

Currents

One People

One River

Yukon River Inter-Tribal Watershed Council

JUNE 2003

YRITWC TANANA OFFICE



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

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Paul Erhart 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.

Challenges of Today

By Rob Rosenfeld, Alaska Region Director

With a sweep of a pen President Bush has been erasing environmental regulations and withdrawing from international treaties, catapulting environmental protection into a tailspin. Dennis Hayes the founder of Earth Day spoke recently in Stevenson, Washington at the National River Rally sponsored by the River Network. Mr. Hayes spoke of the 30 + years that it has taken to create the Environmental Protection Agency and develop the Clean Water Act, The Clean Air Act, and the many other laws, rules, regulations, ordinances and codes that were put in place with the intent of safe guarding pristine forests, endangered species, fragile habitat, vibrant water-ways, National Parks and Refuges. Mr. Hayes highlighted the many backwards steps that have occurred since George Bush became president and he encouraged the many human rights and environmental rights participants at this year's River Rally to work hard in the upcoming election to try to bring about a change before "it is too late".

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Challenges of Today continued...

The Good Earth

The earth is our mother.
Whatever befalls the earth
befalls the sons of the earth.
If men spit upon the ground,
they spit upon themselves.

This we know. All things
are connected like the blood
which unites one family.
All things are connected.

Man did not weave the web
of life; he is merely a strand
in it. Whatever he does to
the web, he does to himself.

Contaminate your bed, and
you will one night suffocate
in your own waste.

**Chief Seattle
Duamish Tribe
1854**

WATER FACTS

- 40% of U.S. rivers & streams are too polluted for fishing & swimming.
- 30% of Native Freshwater fish species in North America are threatened, endangered or of special concern.
- Freshwater animals are disappearing 5x's faster than land animals.

The other Keynote speaker of this year's River Rally, Elizabeth Furse of The Institute for Tribal Government, highlighted the fact that a great deal of ground is being lost at a rapid rate and that River protection efforts nation-wide need to understand that the single most powerful ally today is the Tribal Governments across the Nation. The Sovereign Indigenous governments throughout North America have the right to be at all decision making tables on issues that may impact their traditional territories. Past U.S. Presidents and former Governor Knowles have signed Executive and Administrative Orders that require Federal and State entities to engage in **meaningful** consultation with Tribal Governments. Tribes and First Nations have the right and the authority to define the nature of Government-to-Government consultations. And today Watershed Protection activists, conservation workers, environmentalists, and sustainable development proponents are coming to the realization that Indigenous Peoples can get to the decision making tables and have their input become integrated into real decision making and policy making.

As change continues to move quickly those interested in a clean and healthy future are often overwhelmed by the many injustices that are happening simultaneously. Individuals and organizations are questioning where to focus energies. To date the Yukon River Inter-Tribal Watershed Council has been involved in education, training, assessment, monitoring and advocacy with the intent of conserving and cleaning-up the Yukon River Watershed for future generations. This year the Leaders of the Yukon River will come together in Ft. Yukon August 19th – 22nd to give new directives to the Yukon River Inter-Tribal Watershed Council. The staff of the Yukon River Inter-Tribal Watershed Council will be awaiting direction and guidance as to where to focus our efforts in these difficult times. Don Sampson of the Columbia River Inter-Tribal Fish Commission has been invited as the keynote speaker for this year's gathering hosted by the Gwichyaa Gwich'in Tribal Council. Please call us at (907)258-3337 if you have any questions, resources or ideas that you wish to contribute to this year's summit.

What is a WATERSHED?

"An area of land that water flows across or through on its way to a common body of water."



WETLANDS

Article and Pictures by Kip Cronk

An area that has water all or part of the year, specific plant and soil types is considered a wetland. Unfortunately to some, these areas are considered a waste of space and have been filled in. Sadly, in my home state of Michigan, 50% of the wetlands are gone forever.

For me, a wetland is a very interesting, beautiful and exciting ecosystem. Some wetlands dry up during certain times of the year and later fill up with water and come to life. Wetlands are crucial habitats for many different forms of life. They provide breeding grounds as well as a place to feed for animals. Various plants that can live with the changing water level, live in and around wetlands. Wetlands are very productive ecosystems by taking in the sun's energy and processing it into other types of energy for the animals to use and also supplies water to those animals and plants. Some people consider a wetland as mosquito machines, which they are, but those mosquitoes provide a diet for many different animals in the food web of life.



It is critical in managing a watershed to preserve the wetlands throughout the entire watershed. Wetlands are Mother Earth's natural filters, as the water comes to rest in them and allows time for the plants to filter out contaminants. Wetlands are also very important during floods as they act as a natural overflow pond. They take in the water during times of high water minimizing the effect of the flood. Areas that have lost wetlands along rivers are much more affected by floods as the water is not contained and continues to flow out and over the land. Wetlands also help control the quality of water by allowing it to settle, which gives the plants time to filter nutrients and pollutants in the water and sediment to drop out of the water. Another important role of wetlands is that they recharge ground water. Many people still depend on wells to obtain their water from the ground. By holding water, a wetland allows that water to seep through the ground to recharge aquifers and this is very important as many areas around the world are losing ground water supplies at alarming rates.



The Clean Water Act has provisions in it to protect wetlands, but only large wetlands of 5+ acres. It is critical that communities prioritize preserving wetlands in their planning processes. All wetlands are important, and the smaller ones can be protected through planning and local ordinances. Without wetlands the watersheds we live in will not flourish and many more problems will arise in water quality and diversity of life.



