COMPLETED SAME PAGE

**Science:**

*Indigenous Observation Network (ION):* ***WEBSITE SUMMARY***

The Indigenous Observation Network is an organization made up of technicians who test water quality to create “snapshot” of water quality from the Yukon River Basin. This page outlines the Yukon River Intertribal Watershed Council’s involvement with the ION.

Key Words: Water Quality Testing; Yukon River Basin; USGS; Environment Canada; Traditional Science; Quality Assurance Project Plan; Administration for native Americans Grant; Water Survey of Canada; Active Layer Observation Grids;

*Yukon Climate Science and Community Needs:* ***YOUTUBE VIDEO***

The video outlines why the Yukon River is so important and explains the purpose of and methods used by the Yukon River Inter-Tribal Watershed Council.

Key Words: Video; History of Yukon River Watershed Council; Traditional Science; Water Quality Sampling;

*Active Layer Network:* ***WEBSITE LINK***

The Active Layer Network was created to develop a better understanding of climate shifts and their effects on social structures with the aim of aiding in better decision-making and scientific process to combat climate change. This site outlines the climate concerns in this area and the work done by the Active Layer Network and the Yukon River Inter-Tribal Watershed Council.

Key Words: US Geological Survey; Circumpolar Active Layer Monitoring Program; climate change in the Arctic and Sub-Arctic; Yukon Basin; ION

*Water Quality Reports 2015:* ***(15 Villages)***

These reports provide information on the ION project and the water quality testing that has been done in each community

Key Words: ION; Water Quality; Community Reports; Anvik; Carcross; Carmacks; Dawson; Eagle; Fort Yukon; Kaltag; Kotlik; Koyukuk; Marshall; Nenanan; Nulato; Pilot Station; Stewart; Whitehorse

*Climate Adaptation Strategies – An Intergenerational Effort To Combine Indigenous Knowledge and Western Science: (****5Villages)***

These reports provide an introduction to the YRITWC, along with the results of focus groups and interviews conducted with Elders and citizens of each nation in an effort to share Traditional Knowledge and create a combination of Indigenous Knowledge and Western Science.

Key Words: Water Quality; Indigenous Knowledge; Individual First Nations

*2014/2015 Yukon Projects:* ***SECTION SUMMARY***

On this page can be found the projects that were conducted in the Yukon, Canada between 2014 and 2015. They include the Pacific Salmon Foundation Community Report; the First Nation-Led Water Quality Monitoring of Salmonid Habitat in the Yukon River Watershed; Water for Nature, Water for People; the Yukon River Watershed Plan presentation; and the YRITWC’s Science Overview of Yukon Projects.

Key Words: First Nation Climate Change Policy; Water Action Plan; Pacific Salmon Foundation Community Report; First Nation-Led Water Quality Monitoring of Salmonid Habitat in the Yukon River Watershed; Water for Nature, Water for People; Yukon River Watershed Plan presentation; YRITWC’s Science Overview of Yukon Projects; Water Quality; Health Concerns; Climate Change; Water Action Workshop; Indigenous Collaboration

*First Nation-Led Water Quality Monitoring of Salmonid Habitat in the Yukon River Watershed*

This workshop was held with participants from six nations with the aim to train government employees in water quality monitoring techniques.

Key Words: Training Resources; Water Quality; Fish Habitat Monitoring; ION; Pacific Salmon Foundation; Active Layer Network; Water Sampling; FieldScope;

*Water for Nature, Water for People: Yukon Water Strategy and Action Plan*

This presentation introduces the Yukon Government’s proposal to improve the water quality programs of the area.

Key Words: Water Quality; Water Management Programs; Yukon Government

*Yukon River Watershed Plan: Mayo, Yukon Territory August 2013*

This presentation introduces the Yukon River Watershed Plan and how it can be implemented on a local and federal level.

Key Words: Training Material; Water Quality; Yukon Territory; Yukon River Watershed Plan; Sovereign Rights; Indigenous Rights; Final Agreement; Water Quality Legislation; Yukon Waters Act;

*YRITWC’s Science Overview of Yukon Project’s*

***Broken Link***

*Water Quality in the Yukon 2014/2015:*

This poster outlines the project undertaken in May 2014 to March 2015 to train Indigenous community members in water quality sampling.

