

**YRITWC  
Executive Committee**

**Alaska Region**

Yukon Flats  
Chief Clarence Alexander  
2nd Chief James Nathaniel Sr.  
(Alt)

Tanana River  
Edna Hancock  
Chief Charlie Stevens (Alt)

Middle Yukon  
Chief Peter Captain Sr.  
Pat Sweetsir (Alt)

Koyukuk River  
Eliza Jones  
Karen Kriska (Alt)

Lower Yukon  
Olga Changsak  
Chief James Landlord (Alt)

Innoko Confluence  
Harry Maillelle  
Chief Carl Jerue, Jr. (Alt)  
John Deck (Alt)

Coastal Communities  
Ted Hamilton  
Elmir Simon (Alt)

**Yukon Territory**

Dahka Tlingit Nation  
Clan Leader Harold Gatensby  
Carl Sidney (Alt)

Vuntut Gwich'in/  
Tr'ondek Hwech'in  
Chief Darren Taylor

Northern Tutchone  
Chief Darren Isaac  
Chief Edie Skookum (Alt)

Kaska Tribal Council  
Sam Donnessey

Southern Tutchone  
Geraldine Pope

Kwanlin Dun  
Jessie Dawson  
Leslie McDiarmid (Alt)

White River First Nation  
Chief David Johnny  
Chief Angela Demit (Alt)

**Elder Advisors**

Sarah James  
Nick Andrew Sr.  
Stanley James



**Yukon River Inter-Tribal Watershed Council**

*To Be Able to Drink Water from the Yukon River*

*Vol 1 Issue 1*

**Yukon River Inter-Tribal Watershed Council Receives High Honors from Harvard University's "Honoring Nations" Award Program**



*Stephen Cornell, Native Nations Institute for Leadership (NNI); Chief Peter Captain Sr., YRITWC; Heather Kendell Miller, Native American Rights Fund; Former Grand Chief Clarence Alexander, YRITWC; Chief James Landlord, YRITWC and Pat Sweetsir, YRITWC at the Honoring Nations Ceremony. (Photo compliments of Honoring Nations)*

TULSA, OK, Nov. 1 – The Yukon River Inter-Tribal Watershed Council (YRITWC) received “High Honors” from Harvard University’s Honoring Nations award program for its successful work with Indigenous governments in Alaska and Canada. Honoring Nations is an extremely competitive and prestigious award program that recognizes innovation and excellence in American Indian tribal governance. The YRITWC received the highest award possible, which includes \$10,000 to share their success stories with other tribal and non-tribal governments across the continent.

Peter M. Captain, Sr., First Chief of the Loudon Tribal Council and Chairperson of the YRITWC Alaska Executive Committee, said, “We are elated about receiving this award. We formed in 1997 out of concern for the health of the fish, animals, and people. All the hard work of all the Tribes and our staff—everyone doing their part—has brought us to this point where we are actually cleaning up the River and receiving recognition for it.”

Throughout the Yukon River watershed most of the indigenous peoples still rely on hunting and fishing to provide much of their diet, though the area has received contamination from mining, military, and municipal solid waste. The YRITWC has initiated recycling programs, landfill and sewage lagoon improvements, toxic waste and recyclable materials backhauling (over 1.3 million pounds this year), and military and mining site reclamation with many communities throughout the watershed. Combining traditional perspectives with technical tools from modern scientific disciplines, the YRITWC has also developed community-based water quality monitoring, mapping, and environmental education programs that are now implemented throughout the region.

Pat Sweetsir, YRITWC Alaska Executive Committee member, stated “the main ingredient for success has been our inclusive approach to our work that has resulted in meaningful partnerships with the US Geological Survey, the US Environmental Protection Agency, Bureau of

*(Continued on page 11)*

## Yukon Region Director Bonnie Harpe



Bonnie Harpe with her daughter Alison.  
Photo by Rosalie Brandon

The Yukon Regional office has been very busy since our last newsletter. The 5th Biannual Summit was held this past summer in Moosehide, Dawson City and was a huge success. We had over 250 people in attendance for the meetings and training sessions. I would like to thank Mr. Glen Everitt and the leadership of the Tr'ondek Hwech'in and all citizens of the First Nation, for your generous hospitality and

for welcoming summit participants to the Traditional Land of the Han people.

We recently concluded our community information sessions on Coalbed Methane (CBM). In collaboration with Canadian Parks and Wilderness Society (CPAWS), we brought guest speakers from Durango, Colorado; Fernie, British Columbia and Rosebud, Alberta to the Yukon Territory share their knowledge of CBM as they all have CBM producing wells within their regions. We appreciate them for taking the time out of their busy lives to come to the Yukon and share their experiences with our people. Thank you to all 13 Yukon First Nation Communities for welcoming us to your Traditional Territory and for participating in these very important information sessions. And thank you to all the Lands and Resource staffs of each of the First Nations for helping me organize these community presentations. We had over 60 participants at our second presentation in Whitehorse as well and strong participation in each of the communities. Thank you to the staff at CPAWS for agreeing to work with the YRITWC to get this important message out to everyone.

The work on the Consultation Protocol is progressing along well thanks to the funding provided by the Walter & Duncan Gordon Foundation. The working group was formed with representatives from both the Yukon Territory and Alaska. Some of the representatives were chosen at this summer's summit meeting and some were appointed by their Tribal Councils and First Nations. With the help of Lucy Simpson from the Indian Law Resource Center in Montana, we have drafted suggestions and a series of recommendations to present to the working group. A "draft" copy of the protocol will be ready in March for review by the working group. Once the draft is accepted by the working group it will be presented to the leaders for their final approval.

