



BRIDGING YESTERDAY WITH TOMORROW

UNDERSTANDING TRADITIONAL ECOSYSTEM MANAGEMENT PRACTICES
AND THEIR APPLICATION TO
CONTEMPORARY SUSTAINABLE BOREAL ECOSYSTEM MANAGEMENT



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Alaska Region Northwest Boreal Landscape Conservation Cooperative



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Northwest Boreal Landscape Conservation Cooperative
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So that's what we wanted, you know, we wanted to eat good food every day and to be healthy, and to be strong, and keep, keep our ways. You know, that's what we're talking about today; to keep some of the ways that fit into today contemporary young people, young generation. Paul Williams Sr.

FOREWORD

Bridging Yesterday with Tomorrow: Understanding Traditional Ecosystem Management Practices & Their Application to Contemporary Sustainable Boreal Ecosystem Management was created to engage Gwich'in and Koyukon traditional knowledge bearers, to further promote and reestablish the reciprocal relationship between people, landscapes, and food resources to ensure sustainable forest ecosystems for generations to come.

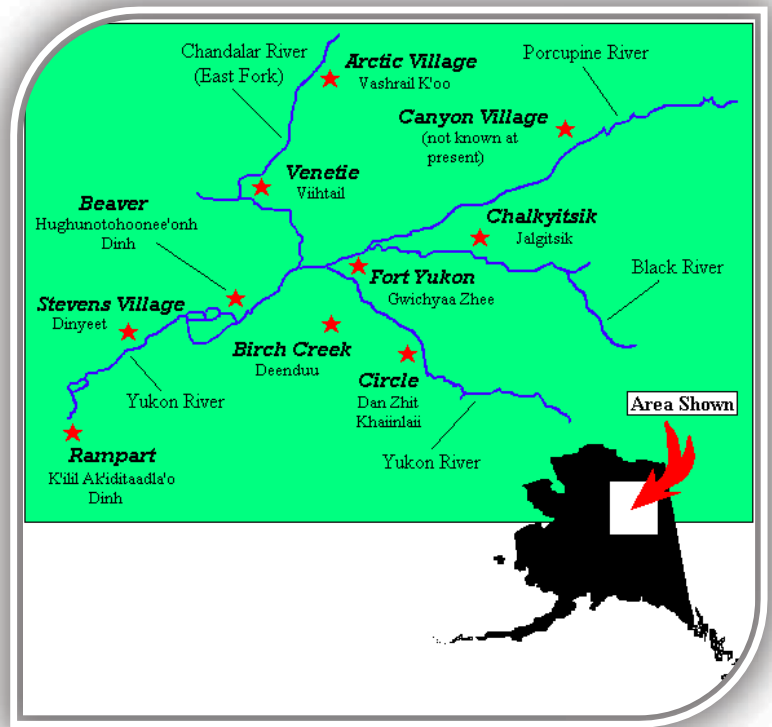
Gwich'in and Koyukon Athabascans of the Yukon Flats do not define themselves as 'managers' of the ecosystem upon which they rely, they have held an intimate reciprocal relationship with the lands, animals, and waters of their traditional territory for generations. Therefore, here the term 'management' is not used to reference traditional practices, as it does not reflect culturally-based principles. Here 'stewardship' is used to reflect culturally-based principles and the reciprocal-relationship held. The goal of this research is to gain a deeper understanding of traditional stewardship practices, in order to inform and impact the discourse, policy, management, and regulations related to sustainable use and conservation of boreal ecosystems. This document speaks directly to the application of Gwich'in and Koyukon Athabaskan traditional stewardship practices - past, present, and future. It contains recommended actions for Alaskan Native communities and State and Federal entities alike, that if taken can greatly improve current natural resources management in interior Alaska. The central message encourages Alaskan Natives to practice traditional stewardship and emphasizes the need for western systems of natural resources management to integrate these principles.

While conducting the research and preparing this document, it became evident the matters addressed here are neither new, nor are they unfamiliar. Since the 1970's, conservatively, numerous concerted efforts have been made and commissioned at varying levels of state, and federal government to capture how Alaskan Native's manage their landscapes both traditionally and contemporarily. Traditional knowledge has been documented in countless ways, under the auspices of creating more inclusive co-management delivery systems. Overall, these efforts have several traits in common: they identify traditional stewardship practices and principles, they recommend strikingly similar solutions, and the solutions recommended have largely not been implemented.

INTRODUCTION

COUNCIL OF ATHABASCAN TRIBAL GOVERNMENTS

The Council of Athabascan Tribal Governments (the Council) is a tribal consortium founded in 1985 on the principals of tribal self-governance. Tribal leadership has clear vision: self-sufficient economies built upon self-governance. The Gwich'in and Koyukon Athabascan peoples of the Yukon Flats live in ten remote villages, which united form the Council. They are: Arctic Village, Beaver, Birch Creek, Canyon, Chalkyitsik, Circle, Fort Yukon, Rampart, Stevens, and Venetie. The river system connects the villages in the summer months, snow machine travel connects them through winter, and bush airline service connects them year round.



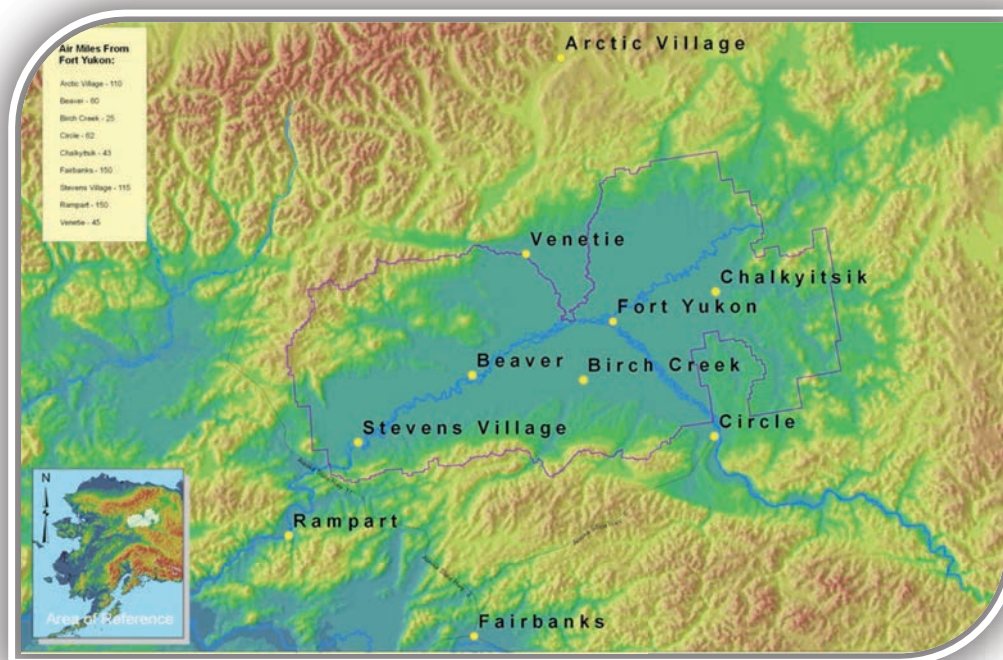
Since time immemorial the Tribes have lived in reciprocity with this landscape. The Council asserts their inherent stewardship authority within their traditional territory to provide for a healthy boreal ecosystem necessary to maintain a traditional and customary way of life. The purpose of the Council as mandated by their Constitution:

...shall be to conserve and protect tribal land and other resources; to encourage and support the exercise of tribal powers of self government; to aid and support economic development; to promote the general welfare of each member tribe and it's respective individual members; to preserve and maintain justice for all and, to otherwise, exercise all powers granted by it's member villages and the purposes expressed in the preamble.

