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Sincerely,

Dawson Regional Planning Commission

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LIST OF ACRONYMS

CA	Community Area
DRLUP	Dawson Regional Land Use Plan
DRPC	Dawson Regional Planning Commission
FN	First Nations
ISA	Integrated Stewardship Area
LMU	Land Management Unit
SARA	Species at Risk Act
SLC	Senior Liaison Committee
SMA	Special Management Area
TH	Tr'ondëk Hwëch'in
THFA	Tr'ondëk Hwëch'in Final Agreement
TOR	Terms of Reference
TT	Traditional Territory
TWG	Technical Working Group
UFA	Umbrella Final Agreement
WRFN	White River First Nation
YG	Government of Yukon
YGS	Yukon Geological Survey
YLUPC	Yukon Land Use Planning Council

Draft Plan Highlights

Draft plan concepts and principles

Vision: Decisions that impact the future of the Dawson Region are to be guided by the Vision Statement. *The future of the region will include a diverse economy, rich cultural legacy, healthy environment, with shared and respectful use of natural resources.* It reflects community values and will guide the integrated use and stewardship of land, water, and resources.

Sustainable Development: The plan was built with a strong commitment to sustainable development as defined in the THFA. It strives to be inclusive of all people and attempts to balance competing land and resource uses for current and future generations.

Community Stewardship: This is a key guiding principle of the Draft Plan and is an important ancestral responsibility for Tr'ondëk Hwëch'in. Stewardship is taking collective responsibility and actions for the continued health and vitality of the region. It also means being part of a strong community that is connected to the land.

Plan Goals: There are eleven plan goals that fall under the themes of ecology, socio-cultural, and economy.

Land Designation System: The Draft Plan divides the planning Region into 23 Landscape Management Units (LMU). These units allow for varying levels of conservation and development. Each LMU is assigned a land use designation (or zoning) depending on the priority values and land use issues identified:

- **Integrated Stewardship Areas (ISAs):** identify areas where varying levels (1-4) of industrial and other development can occur. Land management in these areas is based on the concepts of stewardship and cumulative effects management.
- **Special Management Areas (SMAs):** are areas that need a higher conservation focus because of high cultural and ecological values. There are two SMA designations (SMA I & SMA II)
- **Highway Corridors:** Transportation and access are a major focus of the plan.
- **Future Planning Areas:** Such as the Yukon River Corridor and the Klondike Valley Corridor where additional planning should occur based on values such as water, residential development, and tourism etc.

Key Recommendations

Access: A strong focus is put on transportation and access to ensure that access development can occur carefully and responsibly while promoting a healthy regional economy.

Caribou: The Commission recognizes the importance of caribou in the Region, including the Fortymile caribou herd whose range spans most of the planning Region. Recommendations for caribou habitat in the plan include the protection of critical habitat, limited development in a key migratory corridor, recommending timing windows and access management planning.

Conservation Priorities: Two areas have been proposed for protected area designations (SMA I) in the plan: Matson Uplands and Upper Klondike.

Culture and Heritage: Designations for many LMUs in the Draft Plan have been guided by the cultural importance of the areas for Tr'ondëk Hwëch'in citizens, and Hän language has been incorporated where possible and appropriate.

Mineral Development and Exploration: Recommendations that recognize the importance of mineral exploration and development in the Region, including support for the implementation of the Yukon Mineral Development Strategy, and the continued viability of existing claims in areas identified as SMA IIs.

Stewardship: The Draft plan introduces the concept of Integrated Stewardship Areas. These not only focus on the 'use' of the land but also the collective responsibility to be stewards of the land. Additionally, a Land Stewardship Trust has been recommended to promote the ongoing practice of stewardship by the community and industry.

Wetlands: The Draft Plan makes many recommendations for wetlands including: the recognition of wetlands of special importance (Scottie Creek and Upper Indian River Wetland complexes), and direction on limiting development in rare and sensitive wetland types.

We Want to Hear From You!

Please tell us what you think. All of the Draft Plan is up for discussion this summer and fall, and there are specific topics that the Commission would like to highlight for engagement during this time.

Within the plan there are call-out boxes that ask questions for the reader to consider on the following subjects:

- Wetlands
- Special Management Area II
- Draft Plan format and usability
- Stories of the land
- Cumulative effects framework

How to Use This Plan

The following is a general guide for using this Plan. The intent of the design of this Plan is to provide certainty and clarity particularly for people working in the environmental assessment field and project proponents who are looking to work in the Dawson Region.

We want to hear from you!

As you are reading through this Plan please think of the following:

- Is it organized in a 'user friendly' way?
- Can you find the information you are looking for?
- What are your suggestions to make it easier to use?

Visit our Engage Dawson website to let us know.