We hosted a two day Water Quality Monitoring training in Whitehorse on March 8 & 9, 2006. At this time we will be training six First Nations participants on the basics of water quality monitoring. The goal of this project is to have First Nations people trained in water quality sampling techniques located at multiple locations throughout the Yukon River watershed performing similar sampling activities. La'ona DeWilde, from the Fairbanks office instructed along with Doug Davidge an Environmental Assessment Officer with

## Alaska Region Director Rob Rosenfeld

*YRITWC's Growth Spurt*

The past several months have been exciting for the Yukon River Inter-Tribal Watershed Council. The Alaska office added three new programs, expanded current programs and grew to a staff of twelve employees. Our growth greatly increases our ability to carryout the mission of the organization. During this time, the we also received a prominent award for work accomplished, extended a thank you to our partners on television and compiled success stories that highlight the accomplishments of the many Yukon River watershed communities.

The Yukon River Inter-Tribal Watershed Council's areas of focus includes: the Backhaul Program, Tribal Capacity Building Environmental Education Program, the Brownfield Program, and the Water Quality and Mapping Programs. These programs are staffed and delivered by eleven full-time employees and a half-time Development Director. Seven staff members are located in the Fairbanks office and four are in the Anchorage office. Additionally YRITWC expects to add two seasonal employees this summer. One is Joy Shockley, who will be returning with her undergraduate degree from Dartmouth University. As you read through this newsletter issue, you will be introduced to new staff and programs, and you will recognize the staff members who continue to work with the Yukon River Inter-Tribal Watershed.

In November YRITWC received the High Honors award from the Honoring Nations Award Program given annually by the Harvard Project on American Indian Economic Development. Executive board members Chief Peter Captain Sr., Former Grand Chief Clarence Alexander, Pat Sweetsir, and Chief James Landlord accepted the award on behalf of the organization during the National Congress for American Indians annual meeting.

A chance to thank company sponsors who are key supporters in YRITWC's backhaul initiative came during Super Bowl XL. ABC-TV aired a brief commercial extending our gratitude to companies willing to participate in the removal of unwanted wastes and materials. Yutana Barge Lines was the first partner to work with YRITWC on this initiative. With help from Matt Sweetsir at YBL, an extensive amount of waste was shipped out of the Yukon River Watershed. Through a coordinated effort between Yukon River watershed communities, YBL, the Alaska Railroad and many airlines, shipping, trucking and recycling companies, over 1.3 million pounds of hazardous and recyclable materials were removed from the river during the 2005 backhaul season.

Recently YRITWC assisted with the printing of a booklet titled "Success Stories," which highlights many successful and innovative tribal environmental programs in the Yukon River Watershed. These stories provide a broad view of the different type of environmental actions that rural Alaska communities are taking.

YRITWC is making a difference towards the health of the Yukon River because of the guidance given by the Yukon River tribes, the leadership provided by our executive committees, the generosity offered by our supporters and partners, and the abilities of our staff.

## The YRITWC's Monitoring Program, a Watershed Wide Effort!



*Bishop Mountain located on the Yukon River between Galena and Koyukuk. Photo by La'ona DeWilde*

The YRITWC watershed wide waterquality program is a study to monitor the overall health of the Yukon River by creating a baseline dataset. The baseline dataset can help us understand trends to help predict future changes as well as help identify point source pollutions to provide insight into impacts to our environment. The YRITWC will work with USGS and tribal technicians to sample water characteristics at important locations along the river. Many of the sampling sites will correspond with sites USGS has sampled over the previous 5 years; our data will add to data previously collected by the USGS.

The proposed sites will be sampled 6 times during open water (~May 15 through September 30) and once before break-up in early spring for a total of 7 times a season. The tentative sampling schedule is dependent on discharge which is, in turn, dependent on snowmelt. Tribal technicians will sample sites above and below their villages. We are searching for more volunteer technicians who can sample for us.

Water quality information will be obtained by using YSI meters and probes, collecting water samples for laboratory analyses and collecting macro-invertebrates for the bio-assessment component of our program. At each site, a photo and GPS point will be recorded. A sampling event our volunteers will take entails three parts, 1) taking field measurements, 2) taking water samples to send to USGS labs to be analyzed for 90 different constituents, 3) collection of diatoms and macro-invertebrates from

habitat traps 3 times during the summer. Technicians will pull up the traps and wash all of the macro-invertebrates into a container to be preserved and sent to the YRITWC so we can do population analysis as part of the bio-monitoring program.

The YRITWC is focused on keeping this program alive far into the future; the longer the dataset the better for analyzing trends and finding point source pollution. The long term success of this program is hinged on the development, capacity and involvement of the tribes who live in the watershed. If the tribes develop their local village programs, write their QAPP and local residents build their understanding and technical skills in this area, especially the youth, we are assuring the future of this program. For this reason we urge tribal technicians to not only become a partner/volunteer in this program by collecting samples, but to also develop local programs. To develop a local program you need to obtain training, write your QAPP and tailor your grants to include water quality monitoring as part of your environmental programs. Please refer to our websites at <http://www.yritwc.com/waterquality/wqmenu1.htm> for information on where to get training, QAPP templates, slide shows, and detailed information about the YRITWC's monitoring program.

