

APPENDIX “C”



**Tr'ondëk Hwëch'in
Resource Report**

**Submitted to the
Dawson Regional Land Use Planning Commission**

May 2012

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Concerning this submission:

The following pages of Tr'ondëk Hwëch'in resource information is a combined effort of various departments within the Tr'ondëk Hwëch'in Government that have responsibility for land use and management on Tr'ondëk Hwëch'in (TH) Settlement Lands and within TH Traditional Territory. Together it initiates the identification of resource interests for TH within the Dawson Regional Land Use Planning area.

As this submission will show, the resource interests of TH are varied and involve a broad number of traditional and modern economic resources and sectors. As indicated in the Issues and Interests submission of TH previously sent to the DRLUP Commission, TH interests can be classified in the following broad categories:

- Heritage Resources and Cultural Protection
- Fish and Wildlife Harvesting and Habitat
- Sustainable Development

The organization of this resource report maintains these above “interests/issues” topics but organizes them and presents them in a different manner.

Part One of this submission provides background historical overview information, highlighting the existence and components of what we call the “traditional economy”, from an ancient perspective up to the recent transition period.

Part Two includes Fish and Wildlife resource information, a summary of Tr'ondëk Hwëch'in Settlement Land areas, and a Traditional Knowledge and Heritage Values report.

Part Three of report will elaborate on the Traditional Economy concept and will provide more detail on today's traditional economy resource values and how TH envisions a “modernized traditional economy model” as a helpful tool for planning Sustainable Development and land use in the Dawson Region.

Please note that associated maps and data products will be submitted to the Dawson Regional Planning Commission separately.

Introduction

In furthering the Objectives of Land Use Planning outlined in Chapter 11 of the Tr'ondëk Hwëch'in Final Agreement, the following submission initiates the First Nation's identification of resources within the area, including heritage resources, fish and wildlife species and habitat, and the traditional economic resources and practices that sustained the People of this region for thousands of years.

TH's interests converge around a key component: the reality and future potential of what we will call the *traditional economy*. TH strongly believes that a successful Dawson Regional Land Use Plan (DRLUP) will maintain and enhance this traditional economy, and that the success of the Commission's plan will in part be measured by the extent to which it can utilize and deliver on this concept.

By envisioning the landscape required for a successful traditional economy, we also plan and allow for a successful and sustainable modern economy.

Today's subsistence harvest activities are important and relevant to the Commission's work, but they represent only a fraction of a sophisticated traditional economy that once operated across the region's landscape. The traditional economy evolved over thousands of years, adapting to changes in the environment, reflecting social developments and building off the knowledge of the original peoples. Within this traditional system, people occupied their lands, used natural resources, conducted environmental stewardship activities, structured a productive society, and developed their distinctive culture, identity and perspective. Traditional resource production sustained the entire population and often provided surplus for trade.

For thousands of years, the traditional economy functioned in equilibrium with nature, and survived many generations by constantly evolving and adapting to a variety of changes. During the historic period, the system changed drastically in response to an unusually high number of external influences, all introduced in a relatively short timeframe.

Today, the future of regional economic development remains uncertain. Contemporary social issues related to health, addiction and social cohesion all have the potential to undermine healthy development. As governments continue to seek ways to manage this vast landscape responsibly, they must also prepare for unprecedented environmental challenges like climate change. We understand that outside investors, businesses, entrepreneurs and immigrants will want certainty from a plan that deals responsibly with environmental, cultural and social issues. As we work together to plan for the future, we must also remember what worked in the past: a traditional economic system that sustained both a people and an abundance of natural resources.

In our view, the traditional economy is a proven development planning model that fulfills key parts of the Commission's Vision. It offers lessons on using natural resources and landscape features sustainably, adapting to changing environmental conditions, and

incorporating new technologies and industries while still upholding the core values of environmental stewardship, cultural preservation and social development.

TH expects that the Dawson Regional Land Use Plan will provide the certainty that the First Nation government and its citizens require to make decisions about rebuilding traditional economies within a modern context. An effective plan will provide the region with its own distinctive land use and economic development platform, one that incorporates traditional knowledge, landscape intelligence, and openness to new ideas. In doing so, we will not only fulfill the Chapter 11 Objectives in the Final Agreement, but will be better able to address our contemporary social, cultural, economic and environmental challenges.

1. Remembering a Traditional Economy

1.1 A Perspective on Long-Ago

Much of the distant past remains unknown but we can propose some ideas about the past. A few early explorers recorded the outcomes of this ancient history as they understood them, and anthropological researchers later detailed them. What these early explorers, traders, missionaries, government agents and miners saw was the result of thousands of years of human occupation and social evolution.

Our Elders are very clear that First Nations people have always been here. Western scientists remain uncertain about the timeframe of human occupation in this part of world, but most estimates range from 10,000 to 12,000 years. They report that the original inhabitants occupied a landscape very different from what we see today. At the end of the last Ice Age, humans arrived and began establishing a pattern of land and resource use. As the climate warmed, grasslands gave way to boreal forests, and some animals went extinct while others flourished.

During this period of ecological change, patterns of human land and resource use evolved in a continuous cycle of learning, adaption and innovation. Early peoples suffered through periods of starvation, endured harsh winters, dealt with catastrophic environmental events, and coped with social conflict, including warfare.

Their societies survived these challenges by developing an approach to land and resource use that incorporated stewardship principles. This involved using resources in a manner that would build natural resource capital and therefore not deplete food supplies. Effective stewardship requires intimate knowledge of the environment, the development of customary harvest practices, and structures of social organization, knowledge transfer and decision-making that support sustainable resource use. Stories in the oral tradition allowed groups to pass down knowledge about long cycles in nature, expose hidden threats in the environment, and entrench customary practices whose embedded logic would not otherwise survive beyond the lifetime of a single person.

The ancient battle for survival dealt not only with the forces of nature but also with human nature. To function properly, societies needed rules to maintain social cohesion, keep the

peace and provide for efficient and sustainable economic production. Over time, early people in the region developed a unique social group identity, becoming a People, a nation with a distinctive language, culture, traditions, customs, values and beliefs – all tied to what we now call a traditional territory.

As people used the landscape, harvested natural resources and practiced stewardship, they changed the environment in the process. In this manner, traditional economies became integrated with the land. The larger economic system was premised on a co-dependent relationship between individuals and groups and their environment. . Through this relationship, even a relatively small group of people could have a disproportionate influence on the ecology. This process enabled the early nations to build up natural resource capital within their territorial boundaries. The abundance of natural resources that the first European travelers and settlers observed was the outcome of a system of economic production and environmental stewardship that the original peoples built and maintained over centuries.

The traditional economy was a system of harvesting, processing, production and technological adaptation. Efficient transportation was crucial to making the economy function. A network of trails and marine corridors enabled people to move from place to place, to focus harvest activities on seasonally available plants and animals, and to transport resources, goods and equipment. These trail networks – a form of intelligent design linking important natural resources – tell the story of how people used the landscape in the most efficient way possible.

Rauna Kuokkanen's understanding of what she calls "indigenous economies" is consistent with our view of the traditional economy:

“The key principles of indigenous economies – sustainability and reciprocity – reflect land-based worldviews founded on active recognition of kinship relations that extend beyond the human domain. Sustainability is premised on an ethos of reciprocity in which people reciprocate not only with one another but also with the land and the spirit world. Indigenous economies are thus contingent upon a stable and continuous relationship between the human and natural worlds.¹

“These systems include a variety of land-based small-scale economic activities and practices as well as sustainable resource management. Indigenous economies are often characterized by a subsistence mode of production. At the center of the economic activity is not the exchange for profit or competition but the sustenance of individuals, families, and the community. Surplus is shared at numerous festivals and ceremonies that maintain the social cohesion of the community but also bring prestige to those who give and share their wealth. The subsistence-oriented economy—including

¹ Rauna Kuokkanen, “Indigenous Economies, Theories of Subsistence, and Women: Exploring the Social Economy Model for Indigenous Governance,” *American Indian Quarterly*, Vol. 35, No. 2, 219 (Spring 2011).

various contemporary versions of mixed economies—also ensures the continuation of the traditional social organization.²

Natural resources are not spread evenly across the landscape. At some places during certain times, resources might be very abundant, providing more than enough for a nation's requirements and allowing the harvest of tradeable surpluses. Trading became a more efficient way to run the economy and enabled other dimensions of the economy to develop.

Before the arrival of Euro-Canadians and Anglo-Americans, the Han traded with other Native people who lived in different ecological zones and had access to different kinds of resources. One end of the aboriginal exchange network originated with Chilkat Tlingit who bartered maritime products such as rendered sea mammal fat, fish oils, and dentalium shells with Tutchone Athabaskans who provided the Tlingit who provided the Tlingit with inland products such as furs, tanned caribou skins, and copper. The Tutchone, in turn, bartered coastal products with their Han neighbours for furs and red ocher. In addition, the Han traded with other Athabaskan groups living to their north, such as the Gwitch'in, who had access to maritime products from Inuit living on the Arctic coastal plain and near the mouth of the MacKenzie River.³

Trade became an important method of strengthening the early nation, just as international trade allows a modern nation to benefit from comparative advantages and build constructive relations with other nations and societies. Trade was a tool of political dialogue, a way of getting favours or avoiding conflicts. Tanner (1965) shows the social dynamics of trade in the following passage about exchange between Tlingit and Athapaskan peoples:

The Tlingit view of society was bounded by considerations of status and kinship. These two factors were related, and they dominated all relations with other Tlingit. The Athapaskans, as foreigners without any wealth, were treated with derision. However, in order to exploit them it was necessary for the Tlingit to have social relations with them. One of the first aims of traders is to eliminate fighting between native groups. A binding relationship with a trading group through its trading chief is formed not merely to make trade possible, but to actually expand trade...⁴

By expanding trading horizons, early nations got access to highly prized resources, important goods and specialized equipment. Trade also provided for the movement of information and new technologies across vast geographical distances that no one person or group could bridge.

² Rauna Kuokkanen, "Indigenous Economies, Theories of Subsistence, and Women: Exploring the Social Economy Model for Indigenous Governance," *American Indian Quarterly*, Vol. 35, No. 2, 219 (Spring 2011).

³ Mishler and Simeone, "Han Hwech'in People of the River," University of Alaska Press, p.2, 2004

⁴ Tanner, "The Structure of Fur Trade Relations", Master's Thesis, University of British Columbia. 1965

1.2 Components of the Traditional Economy

1.2.1 The Cultural Landscape

The Aboriginal approach to using the entire landscape ties together all other aspects of their economies, societies, cultures and nations. People lived across the vast northern landscape, which includes a variety of terrain types and geological features. While their precise historical population is unknown, their numbers were relatively small given the large size of their traditional territories. As Ruth Gotthard (1987) points out, “[a]cross most of the Yukon, resources were thinly scattered. Migrating groups would often utilize resources over an area up to one thousand square miles.”⁵ These peoples’ capacity to occupy, use, manage and control such vast territory remains a remarkable achievement.

Aboriginal cultural landscapes, societies and economies shared the following important features:

- Intact tracts of natural landscape, which allowed traditional societies to continually practice their resource harvesting
- Transportation, shelter and harvest site infrastructure, which allowed people to interact with land and resources;
- Management practices (such as prescribed burning techniques and clearing debris from critical fish migration routes), which enhanced and protected ecological systems;
- Seasonally shifting land and resource use patterns, which allowed for the conservation and rebuilding of natural resource capital in harvesting areas;
- A cultural landscape characterized by Aboriginal language place-names, where people reference distance-time landmarks and places.
- Traditional territorial boundaries, which evolved from the cultural and familial composition of the group at any given time, continued to evolve over time as that composition changed; traditional boundaries also reflected the geographic extent of economic infrastructure, stewardship responsibilities, and resource harvesting.
- Traditional economies reflected environmental conditions within the traditional territory, including availability of harvestable resources, migration-harvest patterns (seasonal rounds), and ecological productivity (production and wealth-generation capacity).