The Council's traditional territory encompasses 35 million acres of critical wetland habitat dominated by the Yukon River watershed, stretching from the White Mountains in the south into the Brooks Range in the north, from the western edge of the Yukon Flats past the Trans-Alaska Pipeline and east into Canada, encompassing what is now the Yukon Flats National Wildlife Refuge, Arctic National Wildlife Refuge, Bureau of Land Management Eastern Interior Management Area, the State of Alaska Chandalar Mining District, the Venetie Indian Reservation, Doyon Limited lands, ANCSA Village Corporation lands, and Tribal lands all of which have significant historic, cultural and geographic importance to the Tribal Governments.



The Gwich'in and Koyukon Athabascans live a primarily traditional subsistence lifestyle to this day. The people were traditionally nomadic, following the seasons and the resources, which fed their families. The villages were settled in the late 1800's - early 1900's due to external resource extraction, trapping, trading, and schooling. In the contemporary setting, the seasons and the land still dictate activities and lifestyles. Locally harvested moose, caribou, bear, sheep, salmon, whitefish, grayling, ducks, geese, ptarmigan, rabbit, and berries comprise the majority of their diet.



Traditional and customary use of resources provides the principal component of the regional economy, as well as the backbone of traditional culture.

Reliance on traditional and customary use is well documented. As the Federal Subsistence Management Program noted:

...the state's rural residents harvest approximately 22,000 tons of wild foods each year – an average of 375

pounds per person. Fish makes up about 60 percent of this harvest statewide. Nowhere else in the United States is there such a heavy reliance upon wild foods" (<http://alaska.fws.gov/asm/about/cfml>).

The Council's Natural Resources Department annual *Yukon Flats Moose, Bear, Waterfowl, and Furbearing Harvest Data Collection Final Summary Report, Technical Document 08-02* published in 2009 documents the economic importance of subsistence in the region:

Although successful hunting was down with only 25.49% of households harvesting bear, moose, or wolf, sharing continues to be an important aspect of life in the Yukon Flats with 85.58 % of the households that harvested meat sharing with other households and 76.71% of the households in the Yukon Flats receiving meat. The number of households in the Yukon Flats using moose or bear meat remains...93.6% of the households. Six of the seven villages surveyed reported...100% of households using moose and/or bear meat (from Results: pg. 7).

The Athabascan people of the Yukon Flats lived according to rules established by their sovereign governments. When Alaska assumed statehood in 1959, the federal and state government assumed jurisdiction over the affairs of the Athabascans, including the rights to manage the lands, waters, and traditional and customary resources sustaining them. Subsequent legislation and regulations have created a devastating set of circumstances for Alaska Natives, regulating them out of their traditional and customary resources and worse criminalizing the practice of traditional subsistence activities.

The Council's Natural Resources Department is mandated by tribal leadership to practice self-governance and ensure the Gwich'in and Koyukon way of life is the driving force in the stewardship of their traditional territory.

NORTHWEST BOREAL LANDSCAPE CONSERVATION COOPERATIVE

The Northwest Boreal Landscape Conservation Cooperative (NWLCC) is a Department of the Interior and U.S. Fish and Wildlife Service (Service) broad based public private partnership providing the science necessary to undertake strategic conservation efforts across a large geographic area, in part to address major environmental and human related factors that limit fish and wildlife populations at the broadest of scales. The science provided by the partnerships will inform biological planning and conservation design, and help to direct assumption driven research and monitoring necessary for decisions about conservation delivery within an adaptive management framework.

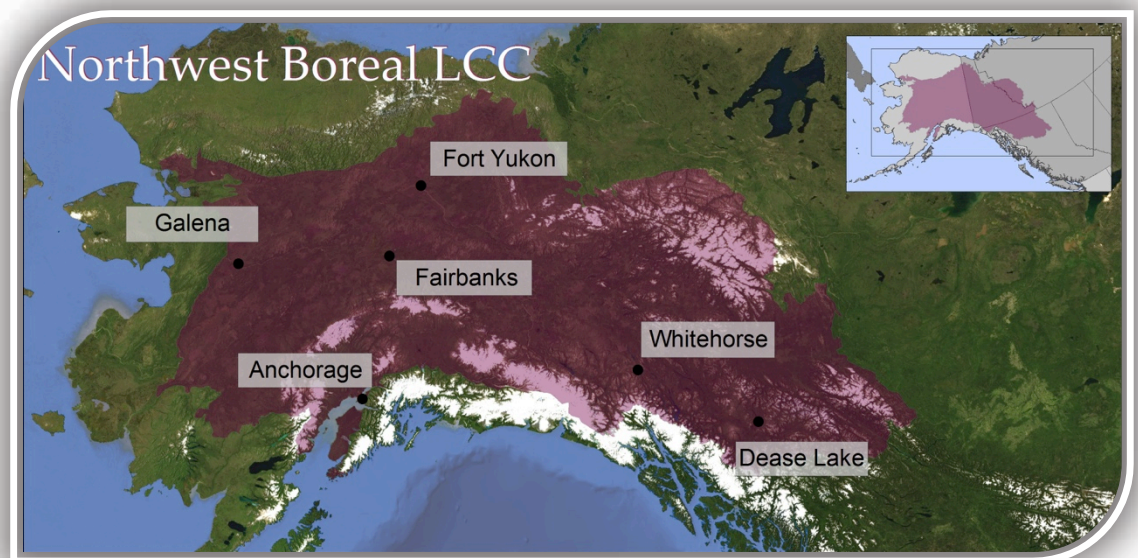
The NWBLCC is building upon strong partnerships to create a landscape scale conservation initiative, guided by the principles of strategic habitat conservation to develop and communicate landscape scale scientific information to shape conservation in Alaska and adjacent Canada.

Established NWBLCC Prioritized need: Best management practices for protecting/informing landscape scale conservation, ecosystem function (e.g., wildlife corridors, road placement, buffers). A - Adaptation Planning and Best Management Practices. These are information needs that support or enhance the LCC's understanding of the actions needed to move toward a desired future system state or condition, given current knowledge of "Where we are, today," "How and why systems work" and "Where we are headed." The information needs in this bin pertain to the conception or implementation of local to regional adaptation strategies. This includes the creation of Best Management Practices or alternative management scenarios, and decision support to identify "Where do we want to go, and how do we get there."

TRADITIONAL PRACTICES AND SUSTAINABLE ECOSYSTEM STEWARDSHIP

The Council and Service recognize the need to bridge the divide between indigenous knowledge systems and those of western science to facilitate conservation science. By documenting the traditional stewardship practices of the Gwich'in and Koyukon community of Beaver, Alaska. This report provides insight and understanding into the culturally-based principles that guide management and relationships between people, landscapes, and food resources to ensure healthy ecosystems that maintain healthy fish and wildlife populations within the northwest boreal forest. This provides a greater understanding of traditional stewardship and its application to the 'contemporary' or 'western' approach to ecosystems management to develop appropriate, local Best Management Principles.

There is a clear need for documentation of culturally and traditionally- based stewardship practices as held in the oral histories of the elders. This critical information provided for the foundation of survival and well-being of the Gwich'in and Koyukon within their boreal ecosystem is in danger of being lost as traditional knowledge bearers and elders are lost within their communities. This rich cultural tradition holds solutions necessary for cultural adaptation, resilience, and survival in a changing ecosystem. Through documentation and development of a Traditional Practices Seasonal Calendar these principles will be accessible to the next generation as well as partners in management.





