

First Nation Climate Change Policy:

A regional, Indigenous approach to climate change adaptation, health and water governance







Final report for:



Health Canada Santé Canada

Climate Change and Health Adaptation Program for Northern First Nations and Inuit

Communities 2014-2015

Submitted to:

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Project Title: "First Nation Climate Change Policy: A regional, Indigenous approach to

climate change adaptation, health and water governance."

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INTRODUCTION

The Yukon River Inter-Tribal Watershed Council (YRITWC) successfully completed the project titled, "First Nation Climate Change Policy: A regional, Indigenous approach to climate change adaptation, health and water governance." The long-term objectives were to:

- Facilitate the development of a Water Action Plan outlining how First
 Nations can use their traditional knowledge and environmental
 monitoring data to take action and address their concerns regarding
 climate change and the associated release of contaminants that impact
 water and human health;
- Foster collaborative partnerships between First Nations with other levels of government to recognize, prioritize, and address health concerns related to water and climate change at a regional level (Yukon-wide).

This project brought First Nations leaders from across Yukon to recognize, prioritize, and address health concerns related to water and climate change at a regional level. Previous projects conducted by the YRITWC built the foundation for this "water action workshop." Originally, the YRITWC collaborated with five Yukon First Nations to establish climate change adaption plans. For the water action workshop 14 First Nations were invited with 10 First Nations in attendance to formulate a region-wide water action plan. The project involved developing a two-day workshop for November 17-18, 2014 in Whitehorse, Yukon for Yukon First Nations. The follow pages detail the implementation of the latter half of the project.

Final report for the project:

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ACTIVITY REPORT

OBJECTIVES

Short-term objectives:

- Conduct semi-structured phone interviews with workshop invitees to help inform workshop development.
- Co-develop and co-deliver (with partner First Nations) a workshop on "Planning for Climate Change Adaptation, Health and Water Governance."
- Co-develop a Water Action Plan designed to implement the "Yukon River Watershed Plan" and containing a policy statement regarding the desired roles of Yukon First Nations in water governance
- Disseminate project results to all of the YRITWC's signatory First Nations and Tribes

Long-term objectives:

- Facilitate the development of a Water Action Plan outlining how First Nations
 can use their traditional knowledge and environmental monitoring data to take
 action to address their concerns regarding the impacts of climate change and
 contaminants on water and health.
- Foster the creation of collaborative partnerships between First Nations and with other levels of government to recognize, prioritize and address climate change challenges at a regional level.

PROJECT PREPARATION

As noted in the interim report, the project implementation was well underway. We completed all necessary logistical planning for the workshop included purchasing supplies for the workshop and related activities. No electronics were purchased for this project as they were either provided by the YRITWC or rented from Yukon Inn during the workshop.

Prior to the workshop, the YRITWC hired a new staff member to assist with our projects in early November 2014. Furthermore, the YRITWC and the project's facilitators met regularly to discuss objectives and coordination. The YRITWC contacted and sent workshop invitations to 14 First Nations including YRITWC's Executive Council members through a variety of means by phone calls, email, and social media. An online survey was created to help develop the content of the workshop and sent to all registered participants for their initial feedback. Unfortunately, the voluntary survey resulted only

in a handful of responses. Once the YRITWC, Shannon Donovan and Nicole Wilson reviewed the online survey with all invitees' feedback, the workshop agenda was finalized and sent to all registered participants. A copy of the online survey can be found in the interim report. No adjustments were made to the agenda upon review from First Nations, Executive Council members and YRITWC Director. The detailed agenda can be found in Appendix E.

The YRITWC coordinated travel, accommodation, and meals for participants to attend the workshop in Whitehorse. To help with the logistics a registration form was made for First Nation representatives and postcard reminders were sent out to each First Nation a few weeks before the workshop. More details can be found in the interim report regarding logistics.

FACILITATE THE DEVELOPMENT OF A WATER ACTION PLAN

CONDUCT "PLANNING FOR CLIMATE CHANGE ADAPTATION, HEALTH AND WATER GOVERNANCE" WORKSHOP

The November water action workshop titled, "Planning for Climate Change Adaptation, Health, and Water Governance" brought together 10 First Nations out of the 14 that were invited. A total of 18 representatives including Elders, Natural Resources Managers/Directors, Chiefs, Councilors, Environmental Officers, Renewable Resources Council members, and YRITWC Executive Council members. Table 1 lists the number of workshop representatives.

Invited guests included Megan Mackey and John Shurts. Together they presented on the YRITWC's Yukon River Watershed Plan and First Nation water rights. Yukon Government representatives Heather Jirousek and Bengt Petterson attended and presented the Yukon Government's Water Strategy. Copies of their presentations will be posted the YRITWC's website (http://www.yritwc.org/Departments/Science/Reports.aspx). All, participants found the presentations to be informative as well as initiated constructive discussion on the presented topics.

Table 1: Confirmed list of First Nation participants

First Nations	Number of Workshop Participants
Carcross/Tagish	6
Kwanlin Dun	2
Taku River Tlingit	1
Teslin Tlingit Council	1
Ta'an Kwäch'än Council	2
Na-Cho Nyak Dun	1
White River	2
Kluane	1
Little Salmon/Carmacks	1
Tr'ondëk Hwëch'in	1
Ross River Dena Council	0
Vuntut Gwitchin	0
Selkirk	0
Liard	0

The first day of the workshop began on November 17th, 2014 at Yukon Inn's Willow Room. Participants registered and received a folder with documents needed for the workshop (agenda, notebook, and workshop rubric). Afterwards, the YRITWC introduced the workshop agenda and outlined the expected outcomes. The first workshop day included presentations from John Shurts and Megan Mackey on the Yukon River Watershed Plan. Followed by a presentation by the YRITWC's Science Department on 1) a summary of the two previous projects supported by Health Canada; 2) the community reports and calendars from the previous years were shared; and 3) other Science initiatives like the Water Quality Program and Active Layer Network. The afternoon consisted of breakout group discussions on water quality concerns that were considered to be included in a Water Action Plan. The community report compiles the findings of the breakout group discussions.

