

Village Spotlight: Huslia Has Game. Barrel Burning Gets Defeated with Strong Community Collection Program.

This issue, we visit Huslia and their efforts to address solid waste and barrel-burning by starting up a trash collection program for their community.

Community background & history

Huslia has a population of 275 residents. Huslia is located on the north bank of the Koyukuk River, about 170 river miles northwest of Galena and 290 air miles west of Fairbanks. It lies within the Koyukuk National Wildlife Refuge. The Koyukon Athabascans lived between the south fork of the Koyukuk River and the Kateel River, and sometimes traded with



Kobuk River Eskimos. Cutoff Trading Post (also called Old Town) was established in the 1920s about 4 miles overland or 16 river miles

from modern Huslia. In 1949, the community moved to the present site. By 1952, families began to live year-round at Huslia.

Solid Waste Problems

Previous to last year in Huslia, most of the community burned their trash in 55-gal drums (“barrel-burning”) outside their homes and businesses to reduce their trash volume. Reduced trash volume results in a lower number of trips needed to the landfill – which is pretty distant, and costs folks gas money. But when regular household trash is burned in a barrel or a burnbox, or on the ground, it always emits toxic smoke. When that smoke is generated in town versus the landfill, residents are exposed to breathing that smoke a good deal more – they are closer to the source when they breathe it, and they breathe the smoke more regularly. A study on short-term health related to solid waste practices and conditions was performed in YR 2001 in four rural Alaska Villages. *People who barrel-burned their trash were twice as likely to have a cough, from 5 to 17 times more likely to suffer faintness, and 5 to 10 times more likely to experience numbness, than people who didn’t burn.* The more often people burned,

the more likely they were to get the symptoms. Burning was also associated with increased fever and sore throat.

Beyond dangers in breathing waste smoke, the self-hauling of garbage by Huslia residents to their mostly unmanaged dumpsite also presented concerns. Just visiting a dumpsite presents health risks as well as safety issues. The same YR 2001 study found that *folks who visited their dumps were 2 to 3.7 times more likely to experience faintness, fever, vomiting, stomach pain, ear and eye irritation, headache, and/or numbness.* The more often people visited the dump, the more likely they were to experience the symptoms.

Huslia’s Solid Waste Vision

Using a shared community bins system, versus house-to-house collection, reduces the labor and operational costs for a collection program. The



Barrel Burning In Town

Huslia Tribal Council (HTC) wanted to demonstrate how a low-cost, shared trash bin

collection program could reduce barrel burning, by making it more convenient for the community to dispose their trash. Huslia also wanted to show how they could convince the community to pay for the service to make it sustainable. Lastly – they wanted to support local employment and hire a local carpenter to design and build the trash bins they would use.

So IGAP Coordinator Shandara Sam submitted a proposal to the FY2012 Community Environmental Demonstration Project (CEDP) Program, also known as the Alaska Tribal Multi-Media Grant Program. After a full review by the CEDP proposal selection committee, the Huslia Tribal Council was awarded a grant for

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\$21,743.00 to carry out their proposed project. Huslia's approach of public education, and locally-built, lower-cost community bins demonstrates how a more affordable trash collection program can be achieved, and how it can reduce poor in-town practices such as barrel burning. Interested? Read on!



Presenting at a Community Wellness Event

to pay for a shared waste bin collection system since folks can discard their wastes in open bins without paying anyway (as long as no one sees them).

So Shandara carried out a lot of education at first, and throughout the project. Efforts included speaking about the new collection service at community meetings, developing and posting information flyers, writing and mailing out letters to each household, and announcing the new service at other community gathering times, such as bingo.



Monthly Raffle Poster to Encourage Signup.

They also collaborated with their wellness program with their first presentation carried out with an already planned Community Wellness event. Community involvement activities included door prize incentives for households who paid their collection fees. Shandara also took advantage of informal education opportunities, such as when people would ask questions about "what's going on" when they would see the trash bins being constructed. They also began working with a local mushing team effort that is intended to get youth involved in healthy activities.

