



LAKE COUNTY

Public Works

PO BOX 952
429 East 12th Street
Leadville, CO 80461
Phone: 719-486-0259
Fax: 719-486-8479



Recycling Resources Economic Opportunity Grant Program Final Report

I. ORGANIZATIONAL INFORMATION

Organization Name: Lake County

Project Title: Lake County Recycling Initiative: Access and Economic Sustainability

Project Coordinator: Brad Palmer, 719-486-0259, bpalmer@co.lake.co.us

Person Completing This Report: Mabel Bogear, 719-486-0259, mbogear@co.lake.co.us

Contract Duration: 7/7/2014 -- 6/30/2015

Grant Award Amount: \$165,498

Deliverable	Completion Date	Comments <i>(if deliverable was not completed, please explain why and what progress has been made)</i>
Purchase five roll-off containers, trailer, fences and cameras, signs and interpretive displays.	Roll-offs, trailer purchased 9/22/14 Cameras 2/6/15 Signs 12/19/15 Fences 04/01/15	Roll-offs took 4 months to build, which was unanticipated. We were late in ordering them because we developed a new strategy for drop sites when the project increased in scope (and funding from other agencies).
Place roll-offs, fence, camera, signs at drop-site.	9/10/15	The Lake County Building Department indicated in April, 2015 that additional permitting and zoning changes were required in drop-site construction. This was an unexpected development from a new building department director and delayed the process an additional 3 months in permitting and another 2 months for construction, The new grand opening date is scheduled for September 25, 2015. Lake County Public Works and Cloud City Conservation Center applied for and received on August 3rd, a Special Use Permit for construction and operation of a Waste Transfer Station. In addition, on July 27th, zoned areas able to house a Waste Transfer Station were expanded to include AG, IM, C which enabled construction of drop sites and expanded options for future drop site locations. Original site locations developed by the Recycle Task Force were revisited through the public input process associated with special use permitting. New drop site locations recommended by the planning commission and approved by the Board of County Commissioners are: 1. The Lake County Community Park, 2. 1/2 mile south of the junction of CR10 and HW 24.
Drop-site is open to the public.	9/25/2015	
Share service and maintenance schedule for drop-site.	5/15/2015	Maintenance and service schedule has been completed and shared.
Measure and report recyclables to ensure County is on track to double recycling rate by June 30, 2015.		To be completed when drop sites increase access and recycling volume.



Purchase storage facility and baler with conveyer belt.	Baler with conveyer belt purchased 10/1/2015	As part of the budget reallocation approved 9/15/2015, instead of a large storage facility, the County purchased a baler with conveyer belt to help with processing. IN regards to storage, the County reorganized the current storage facility to house more recyclables. For additional storage, the County was approved to purchase a trailer through the RREO grant, to house and transport recyclables. The trailer was purchased on 6/29/15.
Construct concrete and asphalt pads.	n/a	Not needed as part of new storage plan.
Construct storage facility.	n/a	Not needed as part of new storage plan.
Report will indicate annual revenue increase of at least \$10,000.	tbd	Pending drop-site construction.
Joint County and City letter published in support of recycling and enforcement of illegal dumping laws. Ordinances and fines in place in the County and City.	8/1/2014	County and City ordinances were developed over a period of months and are now in place supporting recycling and enforcing illegal dumping. Letter published in Herald Democrat 04/10/14.
Four ads, four articles in local press.	articles 11/3/2015 11/25/2015 07/30/2015 08/06/2015 Press release: 08/12/2015	Press releases were sent 3/01/2015 and resent 08/12/2015 when drop sites were postponed. Two articles covered the drop site development and permitting process, and two articles covered developments in recycling, sorting and drop-sites.
Waste Watch conducted at drop-sites for first three months.	Sign ups are in place 8/12/2015	Adopt a Drop Site and Drop Site Monitor program are in place.
School recycling workshops begin in all 1st-4th grade classrooms. Ten workshops per school- year. 20 hours of instructor- training per school year.	Completed 07/1/2015	A total of 14 workshops were completed in 1-6th grade classrooms in the 2014-2015 school year. 20 hours of instructor-training per school year were completed.
Six local presentations completed.	Completed 08/1/2015	Lake County Board of County Commissioners 08/14/2014, 04/20/2015, 08/03/2015, Lake County Planning commission 7/27/2015, Coffee Club 03/12/15, 05/14/2015, CMC Sustainability Conference 04/17/15, Climax Community Partnership Panel 05/06/2015



10,000 handouts distributed with the County's annual mailing.	n/a	We changed strategies because the County no longer accepts inserts in the County property mailing. Our second choice (for a free insert), the Water Department also no longer accepts inserts.
Recycling Task Force conducts project evaluation and oversight quarterly.		Recycle Task Force: April 14, 2014, Nov 20th, 2014. Mini-task force meeting 12/14.