Key Words: Media; Water Quality; ION; USGS; Northern Climate Exchange; Northern Climate ExChange; Environment Canada; Trent University; Department of the Environment; Pacific Salmon Foundation’s Community Salmon Program

***Passive Sampling Results for Polycyclic Aromatic Hydrocarbons and Selected Metals in the Yukon River Watershed, Yukon Territory***

**This report outlines the study done by the Yukon River Inter-Tribal Watershed Council to obtain quantitative data on water quality parameters and contaminant levels to create baseline data on potentially toxic contaminants that may be related to human activities and natural occurrences.**

**Key Words: Reports; Water Quality; Mayo, Dawson, Whitehorse; Institute of Watershed Science at Trent University**

***Yukon River Water Isotope Data – Interpretation of Canadian Indigenous Observation Network Results***

**This project examines a robust set of water isotope data collected within the Yukon River watershed**

**Key Words: Reports; Water Quality; Northern Climate ExChange; ION; Canadian Indigenous People; Atlin Lake; Teslin; Bennett Lake; Tagish; Whitehorse; Carmacks; White River; Stewart River; Dawson**

***Water Quality Reports 2013: (25 Communities)***

These reports provide information on the ION project and the water quality testing that has been done in each community

**Key Words: Reports; Water Quality; ION; Alaska Department of Environmental Conservation; Water Quality Standards; Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances; USGS; Environmental Protection Agency; National Science Foundation; Yukon Government; Administration for Native Americans; National Geographic; Circle; Eagle; Fort Yukon; Galena; Hooper Bay; Huslia; Kotlik; Koyukuk; Kwanlin Dün; Marchall; Na-cho Nyak Dun; Nenana; Pilot Station; Ruby; Russian Mission; Stebbins; St. mary’s; St. Michael; Ta’an Kwäch’än Council; Taku River Tlingit; Teslin Tlingit; Tr’ondëk Hwëch’in; Venetie; Little Salmon; Carmacks; Carcross; Tagish**

*Integrating Indigenous Knowledge into a Community Contaminant & Climate Change Monitoring Program:* ***(6 Communities)***

These reports detail the results of research conducted in these communities to assess and monitor climate change and contaminants within their traditional territories through integrating Indigenous Knowledge of the environment into a community contaminant-monitoring program.

Key Words: Reports; Water Quality; Indigenous Knowledge; Community-Based Participatory Research; Carcross; Tagish; Kluane; Selkirk; **Tr’ondëk Hwëch’in; Teslin Tlingit; White River**

*Integrating Indigenous Knowledge & Public Health Concerns into a Community Contaminant & Climate Change Monitoring Program 2012-2013:*

This poster outlines the research projects done in the Integrating Indigenous Knowledge into a Community Contaminant & Climate Change Monitoring Program.

Key Words: Media; Water Quality; Health Canada; ION; Carcross; Tagish; Kluane; Selkirk; **Tr’ondëk Hwëch’in; Teslin Tlingit; White River**

*Climate Adaptation Strategies: An Intergenerational effort to combine Indigenous Knowledge and Western Science 2013-2014:*

This poster outlines the results of the project aimed at creating a dialogue between youth and elders in communities around climate change and its effect on their communities.

Key Words: Media; Water Quality; Health Canada; ION; Indigenous Knowledge; Youth PhotoVoice; Carcross; Tagish; Kluane; Selkirk; **Tr’ondëk Hwëch’in; Teslin Tlingit; White River**

*The Active Layer Network: A collaborative project the US Geological Survey, Yukon River Inter-Tribal Watershed Council, And Yukon River Basin Communities:* ***(15 Communities)***

These reports outline the attempt to initiate the first basin-wide Active Layer Network to measure the permafrost layer and determine the feasibility of sustaining an evolving network within the Yukon River Basin.

Key Words: Reports; Active Layer Network; Permafrost; University of Alaska; USGS; CALM; Allakaket; Arctic Village; Chevak; Circle; Dawson; Eagle; Emmonak; Galena; Hess Creek; Kotlik; Marshall; Nenana; Ruby; St. Mary’s; Teslin

*Yukon Main Stem Synoptic Survey 2009* ***(Link)***

Key Words

*Water Report: 2006 – 2008*

***Broken Link***

*Protocols:*

Key Words

*YSI 63/550A*

Key Words

*Hanna*

Key Words

*YSI Pro*

Key Words

*Active Layer Network Manual*

Key Words:

**Historical Publications:**

**YRITWC Documents**

*Yukon River Watershed Plan August 2013:*

This plan outlines the visions and objectives for the work done on water quality by the Yukon River Inter-Tribal Watershed Council and the First Nation and Tribal Governments, along with the Action and Implementation plan

Key Words: Organization Documents; Administration; Water Quality; Yukon River Inter-Tribal Watershed Council Vision; US Clean Water Act; Canadian Council of Ministers of the Environment (CCME); Yukon Waters Act; Fisheries Act; Canadian Environmental Protection Act of 1999; Yukon Environmental and Socio-Economic Assessment Act

*Subject: Yukon River Watershed Plan Implementation in Alaska December 10, 2014:*

This memorandum outlines the creation of the Yukon River Watershed Plan, and includes the model Ordinance that act as a vehicle for each Tribe to consider using its legislative powers to further the protection of water quality.

