

ALASKA SOLID WASTE NEWS

Summer Issue

Summer is an appreciation of bounty...



Hi everyone! It's been a strange summer so far, hasn't it? Most of the state has been really warm. Here in Anchorage, with all the residents and tourists in shorts and dresses, you could swear you were in Southern California. Hmm, well except for the moose in downtown, reindeer sausage stands, and the hundreds of Alaska T-shirts and plastic snowglobes on sale ☺. We had a very late Spring with snow coming in mid-May and the ground still frozen in June. Even though construction and our greening started a few weeks late, everything bloomed at once or out-of order with the heat. Our fireweed flowered nearly as soon as it got out of the ground. Our trees started turning Fall yellow very early. And the Norton Sound villages

have seen mostly a cold summer (but still a lot of mosquitoes, ugh). The lesson we're all acting on is to take opportunity as it comes. Whatever the summer, winter waits for no one, and summer's bounty may be a food or activity not typically tried. Are you trying to arrange complex logistics to ship in equipment for the last barge, or backhaul out wastes once that ship leaves your landing? Or trying to clean up your dump site? And at the same time you, your fellow staff, and everyone else in the village is urgently trying to carry out subsistence in a crazy season so you'll have nutritious food for your family? Labor for projects can be difficult to

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come by, ATV's are in short supply, and heavy equipment is in-use all day because the construction project window was shortened with the late Spring. We feature two articles here about projects carried out quickly and well -- mainly because villages are used to "making do", and acting fast and flexibly. Draw on strengths practiced simply by living in a Village, and the work gets done in the time that makes sense. And another cycle always follows. Good luck everyone with the Summer's professional *and* personal work left to do.

Hooper Bay Rocks a Backhaul Project...

At the end of last summer (2012), Hooper Bay carried out a large backhaul project with EPA IGAP funds. A total of 76,300 pounds were shipped out of the community, including white goods, e-wastes, batteries (mostly ATV, outboard, and truck batteries), and general scrap metal. In preparing for the backhaul, dealing with the scrap metal took the most time. They also needed to purchase some specific supplies and equipment for cutting the metal. This article summarizes how they carried out their backhaul and the tools and supplies they needed to do it.

Transportation and Recycling Logistics



Hooper Bay prepared and carried out their backhaul in a pretty short period of time (work started in June and materials were shipped out in

August). The Tribe called Northland Services at the beginning of the summer to get quotes and shipping dates for shipping four connexes of materials to Seattle. The contact at Northland was Maureen Fitzgerald (206) 892-2591. Once they had quotes, they looked at their total budget and calculated that they only had enough to ship two connexes. After talking to Maureen again, Northland was able to offer the shipment of two connexes free of charge, which Hooper Bay was really happy about, and they booked the four connexes on the next barge out. They also called Total Reclaim in Seattle and confirmed with them that they could take all of the materials they had. They also confirmed any fees they would charge to make sure it fit within their budget. The contact at Total Reclaim was Larry Zirkle (907) 561-0544.

Supplies and Equipment

In June and July, four trained workers and three additional people were hired locally and they started staging materials and placing them into

the four connexes they had on site. Safety gear was purchased for the workers to use and equipment was also ordered for the scrap metal preparation. All of the supplies and equipment they needed for the scrap metal preparation are shown in the invoice at this link:

www.zendergroup.org/docs/scrap_metal_supplies.pdf

You can view this invoice for the list of equipment purchased, and the amounts and prices of each.

A general list of equipment/tools needed for cutting metal is given in the table below:

Item	Estimate cost per item
Inverter/Generator	\$1050
Gas cutoff saw with diamond blade	\$1040
Saw cutoff wheel	\$10
Sawzall reciprocating saw	\$120
Metal cut sawzall blade	\$100

The equipment listed above was used to cut the scrap metal down to size so it would fit in the connexes. Once the scrap was cut down, the metals were separated out (for example all aluminum was put into one connex, scrap iron in another, etc.)