As the program evolves we can focus on trends specific to the basin's response to climate change such as; permafrost melt, fire Increase, increase in human population (sewage, agriculture waste), lakes warming and receding, atmospheric pollutants and an increases in exotic species. The database can also serve to help locate point source pollution, such as; sewage systems, contaminants in the form of heavy metals and other trace elements from mining, pesticides and atmospheric deposition, petroleum products and chlorinated solvents. Currently it is difficult to demonstrate point source pollution if there is no baseline to measure against. One of our goals is to

locate the sources of contaminants in our environment and determine the negative effects on our animal populations, plants and our body. The answer is research by mapping how contaminants travel from the source to the victim; combined with political action and education to stop the source, along with action to help the victims. Please contact La'ona DeWilde if you are interested in joining this important watershed wide effort at [ladewilde@yritwc.com](mailto:ladewilde@yritwc.com) or 451-2546. Anna'Basse.



*Two students test water at culture camp in the Rapids above Tanana. Photo by Geoff Johnson*

**Inter-Tribal Accord Signatories**

Alakanuk Traditional Council  
 Alatna Village Council  
 Algaaciq Tribal Council  
 Allakaket Traditional Council  
 Anvik Tribal Council  
 Arctic Village Council  
 Asa'carsarmiut Tribal Council  
 Beaver Tribal Council  
 Birch Creek Tribal Council  
 Canyon Village Council  
 Carcross/Tagish First Nation  
 Chalkyitsik Village Council  
 Chevak Native Council  
 Chuloonawick Native Council  
 Circle Village Council  
 Eagle Traditional Council  
 Emmonak Traditional Council  
 Evansville Tribal Council  
 Gwichyaa Zhee Gwich'in Tribal Government  
 Grayling IRA Council  
 Hamilton Tribal Council  
 Holy Cross Traditional Council  
 Hooper Bay Native Village  
 Hughes Village Council  
 Huslia Tribal Council  
 Iqurmiut Tribal Council  
 Kaltag Tribal Council  
 Kluane First Nation  
 Kotlik Traditional Council  
 Koyukuk Tribal Council  
 Kwanlin Dun First Nation  
 Liard First Nation  
 Little Salmon/Carmacks First Nation  
 Louden Tribal Council  
 Marshall Traditional Council  
 Mentasta Village Council  
 Na-cho Nyak Dun First Nation  
 Native Village of Bill Moore's Slough  
 Native Village of Minto  
 Native Village of Shaktoolik  
 Native Village of Venetie Tribal Government  
 Nenana Native Council  
 Nulato Tribal Council  
 Ohogamiut Traditional Council  
 Paimiut Traditional Council  
 Pilot Station Tribal Council  
 Pitka's Point Traditional Council  
 Ruby Tribal Council  
 Scammon Bay Traditional Council  
 Selkirk First Nation  
 Shageluk IRA Council  
 Stebbins Community Association  
 Stevens Village  
 Ta'an Kwach'an First Nation  
 Taku River Tlingit First Nation  
 Tanana Tribal Council  
 Teslin Tlingit First Nation  
 Tr'on Dek Hweck'in First Nation  
 Venetie Village Council  
 Vuntut Gwichin First Nation  
 White River First nation  
 Yupit of Andreafski

Environment Canada.

We received funding dollars to create an aboriginal youth council for the YRITWC. This is a directive to the YRITWC staff from last summer's summit meeting. The YRITWC leadership wants youth to connect, participate and give input on issues like climate change, policy making, governance and leadership development. The youth council will be comprised of one or more youth delegates from each of the Yukon First Nations that has signed the YRITWC Inter-Tribal Accord.

The Pembina Institute in Calgary, Alberta will be hosting a spring and summer session on the Oil and Gas Industry. The information on these sessions and the contact person at Pembina has been sent to all of the Yukon First Nations.

If you require further information about the various projects we have in the works, please call our office at (867) 393-2199 or fax us at (867) 393-2431.

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## YRITWC Brownfield Tribal Response Program

*By Malinda Chase*

Ask someone in Interior Alaska to imagine and describe a brownfield, and after a moment you might get a slight smile with a response describing a field full of dry brown grass like a clearing that you find in late September during the fall moose hunt. Ask someone from the Alaska coast what a brownfield is and you may get a response that comes from a similar seasonal perspective. "The tundra turns brown in the fall time, when the plants die for winter. When living things die, they turn brown," says my co-worker Rebecca Napoleon, originally from Hooper Bay. "When things are dead, it is like a dead field of brown."

For most of us though, the term brownfield is not an everyday word that we use to describe the land around us. Yet in the environmental arena, a brownfield has a specific meaning, which relates to the way my co-worker described a brownfield from her Yupik perspective. Unofficially a 'brownfield' is a site – land or a structure – that is contaminated and upon cleanup is targeted for reuse. Understandably a site, such as land, that may be contaminated could turn from green to brown, or a structure with hazardous materials in it could negatively impact the environment. The Environmental Protection Agency's formal definition states that "a brownfield site means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."

Buildings or lands that are perceived to be contaminated or have some kind of environmental concern can pose a problem to community land use and development. "Environmental conditions (with a building or land) often lead to blight in a community, which can in turn lead to decreased property values (and use) in the community," says John Carnahan, the Brownfield Coordinator for the Alaska Department of Environmental Conservation. "Brownfield assistance can often help communities deal with this type of blight." Blight is considered anything - in this case either real or perceived contamination - that hinders the use of a property or structure. Communities can play an important role in determining the most beneficial use for a property or structure.

