,316
Parkland County	Precision Plastics	24,769
Peace River, town	Recycle Plus	6,536
Picture Butte, town	Picture Butte Bottle Depot	1,669
Pincher Creek MD #9	Pass Recycling	3,172
Pincher Creek, town	Pass Recycling	3,659
Ponoka, town	Ponoka, Town	6,149
Red Deer	Red Deer, City	65,701
Redwater, town	Precision Plastics	2,120
Reg Mun Wood Buffalo	Reg Mun Wood Buffalo	51,406
Rochon Sands, S.V.	Stettler Waste Management	86
Rocky Mtn House, town	Canadian Waste Services	6,062
Rosemary, village	Newell Recycling Ass'n	332
Rycroft, village	Recycle Plus	667
Ryley, village	Holden/Bruce Dist Recycling	465
Sexsmith, town	Recycle Plus	1,615
Special Areas 2, 3 & 4	Big Country Reg. Recycling	5,756
Spirit River, town	Recycle Plus	1,112
Spruce Grove, city	Precision Plastics	15,069

St. Albert	St. Albert, City	51,716
St. Paul, County No., 19	Elk Point Bottle Depot	6,335
St. Paul, town	St. Paul Abilities Network	4,970
Stavely, town	Willow Creek Recycling	513
Stettler, County No. 6	Stettler Waste Management	5,278
Stettler, town	Stettler Waste Management	5,220
Stony Plain, town	Town of Stony Plain	8,274
Strathcona County	Precision Plastics	69,268
Sundre, town	Sundre, Town	2,190
Swan Hills, town	Recycle Plus	2,030
Sylvan Lake, town	Canadian Waste Services	7,008
Taber, MD	Vauxhall, Town	6,009
Taber, MD	GPS Recycling Ltd.	
Taber, town	Taber Container Depot	7,331
Three Hills, town	Town of Three Hills	3,375
Tilley, village	Newell Recycling Ass'n	368
Valleyview, town	Recycle Plus	1,994
Vauxhall, town	Vauxhall, Town	1,011
Vegreville, town	V.A.L.I.D.	5,337
Vermillion, town	Town of Vermillion	4,356
Veteran, village	Big Country Reg. Recycling	317
Vulcan, county	Vulcan Recycling Depot	3,829
Vulcan, town	Vulcan Recycling Depot	1,677
Wainwright, MD	Falcon Waste Recovery	4,044
Wainwright, town	Falcon Waste Recovery	5,219
Waterton Green Team	GPS Recycling Ltd.	279
Wembley, town	Recycle Plus	1,523
Westlock, County of	Wutzke Garbage & Recycle	6,958
Westlock, town	Westlock Waste Mgmt Cent	4,817
Wetaskiwin, city	Wetaskiwin, City	10,959
Wetaskiwin, county	Wetaskiwin, City	10,467
White Sands, S.V.	Stettler Waste Management	49
Willow Creek, MD #26	Willow Creek Recycling	3,400
Woodlands County	Recycle Plus	3,699
Yellowhead County	Edson & Dist Recycling Soc	2,500
Youngstown, village	Big Country Reg. Recycling	239
TOTALS		2,511,743

New to the program since inception are identified by bold print.
New to Year 2 are identified by yellow highlight.

Alberta Dairy Council
Milk Container Recycling Program

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