Final report for the project:

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On November 18th, 2014 the day began with a summary of the previous day's work. This was followed by a presentation by Heather Jirousek and Bengt Petterson (Yukon Government) on the Yukon Water Strategy. John Shurts presented First Nation water rights that incorporated a fruitful discussion with workshop participants on the topic. The afternoon consisted of the final breakout session with participants on components of the Water Action plan.

Overall, the YRITWC deemed the workshop to be a success. A total of 18 First Nation representatives attended the workshop. During the workshop, the YRITWC recorded notes and created a document that was sent to all participants at the workshop through E-mail. See Appendix B for the meeting notes.

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FINALIZE OUTPUTS OF WORKSHOP AND VALIDATE RESULTS

A community report titled, "Water Action Planning Workshop Report", was developed after the workshop. Nicole Wilson analyzed notes taken at the workshop and took the lead in completing the community report. This report can be found on the YRITWC's website at http://www.yritwc.org/Departments/Science/Reports.aspx. Printed copies were sent to all Yukon First Nations.

The report focuses on local, regional, and basin-wide concerns and priorities on water, health and climate change in the Yukon River watershed. Water priority areas that First Nations identified at the workshop can used for their own water action plans. The YRITWC realized that First Nations are currently at many different stages regarding community adaptation and legislation regarding water, health, and climate change. The First Nations such as Carcross/Tagish First Nation and Teslin Tlingit Council are in the midst of developing their own Water Acts. Other First Nations such as Na-Cho Nyak Dun First Nation and Tr'ondëk Hwëch'in First Nation developed their own community-based monitoring programs. In addition, the Tr'ondëk Hwëch'in First Nation is currently developing their plans on food security in Dawson City, Yukon.

On March 3, 2015, preliminary results from the workshop were shared at the water quality training in Whitehorse, Yukon for validation. For participants which were not present at the First Nation Climate Change Policy: A regional, Indigenous approach to climate change adaptation, health and water governance" workshop; the project was introduced and familiarized participants on First Nation water rights in Yukon. Present at this meeting included First Nations of Na-Cho Nyak Dun, Tr'ondëk Hwëch'in, Teslin Tlingit Council, Ta'an Kwäch'än Council, Carcross/Tagish and Taku River Tlingit.

WATER QUALITY MONITORING

The YRITWC was able to obtain funds from Environment Canada to monitor hydrocarbons and a suite a heavy metals from nine locations in Yukon. Several sampling sites from the previously established water quality project in the Yukon River watershed, which was funded by Health Canada in 2013, were reconsidered for this project. In 2013 YRITWC found concentrations levels of elements (i.e. arsenic, cadmium, iron, lead and selenium) and hydrocarbons exceeding the Water Quality Guidelines of the Council of Canadian Ministers of the Environment (CCME) for the protection of aquatic life at several sites that were identified by community members as being potentially contaminated. The completed Environment Canada project report can be located at http://www.yritwc.org/Departments/Science/Reports.aspx.

CHALLENGES AND LESSONS LEARNED

During the two-day workshop, there was another event occurring in Whitehorse about mineral exploration in Yukon and so several First Nation representatives were not available to attend the Water Action workshop.

Not having enough time to develop deeper discussions with workshop participants.

PARTICIPANTS FEEDBACK

For the most part, the workshop got a lot of positive and constructive feedback. See Appendix F for an example of a completed evaluation form. Feedback was collected anonymously. The quotes noted below were taken from the evaluations.

What did you like best about this workshop?

- "Objective watershed protection"
- "Well structured, informative and interactive."
- "The breakout groups"
- "Discussions the second day"
- "First Nation involvement"
- "The First Nation legal background for water cons + use decision-making (including the use of standards)"
- "Hear from other First Nations and their work plans with water"

What did you like least about this workshop?

- "Didn't find anything that I didn't like... Not really, materials, discussions, breakout sessions were all relevant to the water strategy and the task at hand."
- "I wasn't very engaged the first day"
- "Should have included all First Nations involved in watershed"
- "The Yukon Government Strategy presentation"
- "Knowing our rights and how to use it, it needed more information"

CONCLUSION

The YRITWC successfully completed the Water Action workshop with attending representative participants of First Nations, representing a large portion of Yukon. The YRITWC will continue to share the results of this project at community meetings, conferences, and outreach materials. Most recently, Nicole Wilson and the YRITWC shared results from this project at a conference, International Association for the Study of the Commons, in Edmonton, Alberta.