METHODS

The Council collaborated with the Tribal Government of Beaver and researchers from the University of Alaska Fairbanks and University of Kansas in the documentation of traditional stewardship practices and culturally-based principles as held in the oral histories of the community elders. This data was collected through semi-structured interviews with two community elders and one traditional hunter/fisherman. This method provided rich data, as all three participants felt comfortable telling their "story" via interviews. The methodology is outlined below:

1. Semi-structured interviews with two elders and one traditional hunter/fisherman from 3 different families were conducted. Participants were selected for their depth of traditional knowledge, respect among their community members, and commitment to their traditional way of life. Each are highly regarded within and outside of their communities for their knowledge, understanding, and continued practice of their traditional way of life. The semi-structured interviews were designed to document the cycle of seasonal harvest and traditional stewardship practices. Questions were structured to answer the following:
 - How were landscapes managed to maintain sustainable populations?
 - How were wildlife populations managed to maintain sustainable populations?
 - What norms, sanctions, rules were placed upon the harvesting and handling of wildlife?
2. The interviews explored the challenges of practicing traditional hunting, fishing, and gathering within contemporary management systems. Questions were structured to answer the following:
 - How do current regulatory seasons and limits affect your ability to harvest and manage wildlife populations for sustained yield?
 - How do current regulatory and land ownership regimes affect your ability to harvest and manage landscapes for sustained yield?
 - What other factors influence your ability to hunt, fish, and gather as passed down from your elders?
3. Each interview was transcribed verbatim and verified by the research team for accuracy.
4. Once transcribed, each member of the research team analyzed the data and constructed their own set of themes. The research team then met collectively to discuss their themes and begin shaping unified themes.
5. From the unified themes, the research team drafted this report, highlighting traditional stewardship practices and culturally-based principles. A seasonal calendar based on the information collected in the interviews was also developed to add esthetic value, diversify learning opportunities, and ensure continuity in the Elders message and instructions to younger generations as a visual accompaniment to the report.

FINDINGS

Overall, three major themes surfaced during this research that identified a past, present, and future ideology Elders seemed to live by, and call upon daily to traverse as well as try to understand the world of modernity. What follows is a thematic presentation and discussion of the findings. Interviews were coded and organized in reflection of the semi-structured questions from the interviews (i.e., past, present and future). Each interview response was assigned a theme and then marked for incorporation into the larger themes of the research, individual quotes were gleaned from the interviews in order to maintain the integrity of each participant's voice.

YESTERDAY: TRADITIONAL ECOSYSTEM MANAGEMENT PRACTICES

Everybody take care of what animals we got out there. Elsie Pitka

The interviews revealed that indeed there were strict traditional laws and protocols that guided hunting, fishing, gathering and being out on the land. These laws are still intact, though the younger generation is not as familiar and versed in the teachings of these traditional laws as the participants, participants maintain a commitment to teach these laws to the next generation. Hence, time is of the essence in ensuring these laws are passed down. According to the participants, adhering to traditional law was/is non-negotiable and one's very survival depends on it. What follows are key themes that emerged from the interviews regarding traditional or past ecosystem stewardship practices.

SPRING TIME AND RENEWAL

What was very clear from all three interviews was that the animals and the seasons/temperature dictate when it is appropriate to hunt and be on the land. Spring was an especially important time of the year, a time of "renewal" as elder, Paul Williams Sr., appropriately referenced. This time of the year was important, because the sun was returning, there was a transition from winter to spring, and most importantly the animals were mating and rearing their young ones. To the participants in this study, this was significant because it means that life is renewed, both in the physical sense, but also the metaphorical and spiritual sense.

For example, with spring came sunlight and the returning of the ducks and geese, who nested and reared their young, which reflected balance in the ecosystem. Being part of this larger system and knowing your place within that system gave one a sense of belonging and intimate knowledge of the ecosystem. The people feel a spiritual connection to this system and are mandated by traditional law to care for and steward it, in an effort to maintain the sacred balance. In reference to spring being a time of renewal, Paul Williams Sr. stated,

Bunch of us went to Whitehorse, and they asked me to say something about the people living on the land; I told em' you know there's a struggle springtime. I don't know why. Spring is it like, being renewed, you know, recharged. All of the uh, snow goes away, and uh, trees start to leave, animals come around, and birds arrive, it's just like a renewal, so, might as well start at the beginning. It's like uh, coming around the corner in a canoe and you see uh, long whisp of smoke down there among the trees.

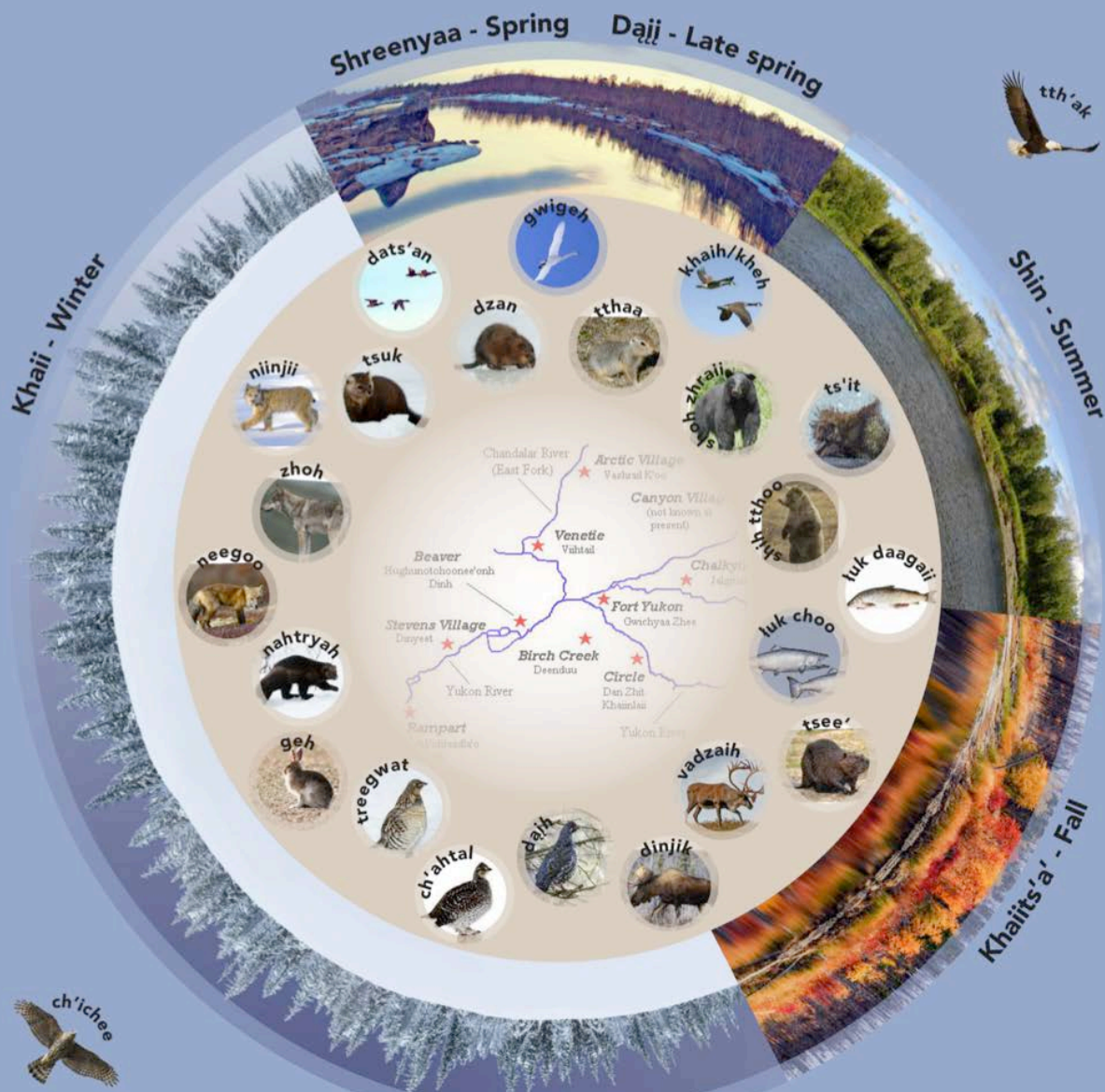
Later in the interview, Paul Williams Sr. went on to talk about how important spring flooding was after the ice would break-up on major rivers. After the water receded, the areas flooded would become rejuvenated with life, as willows and various shrubs would regrow. The regeneration of plant-life in turn would support wildlife



populations and their habitats. Specifically, knowledge about flooding in the very remote areas of the Yukon Flats comes from being out on the land and watching changes over time, as Paul Williams Sr. demonstrated in his interview. This viewpoint is a vastly different viewpoint than how floods are portrayed in mainstream society, in which they are seen as dangerous and something to fear.