⁵ Ruth Gotthardt, Selkirk Indian Band: Culture and Land Use Study, 1987.

1.2.2 Traditional economy development infrastructure

Athapaskan nations had large and geographically diverse territories which they used for their traditional economic activities. Society was structured around small kinship groups, which were also the principal unit of economic production. Each group followed a similar seasonal migration cycle to different places across the landscape. Continually moving from location to location and occupying different types of areas required an ingenious system of using the landscape.

They utilized the traditional trail networks that had been established for centuries combined with marine routes provided by the rivers, lakes and navigable tributaries. While there were often trails next to these marine routes, being able to travel on the water greatly increased their ability to carry heavy loads, move quickly and effortlessly with the stream flow. The traditional trail network linked together much of the traditional territory and provided access to key harvest locations.

1.2.3 Trail Networks

These trails were established from the beginning of human occupation as people gradually selected the best routes to join together all the important natural resource harvest sites. Worn smooth and kept open mainly through ongoing seasonal use, traditional trails offered an inherited infrastructure asset that required little investment of physical effort except basic clearing of deadfall.

The traditional trail network and marine routes did more than enable their system of traditional economy harvesting and production. The transportation system came to define their relation to the landscape and each other. Their perspective on the world was oriented to how they viewed it from these trail and marine corridors. When assessing the landscape the trails and marine routes were their main references. Interestingly, the language itself reflects these connections. Everyone traveled in the same way. This brought people together and also enabled the entire nation to assemble at gatherings.

Characteristics of heritage trail networks and marine routes;

- Trails and marine routes create a traditional territory wide transportation network.
- Trails were networked together following major drainage systems, looping around mountains and lakes, all joining together in an interconnected land based transportation system.
- Trails link various natural resource values (harvesting opportunities), traditional camping locations, important landscape features (lookouts) and other significant locations (gathering places).

- Principles of intelligent design are embedded within trail routes as they are selected to maximize efficiency, reduce distances between locations, avoiding natural hazards (i.e. landslides) and utilize terrain advantages such as: gradual slopes, stable ground, good drainage.
- Trails have minimal associated environmental liabilities in part due to light and moderate use plus a matter of select route advantages (i.e. avoiding hazards, gradual slope, ground stability).
- Trails require modest maintenance efforts.
- People used these established trails and marine routes as the primary means of movement from one place to the next.
- Using trails was a safer way to travel and far more efficient than moving in a random manner across the landscape,
- Trails would often be used more so or exclusively during certain times of the year (i.e. fall migrations into mountains).
- Certain trails provided passage to adjacent traditional territories serving as trade corridors.
- Trails developed over long periods of time in theory from the beginning of human occupation.
- Aboriginal people viewed their traditional territories and landscapes within the context of trail networks and marine routes. This is confirmed by place names and stories.
- Animals frequently moved along trails.
- Types of watercraft included birch bark canoes, dugout canoes, moose skin boats and rafts.
- The degree in which water transportation was utilized varied among different Aboriginal groups.

1.2.4 Campsites, seasonal settlements, and harvesting infrastructure

Aboriginal people moved and harvested throughout the traditional territory, so the establishment of campsites and settlements for seasonal occupation was an important feature

of their land use patterns. People established campsites or seasonal settlements for specific purposes: for resource harvesting activities; places situated along migration routes; and also gathering places.

Traditional camp sites or seasonal settlements are associated with:

- Locations chosen to utilize natural landscape features (i.e. a junction between watersheds, sheltered locations in the terrain, access to water or firewood), near prime harvest locations or lookouts and to take advantage of some aspect of the environment (i.e. breeze, shade or sunshine),
- Locations chosen for seasonal climate advantages for example places with warmer temperatures in winter or sheltered from prevailing winds, and
- Rarely situated in vulnerable places (landslides, flood plain),

While their physical infrastructure developments were limited, there were infrastructure assets other than shelters. Caribou fences and deadfall traps were developments associated with specific resource harvesting activities. Caribou fences were constructed to herd the animals into situations where they could more easily be killed. These corral strategies were used along with snares that strangled the animal. Caribou fences were constructed from poles and could run for distances of many kilometers. Animal deadfall traps used a baited triggering mechanism that crushed the animal under a log weighted down with several large logs.

1.2.5 Traditional resource use

Harvesting natural resources was the foundation of traditional economies.. The group had to be completely self-reliant. Although goods and resources were traded they had to essentially produce everything needed for their survival. This required large quantities and varieties of natural resources. While essential resources and food supplies could be cached away or stockpiled, they usually required a continual input of natural resources during periods of scarcity.

Natural resources are, however, not predictable. Species numbers can fluctuate between scarcity and abundance, and sometimes go extinct altogether or move out of the territory. Aboriginal people knew about the realities of change in their environment and they understood the unpredictability of natural resources in the ecosystem.

Aboriginal people understood they had a special place in this living world. People could harvest and utilize all types of ecological resources that these natural systems produced but it came with responsibilities. They utilized different strategies that defined their relationship with natural resources. Distributing harvesting across the landscape spread out their resource use activities and accommodated the distributed nature of ecological resources. They spread out their harvesting throughout the year taking advantage of migrating animals and fish, gathering plants and fruits in season and trapping in winter when fur was thick. Animal

populations run in cycles. There were periods of scarcity when animal populations are low, so they limited their harvesting on those species. There were also periods of abundance when animals were plentiful, so they focused harvesting then.

Preserving natural capital in the ecology was essential for the long term. Aboriginal people would often select animals and fish for harvesting in a bid to protect species health by encouraging the best of the species to reproduce. They respected all living things from animals, to fish to plants. There were harvesting and resource handling customs that demonstrated this respect, which also helped protect the species in some manner.

There are natural succession events in the ecology that effect animals, fish and plants, forest fires being such an event. Aboriginal people would avoid using these areas for a period of time allowing the ecology to recover without harvesting. A healthy and productive ecosystem was capable of withstanding considerable harvesting and may have required people to be using natural resources the way they did. The boreal forest ecology evolved during a period of human occupation. These traditional economy resource harvesting activities have always been part of the forest ecosystem.

Factors in landscape natural resources harvesting:

- Natural resource values are spread unevenly across the landscape
- There can be places that have periods of relative abundance
- Most resources are available or best suited for harvest during specific times of the year
- Certain places are better for harvesting than others as a matter of availability, abundance or ease of harvest
- Depending on the availability of abundant resources and method of harvest, several family groups may coordinate their efforts forming large collectives for major harvest initiatives (i.e. caribou herd hunting),
- The harvesting group was organized in small family based groups as the main economic production unit
- Each group would follow a similar pattern of land occupation and resource use throughout the seasons but often utilize different areas across the traditional territory
- These patterns of land use followed a predictable course from fishing on rivers during summer, moving up to the mountains to harvest berries and hunting in the late summer and fall, then moving into forested areas for winter.
- Each family group would utilize a different section of the traditional territory for these seasonal cycles of activity.

- A particular social group would often maintain the same migration route and harvesting routine, year after year, generation after generation.
- Through these social organization units resource harvesting pressures were distributed over the larger traditional territory area.

Customary harvest techniques and selective harvesting practices:

- Aboriginal people required an understanding of where resources could be found, when was the optimum time to harvest, what resources could be taken and most efficient harvesting method.
- Certain harvesting and resource handling methods followed customary practices known as Dä'o'le' that has been used for many generations; some of these practices may not have had obvious or explicit rationale but were nevertheless followed.
- Aboriginal people understood that each resource had certain properties and that all resources interacted within a complex, always changing environment.
- Aboriginal philosophies placed people and all living creatures in a delicately balanced world. All living things including people had a role in maintaining that balance.
- Selective harvesting was the principle management mechanism used to maintain a balance among different species and their habitat. For example, if the population of one species was affecting predatory or habitat conditions of another species more focus may be placed on harvesting the abundant species.
- Selective resource harvesting also improved the health of fish and wildlife populations. Through selective harvesting, enhanced genetic health could be encouraged by not harvesting species with desirable characteristics such as health, reproductive capacity or size.
- Natural resource harvesting became part of the ecological system, in this sense species health and abundance required these ongoing and consistent harvest routines.

1.2.6 Environmental stewardship

Aboriginal people practiced environmental stewardship mainly through their traditional resource harvesting activities but also through direct initiatives. In the boreal forest ecology occasional fire events are necessary to induce succession. An overly mature forest gradually becomes less productive, with fewer types of biological species, and is more susceptible to insect infestations. After a fire event, plants, trees, other organisms and animals begin the

pattern of re-establishing. Within a few years a new ecology is established, highly diverse and more productive.

However, forest fires can be highly disruptive on the forest ecosystem if they become very large. Similarly, an area may burn a second time because there is still considerable combustible material after the initial fire event. These secondary fires are not considered an ecological advantage because they burn hotter, remove wood matter and move slower, damaging soils and destroying re-growth. In an ideal sense fire events should occur on regular intervals and happen in a multiyear patchwork across the boreal forest landscape. This provides for a healthy, productive and diverse forest landscape that is not as susceptible to extremely large fire events.

The degree to which Aboriginal people practiced prescribed burning is uncertain. Fire was used near their campsites and seasonal settlements to reduce fire risks and keep back insects. Grassy areas were burned occasionally to encourage animals to use these places and generally to improve habitat.

Another form of land stewardship was fish habitat stream maintenance. Migration routes which fish use during spawning are vital to those fish species. Logjams and beaver dams in particular can impact fish habitat. Based on fish habitat priorities, streams would be cleared to maintain habitat conditions. This was a labour intensive land management activity. Ongoing beaver harvest activities was the routine method to maintaining fish migration routes.

1.2.7 Traditional knowledge and the traditional economy

Aboriginal people lived a migratory lifestyle in their small family groups but with a common cultural identity. Their traditional economies were based on harvesting natural resources across the landscape following predictable cycles of land use. The group had a large traditional territory with known, but shifting, boundaries. People traveled extensively within their traditional territory and also went beyond for trading purposes. Their social, economic and political context allowed them to pursue on-going development of their culture.

Aboriginal societies and nations made many achievements from their trail development networks, systems of resource harvesting, economic production, trading partnerships and political relations. A central factor among all these achievements was their traditional environmental knowledge. Possessing an in-depth understanding of the complexities in the natural world enabled these other achievements, and helped ensure their very survival over many generations. Environmental knowledge was held by all individuals. This principle of a shared knowledge base among all people was certainly an important factor in their ability to cooperate together and maintain their group identities, as well as support the development of natural capital in their traditional territories.

The Aboriginal approach to the world was a philosophy that placed the individual within a structured reality with certain parameters. There was: the traditional territory, the family and social group organization, the culture and shared values. The traditional economy was a

constant factor that blended within all these context parameters. Traditional environmental knowledge was also woven between all these other aspects of their life.

Traditional knowledge involved building a relationship to the land through:

- The daily ritual of observation, continually watching conditions around them such as the weather, looking out for danger or something that could be harvested but also examining more detailed aspects of the ecology, People migrated from place to place on a seasonal cycle, year after year, this lifestyle expanded their horizon of experience and gave them an opportunity to witness changes at points across the landscape continually over a lifetime; and
- Harvesting natural resources was a never ending process of finding resources, knowing where to harvest, when and how, this was often a group effort where knowledge was shared.

