

Currents

One People

One River

Yukon River Inter-Tribal Watershed Council

May, 2003



Special points of interest:

- 4th Bi-Annual Summit will be held in Fort Yukon from August 19-21, 2003 (travel dates are the 18th and 22nd), hosted by the Gwichyaa Gwich'in Tribal Council.
- Check us out on the web!
www.yritwc.com

Inside this issue:

YRITWC Alaska Staff	2
On-Line MAPS	2
New On-line GIS	3
Environmental Education Highlights	4
2002 Survey Project Results	8
Yukon River Story	9
What is a Watershed?	15

TIMES OF CHANGE

by Rob Rosenfeld, Alaska Region Director

I'm writing this article thinking of the many changes that the Yukon River Inter-Tribal Watershed Council has experienced in the past 6 months. To begin with I'd like to formally welcome Paul Erhart, our new Assessment and Monitoring Coordinator to the organization. Paul is Koyukon, Athabascan and was born and raised in Tanana (Nuchalawoyya, "Where the two rivers meet"). Paul has been raised by elders and has a unique understanding of the natural environment and how to identify changes by observation. His Biology degree and his close connection to the past and to the land, give him a balanced platform to embark on the difficult task of coordinating an ongoing river-wide assessment and monitoring effort. Paul's

commitment to the river and it's peoples are contagious. Paul has generously donated use of his 1895 cabin as office space to the Yukon River Inter-Tribal Watershed Council on the banks of the Yukon River, looking out at the confluence of the historic meeting site where the Tanana and Yukon Rivers join together. Our new office in Tanana awaits your visit to see Paul, all of his testing equipment and to join him in checking the daily vitals of the River. We are honored to have Paul take a lead role in the work ahead and acknowledge that he broke new ground for Tribes in Alaska, as he was responsible for the signing and approval of the first Tribal Quality Assurance Project Plan (QAPP) in the State of Alaska. Paul is available

to assist Tribes within the Yukon River Watershed to develop QAPP's and to conduct tribally-run water quality assessment and monitoring programs. Please call Paul for assistance.

Another positive change is the enhanced job position of Diana Ervin formally the Environmental Education Coordinator. Diana has been promoted to the position of Training and Environmental Education Coordinator. Diana is a strong tribal advocate and educator who will be conducting a series of trainings and workshops in the months to come. Please know that Diana will be announcing the dates and locations of upcoming Emergency Response

Continued of Page 6

FOURTH SUMMIT ANNOUNCEMENT

The Yukon River Inter-Tribal Watershed Council is enthused to announce our Fourth Summit, which is scheduled for August 19th - 21st, 2003 in Ft. Yukon (travel will be on August 18th and August 22nd) hosted by the Gwichyaa Gwich'in Tribal Council.

There are three main objectives for the summit: 1) To develop an implementation agreement

for the Inter-Tribal Accord, 2) To create an opportunity for the Leadership to evaluate the organization, decide on future oversight methods and needs, and provide directives for the future of the organization, and 3) To provide training for Environmental Technicians and Lands Department workers in the area of solid waste management with a focus on landfill and sewage lagoon im-

provements.

A formal invitation will be extended to Leaders, Environmental and Lands employees and other guests in late May, including a draft agenda and what you will need to bring. We look forward to another landmark gathering on the traditional lands of the Gwichyaa Gwich'in Tribal Council.

Maps and Community Information on the Web

The Alaska Department of Community and Economic Development (DCED) has maps, aerial photographs and community information available online.

The website is:

www.dced.state.ak.us

Once the page has loaded, there is a link on the right side of the page named Community Profiles Online.

If that link is clicked it will

take the user to a page named Community Database Online. This page offers six links that provide different types of information.

Once one of the links have been chosen, the next page will ask the user to select a community. Highlight the community and hit the next button and information will appear on the following page.

Not all communities have been updated with maps and aerial

photographs. The DCED will continue to update the page as new maps are created and photographs taken.

This web site may be valuable to communities that are looking to upgrade their mapping as a starting point or just a useful site to find additional information regarding Alaskan communities.

This link and other helpful links can be found on our website at www.yritwc.com



Yukon River Watershed Facts

Did You Know?

The Yukon River is the third longest river in North America, flowing northwest from the mountains of northern British Columbia Coastal Range, through the Yukon Territory and Alaska to the Bering Sea.

Its overall length is 1,980 miles (3185 km), with 714 miles (1149 km) within Canadian and 1,266 miles (2,036 km) in Alaska.

The watershed's total drainage area is 330,000 sq. miles (854,000 sq. km or about the size of Texas) and it discharges 195 cubic kilometers of water per year or over 51 trillion

gallons per year.

The Yukon River arises from Tagish, Atlin and Teslin Lakes in northern British Columbia.

The Yukon River initially flows northwest through majestic gorges and deep valleys in the Yukon Territory, passing the settlements of Whitehorse, Carmacks, Fort Selkirk and Dawson City. From its source to Dawson City the river contains an almost unbroken chain of islands. Just before Dawson there are several wide stretches with majestic curves. From that point to beyond the Alaskan border the river is flanked by hills and confined to a

single, broad channel broken only by occasional islands.

The principal tributaries in Canada are the Big Salmon, Pelly, White, Stewart, and Klondike rivers.

The principal tributaries in Alaska are the Porcupine, Chandelar, Tanana, Koyukuk and Innoko rivers.

The section of river between Lake Laberge and the Teslin River, known as "The Thirty Mile Section," has been designated a Canadian Heritage River for its outstanding natural and cultural heritage.

Fools Crow, Ceremonial Chief of the Teton Sioux:

"The survival of the world depends upon our sharing what we have and working together. If we don't, the whole world will die. First the planet, and next the people."

YRITWC Staff Members

The YRITWC Alaska Region Staff members are working to assist communities within the Yukon River Watershed. Here is a list of staff members. Feel free to contact them with any questions you may have.