YRITWC WEBSITE INFORMATION

The Yukon River Inter-Tribal Watershed Council's website is located at www.yritwc.com. Once you click onto the front page to enter you will be taken to the MENU. Here you will find many links that are valuable to communities throughout the watershed. We have listed a couple points of interest from the menu and suggest that you visit these links as well as the entire website.

ONLINE RESOURCES-MISCELLANEOUS LINKS:

Here we have placed many links to different organizations that we thought may be helpful. This page is easily updated by the YRITWC Staff, who are willing to add website links that the communities find important.



YRITWC INFO-PROJECTS AND PROGRAMS: This will take the user to a site that lists both Alaska and Yukon projects. At this time we have put the Unified Watershed Assessment (DRAFT) and the Fortymile River Watershed Assessment (DRAFT) onto the website. Both of these projects can be found under Alaska and Yukon projects. Once there, click on the name of the report and it will open for you. Both of these projects are very large and will take some time to open, so please be patient.

COMMUNITIES MAP: This page has a picture of the watershed with all of the communities within it. If you click on a community name a profile will come up. We need some help with this page as a lot of the Alaskan communities don't have links yet. We need pictures, populations and tribal information to add to the page. Digital photos would be most helpful. Please send information to the attention of Kip Cronk.

**BUREAU OF INDIAN AFFAIRS
WATER RESOURCES PROGRAM**
Water Management Planning and Development
Funding

OBJECTIVE: To assist Indian tribes in the management, planning and predevelopment of their water and related land resources.

USES AND RESTRICTIONS: Tribes use funds for Water Management, Planning, and Predevelopment, which are project specific awards that are made competitively.

ELIGIBILITY: Federally Recognized Indian Tribal Governments and Native American Organizations authorized by Indian tribal governments.

DEADLINES: Proposals should be submitted to the Regional Office by **August 15, 2003** for fiscal year 2004 funds.

EXAMPLE OF PROJECTS: Projects include geographic, hydrologic quantitative and qualitative analysis of water, ground, surface water quality and quantity monitoring, aquifer classification, and stream gauging; ecosystem development and management.

MORE INFORMATION:

Keith Kahklen
907-586-7318

Bureau of Indian Affairs
Branch of Natural Resources Management
P.O. Box 25520
Juneau, Alaska 99802-5520

Indian Law Resource Center

By Andrew Huff, Staff Attorney

Already two years have passed since we last gathered at the headwaters of the Yukon River in the territory of the Teslin Tlingit First Nation to sign the historic *Yukon River Inter-Tribal Accord*. We will soon be gathering again at the fourth summit meeting of First Nations and Tribes of the Yukon River watershed, which is scheduled to take place at Fort Yukon, Alaska, from August 19-21. These summits embody the long-term commitment of the sovereign Native nations of the Yukon watershed to cooperate in restoring the environmental vitality of the river and its tributaries. The signing of the Accord by First Nation and Tribal governments was a first step in what will be a long process of building relationships between dozens of governments and agencies, building the capacity of Native peoples to control and clean-up the Yukon and its tributaries, and becoming a powerful voice in the future of the Yukon River watershed.

The Yukon River Inter-Tribal Watershed Council has been busy in the last two years. An impressive website has been created, containing the Accord and vast amounts of information regarding the Yukon River in general and the specific activities of the Watershed Council (accessible at www.yritwc.com). Two comprehensive studies of the Yukon River watershed have been completed: one which analyses the entire Yukon watershed and one which takes a close look at the Fortymile River watershed. The Council has also done considerable training and mapping, and has undertaken a variety of educational and capacity-building programs.

The upcoming fourth summit meeting presents an opportunity to assess past efforts and come to a consensus on the future activities and direction of the Watershed Council. As part of the mission of Tribes and First Nations to clean-up the Yukon watershed, I will be presenting a handbook to summit participants which will outline a variety of ways for Tribes and First Nations to have a direct voice in the management of the Yukon River watershed. The First Nations and Tribes of the Yukon watershed must be at the table with the governments of Canada and the U.S., and with corporate and other interests, in deciding the future of the Yukon. As a wise person once said, "You are either at the table, or you are on the menu." In signing the *Inter-Tribal Accord*, the Tribes and First Nations of the Yukon have decided to be at the table.

The handbook will look at international treaties and agreements that are concerned with the Yukon River and the entirety of the Yukon-Alaska region. For example, I will explore the Pacific Salmon Treaty, the Boundary Waters Treaty, the Jay Treaty, the North American Free Trade Agreement, and international law regarding transboundary freshwater disputes, looking for opportunities presented by these agreements for meaningful Native participation and influence. A second handbook is planned which will look at legal mechanisms available domestically, in the Yukon territory and in Alaska, to increase Native participation and influence in the management of the river.

In addition to creating these handbooks and assisting Tribes and First Nations to use them effectively, the Indian Law Resource Center is available to assist Tribes and First Nations in other areas. For example, if a tribal government has a specific legal question or needs help with a specific issue, do not hesitate to contact us. Although we are a small organization with limited funding, we may be able to help you with research, with direct legal assistance, or by directing you to an organization that can better assist you.

I encourage those Tribal and First Nation governments that have not yet signed the Accord to come to the summit and see firsthand the commitment and vision of the Native leaders and governments that are forging the future of the Yukon River watershed. I am looking forward to seeing you in Fort Yukon.