Dinjii Zhuh K'yaa Gwiindaii

Live Your Native Culture



Alaska Native people prepare carefully for floods, knowing the power and force of the rivers, but there was and continues to be the understanding that this was and is a necessary part of life, this time of renewal and keeping the sacred balance. It was also the understanding that rivers have their own spirit and energy, which directs their path as it lives in relationship with everything else. Accordingly, there is an understanding among people who live in close proximity to the river, to respect all water, let it run its' course, as it provides for the health of the land and animals. The reference participants made to spring time being a time of renewal is important, because it demonstrates the intimate knowledge and awareness participants practice regarding what happens on the land, and how that simultaneously impacts human life.

All interviewees spoke about the importance of not bothering the animals in the spring, as that is when they were having their young ones. Elder, Elsie Pitka, who stated,

But we start beaver trapping, beaver trapping in February and March...[sighs] and maybe April, but we got to pull them out quick, because they're they're going to have their young ones s maybe, so we don't want to, you don't want a clean out, all the houses and stuff, you know?... So middle part of May and June we don't do ducks, muskrat, beaver. They have their young ones then, you don't bother them.

It was evident from the interviews that the participants had learned and been acculturated into a way of life where deep respect is shown not only for human life, but for the land and animals as well.

DO NOT TAKE MORE THAN YOU NEED

Another theme that emerged was only taking what you needed to be well and maintain ecosystem balance/health. This builds upon the theme of not bothering animals in the spring. Gwich'in and Koyukon people maintained a balance with their environment by respecting animals' own spaces in the spring to have their young ones. This was shared by each of the participants. Clifford Adams Jr. spoke of only harvesting what you need and not hunting cow moose, because they are the ones that bare moose for the future. He stated,

I mean, I'm talking 30, 25 to 30 years ago when we were still doing that, even 20 years ago probably where we just harvested when we needed it and I don't ever recall – there was no limit on salmon, I don't ever recall there being wasted salmon, you know, we just harvested what we needed and what would sustain us through another year as far as the salmon. I don't recall there being a limit and, you know, I know we didn't shoot cows and calves, you know, we didn't shoot young moose and it was just – we had our own standards that we lived bybut there wasn't a limit and I can recall there being a lot more moose when we were kind of in charge, living by our rules, but today, I mean, it's like I'm not sure what's going on with it.

His statement reflects upon the times prior to western management systems, where traditional laws and protocols were in place, passed down from elders to younger generations, to guide all





Dinjii zhuh k'yaa gwizhrih gwinjik ohdaa **Live by your traditional principles...follow traditions**

Translations provided by Kenneth Frank

Nakhwokhai' t'ikhwa'in
We do it ourselves

Nin yinjihodhoh'ee
Respect animals

Nin datthak yinjihodhoh'ee, nin nakhwant'ee adaachii t'inch'yaa
Respect all life, animals give themselves to our people

Nanhkat datthak gwiinzii gok'eenoh'tii
Maintain the balance

Nan, chuu, gwandaii datthak gwinzii k'eenoh'tii
Take care of the land, water, and animals

Nanh nin haa datthak dinjii yit'eehaach'yaa geenjit K'eegwaadhat yiltsaii
The world around us provides for our people

Zhik gweedhaa gwinzii gwik'eenoh'tii
Nature tells us when to do things

zhik nats'aa gweedhaa gwadak t'ohch'ya' shro'
Do not go against nature and have respect for nature

Shreenyaa nineegwiidhat dai', dinjii naii datthak haa shroonch'yaa
Spring is a time of renewal and rebirth

Nin nihlinkeehaa'oo daa nahdak ts'a' nin digii dai', haa nagooh'aii kwaa
Do not bother animals during their mating and birthing seasons

Deegwahtsaii t'ooch'yaa zhrih ohjii, zhyaa shih an ohtsyaa shro'
Take only what you need, do not waste

Gwint'ee ch'agahchak, tr'ookit gwandaii gaahkhok, dinjii naii agah'aa
Share, gift your first harvest

Kwaiik't gwa'an zhit neeshraahch'yaa naii gwinzii k'eegahtii i'
Share, work together to provide for our elders, our children, our people

Hahkwaii naii lyaa yinjih gehi'ee
Think collectively, respect tribal leadership

Gwiinzii k'eegahtii ts'a' deenyaa tthak gwinzii gwinjik geedaa
Follow tribal guidance

Nakhwogindihk'it gwinzii gaakhwondaii
Know your traditional territory

Ch'adanh Gwich'in naii goonanhkat yinjihodhoh'ee
Respect the traditional territory of others

Ch'anjaa ts'an gagoo'ee
Get elder teaching

behavior. Elsie Pitka demonstrated a deep respect and reverence for this knowledge as well as these laws throughout her interview. Elder Pitka started her interview by drawing a diagram of the traditional hunting, trapping, and gathering seasons that people relied upon, including the periods of time when animals were left alone to birth and rear their young ones [see Figure 1]. She carefully took time to discuss the different seasons, what animals were hunted and trapped during that season, where you were allowed to hunt



and trap, what areas you left alone and protected. She also discussed who had what role within her family, as everyone was familiar with their unique role in keeping their families, land, and animals healthy. In this manner, there was a symbiotic relationship between the animals, land and people; a unique balance that served as a foundation for everything else. If this balance and respect were maintained, there would always be food and other resources.

MAINTAINING A BALANCE

The participants discussed predator management as an important way to ensure that all animal populations stayed healthy and strong, for the animal population itself and for the animals that they relied upon. Directing the conversation to the current game management system in reflection of how management occurred in the past, Paul Williams Sr. stated,

A style that is foreign to us, you know. We don't know what numbers, yet we knew how many bears or wolves to take in wintertime, you know, each. We're responsible to keep, what you call a balance, or - that's a good word for that you know, a balance - where there's enough moose for the people, and the predators. And how we could use it, because we used the skin, and the feet, and, you know we used, they had special parts for potlatches or take it to the chief.

Also emphasized in this quote, and in the interview as a whole, was the key principle that when something was taken, whether for food or to help maintain a balance, everything was used and there were specific purposes for different parts of the animals.

This point regarding predator control and helping to maintain a balance was echoed by Clifford Adams Jr. who spoke to the importance of maintaining a balance of the animal population by managing predators, such as bears and wolves, who deplete the moose population. Adams spoke about the past, recalling a boat trip where he saw 26 moose in one day. Comparatively, Adams stated moose populations are not the same as they used to be, because the predators are not well managed, which has implications for wildlife populations as a whole such as small game like rabbits, and martin as well as large game like moose and caribou.

Another way in which the balance between human beings and the natural world was maintained was certain areas were off limits for hunting, fishing and gathering. Oral tradition, teachings, and direct communication with the community set limitations for everyone to follow regarding when, where, and what to hunt. Elsie Pitka spoke about areas people knew to be off limits to hunting, places where people know you are not supposed to kill a moose, because the moose need these

protected spaces so that the overall population doesn't diminish. Predator management and using all parts of an animal are just two ways in which Alaska Native people ensured that this delicate balance between humans the natural world were maintained.