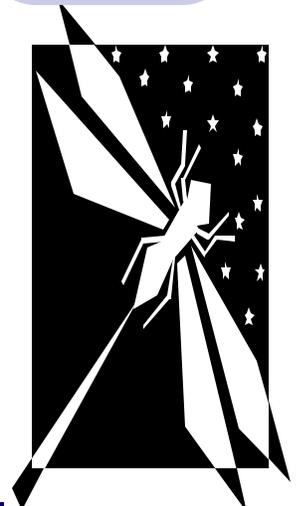
Rob Rosenfeld, Alaska Region Director (907)258-3337, yritwc@alaskalife.net

Julia Forte, Grants and Communications Coordinator juliaforte@gci.net

Paul Erhart, Assessment and Monitoring Coordinator (907) 366-7122, paulerhart@gci.net

Diana Ervin, Training and Environmental Education Coordinator (907) 373-8690, dervin@mtaonline.net

Kip Cronk, Communications and Logistics Intern (907)258-3337, kipcronk@gci.net



NEW ON-LINE GIS

By Sam Skinner

We are pleased to announce the launch of the Yukon River Inter-Tribal Watershed Council online GIS. It has taken a concerted effort to produce what we feel is an excellent beginning of a one-stop shop for mapping, geographical metadata (data set descriptions), and links relating to mapping in the Yukon River Watershed in Yukon Territory. You can find a link to our GIS section by linking from our website (www.yritwc.com) through the "Online Resources" menu, or you can go directly to www.yritwc.com/gis/gis_intro.htm.

In our GIS section, you will be able to interactively view, use and modify maps of the Canadian portion of the Yukon River watershed. No expensive specialized software is required to do this; a link is provided from our GIS web-page to a site where you can download a free viewer. This tool allows you to zoom in to specific locations, pan around the map, point to some features for a pop-up description, click on other features to bring up photos of them, create and view buffers, and measure distances. With numerous features included on the map legend ("layers"), maps may be customized to suite the needs many different specific projects. There are both a Landsat image and a DEM (which shows topography by shading hills and mountains) to provide a useful backdrop. Should you need assistance using this tool, a useful help link (click on the question mark) is provided (you may email or call us if this doesn't help).

There still remains many potentially useful data "layers" that could be put on our site, including layers from Alaska. We are hoping to put more of these layers into our GIS in the future, pending additional funding. If your organization has some GIS data that could be put on our GIS, please let us know. We should be able to handle more sensitive or semi-confidential layers by adding password protection to them, by displaying them only at a small scale, or by applying a "fuzz factor" that moves point locations randomly away from their actual locations. Additionally, we hope to add "reporting" capability where users are able to select features (e.g. streams) and then view or print a table showing all the data associated with those features (e.g. flow rate, water quality, spawning species, etc.).

Also associated with our on-line GIS is a link to a GIS glossary that should help novice users with their GIS vocabulary, as well as a link to other on-line GIS in the Canadian portion of the Yukon River watershed. Finally, through the "acknowledgements" link, there is a table showing the source of all the data sets we have used, as well as links to more information on that data. This page alone is a great tool for GIS-interested people to learn more about some datasets available in the watershed.

The YRITWC would like to thank those who helped us make this project possible: Eric DeLong for his map authoring and Marie Gallagher (Gartner Lee Ltd.), Kevyn Dambrowsky and Bill Macleod (MicroAge, Whitehorse), as well as all the people and agencies that provided data to the site (they are all listed on our GIS website). We would like to also take this opportunity to acknowledge Clint Ireland and the INAC Knowledge and Innovation Fund; without their support, this project wouldn't exist. Thanks also to the generous support from George Mackenzie-Grieve and others at Environment Canada, the Oak Foundation, and the Lannan Foundation.

In closing, we are excited to bring you a new tool that should allow lands managers to make better decisions easier. Future options for expanding and improving this tool are just as exciting. With your feed-back and possibly data contributions, the future of our on-line GIS looks very promising indeed. Enjoy!

YRITWC Mission Statement

We, the Indigenous Peoples from the headwaters to the mouth of the Yukon River, including its tributaries, having been placed here by our Creator, do hereby agree to initiate and continue the clean up and preservation of the Watershed for the protection of our own and future generations of our Indigenous Peoples and for the continuation of our traditional Native way of life.

2002 Environmental Education Highlights

Three Regional Trainings A SUCCESS! 2002 EE Highlights & Overview

By: Diana L. Ervin
Environmental Education & Training Coordinator

SUCCESSFUL! "If I had one word to describe the environmental trainings conducted this past year how would I describe it?" SUCCESSFUL! Congratulations to all of you who attended and participated. You

ALL made it an exceptionally wonderful experience.

Based upon evaluations submitted by participants the 3 trainings were very successful because the applicability of materials and information provided to participants, and the amount of time spent on actual hands-on implementation of the materials. Special attention was given to participants towards adapting curriculum to be culturally sensitive and specific to the region. Of course, the gracious hospitality provided by the HOST community was incredible.

Two of the trainings were sponsored by YRITWC and the other one was held in co-sponsorship with the Nulato Environmental Program. A total of 47 participants attended the 3 trainings: 2 youth, 7 elders, the remaining consisted of a teacher, a teacher aide, a superintendent, Council members, tribal environmental and natural resource staff, Fish & Wildlife staff, and members of the local congregation (they were asked to lead and close the training with a prayer and then ended up becoming participants).

Scheduling and topics to develop the training manuals were compiled and identified through a survey conducted by YRITWC. The end result was the development of "A Watershed Training Manual." The manuals contained the following information: Overview of YRITWC and staff expertise, Learning and Teaching Styles/Techniques, Environmental Education, Using A Watershed Approach, Project Planning, RRRR Information, activities, substitutions and alternatives, Existing EE Curriculum, Web Resources, Funding Opportunities, YRITWC-Resource Directory of Regulatory Agencies, and State of Alaska Standards for Education (Math, Science, and Cultural Responsibility). Including three curricula resource books (Project Wild, Project Aquatic & Project Learning Tree).

