June 2021 Agricultural Plastics Pilot Program Report
Grant Agreement: ESB-047715

Reporting period: January 1 to June 30, 2021 | July 28, 2021

Classification: Protected A

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Appendices

1. Introduction

The Alberta Ag-Plastic. *Recycle It!* program is a three-year (2019 - 2022), government funded pilot project that helps farmers recycle used grain bags and twine. In addition to on-the-ground pilots that divert used grain bags and twine out of landfills and into new products, the program delivers a number of research projects that will help the potential transition of the pilots into a long-term, sustainable and self-funded program.

This report summarizes the key activities from the pilot that took place between January 1 to June 30, 2021, namely the operation of pilot collections.

Agricultural plastics (ag plastics) recycling initiatives have been underway in Alberta for a number of years. These were primarily managed by individual municipalities and funded by ratepayers. These initiatives, combined with industry trends and the increased availability of ag plastics recycling across Western Canada, has led to a strong desire for a coordinated, province-wide approach to help farmers and municipalities manage ag plastics.

The Alberta Ag-Plastic, Recycle It! program is led by the multi-stakeholder Agricultural Plastics Recycling Group (APRG). The APRG, a group made up of over 20 stakeholder organizations from sectors across Alberta, representing municipalities, producers, non-profits, recyclers and retailers among others, provides oversight of the program and a network to disseminate information and build support.

The program is being funded through a grant from the Government of Alberta and administered by Alberta Beef Producers.

Cleanfarms is the program operator, responsible for identifying and accessing end markets, handling program logistics including the collection and transportation to recycle the materials and leading the research projects.

We understand that there is strong appetite for data and stakeholder feedback about the pilots. Please note that the pilot has operated for twenty-one months (start of collection oct 2019) and we are now able to report data on the majority of quantities collected

1.1. Key Highlights – January 2021 to June 2021

Collection volumes for both grain bags and twine steadily increase as the pilot unfolds. There has been continued inquires from agriculture producers about where and how to participate in the program, as well as expressed participation interest from several non-pilot municipalities. Most notably, twine collections have gained momentum over the past two quarters since Cleanfarms has recruited several high-volume twine users (hay processors) in southern Alberta for regular direct pickups. Farmers, keen on participating, have also shared some innovative cost-saving ways to properly roll grain bags and DBS Environmental Ltd. (DBS), a service company for the collection and transportation of grain bags and twine, built a trailer to maximize the hauling of the grain bags. See Appendix E for more details about these programs.

Total collection partners: 32 (up from 26 last report)

Table 1 – Alberta Pilot January 2021 to June 2021:

Material type	Tonnes collected		
	Total	**Legacy material[1]**	**Pilot material**
Grain bags	601	18	583
Twine	90	38	77
Total tonnage collected[2]	692	56	660

[1]*'Legacy material' is defined as grain bags and/or twine that were collected and stored onsite by the collection sites prior to becoming a pilot collection site. A detailed explanation of 'legacy material' is provided in Section 3.1.*
[2]*The total tonnage excludes disposal waste contained in legacy material.*

1.2. Collection partners site list and map (as of June 2021)

See Appendix A for a list of collection partners and a map of their locations in Alberta.

Collection site summary

Total number of collection sites	32
Sites collecting twine only	1
Sites collecting grain bags and twine	31

Note: There are 34 map points (Appendix A) pending fully executed agreements with County of Stettler and Lamont County.

2. Agricultural Plastics Recycling Group (APRG)

The multi-stakeholder APRG aims to meet in person to keep members informed on the pilot updates and allow for feedback and engagement from members on key topics. An executive of five representatives is elected each year by the members and meets on a regular basis to interact with and oversee the program operator, advocate for a permanent program and report back to the group. All APRG members provide valuable input to the pilot from their unique perspectives and also play a key role in disseminating information back out to their members and partners.

The Committee was formed in 2017 with a mandate to assist in the development of recommendations to manage ag plastics including:
- Promote ag plastics recycling actions and programs that are sustainable, and
- Implement the terms as set out in the Alberta ag plastics pilot program business plan.

A list of members of the APRG is included in Appendix B.

2.1. APRG Executive Activities

The APRG executive is comprised of five sector representatives. Dean Hubbard from the Alberta Wheat Board joins the executive replacing Neil Gorda. The executive met six times during this report period and there was one larger committee meeting in June.

APRG activities included:
- Sent a letter to Hon. Jason Nixon updating him on APRG's work and recommendations to advance agricultural plastics recycling.
- April 12 meeting with AEP and APRG discussing the recommendations sent to the Minister.
- Responded to the government's consultation on extended producer responsibility (EPR) on behalf of the Agricultural Plastics Recycling Group (APRG).
- May 11 presentation to North Rural Regional Caucus about Ag Plastics Pilot Project.
- Requested a meeting with Hon. Devin Dreeshen to provide an update on the Alberta Ag Plastics pilot project.
- Executive reviewed Cleanfarms business plan for a potential transition to a permanent program; reviewed quarterly reports from Cleanfarms and provided input on the location of additional collection sites.
- Attended a webinar hosted by EPRO (European Association of Plastics Recycling)
- Focused on advancing conversations with stakeholders to explain APRG's long-term plans for a permanent program, answer questions about the concept and request letters of support for a permanent program. Commodity groups and the producers were approached in Q2. These groups included Crop Sector Working Group, Alberta Federation of Agriculture, Cattle Feeders Association, Alberta Milk, and Alberta Beef. Appendix C includes a copy of the letter.
- Provided editorial comments on the Cleanfarms Ag Newsletter series and feedback on the July Newsletter.

3. Pilot

The background for how the pilot is intended to operate can be found in the *December 2020 Agricultural Plastics Pilot Program Report*.

3.1. Overall Pilot Quantities Collected

A total of 1,605 tonnes of material has been collected since the program's inception. 27 per cent of the volume picked up during the reporting period was considered legacy material.

Table 2 – Alberta Pilot October 2019 through June 2021

Material Type	Tonnes Collected		
	Total	Legacy Material[1]	Pilot Material
Grain bags	1470	392	1079
Twine	134	38	96
Total tonnage collected[2]	1605	430	1175

[1]'Legacy material' is defined as grain bags and/or twine that were collected and stored onsite by the collection sites prior to becoming a pilot collection site.
[2]The total tonnage excludes disposal waste contained in legacy material.

For the purpose of this report, 'legacy material' is defined as grain bags and/or twine that were collected and stored onsite by the pilot sites prior to program inception (October 1,

2019) and was transported to end markets under the pilot program. 'Program material' is defined as grain bags and twine that have been collected after site agreements were executed.

This distinction is important as it relates to financial reporting, particularly for this reporting period, because:
- Collection sites were not compensated for collecting legacy material.
- This material was collected outside of the program parameters and therefore the quality varies greatly. This impacts the potential revenue that can be generated from this material.

Please see Appendix D for a detailed breakdown of the quantity collected by the collection sites.

Of the total legacy grain bag material (392 tonnes) sent for recycling in the first 21 months of the pilot, a total of 110 tonnes of other waste material (pieces of metal, tents, wood, and other plastics) that was contained within the legacy material was sent to landfill. In response to the large volume of waste material that was contained within the legacy grain bag loads, significant changes have been made to the inspection and acceptance criteria of legacy material, which will be implemented for newly onboarded collection sites.

Four of the 32 collection sites have only collected small volumes of grain bags, that were not enough to constitute a full truck load to send for recycling. To assist in increasing producer awareness, Cleanfarms is connecting with those collection sites and distributing a series of informative articles to develop a shared understanding of the importance of used agricultural plastics resource management. More details can be found under section 5, Communication Activities.

Twine collection volumes are steadily increasing over the last two quarters as the participating hay processing plants in the province increase in volume.

3.2. Costs Per Tonne Estimates

Table 3 provides a breakdown of the direct costs for the collection and recycling of grain bags from January 2020 to June 2021. The cost per tonne calculations are important for forecasting logistical costs and for determining the appropriate costs to run a permanent program. At this time, there is still insufficient data to provide a meaningful direct cost/tonne estimate for twine.

Table 3 – Grain Bag Direct Cost Per Tonne Estimate (January 2020-June 2021)

AB Ag Plastics Recycling Pilot Program - Grain Bag Direct Cost/Tonne Estimate	
Revenue	**Jan '20 - Jun '21**
Recycling Revenue	
Revenue from Marketing Materials	63,476
Total Recycling Revenue	**$ 63,476**
Expenses	
Collection Costs	
Contractor Expenses	67,179
Incentive Payments	60,638
Total Collection Expenses	**$ 127,817**
Net Collection Cost	**$ 64,342**
Total Grain Bags Collected (kg)	1,162,431
Cost per Tonne	**$ 55.35**

Total program cost/tonne estimates, as per the last report, have not been included since expenses specific to this pilot would not be part of the future program. Additionally, regulatory changes in Alberta to consider Ag plastics as part of an EPR program also directly impact the cost for running the program.