APPENDIX A

Financial Report

Yukon River Inter-Tribal Watershed Council Health Canada FY 14/15

Actual Expenditures

Notes	Budget	Interim Report	Year End Report	Notes	\$ Over
		Ending Sep 30 th due	Ending Mar 31 st due		Budget
		Nov 15th	June 30th		
Revenue	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00		
Government Grant Total Revenue	\$ 100,000.00	\$ 50,000.00	\$ 64,560.57		
Expenditures Payroll Expenditures Salary Co-Pl	\$3,601.00	-	\$3,601.00	Hired Rosie Simms to help with data analysis. Shannon Donovan provided guidance for the project.	
Salary Co-PI Workshop	\$3,998.00	-	\$4,000.00	Facilitator & Data Analysis	\$0.02
Salary Environmental Scientist	\$40,000.00	\$ 23,474.56	\$16,525.44		-
Fringe Benefits (30% salary)	\$12,000.00	\$ 7,042.37	\$4,957.63		-
Governance Workshop Venue	\$2,500.00	-	\$3,277.78	This was higher than the set coast because of venue equipment rentals, specialty meal requirements, GST and included gratuity.	\$777.78
Transportation	\$11,000.00	-	\$8,828.73	Less participants than proposed attended	-\$2,171.27
Accommodation	\$9,000.00	-	\$6,079.73	Less participants than proposed required accommodation, as many found their own	-\$2,920.27
Per Diem	\$3,776.00	-	\$3,788.78		\$12.73

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First Nation Climate Change Policy: A regional, Indigenous approach to climate change adaptation, health and water governance

Material	\$1,500.00	-	\$1,407.79		-\$92.73
Equipment				Needed a virus protection program	
Equipment	\$150.00	-	\$196.34	for the laptop	\$46.43
Research outputs	\$2,500.00	-	2,500.00		\$2,500.00
Office materials/supplies	\$200.00	\$ 200.00	\$58.54		\$58.54
Telephone and telecommunication	\$500.00	\$ 250.00	\$408.13		\$148.13
Postage, shipping and handling	\$100.00	-	\$39.27		-\$60.73
Human resources, pay services	\$2,265.00	\$1,132.50	\$1,132.50		-
Benefits	\$680.00	\$340.00	\$340.00		-
Other (Rent	\$6,000.00	\$3,000.00	\$4,140		\$1,140
Copier and photocopies	\$230.00	-	\$207.61		-\$22.39
Total Expenses	\$ 100,000.00	\$ 35,439.43	\$61,489.27		
Net Revenues & Expenditures	\$0	\$ 14,560.57	\$3,071.30		

Financial Narrative

The budget ended up being under-spent by \$3,071.30 because the number of participants that did participate, and who actually needed accommodation and travel funds, was less than had been proposed at the beginning of the project.

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APPENDIX B

Minutes from November 17th-18th, 2014 (13 pages)

YRITWC's Planning for Climate Change Adaptation, Health and Water Governance Workshop

Yukon Inn - Fireside Room Day 1 - Nov. 17, 2014

Funded by Health Canada's Climate Change and Health Adaptation Program for Northern First Nations and Inuit Communities

Day 1 Check-in: George Shepherd, Carl Sidney, Robert Wally, Alvin Matthews, Corey Edzerza, Jessie Dawson, Albert James, Russell Blackjack, Geraldine Pope, Stanley James, Dawna Hope, Matthias Zinsli, Anna Schmidt, Coralee Jones, John Pattimore, Glenn Stephen, Duncan Stephen, Darren Taylor.

Carl Sidney Opening Speech (9:15am)

- -need to develop proper plan before YTG gets theirs in place to trump YRITWC
- -aware of the very obvious climate changes happening to the River

Stanley James (9:30am)

-need to address the concerns of climate change now, stop talking about it and take some action

What are water concerns? (9:30-10am)

- -TRTFN: biggest challenge is placer mining and its impact to water quality. Heavy metals in water as a result; creeks aren't regulated so increased turbidity in the water. Could affect fish and drinking water. Would like to monitor it and get funding for land guardians for monitoring.
- -LSCFN: biggest concern is allowing highways to remove old fill from mine and using it at Tatchun creek, not sure of the impact on the salmon, fish were late so not sure if they hatched there or not. Minto breached their water license by removing water sanctions from the mine and there are no consequences
- -KFN: concerns are water, fluctuating level from drastically high to low. Developing the Gladstone Diversion concept, concerns about what it will do to Kluane Lake. Climate change concerns
- -TKC: temperature monitoring of surface and groundwater, salmon restoration, looking at water quality on freshwater species (spawning for salmon)

- -NNDFN: mining big concern, impact on fish and water quality, do own water quality sampling, oil and gas proposal, YESAA process big concern
- -KDFN: not active at technical water sampling yet, need to properly detect water quality, quantity and rate of flow. YESAB engagement, water hearings. Concerns of too much water, hydro project at Fish Lake (many breached water licenses) high water flooding settlement land, Marsh Lake hydro project also concern. YESAA process a concern. Fish numbers a concern, concerned for elders and how they can continue to live traditionally.
- -WRFN: Concerns of Alaska Highway contamination of creeks (tested creeks with YRITWC and founded to be clean which was relief). Need to put the legislation into practice to win court cases. No close mines but potential for future concerns. Permafrost concerns, Onion Lake disappeared one year.
- -THFN: water quality big concern, level of placer and hard rock mines. Healthiness of traditional territory. Taking own water sampling and data important to them (capacity to do so). Need a baseline criteria to do own testing, which is a positive. Like the draft watershed plan, want to integrate it into FN laws and policy. No faith in YTG watershed plan or changes to YESAA and Fish and Wildlife Act. They accommodate mining too much. Need to step up and not rely on others to improve water and protect environment. Engaging in climate change initiatives, particularly as it relates to food security, growing own food and being self-sustainable. Permafrost problems concerns. So want to be sufficient in own community.
- -CTFN: concerns of water are White Pass Railroad, lots of workers from there have cancer now. Current and past mining activity in traditional territory are a concern. Like to see testing all along the tributaries, more testing for quality. Doing some tests concerning White Pass. Water isn't just a Yukon issue. Issues of fracking, probably already going to happen in Yukon if it is in Northern BC. Cuts to YESAA is a problem, no faith in it now. Need to look outside of Yukon and look to BC. Fracking can be the new Faro, from BC and AB could affect our water from the process. Maybe look into trans-boundary water monitoring system. BC doesn't look after Yukon's best interest, can only control our land but need to look further than that. Bigger threat on BC side which we can't control. Animals, habitat, fish, water are renewable resources we are concerned with. LNG plan a concern. Northern BC gives no jurisdiction even though it's our traditional territory. Water is most important, quality of water from White Pass and mine needs to be looked at. Used to be millions of small herring, now they're gone. Look at educating others on the use of water. Final agreements gives FN control over water, need to exercise that right. YESAA will have to go to court case once changes become law. Southern Lakes area past few months found king salmon there (not sure how but assume they came from Yukon River, looking into that). Look at protecting the headwaters, need to re-visit and redo this. Need to take action to drink out of Yukon River in 50 years. Working on a waters act, YRITWC would like to learn more about this.