Hooper Bay had a local worker that was certified in Freon removal, thanks to the RACEJT program described below. A Freon removal kit was purchased for

the project, and Freon was removed from a number of units so the scrap freezers, refrigerators, etc. could be recycled. A backhaul "kit" to ship batteries, e-waste and fluorescent bulbs was also purchased for the project and both the backhaul kit and Freon Removal equipment were purchased from Total Reclaim (contact at Total Reclaim is Gary Smith 561-0544).

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Safety gear purchased for prepping scrap metal, or suggested for purchase, is listed below.

- Faceshield
- Coverall
- Hardhat
- Canvas gloves with safety cuff
- Clear anti-fog safety glasses

For safety gear information and where to purchase, see www.zendergroup.org/docs/Safety_gear.pdf

Training and Labor

The IGAP program was able to hire locally trained and certified personnel to carry out the backhaul

preparation. The Native Village of Hooper Bay with the assistance of their village corporation Sealion, Inc. had sent 4 people to attend the Rural Alaska Community



Environmental Job Training (RACEJT) program in Spring of 2012. This 160-hour program trained the 4 people in subjects such as HAZWOPER, Freon Removal, and solid waste backhaul, all of which helped the backhaul crew tremendously. RACEJT is for unemployed rural residents and is managed and hosted by Zender Environmental and funded through grants from EPA and State of Alaska Dept of Labor. Applications for the Spring 2014 class will be out by late Summer. For more information see <http://www.zendergroup.org/racejt.html>

Funding

Hooper Bay had some unspent funds in their IGAP grant, and through a work-plan change, they were able to use these funds for the project. The funding was used to cover the workers, the supplies and equipment, the end destination recycling fees, and the transportation costs. Hooper Bay feels that the reasons they were able to complete the project in such a short amount of time were having access to trained workers on site, having the equipment they needed to do the job (as well as the proper safety gear), and of course the funding to be able to obtain

both of those. Several photos were taken throughout the project and included in their final IGAP report. Hooper Bay earned a total of \$3,000 by selling the recycled metals (all went to Total Reclaim in Seattle).

Current Backhaul Plans

The IGAP program is currently conducting another backhaul event and they are striving to ship out four more connexes of materials. Hooper Bay has estimated that they have enough scrap metal, white goods, e-waste, and hazardous waste to fill between **50-60** connexes! So their backhaul efforts will probably take place over several summers and will be dependent on available funding. Currently, the prioritized backhaul items that are shipped out are the wastes considered to be most hazardous to environmental and health, in addition to the high-value wastes that will give back the most money into the project. That way, with the revenue they generate they can continue to ship out at least some hazardous wastes.

Contact Information

If you would like to talk to Hooper Bay about their backhaul project, contact Bernard Murran at



(907) 658-4122.
Zender
Environmental
Health and
Research Group
provided free
technical assistance
to Hooper Bay
through a USDA

Rural Utilities grant. For villages that need the help, we provide recommendations on what equipment and supplies are needed, contact vendors for these equipment and supplies, place the orders, and assist in shipping arrangements. If your community is looking for free training or assistance in backhaul and other solid waste related needs, contact us at 907 277 2111 or ssebalo@zendergroup.org

For more backhaul information, including where to purchase supplies, how to package materials, where and how to plan for backhaul, see <http://www.zendergroup.org/backhaul.html>

Village Spotlight: Mekoryuk

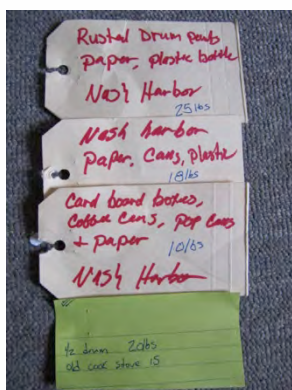
In this issue, we visit the Native Village of Mekoryuk (NVM) with a population of 210 and located at the mouth of Shoal Bay on the north shore of Nunivak Island in the Bering Sea. Mekoryuk is part of the Yukon Delta National Wildlife Refuge. The Nuniwarmiut people who are Cup'ik Eskimos have inhabited Nunivak Island for 2000 years. While there used to be 16 villages on the island, by 1957 Mekoryuk was the only permanent community on the island.