Step 1: Determine project location or area of interest
Refer to **Map 2, Appendix A** • Is the project location or area of interest in the planning region? • If in the region, within which landscape management unit does it occur?
Step 2: Determine broad management intent for landscape management unit
• Refer to **Map 2: Appendix A** for land use categories and designations. • Refer to **Section 3** for descriptions of land use categories and designations.
Step 3: Determine what values may be affected
• Refer to **Section 5** for descriptions of identified values and special considerations within the area of interest (landscape management unit). • Refer to **Maps 1-7: Appendix A** for locations of identified values.
Step 4: Determine management direction for identified values or issues
• Refer to **Section 4** for management direction regarding identified values or issues. • Refer to **Section 5** for specific management issues and considerations within the area of interest (landscape management unit).
Step 5: Determine other management direction if required
• Refer to **Appendix B** for links to management strategies.

How the Plan is Organized

This Plan is organized in six major sections:

Section 1: Provides context and guiding principles for the Plan.

Section 2: Describes the planning region and the economic, environmental, and cultural values within it.

Section 3: Presents key Plan tools and concepts – the way in which the Plan uses different land management methods and strategies.

Section 4: Includes general management direction and recommendations, with each topic organized by the sustainable development topic – sustainable economy, ecological integrity, and conservation; and culture and heritage. Each topic is linked to specific Draft Plan goals.

Section 5: Describes each Landscape Management Unit (LMU). Outlining management intent, special management directions, objectives, rational, and values

Section 6: Describes recommendations related to Plan implementation and revision.

1 INTRODUCTION

1.1 CONTEXT

The Dawson Planning Region is located in the west central part of Yukon, encompassing 39,854 km² or about 10 per cent of the territory (**Figure 1.1**). The planning region falls within the Traditional Territory of three self-governing First Nations: Tr'ondëk Hwëch'in, Vuntut Gwitchin First Nation (VGFN), and Na-Cho Nyäk Dun (NND). However, only Tr'ondëk Hwëch'in has Settlement Land within the planning region*. The planning region has a relatively small but stable population, with most residents residing in and immediately around Dawson City.

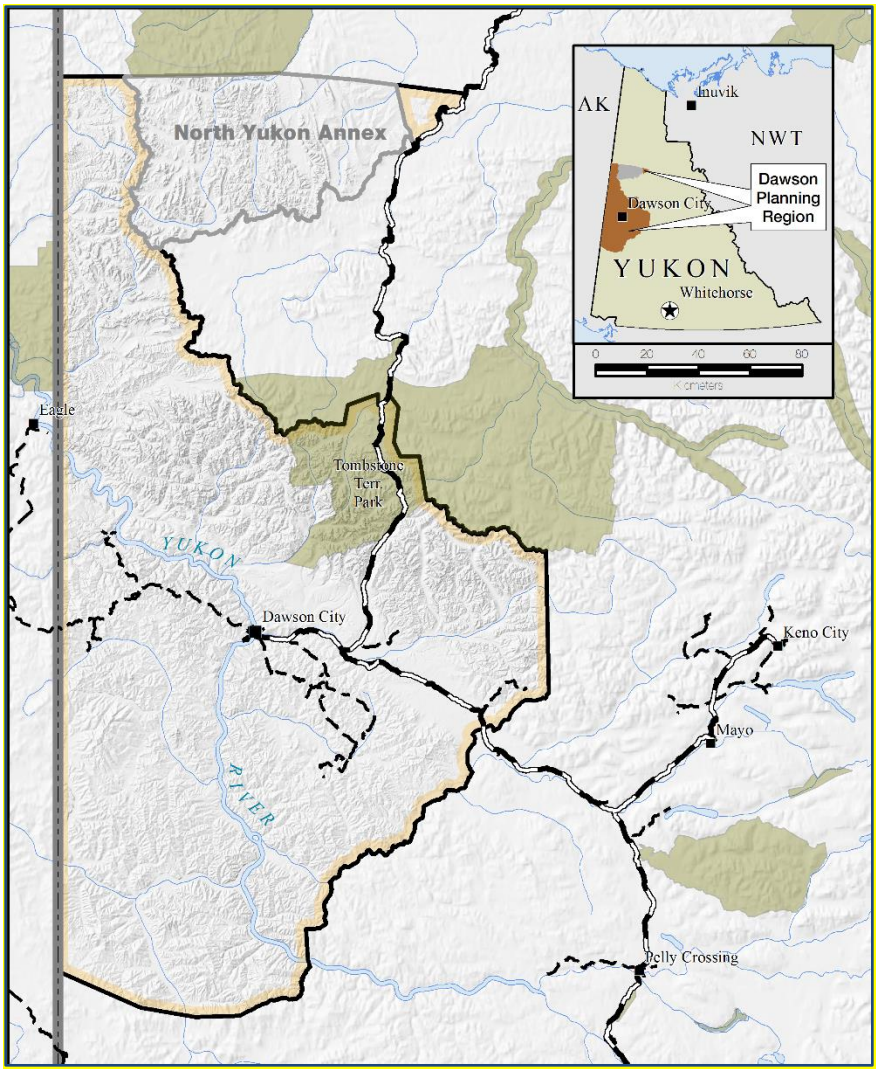

Figure 1-1 Map of Dawson Region with Yukon context inset map

**White River First Nation (WRFN), who are not a self-governing First Nation under the UFA, have identified a land selection in the southeastern corner of the region. As the regional land use planning process is being carried out in accordance with the TH Final Agreement, "Traditional Territories" is defined in the THFA in relation to the geographic area identified as a Yukon First Nation's Traditional Territory on the*