Legal Team Presentation (10:30 – 11am)

- -Corey Edzerza: question on the size of the legal team the US federal government has in regards to Alaska Tribes
- -John Pattimore: what kind of mechanism would come? If a Yukon FN puts forward legislation it could go against another one, need to agree between other parties
- -YRITWC working on releasing standards and data faster to FNs
- -Corey Edzerza: curious about water quality of the Pelly River before it flows into the Yukon River (like contaminants from Faro). Try to keep water monitoring up to date in the area.
- -Stanley James: know about UN Declaration and when we operate under international law. Moved from strictly Indian affairs to international law, what can we do about it? Should bring it up even though Canadian/US govs don't really recognize it
- -George Shepherd: What sort of authority does UN actually have? Even if you took them to world court, would they have an authority to act?
- -Nicole Wilson: Water quality standards based on a number of standards put together. Where did the baseline results really come from?
- -How much has the data (baseline) changed in the last 30 years from now? Last one in the previous 5 years, Washington wants stricter, constantly changing.

YRITWC Science Presentation (11am -12pm)

- -Corey Edzerza: is there a study regarding data on pockets of methane gas in Yukon? That would be a great option to look further into. How could the Elders statement be incorporated into the watershed plan? It's not really part of the Final Agreement but that's what CTFN follows. The elders' statement should be incorporated and followed to reflect CTFN and other FN values. If it's taken seriously on the Alaska side, it would help FNs in Yukon
- -Robert Wally: is there any data for specific communities regarding water quality and contaminants? Can the FN go and do their own testing/monitoring? It could help get the data faster if done at the community level. Raw data should be available to the public because it impacts everyone who uses and drinks the water. Is there any other place to go to find the data regarding water quality to get the data faster?
- -Corey Edzerza: can DFO give a breakdown of the formula of water as it comes out of the Minto Mine? Also, want to see what leaching from Venus mine looks like, maybe some of the mining reclamation funding can be used for this?
- -Robert Wally: examples of Chloride levels, they don't let us know about this. In Carcross sheep are dying from the water coming out of the mines and it's taking a long time for the data to get

back. If sheep are dying, it can't be good for people. The mine workers are crossing the Wheaton River with loaders and machines and oil is leaking into the creeks.

- -John Pattimore: is the Chloride coming from the environment or from human intervention?
- -Robert Wally: what are the results on the best places and worst places that have come from the water monitoring? Where can we find the results?
- -Corey Edzerza: a family really close to the Venus mine flood on the BC border were finding little white fish with deformities and feeding them to eagles. The mine says its natural leaching and not a problem but it clearly is. We looked at it as an opportunity to take proactive measures rather than reactive measures when it's already too late.
- -Corey Edzerza: it's gotten to the point where we've stopped trusting YG's data. We're confronting them to adapt when they give such low numbers, they're not counting wildlife mortality; wildlife numbers are far off. Access to animals for hunting is a problem in Carcross
- -Corey Edzerza: need to work on transboundary research despite the funding limitations, can't focus only on Yukon or Alaska by themselves because all factors are linked across boundaries.
- -Corey Edzerza: what are the board's operating costs annually? Just thinking about how YRITWC is on the tail end of its funding allowing YTG to come in at that point and finish the plan how they'd like to
- -Corey Edzerza: thinking about the water, some FN's haven't implemented all their Final Agreements, watershed plan makes it easier to act. BC hydro projects will have an impact and an effect on Yukon projects
- -Corey Edzerza: make a call out to FN's to establish the plan (if they can fund it) and show YTG there is a plan in place. Comes down to about \$104000 per FN for those that haven't implemented a plan
- -Darren Taylor: Just want to back up and make people realize the YRITWC isn't a government or a decision making or funding body. There are limitations they cannot control. The key thing for the council is to identify the gaps in our communities to help compile info and allocate funds in proper places. It's great to collect data, but you need to do something with it after it's calculated. Data can be manipulated to make it look good depending on which side you're sitting on. The workshop needs to make us think not what the YRITWC will do on FN's behalf, but how they can help FN's with their projects and initiatives. Most of the ground work needs to be done by communities, the YRITWC will help provide the training and capacity. Important to get the baseline data to prepare for future projects like the Casino mine and to know what the changes are in fish, wildlife and water to properly address them.