"If I had one word to describe the environmental trainings conducted this past year how would I describe it? SUCCESSFUL!"



September 3-6, 2002, Emmonak, Alaska, 17 participants

The first day of the trainings focused on building, promoting and raising the general awareness of the YRITWC and what a watershed is. The training incorporated the components of a watershed approach and the connection between the communities and the entire drainage. In addition, the trainings focused on ideas to implement traditional values and culture as well as ways to foster networking opportunities within communities.

The second and third day focused on culturally sensitive and hands-on environmental education, emphasizing teaching/learning styles of target audiences. In addition we learned various ways that teachers teach. Participants utilized existing curriculum and were taught how to use and adapt it. Participants learned how to prepare for their target audiences, strategies to increase interest and motivation. We also explored insights into environmental education program development and sustainability. Participants were given an opportunity to learn and develop teach back activities to be more culturally relevant.

The trainings also examined local issues and their impacts river wide with sensitivity to community needs and culture. Elder knowledge was an important component to offer insight and perspective to traditional practices of water and land stewardship. The incorporation of elder participation was greatly encouraged.

The YRITWC will be sending out information regarding future Environmental Education Trainings as soon as we have it available!

For more information, please contact Diana Ervin at (907) 373-8690.

June 24-28, 2002, Fort Yukon, Alaska, 23 participants)



2002 EE Highlights Continued...

If you are interested in participating as a Host Community and would like to host a training in your community contact Diana Ervin.



(September 16-19, 2002, Nulato, Alaska, 7 participants)

This training has set the stage towards informing and educating rural communities, especially to include all stakeholders and to guide the YRITWC's development and growth towards effective watershed and wetlands management practices. Educating all stakeholders and encour-

aging stakeholder involvement will provide a venue for creating a dialogue between all of the communities residing within the watershed. Empowering local governments to make informed decisions regarding community growth and development, Tribes are then better

equipped to engage in proper consultation to develop sound environmental infrastructures that will sustain their community's economic growth.

I would like to also extend a HUGE THANK YOU to all of the kind and helpful indi-

viduals who gave freely and willingly at the local level for making it such a HUGE success! A special thanks is extended to the Village Councils, Tribal Staff, and local residents whose hospitality was immeasurable. I would also like to extend my appreciation to a wonderful TEAM

of presenters: Sherry Dugan, F & Wildlife Service-Project Wild and Project Aquatic, Matt Weaver, Department of Natural Resources-Project Learning Tree, and the YRITWC staff.

I look forward to facilitating and coordinating more training opportunities to any and all interested communities within the Yukon River Watershed. It was a great learning and unforgettable experience. I consider it an honor and privilege to serve you as an employee of the Yukon River Inter-Tribal Watershed Council.

If you are interested in participating as a HOST COMMUNITY and would like to host a training in your community contact Diana Ervin at (907)373-8690 for more



TIMES OF CHANGE continued...

trainings, and Solid Waste Management trainings in the near future. Diana has a unique ability to modify trainings and curriculum in a culturally-appropriate manner. Diana is a descendent of the Upper Tanana Athabascans of Northway within the Yukon River watershed. Diana continues to show her incredible knowledge of local realities and demonstrate her ability to help problem solve solutions to complex environmental problems.

Julia Forte formally our full-time Grants Manager is now working as our part-time Grants and Communications Coordinator. Julia has been very busy in assisting us in preparing for 2 years of audits, in contributing to the development of this newsletter and in making suggestions for improving and adding to the existing website at www.yritwc.com.

Our newest addition to the team is Kip Cronk. Kip comes to us from Ann Arbor, Michigan and is working as the Grants Management and Logistics Intern. Kip was an Earth Science Teacher, a Biologist and formally worked as a Grants Administrator. Kip has been a tremendous help in the area of grants management and newsletter development. You will be hearing from Kip soon regarding upcoming travel to the 4th Summit in Ft. Yukon. I want to thank Kip for his willingness to work hard in exchange for a stipend and for the experience. His high energy and self-motivating work ethic has already been a great contribution.

In January of 2003, the Steering Committee requested that I work as the Alaska Region Director rather than Interim Alaska Region Director. I accepted this position on contract and am willing to assist until the Steering Committee wishes to make a change. I've been working on the Yukon River since 1997 and remain committed to the goals of the Yukon River Inter-Tribal Watershed Council and I feel honored to be working in a coordinating capacity. A good deal of my time will be spent coordinating the 4th summit, working with staff on projects, grant-writing and in facilitating upcoming trainings in the areas of grant-writing, grants management, and in strategic-planning facilitation.

At this time, I would like to recognize the hard work of Rosetta Alcantra, Tricia Waggoner, Carl Wassilie, and Teigen Sorenson; all of whom contributed many permanent tools, trainings and capacity to the organization. Thank you and best wishes to all the above former employees.

I wish to formally appreciate the many individuals and organizations that have contributed to the work of the Yukon River Inter-Tribal Watershed Council. Thank you to the Yukon River Inter-Tribal Watershed Council Steering Committee, Deborah Williams, Julie Jessen and Toni Carlo of the Alaska Conservation Foundation, Ken Margolis, Don Elder, Gayle Killiam, Angie Reed and Jeff Dates of the River Network, Tim Coulter, Andy Huff and Deborah Schaff of the Indian Law Resource Center, Rebecca Seib of First Nations Development Institute, Bill Stokes, Bill Smythe and Kent Patrick-Riley of the Alaska Department of Environmental Conservation, Nathan Spees, Richard Porter, Jean Gamache, Greg Kellogg, Joe Sarcone, Fran Stefan, John Iani and Marcia Combes of the U.S. Environmental Protection Agency, George McKenzie-Grieves of Environment Canada, Carl Gatter of the North Pacific Rim Housing Authority, Bruce Thomas and Ben Stevens of the Council of Athabaskan Tribal Governments, Jill Klein of the Yukon River Drainage Fisheries Association, Karen Blanchard of the School for International Training, Ray Givens former Attorney of the late Henry Sijohn of the Coeur d'Alene Tribe and of the newly established Givens Law Firm, Mark Wedge of Wedge Consulting, Sarah James, Andrea Carmen and Carol Kalafatic of the International Indian Treaty Council, Brian Hirsch and Richard Martin of Earth Energy Systems, Chris Herberger of REM Data Services, Doug Johnson and Bill Dann of Professional Growth Systems, Matt Weaver of DNR Project Learning Tree, Sherry Dugan of DFG Project Wild and Aquatic, and to the many others that have contributed towards the health of the Yukon River for future generations.