3.3. Next Steps

- Pilot collections at the 32 current collection sites will continue to further test logistics, handling and other aspects of the program.
- Additional collection sites will likely be recruited in the next year of the program to increase accessibility and test larger scale logistics.
- Communications efforts to producers, emphasizing proper preparation and collection site locations, will continue.

4. Key presentations & event listing

The table below highlights the key speaking engagements during the reporting period. Due to restrictions with COVID-19, we were unable to attend larger in-person conferences to promote the pilot, though a number of online engagements were still undertaken.

Event name	Audience type	Approx. attendance
January		
Webinars with potential collection sites hosted by Cleanfarms -South Forty Waste Commission	Municipality	10
February		
Webinar – Grain bag online pickup request system introduction & program updates	Municipality	40
Webinar – Veterinary Agri-Health Services Ltd.	Other Stakeholder	20
Site Visit - High volume twine user – Green Prairie International Inc., Lethbridge	Business	2

Event name	Audience type	Approx. attendance
Site Visit - High volume twiner user –Wilbur-Ellis Holdings Inc., Lethbridge	Business	2
Site Visits (2) – Grain bag pickup – Cardston County	Municipality	3
March		
Webinar – Mountain View County	Agriculture Service Board	10
Webinar – Grain bag online pickup request system – Vulcan Country	Municipality	3
April		
Site Visit – Drumheller Landfill grain bag re-rolling and staff training with Wheatland County Staff	Municipalities	9
Webinar - potential collection site hosted by Cleanfarms – Lamont County	Agriculture Service Board	12
Webinar - potential collection site hosted by Cleanfarms –Two Hills Regional Waste Management Commission	Municipalities,	10
May		
Webinar - with potential collection sites hosted by Cleanfarms – MD of Greenview (ASB)	Municipality	10
Webinar - with potential collection sites hosted by Cleanfarms –Birch Hills County	Municipality	8
Webinars with other stakeholders – Great Plains MDF (soon to be a high volume twine user)	Municipality	1

5. Communication Activities

As requested by Alberta Agriculture and Forestry, Cleanfarms and the APRG are co-creating a series of informative articles for Alberta farmers to develop a shared understanding of the importance of used agricultural plastics resource management. A common theme throughout this monthly series will be an exploration of how ag plastics, once used, can be recycled to reclaim the natural resources and the invested energy, returning them to the economy where they can be remanufactured into new products. The first article can be found at https://cleanfarms.ca/alberta-ag-forward-managing-on-farm-plastics/. The articles are distributed via the Cleanfarms and APRG websites, Agricultural extension staff, as well as producer and commodity groups across Alberta.

6. Budget Details January 1 to June 30, 2021

Balance spent for this period $ (94,792.50)
Balance as of June 30, 2021 $ (690,943.12)

Revenue	Jan - Mar	Apr - Jun
Funds Transferred to Cleanfarms from Alberta Beef Producers		
Studies	-	-
Communications	-	$ 225
Net Collection Costs	$ 26,857	$ 10,732
Program Admin (Cleanfarms)	$ 12,500	$ 12,500
Total Revenue from Alberta Beef Producers	$ 39,357	$ 23,457
Recycling Revenue		
Revenue from Marketing Materials	$ 30,520	$ 42,024
Total Program Revenue	$ 69,877	$ 65,481
Expenses		
Studies		
Ag Waste Characterization Study	-	-
Stakeholder Groups Survey	-	-
Market Analysis	-	-
Communications		
Brand Development	-	-
Printing Costs	-	$ 225
Design Costs	-	-
Collection Costs		
Contractor Expenses	$ 37,345	$ 35,210
Collection Bags	-	-
Incentive Payments	$ 20,033	$ 17,547
Total Collection Costs	$ 57,378	$ 52,757
Program Admin (Cleanfarms)	$ 12,500	$ 12,500
Total Cleanfarms and Operational Expenses	$ 69,878	$ 65,257
Committee		
Secretariat - APRA	$ 2,044	$ 3,682
Technical Oversite - *RCA*	-	$ 788
ABP Accounting/Grant administrator	-	-
Total Committee and Administrator Expenses	$ 2,044	$ 4,470
Total Program Expenses	$ 71,922	$ 69,727

Project inception until June 30, 2021
Expenses $ (338,204.95)
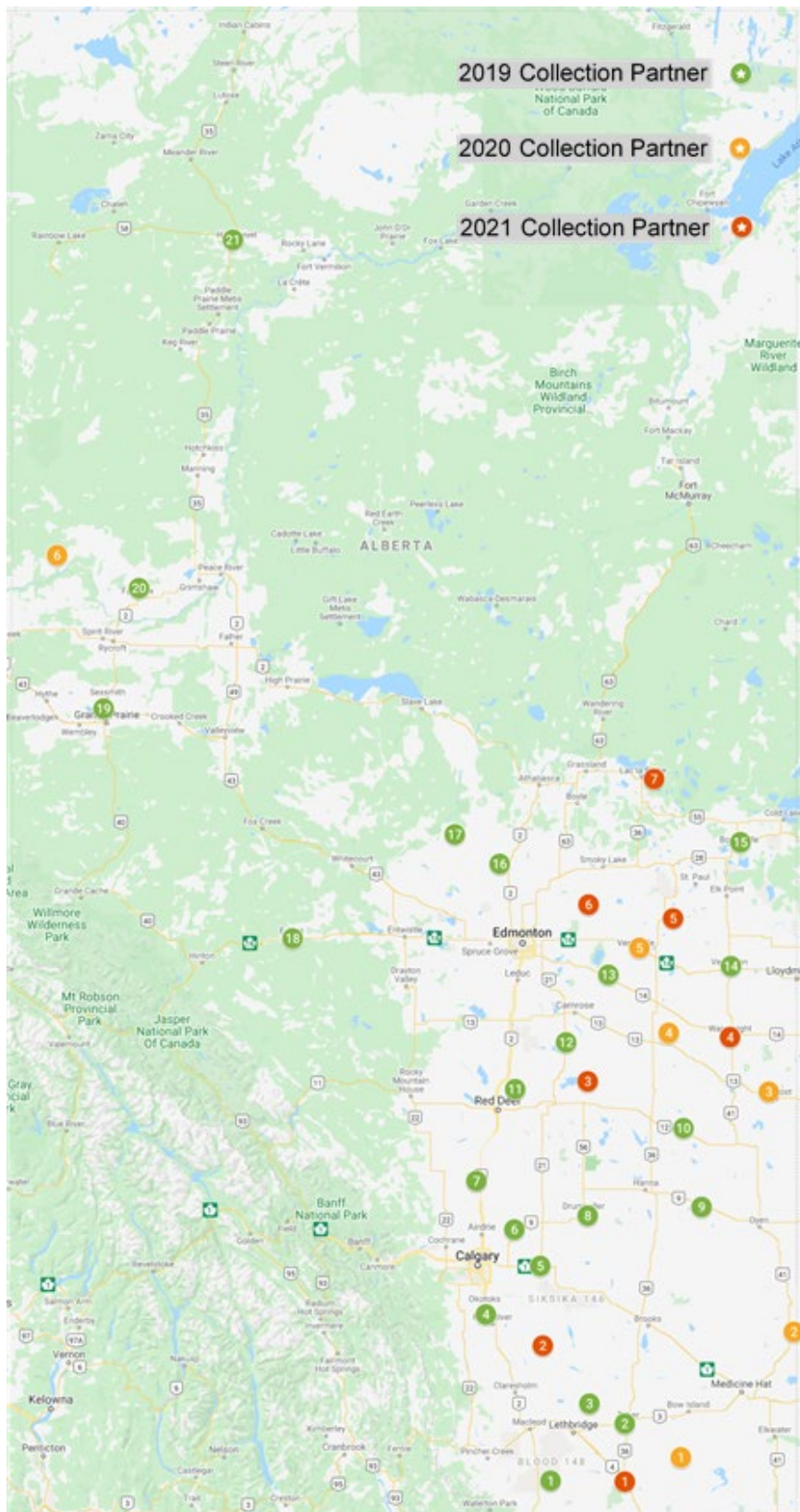Interest earned (since inception) $ 29,840.60
Balance $ 690,943.12