Traditional knowledge was enabled by the society where:

- The family group was a learning system where people continually shared information and the older people taught younger people throughout life
- People were healthy and active with a relatively long lifespan,;enough time to learn much and teach to others
- The traditional diet was very nutritious so babies had well developed senses and people generally ate sufficient amounts of high protein foods
- The traditional economy involved many activities that required a collective effort among the group, working together on gender specific tasks provided the time, setting and context to teach and practice these knowledge sets and skills
- People were very spiritual, they watched for and interpreted signs in the environment and considered dreams as important aspects of the consciousness
- Shaman practitioners were highly regarded within society, a profession that provided medicine and healing for people often involving biological based products with complex mixture, preparation and treatment requirements, they also offered spiritual guidance.

Traditional knowledge was sustained and enhanced by culture and heritage because:

- A common language provided the thought process and communication device to describe, interpret and discuss features in nature with various or multiple words for weather conditions, life cycles, species type and landscape features

- Generations of knowledge about how the natural world and society function led to deeply held principles about how people should relate to their environment and societies, these principles were reflected in a legacy of customs and laws regarding important aspects of natural resource use and relations with other people
- Generations of knowledge and experiences were retained in a legacy of stories that held essential information determined to be important to future generations and that could be told to others and passed down through the centuries
- A common belief structure and spiritual reference and set of values, behaviours, attitudes and concepts that were interpreted, followed or acted out by individuals, society and the group.

Governance processes provided mechanisms to share, interpret, utilize and transfer traditional knowledge through:

- Mandating a messenger or messengers to travel throughout the traditional territory to the different family groups and deliver information considered a priority for the group
- Annual assembly gatherings of all the groups where information could be shared about the land, natural resource conditions, environmental events and ecological changes
- Governance processes for dialogue and decision making on natural resource harvesting, land use, group allocation adjustments of lands and resources, stewardship roles or initiatives
- Trading networks that also functioned as means to provide environmental information about distant locations, situations, events and changes
- Inter-group relationships involving traders or shamans that transferred environmental knowledge about medicinal plant technologies.

1.2.8 Traditional trading networks

Aboriginal societies and nations were largely self-reliant through the production systems of their traditional economies. However trading among themselves and with neighbouring or distant tribes was an important aspect of their identity. Trading became the device of communication, dialogue, relationship development, political alliance, technology transfer and economic innovation. Trading allowed for an increased production of resources and goods because any surplus could be traded. This created economic efficiencies and helped

generate wealth. Aboriginal people were also attracted to foreign goods, foods and fashion. Aboriginal people and societies considered themselves to be traders just as much as harvesters and producers of goods.

Traditional trading systems and trade networks were important because:

- Exchanging resources from one area to the next provided Aboriginal people with goods not readily available,
- People could expend more effort harvesting abundant resources when available then trade those resources for other goods later,
- Trading systems transferred resources, products and technologies from area to area and group to group.
- Trade also helped ensure peace among the groups by providing mutual benefits and a political dialogue mechanism to resolve disputes, and
- Trade enriched Aboriginal culture through traditional customs involving ceremonial rituals, dance and trading protocol.

1.3 Historical Transition Impacting the Traditional Economy

A series of events over many years impacted the traditional economy and the aboriginal Nations of the Yukon area. Epidemics and disease, the fur trade, the gold rush, government regulations, and residential schools all contributed to the decline of the traditional economy.

The Epidemics

Epidemics from European diseases arrived even before the first known Europeans. These were disastrous events that would have dramatically impacted populations and disrupted all normal activities. Fewer people, disrupted social organizations, reduced or severed trading, are all factors that would have resulted from these events. It could be assumed use of lands and resources would have also been impacted. Harvesting resources declined across the landscape. If the principle that selective harvesting was a form of environmental stewardship is followed, then the epidemics also had an environmental impact.

- Epidemics severely impact Aboriginal populations, entire family groups died off or were dramatically reduced forcing the survivors to combine with other groups
- Collapse of Aboriginal populations and decline of the traditional economy reduced the scope and impact of land and resource management roles

Scope of known epidemics since contact:

1835 Severe epidemic killed 25-50% of Tlingit on coast. Likely transmitted to interior during trading expeditions

1848 Epidemic among Hän after visits to Fort Selkirk and Fort Yukon

1850's Epidemic of small pox among Tlingit spread up the Alsek River to various parts of the interior, decimating entire villages

1850 Severe famine. Diarrhea among children pulmonary infections spreading

1851 Scarlet fever epidemic "one third of population dead"

1865 Scarlet fever at Fort Yukon, Peel River Fort and Lapierre House. "One third of population dead" May have affected neighboring groups

1868 Epidemic at Fort Yukon

Dysentery among the Hän-a number of children died

1887 Many dead among the Hän and Stewart River Indians

1898 Numerous deaths from illness among Indians

1901 Police report great motility among the Indians due to pulmonary illness

1905 Diphtheria epidemic at Fort Selkirk- greatest mortality among children.

1907 tuberculosis and diphtheria are widespread

1925 reports of an influenza epidemic from all parts of the territory

1953 Severe outbreak of polio throughout the Yukon

(Gotthardt, 1987)

Early Fur Trade

By the mid 1700's Russian trading goods were being brought into the Yukon by the Chilkat traders. Aboriginal trading monopolies were eventually broken by large trading companies. The fur trade had 2 components; first it created a commercial market for furs, and second, it brought in many new products. These new product technologies included guns and steel traps that changed the nature of resource use. This made harvesting easier and more productive. It allowed individuals to harvest animals in a manner that once required a coordinated effort among several people. The foreign commercial fur markets and later local demand for wild meat. Harvesting animals increased for a period then began a long decline to the relatively more sparse animal populations we see today.

Gold Rush

- Early mining development activities and hunting pressures greatly reduced animal populations
- Widespread overharvesting of moose and caribou by non-Aboriginal society combined with wasteful resource use practices depleted natural resources

Frontier communities

- Transition off the land in many frontier areas

- Community lifestyle (labour market activities, school year) gradually limiting scope and duration of land use activities
- Gradually, traditional and customary harvest practices declined

Government regulations

- Wildlife harvesting management rules had the effect of restricting traditional harvest practices
- Government regulations restricted certain land management practices; for example, prescribed burning considered arson
- In the case of the Tr'ondëk Hwëch'in, the Canada-United States border restricted harvesting activities to those nationals on either side of the border
- Outfitting industry focused harvesting on the strongest and largest animals, degrading genetic health of species
- Collapse of 40 Mile Caribou Herd due to major overharvesting. Once numbering in the hundreds of thousands the caribou herd was decimated by severe overharvesting on both sides of the border. Then numbering only tens of thousands, the herd limited their migration range and stopped migrating into the Yukon River region

Trap line regulations

- Implemented by RCMP with intention to protect Aboriginal harvest areas and establish management authority
- Many Aboriginal trap line holders eventually lost their concession for various reasons but sometimes just for not paying the annual \$5 fee
- Concession system that was created established, in large part, an individual concession right, replacing a traditional collective system of ownership of natural resources

Highway networks

- Highway routes and roads built over trails as these often provided the best routing option

- Highway corridors and side roads provided easy access but led to focused-area harvest activities
- River travel drops off including the end of steamboat era and loss of commercial fuel wood market and associated employment opportunities
- Increasing demand for imported foods and products that replaces regional food production

Residential schools

- Traumatic experience for children and families
- Loss of culture, language, knowledge and skills
- Family unit broken, children losing connections to parents-grandparents-relations and limiting family building experiences during early years
- Poor education standards resulting in youth leaving school with limited skills and knowledge
- Poor health conditions lead to chronic health problems and deaths
- Precondition for social problems, many people developed substance addictions

Collapse of trapping industry

- Last major opportunity for traditional lifestyle with reliable income collapses in the late 1980s, with decline of European market
- Many trapper cabins and equipment fall into disrepair
- Many trails gradually used less and less, these trails eventually become overgrown and covered with deadfall

2. Tr'ondëk Hwëch'in Resource Information

The following section includes fish and wildlife habitat and conservation value information, a summary of TH Settlement Land parcel-specific information, and a Traditional Knowledge and Heritage Resource Values Report.

2.1 Tr'ondëk Hwëch'in Fish and Wildlife Habitat and Conservation Values

2.1.1 Summary

This report provides a summary of the conservation values in terms of fish and wildlife habitat information accumulated and collected from individual Tr'ondëk Hwëch'in (TH) Citizens, information received throughout the years from Elders Meetings and Citizens meetings on other matters, although valuable in the essence of contributing towards land use planning areas within Tr'ondëk Hwëch'in Traditional Territory, thus in this case, the Dawson Land Use Planning Region.

2.1.2 Introduction

Harvesting fish, wildlife and plants was so important to the Tr'ondëk Hwëch'in people and all Yukon First Nations that it proved to be one of the challenging chapters to negotiate during the land claims process. The following objectives of Chapter 16 of the Tr'ondëk Hwëch'in Final Agreement provided the basis for the negotiation of the rest of Chapter 16, including its *specific provisions*:

- *To ensure conservation in the management of all Fish and Wildlife resources and their habitats;*
- *To preserve and enhance the renewable resources economy;*
- *To preserve and enhance the culture, identity and values of Yukon Indian People;*
- *To ensure the equal participation of Yukon Indian People with other Yukon residents in Fish and Wildlife management processes and decisions;*
- *To guarantee the rights of Yukon Indian People to harvest and the rights of Yukon First Nations to manage renewable resources on Settlement Land;*
- *To honour the Harvesting and Fish and Wildlife management customs of Yukon Indian People and to provide for the Yukon Indian People's ongoing needs for Fish and Wildlife;*
- *To enhance and promote the full participation of Yukon Indian People in renewable resources management.*

These objectives represent significant commitments towards the preservation and enhancement of Aboriginal Rights related to the land-based harvesting so essential to the practice of our culture, values and lifestyle. It is imperative that a DRLUP protect and enhance the harvesting of ungulates, furbearers, freshwater fish and salmon, and that any

development activities in the region are done sustainably without eroding the traditional lifestyles and economies that depend on these economic resources.

“The land out there is our grocery store, our medicine store and clothing store, we need to look after it and protect it for our grandchildren.” – Tr'ondëk Hwëch'in Elder

In comparison to other parts in Canada, our People live in a fairly remote location. The Dawson planning region remains relatively un-developed, and our traditional territory provides habitat and migration routes for a variety of wildlife species, including moose, caribou, sheep, furbearers, freshwater fish and salmon.

In preparation for land use planning, the Tr'ondëk Hwëch'in Fish and Wildlife Branch collected information on habitat and harvesting use areas from Tr'ondëk Hwëch'in hunters, trappers, fishers and other citizens. This report provides a summary of the information collected, and includes habitat identification data on caribou, moose, sheep and furbearers.

2.1.3 Species of Interest

Moose

Ungulates, particularly moose, are a principal component of the traditional diet and essential to the good health of Tr'ondëk Hwëch'in People. For many generations, moose provided food, nutrients, traditional supplies/tools and clothing for Tr'ondëk Hwëch'in People. Continuing this important practice is necessary to preserve the traditional lifestyles and identities of individual TH citizens and the community as a whole

The TH Final Agreement Chapter 16, Schedule C, outlines the process for sharing a Total Allowable Harvest for moose. In the late 1970s, the TH People were concerned about declining moose populations in Southern Yukon and made management recommendations against the harvesting of cow moose.