map referred to in 2.9.0 of the THFA, and as agreed upon between First Nations through Contiguous Boundary Agreements.

The planning region is one of the most unique areas of the Yukon – its quality of life is attributed to opportunities and employment in mining and other economic sectors; a thriving cultural landscape; and healthy ecosystems that support a wide variety of fish and wildlife populations.

The Dawson Regional Land Use the (the Plan) is guided by the principle of sustainable development and is intended to reflect the values and interests of the Tr'ondëk Hwëch'in, other affected First Nations and Yukoners as a whole. The Plan is designed to enable the people of the planning region to build a diverse economy while maintaining a rich cultural legacy and a healthy environment.

1.2 Scope of the Plan

This Plan is the third of a network of regional land use plans to be produced through Chapter 11 of the Yukon First Nation land claim agreements. The regional planning process is described in Chapter 11 of the Tr'ondëk Hwëch'in Final Agreement (THFA).

A regional land use plan is a collective statement about how to manage land and resources within a given area. It provides guidance for land and resource use decision-making and helps to achieve the kind of future people in the region want to see. This Plan provides guidance for land and resource decision-making within the Dawson Planning Region only (**Figure 1.1**). It provides management direction for all Yukon public lands and all First Nations Settlement Lands within the planning region.

While providing guidance for decision-making, it is not a legal document. This Plan does not replace existing legislation, nor does it affect First Nations rights established by land claim agreements and constitutional law.

In accordance with the THFA, this Plan does not apply to:

- Land within the City of Dawson and areas subject to subdivision planning or local area planning outside of a municipal boundary (e.g. West Dawson, Sunnydale);
- The Klondike National Historic Sites; and
- Tombstone Territorial Park.

1.3 History of the Plan

The Tr'ondëk Hwëch'in signed its Final Agreements with the Government of Canada and the Government of Yukon in 1998. In 2006, the Tr'ondëk Hwëch'in requested the establishment of a regional land use planning commission based on Chapter 11 of the THFA:

> *Government and any affected Yukon First Nation may agree to establish a Regional Land Use Planning Commission to develop a Regional Land Use Plan (11.4).*

A Dawson Regional Planning Commission (the Commission) was established in 2011, but in 2014 the planning process was suspended by the Parties until the legal proceedings around the Peel Watershed planning process were resolved (First Nation of Nacho Nyäk Dun v. Yukon, 2017 SCC 58).

At the time of the abeyance, the Commission had started a draft land use plan, a report on the cumulative effects of future land use and had published foundational documents including an Interests and Issues Report (2011), a Resource Assessment Report (2013), and Plan Alternatives (2014).

The planning process resumed in early 2019 with a new Commission of six members jointly nominated by the Tr'ondëk Hwëch'in and the Government of Yukon. The new Commission convened their first meeting on April 29, 2019 in Dawson City. The Commission proceeded to create a new vision statement, update its foundational documents and develop a public engagement strategy.

Following a series of public engagement sessions in the Fall of 2019 with Dawson and Yukon residents, Tr'ondëk Hwëch'in citizens and many different interest groups, the Commission drafted the Draft Land Use Plan.

As per our Terms of Reference, the Commission is responsible for public consultation on the Draft Plan. Following this, a Recommended Plan will be submitted to the Parties.

1.4 ON THE LAND WE WALK TOGETHER NÄN KÄK NDÄ TR'ÄDÄL

The Dawson Planning Region is characterized by its unique landscape, diverse economy, rich cultural legacy and healthy environment. It is a region that has sustained generations of First Nations and non-First Nations people with its wealth of natural resources. The Dawson Planning Region is truly a place where diverse, and sometimes competing, land use activities exist across the landscape. Land use activities in the region include, but are not limited to, mineral exploration and development, agriculture, forestry, tourism and recreation, outfitting and trapping, traditional land use practices and subsistence harvesting. Levels of land use activity are increasing because the region is an attractive place to work, live and visit. This can lead to increasing levels of land use conflict and potential impacts to culture and the environment if not properly managed.