As I think of the uniqueness of the work of the Indigenous Leaders within the Yukon River watershed, the historic Inter-Tribal Accord is what comes to mind. No-where else in the world have so many elected Leaders on an International Watershed agreed to sign their names to a long lasting Accord and commit to the ongoing stewardship and protection of a river. The commitment that the Leaders made to each other has resulted in real and lasting change in the many communities from the headwaters to the mouth of the Yukon River and its tributaries. Recycling programs are happening, landfills and sewage lagoons are being improved, contaminant sites are being cleaned-up, hazardous waste is being reduced in landfills, and new development efforts are receiving the input from concerned Tribal Leaders. Certainly there is a great deal of work ahead and this work will clearly continue until the goal of being "able to drink water directly from the Yukon River" is reached. Since the August of 2001 summit and the historic signing ceremony of the Inter-Tribal Accord, Holy Cross Tribal Council, Allakaket Tribal Council and Beaver Tribal Council have signed the Accord. We are also very enthused to have been informed that Eagle Tribal Council will soon be signing the Accord, which will bring the number of signatures to 35 Indigenous governments.

CONTINUED ON PAGE 7

TIMES OF CHANGE continued...

The Indian Law Resource Center will soon be contacting Tribes and First Nations within the Yukon River Watershed who have not signed the Inter-Tribal Accord to answer questions and inquire about the possibility of signing if desired by the Indigenous governments. During the 4th Summit in Ft. Yukon, in August of 2003 there will be the opportunity to consider an implementation agreement to the Accord and to discuss possible usages of the Accord. The 4th Summit will also be an opportunity for the Leadership to revue and evaluate the organization and to offer new directives for future work. The Summit will also be an excellent forum for Environmental Technicians and Lands Department employees to share approaches and experiences with one another. The exchange of information and coordination between the many workers in communities on the Yukon River Watershed is critical to the future success of this, vital grassroots efforts.

In January of 2003 the Steering Committee requested that the Anchorage Office be relocated to Fairbanks in order to better address pollution that enters into the Chena and Tanana Rivers. This move is scheduled to occur during the Fall of 2003. Speaking of offices, the Yukon Region Steering Committee is planning a temporary closure of the Whitehorse office until funds can be raised to continue their efforts. In the mean-time the website which was created and managed by the Yukon Region staff will be managed by the Alaska Region staff until new employees are put in place in the Yukon Region. Heidi Istchenko resigned in March of 2003. Suchot Sunday, Desiree Balderas and Sam Skinner have all been very busy completing their work and in preparing for a temporary closure. We thank Suchot, Desiree and Sam for all their extra work in facilitating the temporary closure and all that they have done to maintain positive relations with all funders, partners, and supporters. Suchot will be moving from Whitehorse with her new fiancé and we wish her all the best in her future. Please visit our website to see the work of Suchot and Sam.

During these times of change the Steering Committee and the staff have all been very busy in managing the additional work associated with a reduced staff. Between the Yukon Region and the Alaska Region we have downsized from 9 full-time employees to 3 full-time employees, a full-time intern and one part-time employee. Consequently, these times of change have meant some long hours of work and the emphasized need to take a close look at where improvements to the organization can be made. As a result of our recent changes, I'm very enthused that the Leadership will be coming together to evaluate the Yukon River Inter-Tribal Watershed Council and to determine its future work priorities. I recognize that a steady flow of communication has been limited and that trainings and workshops have been temporarily delayed. Please accept my apologies, for not having a newsletter out to you sooner. The staff will remain busy in organizing the many upcoming trainings that we have committed to, organizing the summit and in providing individualized support to Tribes and First Nations upon request. We are always very enthused when we are asked to provide assistance. Paul has been working closely with Kotlik Traditional Council and Council of Athabascan Tribal Governments on developing their QAPP's, Diana is looking forward to working with Minto Tribal Council and Koyukuk Tribal Council on their Emergency Response Plans and I have been honored to be asked to review grant proposals, write letters of support and to assist with strategic planning and advocacy efforts. Lastly, I want to end with saying how inspired I am with the many efforts of the Environmental workers on the Yukon River watershed. In the past few months I have been very impressed with the work of Kathleen Peters-Zuray of Tanana Tribal Council in working towards cleaning up contaminant sites, Andrew Boy Scout of the Chevak Tribal Council in the area of GIS mapping, and Sue Davis of the Little Salmon Carmacks First Nation in developing tourist education materials in 3 languages. Keep up all the awesome work and lets continue to applaud the positive work of the Indigenous peoples of the Yukon River Watershed. I look forward to hearing from you soon. Respectfully submitted. Rob

Alaska Steering Committee Members

Clarence Alexander

Yukon Flats Region Representative

Chief Peter Captain, Sr.