Project Activities

Community Education & Involvement Activities Taken:

It can be hard to convince households



Above: Constructing Bins and Below: Completed Trash Bin

Local hire for locally built trash bins:

The project included a local design for the bins and developing a bin location strategy for optimum use and convenience for service users. Shandara

ordered all the lumber and other supplies required to build good durable trash bins. A local carpenter was hired to build the bins. Unlike many villages who

have portable smaller bins, Huslia's bin design is a walk-in caged design where residents can drop off their trash safely in tied bags. Huslia also included and involved the RuralCap Raven AmeriCorps program and Tribal youth summer job program to assist with the construction and placement of trash bins. A total of 20 trash bins were constructed.

The location of the bins was changed a couple of times as they learned what bins were being most used, and what bins the non-paying customers were using. They also tried to place bins outside Elder's homes to make it convenient for them, and to have them be able to let folks know they should pay for using them. Elders were free. However, after a few months, Elders who wanted to be in the raffle program had to pay a reduced fee rate.

Huslia took advantage of the Rural Cap AmeriCorps and had their intern drive around to collect from the bins. They charge \$10/mo fee for households and \$20 fee for businesses. A \$15 fee is assessed for homes that have businesses in them. Elders pay \$7/mo. Huslia's plan is to use

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the collection fees generated to pay for a collector once they don't have an intern. They will also slowly raise the fees as needed to cover the technician's wages. For now the fees cover gas, vehicle and bin maintenance, and participation incentives (Monthly raffle!), and leave a lot leftover for supporting different wellness projects in the community that help with overall environmental awareness.

Results of Project:

For Burning: Shandara

conducted two (2) complete burn barrel counts, one at the beginning of the project, prior to starting up the collection and one 11 months later when the trash collection bins were available to residents and business. For each count, they counted how many homes and businesses had barrels and they visually inspected how many were being used. They had remarkable improvements, which is *Less Barrel Burning*.

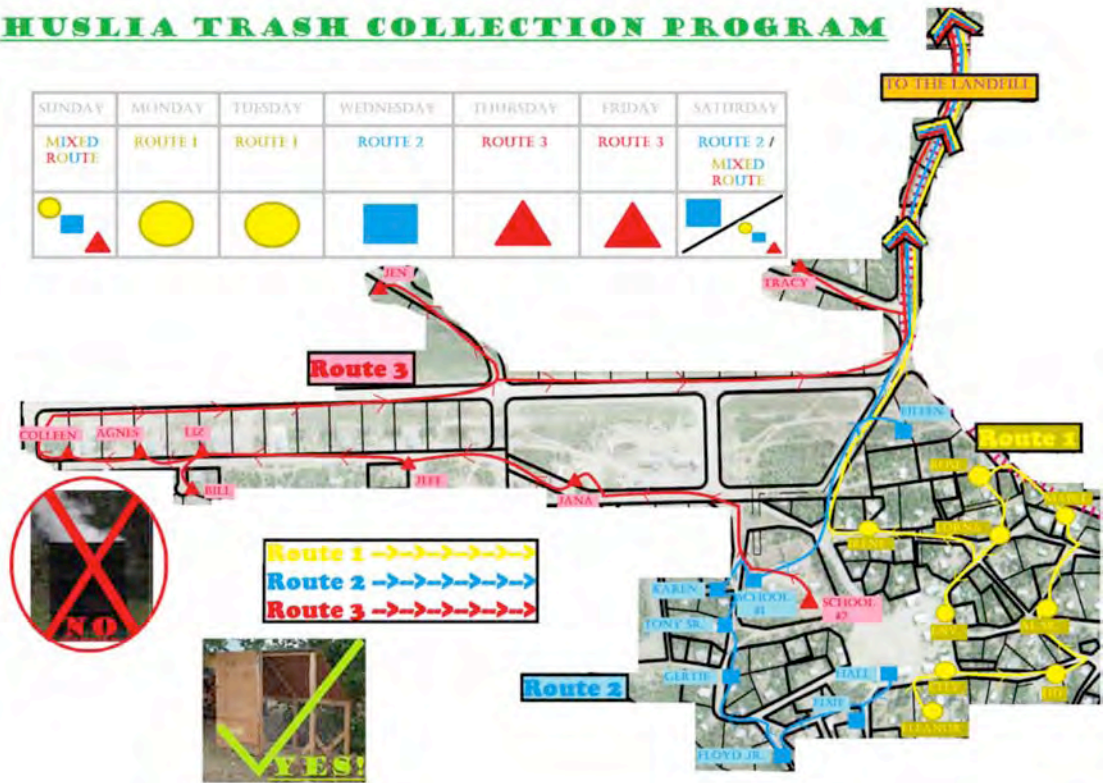
In April 2012 at the start of the service, 51% of Huslia used barrel burning. By March 2013, only 26% barrel-burned! **That is about half as much smoke being breathed by the community!** Great job Shandara!