At the Yukon River Inter-Tribal Watershed Council (YRITWC), the term brownfield is increasingly being heard, explained, and untangled. Last August YRITWC received an EPA award to establish a Brownfield Tribal Response Program. The program is one of a handful of brownfield response programs that are new to Alaska. The program intends to lay the initial path for identification, assessment, cleanup and reuse of certain contaminated areas in the Yukon River Watershed. The program responds to a directive given by the early YRITWC leaders.

## Contaminants Mapping in the Yukon River Watershed

Over the past year the YRITWC staff traveled to villages throughout the Yukon River Watershed to identify and map sites in the watershed thought to be possible contaminant risks. These sites are known contaminated places or sites that may become a risk in the future. The identification and mapping of these areas is a collaborative effort among Native tribes, a variety of agencies and the YRITWC with the support offered by the Lannan Foundation. The information collected is combined with existing data to build databases that will be available to protect and sustain the Yukon River ecosystem. Developing GIS maps can play an important role in Yukon River communities by facilitating organizational development, remediating contaminated sites and acquiring the necessary resources to spur responsible development and protect important areas.

As of February our inventory of contaminants risks included 370 sites in 23 communities. These sites include everything from sewage lagoons and dump sites to old tank farms and items that could be hauled out of the community such as old cars, batteries or computers. Many tribal governments, represented by their environmental technician and individuals assist in this

project by accompanying YRITWC staff around their village to map and discuss sites. In many places tribal governments or other local entities provide data they have collected in their mapping effort. In some cases, this mapping follows or is completed as part of the GIS training offered by the Science, Mapping and Research Department staff.

Recently a GIS training was held in St. Mary's. Representatives of the communities of Emmonak, Kotlik, Mountain Village, Pilot Station, Pitka's Point, Anvik and St. Mary's attended. The training included hands on lessons in GIS mapping software and hardware; presentations about contaminants mapping, water quality monitoring and climate change; and a field trip to collect GPS information on potential contaminants sites in Pitka's

Point. When asked about hosting the GIS training in St. Mary's, Serena Alstrom said that "utilizing the different types of training hosted in rural communities benefits the tribe in many ways. The Mapping and Water Quality training that was held in St. Mary's was a huge success. We had interested participants; including some St. Mary's high school students, and we need to build from there." Mike Grundberg, the Anvik Tribal Council Environmental Coordinator, attended the workshop and said that the "training was well organized and professional, but presented the information in easy to understand terms. The information was also very relevant to the objectives and needs of our Environmental Programs. The YRITWC Staff is professional and caring, and also very fun to work with, plus they offer assistance and ad-

vice after the trainings are complete. There may be other sources for this type of training, but I doubt that they can compare with the YRITWC trainings when it comes to personal attention and focus on the specific needs of Tribes on the Yukon. The YRITWC is a very valuable resource for Tribes and their Environmental Programs. I eagerly look forward to working with the YRITWC in the future."

Currently there is an effort to compile contaminant site information online at the YRITWC

website so that it can be used by communities. We will make the data available as interactive maps on the website that include links to databases and photos.

Contaminant mapping is an important ongoing project in the watershed. Our organization plans to continue collecting site information for as long as communities have concerns about what is brought onto the land. We'd like to thank everyone for their participation and for making this project such a great success. If you would like to get involved in this project by sending us data, voicing your concerns, attending GIS training or escorting YRITWC staff around your community, contact Laura Phillips (lphillips@yritwc.com) or La'ona DeWilde (ladewilde@yritwc.com) at (907) 451-2530. You can find out more about this and other YRITWC programs at [www.yritwc.com](http://www.yritwc.com).



*Mike Moses, La'ona DeWilde and Jennifer Kozevnikoff map the location of an abandoned building in Pitka's Point during the St. Mary's GIS workshop. Photo by Laura Phillips*

# Upcoming Events, Trainings, Conferences, and Gatherings

EVENT	DATE & LOCATION	CONTACT
YRITWC Annual Water Quality Monitoring Training	March 21-23 Fairbanks	La'ona DeWilde 451-2546 ladewilde@yritwc.com
Tribal Board Training (Circuit Rider)	April 4-5 Inlet Tower, Anchorage	Rebecca Napoleon 258-3337 rnapoleon@yritwc.com
Water Quality Training in Anvik	April, Date: TBA Anvik	La'ona DeWilde 451-2546 ladewilde@yritwc.com
YRITWC Brownfields Tribal Response Training	May, Date: TBA Fairbanks	Malinda Chase 451-2548 mchase@yritwc.com
Grants Management/Financial Management	May 3-4 Inlet Tower and Suites Hotel, Anchorage	Rebecca Napoleon 258-3337 rnapoleon@yritwc.com
Tribal Board Training	May 24-25 Inlet Tower and Suites Hotel, Anchorage	Rebecca Napoleon 258-3337 rnapoleon@yritwc.com



**Remove the following items from your community:**

Junk Vehicles - Old Batteries-lead acid and household Old computers and office equipment - Sno-Go's, ATV's and Boats - and many other items

For more information : 907-258-337 or 907-451-2530

**Capacity Building Training Opportunities for Partner Tribes  
*Circuit Rider Program***

The Yukon River Inter-Tribal Watershed Council, in conjunction with the Foraker Group, will be conducting a series of capacity-building training sessions for Tribal Board Members, Tribal Administrators and/or other designated representatives in Anchorage, Alaska. The trainings are made possible through the Circuit Rider Grant Program from the Environmental Protection Agency (EPA).