This Plan strives to reflect community values and strike a balance within the planning region between sustainable economic development and ecological conservation and socio-cultural preservation. This Plan tries to do that by:

- Supporting existing and future economic development opportunities that result in benefits to First Nations, the community of Dawson and Yukon;
- Maintaining and enhancing cultural and heritage values of Tr'ondëk Hwëch'in, other First Nations and other residents of the planning region; and
- Ensuring that fish and wildlife populations and their habitats remain healthy and sustainable in the long term.

1.4.1 PLANNING ISSUES

A key step in the planning process is the identification of resource values and associated issues that will be addressed in the Plan. The Commission reviewed the report prepared by the previous Commission on planning issues, updated information received from the Parties, as well as considerable information received through in person and online community consultations.

Key planning issues in the region have been summarized in the Commission's Issues and Interests Report (DRPC, 2020b) to reflect three main themes: sustainable economy; ecological integrity, conservation and stewardship; and culture and heritage. As evidenced through public feedback, there is a strong desire to strike balance within the planning region between sustainable economic development and ecological and socio-cultural preservation.

The key planning issues for each theme and value are displayed below in Table 1-1 and they are further discussed in **Section 4: General Management Direction**.

Table 1-1Key Planning Issues in Dawson Region

Theme	Key Planning Issues
Sustainable Economy	• Mineral Exploration and Development • Access and Infrastructure • Cumulative Effects • Community Growth and Recreation • Agriculture • Tourism
Ecological Integrity, Conservation and Stewardship	• Fish and Wildlife Habitat • Protected and Conserved Areas • Climate Change
Culture and Heritage	• Heritage Resources and Sites • Harvesting Rights and Activities

1.5 Terms of Reference

The Terms of Reference (TOR) for the Commission was jointly prepared by the Tr'ondëk Hwëch'in and the Government of Yukon, with assistance from the Yukon Land Use Planning Council (https://dawson.planyukon.ca/index.php/the-commission/terms-of-reference). These two governments are called the 'Parties' to the Plan. The six members of the Commission are jointly nominated by the Parties to the Plan but are not representatives of the Parties.

The TOR provides direction to the Commission for preparing a regional land use plan for the Dawson Planning Region. The TOR describes the roles of the Parties, the Council, and the Commission, and outlines the products, timelines, available budget and processes expected during the Commission's term. Roles, responsibilities and inter-relationships among the Parties and/or the Council may be further defined in other agreements.

1.5.1 Mandate of the Commission

Working with the Parties, and through public participation, the mandate of the Commission is to develop a regional land use plan for Settlement Land and Non-Settlement Land that is consistent with and achieves the objectives of Chapter 11 of the Tr'ondëk Hwëch'in Final Agreement (THFA).

1.6 Vision Statement and Guiding Principles

1.6.1 Vision Statement

The Commission created the following vision statement to guide its work:

For the Region - The Dawson Region encompasses a unique landscape that enables our community to build a diverse economy while maintaining a rich cultural legacy and a healthy environment.

For the Process - Shared and respectful use of natural resources is guided by the principles of sustainable development, respect for heritage and culture, and conservation of fish and wildlife

habitats. Ongoing community stewardship, based on consensus building, will achieve significant and lasting social, economic, and ecological benefits for all Yukoners.

For the Plan - Our regional plan will be crafted to reflect community values and will guide the integrated use and management of land, water, and resources.

1.6.2 Guiding Principles

1.6.2.1 Sustainable Development

The regional land use plan is guided by the principle of sustainable development as defined in the THFA:

> *Beneficial socio-economic change that does not undermine the ecological and social systems upon which communities and societies are dependent.*

The THFA states that regional land use planning as per Chapter 11 shall ensure that the principle of sustainable development is promoted through the land use plan; and that the social, cultural, economic and environmental policies are applied to the management, protection and use of land water and resources in an integrated and coordinated manner to ensure sustainable development.

The recommendations made by the Commission in this Plan were first and foremost considered through the lens of Sustainable Development:

- Ensuring that economic development in the region continues with the intention of providing for current and future generations, and that it is resilient, versatile and responsible. Maintaining the ecological integrity of our air, water, land, and wildlife, not only through protection of these values, but through stewardship and education.
- Maintaining and enhancing cultural and heritage values, focusing on strong communities and enhancing a way of life that Tr'ondëk Hwëch'in, and the whole community have built for generations.

Achieving sustainable development requires the following:

Sustain ecosystem integrity

Sustaining lands and waters, living things and natural processes is the fundamental priority. If the integrity of ecosystems is lost, societies and economies cannot be sustained.

Sustain communities and cultures

Maintaining communities and cultures relies on achieving success with the first priority. Sustainable communities and sustainable ecosystems are therefore intertwined.

Foster sustainable economic activities

Recognizing that economic activities are of two kinds. First, there are those that do not degrade the land or undermine communities and can be sustained indefinitely. Second, there are activities that deplete resources, but from which the land can recover. In addition, making land use decisions to encourage a self-sufficient economy is important to assist with climate change adaptation and food security issues in the future.