WANTED: Submissions for the YRITWC Newsletter



Send us your articles about your environmental programs, training dates and success stories about protecting the watershed within your own communities.

We would love to reprint them and share them with other Tribes across Alaska!

Please send them attention to Kip Cronk.

GENERAL DISASTER PREPARATIONS

By: Diana L. Ervin, Environmental Education & Training Coordinator

To properly prepare for any type of disaster you will need to take a critical look at your familiar surroundings. You will probably find some things that have been right all along, some things that need changing, and perhaps some things for which you'll need technical advice. It is recommended that you, your family or community make a list; identify serious problems such as missing smoke alarms or dangerous fire hazards. Beyond that you may want to take things in order from the easiest to the most difficult. Do those things that can be easily done right away and check them off. More difficult tasks, or tasks for which you need help or advice, can be attacked next. But don't put things off; set a reasonable schedule and stick to it.

Making the various things that need to be done into a family project is a good idea. This way you get everyone in the family or community thinking and involved about preparing for a disaster. Not only will good ideas come forth, but it introduces the notion that the family or a community can face a disaster together. **I encourage family or community discussion about how and why and what needs to be done to prepare for a community disaster.**

Plan Ahead

When a disaster strikes, you must be ready to take action. In an emergency of any type you will not have time to make lists of things you will need to survive. Now is the time to see to the safety of you, your family and community.

Family & Community Check List

Gather your family or community together and discuss the possibilities of a disaster and what to do if one occurs. Your Disaster Plan should include the following:

- Decide how you will prepare to be self-sufficient for 3-14 days.
- Prepare your 3-day Disaster Emergency Survival Kit and make sure all members who will be utilizing the supplies know where it is located.
- Make sure you have an adequate amount of water on hand and where it is located.
- Determine how your family members will protect themselves during the disaster.
- Determine the best ways to evacuate the house or community. Locate the best escape routes from each room and your community.
- Decide where to meet after you evacuate.
- Decide how you will evacuate those who cannot exit the house or community without help (elderly, young children, and pets).
- Evaluate everyone's First Aid skills.
- Determine where the most dangerous areas of the house and community are and what can be done to minimize the danger and damage potential.
- Determine where the safest places are in the home and community.
- Know where the fuel shut-off valves are located. Most are located outside along the base of the home or buildings.
- Know where the water shut-off valve is located.
- Know where the electrical circuit breaker boxes are located.
- Determine where the closest hospital is to your home, school, work and community.
- Decide what to do if family or community members are in different areas of the city.
- Determine where to go (community hall, school, or other larger structure) if your home is so badly damaged that it can't be lived in.
- Check for possible fire hazards and repair or remove them as soon as possible.
- Your whole family and community should have a common contact place or person that can be called for information or notification about family members, not only for fires, but floods, earthquakes, storms or other natural or man-made disasters.
- Keep important documents, titles, deeds, birth certificates, replaceable pictures, and insurance policies in a safe deposit box or fire proof safe.

Most of the preparation I suggest can be done yourself or by any competent handy person.

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Would you like our newsletters as an email instead of a paper version, or both?

If so, contact Kip Cronk at kipcronk@gci.net and we will add your information to our emailing list.

GENERAL DISASTER PREPARATIONS Continued...

Emergency Supplies & Equipment

When most of us think about disaster we tend to think in personal or family terms. We respond to such situations as a fire in the home or a catastrophic illness by dialing 911 for emergency services. BUT what if a catastrophe is community-wide? Consider, a severe earthquake. There may be many people seriously injured, there may be fires complicated by interruptions to the water supply. The police or VPSO will have their hands full maintaining minimal order. The harsh truth is, you may not be able to get emergency services, or any services, for several days. It may take weeks for normal levels of service to be restored.

This alarming prospect is a strong argument for maintaining a stock of supplies in your home or community to sustain everyone for 3 or 4 days. It is recommended that the following items be packed and stored in a sturdy sealed container.

- Flashlights
- Battery operated radio
- Extra batteries
- First Aid Kit, Handbook and additional supplies
- Personal items, including one change of clothing per person, shoes, and a coat
- Miscellaneous items (scissors, tweezers, thermometer, petroleum jelly, rubbing alcohol, tissues, pocket knife, water purification tablets, eye dropper)
- 3-day food supply requiring no refrigeration
- Bedding supplies
- Toiletries (tissue, towels, reading material and pencil)
- Fuel and light (matches, candles, flares, canned heat)
- Equipment (can opener, dishpan, disposable dishes and utensils, an axe, shovel and a bucket w/plastic liners)
- Personal documents (Driver's license, list of credit cards, checking and savings account numbers, insurance policies, birth certificates, medical history, passports, etc.)
- Minimum of \$100.00 cash in small bills

These are just some of things you can do to prepare for a disaster. For a more complete and comprehensive list contact the **Alaska Division of Emergency Services**, P.O. Box 5750, Fort Richardson, AK 99505-5750, (907) 428-7000 or 1-800-478-2337, or by email at des@ak-prepared.com.

Questionnaire on INDIGENOUS PEOPLES' TRADITIONAL FOODS & CULTURES *Distributed by the International Indian Treaty Council (IITC)*

Respectful greetings.