The Tribal Council Board Trainings will also be in conjunction with the Foraker Group, conducted primarily by Mr. Dennis McMillian, president of the organization who has a long history of working with rural communities. The Board Training sessions will be held on April 4-5 and May 24-25, 2006, also at the Inlet Tower Hotel and Suites.

Although the training sessions will be a priority for Circuit Rider Villages, all interested Yukon River Watershed signatories are urged to contact Rebecca Napoleon ((907) 258-3337, rnapoleon@yritwc.com) and ask to be put on the training waiting list.

## Thank You to Our Donors

Oak Foundation - Patagonia Foundation - US EPA Goldman Fund - Mead Foundation - Alaska Conservation Foundation - Bancker-Williams Foundation - Sweetgrass Foundation - Environment Canada - Department of Northern Indian Affairs Canada - Northern Ecosystem Initiative - Honor the Earth/Tides Foundation - Walter Duncan and Gordon Foundation - Bureau of Land Management - Ridolfi Inc. - Lannan Foundation - Fund for Indigenous Rights and the Environment - Armington Foundation - US Department of Health and Social Services/Administration for Native Americans - Summit Consulting

## Communities get \$\$\$ for recycling aluminum cans!



Call ALPAR at (907) 274-3266.

Sponsors: Airline members of the Alaska Air Carriers Association &



## “Renewable Energy From the Sun”

by Brian Hirsch, Development Director

With the darkest part of this winter behind us, this is a good time to think about energy from the sun. A solar energy system, which has a number of key parts, can provide a way to capture this energy. Solar panels that make electricity from the sun are called photovoltaic panels or PVs. Over the past few years Venetie and Arctic Village - communities within the Yukon River watershed - successfully installed PV systems that produce power for their washeteria buildings.

The main parts of a PV system are the solar or PV panels and an inverter. The PV panels turn sunshine into electricity and the inverter changes the electricity from the solar panels into a form that is useful for a building. The system may also include batteries, a charge controller to save the energy for use at another time, lots of wires, safety switches and warning stickers.

Most PV systems have the solar panels attached to the top of a building following the slope of the roof. But PV panels make more electricity when the sunlight directly shines on them. When PV panels are installed to follow the sun, as it moves across the sky, the panels capture more sunlight. With this system more energy is caught than if the PV panels were fixed in one place like on a roof. To get the PV panels to follow the sun and increase energy production, a “tracker” is used. A tracker is similar to a satellite dish that rotates to find the best signal for your TV show.

Photo 1 and Photo 2 show the different PV systems that are installed in Arctic Village. Photo 1 is a standard, fixed PV system with panels attached to the roof of the Arctic Village washeteria. Photo 2 is a PV system with a tracker that allows the solar panels to follow the sun as it moves across the sky and changes its path over the seasons.

In places like California the sun’s path does not change much from season to season and using a tracker does not increase energy production by a large amount. In northern regions, however, there is a big difference between the sun’s path across the sky in February as opposed to June.

Every situation will be slightly different. In Venetie for example, Lance Whitwell, the tribe’s energy manager, reports that the tracker results in the doubling of energy production each year. That means ten solar panels on a tracking system produce as much electricity as twenty of the same solar panels fixed on a roof.

We know energy is expensive, especially with rising fuel prices these days. So how much does one of these PV systems cost? Every situation will be different. Shipping costs and where the system will be installed affect costs. After almost 30 years of improvements and declining costs for PV panels, the prices for PV panels are now increasing, though slower than the rest of the energy industry. But once you pay for the equipment, you hopefully won’t have any more costs for ten or twenty years.

The PV tracking system shown in Photo 2 has a capacity of 2200 watts and cost almost \$30,000 with shipping. When the sun shines on this system it produces enough energy to light 22 100-watt light bulbs. The fixed-roof system in Photo 1 has a capacity of 1200 watts and costs about \$14,000. It powers 12 100-watt light bulbs but for less time over the year, because there is no tracker. This is a rough estimate but offers a sense of the cost— a solar energy system is not something that you are going to run to the local store and pay for in cash.

In general the PV tracking system is a better deal when com-

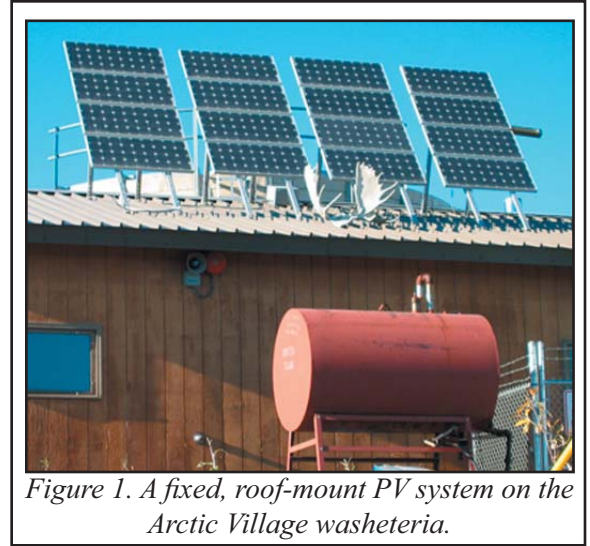


Figure 1. A fixed, roof-mount PV system on the Arctic Village washeteria.