1.6.2.2 STEWARDSHIP

"Long ago, we were given the duty to care for our land and our communities. The beliefs and values taught to us by our Elders showed us how to care for our world. Today, we use the word "stewardship" to describe our duties towards the land, waters, animals and fish. This duty is part of our beliefs, values and customs. It is woven into our social system, our political and economic practices, and our kinship relations (Guide to Heritage Stewardship for Yukon First Nation Governments, 2018).

As reflected in their Vision Statement, the Commission was guided by the principle of community stewardship. In addition, a common sentiment heard from industry partners, non-profits, the Parties, and the public, was an emphasis on shared responsibility and respect for the land. It is recognized that collective responsibility and actions are needed for the continued health and vitality of the region. Maintaining a strong community connection to the land is achievable through stewardship.

For Tr'ondëk Hwëch'in, stewardship is an ancestral responsibility "*...premised on a duty to interact with and use the land 'in a good way;' this is central to our identity as a people. We have a deep spiritual connection to the land and water. It is our responsibility to protect our Traditional Territory as a whole, and the land, water, animals and plants that have supported our people for generations. Everything is connected*."
(Ninänkäk hoẓo̱ wëk'ätr'ènòhcha -We Take Good Care of Our Land, submission to DRPC, 2020)

Stewardship in Yukon Regional Planning

In previous regional plans in the Yukon (see North Yukon and Peel Watershed plans) the Land Designation System has used 'Integrated Management Areas' (IMAs) to identify '*the working landscape'*. The Dawson Region differs from these two regions in that it includes an active industrial landscape that also holds high ecological and cultural value. As such, the Dawson Regional Plan is introducing a new land designation, **Integrated Stewardship Area (ISA).**

Stewardship is promoted in this Plan in a variety of ways including:

- Initiatives and direction in Plan recommendations,
- The land designation system (Integrated Stewardship Areas ISAs)
- And the application of adaptive management in implementation.

The intention of the ISA is to put an emphasis on creating a landscape where human activities happen in a respectful way with the health of land at the forefront of decision making. Through management directions and thresholds, the focus will be on minimizing negative environmental and cultural impacts, restoring areas of imbalance, and protecting ecological and cultural values while allowing economic development activities to continue. Through an integrated stewardship approach the aim is to not simply manage or control the industrial use of the land, but rather to create a holistic mindset that all land users have a duty to care for the land.

This Plan, in conjunction with industry led initiatives, the work of Tr'ondëk Hwëch'in, and Territorial regulations and policy will ensure that people who live, work and play in the Dawson Region are stewards with a shared responsibility to the land for future generations.

> *It is our law to care for the land as it cares for us. We live in balance with its rhythms and respond to its demands. We make our decisions, from the smallest to the most complex, with the future health of the land and ourselves in mind. We know that the smallest action can cascade outward in time and space and will impact the integrity of the land as a whole. In turn our beliefs, thoughts and actions also cascade outward and impact our wellness as a community. … Our ancestral stewardship responsibility is premised on a duty to interact with and use the land "in a good way;" this is central to our identity as a people. (We are Dënezhu, Tr'ondëk Hwëch'in)*

1.6.2.3 Precautionary Principle

Regional planning should consider potential impacts before making resource decisions. Our limited understanding of land use impacts on other resources in the north makes this especially important. The International Institute for Sustainable Development (2007) describes the practice of the Precautionary Principle as:

> *"A lack of conclusive scientific evidence does not justify inaction on managing the environment, particularly when the consequences of inaction may be undesirable or when the costs of action are negligible."*

Due to the limited understanding of some of the ecological functions in the north, especially in relation to the prevailing threat of climate change and what that might mean for ecosystem function and species' behaviour, the Precautionary Principle enables us to make sound decisions until such a time that more evidence of the potential impacts of these decisions is known.

1.6.2.4 Adaptive Management

The Dawson Planning Region, like all regions, is subject to environmental, economic, and social changes over time, and as such, regional land use plans in Yukon are designed to be 'living documents' that are open to periodic change and revision.

Adaptive Management means responding to changing land use and/or environmental conditions as new or better information becomes available, or if the Plan is not adequately achieving the social, environmental or economic goals as intended. It is a management philosophy that applies a structured, iterative process to decision-making. The principle of adaptive management provides flexibility; and through continued research, monitoring, and reflection, adjustments can be made to the Plan and planning tools to ensure the Plan goals are met.

Adaptive management means we must:

Look, learn, and adjust as required

1.6.2.5 Priority Criteria for Candidate Conservation Areas

Healthy air, water, vegetation and wildlife are critical to sustaining life. Ensuring that ecological systems are maintained is central to the definition of sustainable development. Rather than formalized targets for conservation, the Commission has identified priority criteria for the identification of candidate conservation areas as follows.