Key Words: Organization Documents; Administration; Yukon River Inter-Tribal Watershed Council Summit 2013; Yukon River Watershed Plan

*Subject: Yukon River Watershed Plan Implementation in Yukon Territory and British Columbia December 30, 2014:*

This memorandum outlines the creation of the Yukon River Watershed Plan, and presents a model form of water quality legislation for the First Nations to consider.

Key Words: Organization Documents; Administration; Yukon River Watershed Plan; Yukon Umbrella Final Agreement; Water Quality Act

*Fotymile River Watershed Assessment Draft 2*

This report Is indented to assess the overall health of the Fortymile watershed with the intention to upgrade the report as information is located and analyzed.

Key Words: Report; Water Quality; Bureau of Land Management; EDI Environmental Dynamics

*Yukon River Unified Watershed Assessment*

This report outlines the purpose of the Unified Watershed Assessment to create an avenue to build cooperate and an understanding of the issues within the drainage of the Yukon River, and provides a Regional overview of the Yukon River.

Key Words: Report; Water Quality; State of Alaska FY03 ACWA Nonpoint Source Waters Draft Priority List; Clean Water Act; Yukon River Inter-Tribal Watershed Council Summit 2001

*Annotated Bibliography*

This annotated bibliography contains sources related to the impact of climate change on various aspects of the Alaskan environment.

Key Words: Not done because the document is 333 pages long with no introduction and highly varying sources from Caribou Calf Mortality to Arctic Climate Impact Assessment Models.

*Ichthyophonus in Yukon River King Salmon; What Does It Mean for Subsistence and Commercial Fishing by Joe Sullivan:*

This report outlines the effect of Ichthyphonus, a protist parasite, on the King Salmon population in the Yukon River.

Key Words: Reports; Tribe Resources; Science Department; Subsistence Activities; Alaska Department of Fish and Game;

*International Opportunities for the Protection of the Yukon River Watershed – A Handbook of Strategies*

A handbook of international strategies for the protection of the waters of the Yukon River and its tributaries that outlines the opportunities available at the internal level for Tribes and First nation to engage in advocacy for the protection of the Yukon River watershed.

Key Words: Reports; Water Quality; Advocacy; The Pacific Salmon Treaty; The Yukon River Salmon Agreement; The 992 North Pacific Salmon Treaty; The Boundary Waters Treaty of 1909; The Jay Treaty of 1794; The North American Free Trade Agreement; The North American Agreement on Environmental Cooperation; Human Rights Treaties

*Yukon River Inter-Tribal Success Stories - Tribal Environmental Program Success in the Yukon River Watershed:*

This report outlines the successes that have been seen in various villages through the environmental programs offered by the Yukon River Inter-Tribal Watershed Council as of 2005.

Key Words: Reports; Clean Drinking Water; Solid Waste; Public Education; Energy; Andreafski; Iqurmiut; Anvik; Nulato; Louden; Tanana; Venetie; Gwichyaa Zhee Gwich’in

*Federal Statutory Opportunities for the Protection of the Yukon River Watershed in Alaska and the Yukon Territory - A Handbook of Domestic Statutory Strategies:*

This handbook outlines the domestic statutory strategies of the United States and Canada that pertain to the protection of the Yukon River Watershed and the opportunities they present for advocacy.

Key Words: Reports; Tribal Resources; Advocacy; Subsistence Activities; Drinking Water; Solid Waste; Alaska Native Claims Settlement Act; National Environmental Policy Act; The Endangered Species Act; The Clean Water Act; The Safe Drinking Water Act; The Resources Conservation and Recovery Act; The Comprehensive Environmental Response, Compensation and Liability Act; The National Historic Preservation Act; The Archaeological Resources Protection Act; The Native American Graves Protection and Repatriation Act

*Model Community Emergency Response Plan:*

***Broken Link***

*Forty Mile River Water Assessment – DRAFT*

***Same As Above***

*Unified Watershed Assessment – DRAFT*

***Broken Link***

*Solid Waste Solutions in Rural Alaska*

This report outlines the success stories from solid waste projects undertaken by the Yukon River Inter-Tribal Watershed Council and various villages.