Figure 2. A state-of-the-art PV tracking system, and two local installers, near the Arctic Village washeteria.

## Welcome Aboard New YRITWC Staff!

### Rebecca Napoleon, *Circuit Rider*



Rebecca Napoleon is a Yup'ik Eskimo from the community of Hooper Bay, located on the southwest coast of Alaska, on the Bering Sea. Rebecca has a Bachelors Degree in Cultural Anthropology with a

Minor in Arctic Studies from the University of Alaska, Fairbanks. She has worked in various capacities in Alaska, as a researcher/ethnographer, youth service coordinator, cultural heritage and language instructor, as an employment counselor, a national ethnography trainer, and as a director of a circumpolar educational organization. She also have served on several regional/state and national boards/ commissions, such as the Lower Yukon Regional School Board, the Alaska Women's Commission, the Roger Lang Clearinghouse for Circumpolar Education and the National Science Foundation's Education and Resources Group.

### Malinda Chase, *Brownfields Coordinator*

Malinda Chase works as the program manager for the Brownfields Tribal Response Program. In her position, Malinda will work collaboratively with the Yukon River Watershed communities to identify and inventory potential brownfields in their area. She lives with her daughter in Fairbanks, however, her "home" is Anvik where she has family ties. Anvik is an Athabascan community located on the lower-middle Yukon River, at the mouth of the Anvik River. Malinda has a bachelor's degree in American Studies from Wellesley College and graduate work in Cross-Cultural Studies with an emphasis in rural development. Her previous experience is in community planning, editing, post-secondary distance education and youth programming. And she has a strong interest in Deg Xinag, the Athabascan language of the Anvik-Shageluk area. When she has the chance Malinda loves cutting and preserving salmon, picnics and being in a boat on any river, especially the Yukon River.



### Anna Pratt, *Solid Waste Coordinator*

Anna (Stevens) Pratt was born and raised in St. Marys, and is Yup'ik Eskimo. She is currently working with us in the Solid waste/Backhaul Program.

## Celebrate Earth Day 2006!

April 22

Walk to the river and pick up trash

Start seeds for your garden

For more info: <http://www.earthday.net/>

<http://www.getgreen.com/atstore.html>

### Roslyn Petersen

#### *Administrative Assistant*

Roslyn joined the YRITWC staff in October 2005 and moved from a part time to a full time permanent position in December.



Born and raised in the Yukon Flats, Roslyn brings over 20 years of career administrative experience with her from her previous work at Tanana Chiefs Conference, University of Alaska Statewide, Dept. of Natural Resources, Dept. of Labor and Doyon, Limited. Roslyn has a broad knowledge of the Interior and its peoples. She is our front line staff and is always happy to assist.

### Loretta Henderson

#### *Backhaul and Solid Waste Coordinator*

Loretta came to us from the east coast of the U.S. and



she is proud to say she is Canadian. Previously she lived and worked in Alaska for the school district in Galena and Homer.

Loretta is very excited about the child like joy of coordinating a giant clean up. And she claims she

will bite her tongue before she sings the clean up song to everyone she meets along the river. Loretta says she is mostly just happy to be a part of the organization and help out in anyway she can. Loretta will be finishing her Master's degree this year and looks forward to spending time on the river.

### Laura Phillips

#### *Science, Research and Mapping Technician*



Growing up in North Florida, my parents instilled in me a love for wildlife and the outdoors. I received a degree in Wildlife Ecology and Conservation from the University of Florida in 1997.

After receiving my degree, I worked on a number of wildlife projects related to the study of and conservation strategies for birds of prey. I moved to Alaska to complete my Master's degree in Wildlife Biology in 2001. My thesis study was conducted on the North Slope of Alaska and investigated the migration ecology of king eiders in relation to oil development in the Beaufort Sea. I feel my background in study design, GIS mapping, field work, data analysis, and conservation will be an asset to the YRITWC Science, Research and Mapping Program.

## Paulina Stickman - Interior Alaska Koyukon Athabascan Elder

*Paulina Stickman is an elder from Nulato Alaska. She has been teaching the Koyukon Athabascan language and culture to youth since 1971. She sat down with Darcie Warden, YRITWC staff, to share her history, her observations of the land and weather, and her message to the youth.*

Paulina is the oldest of eight children. Her parents are Humphrey Ambrose and Mildred Ambrose. When Paulina was a child, she lived in Kaiyuk during the winters through early September and stayed in fish camp during the summers. Additionally, her family stayed in Nulato for a couple of weeks during Christmas and in May. She learned how to trap and set fish traps under the ice with her father, and cut enough fish with her family each year to last two dog teams all winter. They didn't have snow-machines, so they traveled by dog team or walked. They didn't have television, only relying on a radio during limited hours to conserve the battery. Later in life, she took her GED and furthered her education to obtain training to teach her native language.

### Business on the River

The local store was extremely flexible with community members compared to today's standards, combining trade and monetary transactions. When folks were unable to pay for supplies upfront, the store let them pay at the end of the fishing season with bundles of fish, or they accepted bundles of fish upfront for supplies.