Fish and Wildlife Habitat

Maintaining sustainable fish and wildlife populations and their habitats is a significant planning issue for the region. Key species that warrant consideration in the Plan include, but are not limited to salmon, moose, caribou, sheep, fur-bearing animals, freshwater fish, birds, and species-at-risk. Maintaining healthy terrestrial (e.g. boreal forest, taiga) and riparian (e.g. rivers, creeks, wetlands) habitats, and managing threats to these habitats (e.g. from mineral development, roads, invasive species etc.), were important considerations when selecting candidate conservation areas.

Key fish and wildlife habitat considered in this submission include:

- **Caribou** – High quality summer and winter habitat and key migration corridors.
- **Sheep** - Key habitat areas including winter range, lambing and rutting areas.
- **Moose** – Key habitat areas including late winter range and calving areas.
- **Salmon** – Adult spawning, juvenile rearing and overwintering habitat.
- **Birds** – Staging and nesting habitat (including wetland areas) and key migration corridors (including the Tintina Trench).
- **Species-at-risk** - Habitat for species identified by Federal (Species at Risk Act) and/or Territorial legislation.

Water

Water sustains life and is critical to the health of people and the land. It is also central to many traditional and cultural activities of First Nations and non-First Nations people. Water is equally important to communities and development activities. Maintaining water quality and quantity also upholds the rights under the THFA. Major River Corridors and other waterbodies containing key habitat for fish, birds and many other wildlife species received priority consideration in selection of candidate conservation areas.

Wetlands

Wetlands are sensitive areas of ecologically and culturally significance and cover approximately 10% of the planning region. They provide a variety of ecosystem services including, but not limited to, habitat for fish and wildlife, carbon storage and clean drinking water. Wetlands and surrounding areas are also significant for TH traditional and cultural activities. Wetland complexes are concentrated groupings of individual wetlands and may include both wetland and non-wetland habitats. Several significant wetland complexes exist in the planning region including in the Scottie Creek, Flat Creek and Indian River watersheds. Conserving key wetland complexes received priority consideration in the identification of candidate conservation areas.

Ecosystem Representation

Ecosystem representation is a key consideration when planning for conservation areas. The goal of ecological representation is to have a representative sample of biodiversity to ensure the long-term viability of all species and ecosystems in a given area.

One of the main purposes of the Territorial Parks and Lands Certainty Act is to provide for the protection and management of representative areas of ecological significance and other special places in the Yukon. In addition, the preamble to the Act recognizes the need to protect at least one

representative core area within each of the 21 ecoregions in the Yukon. This objective has also been reiterated in the new Yukon Parks Strategy.

Areas of the planning region that are currently under-represented in the protected area network in Yukon were considered in identifying candidate conservation areas including the North Yukon Ogilvie Mountains and McQuesten Highlands Ecoregions.

Landscape Connectivity

Ecological connectivity is important between areas of high conservation value both within and adjacent to the planning region. Retaining landscape level connections between habitats is integral to healthy, resilient and sustainable ecosystems. For example, landscape connections promote the natural movement of wildlife and function as corridors for biological genetic exchange.

Opportunities for landscape level connections within and adjacent to the planning region were considered in identifying candidate conservation areas. Existing protected and/or special management areas within or adjacent to the planning region include:

- Tombstone Territorial Park;
- Yukon-Charley Rivers National Preserve (Alaska);
- Fishing Branch Habitat Protection Area / Wilderness Preserve (North Yukon Planning Region);
- Ogilvie River Headwaters (Peel Watershed Planning Region); and
- North Cache Creek / Kit Range (Peel Watershed Planning Region).

Heritage, Social and Cultural Values

Maintaining and enhancing social and cultural values was a key consideration in the identification of candidate conservation areas. Consideration of areas identified by Tr'ondëk Hwëch'in in their conservation priorities submission played a central role in this analysis. Land stewardship and maintaining a connection to the land are central to TH culture. Heritage is not something from the past, but rather a way of life reflected in the beliefs, values, stories, knowledge and practices passed on from generation to generation. The THFA recognizes and protects this way of life which is based on an economic and spiritual relationship between Tr'ondëk Hwëch'in and the land. Other First Nations' and residents' perspectives on culture and heritage in the planning region are equally important to consider.

Key heritage, social and cultural values considered in this submission include:

Heritage Resources and Sites

- Harvestable resources (e.g. wildlife, medicines, raw materials);
- Traditional knowledge (e.g. oral histories, place names, songs);
- Trap lines, camps and caches;
- Trails and travel routes;
- Burial and sacred sites;
- Archaeological and paleontological resources; and
- Historic sites.

Harvesting Rights and Activities

First Nations and other residents of the region spend a considerable amount of time on the land participating in various harvesting activities. Tr'ondëk Hwëch'in continue to exercise their culture through traditional economic activities including, but not limited to, hunting, fishing, trapping and harvesting plants. Resource harvesting by non-First Nations people in the region is also a key part of their cultural identity. While resource harvesting has an economic component, these activities are also important for maintaining and building connections to the land, as well as a sense of stewardship.