From local to international levels, there is a growing understanding of how culturally important Indigenous Peoples' traditional, subsistence foods are to the overall well being of our communities. But many outsiders still use only *economic* or *nutritional* standards (not *cultural* standards) when they try to help us feed our communities, or when they carry out projects that affect our communities' food systems.

The UN Food and Agriculture Organization (FAO) would like to support Indigenous Peoples' in strengthening our communities' food systems by giving us the chance to voice our opinions and make

recommendations through this questionnaire, developed by the IITC. The questionnaire results will help guide FAO as the lead UN agency for agriculture, forestry, fisheries and rural development issues. With over 180 State (government) as members, FAO is responsible for:

1. raising levels of nutrition and standards of living
2. improving agricultural productivity
3. improving the condition of rural populations

We request that completed questionnaires be submitted by **July 7, 2003**, either by mail to IITC, 456 N. Alaska St., Palmer, AK, USA, or fax (907) 745-4484, or e-mail to iitcny@mindspring.com

The blank questionnaires are posted in English and Spanish on IITC's website, www.treatycouncil.org, or call 907-745-4480. A summary of responses will be posted after **July 7, 2003**.

THANK YOU FOR YOUR INPUT.

***Ichthyophonus* in Yukon River King Salmon; What Does It Mean for Subsistence and Commercial Fishing?**

**By Joe Sullivan,
Program Director**

Yukon River Drainage Fisheries Association: Reprinted with permission

(This article and pictures can be found on our website at www.yritwc.com/alaskaProjects.htm)

Light years ago, just before the invention of dirt (1988), I was a fish pathologist for the Alaska Department of Fish and Game (ADFG). A Yukon king salmon (Chinook) caught near Koyukuk had been sent into the Fish Pathology Lab having grayish-brown streaks throughout the flesh. A subsistence fisher had caught it and was worried there might be a human health problem. A quick look at a piece of the tissue under the microscope revealed what it was, *Ichthyophonus* (Fig. 1), a fairly large (a millimeter or so in diameter) protist parasite, but one that has been found in many different species of fish in many, many parts of the world. In other words, it was curious but no big deal and, as I said in the report then "...not known to be of human health significance." But I also said "**Please do not dispose of any raw fish parts from similarly infected fish in the future into streams, rivers or other wild waters in order to prevent the infection of additional fish.**" (Fish Pathology Report 890026).

Move ahead another few years and *Ichthyophonus*, together with a viral disease (Viral Hemorrhagic Septicemia) was killing herring in Prince William Sound, but the question then was, did the *Exxon Valdez* Oil Spill (EVOS) have anything to do with it? Exposure to oil can weaken a fish's immune response system so there was an arguable case, but of all fishes, herring seem to be about the most susceptible to *Ichthyophonus* so that was not really a big surprise either. Dr. Dick Kocan of the University of Washington was one of the researchers looking at this disease in the herring.

Now fast forward another ten years from the Prince William Sound herring, 15 years beyond the Yukon Chinook case. I left Fish and Game behind, left the country, in fact, to join the Peace Corps for awhile, and when I came back and joined YRDF, here was my old acquaintance, *Ichthyophonus*, once again in Yukon River kings, and once again, Dr. Kocan was hot on its trail. This time though things had changed. Infected salmon were not the occasional oddball fish, but much more common and thus were getting people's attention beyond just the "What's this?" question. Some people along the Yukon noticed a different odor to fish heavily infected with *Ichthyophonus* and they said it does not dry correctly. They wanted to know how it was going to impact their subsistence and commercial fishing up and down the river and on both sides of the US-Canada border. Consequently, the Joint Technical Committee (JTC) of the Yukon River Panel funded Dr. Kocan to investigate. The jury is not in yet on the disease's impacts, but some of the results Dr. Kocan has thus far are not good news. In 2002, he found that about a quarter of the Chinook salmon entering the Yukon were infected with *Ichthyophonus*, but only about half of those showed clinical signs of disease (a fish, a human or any animal can be carrying a pathogen, but not always show signs of disease). As the fish moved up river a bit larger proportion of the infected fish showed clinical signs of disease UNTIL spawned out fish were examined at which point the prevalence of detectable *Ichthyophonus* actually declined to half or less of what it had been.

Chinook are believed to acquire *Ichthyophonus* infections by eating infected marine fish. When the prey fish is digested in the salmon's gut, amoeboid forms penetrate the gut wall and are most likely carried by the blood or lymph to all parts of the fish's body. They then form resting stages (Fig. 1) which appear as granular nodules or grayish-brown streaks. Later, the spores begin to bud out (Fig. 2) and form aseptate hyphae (Fig. 3) which continue to proliferate throughout the fish's body forming more resting stages followed by more budding and hyphae and so on until the fish dies. When the fish dies, the pathogen continues to proliferate, the resting spores become multinucleate (many nuclei) forming endospores and presumably are able to infect other aquatic organisms that consume them, thus working their way through the food chain again as small fish are consumed by larger fish and so on. For the most part, transmission from one fish to the next seems to take place largely in salt water though some examples of freshwater transmission have been noted. Indeed, most fish from which *Ichthyophonus* has been isolated live in marine waters, but once infected, a fish typically carries the pathogen for the rest of its life whether it moves into freshwater, as salmon do to spawn, or remains in saltwater.