Appendix A – Collection Partners and Location (Map)

Site Name	County or MD	Site Number on Map
Cardston County Composting Yard	Cardston County	1
MD of Taber Operations and Maintenance Building	MD of Taber	2
Iron Springs Transfer Site	Lethbridge County	3
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	4
Wheatland County Agriculture Service Board Shop	Wheatland County	5
Irricana Transfer Site	Rocky View County	6
Mountain View County Ag Shop Twine Collection	Mountain View County	7
Drumheller & District Regional Landfill	Drumheller	8
Youngstown Regional Landfill	Special Areas 2, 3 & 4	9
Coronation Transfer Station	County of Paintearth	10
Prentiss Landfill	Lacombe County	11
West Dried Meat Lake Regional Landfill	Camrose County	12
Ryley Landfill	Beaver County	13
Vermilion Waste Transfer Station	County of Vermilion River	14
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	15
Westlock Regional Landfill	Westlock County	16
Neeralta Manufacturing Recycling Depot	County of Barrhead	17
Edson and District Recycling Society	Yellowhead County	18
Clairmont Landfill	County of Grande Prairie	19
North Peace Regional Landfill	MD of Fairview	20
MacKenzie Regional Waste Landfill	Mackenzie No. 23	21
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	1
Hilda Transfer Station	Cypress County	2
Provost Regional Landfill	MD of Provost	3
Flagstaff Waste Regional Landfill	Flagstaff County	4
Vegreville Landfill	County of Minburn	5
Cleardale Transfer Station	Clear Hills County	6
County of Warner Ag Service Board Shop	County of Warner	1
Vulcan Waste Transfer Station	Vulcan County	2
Stettler County Operations Shop	Stettler County	3
Wainwright Regional Landfill	MD of Wainwright	4
Two Hills Regional Landfill	County of Two Hills	5
St. Michael Landfill	Lamont County	6
Beaver Lake Landfill	Lac La Biche County	7

Year Joined as Collection Partner
2019
2020
2021

2019 Collection Partner ⭐

2020 Collection Partner ⭐

2021 Collection Partner ⭐

Note: There are 34 map points on this map pending the signed agreements with County of Stettler and Lamont County which should happen in Q3.

Appendix B – APRG Member Organizations

Organization	Sector/Representation
Agricultural Service Board	Board Representation
AB Association of Agricultural Fieldmen	Agricultural Fieldmen
Alberta Agriculture & Forestry	Government (ex officio)
Alberta Barley	Barley Producers
Alberta Beef Producers	Livestock
Alberta Cattle Feeders Association	Livestock
Alberta CARE	Recycling and Waste Management
Alberta Environment & Parks	Government (ex officio)
Alberta Federation of Agriculture	Producers
Alberta Milk Producers	Dairy Producers
Alberta Plastics Recycling Association	Plastics Recycling
Alberta Urban Municipalities Association (AUMA)	Urban Municipalities
Committed Ag Supply	Retailer
Crop Sector Working Group	Crop Producers
Merlin Plastics	Recycler
Olds College	Academia
Peavey Mart	Retailer
Recycling Council of Alberta	Recycling and Resource Conservation
Berry BPI Agriculture	Material Manufacturer
Rural Municipalities of Alberta (RMA)	Municipalities
South/Central Waste Collaboration Group	Rural Municipalities
TAMA Canada	Retailer
Tractorland	Retailer

Appendix C – Commodity Letter

Subject: Request for your feedback on a permanent recycling program for grain bags and twine

June 15, 2021

Dear commodity group member;

On behalf of the Agricultural Plastics Recycling Group (APRG), we are reaching out to provide an update on the *Alberta Ag Plastics: Recycle It!* Pilot Project and ask for your members to share your support along with your questions and concerns as we look to advance a permanent recycling program.

The APRG represents multiple stakeholders across Alberta and promotes discussion and action on ag plastics recycling (see the list of representatives on page 3). We are now half-way through the three-year $1 million pilot project, funded by the Government of Alberta through Alberta Agriculture and Forestry to recycle grain bags and twine. We believe that management of agricultural plastics needs a permanent provincial solution in the form of a regulation that should be developed by the Alberta Government with collaboration amongst partner organizations.

To advance a permanent solution for ag plastics in our province, the APRG continues to work with representatives from Alberta Environment and Parks (AEP) and Alberta Agriculture and Forestry. These government contacts wish to hear from those using and impacted by the program to share feedback about a permanent program and what these concerns might be. **As such, we ask your organization to provide the APRG with a letter or statement outlining your position on the advancement of a permanent program (including reasons why your Board and members would or would not share support for a permanent program for grain bags and twine so that we can present the most current information to our partners and manage expectations for next steps in the process)**. Some of these comments could include your members' willingness to participate in returning their ag plastics for recycling and willingness to pay for a permanent program (see below for a summary of cost estimates based on what is done in Saskatchewan).

The information in the rest of this letter outlines updates on the pilot and what we see as next steps.

The pilot has trialed logistics and shown the validity and results that a permanent program could achieve. There are currently 32 collection sites across the province. In the first 18 months of the pilot, over 1,100 tonnes of grain bags and twine have been collected for recycling – diverting this material from potential landfill disposal or on-farm burning. The pilot has also fostered the start of a new grain bag recycling facility in Bashaw - PolyAg Recycling, while plastics also continue to be processed at a facility near Bassano. Both operations have diverted waste and created local jobs processing plastic back into feedstock for remanufacturing.

A [waste characterization study](#) demonstrated that grain bags and twine make up approximately 55 percent of plastic used on farms in Alberta. Estimated annual generation of twine (polypropylene plastic) is between 1320 and 3000 tonnes, while grain bags (low-density polyethylene) are between 1480 and 2500 tonnes. There are viable end markets to recycle both materials, demonstrating a solution to address the most prominent ag plastics in use in Alberta.

The APRG believes that extended producer responsibility (EPR) is the best tool to provide a permanent provincial solution for the management of agricultural plastics. EPR legislation for ag plastics would place responsibility on first sellers of designated materials to ensure recycling outcomes are achieved for the grain bags and twine that they manufacture. Saskatchewan's EPR policy for grain bags has recycled over 8,870 tonnes of grain bags in three years. While we don't know yet what the program would cost in Alberta, the Saskatchewan program adds five to seven percent to the cost of a grain bag through its user-pay approach,

but has provided a reliable recycling option for farmers, and has transferred the financial burden of managing these plastics away from municipalities.

Our recommendations for next steps include:
- the advancement of a permanent program including harmonization with legislation for agricultural plastics in neighbouring provinces;
- the flexibility to add materials (i.e., other ag plastics) to the regulation over time;
- transparency and accountability for all stakeholders; and
- the establishment of a plan with Alberta Agriculture and Forestry and Alberta Environment and Parks (AEP) to assess the funding and transition plan to a permanent program.

Thank you for your consideration of this important issue. Please let us know when you will be able to share your perspectives on the advancement of a permanent program. If you have any questions, we would be happy to discuss the project further. Please contact me, or APRG Committee Secretary, Stacey Schaub-Szabo, stacey@albertaplasticsrecycling.com, 403-554-9174.

Sincerely,

APRG Executive
Al Kemmere, APRG Chair
al.kemmere@gmail.com
403-507-3345
www.aprg.ca

cc: Tammy Schwass, Alberta Plastics Recycling Association; Assar Grinde, Alberta Beef Producers; Christina Seidel, Recycling Council of Alberta; Warren Noga, Rural Municipalities of Alberta.