Huslia knows it was their collection service that did the trick, because it was mostly the households that were paying for service that didn't have any barrels in-use. Also, for a while in early winter they had no snow, so they had to use their ATV for collection. But they had really cold weather at the same time, so their ATV couldn't start up most of the time, and they had to stop collection. While the collection service was halted, barrel burning increased.

For Collection Service: **After 11 months, 60% of households and businesses had signed up and**

HUSLIA TRASH COLLECTION PROGRAM

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
MIXED ROUTE	ROUTE 1	ROUTE 1	ROUTE 2	ROUTE 3	ROUTE 3	ROUTE 2 / MIXED ROUTE



Huslia poster showing trash routes and days overlaying an aerial picture of the village.

were paying! This is a great accomplishment. Huslia residents took on the responsibility to pay for that service, and their Environmental Program had an important role in accomplishing that.

Post-Project Update: We have an even better post-project update! It's been one and one-half years since their project started, and six months since it ended. The continued anti-burning education-- together with



Dedicated ATV and Trailer Purchased with CEDP Award

possibly the households seeing and smelling the difference, and encouraging others to not burn, resulted in a long-term bigger drop in burning even for those who are not participating in the collection service.

Only a few households are left that still burn in-town!! Yay!

And in the last few months, the door prizes were stopped and less education effort was taken, mostly

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Map showing paying customers helps to determine best bin location and whether it needs to be changed.

due to a busy time period for the Environmental Program. The number of households paying for the service dropped to 44%. That is actually still a great number – it means that if you can afford door prizes and a lot of education for a year, **you can get folks so used to the collection service, most of them will keep paying (called a “behavioral change”)**!

Shandara believes that Huslia can keep increasing that collection number, and she'll be starting new efforts this Fall. To get ready for that, she is working on developing an Excel spreadsheet to keep track of paying customers in a way that makes it easier and less time-consuming.

Lessons Learned

Shandara shared some helpful advice when trying to start up a trash collection service:

- Need to place trash bins most convenient for customers.
- Need to have a backup plan when vehicles break down.
- Need to find innovative and fun ways to encourage service payments.
- Squirrels like to chew into trash bags.
- Ravens are even smarter than you thought possible!
- Orange mesh fencing wrapped several times around the bins didn't really work to keep them out.
- Metal latches and locks work better than wood.
- Need to keep trying new ways to get folks to sign up. Signups keep increasing if you keep trying new things.

- Monthly raffle prizes help a lot to interest folks in trying the service, but prizes can be expensive, so plan for that.
- If door prizes and raffles are stopped, paying customers will drop – but still keep up pretty high if the service has been going a while.

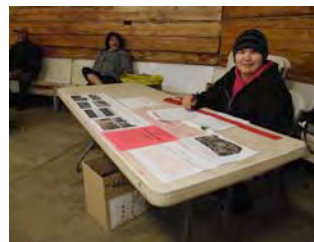
Benefits

- After one year, Burn barrel use decreased by 50%! After 1.5 years, barrel use has decreased to just a few households!! Community health is so much better protected!
- 60% of households and businesses were paying for collection service after one year.
- 20 trash bins were built
- Community-service utility established.
- Two local jobs created- one for making the bins and one for trash collection
- Having the waste technician unload wastes at the dump instead of residents allows a better organized site that requires less management.
- Gas and maintenance costs are covered and money left over goes to environmental wellness activities that in turn encourage the community to participate in the service.