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Yukon River Inter-Tribal Watershed Council's Guiding Principles:

Listening, Inclusive, Consensual, Sharing Wisdom, Trustworthy, Timely Decisions and Responses, Tenacious, Respectful, Fair and Equal, Integrity, Honest, Patient, Bold, Flexible

As noted, once a fish is infected with *Ichthyophonus*, it is generally believed that it never recovers from the infection. Given enough time, infections eventually do tend to become “clinical” and the fish dies. This might take a very long time under some circumstances, but the only way for there to be a smaller proportion of infected fish on the spawning beds than there are during the earlier parts of the salmon’s journey is for some of the infected fish to die along the way without some of the uninfected fish themselves becoming infected. Since *Ichthyophonus* is primarily if not entirely picked up by the fish in saltwater, this scenario is very plausible. So what proportion of the fish never make it to the spawning grounds because of this pathogen? Excluding spawn-outs, Kocan found that 29.9% of all males tested in the Yukon or Tanana and 29.7% of the females were positive for *Ichthyophonus* infections. Conversely, 16.4% of the spawn-out males and 9.9% of the spawn-out females from the Chena and Salcha tributaries to the Tanana were positive. What happened to the extra 13.3% of the males and 20% of the females if they did not die somewhere along the way? Dr. Kocan believes that this is precisely what happened and he is sampling fish again this year to see whether he gets similar results.

If infections are almost entirely marine in origin, how can the prevalence of infection go up as the fish move upriver? The answer is that the prevalence may not actually go up; it just might be easier to detect the infections that were always there in a fish, but originally were below the sensitivity level of the test being used. The most sensitive test currently used (which is also the test Dr. Kocan uses) requires culturing heart tissue in growth media which obviously is a fatal procedure. If a non-lethal test could be developed that is at least as sensitive as the culture method, many more fish could be tested, released alive and development of the disease in individual tagged fish could be tracked. The *Ichthyophonus* Committee is asking Dr. Mike Kent, a researcher at the Oregon State University, to develop a PCR test (polymerase chain reaction) to detect minute amounts of *Ichthyophonus* DNA in a fish’s blood. Blood can be drawn from a fish without killing it and if the PCR test works as well with this pathogen as it has with many others, it should be able to detect the very low level initial stages of an *Ichthyophonus* infection in a fish. They could then radio tag these fish and uninfected fish to find out whether there is a difference in pre-spawning mortality, whether different stocks have different infection rates, whether any fish are picking up their infections in freshwater and so on. As the test is being developed, the same fish will be tested for Dr. Kocan’s study and for Dr. Kent’s and thus the methods themselves will be directly comparable.

There is some speculation that global warming is causing Yukon waters to warm up and make the salmon less able to fight an *Ichthyophonus* infection. Thus it could be that just as many Yukon salmon were infected in the 1980’s as there are today, but the greater stress of the higher temperatures is turning more of those hidden infections into clinical disease. Some of the tags placed in fish periodically record the temperatures to which a fish is exposed as it moves upriver. Some day with enough data, we may be able to say whether a fish infected with *Ichthyophonus* and exposed to higher water temperature stress is more likely to develop clinical disease and die before spawning. That would mean that if global warming continues to increase Yukon water temperatures, the proportion of disease and pre-spawning mortality among *Ichthyophonus*-infected fish could go up. If, that is, they are all linked and this has not been shown to be the case yet. But it is the research we need to do to find the answers. Whatever the reason for the apparent increased numbers of infected Yukon chinook salmon, it does appear that it is going to be a factor we must consider for some time into the future. We cannot cure the fish so we must live with it, but, like anything else, the more we know, the better decisions we can make to do that.

Native American Fish and Wildlife Society

Northeast Regional Conference

Akwesasne, New York

IO HA HI:IO Center

August 5-7, 2003

Fax # (518) 358-6252

Phone # (518) 358-5937



50 Year Vision
"To be able to
drink water di-
rectly from the
Yukon River"



Independent Oceans Commission Calls for Immediate Reforms:

Scientists, fishermen, conservationists, elected leaders, and business officials unveil recommendations to avert decline of ocean wildlife and collapse of ocean ecosystems (June 4, 2003, 9:30 ET). Overfishing at sea, over-development along the coasts, and increasing pollution from cities and fields are leading to decline of ocean wildlife and the collapse of ocean ecosystems, according to a landmark report released today by scientists, fishermen, conservationists, business leaders, and elected officials. The independent Pew Oceans Commission calls for immediate reform of U.S. ocean laws and policies to restore ocean wildlife, protect ocean ecosystems, and preserve the ecological, economic, and social benefits the oceans provide. The comprehensive report, entitled [America's Living Oceans: Charting a Course for Sea Change](#), is the result of a three-year, nationwide study of the oceans, the first of its kind in more than 30 years.

More information at http://www.pewoceans.org/oceans/press_release.asp

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.*

Alaska Steering Committee

Clarence Alexander
Yukon Flats Representative
Chief Peter Captain Sr.
Middle Yukon Representative
Edna Hancock
Tanana River Representative
Chief James Landlord
Lower Yukon Representative
Larry Nathaniel (alternate)
Yukon Flats Representative

Jack Wholecheese
Koyukuk River Representative
Pat Sweetsir (alternate)
Middle Yukon Representative
Ephrim Thompson (alternate)
Lower Yukon Representative

Yukon Steering Committee

Harold Gatensby
Dahka Tlingit Nation Representative
Chief Lucy McGinty
Selkirk First Nation Representative
Geraldine Pope
Interim Southern Tutchone Representative
Chief Eddie Skookum
Northern Tutchone Representative
Chief Darren Taylor
Vuntut Gwichin/Tr'ondek Hwech'in

Farewell Diana!