Appendix D – Quantities of Grain Bags and Twine Sent for Recycling

Grain Bags and Twine Sent for Recycling		Oct 2019 – June 30, 2021			
		Legacy Material (kg)		Pilot Collection (kg)	
Site Name	County	Grain Bags	Twine	Grain Bags	Twine
Ryley Landfill	Beaver County	-	-	6,040	170
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	-	-
Cardston County Composting Yard	Cardston County	-	-	7,945	-
Clairmont Landfill	County of Grande Prairie	22,020	-	-	-
Vermilion Waste Transfer Station	County of Vermilion River	9,780	-	50,505	370
Iron Springs Transfer Site	Lethbridge County	-	-	76,695	4,850
Drumheller & District Regional Landfill	Drumheller	-	6,320	83,638	3,060
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-	-	64,700	-
Prentiss Landfill	Lacombe County	-	7,110	64,785	4,576
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-	-	-	-
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	-	N/A	3,509
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	10,670	-	24,010	1,580
MD of Taber Operations and Maintenance Building	MD of Taber	-	-	82,100	1,670
Neeralta Manufacturing & Westlock Regional Landfill	County of Barrhead & Westlock County	-	2,000	-	6,069
North Peace Regional Landfill	MD of Fairview	57,870	-	78,260	-
Coronation Transfer Station	County of Paintearth	-	-	13,280	1,902
Irricana Transfer Site	Rocky View County	64,139	7,800	110,190	6,300
West Dried Meat Lake Regional Landfill	Camrose County	49,250	1,250	76,990	922
Wheatland County Agriculture Service Board Shop	Wheatland County	-	-	179,203	458
Edson & District Recycling Society	Yellowhead County	37,860	-	12,660	-
Cleardale Transfer Station	Clear Hills County	-	-	-	-
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	-	-	-	-
Mannville Waste Transfer Station	County of Minburn	33,060	12,970	-	4,580
Hilda Transfer Station	Cypress County	11,520	-	-	-
Flagstaff Waste Regional Landfill	Flagstaff County	-	-	53,960	435
Provost Regional Landfill	MD of Provost	33,060	-	5,060	279
County of Warner Ag Service Board Shop	County of Warner	-	-	12,180	-
Vulcan Waste Transfer Station	Vulcan County	-	-	27,200	-
Beaver Lake Landfill	Lac La Biche	N/A	493	N/A	-
Two Hills Regional Landfill	County of Two Hills	-	-	-	-
Wainwright Regional Landfill	MD of Wainwright	62,405	-	-	-
Farm (non-pilot site)	MD of Willow Creek	-	-	49,550	-
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	-	N/A	55,438
Totals		**391,634**	**37,943**	**1,078,951**	**96,168**

Total Grain Bags	1,470,585	**Total Twine**	134,111

Total Grain Bags and Twine	1,604,696

Appendix E – Agricultural Plastics Recycling Group Quarterly Report – Q1

Agricultural Plastics Recycling Group Quarterly Report

2021-Q1 | April 14, 2021 | Final

APRG Quarterly Report – April 14, 2021

Momentum for the program continues to increase as more agricultural producers and other stakeholders become aware of the pilot. This is most notable by the continued inquires from agricultural producers about where and how to participate in the program, as well as expressed participation interest from several non-pilot municipalities. In addition to the five new pilot partners who have started to collect program material in 2021-Q1, Cleanfarms has recruited several high-volume twine users in southern Alberta for regular direct pickups, thus greatly increasing twine recovery.

1. Collection Sites

Moving forward, the term collection partner will be used in lieu of collection site. Over the course of the pilot, several collection partners have requested that Cleanfarms add additional locations to the online map where they will accept either grain bags, or twine, or both, to better serve the agricultural producers in their regions. However, in accordance with the collection agreements, Cleanfarms will continue to coordinate transportation of collected material for recycling at the designated location in each respective agreement. It remains the responsibility of the collection partner to consolidate material from their various collection sites to the designated pickup location.

An additional six collection partners were selected and then approved by the APRG to participate in 2021 (Table 1 and Figure 1). Five of the agreements have been fully executed while one of the six partners (Stettler County Operations Shop in the County of Stettler) is currently reviewing the agreement.

The collection and recycling of materials from all collection partners is underway. Five of the original twenty collection partners have yet to collect enough volume of grain bags to constitute a full truckload of grain bags for recycling, however, it is anticipated that most of those partners will have enough for their first shipment in the second quarter of 2021.

Cleanfarms has also recruited and is collecting twine directly from six high-volume users (hay processing plants) in southern Alberta (Table 2). As of this report, twine has already been collected from four of the six locations. Cleanfarms is actively recruiting additional high-volume twine users for direct pickup.

A map of all 50 current collection locations (not including the high-volume twine users) can be found online. Site-specific information (opening hours, contact information, etc.) is updated as required.

Table 1 – List of collection partners

Site Name	County or MD	Site Number on Map
Cardston County Composting Yard	Cardston County	1
MD of Taber Operations and Maintenance Building	MD of Taber	2
Iron Springs Transfer Site	Lethbridge County	3
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	4
Wheatland County Agriculture Service Board Shop	Wheatland County	5
Irricana Transfer Site	Rocky View County	6
Mountain View County Ag Shop Twine Collection	Mountain View County	7
Drumheller & District Regional Landfill	Drumheller	8
Youngstown Regional Landfill	Special Areas 2, 3 & 4	9
Coronation Transfer Station	County of Paintearth	10
Prentiss Landfill	Lacombe County	11
West Dried Meat Lake Regional Landfill	Camrose County	12
Ryley Landfill	Beaver County	13
Vermilion Waste Transfer Station	County of Vermilion River	14
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	15
Westlock Regional Landfill	Westlock County	16
Neeralta Manufacturing Recycling Depot	County of Barrhead	17
Edson and District Recycling Society	Yellowhead County	18
Clairmont Landfill	County of Grande Prairie	19
North Peace Regional Landfill	MD of Fairview	20
MacKenzie Regional Waste Landfill	Mackenzie No. 23	21
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	1
Hilda Transfer Station	Cypress County	2
Provost Regional Landfill	MD of Provost	3
Flagstaff Waste Regional Landfill	Flagstaff County	4
Vegreville Landfill	County of Minburn	5
Cleardale Transfer Station	Clear Hills County	6
County of Warner Ag Service Board Shop	County of Warner	1
Vulcan Waste Transfer Station	Vulcan County	2
Wainwright Regional Landfill	MD of Wainwright	3
Two Hills Regional Landfill	County of Two Hills	4
Beaver Lake Landfill	Lac La Biche County	5
Stettler County Operations Shop	County of Stettler	-

2019 Collection Partner
2020 Collection Partner
2021 Collection Partner

Figure 1 – Map of collection partners
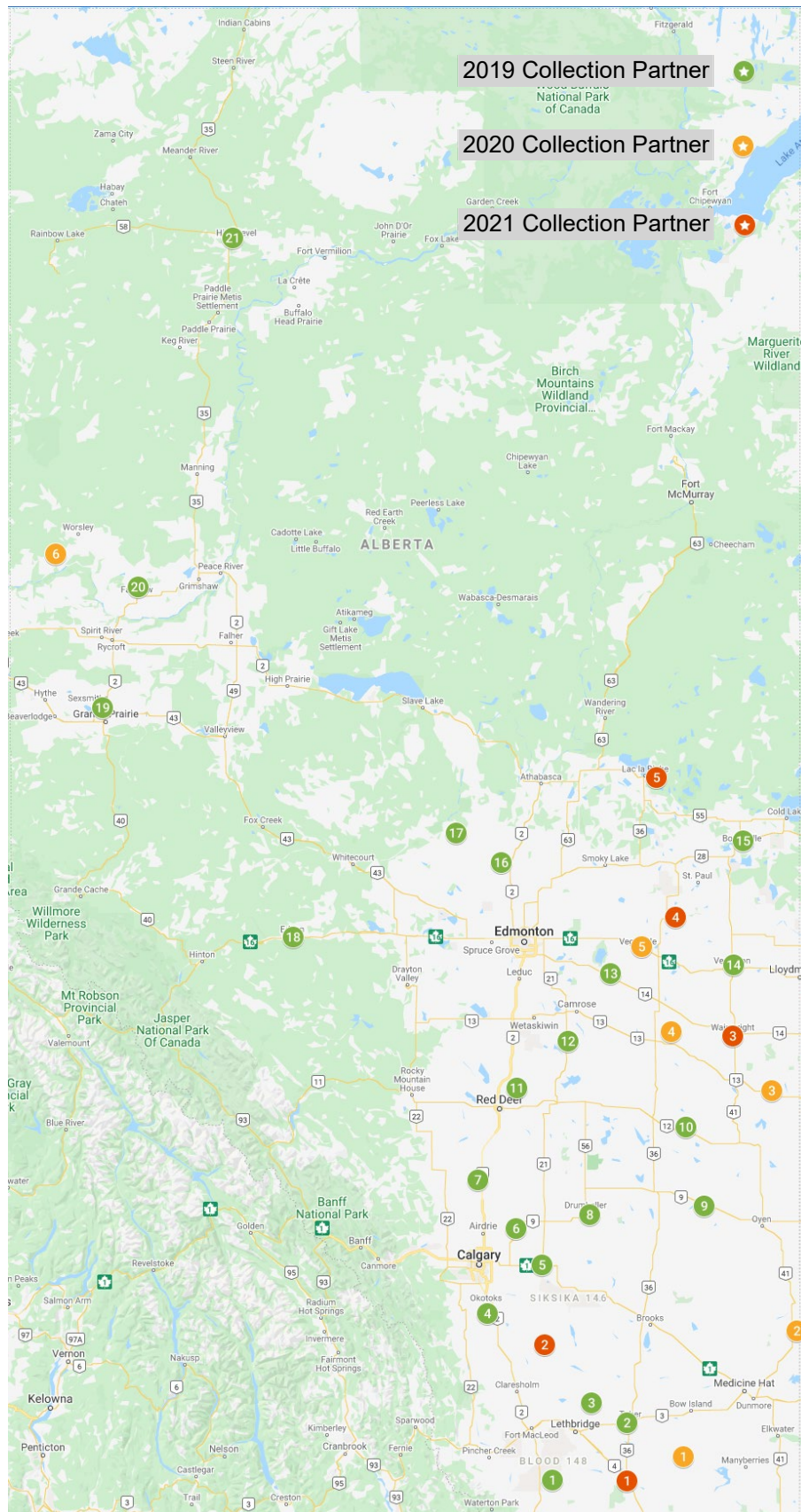
Table 2 – List of high-volume twine users with direct pick-up