Background and Getting Started

Bessie Weston was the IGAP coordinator in February 2012 when NVM-IGAP applied for a Multi-Media grant, also known as a Community Environmental Demonstration Project (CEDP) grant. She submitted a well-thought out proposal requesting funds for a subsistence lands clean up project.

For generations there have been many subsistence camps used all across Nunivak Island. The biggest subsistence camp, which also serves as a commercial halibut camp, sometimes has as many as 50 campers at once. Since residents use small boats to access these camps, they often have to make a choice at the end of the season between hauling back subsistence food or hauling back trash. Being a subsistence community, this means that solid waste sometimes gets left behind.



Waste labels

Over time this has led to quite a bit of waste piling up in subsistence campsites. This directly impacts the environment in these areas and also, in the case of toxics such as used oil, and boat maintenance products could potentially affect the health of residents who eat food from these subsistence sites. Bessie had two goals for the

project. The first was to clean up trash from the subsistence sites and put it in the landfill. The second was to educate the community about solid waste management in subsistence areas.

As part of the proposal, Bessie went to 47



Waste in the boat

community members and asked them for signatures of support. She also asked them if they use a fish camp. Out of 47 people,

only 5 said that they do not use a fish camp. These numbers were used to show that this issue affects a large percentage of community members. Bessie also met with the IRA Council President and the Vice President. They provided a letter of support along with Coastal Villages Seafood.

Adjusting the Workplan

Bessie resigned from her position in April and Dale Smith temporarily managed the project. He had previously taken part in a beach clean up project in Mekoryuk and had some suggestions for the workplan.



Collecting waste

Originally, the workplan called for hauling trash by boat in the summer and by snowmachine in the winter.

Dale thought that it might be

easier to haul everything all at once in the summertime.

By May the Native Village of Mekoryuk had

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Continued from previous page hired a new IGAP coordinator, Delcie Davis. She began work on the grant by hiring a boat captain and crew for the clean up. She set up a meeting with the captain and the IRA Council President to sign a contract stating the details of the agreement. The contract stated the timeline of the project, the necessary qualifications for the captain and his crew, the responsibilities of the captain and his crew, and the compensation for the work. There was also a clause stating that the captain would use his own boat and that the Native Village of Mekoryuk was not responsible for any damages to the boat.



Collecting old drums

The next step was a very important aspect of the project – outreach and education to the community. Delcie went to a few houses to inform community members about the

project and to ask about where trash was located. One community member told her about some old gravesites near his fish campsite that should not be disturbed. She explained that the reason they were talking to campers about the project was to gather exactly this type of information. By June, Delcie had also sent out letters to campers to explain the project. The letters specifically requested that campers pile up all the waste that they wanted to be removed in one location. Having campers pile up their own waste would prevent the captain from taking items that people did not want removed. It would also speed up the job of the captain and his crew in gathering, weighing, and labeling the waste.

Gathering Waste

Albert Williams was the boat captain for the clean up crew, his first mate was James Andrew, and his other crewmember was Bob Edwards Jr. The three of them took on the task of visiting five different campsites to collect, photograph, and document waste.

They went to the campsites and sorted trash into bags based on different categories, such as fishing nets, plastic bottles, aluminum, and scrap metal. The

bags were labeled by the type of trash they contained and the location of the trash. To be as accurate as possible, they took GPS coordinates of all the locations of the trash sites to maintain a record for the project. They also took before and after pictures of the campsites to document their work. One of the most frequently found items were old rusted out 55-gallon drums. These drums take up a lot of space so they were more likely to be left behind by campers if their boats were full after subsistence fishing.



Campers pile up waste for pick up

The crew made three trips total to collect waste; one trip in July, and two trips in August. They collected waste at halibut camp, Cape Mendenhall, Nunarlugarmuit, Paamiut, and Nash Harbor. In

total they collected 1,898 pounds of waste!