- -Corey Edzerza: what is the average temperature of the Yukon River from July-August? In summer it's around 10-12. Can't have it going that close to 15 degrees because it just takes one major project to do that to deplete our resource. Does the YRITWC share information at any forums, etc. to show the data to concerned parties?
- -Darren Taylor: YTG has monitoring stations throughout the territory, have we ever compiled Yukon's data into our data at any time? There's a gap in data depending on when people started monitoring, so could that combination be a project for the future to use for internal purposes?
- -Darren Taylor: in regards to FieldScope, the information is there so it should be used, but to add onto the site the security to the data needs to be addressed. Some data needs to be restricted to communities
- -Corey Edzerza: Are any of the funding agencies from the Americans? Asked some permafrost researchers 6 years ago where they got their funding and it was from NASA, could be alternate funding agencies to look into

Breakout Session Wrap-Up

- -Water Budget
- -More sampling stations
- -Winter water monitoring
- -Trans-boundary concerns (effects from Northern B.C.)
- -have a lot of data already, do capacity building to analyze the data
- -develop water acts or strategies (individual FNs), implement Yukon-wide water strategy
- -thinking about how FNs can go to different sources other than YTG or feds (like directly to a mining company)
- -how various threats to water affect drinking water (mining occurring upstream from drinking water source)
- -cumulative effects monitoring (understanding effects of the combination of development projects, not just one, also about the effects over time rather than just initially). YESAA will not touch cumulative effects, have to do it on our own
- -importance of teaching and involving youth, having them do job shadows, programs to teach youth about traditional uses of water and environmental issues
- -food security in terms of collecting native seeds, community gardens. Learning about farming and agriculture, growing, storing, collecting native seeds for mine reclamation (doing it

ourselves or selling it back to mining companies for reclamation) maybe certain types of tree nurseries native to the area.

- -plan put together by FNs (southern lakes wildlife steering committee). Supposed to be money allocated for this process and for monitoring but not sure when it's coming. YTG played big part of this but hasn't acted. CTFN, KDFN, TKC, TRTFN and Smithers, BC can come together to discuss this.
- -is there any collaboration between YRITWC and YTG for their water strategy?
- -THFN did have a meeting with the minister to tell him they were ready to collaborate but they were reluctant to have territory-wide standards. Site specific standards don't work for a watershed.
- -need to re-assign priorities and re-focus to come back to the legislation (whether it be outdated mining or new water legislation). Signatory FNs are part of that process and need to make it a priority.

Breakout Group Discussion Points

Mining, Oil & Gas Development

1st group

- -concern around transportation of dangerous goods close to water bodies (KDFN)
- -permafrost (NNDFN)
- -more sampling stations (NNDFN)
- -problem of enforcement
- -de-regulated creeks in BC

2nd group

- -Tailings ponds being placed on permafrost
- -we don't know the true socio-economic impacts
- -we don't have the baseline data to measure the impacts sample/monitor 3-5 years
- -local involvement, proper education
- -designed properly
- -YG approving all these projects and not having proper guidelines, conditions, structure
- -adequate security
- -no water quality standards
- -YTG is not the best interest of Yukoners and our natural resources

Sewage and Landfills

1st group

- -testing contaminant levels in stocked fish in Como Lake (below Atlin landfill)
- -are pharmaceutical levels being tested and treated at the Whitehorse sewage treatment plant?
- -are water wells being frequently tested at the Whitehorse landfill to ensure chemicals from pond behind landfill aren't leaking?
- -regulations for houseboat sewage disposal on Atlin Lake are they being enforced?
- -Atlin not incorporated so no proper regulations/enforcement for proper sewage fields for private homes (concerns that sewage leaking from house in Atlin straight into the lake)

2nd group

- -location, location, location
- -what is going on? Recycling? Oils? Toxic?
- -transfer stations transport to other areas who don't want our garbage
- -what are we/were we burying? past, present and future leaching of toxins?
- -if compost landfills aren't used right good source of energy from methane

Why is Water Important to You?

1st group

-water is fundamental liquid of life. Water is fundamental liquid to our economy. We need to be preparing for future use and demand through conservation and sustainability for the economically and environmentally sustainable use of water. We have ever growing populations around the world. We need to start focusing on gaining a better understanding of watersheds and how they work, and guidance for government decision making, including issues with overlapping governmental jurisdictions.

2nd group

- -there are no set regulations in place to ensure the security of sustainable clean, fresh water
- -there is no understanding of the natural requirements of water resources to supply and sustain the diverse ecosystem in the north or any specific aquatic ecosystem protection from degradation
- -under the Environment Act: we have the right to use water but there are no current monitoring programs for drinking water or water resources in First Nation communities

HC Climate Change Workshop Day 2 - Nov. 18, 2014

Day 2 Check-in: George Shepherd, Corey Edzerza, Albert James, Jessie Dawson, Geraldine Pope, Russell Blackjack, Stanley James, Dawna Hope, Anna Schmidt, Coralee Jones, Matthias Zinsli, John Pattimore, Glen Stephen, Darren Taylor, Robert Wally, Duncan Stephen.