II. WORK PLAN

Please use the format provided in the table below for your goals and objectives as listed in Exhibit B of your contract. Indicate the date each deliverable was completed or briefly describe why the deliverable was not completed.

III. PROJECT SUMMARY

1. Executive Summary

Provide a brief summary of the entire project including goals, challenges, successes, results, and environmental/economic benefits.

The goal of this project was to triple the amount of recycling accomplished in Lake County and create a sustainable revenue stream for recycling services in the future by (a) providing increased access to recycling at two drop-sites, (b) increasing Lake County's ability to store and process material and (c) providing the institutional and educational support needed to make increased access a long-term economic success.

To date we have doubled the County's processing and storage capacity through purchase of a new baler with conveyer belt and new storage trailer. Educational systems are in place and have been very successful, particularly school recycling and environmental educator programs.

Both drop sites will be constructed by the end of September. This is well past our estimated start date, as we ran into significant delays during the project. The biggest delay was a result of the Special Use Permitting process, in conjunction with a re-zoning process. Both of which were initiated by a new Building Department Director in April, 2015, in accordance with Lake County Code. We found that the resulting public input process was beneficial to the project, and though it delayed the project, helped to cultivate public support. Over 30 individuals either showed at public hearings in support of drop sites or signed up to adopt and monitor drop sites. The good news is that after a ground-swell of public support and additional paperwork, both Drop Sites were passed with a Trash Drop at each.

We have full confidence that the primary goal of tripling recycling volume in Lake County will be accomplished. Importantly we expect the increase in revenue to allow recycling operations to be in existence for many years to come.



2. Project Description & Overview of Work Completed

State your project goals and describe the steps taken to meet those goals. Explain why the project was important for recycling in your community and for Colorado in general.

The goal of this project is to triple the amount of recycling accomplished in Lake County and create a sustainable revenue stream for recycling services in the future by

(a) Providing increased access to recycling at two drop-sites

Steps taken:

- All equipment including roll-offs, trailer to haul roll-offs, fences, cameras, signs have been purchased
- Site plans and maintenance plans have been completed
- Original site locations developed by the Recycle Task Force were revisited through the public input process associated with special use permitting. New drop site locations recommended by the planning commission and approved by the Board of County Commissioners are: 1. The Lake County Community Park, 2. 1/2 mile south of the junction of CR10 and HW 24.
- Lake County Public Works and Cloud City Conservation Center applied for and received on August 3rd, a Special Use Permit for construction and operation of a Waste Transfer Station. The new grand opening date is scheduled for September 25, 2015.
- Allowable zoning was expanded. On July 27th, zoned areas able to house a Waste Transfer Station were expanded to include AG, IM, C which enabled construction of drop sites and expanded options for future drop site locations.
- County and City ordinances were developed over a period of months and are now in place supporting recycling and enforcing illegal dumping. We continue to work with law enforcement and members of the judicial process to ensure enforcement. The drop sites are equipped with illegal dumping signs in English and Spanish, as well as cameras. Community members have signed up to monitor drop sites for the first several weeks and to adopt drop sites for the first year.

(b) Increasing Lake County's ability to store and process material

Steps taken:

- A baler with conveyer belt was purchased to more efficiency process material. A storage trailer was purchased to house a full trailer load of one material, which will increase commodity sales revenue.



(c) *Providing the institutional and educational support needed to make increased access a long-term economic success.*

Steps taken:

Programs in the schools were a success. A total of 14 workshops were completed in 1-6th grade classrooms in the 2014-2015 school year. 20 hours of instructor-training per school year were completed. Instructors are 11th grade students who teach in teams of two and are mentored throughout the semester. In addition, we worked with and cultivated green Teams in each school. These teams led and monitored recycling processes. Mini-grants were given to green teams to improve recycling infrastructure and cut down on waste. This year, after conducting waste audits at each school, student-led green teams pioneered an effort to remove all styrofoam from the schools. They succeeded by working with Cloud City Conservation Center to raise the money to buy re-usable products and presenting the findings of their waste audit to the School Board. Additionally, the Lake County High School Green Team won the Colorado Association for Recycling's Outstanding Outreach Award for an Educational Institution, for their work in collecting and managing 11,000 pounds of recycling at the High School. The recycling effort has become institutionalized in the schools, with excellent infrastructure and many champions.

Relationships built and maintained with County staff, community members, elected officials, law enforcement and judicial leaders will ensure that Drop Sites are well monitored and illegal dumping is enforced.

3. Summary of Results

Based on the work completed, what were the environmental and economic benefits of the project? Discuss any significant successes realized as a result of this project and the response from the community.