During open water season, an inboard motor boat/barge sailed from fish camp to fish camp selling supplies and groceries. The barge would travel on the river selling everything they had until it was gone.

### Changes in the Land and Weather

When Paulina was a child, she didn't see wolf and moose tracks like she does now. On the other hand, she used to see more rabbit and fox tracks than there are now, but she did note that the rabbit population is growing again. They used to bring lots of rabbits home for food. Paulina and her family would trap the foxes that ate the rabbits.

The weather used to be much colder in the winter, reaching 60 – 70 degrees below zero. Paulina would walk during the extreme cold times of the year. In order to stay warm, she and her family wore fur mittens and boots made out of tanned rabbit skins, and made warm hooded parkas with goose feathers. When the rabbit fur wore thin in the gloves they replaced it with new fur. They didn't throw anything away.

Finally, Paulina said the Yukon River has changed over time. She sees more sand bars now than she used to. She also spoke about the big flood of 1963. The flood occurred during break-up, inundating the village with

massive chunks of ice and water. She said the village was a mess, taking over a month to clean up while residents lived in tents on the hill.

### Fishing

As a child, Paulina lived in fish camp every summer. During her childhood there were no federal or state subsistence fishing regulations. Therefore, the fish wheel, located four miles below Nulato, turned almost all of the time. She remembers the abundance of salmon they used to catch from the main river. They caught enough fish to fill their smoke house with eating fish. Further, at fish camp, they would fill 14 racks of dog fish for their dog teams.

Paulina says there are not as many fish in the river now. The federal and state regulations now in place for fish nets are hard on elders. They are unable to check their net, pull them in and put them back out without difficulty. Most elders need help to catch their fish for the season.

### Teaching and Language

In 1971 Paulina started teaching. She learned how to read and write the Koyukon language. She taught students how to tan skins, make fish skin boots (water boots), Caribou leggings and Beaver skins. She spends half hour sessions in the classroom at the school with students teaching language. She works with youth to put Koyukon words into sentences. They learn native names for the villages, populations, body parts, feelings and learn to count to ten.

### Paulina's Message to the Youth

Paulina would like to see the youth keep up the old ways. Paulina remembers a women's sewing group that used to gather a long time ago. The oldest girl in the family was taught to sew, bead and make patterns. As a child Paulina used to make money by helping adults and elders in the community.

She encourages youth to help elders with house cleaning, cutting wood, hauling water, feeding their dogs and checking fish nets. She would like youth to keep and use fish camps every summer. She also wants youth to keep up their schooling, because it helps with employment opportunities in the future. She would like to see youth stay busy, take care of themselves, and take care of the environment.

**REDUCE THE USE: *landfill reduction tips***By *Loretta Henderson****Backhaul and Recycling Coordinator***

The problem of what to do with solid waste in our communities is an issue that many of us think about. With a variety of solutions to consider, why not think about promoting lifestyle choices that Reduce the Use of the present landfill? A backhaul program reduces the amount of goods that enter the landfill and extends the life of the present site. Items such as cars, vehicles, batteries, computers, keyboards, fax machines, printers, TV's, fridges, freezers, washers, dryers, stoves can be backhauled. We work with Yutana Barge Lines to bring these goods to Nenana where they are shipped to recycling centers in Fairbanks, Anchorage and Seattle.

Another method to reduce the amount of waste that enters the landfill is to utilize green cleaning products. Out of window cleaner? Try vinegar and water to wash away those fingerprints. What about baking soda instead of counter cleaner and lemon juice for wood polish? These old fashion options are making a comeback amongst those who want to Reduce the Use. These products can be substituted for traditional cleaners therefore Reducing the Use of the present landfill and keeping many hazardous household waste products out of the landfill and the environment. The box below highlights a few low cost options to substitute for traditional household cleaning products.

**THE TOP THREE GREEN CLEANERS THAT WILL CLEAN JUST ABOUT ANYTHING!**

1. Baking Soda is alkaline and therefore works well on acidic substances such as proteins, grease and messes. It is slightly abrasive and can be used for scouring. It is also a natural deodorizer and grease cutter and has mild bleach properties.
2. Vinegar is acidic, it dissolves scale, inhibits mold, and cuts soap scum. It works well on alkaline substances and stains such as coffee, rust, tea and liquor.
3. Simple Castile Soap made with olive oil and Vegetable Based Soap such as Murphy's oil soap has a neutral pH. Soap cleans by attaching to soil at the molecular level, so that soil can be rinsed away with water.

**Energy Saving Tip**

Did you know that you are using electricity even while things are turned off? To conserve electricity and save money, use a power strip and turn it off when you are done.

**Online Funding Resources**GuideStar - [www.guidestar.org](http://www.guidestar.org)

This resource is good if you know about a foundation you want to research. You can obtain information about who they have provided grants to in the past.

The Foundation Directory Online

<http://fconline.fdncenter.org>

This resource focuses on providing foundation information and has an intuitive, easy-to-use website design. There is a membership fee so for most grantwriters, one of the \$19.99 or \$29.99 packages would be enough to get you started.

A Proposal Writing Short Course

<http://fdncenter.org/learn/shortcourse/prop1.html>

This site provides a clear explanation of the basic components of a grant. If you're new to grantwriting this site will save many hours of frustration.

Catalog of Federal Domestic Assistance

<http://www.cfda.gov>

This website provides access to the federal funding programs database. You can read the full application and learn who to contact with any questions.