For more details on the project or just if you want to see a great community education project, please get out the popcorn and view Shandara's awesome music video! The video tells this project from the perspective of **improving environmental conditions through empowerment of community members**: <http://www.youtube.com/watch?v=PgBzHl3PAug&feature=youtube>

Shandara also presented an impressive Powerpoint Presentation at last year's AFE conference. Click on: <http://zendergroup.org/docs/cedp/Husliappt.pdf>

For more information on this project, contact:



Shandara at a community event

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To see other available resources on collection

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Calendar of Events and Deadlines

DATE	EVENT/TRAINING	LOCATION	MORE INFO	FUNDING ANNOUNCEMENTS & DEADLINES
Nov 12-15, 2013	Alaska Tribal Conference on Environmental Management (ATCEM)	Anchorage, AK	http://www.atcemak.com/	AmeriCorps BIRCH and RAVEN Applications Deadline: Nov 15, 2013 Contact Charlie Ess at RurAL CAP at 1-800-478-7227 extension 7355 or cess@ruralcap.com
Nov 12, 2013	EPA's Inaugural Tribal Leaders Listening Session with Administrator Gina McCarthy	---	Please RSVP by November 11th to Elvira Dixon by email at Dixon.Elvira@epa.gov or by phone	RurAL CAP Solid Waste Management Grants Deadline: Nov 22, 2013 www.ruralcap.com/publications/applications/commdev/Solid%20Waste%20Improvement%20RFP.pdf
Nov 13, 2013	5th Annual White House Tribal Nations Summit	Washington, DC	http://www.whitehouse.gov/webform/2013-White-House-Tribal-Nations-Conference	BIA Tribal Climate Adaptation Grants Deadline: November 29, 2013 Email climate-adaptation-grant-info@bia.gov
Dec 2-6, 2013	BIA Tribal Providers Conference	Anchorage, AK	http://biaprovidersconference.com/	Wells Fargo and the National Fish and Wildlife Foundation Environmental Solutions for Communities Deadline: Dec 16, 2013 http://www.nfwf.org/environmentalsolutions/Pages/2014rfp.aspx
December 9-13, 2013	Zender Combined Integrated Solid Waste Management Plan Training and Sustainable Solid Waste	Anchorage, AK	www.zendergroup.org/sw.html	Alaska Community Development Block Grant Deadline: Dec 6, 2013 commerce.alaska.gov/dnn/dcra/GrantsSection/CommunityDevelopmentBlockGrants.aspx
Feb 3-7, 2014	Alaska Forum on the Environment	Anchorage, AK	http://akforum.com	DEC Brownfield Cleanup and Assessment Due: Dec 18, 2013 dec.alaska.gov/spar/csp/brownfields.htm#assess
March 18-20, 2014	Rural Alaska Landfill Operator (RALO) Training	Anchorage, AK	http://akforum.com/training.html	
April 15-17, 2014	Rural Alaska Landfill Operator (RALO) Training	Anchorage, AK	http://akforum.com/training.html	
For more details of the events/trainings listed here, and for additional trainings, events, and funding announcements, go to: http://www.zendergroup.org/docs/Calendar_Oct_2013.doc .				

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programs and user fees, go to www.zendergroup.org/collection.html. To view other CEDP Projects that might help your community address solid waste issue visit our website at www.zendergroup.org/cedp.html. The Request for Proposals for the 2014 CEDP/Multi-Media Program should be out by mid-November. For more information, visit the website above, or contact Jacqueline Shirley at jshirley@zendergroup.org, Phone: 952-9973.

Resource Circle Continued From Page 4...

- Creating Tribal Climate Change Adaptation Plans
- Grant Work as Guide to Developing a Site Response

To see all the presentations go to:
www4.nau.edu/itep/conferences/conf_r_tlf13_pres.asp

Fall Elder Wisdom:

All our cultures have unique values. Alaska Native cultures have many values in common too. According to Native Knowledge Network at <http://www.ankn.uaf.edu/ANCR/Values/index.html>, these are:

1. *Show Respect to Others* - Each Person Has a Special Gift
2. *Share what you have* - Giving Makes You Richer
3. *Know Who You Are* - You Are a Reflection on Your Family
4. *Accept What Life Brings* - You Cannot Control Many Things
5. *Have Patience* - Some Things Cannot Be Rushed
6. *See Connections* - All Things Are Related
7. *Take Care of Others* - You Cannot Live without Them
8. *Honor Your Elders* - They Show You the Way in Life
9. *Pray for Guidance* - Many Things Are Not Known



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