Tr'ondëk Hwëch'in Citizens have reported moose sightings in a number of moose habitat locations within the DRLUP region, both in traveled areas and remote locations:

- Along the Yukon River from the Alaska border to Coffee Creek
- Klondike River, the Klondike Plateau and the Klondike Mining District
- Up the Dempster Highway to Bradley Creek
- From Empire Creek to Clinton Creek
- Along the Minor River northwest of Dawson
- In the northeastern range of the Blackstone River
- In the Taiga range and the eastern range of the Ogilvie mountains
- Throughout Tombstone Park

Citizens traveled to the more accessible locations in passenger vehicles, and used snow machines and river boats to reach more remote settings. The majority of the trips take place during the harvest season (summer/fall) and in winter, after freeze up. Geographical locations included wetlands, alpine areas adjacent to wetlands, and willow sections. These

habitats reflect the abundance of nutritious food for moose, particularly in the summer/fall season.

Caribou

The Tr'ondëk Hwëch'in People were always fortunate to live in a region teeming with barren-ground and woodland caribou. This nutritious traditional food source was often available during caribou migration, and next to moose caribou was highly relied upon for the Han (TH) People to meet their food needs. Many elders recall the years when thousands of Forty Mile Caribou (FMC) would cross the river below Moosehide, Yukon. As with moose, the harvesting of caribou today continues to provide for the preservation of the Tr'ondëk Hwëch'in culture, tradition, and lifestyle.

The TH Final Agreement, Chapter 16, Schedule B, outlines the creation of a Habitat Management Plan for the Forty Mile caribou in collaboration between Yukon Government and Tr'ondëk Hwëch'in. The Plan was recently developed and is an excellent source of information about the Forty Mile Caribou's active/minimal activity locations within the DRLUP region. Furthermore, the Plan documents those locations rich in lichen, a nutritious plant required for the growth and good health of the Forty Mile Caribou.

The Tr'ondëk Hwëch'in have long noticed the decline of the Forty Mile Caribou herd from its historic size of 500,000. In the early 1990s, the Tr'ondëk Hwëch'in recommended the development of a recovery plan to stem this decline. Following the recommendations and in collaboration with other governments and organizations from the Yukon and Alaska, the *Forty Mile Caribou Herd Management Plan* was completed in 1995, with a focus on the recovery of the Herd. The Herd is still undergoing recovery management and remains far smaller than original population estimates. Insignificant amounts of FMC are harvested by TH People today, as most Citizens continue to voluntarily abstain from harvesting.

Additional caribou herds include the international Porcupine Caribou (PC), the Hart River Caribou (HRC) and the Clear Creek Caribou (CCC). When traveling north of the Dempster Highway during the winter migration, the PC or the HRC can be seen feeding or grazing about the Beringia landscape, commencing north of Tombstone Park. Many TH Citizens have enjoyed the experience seeing the whole valley filled with PC, allowing them to bring home many caribou for the winter food supply. Citizens harvest caribou from Tombstone Park all the way to the Northwest Territories Border.

CCC can be seen in the more southeasterly regions of the DLUP and into the Klondike Plateau and McQuestion areas. For many generations, caribou provided food, nutrients, traditional supplies/tools and clothing for Tr'ondëk Hwëch'in People, continuing these important practices are necessary to preserve a cultural lifestyles and identities of individual TH members and the community as a whole.

As mentioned earlier, a number of Tr'ondëk Hwëch'in Citizens travel to locations throughout the planning region, including remote places rarely visited by others. Many of these trips have taken TH Citizens to the Minor River North West of Dawson, on over to the North East range of the Blackstone River area, down through the Taiga Ranges and the

Easter Range of the Ogilvie Mountains, throughout Tombstone Park, Klondike River, Klondike Plateau and Klondike Mining District, on westerly towards the Alaska/Yukon Border Top of the World Highway and throughout the Yukon River from the Alaska/Yukon Border to the Coffee Creek area. Caribou sightings have been reported on many of these trips, and citizens have identified a number of caribou habitat locations. Most caribou habitats were identified within the ranges of migrating herds. For example: Forty Mile Caribou have been harvested along the Top of the World Highway and around the Sixty Mile River, although in the past FMC were harvested along both sides of the Yukon River up to Moosehide and out towards the Dempster and Southern Yukon (More details can be found in the YG, Forty Mile Caribou Herd Management Plan).

A major portion of the Porcupine Caribou herd has been known to migrate during the winter from the mountain ranges towards the Dempster Highway within the DRLUP area. Citizens travel to the more accessible areas by passenger vehicle, and access more remote settings by snow machine and river boat. Most of the trips take place during the harvest season (summer/fall) and winter, after freeze up. Caribou frequent mountain ranges, lichen-growing areas, and shrubby areas with minimal tree growth. These habitat types reflect the abundance of caribou food. Woodland caribou such as the Clear Creek and Hart River herds are permanent residents within their habitat ranges, unlike the PC and the FMC herds which migrate between winter and calving ranges.

Sheep

Within the DRLUP, sheep can be found far and wide. Sheep were once known as a delicacy because of the challenge of locating them. Today, although some herds have become more accessible due to roadways, Tr'ondëk Hwëch'in Citizens still consider them a delicacy, and hunt them mainly in the Richardson Mountains and in the Tombstone Park.

Furbearers

A large portion of the DLUP remains fairly undeveloped, and as TH Citizens we consider ourselves fortunate that a wealth of furbearing animals still exists when we see what development has done to their populations in other parts of Canada. Furbearers such as wolf, fox, link, beaver and marten are very important species to the Tr'ondëk Hwëch'in, and particularly to Citizens who occupy approximately 30 percent of the commercial trapping concessions within TH Traditional Territory (THTI). The majority of these trapping concessions range along the Dempster Highway, extending outwards towards Dawson and the Taiga and Ogilvie Mountain Ranges. Other concessions lie just outside the Sunnydale/West Dawson LUP area, and concessions extend out from the Klondike Highway. Citizens report that trapping activities are more active in broadleaf/mixed wood riparian locations and throughout conifer and shrub areas.

The TH Final Agreement, Chapter 16, Schedule D outlines the process for TH to acquire up to 70 percent of the concessions by 2023. As concessions become available, TH continues to purchase new traplines. In the past, some families trapped as a lifestyle and to earn an income. Today, many trap to carry on a tradition and for the enjoyment of being out on the land, selling the furs when prices are good or using the furs for clothing.

Salmon

Traditional Knowledge about respecting and using salmon has been passed down from one generation to the next since time immemorial. This knowledge teaches us that TH People used to fish Chinook as far down as the Forty Mile area.

Chinook and Chum salmon have always been a staple for Tr'ondëk Hwëch'in people, and remain so today. Every summer, many Citizens eagerly prepare for fishing season, and can be seen harvesting salmon from Happy Jack rock downriver from Dawson to Caribou Creek, with one exception, Kirkman Creek approximately 168 km up river from Dawson City. Each family fishes at a traditional family location, often shared with others when inactive.

As an internationally regulated species listed as a species of concern under the *Species at Risk Act*, Chinook salmon is extremely significant to TH. We stay highly active on salmon management in the Yukon. Under Chapter 16 of the TH Final Agreement, the salmon management process in the Yukon set the terms for negotiating a variety of uses for salmon, including fishing for subsistence, basic needs, commercial and recreation purposes. In terms of the DRLUP, salmon natal streams include are Cole Creek, Twelve Mile, and the Klondike River, all Yukon River tributaries.

2.2 Tr'ondëk Hwëch'in Settlement Land Areas: General Resource Information

To enable TH Land and Resources to properly convey this information to the Dawson Planning Commission, we have divided the planning region into 9 areas. These areas were simply chosen to convey information to the DRLUP Planning Commission, although they do provide some general direction on TH Settlement Land planning priorities.

2.2.1 Top of the World Highway and Sixty Mile Watershed Region

Access to these parcels is varied, ranging from seasonal highway, mining road, to river.

Tr'ondëk Hwëch'in selected a couple of this area's parcels for commercial purposes. Four parcels are designated as Citizen Site Specific Selections and were chosen for traditional economic resource pursuits including hunting and trapping camps as well as heritage resource purposes, including a medicine site. One Category A site was selected due to it being a traditional river encampment.

The majority of these parcels are located in a FRMZ Forest Land Use Zone.

The leading tree species on the majority of the parcels is Black Spruce.

2.2.2 South of Dawson City Near Yukon River

Access to the majority of these TH Settlement Land (THSL) parcels is via river.

Approximately twenty of these parcels have frontage along the Yukon River.

Other parcels located in the West Dawson Sunnydale Local Area Plan have a large amount of Yukon River Frontage; it is understood that these are not part of the DRLUP region.

TH specifically notes the numerous THSL parcels within close proximity of the Yukon River in order to highlight to the DRLUP Commission the importance of special planning consideration for the Yukon River Corridor.

As per the 1977 Soil and Soil Suitability Series, by Agriculture Canada, many parcels in this planning section are suitable for grain crops (Class 3) and seeded forages (Class 5). TH is interested in further developing the agriculture industry in the region and is interested in further soil and agriculture industry planning.

No less than a handful of THSL parcels near the river were initially selected by TH for agriculture purposes, and others have been further identified in a TH 2010 Agriculture Development report.

Many of the THSL parcels identified for agriculture were also selected for traditional economic resource pursuits, and include heritage resources such as traditional hunting, fishing camps, wood camp sites (that supplied the old sternwheelers), gathering and trading sites, and a burial site.

It must also be noted that some settlement land parcels were chosen for Rural Residential homesteading.

Parcel Forestry Land Use Zones as per the DFRMP are HFZ and FRMZ.

2.2.3 White River Watershed

Access to these THSL parcels is via river or air transport.

TH chose many of these parcels due to heritage resource values. One site is an old village site while another is a potential archeological site, as it was an area where the Athapaskan held traditional gatherings.

These parcels are located in a HFZ Forest Land Use Zone.

2.2.4 Near Stewart River

Access to most of these THSL parcels is via river or air transport, while a couple can be accessed via the Dawson Mining Road.

Many of the Category-A parcels in this area are sizable, including R-12A which is located at the confluence of the Stewart and Yukon River.

TH selected these parcels for traditional economic resource reasons, which include hunting camps and sites with other heritage resource values. Of note, R-12A was selected due to its being a traditional river encampment while other parcels were traditional gathering places and resting place camps for the Han people when travelling.

As per the 1977 Soil and Soil Suitability Series, Agriculture Canada, R-12A is suitable for grain crops (Class 3) and seeded forages (Class 5).

All of these parcels are located in a HFZ Forest Land Use Zone.

2.2.5 Klondike Goldfields

Access to these parcels is varied, ranging from year-round mining road, to river. Much of planning section 1 is highly accessible via mining roads and trails, both in summer and winter.

Much of this area has had mining activity and is still where the bulk of placer mining occurs.

R-20A and R-58B are large THSL parcels. Due to R-20A's close proximity to Dawson City, there are many residential interest holders. Also, there are 3 known heritage resource value locations within R-20A.

Due to ample access and recent fire history, these parcels are located in a FRMZ Forest Land Use Zone

2.2.6 Klondike River Valley Region

These parcels are easily accessible via the Klondike Highway, the North Fork Road, and the Klondike River. Due to ease of access, this planning section has many current and intended land uses. The valley on the right limit of the Klondike River is relatively undeveloped.