1.7 Plan Goals

Plan goals are written to express desired future conditions in the planning region and should be used when measuring success of the Plan. Management direction provided in the Plan is organized around these goals. Following the definition of sustainable development and the vision statement, the Plan identifies 11 goals that guide the development of the Draft Plan.

Draft Ecological Goals

- Maintain healthy aquatic and terrestrial habitats to achieve sustainable fish and wildlife populations.
- Support the natural integrity of the planning region by ensuring cumulative disturbances from human activities on the landscape are reclaimed or restored.
- Preserve ecologically representative areas and important ecosystem services.
- Maintain connectivity between areas of key wildlife habitat, while considering climate driven shifts in habitat.
- Promote awareness of, and support mitigation and adaptation to, the effects of climate change on the landscape, fish and wildlife populations, and the people of the region.

Draft Socio-cultural Goals

- Promote land stewardship by upholding and enhancing cultural and heritage values of the Tr'ondëk Hwëch'in, other First Nations, and other residents of the planning region.
- Support land-based activities that strengthen connections to the land in order to promote Yukoners' health and well-being.
- Ensure traditional harvesting rights and activities are respected and sustained.

Draft Economic Goals

- Facilitate existing and future sustainable economic development opportunities and activities (both monetary-based and traditional) that result in socio-economic benefits to First Nations, the community of Dawson, and Yukon as a whole.
- Provide land use certainty and minimize land use conflicts throughout the planning region.
- Manage access infrastructure to renewable and non-renewable resources

2 Description of the Planning Region

2.1 Setting

The Dawson Planning Region is about 39 854 km^2 or 10% of Yukon. The northern extent of the planning region is bound by the contiguous boundary agreed to by TH and VGFN, whereas the southern extent is bound by the Selkirk First Nation Traditional Territory on the southeast, and Kluane First Nation Traditional Territory to the southwest. The eastern boundary of the planning region is the Peel Watershed planning region and, the western boundary is the Yukon/Alaska border.

The planning region excludes land within the City of Dawson, areas subject to subdivision planning or local area planning (West Dawson and Sunnydale), Klondike National Historic Sites, and Tombstone Territorial Park.

The planning process considers both adjacent regions and internal excluded regions in the planning process, as these areas will relate directly to land use within the planning boundaries.

2.2 Land Status

The planning region includes Settlement Lands (administered by First Nations governments) and non-Settlement or public lands (administered by Government of Yukon). The planning region also contains lands that are already administered under existing plans (such as management plans, local area plans and municipal plans). These include land within the Dawson City municipal boundary, West Dawson and Sunnydale area, internationally designated lands, National Historic Sites, Yukon Historic Sites and Tombstone Territorial Park. The Plan does not make recommendations for these specific areas but does consider them.

2.2.1 Settlement Lands

Tr'ondëk Hwëch'in has 135 parcels of Settlement Land within the planning region, this count does not include those settlement lands located within community boundaries (e.g. Tr'ochëk, Tr'ondëk Subdivision). White River First Nation has one parcel within the planning region which is land set aside without a settled claim, and therefore the rights associated with other Site Selections may apply . On Settlement Land, First Nations hold decision-making and legal powers.

2.2.2 Public or Non-Settlement Land

The Government of Yukon manages non-Settlement lands (both surface and sub-surface rights) as per the Yukon First Nations Final Agreements and the lands and resources acts of Yukon and Canada.

2.2.3 Designated Lands

There are lands within the planning region currently designated for protection. These include National Historic Sites, as well as International and Territorially Designated Lands.

Discovery Claim and Dredge No. 4 are both recognized as National Historic Sites as well as internationally, as part of the Klondike Gold Rush International Historic Park, which has sites in Washington, Alaska, British Columbia, and Yukon, all related to the Klondike Gold Rush.

Territorially Designated Lands within the planning region include Tombstone Territorial Park and the Fortymile, Fort Cudahy, and Fort Constantine Historic Site.

- Tombstone Territorial Park makes up approximately 5.3% of the planning region and was established pursuant to Schedule A of Chapter 10 of the Tr'ondëk Hwëch'in Final Agreement. The park is managed according to the Tombstone Territorial Park Management Plan, and the Commission is required to consider the park management plan when developing the regional land use plan.
- Fortymile, Fort Cudahy, and Fort Constantine are located at the confluence of the Yukon and Fortymile Rivers, and this site was established under Schedule A of Chapter 13 Tr'ondëk Hwëch'in Final Agreement.