Upon returning to the village, Delcie and the crew unloaded the waste and weighed each bag to get a total weight. They recorded the



Picking up metal waste

types of waste and the number of pounds in an Excel spreadsheet to organize all the data and make it easier to add up. The waste was then loaded into the IGAP cart and

hauled to the landfill for disposal.

The Final Tally

In all, 1,567 pounds of waste was picked up at the five camps! The waste varied a lot from camp to camp, and overall included, by weight, 12% scrap metal, 10% propane tanks(with some fuel), 2% cardboard, 18%

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Collecting waste

motor parts, and 3.5% plastics. Miscellaneous items included a small canoe, generator, and airbed mattress. Even though plastics and cardboard didn't

make up a high percent by weight, they are a much lighter item than the other wastes. That translates to a higher volume of these wastes, and a fair amount of littering at the sites. The 50 pounds of plastics picked up is the plastic equivalent of 4,500 shopping bags! And even one bag ingested by sea birds, fish, or marine mammals can be harmful or even deadly.



Metal waste

Wrapping Up the Project

All CEDP grantees were asked to present at the Alaska Forum on the Environment (AFE) in February 2013. Unfortunately, Delcie had resigned from

her position by the time of AFE, but she did get a chance to put together a wonderful powerpoint showing all the hard work that went into the project, which was shared at AFE. The powerpoint includes pictures and spreadsheets to document the success of the project.

Delcie thought of a really great way to wrap up the project and make the powerpoint presentation even more effective. She asked community members if they'd be willing to be interviewed about the best way to keep subsistence lands clean. She talked to a broad range of community members, including a child and an Elder. Then Delcie recorded their

voices while she interviewed them and included the recordings in her presentation. By



Fully loaded boat

doing this she captured the actual voices of the community talking about ways that everyone could do their part to keep subsistence

lands clean, from the youth to Elders and everyone in between. Check out the powerpoint here: www.zendergroup.org/docs/cedp/Mekoryukppt.pdf

Lessons Learned

In the beginning of the project, Bessie had hoped that volunteers could be used to do the clean up. As the project continued and she and Delcie did more outreach, it became clear that the grant would need to pay for a boat captain and a crew to do the clean up. This was partly due to the fact that the outreach to volunteers was delayed with the turnover in the IGAP coordinator position. Valuable time was lost and as the fishing season approached people



Loading waste into the cart

were busy with preparations. Delcie did the best she could with outreach to volunteers, but the

timing of her hiring made it very difficult to recruit community members. For other communities that are looking to do a similar clean up, she recommended talking to volunteers as early in the project as possible so

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that people won't be disturbed as they get ready for fish camp. She also realized that many people were not willing to haul back waste for the same reason that the subsistence sites were dirty in the first place – that people don't have space for trash in their boats when they are

bringing back their subsistence catch.

Another important lesson learned was the value of doing outreach and education to the community in a variety of ways.

Delcie took many opportunities to conduct outreach about the project. She talked to people about the project during a



Weighing the waste

HAZWOPER training held in Mekoryuk that she attended. She put together a presentation for school children for Earth Day. She thanked the captain and crew in a newsletter. She posted pictures, facts, and information about the project on the Mekoryuk IGAP Facebook page. She also sent letters to campers and visited them at their homes to talk in person about the project. By carrying out the various levels of outreach she was able to reach the broader community and expose the project and the

importance of addressing the issue of solid waste at subsistence camps.



Mekoryuk has since had a turnover in IGAP staff. If you would like more information about Mekoryuk's project, please contact Emily Kloc at Zender Environmental at 907-444-4711 or ekloc@zendergroup.org. The Multi-Media/Community Environmental Demonstration Project Grant is funded by USEPA, and administered jointly by Zender Group and Alaska Native Tribal Health Consortium. To see other projects and learn more, visit <http://zendergroup.org/cedp.html>

Resource Circle

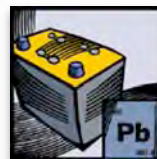


Sitting on the Fence...? A new summer resource is our fencing factsheet at : Tips in designing and purchasing your fence, a list of vendors, and some communities that recently purchased fences are included. View the sheet at www.zendergroup.org/docs/fencing.pdf .