Overview

YTG Water Strategy Presentation

- -Darren Taylor: in my view this is the information session, not the direct consultation with FNs
- -Corey Edzerza: would you think underground waterways that connect lakes are important? Not sure if this is included in groundwater because there are creeks underground used for fish spawning (YG: should be included in groundwater priority, but will address that later).
- -Darren Taylor: under the 6 priorities, where do the water quality standards fit in? Thresholds for dissolved oxygen, sediments, metals, etc. Great to have these things but without a standard what will it accomplish regarding human lives, wildlife. (YG: don't have direct standards, but we'll talk about that later. Want to talk about action plans, collaboration).
- -Megan: what was the Hydrogeologist's name? (YG: John Miller)
- -Megan: when is the request for proposals going to be done? (YG: not really sure, probably soon, starting to get into the topics to decide what programs to develop, need to have a dialogue)
- -YG: planning for a water forum in Feb 17, 18. This will include headwaters issues
- -YG: government looking at creating a few different best management practices
- -Corey: my definition of protecting headwaters is different from yours, think about habitat protection areas, and won't be managing best practice areas without this. (YG: other parts of the department are working on this, need to get them started. This is what came from the engagement process, relying on people to bring these ideas together). Don't think these are actually ideas, they are already engrained they just need to start being done.
- -Corey Edzerza: in your opinion do you think fracking could jeopardize this plan? (YG: fracking is one technique for oil and gas, it's kind of a different issue).

Robert Wally: Look at Texas, can light a fire in the shower. Not answering the question, fracking is where we're at as FNs. (YG: fracking was brought up during engagement but not put into the strategy, wanted to keep it separate from the strategy because of the select committee is looking at fracking, two separate processes).

Albert James: How can you say it is two separate processes when it affects water. In our UFA, we have a water chapter that gives us more than what were given here. FNs aren't even mentioned in this strategy. It seems ironic to bypass the agreements, not really sitting down and talking to FNs people about how they would like to manage water. Talk about licenses and those things but we need a different plan actually about water. Telling us you're going to go right past UFA but it doesn't fit this way. YG is interpreting agreement by themselves. There's a process to interpret these agreements, not just one party doing it. It's too one sided on who decides about what happens in the Yukon. Our agreements are constitutionally protected, so, therefore why are you leaving them out? FNs have a stake in these areas. (YG: hear what you're saying, there were meetings held to develop this process. Not something different than UFA. I would say FNs are included).

George Shepherd: The government is for fracking, you already have a plan set up. Fracking is the same issue as water. (YG: we'll take the considerations back to the office)

John Pattimore: the YRITWC's and signatories are heavily invested in the watershed plan as well so it's hard to see down the road how were going to be involved in it. Is there a partnership there? There is a plan, but we have our own plans too? (YG: we aren't aware of this plan but it is good to have others).

Darren Taylor: This document is a strategy and action plan, it's a guiding document. I think we need to better understand and manage Yukon groundwater. What everyone's trying to say is we don't dispute the concepts here, we need sustainable water and safe source water, but how do we implement these plans? Is it exclusive to YG departments or will FNs also be involved? The concepts are good but we need to be directly involved to make sure it actually protects the environment. Lastly, ensure it's complimentary to our water rights with no disputes between this plan and the UFA. Need water quality standards for this to be successful. More discussion about the points in the action plan are needed to actually take action and know every logistical aspect behind it. This will require a lot of monitoring and research, so who is going to do this work? We need to be involved and have concrete water quality standards to ensure it's a workable document throughout the territory. (YG: those are good wordings, the strategy is a guiding document, the beginning of the conversation, and we're not that far away from each other. Nothing is cast in stone, going to start work in different areas. Going to have water forums to talk to people, I think we're saying the same thing)

-Dawna Hope: why are we trying to follow other provinces, how can we make a plan to use/manage water when we don't even know the amount of water and where its coming from, where it's going, excesses, etc. We don't take cumulative effects into account and who is using

water systems. Can't see how you can plan for sustainability when you don't know how much you have. Don't spend without knowing what the pay-cheque is. (YG: goes back to devolution in 2003, YG started managing water from the feds, few years of collecting info for responsibilities. We need to know what we have before making plans is correct. Some of the action plans include getting more monitoring stations to understand the water we have. Want to work with people of FNs to collect info)

- -Dawna Hope: devolution in 2003 when YG received power to govern water rights. FNs are fighting right now to keep some of that power to govern water. About to use the authority right now with the YESAA process. Biggest change is the power of authority. If we lose the YESAA process, federal guidelines will be back, reading between the lines takes power from the Yukon. (YG: we're not here to represent the YESAA process, all we can do is take concerns and comments) I suggest you do represent that because it is related to water, it affects the water. From a FN point of view, it's all connected
- -Nicole Wilson: looking to the NWT water strategy, the main difference is they had an advisory council of FNs alongside the government to advise the government on the strategy. All these considerations would have been included
- -Carl Sidney: Bengt is familiar with what's going on with YESAB, federal government still funds the YRITWC. The direction may have come from devolution but this discussion started before 2003. The federal government budget is so huge with nothing to show for it. We already have monitoring systems set up, have FN people trained too. Government doesn't pay attention to FNs water strategies. YG is creating this water policy to accommodate the federal government and not FNs. It's just to be able to come into the Yukon to be able to frack and abuse water resource. FN water plans already have all these aspects and more in their plans, come see our plans. You can't just clean up water and drink it right away after it's been polluted. FNs live off the land every day and still have to pay for water. (YG: can't really speak to other levels of government, can really just speak to the strategy).

Robert Wally: Maybe go out there first and see what FNs have been working on and have concerns about. YG just never came and looked at the FNs watershed plans. Every FN has a water plan in one way or another. Do the due diligence and come and ask. (YG: Jon Waterhouse came and dropped off the FNs plan recently to give it to YG). Our FN watershed plans have much more than this already in theirs. All this money is being spent but we already have plans. (YG: we want to work with FNs, seeking input from FNs, we haven't done these things yet, just trying to seek input. If there is an existing plan, we'd hope that it would be brought up during an engagement).