Company Name	Location
Barr-Ag Ltd.	Arrowwood
Barr-Ag Ltd.	Olds
Green Prairie International Ltd.	Lethbridge
Wilbur-Ellis Holdings Inc.	Cremona
Wilbur-Ellis Holdings Inc.	Lethbridge

2. Twine Collection Bags

DBS Environmental Inc. will continue to distribute the collection bags to collection sites as required, through the course of regular business.

3. Site Signage

No additional site signage has been developed. All new collection sites will be in receipt of their site signage (Appendix A) and other electronic communication materials by the end of April 2021.

4. Tonnage Collected

In total, 1,250,316 kilograms (kg) of grain bags and twine have been collected for recycling under the pilot program since October 1, 2019; 109,760 kg of other waste material were previously reported in this total, and therefore the total of recyclable grain bags and twine is 1,140,556 kg. Of this total, 1,052,615 kg were grain bags while 87,941 kg were twine.

During this quarter, a total of 293,295 kg of grain bags was sent to recyclers in Alberta, 31,032 kg of twine was sent for consolidation and baling in Edson or Lethbridge, Alberta, and 18,498 kg of twine that was previously transported to Lethbridge, Alberta for consolidation, was baled and then sent to a recycler in Minnesota, USA. Additionally, 12,970 kg of legacy twine which was baled over several years by the County of Minburn was sent directly to a recycler in Minnesota, USA.

Twine volumes are anticipated to steadily increase with the recent addition of several high-volume twine users.

Of the total grain bags sent for recycling in this quarter, 30,290 kg were shipped direct from a farm in the Municipal District of Willow Creek.

Tables 3 and 4 provide a breakdown of materials collected this quarter and collection since program inception, respectively.

Table 3 – Collection summary for Q1 2021

Grain Bags and Twine Sent for Recycling | Jan - Mar 2021				
		Legacy Material (kg)		Pilot Collection (kg)	
Site Name	County	Grain Bags	Twine	Grain Bags	Twine
Ryley Landfill	Beaver County	-	-	-	170
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	-	-
Cardston County Composting Yard	Cardston County	-	-	7,945	-
Clairmont Landfill	County of Grande Prairie	-	-	-	-
Vermilion Waste Transfer Station	County of Vermilion River	-	-	-	370
Iron Springs Transfer Site	Lethbridge County	-	-	52,925	1,350
Drumheller & District Regional Landfill	Drumheller	-	-	24,510	-
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-	-	4,080	-
Prentiss Landfill	Lacombe County	-	-	26,145	228
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-	-	-	-
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	-	N/A	3,509
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	-	-	-	-
MD of Taber Operations and Maintenance Building	MD of Taber	-	-	28,670	-
Neeralta Manufacturing & Westlock Regional Landfill	County of Barrhead & Westlock County	-	-	-	279
North Peace Regional Landfill	MD of Fairview	-	-	-	-
Coronation Transfer Station	County of Paintearth	-	-	-	1,902
Irricana Transfer Site	Rocky View County	-	-	32,460	-
West Dried Meat Lake Regional Landfill	Camrose County	-	-	21,320	922
Wheatland County Agriculture Service Board Shop	Wheatland County	-	-	30,620	-
Edson & District Recycling Society	Yellowhead County	-	-	-	-
Cleardale Transfer Station	Clear Hills County	-	-	-	-
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	-	-	-	-
Mannville Waste Transfer Station	County of Minburn	-	12,970	-	4,580
Hilda Transfer Station	Cypress County	-	-	-	-
Flagstaff Waste Regional Landfill	Flagstaff County	-	-	34,330	435
Provost Regional Landfill	MD of Provost	-	-	-	279
County of Warner Ag Service Board Shop	County of Warner	-	-	-	-
Vulcan Waste Transfer Station	Vulcan County	-	-	-	-
Beaver Lake Landfill	Lac La Biche	N/A	493	N/A	-
Two Hills Regional Landfill	County of Two Hills	-	-	-	-
Wainwright Regional Landfill	MD of Wainwright	-	-	-	-
Farm (non-pilot site)	MD of Willow Creek	-	-	30,290	-
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	-	N/A	17,008
Quarterly Totals		-	13,463	293,295	31,032
Total Grain Bags	293,295			Total Twine	44,495
				Total Grain Bags and Twine	337,790

Table 4 – Collection summary since program inception

Site Name	County	Legacy Material (kg)		Pilot Collection (kg)	
Grain Bags and Twine Sent for Recycling | Oct 2019 - Present					
		Grain Bags	Twine	Grain Bags	Twine
Ryley Landfill	Beaver County	-	-	6,040	170
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	-	-
Cardston County Composting Yard	Cardston County	-	-	7,945	-
Clairmont Landfill	County of Grande Prairie	22,020	-	-	-
Vermilion Waste Transfer Station	County of Vermilion River	9,780	-	31,625	370
Iron Springs Transfer Site	Lethbridge County	-	-	64,575	4,850
Drumheller & District Regional Landfill	Drumheller	-	6,320	52,348	3,060
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-	-	53,420	-
Prentiss Landfill	Lacombe County	-	7,110	48,550	2,296
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-	-	-	-
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	-	N/A	3,509
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	10,670	-	-	1,580
MD of Taber Operations and Maintenance Building	MD of Taber	-	-	66,320	1,670
Neeralta Manufacturing & Westlock Regional Landfill	County of Barrhead & Westlock County	-	2,000	-	609
North Peace Regional Landfill	MD of Fairview	57,870	-	78,260	-
Coronation Transfer Station	County of Paintearth	-	-	-	1,902
Irricana Transfer Site	Rocky View County	64,139	7,800	78,770	6,300
West Dried Meat Lake Regional Landfill	Camrose County	49,250	1,250	70,650	922
Wheatland County Agriculture Service Board Shop	Wheatland County	-	-	141,663	458
Edson & District Recycling Society	Yellowhead County	37,860	-	-	-
Cleardale Transfer Station	Clear Hills County	-	-	-	-
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	-	-	-	-
Mannville Waste Transfer Station	County of Minburn	33,060	12,970	-	4,580
Hilda Transfer Station	Cypress County	11,520	-	-	-
Flagstaff Waste Regional Landfill	Flagstaff County	-	-	39,315	435
Provost Regional Landfill	MD of Provost	33,060	-	-	279
County of Warner Ag Service Board Shop	County of Warner	-	-	-	-
Vulcan Waste Transfer Station	Vulcan County	-	-	-	-
Beaver Lake Landfill	Lac La Biche	N/A	493	N/A	-
Two Hills Regional Landfill	County of Two Hills	-	-	-	-
Wainwright Regional Landfill	MD of Wainwright	-	-	-	-
Farm (non-pilot site)	MD of Willow Creek	-	-	49,550	-
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	-	N/A	17,008
Wainwright (non-pilot site)	MD of Wainwright	44,115	-	-	-
Totals		**373,344**	**37,943**	**789,031**	**49,998**
Total Grain Bags		1,162,375		**Total Twine**	87,941
Total Grain Bags and Twine					1,250,316

Disposal Waste Contained in 2019 Legacy Grain Bag Material

PolyAg Recycling Ltd.		(109,760)	-	-	-
Total Grain Bags Subtract Legacy Waste		1,052,615		**Total Twine**	87,941
Total Grain Bags and Twine Subtract Legacy Waste					1,140,556

5. Quarterly Financial Report

The income statement for 2019-Q2 through 2021-Q1 follows:

AB Ag Plastics Recycling Pilot Program - Cleanfarms Financial Report										
April 2020 - March 2021						**Year 1 & Program Total**		**Budget Estimates**		
Revenue	**Apr - Jun**	**July - Sep**	**Oct - Dec**	**Jan - Mar**	**Total**	**Apr '19 - Mar '20**	**Program Total**	**YR 1 & YR 2**	**% of Budget Spent**	
Funds Transferred to Cleanfarms from Alberta Beef Producers										
Studies	-	-	-	-	-	45,590	45,590	46,500		
Communications	2,389	4,757	3,055	-	10,200	23,496	33,696	32,000		
Net Collection Costs	6,422	7,514	30,676	26,857	71,469	38,838	110,307	548,500		
Program Admin (Cleanfarms)	12,500	12,500	12,500	12,500	50,000	65,000	115,000	115,000		
Total Revenue from Alberta Beef Producers	**$ 21,311**	**$ 24,771**	**$ 46,231**	**$ 39,357**	**$131,670**	**$ 172,924**	**$ 304,594**	**$ 742,000**	**41%**	
Recycling Revenue										
Revenue from Marketing Materials	10,597	13,065	14,244	30,520	68,427	6,260	74,687	195,000		
Total Program Revenue	**$ 31,908**	**$ 37,836**	**$ 60,475**	**$ 69,878**	**$200,097**	**$ 179,184**	**$ 379,281**	**$ 937,000**	**40%**	
Expenses										
Studies										
Ag Waste Characterization Study	-	-	-	-	-	10,000	10,000	10,000		
Stakeholder Groups Survey	-	-	-	-	-	28,090	28,090	29,000		
Market Analysis	-	-	-	-	-	7,500	7,500	7,500		
Communications										
Brand Development	-	-	55	-	55	10,000	10,055	10,000		
Printing Costs	2,389	4,757	3,000	-	10,145	3,496	13,641	11,000		
Design Costs	-	-	-	-	-	10,000	10,000	11,000		
Collection Costs										
Contractor Expenses	9,612	12,305	14,787	37,345	74,048	24,120	98,169	445,500		
Collection Bags	2,000	-	21,776	-	23,776	17,884	41,660	48,000		
Incentive Payments	5,408	8,275	8,358	20,033	42,072	3,093	45,165	55,000		
Total Collection Costs	17,019	20,580	44,920	57,378	139,897	45,098	184,994	548,500		
Program Admin (Cleanfarms)	12,500	12,500	12,500	12,500	50,000	65,000	115,000	115,000		
Total Cleanfarms and Operational Expenses	**$ 31,908**	**$ 37,836**	**$ 60,475**	**$ 69,878**	**$200,097**	**$ 179,184**	**$ 379,281**	**$ 742,000**	**51%**	
Committee										
Secretariat - APRA	299	630	1,748	2,044	4,722	17,638	22,359	50,000		
Technical Oversite - RCA	687	-	-	-	687	3,054	3,741			
ABP Accounting/Grant administrator	-	-	1,200	-	1,200	900	2,100	15,000		
Total Committee and Administrator Expenses	**$ 986**	**$ 630**	**$ 2,948**	**$ 2,044**	**$ 6,609**	**$ 21,592**	**$ 28,200**	**$ 65,000**	**43%**	
Total Program Expenses	**$ 32,894**	**$ 38,466**	**$ 63,424**	**$ 71,922**	**$206,706**	**$ 200,775**	**$ 407,481**	**$ 807,000**	**50%**	

The following is a list of outstanding line items from 2021-Q1 which are not included in the above income statement; all pending invoices are within budget:
- Revenue from marketing materials ($0 – invoices generated and waiting payment);
- Incentive payments ($2,247 – waiting to receive invoices);
- Contractor expenses (estimated $900 – waiting to receive invoices).

The program is currently operating under budget. Percentage of budget spent listed in the income statement is based on to-date budget estimates; they do not represent the percentage spent of the entire budget.

6. Other Activities and Key Dates

Pilot Site Communications:
- Program communication webinars with pilot sites:
  o February 9 – Grain Bag Online Pickup Request System Introduction & Program Updates
  o March 15 – Mountain View County ASB
  o March 28 – Vulcan County Grain Bag Online Pickup Request System
- February 24 – Site Visit Cardston County – Grain Bag Pickup
- March 11 – Site Visit Cardston County – Grain Bag Pickup

Events and Presentations
- Webinars with potential collection sites hosted by Cleanfarms:
  o January 25 – South Forty Waste Commission
- Webinars with other stakeholders:
  o February 2 – Veterinary Agri-Health Services Ltd.

High Volume Twine User Site Visits
- February 5 – Green Prairie International Inc., Lethbridge
- February 8 – Wilbur-Ellis Holdings Inc., Lethbridge

Appendix A – Site Signage

Figure 2

Figure 3

Figure 4

Appendix F – Agricultural Plastics Recycling Group Quarterly Report – Q2

Agricultural Plastics Recycling Group Quarterly Report

2021-Q2 | July 29, 2021 | Final_Rev1

APRG Quarterly Report – July 9, 2021

Collection volumes for both grain bags and twine steadily increase as the pilot unfolds. Most notably, twine collections have gained momentum over the past two quarters as the hay processing plants in the province increase in participation. Farmers, keen on participating, have also shared some innovative cost-saving ways to properly roll grain bags.

DBS Environmental Inc., a key partner in the pilot program, has also built a self-loading trailer system. The trailer with built-in loading ramps enables them to consolidate multiple small loads efficiently; load grain bags and/or twine at locations without a loading dock/ramp; or load grain bags and/or twine direct on-farm (for high volume producers).

1. Collection Sites

An additional collection partner (St. Michael Regional Landfill in Lamont County) was selected and then approved by the APRG to participate in 2021 (Table 1 and Figure 1). The pilot agreement for the St. Michael Regional Landfill and the pending agreement with the County of Stettler are currently being reviewed by each party. Both are expected to be executed in July of 2021.

Four of the original twenty collection partners have yet to collect enough volume of grain bags to constitute a full truckload of grain bags for recycling; additional meetings to discuss their perceived issues and strategies to increase collections are scheduled for Q3.

Cleanfarms has continued recruitment activities with additional high-volume twine users for direct pickup. However, as of this report, no additional high-volume twine users have been onboarded for direct collections.

A map of all 50 current collection locations (not including the high-volume twine users or partners with un-executed agreements) can be found online. Site-specific information (opening hours, contact information, etc.) is updated as required.

Table 1 – List of collection partners

Site Name	County or MD	Site Number on Map
Cardston County Composting Yard	Cardston County	1
MD of Taber Operations and Maintenance Building	MD of Taber	2
Iron Springs Transfer Site	Lethbridge County	3
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	4
Wheatland County Agriculture Service Board Shop	Wheatland County	5
Irricana Transfer Site	Rocky View County	6
Mountain View County Ag Shop Twine Collection	Mountain View County	7
Drumheller & District Regional Landfill	Drumheller	8
Youngstown Regional Landfill	Special Areas 2, 3 & 4	9
Coronation Transfer Station	County of Paintearth	10
Prentiss Landfill	Lacombe County	11
West Dried Meat Lake Regional Landfill	Camrose County	12
Ryley Landfill	Beaver County	13
Vermilion Waste Transfer Station	County of Vermilion River	14
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	15
Westlock Regional Landfill	Westlock County	16
Neeralta Manufacturing Recycling Depot	County of Barrhead	17
Edson and District Recycling Society	Yellowhead County	18
Clairmont Landfill	County of Grande Prairie	19
North Peace Regional Landfill	MD of Fairview	20
MacKenzie Regional Waste Landfill	Mackenzie No. 23	21
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	1
Hilda Transfer Station	Cypress County	2
Provost Regional Landfill	MD of Provost	3
Flagstaff Waste Regional Landfill	Flagstaff County	4
Vegreville Landfill	County of Minburn	5
Cleardale Transfer Station	Clear Hills County	6
County of Warner Ag Service Board Shop	County of Warner	1
Vulcan Waste Transfer Station	Vulcan County	2
Stettler County Operations Shop	Stettler County	3
Wainwright Regional Landfill	MD of Wainwright	4
Two Hills Regional Landfill	County of Two Hills	5
St. Michael Landfill	Lamont County	6
Beaver Lake Landfill	Lac La Biche County	7