The majority of these parcels are located within the study boundary of the Klondike Valley District Land Use Plan. Although an implementation strategy for the Klondike Valley District Land Use was affected, areas east of Henderson corner were required to undergo detailed studies prior to determining appropriate land use. To the knowledge of TH, these were never undertaken.

There are a number of TH owned traplines in this planning section. TH, along with trapping concession holders, have expressed concerns related to YG Land Authorizations around the portion of the Dempster Highway in which this area encompasses.

The reasons why TH and TH Citizens selected land within this planning section are numerous, and cover the full range of land uses. Many TH Citizens have expressed interest in the majority of these parcels.

A large parcel, R-22B is the location of TH's R-22 Retreat. It is frequently used for gatherings, while C-7B is the site of the old Strachan's farm, which is also used as a modern gathering site.

Another consideration in the areas for these THSL parcels and the area is that it is within a planning section that is subject to the North Fork Hydro Provision, referenced in the Final Agreement.

Land in and around Henderson Corner is identified as having agriculture potential as per the TH Agriculture Development report, 2010. As per the 1977 Soil and Soil Suitability Series, Agriculture Canada, many of these parcels have soil suitable for various agriculture purposes.

Prior to development, many of these parcels within this area require TH Land Management Plans.

All of these parcels are located in a FRMZ Forest Land Use Zone.

2.2.7 North Klondike Watershed and Dempster Highway

The majority of these parcels are easily accessible via the Dempster Highway and the North Fork Road, with the majority of land north of this area being guided by the Tombstone Territorial Park Management Plan, the Tombstone Corridor Management Plan, and the Dempster Highway Development Area Act.

Some of the parcels in this planning section are located within the Tombstone Corridor Management Plan area and some a partially located within the study boundary of the Klondike Valley District Land Use Plan.

There are a number of TH owned traplines in this planning section. TH, along with trapping concession holders, have expressed concern related to YG Land Authorizations in this planning section. TH believes that it is important that the DRLUP Planning Commission address issues with the Dempster Highway Development Area Act, and the portion of the Dempster Highway (North Klondike Watershed) south of the Tombstone Territorial Park. This area is of high value to TH.

TH selected the majority of these parcels for traditional economic resource purposes (hunting, fishing, and trapping), including heritage resource sites, specifically traditional hunting, fishing and trapping camps.

Of note, one Category B site is the location of TH's educational Beaver and Moose Camp two other sites are said to contain Loucheaux/Gwich'in gravesites from the early 20th Century. No less than six archeological sites are located on R-80B, and another B- site in the area also has archeological resource values.

While no less than half of the TH Settlement Land parcels in this area were chosen for traditional economic resource purposes (existing hunting, fishing and trapping camps), it is also noted that four of these Citizen Site Specific Selections were chosen for their commercial potential.

Many TH Citizens have expressed interest in the majority of the parcels in the overall region, mainly for traditional economic resource pursuits.

Another consideration is the parcels within this planning section that are subject to North Fork Hydro Provision.

Parcel Forestry Land Use Zones as per the DFRMP are HFZ and FRMZ.

R-7A, R-80B and R-21B have been subject to recent forest fires. TH has issued its majority of commercial Timber Permits in these parcels. This planning section overall contains a healthy portion of mature timber, and TH is very supportive of harvesting fire kill and dead standing timber in this area.

2.2.8 Yukon River Watershed North of Dawson City

Access to the majority of these parcels is via river or air transport. The Clinton Creek Road, via the Top of the World Highway, offers access to a portion of this area.

TH selected the majority of these parcels for traditional economic resource purposes (hunting, fishing, and trapping) and the areas is rich in heritage resources, including traditional hunting, fishing and trapping camps.

The area's Citizen Site Specific Selections and were mainly chosen for traditional economic resource pursuits.

R-1A, R-3A, R-64B, R-4A and R-5A are large parcels.

Moosehide Creek Indian Reserves, No. 2 and 2B, are just downstream from Dawson City, This is a historic and contemporary area of habitation, and is of high cultural importance to TH. Further downstream is Fort Reliance. R-1A surrounds these Reserves and includes many values, including archeological, camp, and burial site features.

Of note is the vast amount of heritage resources located in this planning section. R-65B contains archeological features and a burial site.

R-83A is the site of Twelve Mile Village. There is a cemetery and archeological site in the area.

Other sites in the area include a traditional Han fishing camp, with other traditional economic resource infrastructure located adjacent to areas administered under the Forty Mile, Fort Cudahy and Fort Constantine Historic Site Management Plan.

R-4A is located across from Forty Mile and was selected as a traditional hunting and fishing site, with numerous heritage resources.

R-66A was selected as a site of the village of Nuclaco, and R-76A contains 5 known archeological sites.

Many TH Citizens have expressed interest in the majority of these North Yukon River parcels, mainly for traditional economic resource pursuits.

TH specifically notes these parcels within close proximity of the Yukon River because we wish to convey to the DRLUP the importance of the creation of a management plan concerning a potential Yukon River Corridor.

Many parcels located downriver near the Canada / United States of America Border (R-4A, R-5A, R-9A, R-24A, R-26A, R-74B, R-76A, R-77B, S-50B, S-57B) were deemed suitable for seeded forages (Class 5), as per the 1977 Soil and Soil Suitability Series, Agriculture Canada

Parcel Forestry Land Use Zones as per the DFRMP are HFZ and FRMZ.

This planning section contains a healthy portion of mature timber.

2.2.9 Northern Traditional Territory

Access is limited to air transport, with the exception of R-49A which is accessible via the Dempster Highway.

This planning section is located in the northern part of the TH Traditional Territory, and encompasses the Nahoni Range.

R-49A is the largest parcel within this planning section.

R-28A, R-29A and R-30A represent traditional economic resource infrastructure locations (food gathering/village site) and are located at the headwaters of the Ogilvie River.

2.3 Tr'ondëk Hwëch'in Traditional Knowledge and Heritage Resource Values

2.3.1 Introduction

This report provides a narrative overview of information gathered regarding Tr'ondëk Hwëch'in land use, both past and present, in the Dawson Regional Land Use Planning Area. Knowledge holders also shared their thoughts and opinions on the value of land-based resources as well as the potential impacts of development activities on the community's ability to traditionally care for and use the land.

Traditional Knowledge about the planning region was gathered using a variety of methods: audio documentation of community members; mapping; heritage resource management methods including cultural landscape and heritage site documentation; archival and ethnographic research; oral history projects; place names work; and archaeology. Most of the information used in this report is primary-source material provided by individuals with extensive and broad knowledge of the area and of associated traditional economic resource use.

The knowledge presented in this narrative is directly associated with a series of maps and tables:

- Traditional Land Use
- Traditional Sites
- Traditional Ecological Knowledge
- Hän Place Names
- Gwich'in Place Names
- Fish and Wildlife

Information in the narrative report includes the thoughts and observations of the community on appropriate and inappropriate land use in the planning area. Information about the geographic locations of valued traditional economic resources and land use patterns is contained in attached maps and in the tables presented to the DRLUP Commission.

Information was researched, documented, and compiled by Lee Whalen, Heritage Officer, and Jody Beaumont, Traditional Knowledge Specialist. The narrative and maps contain summary information only. Background research of documented information was completed and has been included in this narrative report and the associated maps and tables. A series of interviews was completed with several community members, primarily Elders. The interviews involved audio documentation and mapping of the information shared. The

narrative, maps, and tables are all pieces of the Tr'ondëk Hwëch'in Traditional Knowledge and Heritage Resource Values Report for the Dawson Regional Land Use Plan.

There are direct quotes from community members throughout this report. They appear in italics. We have not indicated individual speaker's names in accordance with traditional knowledge sharing agreements made with participants.

* Please note that TH Chief and Council/TH Government do not necessarily share all of the views expressed by the participating Traditional Knowledge holders.

2.3.2 Traditional Knowledge Holders

I've walked every inch of this territory.

I was raised up on the land.

The information used for this process came from a number of individuals and families, all with a long history in this area. The knowledge shared came from personal experiences spanning decades of land use in this territory. Knowledge holders were also able to share information passed from ancestors who used the land for multiple generations.

The people who shared information have spent most of their lives on the land taking part in a variety of activities ranging from traditional pursuits to development projects. Our knowledge holders are:

- Hunters, fishers, gatherers, trappers, gardeners
- Homesteaders
- Tourism operators
- Heritage site caretakers and camp attendants
- Miners, Highways employees, outfitters, wood camp employees, fire management staff, riverboat operators, exploration crew members
- Canadian Rangers

2.3.3 Traditional Knowledge and Heritage Resources: Context

The information in this narrative is derived from the traditional knowledge of this community. We have focused on heritage values in general – the ways that people view their connection to the land, their role as stewards, and the holistic nature of the land itself. This is essential.

One of the core elements of the Tr'ondëk Hwëch'in worldview is that people are a part of the land, equal to all other beings, whether they are animate or not. Our Elders do not view the land or its resources as elements that are independent of each other. As a result they find

it difficult to conceive of providing knowledge about discrete resources and ways to manage them.

They also find it troubling to determine ranked sites of value based on geographic locations. The land is not static. It is an ever-changing system. Their priorities lie in protecting the system as a whole, not in protecting site-specific areas. This is seen as an impossible task given the interconnectedness of all resources on the land.

The use of the land is tied to knowledge of the land. ... people do come to know some areas of the land intensely, often in a detail staggering to those raised in more densely settled areas, but that is not the issue. Knowing a territory is not remembering where every rock is placed or where every species of plant grows; it is having a sound understanding of the nature of animate beings within the land and how those beings relate to each other and to particular kinds of local environments. [People] could not have survived through a detailed knowledge of place within a dynamic and constantly changing environment but have survived through a detailed understanding of how animate life relates to other forms of animate life and interacts with climate and environment. Knowing a territory is not memorizing where things are but understanding how things relate to each other. – Henry Sharp

The content of this narrative speaks to the bigger picture of land use and proper management. The input provided by the community is based on decades of personal observations and generations of traditional knowledge about how best to protect the land and how to properly work within the system in accordance with traditional practices.

As a result, the content focuses on a broader range of resources than is typically (in a Western sense) included in an overview of heritage values. The following descriptions of traditional knowledge and heritage resources are included for clarity.

Traditional Knowledge

Traditional knowledge is a term used to describe the body of knowledge belonging to a community or culture. This includes a great diversity of material such as: mythic stories of the days when animals could talk; genealogical information, detailed knowledge of the land and its resources; and practical information about hunting areas, trapping techniques, building shelters, food preparation, medicinal properties of plants, etc. It can also include lessons on morality and values, traditional justice, and other important teachings on how best to live in the world. Much of this knowledge is drawn from the accumulated experience and the wisdom of several generations.

Heritage Resources

Heritage resources are broadly defined in a First Nations context. They include all of those things that support or result from a people's connection to the land and to their place in the world. The following list reflects the scope of resources that are valued for their place in the community's heritage. This list is not exhaustive.

- Hunting, fishing, gathering, trapping, gardening, travel, recreation
- Harvestable resources – wildlife, fish, plants, and their habitats
- Natural resources - migration routes, waterways, mineral licks, calving areas

- Medicines
- Raw materials - bark, wood, stone, bone, fibers, dyes
- Place names – the stories and where they connect with the land
- Camps, trails, caches, burial sites
- Sacred sites
- Traditional Knowledge
- Archaeological and Historic Sites

The use of traditional knowledge in a variety of projects and government processes has become common. Unfortunately less effort has been spent on educating people on the nature of traditional knowledge. Many think that it is a set of knowledge that can be transferred into other systems of knowledge. This is not the case. Traditional knowledge is fundamentally different from other types of knowledge. It is its own system of knowledge and differs in some key ways from other types of information. Traditional knowledge is a decision-focused, uncertainty-respecting and value-based information system. It focuses on using observation to make the best decisions at any given time and recognizes that in life there are never-ending uncertainties and this is ok.