Middle Yukon Representative

Pat Sweetsir, Alternate

Middle Yukon Region Representative

Chief Edna Hancock

Tanana River Region Representative

Chief James Landlord

Lower Yukon Representative

Ehprim Thompson, Alternate

Lower Yukon Region Representative

Chief Jack Wholecheese

Koyukuk River Region Representative

Yukon Steering Committee Members

Harold Gatensby

Dahka Tlingit Nation Representative

Chief Darren Taylor

Vuntut Gwichin/Tr'ondek Hwech'in Representative

Chief Eddie Skookum

Northern Tutchone Representative

Geraldine Pope

Interim Southern Tutchone Representative

Chief Lucy McGinty

Selkirk First Nation

50 YEAR VISION:

"To be able to drink water directly from the Yukon River"

YRITWC Environmental Education 2002 Survey Project Results

By: Diana L. Ervin
Education & Training Coordinator

This report is based on an Environmental Education Survey conducted November 2001 through August 2002.

A total of 41 surveys were collected. These surveys were completed and submitted by Tribal Administrators and Environmental staff from Fort Yukon, Stevens Village, Minto, Tanana, Ruby, Northway, Dot Lake, Eagle, Healy Lake, Tetlin, Allakaket, Alatna, Loudon, Nulato, Anvik, Huslia, Kaltag, Holy Cross, Koyukuk, Alukanuk, Chevak, St. Mary's, Russian Mission, Kotlik, and Emmonak.

The questions asked ranged from focusing training on how to deliver environmental education within a school or community setting, what topics to focus on, list of other relevant subjects, suggested materials, location of trainings (city/nearby village), time of year for scheduling, other events to consider and suggestions were considered to provide a training that accommodated the needs of the Environmental Technicians.

The majority of those who responded expressed interest in the area of developing classroom and community presentations regarding household hazardous waste, recycling used oil and lead acid batteries, reducing wastes, general recycling methods, water quality issues and landfills.

Other requested topics and materials of interest include: Erosion, Tribal Environmental Agreements, Composting/Littering, Recycling Cans, Indoor/Outdoor Air Quality, Air Testing Kits, Water Testing Kits, Hands-on Project, Energy Conservation, Recycling Anti-freeze, Grant Writing, Mining Concerns, Incorporating Traditional Knowledge, HAZWOPER Training, Tank Farms, Contaminants & Subsistence Foods, Soil Contamination, Dust Control/Road Maintenance, Open Burning/Burn Barrels, Incorporating Elder's Knowledge to achieve Environmental Preservation, Starting Youth Environmental Programs, Clean Up Grants for Landfills and Recycling. Other materials requested include videos on relevant subject matter, more children activities, factual information, and teaching guides.

These surveys allow the Education & Training Coordinator to identify topics and if the interest levels varied or are similar to neighboring communities. Through this survey collection, necessary information was obtained to provide training to participants based on the requested needs. This information assisted us in identifying topics to focus on in the development of a training manual and a training agenda.

Currently, there are five major types of concerns within the Yukon River watershed that have motivated Tribal leadership to voice their concerns among the Tribes that live along the Yukon River and its major tributaries. These impacts include those associated with: 1) Military, 2) Mining, 3) Sewage/Landfills, 4) Tourism, and 5) Health of Subsistence Foods.

YRITWC strongly believes that the Tribal Environmental Technicians are key components towards encouraging and promoting community wide environmental education programs at the local level. By offering support to the local schools the Environmental Technicians can provide additional support by providing cultural expertise. Interested educational staff and their students are invited to attend any YRITWC training opportunities. This type of interactive reinforcement builds a positive working relationship between all participants. By encouraging all interested parties at the local level to attend community training opportunities, it will instill and generate interest of potential stakeholders to acquire the buy-in support necessary to ensure the future sustainability of the YRITWC and its programs.

If you would like to complete a survey, wish to express training needs, or offer comments and/or suggestions please contact Diana Ervin at (907) 373-8690.

“Currently there are five major types of concerns within the Yukon River Watershed...1) Military, 2) Mining, 3) Sewage/Landfills, 4) Tourism, and 5) Health of Subsistence Foods.”

The Story of the Yukon River

An elder once told us about their childhood and how everything was once so beautiful and the animals were not in danger like they are today from all the pollution that is being dumped in the lakes, rivers and our land.

If we all work together we can make it better before it gets any worse. The only way to make things better is to speak and be heard by our people. There are many people who care about our water and land. As youth, it is hard to be heard and that's why we come to these meetings, to say what we have to say and to fight for our land and water before it gets any worse.

In the future, as adults we will want a beautiful and safe environment for our children, so if we work together we can make our land as beautiful as it was in the past. Thank you



Paddy Nollner, Louden Tribe Elder

The Past

Once upon a time there was a very beautiful land, with all different kinds of animals, abundant plants, fish, clear water, stronger and healthier people, and clean air. We had our own spiritual religion, beliefs, and languages. We only hunted what we needed and when we did hunt, when we caught something, every part of the animal was used. Nothing went to waste. There were a lot of trees and the animals were fat and healthy and the river was clean. Clean enough to drink out of. There weren't a lot of big cities or a lot of people to clear our land and use our waterways. This was the ways of our past.

The Present

This illustrates what the present looks like through the eyes of our children and our grand children. As you can see, the earth is heavily polluted with contaminants in the air on the land and in the water. This is a time where you have to buy a bottle of drinking water from the store. A place where the big industries take all of our natural resources and leave us with a big mess to clean up while they make a profit. This is also a time of greed with both big companies and people of our own communities also spending money on unnecessary things - drugs, alcohol and cigarettes, have shortened the lives of our numerous young natives along the Yukon River and all of our tributaries. Government agencies have buried contamination all along the Yukon River. Native lands have been misused and native peoples have been mistreated. There are almost no more animals in our area. No fish, no birds, no big game, but if we work together as one, we will all be blessed. This can be the starting point to show all that we can make a difference.

*"These experiences have
been EXEPTIONAL."*

**YRITWC Staff Updates
Contributions By: Anchorage and Whitehorse Staff**

Diana Ervin, Education & Training Coordinator: Much has happened since I began my employment with the Watershed Council in January 2002. Training, conferences, training, more conferences, can't forget the travel involved. But nonetheless... "The experiences have been EXCEPTIONAL."