There is an option to sign up for the free notification service. Select the federal departments and/or agencies for which you'd like email updates and the next day, you'll get a daily email with any grant opportunities that fit your criteria.

Grants.gov - [www.grants.gov](http://www.grants.gov)

Grants.gov is excellent for federal opportunities.

**Scholarship Opportunity**

Scholarship for American Indian/Alaska Native pursuing a degree in the Natural Resources field

Deadline: April 1, 2006

Contact: American Indian/Alaska Native Employees Association (AIANEA)

Website: [www.aianea.com](http://www.aianea.com)

Two scholarships will be awarded to American Indian/Alaska Native student pursuing a degree in the natural resources field, who is or will be attending an accredited college or university. The Opening Date to apply is January 1, 2006 and the Closing Date is April 1, 2006. The Notification Date for the selected individuals will be May 1, 2006. The scholarship application and information can also be accessed on the AIANEA website: [www.aianea.com](http://www.aianea.com).

Land Management, and more than 23 transportation partners including Yutana Barge lines, the Alaska Railroad, and several airlines.”

Clarence Alexander, former Gwich'in Nation Grand Chief and one of four founding YRITWC Steering Committee members, said, “the main reason for creating the Yukon River Inter-Tribal Watershed Council was for the health of all those that rely on the Yukon River for survival”.

Chief James Landlord of Mt. Village and YRITWC Alaska Executive Committee member added, “the YRITWC strives to behave like an elder and we use the values of elders as the guiding principles of the organization.”

“In 2005, Indian nations are now, more than ever, taking charge of their own destinies and making remarkable progress on their reservations and tribal lands across many different areas of governance,” said Honoring Nations Director Amy Besaw (Brothertown). “Through its awards program, Honoring Nations recognizes innovative programs and initiatives operating throughout Indian Country and provides a unique opportunity for tribes to learn about and replicate these outstanding tribal governance success stories in their own communities.”

*(Energy continued from page 7)*

pared to a fixed, or roof mount, PV system on a dollar per watt-hour production basis, which is how systems are compared. Though it pays for itself over time, a tracking system generally costs a lot more up front. You may not have that money to spend when getting started.

There are smaller and less expensive options, such as a single-solar panel and a limited inverter that can provide electricity for a radio and a single light bulb at fish camp. Of course that won't power your house, but it could provide back-up energy for emergencies. It depends on what you want to power and how much you can spend.

Most of the larger PV projects I've been involved in - including Arctic Village, Venetie and Chickaloon Village, have been funded by grants. Fort Yukon recently received a grant to install PV systems over the next two summers, so more solar systems are on the way.

There is a growing pool of expertise that knows how to install and maintain these systems given the experience of Venetie and Arctic Village, and soon to be Fort Yukon. Other communities can learn from this expertise. Lance Whitwell, energy manager for the Native Village of Venetie Tribal Government is an excellent resource and willing to answer questions that other communities may have.

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“When the Yukon River Inter-Tribal Watershed Council formed, the leadership expressed concerns about past contaminated sites and specifically asked YRITWC (staff) to see if those sites were impacting the health of the river, and to clean those sites up,” says Rob Rosenfeld, Alaska Region Director of YRITWC. “When the funding for brownfields was made available, we applied.”

During the first year of the program, approximately 20 watershed communities will be inventoried for potential environmental conditions, previously known contaminated sites and potential brownfields. This inventory will include collecting current and background information on specific sites in communities. This information describes details about the potential contaminant, the impacted area, the location, the cause of contamination, any possible threats to the community, habitat, and wildlife, and how the site would be reused upon clean-up.

Collecting this information involves working jointly with community environmental staff and leadership to map and photograph potential sites, talking with individuals knowledgeable about the sites, and gathering printed site and community information. To encourage public awareness and participation about brownfields, community outreach will be woven throughout the inventory effort, and a public record of potentially contaminated sites in the Yukon River Watershed will be available on the YRITWC website. The role of the YRITWC Brownfield Tribal Response Program is to assist communities in identifying and gathering contamination and redevelopment information on specific sites. Eventually two of the identified potentially contaminated sites that meet the brownfield criteria for reuse will receive a site assessment, which is the next step in moving to clean-up of an area.

If you are in a Yukon River Watershed community and are interested in identifying and learning more about brownfields, which can be regarded as a concern about environmental health and community land use planning, then contact your local tribal leadership or tribal environmental programs. In turn your tribal leadership can contact and work with the YRITWC Brownfields Tribal Response Program to identify and, perhaps in the future, reuse places in your community.

### For more information

Watch for the forthcoming YRITWC Brownfields Tribal Response Program webpage that will be available on the website [www.yritwc.com](http://www.yritwc.com) by early spring. You may also access further details and examples of brownfields at the following websites: [www.dec.state.ak.us/spar/csp/brownfields.htm#define](http://www.dec.state.ak.us/spar/csp/brownfields.htm#define)

[www.epa.gov/ebtpages/cleabrownfields.html](http://www.epa.gov/ebtpages/cleabrownfields.html).

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Be Good Listeners - Be Honest - Be Consensual - Be Trustworthy - Be Respectful - Be Timely - Be Unifying - Be Flexible - Be Non-judgemental - Be Fair and Equal - Have Integrity - Share Wisdom - Be Tenacious - Be Inclusive - Be Bold - Be Patient

## Yukon River Inter-Tribal Watershed Council Staff Directory

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