2019 Collection Partner
2020 Collection Partner
2021 Collection Partner

Figure 1 – Map of collection partners
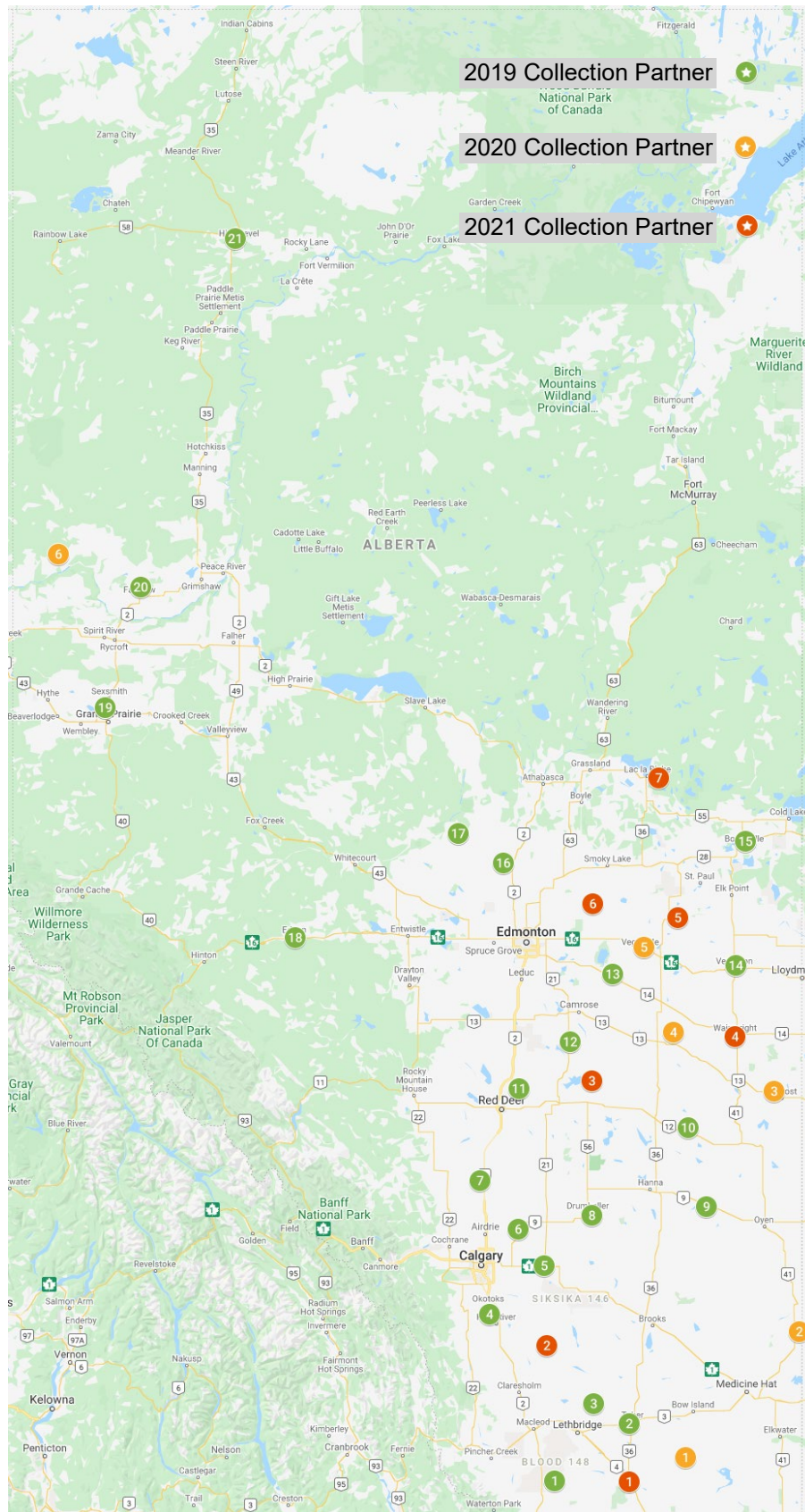
2.   Twine Collection Bags

DBS Environmental Inc. (DBS) continues to distribute the collection bags to collection sites as required through the course of regular business.

3.   Site Signage

No additional site signage has been developed. All new collection sites added in 2021-Q1 have received their site signage (Appendix A) and other electronic communication materials. Signage and communication material will be printed and delivered to the St. Michael Regional Landfill and the County of Stettler once their agreements have been fully executed.

4.   Tonnage Collected

In total, 1,604,696 kilograms (kg) of grain bags and twine have been collected for recycling under the pilot program since October 1, 2019; 109,760 kg of other waste material were previously reported in this total, and therefore, the total of recyclable grain bags and twine is 1,494,936 kg. Of this total, 1,360,825 kg were grain bags, while 134,111 kg was twine.

During this quarter, a total of 308,210 kg of grain bags was sent to recyclers in Alberta. Of this, 18,290 kg were legacy grain bags collected from one of the six new pilot sites added in Q1 of 2021. A total of 46,170 kg of twine (a 49% increase over Q1) was sent for consolidation and baling in Edson or Lethbridge, Alberta, and 54,029 kg of twine that was consolidated in either Edson or Lethbridge, Alberta, was baled and then sent to a recycler in Minnesota, USA.

Tables 2 and 3 provide a breakdown of materials collected this quarter and collection since program inception, respectively.

Table 2 – Collection summary for Q2 2021

Site Name	County	Legacy Material (kg)		Pilot Collection (kg)	
		Grain Bags	Twine	Grain Bags	Twine
Ryley Landfill	Beaver County	-	-	-	-
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	-	-
Cardston County Composting Yard	Cardston County	-	-	-	-
Clairmont Landfill	County of Grande Prairie	-	-	-	-
Vermilion Waste Transfer Station	County of Vermilion River	-	-	18,880	-
Iron Springs Transfer Site	Lethbridge County	-	-	12,120	-
Drumheller & District Regional Landfill	Drumheller	-	-	31,290	-
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-	-	11,280	-
Prentiss Landfill	Lacombe County	-	-	16,235	2,280
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-	-	-	-
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	-	N/A	-
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	-	-	24,010	-
MD of Taber Operations and Maintenance Building	MD of Taber	-	-	15,780	-
Neeralta Manufacturing & Westlock Regional Landfill	County of Barrhead & Westlock County	-	-	-	5,460
North Peace Regional Landfill	MD of Fairview	-	-	-	-
Coronation Transfer Station	County of Paintearth	-	-	13,280	-
Irricana Transfer Site	Rocky View County	-	-	31,420	-
West Dried Meat Lake Regional Landfill	Camrose County	-	-	6,340	-
Wheatland County Agriculture Service Board Shop	Wheatland County	-	-	37,540	-
Edson & District Recycling Society	Yellowhead County	-	-	12,660	-
Cleardale Transfer Station	Clear Hills County	-	-	-	-
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	-	-	-	-
Mannville Waste Transfer Station	County of Minburn	-	-	-	-
Hilda Transfer Station	Cypress County	-	-	-	-
Flagstaff Waste Regional Landfill	Flagstaff County	-	-	14,645	-
Provost Regional Landfill	MD of Provost	-	-	5,060	-
County of Warner Ag Service Board Shop	County of Warner	-	-	12,180	-
Vulcan Waste Transfer Station	Vulcan County	-	-	27,200	-
Beaver Lake Landfill	Lac La Biche	N/A	-	N/A	-
Two Hills Regional Landfill	County of Two Hills	-	-	-	-
Wainwright Regional Landfill	MD of Wainwright	18,290	-	-	-
Farm (non-pilot site)	MD of Willow Creek	-	-	-	-
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	-	N/A	38,430
	Quarterly Totals	18,290	-	289,920	46,170
	Total Grain Bags	308,210		**Total Twine**	46,170
				Total Grain Bags and Twine	354,380