KNOWLEDGE OF TRADITIONAL USE AREAS

Family's intimate knowledge of the landscape, constant interaction with, and commitment to stewardship of traditional use areas kept ecosystems cared for, in balance, and healthy. Each participant spent a lifetime practicing traditional hunting, fishing, and gathering on their traditional land use areas, Clifford Adams stated,

Like I've been out here a long time and I know every lake, meadow, tree damn near, you know, out here but I don't know where the borders are for land. To me it's just all Yukon Flats, its home and I grew up without borders, I still live that way without borders.

Paul Williams Sr. emphasized how non-Native hunters came into traditional Native land and did whatever they wanted, yet this mentality was very foreign to him as a Native person, he stated,

Well for myself, I wouldn't hunt in someone else's hunting area, I got my own you know, traditionally. It never used to be that way long time ago. Nowadays white man just come in and hunt anywhere and camp anywhere.

Embedded in these two quotes are important points: Both Clifford Adams Jr. and Paul Williams Sr. have profound knowledge of their traditional hunting areas; have extensive knowledge and respect for other peoples' hunting areas.

COLLECTIVE COMMUNICATION AND DECISION-MAKING

Participants shared it was evident that decisions were made collectively, through talking things over with other families and other villages to fully understand the state of the land and the animals. For example, if predators were to be controlled, this had to be a collective decision. Paul Williams Sr. spoke of these times and stated,

People that used to live off the land had direct access to information on how the land is doing. They have meetings up there, Fort Yukon and every year people from all over come here and they have a gathering, lot of people from all over come here and we gather...they have uh they have a fire every night and the chief's meet and talk about the land and how its being managed. Each

make a report about the abundance of animals and sometimes they have to go without it for a year or so.

These words bring to life the deep, engrained traditions and laws that guided daily life and how everything, from decisions to actions, were done in a collective manner, knowing that one's actions would impact other people, the land and the animals. There was a sense of unity and togetherness, which allowed life to exist in balance.



SHARING

Sharing amongst people in Beaver and the larger Koyukon/Gwich'in area is a cultural value that continues to be practiced regularly and has ensured that the people have survived since time immemorial. This value of sharing was referenced numerous times throughout the interviews. Clifford Adams Jr. spoke about the importance of sharing and described moose hunting at the community level. He stated,

Whenever we ran out of meat or somebody in the community was low on meat we actually went together as groups and like got moose out of islands. You know, people were really good on snow (shoes) would go in there and drive them out to the people that were waiting outside, outside of the islands and it was a community event.... and so if there's two moose in there that could be harvested we would harvest both of them and that's – and then it was all divvied up and shared and then when we got home everybody that didn't go came and got shares, ...



Elder Paul Williams's words echoed other stories shared by elders throughout the Yukon Flats, who recalled stories of families sharing food and other resources with others so that they could survive during times of migration, sickness and starvation. In times of hardship, if a family lost a provider, another family would take in the remaining family members and care and provide for them. Sharing can also be observed in everyday life throughout Beaver, whether it is people sharing food, younger people helping elders and/or people sharing their knowledge between generations.

SPIRITUALITY

Spirituality was and continues to be a central force in the participants' lives. It was evident from the participants' responses that spirituality was and is something that is so central to peoples' core being. From the point of view of the participants there is a spiritual connection to the land and animals and to the creator, who provides. To hunt and to fish are to be in relationship with the animals and fish and it is widely believed that the animals and fish give themselves to the hunters. In reference to having a spiritual relationship with the land and animals and listening to the creator, Elder Paul Williams Sr. stated,

You know, God's law is not going to change. The Great Spirit gives us food and a place to stay and gives us a temporary life.

This sense of connection to the creator, who bestows the land and the animals so that humans can hunt and fish and live off the land, is something that is deeply felt and valued amongst the participants in this study. This deep spiritual connection was established as they were growing up, creating a strong responsibility to stewardship. Thus, in consideration of the core disconnect between traditional Gwich'in and Koyukon laws and contemporary management styles, it becomes increasingly evident that spirituality as a foundational aspect of traditional stewardship practices tends to be misunderstood, devalued, and at times illegitimated by current management systems. This creates difficult circumstances and limited opportunities to provide input that is valued by management for management decisions. To have limited input into something that is at one's spiritual core creates a sense of disconnect and loss. Paul Williams Sr. captures this deep connection and the accompanying traditional laws, he stated,

There's a spiritual connection between, between uh, animal and man you know, certain, certain animal and man become friend, and dream. Through dream they can help one another to survive and have healthy life, and be happy...

TODAY: CHALLENGES OF WESTERN MANAGEMENT

We are torn between two points. Paul Williams Sr.

Throughout the interviews with elders Paul Williams Sr. and Elsie Pitka, and traditional hunter/fisherman Clifford Adams Jr., the challenges of practicing the traditional way of life within a western system of management emerged as a pressing issue. It was apparent there is a strong pull to tradition and culture for all participants, but that this pull has been directly and personally impacted through western colonization and discourse. They also clearly expressed the disconnected, fragmented, and unresponsive federal and state management system of today, which they see as the driving force behind the decline of fish and wildlife populations.

HOLDING ONTO THE TRADITIONAL WAY OF LIFE

It was evident throughout each interview, that a strong tie to the past, and to the traditional way of life remains central to daily Koyukon and Gwich'in Athabaskan life today. The elders and traditional hunter/fishermen all expressed the daily importance of practicing the traditional way of life to this day, of gathering and eating traditional foods, of respecting and caring for the environment which provides for them. Each noted several traditional practices still in place today, which help to provide for their individual wellbeing and that of their community. Such things noted include: sharing first harvests; sharing with elders; listening to elders; leaving animals alone during breeding, birthing, and raising young; and respecting traditional use areas.

That's the way they did a long time ago. A lot of things I see today that uh, change, not really carry on. One of the things I see in people is when they get their first moose though, the first salmon you know they take a little piece of it, you know, kinda like tradition, that we've been handed down from generation to generation, and um, so many things got written down here too like respecting elders, you know listening to people, and uh kind of uh, helping one another, you know...Paul Williams Sr.

The elders and the traditional hunter/fishermen were very clear that the connection between the health of the ecosystem or natural world and the health of the people was central to the traditional way of life, which is still a necessary element of contemporary life.



So that's what we wanted, you know, we wanted to eat good food every day and to be healthy, and to be strong, and keep, keep our ways. You know, that's what we're talking about today; to keep some of the ways that fit into today contemporary young people, young generation. Paul Williams Sr.

This way of life continues to be paramount in everyday life among the villages in the Yukon Flats, where on any given day people in the village can be seen out on the river, hauling wood from the wood yard, checking their traps and/or putting away food from the land. People can also be seen observing the land, physically sitting by the river or taking a ride to “look around”. This intimate tie with the land and animals not only fills one’s physical sustenance, but spiritual sustenance as well. Throughout the interviews it was apparent that there remains a strong tie to the traditional way of life, with many elders and traditional users continuing traditional practices and passing them on to younger generations.

DISCONNECTED, FRAGMENTED, UNRESPONSIVE SYSTEM

The elders and traditional hunter/fisherman expressed great frustration and disappointment with the current system of western management. While wanting to be as respectful as possible, they all spoke of their dissatisfaction with how physically and spiritually disconnected managers are from the land and the people who live in the Yukon Flats.

They each discussed the lack of understanding and knowledge current managers have of the Yukon Flats ecosystem and of the Gwich’in and Koyukon people, referencing managers live in urban centers and rely on western/college education for their decision-making while minimally relying on the traditional knowledge held in the region. An elder specifically pointed out the inability of managers to drive a boat on the Yukon River, as an example of this disconnect between managers and the landscapes they manage.