We estimate that the increased revenue from commodity sales will total \$26,400. In additional estimated revenue increase from the Trash Drop program (at each Drop Site) is estimated at \$5,000 annually. These revenue streams will ensure that recycling operations can continue in Lake County in the future. Our hope and expectation is to go from losing money on recycling, to making (a small) amount of money.

We expect an additional 400 tons of recycling to be collected in year one of drop site operation. This will more than triple the current waste diversion rate in Lake County, providing easier access for Lake County citizens. 2,100,000 pounds of carbon will be reduced from our earth's atmosphere annually due to this project, or 285 pounds per person (EPA Environmental Benefits Calculator). This is the equivalent of taking 175 cars off the road, and in turn reducing toxic substances that threaten human health such as carcinogens by 803,517 pounds.

This project is particularly important to Lake County's immediate natural landscape. The Lake County landfill has less than 2 years of landfill space left. The new landfill is expected to be developed in the natural area immediately adjacent to the old one. A new landfill will require the disturbance of open space, and cause the potential contamination and disturbance of aquatic and



wildlife habitat. Current recycling rates have already had significantly slow down the amount of material entering the landfill, extending its life. This is also an economic win for the County, as constructing a new landfill will cost millions in tax payer dollars.

4. Summary of Unanticipated Outcomes or Roadblocks

Explain any unanticipated outcomes or roadblocks and how they impacted the project. How did you overcome these roadblocks?

The Lake County Building Department indicated in April, 2015 that additional permitting and zoning changes were required in drop-site construction. This was an unexpected development from a new building department director and delayed the process an additional 3 months in permitting and another 2 months for construction. Original site locations developed by the Recycle Task Force were revisited through the public input process associated with special use permitting.

We went from struggling to get public input in recycle activities to two packed County Commissioner rooms and some very energetic public participants. We attribute this additional interest to property and business owners who, through required notification, realized drop sites would be in proximity to their homes/businesses. The additional public input was extremely helpful to the project and we believe will result in better managed and better supported drop sites.

5. Communication of Project Findings

How have you communicated the results of your project to your community and to Colorado in general? What plans do you have to raise awareness of your project in the future?

- Each 1st-6th grade student takes part in a recycling workshop that has a 'take home' piece including drop site information.
- The Cloud City Conservation Center web-site is frequently updated with recycling information and linked to the County page. Weekly Facebook posts and quarterly newsletters help keep the public updated.
- In the past month, the local paper has run two articles on drop sites and will run another press release in the coming month.
- We plan to continue to communicate our progress with the Colorado Association for Recycling (CAFR). We intend to present at the CAFR conference in June, 2016.
- Surrounding communities are members of our Recycle Task Force and receive communications as necessary.

6. Future Impact of the Project

How will this project impact future waste diversion in your area and in Colorado? Are there any downstream effects of this project? Is there potential for transferring technology or process knowledge to others?



How will this project impact future waste diversion in your area and in Colorado? Are there any downstream effects of this project? Is there potential for transferring technology or process knowledge to others?

We expect the project to triple our Lake County waste diversion rate over the next year. The largest downstream effect will likely be in the extension of the life of our landfill. We also expect illegal dumping to decrease in our urban-wildland areas.

The most innovative part of the project, we believe, is the paring of a Pay As You Throw Trash Drop with a Recycling Drop. We do not know of any other examples of this particular combination in Colorado. Because the majority of the rural Colorado region operated recycling at a loss, this model has real potential to conform to the needs of rural communities *and* turn a profit for recycling. We are very excited to see what the combination of a trash and recycling drop can do and share the results.

7. Financial Summary

Using the Grant Budget Table, indicate how funds were spent during the project, including a breakdown of actual in-kind/matching funds. Be sure the Grant Budget Table is complete.

8. Conclusion

Include any final thoughts on the project and on the RREO grant program.

9. Appendix

a. Grant Metrics Table

i. Be sure the Grant Metrics Table is complete. See Excel spreadsheet.

b. Community Leader Contact Information

i. Include the name, title, phone number & email address of at least three community leaders who are familiar with your project. They may be contacted by the committee for input on the project.

c. Manuals, Brochures, Print Advertisements, Pictures, Educational Materials, etc. Label each as its own appendix.