Soooo... Let me bring you up to date. As of January 2003, I have assumed the duties of Carl Wassilie, Hazardous Waste Contaminants Coordinator (HWCC). I was initially hired as the Environmental Education Coordinator but YRITWC has integrated these two program positions and eliminated the HHWC position. My new title at the Watershed Council is "Education and Training Coordinator".

For the past 3 months I have been reviewing the HWCC program and Technical Assistance Grant history. Once this was completed I began integrating these 2 programs into the YRITWC's Education Program. To provide for improved efficiency I have begun work on color-coding a filing system of 8 major concerns that have been identified within the watershed boundaries. Those are: 1) Military, 2) Mining, 3) Sewage/Landfills, 4) Recycling, 5) Health of Subsistence Foods, 6) Hazardous Waste, 7) Emergency Response Planning, and 8) Recreation and Tourism

My utmost concerns as the Education and Training Coordinator are:

- 1) Provide trainings that are tailored to the needs of the Tribal Environmental Programs.
- 2) Provide trainings within the specific region to show applicability of training in relation to environmental concerns that are occurring within that region. Including field trips to the host community's environmental facilities that are applicable to the course outline.
- 3) Provide materials and suggestions to address those concerns.
- 4) Minimize training costs by providing trainings in host locations in a specific region.
- 5) Boost the community's economy.
- 6)

With that said and done, "**I would like input from ALL OF YOU WHO ARE LIVING WITHIN THE WATERSHED.**" Let me know how I may be of assistance towards providing quality education and training for your community.

"TRAINING UPDATES"

**Community Emergency Response Planning
By: Diana L. Ervin, Education & Training Coordinator**

The community of Minto, Alaska has expressed interest in hosting the next Community Emergency Response Plan training. Tentative dates have been scheduled for the week of June 23, 2003. Training dates will occur on June 24-26, 2003. **More information will be provided as it becomes available.**

HAZARDOUS WASTE

By: Diana L. Ervin, Education & Training Coordinator

Currently I am working with the Alaska Department of Conservation-Northern Region Office and Tanana Chiefs Conference. Both located in Fairbanks, Alaska.

This team is currently developing training manuals. These manuals will be finalized and reviewed by the end of July 2003. The agenda topics of the training will focus on Solid Waste Management but with emphasis directed towards Hazardous and Household Hazardous Waste, outlining a comprehensive hazardous waste overview, and implementing hazardous waste management projects at the local level.

Three trainings will be held in strategic locations within the watershed. Possible host communities that have expressed interest in training sites could be the Upper Yukon, Middle Yukon, and Lower Yukon River, Tanana River and Koyukuk River regions.

Dates of these trainings will be left to the respective river region and host community. In regards to the Upper Yukon training and the upcoming 4th Bi-Annual Summit that will be held in Fort Yukon, Alaska this August, I would like to arrange a specific training for this event.

If you are interested in being a host training community, or would like to complete a survey, have training needs, a comment, and/or suggestions contact me, Diana Ervin, at (907) 373-8690



With minimal vegetation along the shoreline of the river, sediments and other pollutants easily find their way into the river.

In the example shown here the soil near the river would easily enter into the river when it rains or the snow melts, bringing with it any pollutants such as oil or gasoline and nutrients like phosphorus.

VEGETATIVE BUFFER STRIPS FOR THE YUKON RIVER

Article and Photographs by Kip R. Cronk

One of the easiest ways to protect a body of water is to allow the natural vegetation to grow along the banks or shoreline. It is called a buffer-strip and allowing at least 100 feet of vegetation to grow near the banks of the river will limit the speed of which pollutants reach the water, allow the plants to absorb some of the pollutants and create better habitat for wildlife. It is not necessary to re-plant the area, but just let nature run its course and let the plants that naturally occur to grow back into the area.

The greatest concern for water quality world-wide is sedimentation. That is when soil, dirt, sand, etc., is allowed to enter into a body of water. Sedimentation clouds up the water, which limits visibility and causes the water to turn a brownish color, because the water holds the sediment only to drop it when the current slows. Sediment can carry with it pollutants as well as excess nutrients such as phosphorus. Another problem with sediment in the water body is that when it settles it may cover precious breeding grounds for aquatic life such as fish and macro-invertebrates. Losing the breeding sites will eventually effect the population of a species because they will not be able to reproduce and each species in the water body is essential for a healthy ecosystem.

It is advisable to control the amount of sediment entering our water bodies and this can be done in several different ways. One is to create a vegetative buffer strip along the banks. When it rains or the snow melts the plants that live near the bank will slow down the run-off, which in turn allows the sediment to settle out on the land before reaching the water. Also as the water slows because of the plants, the plants will take up the water which is needed for life

CONTINUED ON PAGE 12

and absorb the pollutants and nutrients that the water is carrying. If a road or housing project is being planned near the body of water, the planners should try to incorporate a vegetative buffer strip near the water. Another way to limit the amount of sediment entering the body of water during a construction project would be to put up a silt fence. It is a fence made of a material that allows water to flow through while limiting the sediments. It causes the sediments to settle out of the water instead of flowing directly into the body of water. It is called a best management practice and should be encouraged at all construction sites near a river, lake or wetland throughout the watershed. These silt fences need to be properly installed and maintained. One way to do this is to put straw bales behind them to reinforce the fence.

Another benefit of the vegetative buffer-strip is that it helps reduce stream bank/shoreline erosion. Trees and shrubs that grow near the body of water have deep root systems which allow them to hold the soil in place, reducing the pace of erosion. The taller trees and shrubs have additional benefits by providing shading to the water and keeping the temperatures cooler. Plus the natural vegetation creates habitat for many different species.

It is important to limit the amount of sediment entering into bodies of water. Allowing natural vegetation to grow is one way to achieve such a goal. The natural vegetation, which is known as a vegetative buffer-strip, has additional benefits like limiting erosion and creating habitat. Creating vegetative buffer-strips can be incorporated into community planning along with the use of silt fences. This is another way to help protect bodies of water.