Diana Ervin, YRITWC Environmental Ed and Training Coordinator has accepted a new position with the Northway Natives as CEO/General Manager. "I want to thank you ALL for the experiences and opportunity to assist your Tribes and communities towards understanding the importance of environmental education as a tool to foster community development," said Diana. The YRITWC would like to thank Diana for her hard work, dedication and commitment. Best of luck in Northway Diana, we are going to miss you!

International Year of Freshwater 2003

United Nations Department of Public Information, New York



Message from the Secretary-General of the United Nations

The International Year of Freshwater (2003), proclaimed by the United Nations General Assembly, comes at a crucial time. At the Millennium Summit in 2000, world leaders agreed to reduce by half, by the year 2015, the proportion of people who are unable to reach, or to afford safe drinking water. And at the World Summit on Sustainable Development in Johannesburg earlier this year, a matching target was adopted - a commitment to halve the proportion of people without access to basic sanitation services, also by 2015. Grave consequences lie ahead if we fail to meet these goals: the persistence and spread of deadly diseases; further damage to the global environment, threats to food security and stability itself. And while water problems are most acute in the developing world, developed countries are also at risk.

The world needs to improve its stewardship of water resources. We need much more efficient irrigation, far less toxic agriculture and industry, and new investments in water infrastructure and services. And we need to free women and girls from the daily burden of walking great distances in search of water - time and effort that could be better spent on education and building better lives for themselves, their families and their communities. The International Year of Freshwater should mobilize the world behind these goals by raising awareness, by generating new ideas and strategies, and by promoting participation, partnerships and peaceful dialogue. Let us pool our efforts; let us use the knowledge and technology at our disposal; and let us do our utmost to protect the world's most precious freshwater resources - our lifeline for survival and sustainable development in the 21st century.

Kofi A. Annan

WATER FACTS

- **One flush of a toilet in the developed world uses as much water as the average person in the developing world uses for a whole day's washing, cleaning, cooking and drinking.**
- **Almost 70 percent of all available freshwater is used for agriculture. Yet because of inefficient irrigation systems, particularly in developing countries, 60 percent of this water is lost to evaporation or is returned to rivers and groundwater aquifers.**
- **Water use increased six-fold during the last century, more than twice the rate of population growth.**
- **Water losses due to leakage, illegal water hook-ups and waste total about 50 percent of the amount of water used for drinking in developing countries.**
- **Freshwater ecosystems have been severely degraded: about half of the world's wetlands have been lost and more than 20 percent of the world's 10,000 known freshwater species are extinct.**
- **6,000 children die every day from diseases that can be prevented by improved water and sanitation.**
- **Although essential, freshwater is unevenly distributed: 70 percent of the world's surface is covered by water, 97.5 percent of that is salt water. And of the remaining 2.5 percent that is freshwater, almost three quarters of that is frozen in ice caps.**

A special website for the Year, at www.wateryear2003.org, will provide extensive links to information materials, reports and planned activities and events around the world, by United Nations agencies, governments, and non-governmental and private sector partners.

RECYCLE, CONSERVE & PROTECT

By: Diana L. Ervin

Environmental Education & Training Coordinator

Have you ever wondered what you can do to recycle, or how to conserve energy, or ways to protect OUR environment? Here are some helpful tips that individuals can do to assist your community and your environment to recycle solid waste, conserve energy and protect air, land and water resources. READ ON...

SOLID WASTE: What do newspapers, plastic bottles, aluminum cans, glass, tin, cardboard, car batteries, tires, and motor oil have in common? They are all waste that can be recycled! **Recycling** materials that we no longer need turns them into something that can be used again. New **paper** can be made from old newspapers. Carpeting and park benches can be made from plastic bottles, and new bottles can be made from used glass.

Many things can be used again and again. For example this newsletter is printed on recycled paper. And, as we recycle, we are cutting down on the garbage poured into our landfill every day. We are also saving and conserving energy needed to make new products and at the same time, we are stopping the air pollution that is associated with making these products.

REMEMBER, it is important to **conserve** our resources. By recycling, we are reusing those resources rather than discarding them into the ever-increasing **garbage** pile accumulating in our landfills.

Do you know that the average American throws away at least 4 pounds of garbage everyday? How much do you throw away daily?

CHALLENGE: Determine the amount of trash you throw away on a daily basis. If it is too much work to do on an individual level, then try a family based approach. How much does your family generate on a daily basis?

ENERGY: We all depend on energy to keep us warm, to drive cars, to cook our food, and light our homes. As you know, energy from the sun is called **solar** energy. Fossil fuels such as **coal** and oil come from the mineralized remains of dinosaurs and other animals that lived millions of years ago and are now buried deep in the earth. Cars, planes, and trucks run on **oil** and other fossil fuels. Fossil fuels also create electricity.

Supplies of fossil fuels are limited, so it is important to learn to conserve. We can turn off lights when we are not using them, walk or ride the bus instead of driving cars, turn off the water when we brush our teeth, hang clothes out to dry, purchase chest freezers instead of upright freezers, and keep the thermostats turned **low** at 65° F, especially at night when we are sleeping.