I just don't have an answer for that and today it appears to me, that it is under new management and people who are managing the land for all people in the United States this is Fish and Wildlife managers...and I don't think they know how to manage... They are not living on the land, they get their food from Safeway, and they're sport hunters you know. Paul Williams Sr.

So, the lazy state and federal government, they don't understand the people, and they don't understand their language, and they don't understand the traditional values. They just go ahead and do what they learned in college, you know, yeah, they really don't know nothing. Don't know nothing about water, or the dangers of water. Paul Williams Sr.

The great divide between western management and the traditional way of life was highlighted as elder Paul Williams Sr. noted:

They said they're supposed to let us be first if there's no fish but that didn't happen. They pull our nets if they are not a certain size, they're calling the shots from Fairbanks, and they take it away from us. Where do they think it comes from you know, these are gifts from the Creator, he owns it, it's his. Paul Williams Sr.

Here we see the division between western management principles that are based on western sciences and traditional management principles, which are based on a unique spiritual relationship. All participants noted how different indigenous laws are from western laws, which do not take into account whose traditional lands one is hunting and fishing on and only take into account seasonal openings and legality of location and animals hunted. The difference in laws creates a serious problem for traditional users, because it essentially forces them to hunt and fish in an area and at a time that is not natural to their own proven regulatory laws and values.

Paul Williams Sr. noted how restricting the U.S. and state laws are and how they don't consider this spiritual relationship between human beings, the creator, the land and animals. He expressed his

frustration with the current laws and their lack of adherence for a rural preference over seasonal or sport preferences, which would allow people in the villages to fish first.

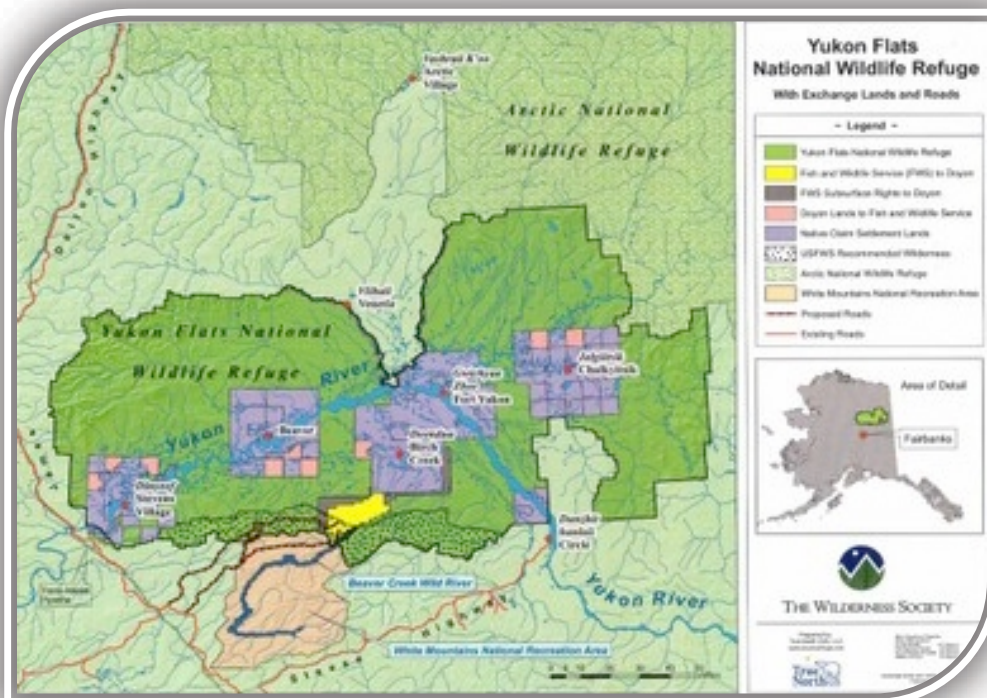
Additionally, traditional hunter/fishermen Clifford Adams Jr. highlighted the challenges of fragmented land ownership and management within the Yukon Flats. With private, federal, and state land ownership in the Yukon Flats, hunting and fishing regulations may change depending upon which side of the river you are hunting, or which side of a tree you are standing. The legal history of Alaska Native Claims Settlement Act and Alaska National Interest Conservation Act created an arbitrary and fragmented management system. Traditional hunters and fisherman, as well as the animals and the fish do not know these arbitrary boundaries. The current management system is fragmented; it puts traditional hunters and fishermen in a place where they fear they are breaking regulations on a consistent basis, while just living a traditional and customary way of life.

But yeah, it's almost looking over you shoulder too, you know, because there's – to me it's really not broken down. Like I've been out here a long time and I know every lake, meadow, ... tree damn near, you know, out here but I don't know where the borders are for land. To me it's just all Yukon Flats, its home and I grew up without borders, I still live that way without borders. So, you know, one of these days they might reach out and grab me but maybe with a fine or something like that but, yeah, it needs – everybody needs to get on the same page...see, I have no borders. In my mind there's no borders. Clifford Adams Jr.

In the case of the Yukon Flats, there are numerous regulations upon traditional resources that are dissimilar between ADF&G and OSM regulations. Refuge Officer Michael Hinkes USF&WS was quoted as saying, “I have worked all across the State of Alaska enforcing fish and wildlife regulations, and nowhere else in the state have I seen such a regulatory nightmare for subsistence users as the Yukon Flats.” (December 10th, 2009)

Lastly, in referencing the current western management system the elders and traditional hunter/fisher recognized the inflexible and unresponsive nature of current management. A traditional

hunter/fisher has to traverse Federal, State, Alaska Native corporation, Tribal and Individual land ownership, as well as navigate seasonal rules and regulations in order to practice a traditional and customary way of life. Western managers do not confer with local people, nor adequately respond to seasonal changes. Western hunting/fishing regulations are based on strict calendar dates and are not responsive or adaptive to local needs and climate fluctuations that occur.



The elders and traditional hunter/fishermen shared their experiences practicing a traditional way of life within the current system of western management, finding the system disconnected, fragmented, and unresponsive to provide for the health and wellbeing of the Yukon Flats ecosystem and the Athabascan people who rely upon it.

DECLINING FISH AND WILDLIFE POPULATIONS

The elders and hunter/fishermen continued to share their experiences of practicing their traditional way of life in the Yukon Flats ecosystem today, and the fundamental challenge of healthy wildlife populations emerged. They expressed concern that the western management system of today has had a large role in declining fish and wildlife populations.



How the state and federal government and caretakers managers keep a balance out there on the land. And when there's, become out of balance, you know, it's kinda like nobody's out there really to take care of it, you know. That's a difference I've seen about us living out here to keep that balance. I don't know what else to call it but balance, you know they uh, like somebody growing garden, and uh, watering it every day, and uh turn it around a little bit so that it grow foods, and that's uh, kinda like what we do out there, uh, taking care of the animals. Paul Williams Sr.

There's no animals to hunt. I think the reason for that is a....poor management system. Paul Williams Sr.

Over the past three years the State of Alaska has limited subsistence salmon fishing along the Yukon, with a moratorium in 2014, impacting the social, economic and spiritual well-being of traditional fishing families. For the Gwich'in and Koyukon people living in the Flats traditional salmon fishing is a chance to renew their relationships with salmon, but to also put fish away for the hard winter months. The moratorium and limited fishing opportunities have disrupted the sacred balance between Alaska Native people and their high quality traditional food sources and put this way of life in danger. A sense of depression, hopelessness, and sadness can be felt in traditional fishing villages during traditional fishing times when there are no fish nor fishing activity. There is no faith among the participants in this study that the government, state or federal, can properly manage resources to bring the salmon population back into balance.

It's something I have done for 50 years and it was like we were in – you'd call it almost a state of depression like we couldn't – we were just standing there like we've got to do something but what are we supposed to be doing because we can't fish? It was fishing (season) and we couldn't – it's just a part of our life was gone, our normal life, and that being closed is one of the strangest things that I've had to go through living this traditional lifestyle and hopefully we'll get through it and get this fishing situation straightened out so we can harvest what we need. Clifford Adams Jr.