Grant Budget Table

Description	Grant Funds Spent	Matching/In Kind Amount (if any)	Total Amount
Personnel Salaries	\$0.00	\$0.00	\$0.00
Fringe Benefits	\$0.00	\$0.00	\$0.00
Tuition/Fees	\$0.00	\$0.00	\$0.00
Travel Costs	\$0.00	\$0.00	\$0.00
Materials/Supplies/Equipment(under \$5000)	\$2,578.93	\$2,400.00	\$4,978.93.00
Equipment Purchases (over \$5000)	\$146,919.07	\$11,107.00	\$158,026.07
Contractors/Subcontractors	\$16,000.00	\$21,500.00	\$37,500.00
Consultants	\$0.00	\$0.00	\$0.00
Training/Education	\$0.00	\$0.00	\$0.00
Marketing/Advertising	\$0.00	\$0.00	\$0.00
Other Direct Costs	\$0.00	\$0.00	\$0.00
Indirect Costs	\$0.00	\$0.00	\$0.00
Total Project Cost:	\$165,498.00	\$35,007.00	\$200,505.00

Total award amount: \$165,498

Once final reimbursements are submitted and approved, adjust the "Grant Funds Spent" column to reflect all funds spent during the grant cycle. Please add all matching/in kind funds spent during the project. Refer to your scope of work for the amount of matching/in-kind funds you committed for this project. This table must be included in your final report in the "Financial Summary" section.

Grant Metrics Table

Date project fully operational (if applicable):

Based on deliverables. Provide the month during which the grant project increased diversion/created jobs/increased number of customers.

Diversion Rates:

Choose one material per blue box from the drop-down menu provided. If your material is not listed, enter a description in the "Other" box. Only list materials diverted as a direct result of the grant project. Must be listed in tons. See tab labeled "Conversion Tables" if needed.

Material Diverted #1	<input type="text" value=""/>
"Other" Material:	<input type="text" value="Baled Misc Film (Poly)"/>
Tons Diverted	
July-14	0.16
August-14	
September-14	0.41
October-14	0.25
November-14	
December-14	0.68
January-15	
February-15	
March-15	
April-15	
May-15	
June-15	
Total	1.5

Material Diverted #2	<input type="text" value=""/>
"Other" Material:	<input type="text" value="Commercial Mix paper"/>
Tons Diverted	
July-14	5.38
August-14	5.11
September-14	4.87
October-14	6.7
November-14	3.22
December-14	3.88
January-15	4.71
February-15	6.27
March-15	
April-15	11.83
May-15	
June-15	7.96
Total	59.93

Material Diverted #3	<input type="text" value="Plastics (#1-7)"/>
"Other" Material:	<input type="text" value=""/>
Tons Diverted	
July-14	1.09
August-14	0.05
September-14	0.96
October-14	2.21
November-14	0.81
December-14	0.9
January-15	0.75
February-15	1.25
March-15	
April-15	2.25
May-15	
June-15	3.49
Total	13.76

Material Diverted #4	<input type="text" value="Cardboard"/>
"Other" Material:	<input type="text" value=""/>
Tons Diverted	
July-14	10.73
August-14	5.27
September-14	11.59
October-14	10.88
November-14	4.88
December-14	5.87
January-15	4.4
February-15	9.29
March-15	
April-15	15.78
May-15	
June-15	14.55
Total	93.24

Material Diverted #5	<input type="text" value="Scrap metal"/>
"Other" Material:	<input type="text" value=""/>
Tons Diverted	
July-14	0.25
August-14	
September-14	0.7
October-14	0.65
November-14	0.34
December-14	0.35
January-15	0.37
February-15	0.56
March-15	
April-15	
May-15	
June-15	
Total	3.22

Material Diverted #6	<input type="text" value="Aluminum / Steel cans"/>
"Other" Material:	<input type="text" value=""/>
Tons Diverted	
July-14	0.72
August-14	0.27
September-14	0.78
October-14	0.61
November-14	0.3
December-14	0.3
January-15	0.17
February-15	0.75
March-15	
April-15	0.61
May-15	
June-15	0.99
Total	5.5

Material Diverted #7	<input type="text" value=""/>
"Other" Material:	<input type="text" value="Glass"/>
Pounds Diverted	
July-14	29280
August-14	
September-14	14780
October-14	13160
November-14	
December-14	14240
January-15	15520
February-15	
March-15	20560
April-15	
May-15	19260
June-15	21400
Total	148200

Material Diverted #8	<input type="text" value=""/>
"Other" Material:	<input type="text" value="Used Oil"/>
Gallons Diverted	
July-14	315
August-14	
September-14	
October-14	290
November-14	
December-14	425
January-15	310
February-15	
March-15	
April-15	
May-15	950
June-15	337
Total	2627

End use of diverted materials:
Describe where materials are going (e.g. MRF, new products, reuse)

Waste Management, Miller Coors and Thermal Fluids

Number of Permanent Jobs Created:
Include full-time & part time paid positions. 1 FTE = 40 Hours Per Week

Type of Permanent Job(s) Created:
Provide titles of jobs created

Recycling

Average Salaries of Jobs Created:
Average of all jobs created

Average Monthly Customers:
Estimate or refer to customer list

Avg. Monthly Amount	
July-14	1650
August-14	1650
September-14	1650
October-14	1650
November-14	1650
December-14	1650
January-15	1650
February-15	1650
March-15	1650
April-15	1650
May-15	1650
June-15	1650
Avg / FY 15	1650