This results in some challenges and concerns when trying to mesh it with other ways of looking at the world. Although we will not go into detail in this report people need to be aware of the following issues when considering the use of traditional knowledge in exercises like this one.

- Traditional Knowledge Is Part of a Broader Social Context

Traditional knowledge is not data in the sense that information gathered through scientific study is data. It does not come from rigidly controlled observation and experimentation. Rather it is a culmination of the life experiences and observations made by an individual or community over the course of decades and generations. It cannot be readily manipulated or circulated without an understanding of the social context from which it comes. As such it cannot be used in the same way that other forms of data are used. This does not mean that it has no meaningful place in scientific studies. Rather, those carrying out scientific studies must be aware of the social context and must be willing to consider how it shapes the knowledge being shared.

- Traditional Knowledge Does Not Have a Control Group

Participants in traditional knowledge studies are all individuals with unique perspectives and insights on the questions at hand. In addition these people have generally lived for many years in a wide variety of locations and situations, all of which influence their perspective. Traditional knowledge holders have a wealth of knowledge to share. We must recognize that this knowledge is a part of their personal heritage and is subject to many nuances. It cannot be collected in a “scientific” manner. Documentation of this knowledge is subject to numerous uncontrolled variables including but not limited to a person’s health, mood, environment, etc on any given day. In addition their relationship with the interviewer can also impact the outcome of the project as the traditional knowledge holder will often only

share what they think you need to know or can know in accordance with traditional protocols.

- Traditional Knowledge Is Subjective and Dependent on External Influences

Traditional knowledge is constantly evolving over time. People's perspectives are influenced by their histories and by current events. Increasing access to the "outside" world means that Elders are aware of worldwide issues and this can colour their views on the knowledge they share. Top stories in the media influence what people may think is important as well as their opinions on a particular issue. For example knowledge shared by an individual living in town will certainly vary from that shared by an individual who lives on a trap line, away from constant exposure to media.

- External Biases Impact the Acceptance of the Validity of Traditional Knowledge

The use of traditional knowledge by researchers, governments, and others has increased significantly in recent years. In some cases it is sought for its value to a variety of studies and processes. Unfortunately it is also often sought for other reasons. It is used politically, for instance the Umbrella Final Agreement in Yukon requires that it be used in a variety of processes. It is used to increase opportunities to obtain funding. Finally it can be used for studies that gain cachet from including traditional knowledge – often with little understanding of the nature of the knowledge itself. It has been our experience that in most of these situations very little thought or time is spent in exploring how it is best used. It is often considered another set of data, similar to that gathered through other means and one which can be melded into an existing methodology. This simply is not the case. It is its own field of study with its own set of methodologies, protocols, and guidelines for use. Because it is often viewed as a set of stories or personal experiences its validity is often questioned. Simply put, it is rarely taken as seriously as information gathered through other means.

- The Role of Indigenous Governments in the Traditional Knowledge Process

Self-governing First Nations in Yukon are in a unique position when it comes to traditional knowledge. We have jurisdiction over community knowledge as well as the obligation to ensure that it is protected and used appropriately. In accordance with our agreements we are also required to participate in a number of processes that are mandated to make use of traditional knowledge. As a result traditional knowledge moves beyond a source of information that can inform on a variety of issues and becomes an integral part of the socio-political system of current-day Yukon.

It is essential that everyone involved in this land use planning process recognize that this narrative and the associated maps are not comprehensive. They in no way reflect the scope or richness of heritage values on the land. We do not have the capacity nor the levels of participation required to provide a solid understanding of the values in this traditional territory at this time. Further the very nature of heritage – that it changes and evolves over time – means that no static report or map will truly reflect the community's values with any

justice. This is of great concern to the Elders who feel that the land use plan may give a green light to future development in areas without case by case consultation. With or without a planning process it is clear that the Elders believe that the health of the land and their ability to use it freely in accordance with traditional customs and laws is the highest priority. These are individuals who value a long-term and sustainable connection to their traditionally used resources above all else. Every other form of activity is seen as short-term and not sustainable and will not provide for future generations.

The First Nation doesn't need money and jobs it needs land animals and water!

2.3.4 Mapping Traditional Knowledge

Everything is important. Every place is important.

Much of the information gathered came from previously documented knowledge. We also completed interviews where we recorded participants and mapped out places of value to them. Our ultimate goal was to map as many land-based values as possible and document associated information about these values.

We started by combining our existing information including things like settlement lands, heritage sites, archaeology sites, graves, camps, trails, place names, hunting and gathering areas, sacred sites, and more. We then added to this information by interviewing several community members, primarily Elders.

We have provided geo-spatial information to the best of our abilities given the time and nature of the process. There are some things that must be considered in order to understand the information that was provided.

Most of the community information we gathered through the interviews reflected contemporary use by the individuals who we spoke with. The information shared reflects patterns of use that coincide with current methods of access. For example the maps show a greater concentration or value of use in areas along rivers and roads. Of course rivers were always of the highest value but with the construction of modern roads most contemporary land use occurs in easily accessible areas. This would not have been the case as little as fifty years ago and beyond when people travelled along trails throughout the traditional territory, on foot and by dog team.

There are many gaps in our mapped information, particularly in the northern region. Once again this is more a reflection of modern transportation systems than it is of heritage value. It also reflects our limited capacity to cover ground when completing heritage assessments and traditional knowledge projects. We build on our information every year but realistically it will take many more years to fully understand the scope of land use in this territory.

Individuals provide relatively little point specific information. Most interviewees talked about larger areas with multiple values and uses. In addition tangible resources on the land must be considered as markers of larger areas of use. For instance a cabin is not of value for the small

piece of land on which it sits. Rather it indicates a greater scope of use in a larger area. People had many camps and cabins which were used as centre points for their larger individual and family hunting and trapping territories. This is true today as well.

It is important to remember that tangible resources like cabins, hunting blinds, trails, caches, camps, and graves are all markers on the land that speak to traditional land use. These land use patterns reflect the consistently changing and evolving system of resources that people refer to as the land. This is why it is so difficult to pinpoint values on a map and is of the utmost concern for Elders when participating in land use planning.

The value of highest priority to our Elders – the ability to be active stewards of the land in traditional ways -- cannot be mapped.

Nevertheless, the TH Heritage Department does see the value in various mapping exercises and the GIS analyses and visualization exercises that are available, and will work collaboratively with TH Land and Resources and the Planning Commission to further the development of the Dawson Regional Land Use Plan.

We need to control our actions ... not the land.

High Value Areas

Although Elders are reluctant to pinpoint specific areas as having a higher value than others they did point out a number of locations that are inappropriate for development. The following areas are of the highest value today. It is recommended that they be off-limits for development.

- Northern portion of planning region
- River corridors – especially Yukon, Klondike, Stewart
- Dempster Highway corridor
- Traditional Trail corridors
- Sacred sites, story sites, burials
- Areas like Moosehide and surrounding area, Twelve Mile, Halfway, Fort Reliance, 40 Mile, Tr'ochek, Tombstone
- Areas associated with current traditional economic practices – trapping, homesteading
- All Settlement Lands

2.3.5 Traditional Cultural Knowledge

Place Names

Elders tell stories of how a particular place came to be, the events that happened there in the distant past when animals and humans could still talk to one another, and the events that

have occurred there in historical times. They locate a place not by means of a map, but by means of a story. Stories and legends are part of culture and indigenous knowledge because they signify meaning. Such meaning and values are rooted in the land and closely related to a sense of place.

Stories associated with place names tell us about where people have travelled, lived, gathered, and hunted. The intimate relationship between our community and the land is reflected in the use of place names. We gave names to rivers, mountains, trails, look-out points, etc. They are often descriptive and evoke legends, stories of people who spent time at that place, and memories of events that have happened there. It has been suggested that our people use places instead of dates as a way to organize and focus their memories of the past. Our place names represent our long history in the planning area. We have completed a very limited amount of place names research. The Hän and Gwich'in Place Names maps make note of only a handful of these important locations.

Land

We need to protect the land because it feeds us ... the land is spiritual.

We need to protect our land so that we can enjoy it. How can you enjoy the land when it is being torn apart?

Every individual who participated in the information gathering spoke about the importance of the land and their concerns that current and proposed future activities will irreparably damage the land. Their concern goes beyond site specific damage. The Elders tell us that any damage, regardless of its location, intensity or geographical extent, will impact the land as a whole because every element of the land is connected.

Everything is connected. If one thing is damaged then we lose everything.

For generations people depended entirely on the land. Although times have changed and new lifestyles have been introduced the value that is placed on the land has not altered.

The community is concerned that damage to the land will result in an inability to depend on it for survival. Elders, in particular, think that increasing levels of development will require future generations to depend on the land again. They believe that development of non-renewable resources is unsustainable. This will require people to adapt to a new socio-economic reality. Unfortunately the exploitation of resources impacts the land to such an extent that they believe that future generations will no longer be able to depend on it for survival – leaving people without a resource-based or traditional economy. Put simply they believe that too much will be lost for too little in return.

We need to save the land for the next generations.

Don't want to ruin my country anymore.

Water

Our watershed is our most important resource. The mountains to the north feed our watershed.

Water must be protected because everything depends on it.

Every individual who was interviewed stressed the importance of protecting our water. Water is essential for the health of every part of the land and for every aspect of survival.

We need to limit what we do on the land in order to protect the water.

The community is particularly concerned that planners, developers, and government do not understand the cumulative impacts of activities on water. They stress the need to clarify that activities that occur in specific locations have the potential to impact the entire watershed. It may be unlikely that impacts on water can be effectively mitigated regardless of the level of care taken by industry.

The Elders stress that water is a system. It is not a static resource. Any damage to water will eventually be seen in deteriorating health of the land, fish and wildlife, plants, and people.

The smallest creeks feed our rivers. We need to protect them too.

At the same time the community recognizes that there will always be some level of industry in the traditional territory. Several individuals offered recommendations for best practices regarding water. Some of these ideas include:

- Closely monitoring the impacts of activity on water and enforcing the rules.
- Developing stronger regulations to protect our water.
- Prohibiting the use of machinery near creeks and rivers.
- Protecting the Yukon River under a separate plan.

Plants

I still gather plants and medicines all over.

Plants are essential as food sources and medicines. They also play an integral role within the ecosystem. Individuals want to ensure that care is taken to protect those plants essential for traditional uses as well as those that are key to the overall health of the land.

Bear root, onion, caribou moss, mushrooms ... important food source.

Many community members continue to gather plants for food and medicine. Many Elders depend largely on traditional medicines rather than pharmaceuticals and are concerned that extensive development will impact their ability to harvest these resources. Information about some medicinal plants is not to be shared in accordance with traditional protocols. Elders have concerns that some of these plants, especially those that are rare, may be damaged due to a lack of knowledge.

Animals need the forests. If you take care of the forest then you're taking care of the animals.

Participants also spoke about additional roles of plants. Again, the land is composed of a number of resources that all work together as a system. Plants play an important role in this system. For instance plants provide food and shelter for fish and wildlife. Trees also hold water in the earth and protect against erosion. People are concerned that development will impact plant life resulting in impacts on other resources. This is particularly worrisome given the short growing season in this environment.

Roads can be beneficial for berries.