Vegetation near the shoreline of the river will limit the amount of pollutants entering the river by slowing the rate at which they move, which allows settling, and allowing the plants to absorb them.

The example shown here has shrubs along the river bank which will help stabilize the bank. Along with the grasses before them, they will work together to slow the movement of water and pollutants into the river and also act as an absorbent.

At least a 100 foot set back for vegetation creates a good buffer.



YUKON RIVER WATERSHED BIBLIOGRAPHY– READY FOR USE

By Anna Godduhn

It is with pleasure that I announce the latest version of the Yukon River Inter-Tribal Watershed Council’s bibliography of scientifically documented research regarding conditions in the watershed. The bibliography is a now list of 971 references to most of the papers and reports that have been published or issued by researchers from universities, government agencies, and non-governmental organizations studying within the

AIR QUALITY	15	NUTRIENT CYCLING	36
BIBLIOGRAPHY	22	PEOPLE	164
CLIMATE	81	POPULATION	364
CONTAMINANTS	105	REFERENCE (NON-YRW)	39
HYDROLOGY	76	SEDIMENT	8
INFRASTRUCTURE	24	SOIL	27
LIMNOLOGY	14	VEGETATION	120
MILITARY	24	WATER QUALITY	78
MINING	61		

watershed. (The ones about geology and archeology were left out.) The bibliography is expected to continue to grow as ongoing research is reported. Each document is one version of some part of the complicated and evolving

TABLE 1. Categorical keywords and number of references.

ing system that is your watershed, where everything is connected to

health. While water quality is a major component of the bibliography, other aspects of the environment - like climate change, pollution, and ecology - are included. Creating the bibliography has been a great honor and I hope it will be valuable in your efforts to protect and replenish this beautiful watershed.

The bibliography is an “endnote library” (.enl, much like a word file is a text document, .doc). EndNote® is a software program for reference management and turns the list into a searchable electronic database. That kind of access is not available via the internet yet, but Rob and I are still working on how best to make it so. A disk with the bibliography and two text versions of it are available at the UAF Rasmussen and Biosciences Libraries and also at the YRITWC office. The text documents are not as useful in the capacity to search, but the “find” mechanism in the edit menu of word can be used. The word.doc without abstracts or summaries is 50 pages; the one with abstracts or summaries is 350 pages.

Also as part of my master’s project I wrote a brief overview of the bibliography (available from myself or the YRITWC office). I described the kinds of the research carried out, rather than the findings. Table 1 summarizes the subjects of the references according to the “categorical” keywords assigned to each (most of the references are in more than one category so the total is more than 971).

CONTINUED ON PAGE 14

Rangers on the River

By Susan Davis

In the past, Little Salmon Carmacks First Nations (LSCFN) has worked each year to put a river clean up project together. Each year was a struggle to secure money for this. As the Yukon River is very important to this community, LSCFN asked the Yukon Government to address the issue of the increasing numbers of tourists on the River. As a result of a cooperative working relationship, LSCFN received \$20,000 from Project Yukon and \$5,000 from the YTG to develop the **River Rangers Program**.

This community based program went for 8 weeks this past summer. Wilfred Charlie, Ted Fairclough and various youth from LSCFN youth Employment Program patrolled and monitored the River. They shared information with tourists about respecting the land and LSCFN traditional activities. They also collected information on campsites, garbage, forest conditions and wildlife observations.

This winter LSCFN will be working with YTG to secure long-term funding for this program. The River Rangers will be making recommendations on patrolling and monitoring to ensure that the Yukon River is well taken care of for years to come.

Yukon River Watershed Bibliography Continued...

The keyword list for the bibliography includes these seventeen categories and more than three hundred “qualifying” keywords. There are many studies about the relationship between lynx and snowshoe hares (possible keywords: POPULATION; mammals; lynx; snowshoe hare; predation; mortality; distribution). These kinds of studies of population dynamics and other ecological relationships actually dominate the bibliography. For instance, herbivory is whole field of study because the consumption of leaves by insects, birds, and mammals influences soil chemistry. There are also many studies about nutrient cycling (i.e., the way that plants “fix” nitrogen and “sequester” carbon or how flooding influences the organic content in sediment). Change is occurring in the watershed at rates that you have a better capacity to recognize than western scientists; your observations have the potential to direct academically and culturally relevant research. Researchers are finally recognizing the value of native insights, especially with regard to climate change. The documentation of observations has value in efforts to recognize patterns and explain phenomena. I encourage villages to initiate their own systematic documentation of your own observations. While research can substantiate or refute local explanations of various phenomena, native insight is vital to really understanding the watershed. The more thoroughly your observations are documented, the more convincing they will be.

When I first spoke to Rob Rosenfeld almost four years ago the opportunity to participate in the Watershed Council’s efforts was immediately appealing, despite the daunting reality that such a project was fit for a graduate student. I had never imagined going back to school for a master’s degree - especially in *chemistry!!* Environmental chemistry is fascinating and just like any subject: the more you learn, the more you realize how much you don’t know. I have still spent very little time far from the road system in Alaska, but I have a strong love for the land and deep respect and admiration for the lives and values of the peoples who have lived here for all time. My personal contact information is included below – please feel free to contact me if I can be of any assistance in your use of the bibliography or related research efforts.

Ana Basee!

Anna Godduhn received a Master of Arts in Chemistry from the University of Alaska Fairbanks this spring; the bibliography was the major product of her program.

Email Anna if you would like to receive more information: ftarg@uaf.edu

CAMPING ALONG THE YUKON RIVER-

A message from the Little Salmon Carmacks First Nation for tourists.