Key Words: Reports; Solid Waste; Council of Athabascan Governments; Venetie; Agdaagux; Kivalina; Nelson Island; Chefornak; Newtok; Selawik

**Presentations:**

*In-Stream Hydrokinetic Turbine in Ruby, Alaska*

This presentation outlines the process of getting approval for and installing a Hyrdokinetic Turbine on the river in Ruby.

Key Words: Training Resources; Green Energy; Ruby

*YRITWC Water quality training – Designing a local water quality monitoring program*

This presentation outlines how to set up a water quality monitoring program in a village, along with concerns about fish health in the Yukon River.

Key Words: Water Quality; QAPP; Fish Habitat Health;

*Measuring Water Quality – Methods and Instruments*

This presentation outlines the methods and instruments used to monitor water quality.

Key Words: Training Resources; Water Quality

*YRITWC Water quality training – Designing a local water quality monitoring program – Why a QAPP*

This presentation outlines how to design a project using the elements of a Quality Assurance Project Plan.

Key Words: Training Resources; Water Quality; QAPP

*The Monitoring of a Lake or Standing Body of Water*

This presentation outlines the process for water quality testing in a lake or standing body of water, including the risks to fish habitat.

Key Words: Training Resources; Water Quality; Fish Habitat Health

*Quality Assurance Project Plan For\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Template*

This is a template for creating a Quality Assurance Project Plan for water quality monitoring.

Key Words: Templates; Water Quality; QAPP; Environmental Protection Agency; Native American Fish and Wildlife Society; US Environmental Protection Agency; Tribal Quality Training Program

*USGS-YRITWC Collaboration “Passing of the torch”*

This presentation outlines the Yukon River Inter-Tribal Watershed Council’s Water Quality Program run in conjunction with the USGS.

Key Words: Training Resources; Water Quality; USGS

*United States Federal Government Dept of Interior USGS Water Resources Discipline Science Centers USGS Programs NASQAN National Research Program Yukon River Study*

This presentation outlines the Water Quality project that was conducted by the Yukon River Inter-Tribal Watershed Council, USGS, the Department of Interior, and NASQAN, and the results that came out of it.

Key Words: Training Resources; Water Quality; Permafrost; Department of Interior; USGS; Water Resources Discipline; NASQAN National Research Program; Porcupine River; Tanana River; Eagle; Stevens Village; Pilot Station

*Galena’s Nuclear Situation*

This presentation outlines the Yukon River Inter-Tribal Watershed Council’s concerns with the proposed nuclear reactor being offered to Galena by Toshiba.

Key Words: Training Resources; Clean Energy; Galena; 4S Reactor; Small Innovative Reactor (SIR); Toshiba; Tanan Chiefs Conference;

*Subject: Review of Toshiba 4S Sodium-Cooled Nuclear Power Reactor Proposed for Galena, Alaska December 11, 2006*

This letter to Brian Hirsch, Rob Rosenfeld, and Jon Waterhouse outlines the concern the Union of Concern Scientists has about the proposed 4S Sodium-Cooled Nuclear Power Reactor being proposed in Galena. The letter was signed by David Lochbaum, the Director of the Nuclear Safety Project.

Key Words: Reports; Clean Energy; Union of Concerned Scientists; Galena; 4S Reactor; Toshiba

*Why Worry About Coalbed Methane?*

This presentation outlines the concerns the Yukon River Inter-Tribal Watershed Council had about the Coalbed Methane deposits in the Yukon and its effect on the rest of the Yukon River Basin.

Key Words: Training Resources; Clean Energy; Wind River; Peel Watershed; Tongue River; Cheyenne;

*Increasing Beaver Populations in Lower Yukon River Watershed*

This presentation summarizes the research done on the effect of beaver populations on the Lower Yukon River Watershed based on 5 interviews.

Key Words: Training Resources; Fish Passage; Beaver Populations; Huslia

*Mapping Contaminants*

***Broken Link***

*Advocacy Training for the Yukon River Watershed April 5-8, 2004*

This presentation outlines the advocacy options for Yukon Indigenous communities to push their agenda for water safety.

Key Words: Training Resources; Advocacy; Yukon Environmental and Socio-Economic Assessment Act; Umbrella Final Agreement; Yukon Fish and Wildlife Management Board; Yukon Water Board

*Environmental Education for the General Public – Yukon River Inter-Tribal Watershed Council:*

This presentation outlines the strategies villages can use to promote environmental safety and care to their population.

Key Words: Training Resource; Clean Drinking Water; Solid Waste; Brownsfields