Several participants also mentioned that certain types of development can be beneficial to some plant species. Some levels of disruption including the building of roads, forest fires, etc can promote the growth of various plant species.

Wildlife

Animals are our survival. All wildlife needs to be protected.

Participants have observed many changes, over their lifetimes, to wildlife patterns. This is normal. Most of the game species that people depend on have their own cyclical patterns – for migration, movement, and population growth and decline.

In more recent decades people have observed that changes appear to occur more rapidly and with less predictability than in the past. Individuals attribute this to our growing population and increased exploitation of certain land-based resources, use of the land that is not in accordance with traditional customs and practices, an increase in development, and changes in our climate.

Moose are not on the islands the way they used to be.

Too many people scare away the animals.

Elders are concerned that we have changed our role in the system to such an extent that the impacts on wildlife are detrimental. We are not doing our job anymore and the health of our wildlife is at stake. This, along with the added pressures of environmental damage due to development, is weakening wildlife. Elders tell us that industry, regardless of reclamation efforts, cannot mitigate the impacts of existing development projects anywhere in the traditional territory to the point that wildlife will not be affected.

Helicopters disturb cows with calves.

Animals get hurt in trenches and pits.

They believe that any future projects will impact wildlife in this way. Although we cannot undo damages that have already occurred the Elders would like to ensure that areas in the traditional territory that are largely free of development, such as the northern portion of the planning area, be left as industry free zones.

Participants did mention that certain activities like road building and placer mining can be beneficial to some species by encouraging new growth of food sources.

Roads can be good for moose because new willow grows.

Fish

The salmon is deteriorating. If we pollute the water it hurts the fish. We need to monitor things like mining more closely.

Fish, in particular the two runs of salmon, are one of the most important resources for Tr'ondëk Hwëch'in. In recent years there have been many concerns with the health of the fish. Salmon numbers are dropping and the quality is decreasing. Elders attribute this decline to a number of activities and factors including overfishing in Alaska and climate change. They also believe that certain development activities have direct and adverse impacts on fish. Elders have observed an increase in the pollution of water and in the damage of spawning streams by mechanized activities that occur alongside creeks.

Most industrial activities have the potential to impact the water system. In turn this will impact the health of the fish. Elders believe that increases to the current level of development activity will drastically damage fish resources. They feel that current monitoring and regulatory processes are not effective.

We need to protect spawning areas.

Intensive mining might affect my salmon fishing.

Heritage Sites and Resources

Leave heritage sites alone. Assessments aren't enough. They need to be avoided completely.

Most tangible heritage sites and resources are protected through various pieces of legislation, guidelines, and best practices. However a lack of knowledge about the location and scope of these resources and limited monitoring and enforcement mean that existing laws and guidelines are largely ineffective.

The maps associated with this narrative show the documented heritage sites to date. This is by no means comprehensive. Most of the mapped sites are site-specifics – they indicate the location of a lone resource without reflecting the larger area of use.

All of the mapped sites are of the highest value. They are the physical indicators of a larger system of land use.

Certain resources, particularly burials and sacred sites, are to be avoided at all costs.

Powerful places need to be left alone. Stay away from burials.

2.3.6 Existing and Potential Development Activities

During the interviews we asked participants for their thoughts on a variety of development activities. Although not averse to some activities people did have strong opinions on the impacts of certain types of development. Many of our participants have made observations over several decades and have first-hand knowledge of the possible impacts of industry. Much has changed in the industrial methods used but there are still many concerns that any impacts on the land are too high a price to pay for any level of return.

Mining – General

Gold leaves the Yukon and we are left with the aftermath.

There are a variety of concerns focusing on the mining industry. People believe that mining can cause irreparable damage to the land and can block the community's access to resources. Several individuals mentioned that miners, whether this is allowed or not, mark access roads as private which creates a barrier for those travelling on the land for traditional purposes.

Many mining activities are believed to pollute the land and the water. Heavy machinery can leak fuel and improper disposal of chemicals and fuels is troublesome.

Miners don't realize that they're polluting so how can you get them to understand?

People feel that small scale operations are generally acceptable. The problems lie in the cumulative impacts of many small scale operations. Individuals think that there need to be enforceable thresholds.

Most interviewees feel that no mining activity should occur in prime hunting and fishing areas.

Everyone believes that the First Nation should benefit in meaningful and sustainable ways from the existing levels of mining. At the same time people need to be aware of the real costs of mining – those that will forever alter the land.

Mining is ruining the land so that people can get rich.

Mining will always be here so we need to get proper compensation.

Placer Mining

Family placer mines are good.

Most interviewees feel that current levels of placer mining are acceptable but that new projects are inappropriate. They would like to see more monitoring and enforcement of regulations. Placer mining that is done correctly does not pollute the water.

Some participants mentioned that more care needs to be taken when stripping the land. It is felt that the soils could be used elsewhere or put back in place during reclamation. This is especially important when one considers how long it takes for soils to build up in this environment.

Although some ground disturbance is seen to have positive impacts by promoting the growth of willows and moose habitat it is felt that higher levels of activity will not be tolerated well by wildlife.

We need to respect the land and not strip it all up.

Hard Rock Mining

Hard rock mining is not acceptable.

Viceroy and Clinton Creek are examples of mining gone wrong and the impacts that mining can have.

All participants were very clear in stating that hard rock mining, and any activities that rely on chemicals, are unacceptable regardless of any mitigating measures. Hard rock mining activities including trenching, leach pits, and drilling damage the land and wildlife and have long-term impacts that occur long after the active life of the mine.

This is bad for the water and is not an acceptable activity.

Reclamation

Reclamation is good but won't replace what is lost.

Interviewees all agree that reclamation should be a requirement of all industrial activity. They feel that it is not currently happening at appropriate levels.

Some individuals suggest that miners should be compelled to provide money for clean up before they are permitted to mine. The money would be returned when reclamation is complete.

Exploration

Although exploration can be seen as the precursor to more intensive development most participant's concerns lie in the impacts of increased numbers of people out on the land. They feel that higher concentrations of people impact wildlife by disrupting travel routes and territories. Elders have also observed increases in bear activity in areas with camps. The camps themselves are seen as potentially damaging, especially if they are not monitored for proper practices. Helicopters also disrupt wildlife.

Forestry

Every tree has a job to do. Logging leads to erosion.

Protecting the land from clear cuts should come before money.

Participants felt that large scale forestry operations were not appropriate. Selective logging was less harmful although it was felt that companies are cutting too much. Many suggested that there should be no timber leases on Settlement Lands or on active trap-lines.

Several interviewees suggested that an increase in fire-smarting activities would be good.

Large timber needs to be protected from mining and forestry.

Oil and Gas

Most participants did not elaborate on potential oil and gas development. They were clear in stating that oil and gas work are inappropriate and that the northern portion of the traditional territory was not to be touched by any development.

The northern part of the territory should be left alone.

Agriculture

Farming is good because we will need to produce food locally in the future.

Most participants support small scale agriculture and gardening and feel that it will be essential one day if we continue to increase development.

Specific locations including the areas around Moosehide, West Dawson and Sunnydale, and Tr'ochëk were suggested as good areas for agriculture.

Tourism

It is good to show people the land and to tell our stories.

Most people support tourism to a degree – especially if it is small scale and done properly.

People who come from the outside don't know how to take care of the land.

Accidents can happen when people do not know what they're doing. Accidents to themselves and to the land, like forest fires.

There is a concern that too many people will have an adverse impact on the land. In addition Elders worry that tourists are not educated properly about the land and living outdoors. This

may cause damage to the land or create accidents where people are hurt. Solutions may include increased education about how to care for the land as well as guided activities.

People do see some benefits in tourism activities. This type of development can create meaningful economic opportunities, especially given the desire for cultural experiences that tourism demands. Elders feel that any new developments must be small-scale and leave a small footprint.

Tourism is ok if people are just viewing the land.

Associated Activities

Roads and vehicles chase the animals away and spoil the land.

All of the previously mentioned activities have associated activities that can create concern in the community. Largely the development of camps and construction of roads are seen to have a high potential for damaging the land. There is a belief that roads attract too many people although they do open up access to increasing areas for local hunting. It is also felt that camps are too large and intensive.

2.3.6 Concluding Remarks

All of the community members interviewed showed a level of consistency in their comments that reflects shared values and knowledge of the potential impacts of development on the land. The following bullets sum up the key messages that community members want to convey to the land use planners.

- The future we need to plan for is long term – not just the next 25 or 50 years.
- Development needs to be sustainable and most activities today are not.
- The First Nation doesn't need money and jobs -- it needs land, animals, and water
- All governments need to protect what we have.
- Everything is connected. It's not about specific places but about how resources connect together and the ways that different activities will impact all of these resources.
- Planning doesn't mean much without monitoring and enforcement.
- Allowing various activities in specific places at specific times can only be decided on a case-by-case basis.
- There is a need for industry but a more important need to moderate it.

- Appropriately controlled placer mining, small scale tourism, small scale and well-monitored forestry, and farming are all ok within reason and fit well with the concept of a modernized traditional economic resource model.
- Hard rock mining and oil and gas development are not appropriate.

We need to be strong and protect our land.

3. Towards a Traditional Economy Resource Planning Approach

As discussed in Part 1 of this resource report, the Traditional Economy and the resources involved have long been an integral part of life in this region. The planning process can facilitate the modernization of such a model to address today's planning needs and challenges.

By envisioning and planning the landscape required for a successful traditional economy, we also plan and allow for a successful and sustainable modern economy. Recognizing traditional development corridors, spaces, and places within a modernized traditional economy will help to support and deliver the Vision that the Planning Commission has for the Dawson Region.

3.1 Components of a Modernized Traditional Economy

Resources involved in understanding a traditional economy were introduced in Part 1 but are further developed below, with additional observations involved with modernizing the concept.

A cultural landscape

Large intact tracts of land allow for the continual practice of resource harvesting and associated land management activities, and for habitat conducive to healthy wildlife species, most notably mega-fauna including caribou, bears, and moose.

A region that has intact land areas allows for the economy to adapt to changes in the environment and fluctuating resource values.

The Dawson Regional Planning area provides a sufficient area in which to maintain and enhance this cultural landscape.

Trails, Roads and Marine Route Networks (Transportation)

- Trails are routes that involve construction (and maintenance) with very little movement of earth and rock.
- Roads, which have been established in the region, are now transportation corridors in the modern context. However, new road networks that fragment habitat or do not contribute to a sustainable traditional economy model must be discouraged or avoided.

- By planning and developing thresholds associated with road and trail development, we can plan for sustainable infrastructure.
- Allowances for transportation innovations must be incorporated into the planning effort (for example, dirigibles capable of hauling large loads).
- Many heritage resource trails are worthy of protection or intense management, while others may be incorporated into well-utilized transportation corridors.
- Trails and marine routes need to be an integral part of the regional transportation network.
- Trails can be networked together to follow major drainage systems and routed through appropriate areas to reduce habitat fragmentation as well as to maximize traditional economy resources and modern industries that require access to natural resource.
- Trail planning can link various natural resource values (harvesting opportunities), traditional camping and harvesting locations, important landscape features (lookouts) and other significant locations (gathering places).
- Principles of intelligent design are embedded within trail routes as they are selected to maximize efficiency, reduce distances between locations, avoid natural hazards (i.e. landslides) and utilize terrain advantages such as: gradual slopes, solar orientation, stable ground, and good drainage.
- Trails have minimal associated environmental liabilities in part due to light and moderate use plus a matter of select route advantages (i.e. avoiding hazards, gradual slope, and ground stability).
- Intelligent transportation corridors offer safer, more efficient transport compared to moving in a random manner across the landscape,
- Trails can be used exclusively during certain times of the year (i.e. fall migrations into mountains), winter travel, etc.