WATER: We use water for many things in our daily lives. It is so much a part of what we do every day, that we take it, and its clean goodness for granted. But, our water supply is limited. Ninety-seven percent, 97%, of the earth's water is **salt** water. Two percent, 2%, is glacier ice. That leaves US just one percent, 1%, which we can actually use. We must be careful to use only what we need!

There are easy ways to save water. By saving the water from your bath or shower and feeding it to your plants you are using the water twice. If you check your faucet and see a **drip**, tighten it up or replace the washer. One little drip can waste a lot of water over a small period of time. If every household faucet in America dripped once each second, we would waste 928 million glasses of water each day or enough to fill 7.5 billion 8 ounce glasses.

Did you know that the average family turns on the tap to use water between 70 and 100 times a day? Shortening the length of your shower time, washing your car on your lawn, adjusting the control on your washing machine, and turning off the water when you brush your teeth can save many gallons of water.

AIR: Living things need **air** to breathe and grow. Air is mostly nitrogen and oxygen. Keeping it clean is a serious problem. Fumes from things like cars, wood stoves, snow machines, 4-wheelers, outboard motors, and factories all mix together in the air and form smog. **Smog** turns the air brown or gray and makes it hard for us to breathe. On the ground **ozone** is bad for us to breathe. But high up in the atmosphere it protects us from the harmful sun's harmful rays.

WORKSHOPS AND CONFERENCES
(Region 10 Tribal Newsletter)

SEPTEMBER 7-9: *Annual Biosolids Management Conference*, Chelan, WA. Info: 206-684-1145
SEPTEMBER 9-11: *Workshop on Mining Impacted Native American Lands 2003*, Reno, NV. Info: Norm Lewis 513-569-7665, or Alina Martin 703-318-4678 or www.epa.gov/ttnrmrl.

OCTOBER 7-11: *North American Association for Environmental Education Conference*, Anchorage, AK.
Info: www.naaee.org.

OCTOBER 13-17: *Alaska Native Health Board Tribal Environmental Conference*, Anchorage, AK.

OCTOBER 26-29: *Region 10, Native American Day at National Brownfields Conference*, Portland, OR.
Info: Susan Morales 206-553-7299.

Upcoming Trainings offered by Yukon River Inter-Tribal Watershed Council:

July 29th and 30th in St. Mary's - Water Quality Assessment and Monitoring Training and Strategic Planning Facilitators Training hosted by **Yupit of Andreafski**. **Please contact Serena Alstrom 907-438-2329.**

August 5th, 6th, and 7th in Fairbanks - Hazardous and Solid Waste Management Training. With an emphasis on the Resource Conservation Recovery Act and methods of properly collecting, managing and storing Hazardous waste. (This training is being offered in collaboration with Tanana Chiefs Conference). For more information contact Molly Patton at 1(800)478-6822.

August 19th, 20th, and 21st in Ft. Yukon – Assessment and Monitoring, Resource Conservation Recovery Act, Hazardous and Solid Waste Management, Tribal Environmental Agreements, and Landfill and Sewage lagoon improvement training ideas. Please contact Rob Rosenfeld at (907)258-3337 for more information.

October 7th, 8th and 9th in Minto –Emergency Response Training to assist Tribes in developing their own emergency response plans. This training hosted by the Minto Tribal Council and is being offered in collaboration with the ADEC, EPA and DES For more information contact Diana Ervin at (907)883-5654 or Rob Rosenfeld at (907)258-3337.



UPDATE FROM THE ASSESSMENT AND MONITORING COORDINATOR

We will soon be purchasing a new test boat for the YRITWC and then I will be driving it from Fairbanks to the Tanana Office. This boat will help us get moving on an affordable sampling program for the daunting task of monitoring 1750 miles of the Yukon River.

I am also helping two tribes with their first QAPP drafts for their own sampling programs, and will be traveling to river villages all this season making presentations on the importance of QAPPs so they can have their own tribal monitoring programs in place. I am very enthused to see more tribes begin their own research on environmental problems pertaining to the Yukon River and their own traditional territories.

Many Thanks, **Paul Erhart**

The NAAEE is offering scholarships to ANROE members and to tribal members to attend the NAAEE conference in October in Anchorage. For information about these scholarships, please go to the NAAEE website at <http://www.naaee.org>.

Funding Strategies for Small Organizations: Remember to be well-rounded

A funding strategy is a written plan showing where and how an organization anticipates receiving financial resources to continue their mission. Developing a funding strategy - and keeping it updated over time - can help ensure a nonprofit's stability and have a direct impact on its ability to successfully pursue its goals.

Perhaps one of the easiest traps for small nonprofits to fall into is relying too heavily on one source – or one type – of funding. Of course, limited resources of time and staffing place boundaries around the amount of effort that can be directed to fundraising; however, the consequences of under-developed funding strategies can be particularly devastating for small organizations.

Here is a table, developed by AFE founder Cindy Adams, showing her opinion of a healthy fundraising mix. Although every nonprofit is different, this is a good general guide.

Individual donations (can be in the form of membership dues, planned gifts, etc.)	33 to 50%
Government Grants	Up to 25%
Corporate Giving	7 to 15%
Foundation Giving (typically for special projects)	5 to 10%
Special Events	10 to 15%
Earned Income	At least 25%

For more information about this funding matrix, stop by www.GrantStation.com and click on the free online Quick Assessment Tool.