To Freeze or not to Freeze... Also just out is our updated antifreeze recycler factsheet at http://www.zendergroup.org/docs/antifreeze_recycling_print.pdf. Why worry about antifreeze seeping into your landfill soil, or leaking out of drums at that site the last project used to discard their wastes? Recycle your antifreeze and you can protect your environment as well as save, or even make money. This sheet describes the basics of the recycling machine, gives operating and purchase costs, and provides tips such as requiring project contractors to use (and buy) your recycled antifreeze, and lists some village contacts that have a machine already.



Batteries are Special... Well, mainly because about two-thirds of their weight is toxic lead. Our battery backhaul factsheet was just updated with new and revised information and instructions on how to obtain your own "special permit" to fly out batteries. If you're new to your job or your community hasn't started backhauling batteries yet, this is a good sheet to read. Find it at: www.zendergroup.org/docs/battery_permit.pdf.



All Kidding Aside... Our youth are a great way to improve community attitudes and practices related to solid waste. Want to convince folks to pay for collection, stop littering, or participate in recycling? Often the way to adult's hearts and pocketbooks are their kids. We have a new sheet that lists lots of interesting internet resources for educating kids. Check it out at: http://www.zendergroup.org/docs/web_resources_for_kids.pdf



News Shorts...

USDA Awards Solid Waste Monies



Are you looking for funding to improve your solid waste situation? One source of funds if you need a larger pot money is USDA Rural Development. They operate a Water and Waste Grant (WWG) or Loan Program for projects that improve or construct a landfill, and a Pre-development and Planning Grant (PPG) Program to develop the required paperwork for new construction projects. Native Village of Sleetmute and Native Village of Noatak were recently awarded PPG's as a first step to getting a new landfill. Native Village of Levelock was just awarded funds for a dozer. Congratulations to these three tribes! If you are interested in these grants, refer to <http://www.zendergroup.org/docs/usda.pdf> for a program summary. Zender is funded to assist tribes and cities in applying for these USDA grants. If you are interested in assistance, contact Simone Sebalo at 277-2111.

FY 2014 Rural Alaska Community Environmental Job Training (RACEJT)



Do you have a project coming up in your village but don't have trained local residents to do the work? Do you want to hire a landfill operator, waste technician, site cleanup worker, Americorps Volunteer, or an additional IGAP staff person? RACEJT provides 168 free hours of environmental training and certifications. Training includes HAZWOPER, Freon Recovery, Confined Space, RALO, Forklift Operation, Spill Response, and more. RACEJT is held in Anchorage, over two 2-week sessions during the Spring, with a 2-week break in-between. Through scholarships and State of Alaska Department of Labor funds, full travel costs are typically covered. Expect RACEJT applications to be out in September or October 2013 and to be due this November. If you know someone looking for a job, refer them to our RACEJT webpage at <http://www.zendergroup.org/racejt.html> Call or email April Reed, Project Manager, at 717 4754 or areed@zendergroup.org .

CULTURE CORNER



Makiiraq Kapuukaraat "Gathering Marsh Buttercups"

Spring has come and gone, summer is here to greet people to continue with their subsistence activities. Spring was a time to step out and enjoy the fresh warming air to gather greens to prepare for another long winter. One of the first greens gathered during the season are the marsh buttercup greens. These tundra vegetables are called "kapuukaraat" in Yup'ik, and are nutritiously good for human health by providing a rich source of Vitamin C. These tundra marsh buttercups are normally a side dish for fresh seal meat, caribou meat, and/or can be added to the soup made with these meats.