Camps, Harvesting Locations, and Seasonal Settlements

Traditional camps and seasonal settlements can be viewed in the modern context either as key spots in which to plan and develop settlements and traditional or modern economic resource developments, or as places to protect and avoid. These locations should be factored into the planning process, so they can be incorporated or avoided, depending on the nature of the site and footprint and characteristics of the development activity.

- Sites were chosen to utilize natural landscape features (i.e. a junction between watersheds, sheltered locations in the terrain, access to water or firewood), near prime harvest locations or lookouts and to take advantage of some aspect of the environment (i.e. breeze, shade or sunshine),
- These locations were chosen for seasonal climate advantages; for example, places with warmer temperatures in winter or sheltered from prevailing winds provide guidance for siting of development activities.
- These locations were rarely situated in vulnerable places (landslides, flood plain), and any planning for new infrastructure should consider these vulnerabilities.

3.2 The Traditional Economy - A Way to Approach Regional Planning

A traditional economy provides a context for embracing and promoting a regional identity. While it is true people may tend to see the Town of the City of Dawson as the hub of the region, in developing the Plan we should look beyond the town and form a regional identity based on the values of the Tr'ondëk Hwëch'in and the Dawson Planning Region.

- A traditional economy model builds off historic precedent and heritage resource values. It can present options for the continuation of historic land use patterns, demonstrate ways of using land and resources, and structures for relationships between people and the environment.
- A traditional economy model presents a cultural identity, in that it offers a way to integrate all people into the existing regional identity, which is particularly relevant for any transition to the relatively remote Dawson Regional lifestyle.
- A tradition economy model retains regional development parameters within the scope of a large traditional territory- regional planning boundary.
- Offers a historical baseline to consider future development, which provides historical context when moving forward with developments, responding to challenges, risks and threats, or preparing for new opportunities or the uncertainties of change.

Traditional economies provide a regional planning framework based on traditional trails and campsites:

- This offers planning route and site development options for future transportation infrastructure network and residential developments. When planned in conjunction with other values of course, it strengthens our planning outcomes.

A traditional economy model offers a structure to maintain and develop environmental information, traditional knowledge and science:

- Development model could provide access throughout region and occupation opportunities for various stewardship roles (i.e. environmental monitoring, research, management or protection programs);
- Regional information can be obtained through land based monitoring, using traditional knowledge and science gained through land-based experiences;
- The regional plan could help establish common environmental research approaches for collecting data, observation, and setting research priorities and research protocols using Traditional and Local Knowledge and Science.

A traditional economy context provides a set of values, principles and applications for utilizing both renewable and non-renewable resources through:

- A renewed focus on building natural capital values.
- Promoting selective harvesting and conservation objectives.
- Strategies to plan and distribute resource harvesting across region, and beyond.

A traditional economy strategy offers both rationale and vision to communicate and enhance economic development:

- A context to present concepts, ideas, strategies
- Public relations
- Marketing opportunities and branding images

3.3 The Traditional Economy - A Competitive Model for Regional Economic Development

The traditional economy development model offers a way to utilize lands and natural resources across the planning region:

- A planned distributed infrastructure network can enable use of many areas and places within the Planning Region;

- Traditional economic resource development can promote the use of areas and places without extensive infrastructure investments (for example, by using marine routes or trails rather than roads);
- Many economic development opportunities in the Planning Region are limited because most places are inaccessible and lack any infrastructure, services or labour;
- Creates options to focus development in locations that are otherwise inaccessible.

Planning for a traditional economy can offer a lower cost infrastructure model and is structured to utilize natural advantages:

- Trail construction and maintenance costs are limited;
- Local resources can be readily accessed for construction of infrastructure (i.e. timber, quarry materials);
- Duration, complexity and scope of work during construction is limited;
- Construction phase can utilize unskilled labour resources effectively;
- Trail infrastructure carries fewer environmental liabilities; including reduced environmental challenges, hazards and liabilities by avoiding risky routes or places;
- Traditional economy model offers way to incorporate environmental knowledge and landscape intelligence into infrastructure;
- Improve transportation designs using existing plans from traditional trails and existing roads reduce planning, construction, maintenance and operation costs;
- Aligning of infrastructure with natural capital values (egs. harvest opportunities, wildlife, clean water);
- Incorporate other considerations into development plans: solar orientation, prevailing winds, microclimate conditions, terrain advantages, irrigation options and geology, nature of soils or drainage.

A traditional economy model provides residential and business users with improved access to local resources (i.e. firewood, water, renewable energy and traditional foods).

Traditional economy and a cultural landscape provide a unique regional identity and authentic marketing brand opportunity for resources, products and services.

Environmental standards certification could provide traditional economy products and services valuable certification for environmental, ethical or sustainability standards. Traditional economy developers will have a property tax advantage because often these types of infrastructure have low property values, property tax exemptions and environmental and socio-economic assessment exceptions.

Traditional economy provides a relatively secure investment structure because infrastructure assets and economic production capacities are tangible assets that have lasting value. This type of development can also benefit from ethical investment inputs.

3.4 An Economic Structure for a Modernized Traditional Economy

Historically, traditional economies were structured on harvesting natural resources for local consumption and fluctuating levels of trade. A modernized traditional economy has certain competitiveness features mainly related to the nature of the development model (i.e. utilizing landscape advantages, access to natural resources, intelligent design, low development costs, environmental sustainability principles). The competitiveness aspects create an underlying foundation to create economic production, income generation, investment and wealth, which are essential factors for successful economic development. The traditional economy must function as a modern economy with similar mechanisms found in modern economies: a market place, product innovation, local services, marketing initiatives and infrastructure investment structures.

An ongoing role for Subsistence Harvesting and Promotion of Agriculture

Harvesting natural resources will continue to be an important element in a modernized traditional economy. What is commonly referred to as subsistence harvesting remains important as a practical way of substituting food expenditures. Similarly, subsistence and market agriculture can reduce food imports. Additional focus could be placed on harvesting plants, mushrooms and berries within the context of subsistence harvesting. Building agriculture and promoting the gathering of these other traditional foods can also reduce harvest pressure on fish and wildlife resources.

Cultural industries

The historic traditional economy produced a range of cultural products for those societies. These products included: snowshoes, clothing, footwear, harvesting gear (i.e. fish traps, snares), tools (i.e. knives, sewing, scrapers, twist drill, fire drill), weapons (i.e. bow and arrow, spears, clubs), boats (i.e. dugout canoe, birch bark canoe, moose skin boat), cooking ware, baskets and hide dome shelters. The knowledge, skills and abilities to produce these goods have their own value from a heritage resource value perspective. The market for authentic Aboriginal products such as these exists and continues to develop. There are opportunities to produce and sell these types of goods as well as develop markets through brand value.

Intellectual property matters should be addressed as part of the cultural industry development process.

Cultural industry products involve a diverse range of arts and craft products. The Inuit stone carving industry is an example of taking traditional skills with local resources and creating not only a new cultural product but an entire cultural industry segment. Many cultural products require raw resources derived from traditional harvesting such as furs, hides, bone or antler so a traditional economy can provide the resources for these cultural industry products. Other cultural industry products can be made from natural resources found in the environment a modernized traditional economy also supports access to these arts and craft resources.

Environmental Industries

The historical traditional economy incorporated environmental services, products and technologies. There are environmental industry applications that exist today and will continue to expand in the future. Environmental programs create certain economic opportunities for local environmental research, resource management, resource enhancement, environmental protection and environmental reclamation. These business and employment opportunities are currently limited will likely grow over time as a response to environmental challenges such as climate change.

Ecologically-conscious products are a rapidly growing part of the consumer market. The biotechnology and natural medicine industries represent adaptations to new discoveries in environmental sciences. A modernized traditional economy would be well positioned to provide ecological resources for a range of consumer products that could be manufactured locally or harvested for export to other manufacturing areas. Environmental products could include: common traditional medicines, specialty traditional foods, teas, herbs, essential oils, spa therapy, aromatherapy, floral décor, value-added timber products, and natural-based beverages.

The principle of stewardship allows for active land-based management. Monitoring of the land through trail and marine networks with relatively low-impact transport options can contribute the necessary information for adaptive responses to landscape-level challenges. Coupling necessary monitoring with traditional and other economic activities allows for synergies of land-use and responsive land use stewardship.

Tourism

The tourism industry provides a natural fit to a modernized traditional economy. The range of tourism products include: eco-tourism, cultural tourism, health oriented product and recreational events.

Mining and Non-Renewable Resource Extraction

Mining continues to be a dominant economic driver in the region. By intelligently planning infrastructure in collaboration with traditional economic resource values, a sustainable

framework can be established that will maximize local participation and encourage traditional economic resource development alongside mineral development. The Planning Commission will need to set appropriate impact thresholds and limit new linear disturbance associated with mining development. The DRLUP should be a long-term plan that recognizes the development of new transportation technologies and the need for both this generation and future generations to benefit from the extraction of non-renewable resources.

3.5 Traditional Economy Information Gaps

Canadian society, institutions, governments and leaders continue to have an underdeveloped relationship with Aboriginal societies and nations. This is a legacy of the colonial era transition where Aboriginal people, societies, cultures and nations were oppressed through diverse strategies. Regardless of that history, society today is in many ways hobbled by these relationship limitations. While it is clear traditional economies were critically important in the development of First Nation societies, cultures and nations, there is continued resistance to acceptance of this in mainstream Canada. Much can be still gained by focusing on what worked in the past to build natural capital in the environment. Traditional economies worked for thousands of years. It is time to accept that discovering the context of traditional economies has an important role in understanding our contemporary issues and that the principles, knowledge sets and lessons are still relevant in finding solutions to our present and future challenges.

Some important traditional economy information gaps:

- Exact location of traditional trails not always recorded; sometimes these are approximate routes.
- While the main campsites and seasonal settlements are often known and still used, smaller campsites and harvesting location off main travel corridors (the river or roads) may not be recorded or precisely located,
- More heritage resource assessment work in the Region would help fill in the gaps on the history including subsurface data on the landscape ecology (i.e. fire history),
- All governments require better incorporation of traditional knowledge in decision-making and planning

Traditional Economy - Predictive Mapping

In spite of our information gaps, there are ways to explore and present land use planning scenarios that incorporate the traditional economy model for the Dawson Planning Region. What is required is a landscape intelligence profile and development of GIS analyses that can help predict traditional economic resource potential. With data layers including known trails,

a digital elevation model, traditional and scientific knowledge (including harvest areas and wildlife habitat areas), and knowledge about landforms, a GIS analyses can predict areas of relative high potential for traditional economic resources. For example, ridge top lookouts, harvesting areas, and riparian habitats are usually found to have higher potential for traditional economic resources. Given the increasingly high quality datasets available for the region, a high quality product of value to the Planning Commission can be developed.

By running a GIS line-of-sight analysis from a trail or marine route, the cultural landscape can also be mapped. Different landforms and viewscapes can be identified. Further visualization work with Traditional Knowledge holders and others can enable thresholds to be developed for different landscapes and development activities.

Tr'ondëk Hwëch'in is initiating work to further develop Traditional Economy Planning Tools and Approaches for the Dawson Region. It is suggested that the Planning Commission may want to collaborate in this work, in contribution to the Dawson Regional Land Use Planning process.

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For more information about this submission, please contact Bill Kendrick, TH Land and Resources Manager, at bill.kendrick@trondek.ca or (867) 993-7105