The elders expressed the importance and strength of a strong spiritual connection to, a reverence of, and an appreciation for the fish and animals that provide for them. This relationship was critical to the wellbeing of the animals, and provided for healthy populations. From the elders we see the expression that today, here with this relationship broken, and poor management or even a lack of commitment to be on the land consistently, fish and wildlife populations are not healthy.

So, we don't know, uh, how the uh, white people would manage land in the way that they think they could. Maybe they could, you know, know [how to manage] fish - I'm not being against other people, you know, just looking at the facts, and uh, moose numbers are pretty low, and, and uh the caribou seem to be holding on - the people up there they beat on the drum and sing for their caribou quite a bit, and that's helped, you know. And, one man's opinion, and um, the way that we manage, they manage is to study the surrounding, you know, they spend a lot of time and money and stuff to do this, you know, like looking at the different kind of willows, and, but they never look at the important thing, you know, which is the people. Paul Williams Sr.

For the elders and the traditional hunter/fisher the current system of western management is not providing for healthy ecosystems, healthy fish and wildlife populations. This decline causes a constant threat to the traditional way of life and the health of the Athabascan people of the Yukon Flats.

COLONIZATION

The elders and traditional hunter/fisher all shared their concerns regarding the impact of western colonization on their people, their communities, and their traditional way of life. Each referenced the influence of settling or centralizing Gwich'in and Koyukon populations into villages, western education systems, corporatization, and capitalism on the traditional way of life. Each expressed their concern for the younger generations, and their losing relationship with the land and their traditional territories.

I think we are moving ahead pretty good but we're not, we're leaving behind the old way. Paul Williams Sr.

We're following the trail that they make too much and we forgot to think for ourselves. We forgot the old ways, we are trying the new ways. Paul Williams Sr.

With western colonization and education, comes the cash economy, desk jobs, school schedules, and living by the calendar. The participants all expressed the barriers this lifestyle creates to being out on the land, living out on the land, and living from the land. There was great concern that people are simply not on the land as they used to be, breaking the relationship between the people and the land and animals.

Old Athabascan way, today it doesn't seem to make sense ya know, because nobody practicing it and don't even know what it is. ... Maybe the people move away from the land and they don't use the resource anymore maybe that's part of the problem ya know. Paul Williams Sr.

Each participant recognized that the younger generation seems to be losing their sense of traditional Gwich'in and Koyukon Athabascan identity, not knowing their traditional way of life.

You need to identity check, just I mean you've got to know who you are, what you are capable of doing. Clifford Adams Jr.

The existing subsistence management system imposed on the Yukon Flats is unsuccessful in meeting the traditional and customary needs of the resident Athabascans. If Tribal Governments and traditional and customary users within the Yukon Flats do not practice self-governance in fish and wildlife management, regulation, and decision-making there will be a continued deterioration of the traditional Athabascan way of life, food security, and self-sufficiency or in sum human rights.



TOMORROW: RECLAIMING TRADITIONS, SUSTAINABLE ECOSYSTEM STEWARDSHIP

We had our standards we lived by. Clifford Adams Jr.

The idea of “reclaiming” is a conscious effort to honor the traditions of past generations and their observations and experiences, while keeping an eye toward the future. A recognition that yesterday is not gone, today represents the opportunity to learn from our mistakes, and tomorrow is new and undefined, filled with possibilities to enact the inclusive wisdom of the elders and traditional users into contemporary management principles. For Alaskan Natives, tomorrow is marked by the welcoming of new life, renewed land, and future generations.

RECREATING SPACE FOR FUTURE GENERATIONS TO BE TRADITIONAL

Some of us are not getting any younger and these values are leaving. Clifford Adams Jr.

Presently, younger generations of Alaskan Natives are being taught to engage in a traditional lifestyle in an inflexible western system that limits their creative ability to reshape and adapt the current natural resources management practices and structure them in their ancestor's image. Well beyond the usual conversations of subsistence and more towards the foundational aspects of stewardship, fish and wildlife populations, like humans, need safe spaces to procreate, birth, and rear their young. Space, in the literal meaning of a safe place where they can bring their young into this world without stress. Allowing Alaskan Natives to hunt and fish *without borders*, as Clifford Adams Jr. explained will reestablish a balance. Elder Elsie echoed this sentiment of balance, *we don't overkill*, even in relation to predators, Elders simply want to get back to establishing a balance between humans, animals, and the land.

If somebody could figure out how we could get into these younger generations heads and show them who they are, what kind of values, I mean, what a great life it is, you know. Clifford Adams Jr.

Gwich'in and Koyukon hunting and trapping regulations are more flexible than current state and federal management systems, shifting with the ebb and flow of the seasons. Seasons are marked by *temperature* as Elder Elsie pointed out, as opposed to months/days on a calendar, which allows time and flexibility for new generations of wildlife to establish themselves and informs the people when to

transition to other seasonal foods. Much of the contemporary hunting and fishing seasons at the state and federal level are controlled to regulate for outside influences, like sport hunting, and commercial fishing, which Alaskan Native's traditional and customary rights then get entangled with.

In sum, Athabascan people, whom observed and experienced this environment and successfully created highly intelligible regulatory laws from those observations and experiences



over 30,000 years, are now recently informed by state and federal managers that their laws are being replaced by unproven written regulatory laws that are 50 years old in Alaska. Upon a closer examination of these older Athabascan laws we find they are proactive in nature, as people are on the land daily, as opposed to reactionary, and they are inclusive, meaning they consider all people. Each Elder told stories of when they or their ancestors instructed non-Athabascan or Indigenous settlers how to live with the land; as such,



substantial evidence can be found and is readily available to make this point that Athabascans are not only successful stewards of their lands but they are also extraordinary teachers.

REINVESTING IN OUR CHILDREN THROUGH CULTURAL EDUCATION

Elder Paul Williams Sr. and traditional hunter/fisherman Clifford Adams Jr. deeply expressed the need to reclaim the education of the youth. Elders agree that valuable time and energy is better spent on our children.

Education throughout rural Alaska is currently managed by the State of Alaska and dominated by western modes of education, which do not incorporate lessons on traditional principles, practices, or ways of knowing as part of their curriculum. Although school boards are largely comprised of local community members who represent village ideals, the system is blanketed by educational models proven to be largely inadequate, focused on educational goals that are not relevant to student and community needs.

The opportunity to reshape children's education, to more appropriately reflect their experiences, lies in the autonomy of school boards and tribal governments (ADE&ED 2016). One of the goals of the Association for Alaska School Boards is "to empower local school boards to incorporate innovative solutions that will ensure student achievement and meet the demands for student success in a rapidly changing world" (AASB 2016). Paul Williams Sr., being a Chief and community figure for much of his adult life emphasized the importance of the school boards as a mechanism to reclaim and instruct village youth in Gwich'in as well as Koyukon traditional and customary lifestyles. He stated,

...Local control, local school board could be stronger than even the district school board. But that's turned around now and they're calling the shots, not the local people.

However, state funding does not cover costs associated with programs that infuse culture. For example, Alaska Native elders who are proficient in their language cannot be paid as teachers, because they are not certified as such. This limits formal teaching opportunities and creates a disincentive for elders to teach, as it is perceived that their knowledge is not valued. Both Elder Paul Williams Sr. and traditional hunter/fisher Clifford Adams Jr. make a strong call to incorporate lessons on traditional principles, practices, or ways of knowing into local school curriculum. Clifford Adams Jr. stated,



We need education...our best hope is to find a way to put it [cultural education] in our schools and start...with the kids starting school.