Marsh buttercups are edibles gathered before their flowers sprout, and are prepared by picking them, cleaning, and boil with seal oil and water. These tundra vegetables are found on mossy edges of the lakes and in ponds along the coast of the Kuskokwim. If you found a lake with a wet mossy area, you are certain to find these underneath moss. If it's your first time, it is probably best to ask for advice from the local residents who are experienced and who generally know the locations of these greens. Some of the things to bring for this subsistence activity are: wader boots, warm flexible jacket, rubber gloves, a rake or 5' stick to comb the surface of the pond to release them to float, and a container to put them in. These greens are gathered for the winter by containing them in airtight zip-locks, so they can be enjoyed throughout the year with the meals prepared. Many of you have probably already stored some, and will find that they are a delicacy during the winter season. Next year, for those of you who haven't gone for these marsh buttercup greens, we hope you have the opportunity to gather some.

Calendar of Events and Deadlines

2013 DATE	EVENT/TRAINING	LOCATION	MORE INFO	FUNDING ANNOUNCEMENTS & DEADLINES
August 13-15	IGAP Peer Assistance	Anchorage, AK	Violet Yeaton: violety4@gmail.com	Rasmuson Foundation Deadline: <i>Accepted throughout the year.</i> http://www.rasmuson.org/index.php RurAL CAP Solid Waste Grants for communities in the Yukon Kuskokwim Coastal Area RurAL CAP is requesting proposals under the program called Yukon Kuskokwim Clean Coast Initiative – Solid Waste Assessment, Best Practices, Training and Clean Up. The maximum award dollar amount is anticipated to be high enough to make substantial improvement in your solid waste circumstances. The FY14 application is anticipated to be in October. Contact Jolene John, Project Supervisor, jjohn@ruralcap.com (907) 865-7358 for more information and to see if your community is eligible. US Fish and Wildlife Service Tribal Wildlife Grants Deadline: September 3, 2013
August 19-22	2013 Tribal Lands Resources Forum	Santa Ana Pueblo, NM	http://www4.nau.edu/itep/conferences/conf_r_tlf.asp	
August 20-22	7 Generations Training	Anchorage, AK	www.anthc.org/chs/ces/hve/7-generations.cfm	
Sept. 11-13	Zender Group Sustainable Solid Waste Management (SSWM) Training	Anchorage, AK	www.zendergroup.org/sw.html	
Sept. 16-18	PETE Grant Management Training	Anchorage, AK	http://tels.kalispeltribe.com/	
Sept. 19	USEPA Accounting and Administration for GAP Administrators and Bookkeepers	Anchorage, AK	Contact Santina Gay: gay.santina@epa.gov	
October 7-11	Tribal Environmental Leaders Summit – EPA Region 10	Spokane, WA	http://tels.kalispeltribe.com/	
October 21-23	Annual Elders and Youth Conference	Fairbanks, AK	www.firstalaskans.org	
November 12-15	Alaska Tribal Conference on Environmental Management (ATCEM)	Anchorage, AK	http://www.anthc.org/cs/dehe/sustops/atcem.cfm	
December 9-13	Zender Group “Boot Camp” Combined Integrated Solid Waste Management Plan (ISWMP) and Sustainable Solid Waste Management (SSWM) Training	Anchorage, AK	Contact Emily Kloc 444-4711, ekloc@zendergroup.org	
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_Aug_2013.doc .				

Summer Elder Wisdom:



For this issue, our words come not from a Native Elder, but a State of Alaska Politician:

“I learned more that day than is written in all the boxes of legal briefs in this long lasting court battle. I understand the strength, care and values that subsistence gives to Katie John’s family, and to the thousands of similar families from Metlakatla to Bethel, from Noorvik to Ft. Yukon to Barrow. I know – we all know – that what Katie John does is not wrong. It is right – right for her, right for the village.”

- Governor Tony Knowles, August 27, 2001

Katie John, Ahtna Athabaskan Elder,
Born in Batzulnetas to the last chief of that village.

1915 – May 31, 2013

Thank you.



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The mission of Zender Environmental Health and Research Group, a non-profit 501(c)3 organization, is to assist underserved communities in developing programmatic capacity and community resiliency in environmental health issues. Visit us on the web at www.zendergroup.org

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