Table 3 – Collection summary since program inception

Grain Bags and Twine Sent for Recycling	Oct 2019 - Present	Legacy Material (kg)		Pilot Collection (kg)	
Site Name	**County**	**Grain Bags**	**Twine**	**Grain Bags**	**Twine**
Ryley Landfill	Beaver County	-	-	6,040	170
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	-	-
Cardston County Composting Yard	Cardston County	-	-	7,945	-
Clairmont Landfill	County of Grande Prairie	22,020	-	-	-
Vermilion Waste Transfer Station	County of Vermilion River	9,780	-	50,505	370
Iron Springs Transfer Site	Lethbridge County	-	-	76,695	4,850
Drumheller & District Regional Landfill	Drumheller	-	6,320	83,638	3,060
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-	-	64,700	-
Prentiss Landfill	Lacombe County	-	7,110	64,785	4,576
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-	-	-	-
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	-	N/A	3,509
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	10,670	-	24,010	1,580
MD of Taber Operations and Maintenance Building	MD of Taber	-	-	82,100	1,670
Neeralta Manufacturing & Westlock Regional Landfill	County of Barrhead & Westlock County	-	2,000	-	6,069
North Peace Regional Landfill	MD of Fairview	57,870	-	78,260	-
Coronation Transfer Station	County of Paintearth	-	-	13,280	1,902
Irricana Transfer Site	Rocky View County	64,139	7,800	110,190	6,300
West Dried Meat Lake Regional Landfill	Camrose County	49,250	1,250	76,990	922
Wheatland County Agriculture Service Board Shop	Wheatland County	-	-	179,203	458
Edson & District Recycling Society	Yellowhead County	37,860	-	12,660	-
Cleardale Transfer Station	Clear Hills County	-	-	-	-
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	-	-	-	-
Mannville Waste Transfer Station	County of Minburn	33,060	12,970	-	4,580
Hilda Transfer Station	Cypress County	11,520	-	-	-
Flagstaff Waste Regional Landfill	Flagstaff County	-	-	53,960	435
Provost Regional Landfill	MD of Provost	33,060	-	5,060	279
County of Warner Ag Service Board Shop	County of Warner	-	-	12,180	-
Vulcan Waste Transfer Station	Vulcan County	-	-	27,200	-
Beaver Lake Landfill	Lac La Biche	N/A	493	N/A	-
Two Hills Regional Landfill	County of Two Hills	-	-	-	-
Wainwright Regional Landfill	MD of Wainwright	18,290	-	-	-
Farm (non-pilot site)	MD of Willow Creek	-	-	49,550	-
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	-	N/A	55,438
Wainwright (non-pilot site)	MD of Wainwright	44,115	-	-	-
Totals		391,634	37,943	1,078,951	96,168

Total Grain Bags	1,470,585		**Total Twine**	134,111	
Total Grain Bags and Twine	1,604,696				

Disposal Waste Contained in 2019 Legacy Grain Bag Material

PolyAg Recycling Ltd.		(109,760)	-	-	-
Total Grain Bags Subtract Legacy Waste	1,360,825		**Total Twine**	134,111	
Total Grain Bags and Twine Subtract Legacy Waste	1,494,936				

5. Quarterly Financial Report

The income statement for 2019-Q2 through 2021-Q2 follows:

AB Ag Plastics Recycling Pilot Program - Cleanfarms Financial Report										
April 2021 - March 2022						**Year 1 & 2 & Program Total**			**Budget Estimates**	
Revenue	**Apr - Jun**	**July - Sep**	**Oct - Dec**	**Jan - Mar**	**Total**	**Apr '19 - Mar '20**	**Apr '20 - Mar 21'**	**Program Total**	**Apr '19 - Jun '21**	**% of Budget Spent**
Funds Transferred to Cleanfarms from Alberta Beef Producers										
Studies	-	-	-	-	-	45,590	-	45,590	54,375	
Communications	225	-	-	-	225	23,496	10,200	33,921	33,125	
Net Collection Costs	10,732	-	-	-	10,732	38,838	71,469	121,039	655,875	
Program Admin (Cleanfarms)	12,500	-	-	-	12,500	65,000	50,000	127,500	127,500	
Total Revenue from Alberta Beef Producers	**$ 23,457**	**$ -**	**$ -**	**$ -**	**$ 23,457**	**$ 172,924**	**$ 131,670**	**$ 328,050**	**$ 870,875**	**38%**
Recycling Revenue										
Revenue from Marketing Materials	42,024	-	-	-	42,024	6,260	68,427	116,711	230,250	
Total Program Revenue	**$ 65,481**	**$ -**	**$ -**	**$ -**	**$ 65,481**	**$ 179,184**	**$ 200,097**	**$ 444,762**	**$ 1,101,125**	**40%**
Expenses										
Studies										
Ag Waste Characterization Study	-	-	-	-	-	10,000	-	10,000	10,000	
Stakeholder Groups Survey	-	-	-	-	-	28,090	-	28,090	36,250	
Market Analysis	-	-	-	-	-	7,500	-	7,500	8,125	
Communications										
Brand Development	-	-	-	-	-	10,000	55	10,055	10,000	
Printing Costs	225	-	-	-	225	3,496	10,145	13,866	11,875	
Design Costs	-	-	-	-	-	10,000	-	10,000	11,250	
Collection Costs										
Contractor Expenses	35,210	-	-	-	35,210	24,120	74,048	133,378	529,450	
Collection Bags	-	-	-	-	-	17,884	23,776	41,660	60,000	
Incentive Payments	17,547	-	-	-	17,547	3,093	42,072	62,712	66,425	
Total Collection Costs	52,756	-	-	-	52,756	45,098	139,897	237,751	655,875	
Program Admin (Cleanfarms)	12,500	-	-	-	12,500	65,000	50,000	127,500	127,500	
Total Cleanfarms and Operational Expenses	**$ 65,481**	**$ -**	**$ -**	**$ -**	**$ 65,481**	**$ 179,184**	**$ 200,097**	**$ 444,762**	**$ 870,875**	**51%**
Committee										
Secretariat - APRA	3,682	-	-	-	3,682	17,638	4,722	26,041	56,250	
Technical Oversite - RCA	788	-	-	-	788	3,054	687	4,528		
ABP Accounting/Grant administrator	-	-	-	-	-	900	1,200	2,100	16,875	
Total Committee and Administrator Expenses	**$ 4,469**	**$ -**	**$ -**	**$ -**	**$ 4,469**	**$ 21,592**	**$ 6,609**	**$ 32,669**	**$ 73,125**	**45%**
Total Program Expenses	**$ 69,950**	**$ -**	**$ -**	**$ -**	**$ 69,950**	**$ 200,775**	**$ 206,706**	**$ 477,431**	**$ 944,000**	**51%**

The following is a list of outstanding line items from 2021-Q2 which are not included in the above income statement; all pending invoices are within budget:
- Incentive payments ($443 – waiting to receive invoices).
- Contractor expenses (estimated $290 – waiting to receive invoices).

The program is currently operating under budget. Percentage of budget spent listed in the income statement is based on to-date budget estimates; they do not represent the percentage spent of the entire budget.

6. Communication Activities

As requested by Alberta Agriculture and Forestry, Cleanfarms and the APRG are co-creating a series of informative articles for Alberta farmers to develop a shared understanding of the importance of used agricultural plastics resource management. A common theme throughout this monthly series will be an exploration of how ag plastics, once used, can be recycled to reclaim the natural resources and the invested energy, returning them to the economy where they can be remanufactured into new products.

The introductory article will be distributed by July 15, 2021. Future articles will feature discussions on change management, such as first sellers and manufacturers taking responsibility for used materials (extended producer responsibility), and explore practical recycling, including opportunities and challenges, for products such as grain bags, silage and bale wrap and baler twine that have real-time applications for farmers.

The articles will be distributed via:
- The Cleanfarms and APRG websites
- Agricultural extension staff across the province to use in their local newsletters and communications/outreach.
- Producer/commodity groups across the province to use in their newsletters and communications/outreach.

7. Other Activities and Key Dates

Pilot Site Communications:
- Grain bag rolling
  - April 8 – Drumheller Landfill re-rolling and staff training with Wheatland County Staff

Events and Presentations
- Webinars with potential collection sites hosted by Cleanfarms:
  - April 7 – Lamont County ASB (with representatives from Waste Commission)
  - April 21 – Two Hills Regional Waste Management Commission
  - May 26 – MD of Greenview ASB
  - June 8 – Birch Hills County
- Webinars with other stakeholders:
  - May 17 – Great Plains MDF (soon to be high volume use twine user)

8. Other Updates

DBS finalized and has been testing the use of a new trailer system (Appendix B) which can transport a skid steer with grapple bucket to load grain bags and/or twine at any location, including on-farm without the need for a standalone loading ramp. This innovative trailer design (inspired by Cleanfarms' Saskatchewan grain bag loading/hauling contractors) will improve efficiency and facilitate partial load collections by being able to consolidate several partial loads in one trip. It also allows for loose twine to be collected from some of the larger twine users in the province.

Some farmers have shared their innovative and inexpensive solutions for properly rolling grain bags. One such farmer modified an old post hole digger (Appendix C) by removing the auger flights and adding plywood to either end to produce tightly rolled grain bags with their skid steer.

Appendix A – Site Signage

Figure 2

Figure 3

Figure 4

Appendix B – DBS Self-Loading Trailer

Figure 5

Figure 6

Figure 7

Figure 8

Appendix C – Innovative Grain Bag Rolling

Figure 9

Figure 10

Figure 11