A growing body of evidence is starting to show that Indigenous youth's perception of a healthy community lies in their connection to elders and the land (Bigcanoe and Richmond 2010). Further, in some Indigenous communities' youth want to be given opportunities to be with elders on the land, as a learning opportunity. Therefore,

building substantial community programs and school curriculum around those perceptions is ideal for building healthy communities (Bigcanoe and Richmond 2010). Language programs and cultural materials have been in Alaskan Native village schools starting as early as the 1980's, but today these programs are a marginal afterthought. The failure or dismal retention of these language and culture programs has been couched in the conversations of modernity, as a distraction to reinforcing in the home what children are learning in the classroom.

We need education on – or teach these guys how to take care and go get moose and all of this stuff. It's like – you almost have to teach them to be Indians. You know what I mean? Teach them values, who they are or they're not – there's so many ways to look at it today. Clifford Adams Jr.

All participants reflected on the many deep wounds and social issues that plague Alaskan Native Villages, and their message was clear: we must invest in the cultural education of our children if the traditional way of life is to continue. They held that this should be done within the existing school system and reinforced/supported at home, ensuring the integration of principles, practices, or ways of knowing in local education is paramount.

RECLAIMING SOVEREIGNTY

Each participant reflected on the strengths of traditional stewardship, the health and wellbeing of the land and people under their tenure. They all expressed an urgent need to reclaim traditional stewardship and put it into practice today. The interviews all expressed that traditionally, generations of both human and non-human renewed their responsibility to each other throughout the year. For thousands of years their people shaped their societies around these relationships, developing their own laws that governed the stewardship of land and all living and non-living things. Traditional practices created intellectual as well as practical space for inclusion and adaptation, whether abrupt or prolonged societal change was needed. Traditional practices that matured over millennia, through trial and error in a specific place on a specific landscape.

We got a lot of things, I think that we can make, tell people, you know, how to look at things because like the flooding and stuff, that was true, you know, we grew up with that and it was – and like you said, the water that floods the land, it puts water back into the trees and everything and that's what moose use, you know, and all of the other animals. It might be one of those big things that people need to start looking at, when they have big (conflicts) they've got to start talking about it. Paul Williams Sr.

They all expressed their discontent under the current state and federal regulatory structure/management of natural resources, and further feeling that under this very new, adolescent, and inflexible structure comparatively, in concert with the ever-present climate related issues in Alaska, tomorrow is not guaranteed.

Nowadays Whiteman just come in and hunt anywhere and camp anywhere. I told these people to put up a No Trespassing sign but they don't want to litter the land with signs. It needs to be done though and it should be done. I think through tribal authority, we could pretty much control the land who hunts where and take it away from the state and federal government, you could do that but people just don't have any unity to do it. Paul Williams Sr.

Ultimately a nation's sovereignty is linked to their ability to unify under common ideas and express their will, without the permission of outside governmental powers. Often, in consideration of how sovereignty is expressed, the act of doing can be more important than talking about the problem. A recent example is the Yukon Flats Moose Management meetings, they have been restructured to account for more action, in response to a popular demand from attendees to stop talking about the issues and do something about them. The proposed regime change will alternate meetings from talking to doing, every-other year, with projects on the ground.

Historically, Paul Williams Sr. shared that the various bands of Gwich'in would come together annually to talk about *the land and how it's being managed*, as a way to share ideas, make decisions, and take action. Reclaiming and reconnecting to traditional practices that existed for the better part of 30,000 years would honor the many contributions generations before made to the success of Gwich'in and Koyukon people. Paul Williams Sr. states

Teach them about respect, have a meeting with Fish and Wildlife, tell them, this is what we are doing, although it belongs to the United States, we are still living here and we have certain rights that we have exercised all through the thousands of years since we've been living here and I don't see why we can't do that anymore.

The right of tribes to self-determine is not based on a racial but a political relationship tribes have with the U.S., born politically from sovereign-to-sovereign negotiations, but more importantly a right that was not given but inherent. This is the basic tenant of Federal Indian Law within the United States, which pre-exists the contemporary interpretation of tribal sovereignty. In sum, reclaiming sovereignty is not asking for permission to act, or the support to make a decision, it is Alaskan Native tribal governments exercising and practicing their inherent right to make a decision.



CONCLUSION

It is evident from the research conducted as part of “Bridging Yesterday with Tomorrow” that traditional stewardship principles have and continue to be alive and well in Beaver, Alaska as well as other areas in the Yukon Flats. These principles are not applied within state and federal systems that are over-controlling and lack flexibility. This creates a dichotomy that makes forward movement and progress difficult, which in turn puts these traditional stewardship principles in jeopardy of being lost, should the current management system continue. State and federal government(s) continue to make the majority of the decisions and unfortunately only consult tribal governments and tribal consortiums on an ad hoc basis.

This research also concludes that it is vital to consult tribal governments and entities on decisions that impact them, requiring them to have a seat at all decision-making tables so that their knowledge is respected (i.e. implemented), further ensuring that sound management practices, based on thousands of years of experiences, are put in place and helping to maintain an ecosystem balance. Furthermore, supporting tribal governments and entities work to reclaim and integrate traditional stewardship principles and practices will guarantee that there are ample opportunities for younger Alaska Native people to obtain this knowledge, which is important to their physical and

mental health and will also benefit all Alaskans, as a healthy ecosystem is good for everybody. This will be increasingly important as the world continues to experience changing social, political, legal, and climate shifts and challenges. Tribal people are often at the forefront of adaptation and responding to change as a whole, as they have been adapting for thousands of years. Their ability to adapt is in reflection of their deep connection to and knowledge of their environment, implementing creative solutions and remaining flexible. However, time is of the essence, as the elders are the ones who possess this critical knowledge and they need time with younger generations to pass down their knowledge. Unfortunately, this cannot happen without the ability to fully practice their traditional stewardship principles without fear of overregulation and criminalization. This means that the State of Alaska and the U.S. Federal Government will have to loosen the reigns and may have to even hand them over to tribes to achieve a sustainable ecosystem on all fronts.





The current state and federal natural resources management systems and controls are new, and already outdated as they lack flexibility. More broadly, the empirical evidence of Gwich'in and Koyukon traditional stewardship principles is not well known, however a number of studies have been conducted. The disconnect between the pursuit of Gwich'in and Koyukon knowledge and the implementation of Gwich'in and Koyukon knowledge breakdown is not in the lack of commissioned research studies, but in the lack of commitment to implement the findings. Interestingly, in parallel to the findings in this research, studies in the past have come to strikingly similar solutions. Past findings indicate that tribal people, tribal governments and tribal consortia's can effectively manage ecosystems using traditional principles as a practical foundation, yet these results have not been implemented. There has also been an issue with dissemination, yet dissemination cannot exist without implementation.

In conclusion, Gwich'in and Koyukon people have much to offer, in terms of land and ecosystem stewardship practices, should they be consulted, their knowledge valued and implemented. They have demonstrated throughout history of living in the Yukon Flats their ability to care for and remain part of the natural ecosystem and have an inextricable, intimate relationship there within. The interviews conducted as part of this study speak to these relationships and the unique balance that exists between humans and the ecosystem. Yet this balance is in peril due to overconsumption, changing climates and inadequate management systems that fail to involve the traditional users of these ecosystems. The key to a brighter, more balanced future is with the elders and traditional land users, their knowledge systems and their ability to pass on their traditional stewardship principles. There is no other way and no other time. These elders and land users are primed and ready, yet they cannot do this within such confining management systems as the ones that exist today. They need to be free to pass down their knowledge and practice their way of life in the way they know how, according to their traditional principles, like their elders, land users and ancestors before them.

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Traditional Chief, Beaver Elder/Traditional Knowledge Bearer

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Seasonal Calendar Artwork

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Photography, Yukon Flats, 2002



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