-Kim: how did you decide where the proposed monitoring wells are going? (YG: Looking for the larger pockets along the watershed, Liard Basin and other spots where there isn't very good data, trying to fill the gaps where old data lacked) So there was no traditional knowledge used? (YG: no)

- -Dawna Hope: concerns about wellhead protection in Whitehorse and Yukon as a whole. Lack of treatment throughout the Yukon, only treated water comes from the wellhead in Marsh Lake. Whitehorse in is danger of running out of drinking water, it's potentially contaminated on a regular basis. You smell chlorine coming from taps, we think it's a treatment but it's not. When there's extensive contamination, they just add more chlorine. Don't see in the plan where past systems are being re-vamped (YG: Drinking water more of a health and social services issue, nothing about revamping the existing system in the plan)
- -Stanley James: what's happened to the FNs that approved the water quality plan last year? 70 FNs approved it (YG: had a meeting set up tomorrow but it was changed, looking forward to rescheduling. We don't use standards, but look at the process of setting up site-specific standards. There is leeway needed for standards, site specific consideration is needed. We're looking at other jurisdictions and most of them give some flexibility, it's hard to be flexible for different sites with strict standards. We want to better understand the standards YRITWC has established) (YG: another approach is looking at site specific, whether it's a small stream or large river, how much it can handle, it will be a more precise protection of water. If you apply the same number it could be unnecessarily strict in some areas and not strict enough in others. CCME has developed an approach to develop site specific numbers and look to apply to it YT)
- -Anna Schmidt: how will you manage cumulative effects if you monitor each specific site individually? (YG: when you do site specific you look at cumulative effects. Take placer mining as a number of activities on a stream, you take them all into consideration. Need to consider all operations on each site to make it more precise). Site specific seems like a way to grant allowances to development operations on water bodies. (YG: Depending on the site, some areas have higher baselines than others and would already be higher than the standard. Some water bodies can handle more or less than others. This is the conversation we wanted to have. In the meantime YG uses CCME numerical standards. We're at the consideration stage right now. Wanted to talk to the water quality people who use the CCME standards to understand the YRITWC standards)
- -Darren Taylor: there's some merits behind site specific, but in reality it's very costly. How are we going to be convinced in the communities that the data collected is actually the situation in creeks? Where is the money and human resources going to come from to conduct these site specific tests? Not even enough mine inspectors now to ensure rules are followed. How will this all be done prior to having companies invest millions of dollars in a project like a mining company having to wait on water board licenses for all this data to be collected? This will be detrimental to the economy of the Yukon. (YG: The approach is the same whether or not you use the site specific or numerical system. It's up to the proponent to give the results of the site). Leaving it up to proponents to ensure water quality standards is dangerous and will not ensure safe environments. They will try to get around standards as much as possible and make it seems like everything is in order. We need to ensure compliance, not the company who is conducting a project. We need to have consensus in regards to who the company picks to find the data so it is

impartial. No confidence in having a company hire contractors that will report data to accommodate mining. Need a 3rd part without a vested interest!

-Dawna Hope: need to know the water quantity in the area before you start using it (YG: It starts out voluntary by well drillers reporting the well log, but we'd like to make it mandatory to get funding. It takes years to develop legislation to increase the amount of well logs). Voluntary reports don't work.

(YG: we look forward to meeting everyone to talk about these water issues and working together on the plans. Protecting UFA and co-management, we don't make those decisions, but can take those comments back to the decision makers)

YRITWC Legal Team Water Right Discussion

- -Robert Wally/Alvin Matthews: how do we get the legislation from the UFA into the Waters Act?
- -John Pattimore: so no water license is needed if no potential for adverse effects, even though the trigger for a YESAA assessment is the potential for adverse effects
- -John Shurts: One thing to do about it is keep telling YTG you want a change, if not, FNs are governments and can adopt legislation and insist they should be equal to the law of the Yukon because they are. If enough of the FNs pass their own legislation, it would be a large jurisdiction that covers most of the Yukon River watershed. Under law, Yukon water board should have to abide by these.
- -John Shurts: adjacent areas to water bodies are included in the wording of the UFA so it's recommended to draw up a map to show the exact areas.
- -John Shurts: the potential is high for a treaty rights based co-management, but it depends on internal legislation coming from FNs
- -Robert Wally: can you give the presentation to the Carcross land management team?
- -Robert Wally: is there a way to stop fracking? (John Shurts: It all comes down to getting water permits that come from these acts and legislations)
- -Anna Schmidt: there is pre-title and post-title to define who makes decisions in the province of BC
- -John Shurts: in the end if there is a litigation strategy, do it in a collaboration not individually
- -Jody Inkster: can you give an update on the Alaska water strategy side and for unsigned FNs?

- -John Shurts: non-self-governing FNs have the same opportunity to create their own plans as self-governing FNs because the language in the UFA just solidifies rights it doesn't create them.
- -John Shurts: Merrill Ann Sear (sp?) is an advocate for the "just do it" government. Webinar happening Dec. 1st regarding FN governance of water.
- -YRITWC looking to create water strategy plans in BC traditional territory
- -Corey Edzerza: how are these plans/agreements compromised by the territorial boundaries between Yukon and BC? Maybe put in how the river doesn't recognize the BC/Yukon border any more than it does the Alaska/Canada border.