Guide to Alaska Funding Exchange Services

The Alaska Funding Exchange has been serving rural Alaska since 1992, and new CEO Mary McRae Miller has introduced several new products to continue that legacy. We have added one-on-one mentoring, major donor research, and two grant-related packages to our menu of top notch consulting, research and writing services. Call or email for additional information.

Consulting:

- Funding Strategies
- Grant Management
- Fundraising

Research:

- Major Donors-NEW!
- Government Funding
- Foundation & Corporate Grants

Writing:

- Grant Proposals
- Case Statements
- Letters of Inquiry

NEW! Grant Toolkit:

Crafted specifically for your organization, this toolkit includes templates for the major parts of a grant request, standard language, facts, and figures.

NEW! Grant Starter Package:

AFE will help you write a case statement, provide a basic funding search, and teach you how to build relationships with promising grant makers – all for one basic price.

NEW! Mentoring:

Advice and guidance for individual grant writers already working for nonprofits. AFE will review grant proposals as they are drafted and help build winning requests.

Alaska Funding Exchange

Mary McRae Miller, CEO

(907) 789-4420 • (907) 789-4480 fax

info@funding-exchange.org

The Water of Life: Peril & Promise in the 21st Century
September 4-7, 2003
3rd Annual Century of the Environment Conference
Omega Institute, Rhinebeck, New York

Cosponsored by Omega Institute and *Resurgence* Magazine.

For further information and registration via e-mail, please contact Omega at registration@eomega.org.

AVAILABLE RESOURCES AND TRAININGS

U.S. Environmental Protection Agency (Alaska Operations Office)

SYSTEM REGULATIONS

If you want to know what water and waste-water regulations affect small communities, here is an easy way to find out. The National Environmental Training Center for Small Communities (NETCSC) offers a list of more than 20 rules and policies that may affect small communities on its Web site.

The list describes applicable regulations; the size of communities affected; specific rules for different size communities' and current, upcoming, and future Safe Drinking Water Act' and Clean Water Act regulatory dates.

Included are contacts and sources, (often EPA Web site links) that provide additional details. NETCSC also has included a glossary of acronyms and important terms. To access: www.nesc.wvu.edu/netcsc/netcsc.regs.html.



Phase I: Introduction to Water Quality Monitoring:
July 23 - August 1, 2003 in Nome, Alaska.
Deadline for Registration: Friday July 18, 5:00pm.
Limited space available.

Phase II: Development of Water Quality Monitoring:
August 18-22, 2003 in Anchorage, Alaska.
Deadline for Registration: Friday August 8, 5:00pm.
Limited space available.

Please call 907-222-6005 for registration.

WASTEWATER MANUAL

The EPA's *Onsite Wastewater Treatment Systems Manual* is now available free to state, county, and local septic system regulatory agencies. This updated manual complements the *1980 Design Manual for Onsite Waste water Treatment and Disposal Systems*, which served as a standard reference for onsite/decentralized program managers, designers, installers, and others involved in the management and design of these systems for years.

The manual provides the last information on onsite system management, siting, design, installation, maintenance, monitoring, and replacement. It will help users assess and select the most suitable sets of technologies and techniques appropriate for site-specific conditions. It also promotes use of an integrated risk/performance-based approach to system design and includes information on cost and effectiveness.

Onsite Wastewater Treatment System Manual is available at no charge on the Web and as a bound reference book. The Web-based version can be downloaded at: www.epa.gov/ORD/NRMRL/Pubs/625R00008/625R00008.htm. Bound versions of the manual are available from EPA's National Service Center for Environmental Publications. To order call 800-490-9198 or www.epa.gov/ncepihom/ordering.htm Request #EPA/625/C-02/017.

Alaska Youth for Environmental Action "Summer Get Together", Youth Environmental Retreat.

August 4-10, 2003. Based out of Fairbanks, Alaska.

This year's event will target 30-35 teen leaders from urban and rural communities who want to learn more about subsistence and our environment. We will base our experience in the Tanana basin.

How To Apply: Students grade 8-11 are eligible to apply. High School seniors (already graduated) will be considered only after younger applicants. Applicants must complete a one-page application and submit three references in order to be considered. Applicants must commit to participating in, or leading, an environmental project, presentation, or training in their community after the "Summer Get Together". For information and application call 907-258-4825 or email AYEA@nwf.org.

YRITWC Newsletter

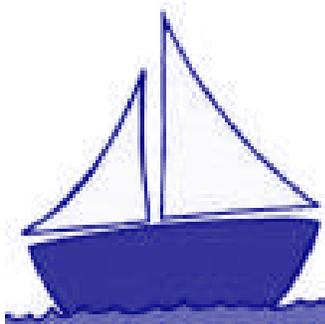
Yukon Inter-Tribal Watershed Council
725 Christensen Drive, Suite 2
Anchorage, Alaska 99501

Phone: 907-258-3337
Fax: 907-258-3339
Email: yritwc@alaskalife.net

We are on the web:
www.yritwc.com



PLEASE RECYCLE



PRIVATE DONOR KICK-OFF!

Please help the Yukon River Inter Tribal Watershed Council purchase a boat this summer in order to collect water samples up and down the Yukon River.

Our goal is to raise \$5,000 and we need your help!!

**Please send donations to: Yukon River Inter Tribal Watershed Council
725 Christensen Drive, Suite 2
Anchorage, Alaska 99501**

Special thanks to David Borden, Brian Hirsch of Earth Energy Systems, and Bob Shavelson for getting our campaign underway, by providing the first donations!!