No Trace Camping Checklist-

1. Plan to leave no trace: Don’t bring over packaged food or smelly, easily spoiled food like fresh meat or fish.
2. Camp on durable surfaces and try to use existing campsites to avoid making new ones. Leave the site cleaner than it was before you arrived.
3. Pack in, pack out: Garbage is a major concern in the backcountry. Burn your toilet paper or pack it out. Don’t bury garbage. Wildlife will dig it up. **PACK IT OUT!**
4. Human waste: Your toilet should be at least 60m (66 yards) away from any body of water. Dig a hole for feces at least 15cm (6 inches) and cover it afterwards.
5. Leave what you find: Historic artifacts, archeological specimens or fossils must be left undisturbed. It is unlawful to collect such items without a permit
6. Respect wildlife: Give animals ample space and don’t camp where there are signs or wildlife.
7. Campfires pose a risk of starting forest fires. Keep your fires small.
8. Burial sites are not to be disturbed. Please stay away from these areas.

What is a Watershed?

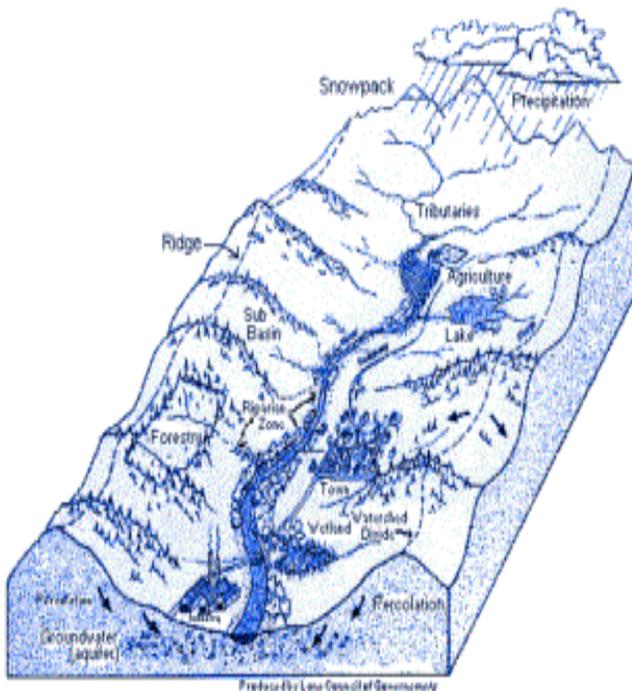
What is a Watershed?

By: Diana L. Ervin
Education & Training Coordinator

A watershed is simply the area of land that water flows across or through on its way to a common stream, river, or lake. Watersheds come in all shapes and sizes. They can be very large or very small. A small watershed that nests inside of a larger watershed is sometimes referred to as a subwatershed or basin. John Wesley Powell, scientist geographer, put it best when he said that a watershed is:

"the area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of a community."

You can delineate or identify a watershed's boundaries (or many watersheds) on a topographic map by using two important map symbols: the blue hydrographic lines symbolizing water and the brown elevation contour lines indicating areas of equal height above sea level. Since water flows downhill from higher elevations to a common body of water, to delineate the watershed boundary for a particular place



Prepared by Lewis Council of Governments

on a stream or lake, you will need to draw a line along the ridge-tops connecting the highest elevation points surrounding the lake or stream. These physical characteristics define the movement of water and delineate the watershed boundaries.

Do you know you are sitting in a watershed now?

Homes, farms, trapping cabins, trap lines, fish wheels, forests, small towns, big cities, villages and more can make up watersheds. Some watersheds spread across county, state, and even international borders. Watersheds come in all shapes and sizes. No matter where you are, you live in a watershed.

YRITWC is working towards utilizing "A Watershed Protection Approach." It is a strategy for effectively protecting and restoring aquatic ecosystems and protecting human health. This strategy has as its premise that many water quality and ecosystem problems are best solved at the watershed level rather than at the individual water body or discharger level. Major features of a Watershed Protection Approach are: 1) targeting priority problems, 2) promoting a high level of stakeholder involvement, 3) integrated solutions that make use of the expertise and authority of multiple agencies, and 4) measuring success through monitoring and other data gathering.

How can you help? There are various ways that the community or an individual can improve the overall health of their watershed. You should become involved, take an active role and be more conscientious of what you purchase, and dispose wastes properly.

Consider: Have you ever wondered about the ease in which items can be shipped into a community, but no one wants the waste by-product. Why is easier to have items transported in, but much harder to haul out? Most transportation businesses come into a community full but go out partly empty. Work with these businesses and utilize any and all means to minimize and alleviate the influx of items that do not benefit the overall health of your community and its people.

WATER FACTS

One ear of corn is 80% water; it takes 39,090 gallons of water to manufacture a new car and its four tires; 75% of the human brain is water and 75% of a living tree is water.

Scientific name for water: H₂O meaning it takes 2 hydrogen atoms and 1 oxygen atom to make up one molecule of water.

When landscaping, use plants native to your area since they can normally survive on rainfall alone. Design your landscape with zones that group plants with similar water needs for easier and more efficient watering.

If you turn off the tap water when you brush you shave or brush your teeth; repair leaky faucets; install low-flow toilets, showerheads and faucet aerators, you will cut household water consumption by up to 30%. (Source: Residential Water End Use Study, AWWARF & AWWA, 1999)

For more information regarding Consumer's Guide to Water Conservation tips visit www.waterdata.com. It is a great resource of information on a watershed!

YRITWC Newsletter

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www.yritwc.com



PLEASE RECYCLE

WANTED: NEWSLETTER CONTRIBUTIONS

Creating a newsletter for the Yukon River Inter-Tribal Watershed Council can be more successful with suggestions and contributions from the various communities within the watershed.

We accept letters up to 2 pages and pictures. Please submit in an electronic format that is compatible with Microsoft Office (Word, Publisher...).

We are looking for stories about environmental programs that communities have installed and have been successful. We feel this is a great way for the different communities within

the watershed to share their information with others..

If you have other types of information that you feel would make the newsletter more successful, please contact us.

Send your articles, letters or pictures to:

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