Overview

- -Darren Taylor: haven't been any examples of studies done on fracking in permafrost zones (like the Eagle Plains area). There's just a small amount of vegetation and then ice, this type of terrain has never been fracked before. Key thing is making sure YESAA legislation is put in place for its intended purpose. We aren't like the rest of Canada in our legislation and modern land claims agreements, it defeats the whole purpose of the agreement to bring us in line with the rest of Canada, the Yukon needs to be treated differently legally. Educate YG/Federal Government employees in the UFA more frequently because they need to know the agreements need to be followed. There is such high turnaround in those governments so the education needs to be kept up to date. They've got their own people to do the educating in ways they want rather than people who were actually involved in the agreements where the knowledge is much greater.
- -John Pattimore: defeating Bill S.6 at parliament can serve as an indicator that the YESAA process is being resolved.
- -Darren Taylor: with the YESAA amendments, too much power is being delegated to the Minister.
- -John Pattimore: get whatever standing committee that is deciding on YESAA to come to the Yukon rather than make the decision from Ottawa because YESAA only affects the Yukon
- -Mathias Zinsli: need to use Yukon regulations for Yukon fracking concerns, not Alberta regulations that don't take permafrost into consideration
- -Darren Taylor: responsible party to deal with fracking shouldn't be just FNs because Yukoners in general are opposed to fracking. It takes more than FNs to oppose it, need all parties that have any sort of interest in the environment to speak up.
- -Geraldine Pope: especially in Kluane FN territory the arctic institute and so many other scientific researchers study the area but then give reports in very technical, scientific data that is too hard to understand. Need a layman's version so that the FN can actually use the findings.

Closing Remarks and End of Workshop (3:30pm)

APPENDIX C

Project photos



YRITWC Science Department Presentation

Final report for the project:

First Nation Climate Change Policy: A regional, Indigenous approach to climate change adaptation, health and water governance



Final report for the project:
First Nation Climate Change Policy: A regional, Indigenous approach to climate change adaptation, health and water governance

Day 1 Breakout Sessions



Presentation by Yukon Government on their Water Strategy



Day 2 Breakout Sessions

Final report for the project:
First Nation Climate Change Policy: A regional, Indigenous approach to climate change adaptation, health and water governance

APPENDIX D

Detailed Agenda from Workshop

Final report for the project:

Since Notice Classes Deliver Assistant Assist



Planning for Climate Change Adaptation, Health and Water Governance

Yukon Inn – Fireside Room 4220-4th Avenue, Whitehorse, Yukon

November 17th, 2014:

8:15 am - 9:00 am: Light breakfast buffet

8:30 am - 9:00 am: Registration

9:00 am - 9:30 am: Yukon River Inter-Tribal Watershed Council opening remarks and introduction to workshop (outline agenda and expected outcomes)

9:30 am - 10:00 am: Opening prayer/comments about the importance of water

10:00 am - 11:00 pm: Introductions (Each participant is asked to introduce themselves and speak briefly about the initiatives that are currently happening in their community and what they would like to get out of this workshop.)

11:00 am - 12:00 pm: Overview of the Yukon River Watershed Plan by the YRITWC's Legal Team

12:00 pm - 1:00 pm: Lunch served at venue

1:00 pm – 1:45 pm: YRITWC Science Department's overview presentation

1:45 pm - 2:00 pm: 15 minute break

2:00 pm - 3:30 pm: Breakout group discussions and brainstorming sessions to identify concerns that should be included in a Water Action Plan.

3:30 pm - 5:00 pm: Wrap-up and review breakout session collectively as a group and introduce SMART Rubric (to be used on Day 2.)



Planning for Climate Change Adaptation, Health and Water Governance

Yukon Inn – Fireside Room 4220-4th Avenue, Whitehorse, Yukon

November 18th, 2014:

8:15 am - 9:00 am: Light breakfast buffet

8:30 am - 9:00 am: Registration

9:00 am - 9:30 am: Opening remarks and summary of Day 1

9:30 am – 10:30 am: Presentation by Heather Jirousek and Bengt Pettersson - A discussion on Yukon Government's Water Strategy

10:30 am – 12:00 pm: Water Rights Discussion with YRITWC's Legal Team

12:00 pm - 1:00 pm: Lunch served at venue

1:00 pm - 2:30 pm: Breakout sessions - Fill out SMART Rubric using identified concerns

2:30 pm - 3:30 pm: Back together as a large group to review and refine SMART Goals

3:30 pm - 3:45 pm: 15 minute break

3:45 - 5:00 pm: Final Water Action Plan Session – Complete Draft of Water Action Plan based on SMART Goals

5:00 pm: Conclude workshop and have participants complete feedback form. Update on the next YRITWC's Biennial Summit in Minto, AK

APPENDIX E

Example of Completed Evaluation Form

Water Action Planning Workshop Yukon River Inter-Tribal Watershed Council Whitehorse, Yukon November 17th and 18th, 2014 Participant Feedback Form We ask that you take a moment to provide your feedback. Your responses are anonymous and will be used to improve future workshops. Your feedback is important to us. On a scale of 1-4 where 1 is strongly disagree and 4 is strongly agree, please circle the most appropriate answer: 1. The workshop venue was: a) Comfortable c) Food and refreshments were adequate 2. The workshop content was: a) Relevant b) Comprehensive c) Easy to understand 3. The workshop was a) Well paced b) Breaks were sufficient

5. The facilitators were:

a) Knowledgeable

c) A good mix between listening and activities

4. The activities were useful learning experiences.

1 2 3 4

Yukon River Inter-Tribal Watershed Council