2.2.4 Adjacent Designated Lands

Existing or proposed protected areas immediately adjacent to the planning region include Ni'iinlii Njik (Fishing Branch) Territorial Park and Kit Range/North Cache Creek within the Yukon, and Yukon Charley Rivers National Preserve located in Alaska (see figure Figure 2-1)

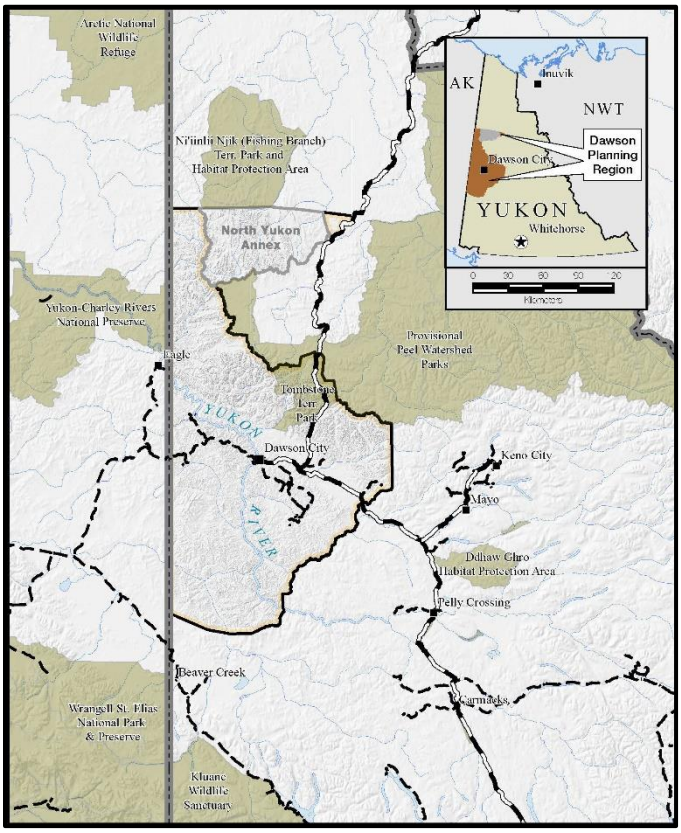

Figure 2-1 Adjacent protected lands surrounding the Dawson Planning Region (in green).

Fishing Branch is located within the North Yukon Planning Region approximately 100 km south of Old Crow and was established in 2000 under the Yukon Parks Act as set out in the Vuntut Gwitchin Final Agreement. The Ecological Reserve is exceptional primarily because of the seasonal congregation of grizzly bears to feed on fall chum salmon.

Kit Range/North Cache Creek is located within the Peel Watershed Planning Region and is approximately 973 km² in size. It is located directly above Tombstone Territorial Park and will serve to maintain the wilderness character of the area and to continue to support community cultural activities.

Yukon-Charley Rivers National Reserve is located immediately west of the planning region, within Alaska, and is approximately 10,226 km² in size. In was designated in 1980 in order to provide protection for the

entire one million acre watershed of the Charley River and a 115 mile stretch of the Yukon River.

2.3 ENVIRONMENT

The Dawson planning region is bisected by the Taiga Cordillera Ecozone in the north and the Boreal Cordillera Ecozone in the south. The Taiga Cordillera is a subarctic region that covers most of the northern half of Yukon and the southwest corner of the Northwest Territories. The Boreal Cordillera is an extension of the boreal forest zone that stretches from Labrador to Yukon.

Most of the planning region was part of Beringia, a landscape spanning northwestern North America to eastern Siberia. This unglaciated area was a refuge for plants and animals, supporting many glacial species that are found nowhere else in the world.

The majority of the region is forested but there are areas of alpine, subalpine, taiga shrub and wetlands. Wetlands cover roughly 10% of the planning region and are considered to be low in abundance relative to other areas of Yukon. Active riparian zones (areas along rivers and streams that are periodically flooded by flowing water) cover about 4% of the planning region.

The largest sub-watershed in the region is the Central Yukon, which includes tributaries of Sixty Mile River and the Indian River. The Yukon River is the largest river in the planning region and generally flows north and west to the Canada-Alaska boundary. Significant tributaries to the Yukon River include the White River and the Stewart River.

The region is underlain by continuous and discontinuous permafrost; permafrost is more widespread in the northern and higher elevation areas of the planning region.

The most distinct geologic feature of the planning region is the Tintina Trench, which runs northwest-southeast, a nearly 1,000 km fault line along the continental margin of ancient North America. To the north of the fault, rocks and mountains were formed from sediments deposited along the ancient coastline (e.g. shale, slate, sandstone and chert). South of the Tintina Trench lie sedimentary deposits, which contain a variety of minerals including asbestos, copper and gold. Gold eroding from quartz veins was concentrated by pre-ice age rivers into placer sand and gravel deposits.

Wildfires and flooding represent the two greatest natural disturbances in the region. The Klondike Plateau has some of the highest levels of fire activity in Yukon, with an average fire cycle of approximately 100 years. Approximately 0.5% of the planning region burns in any given year, although climate change projections indicate that within the next 50 years the total area burned may be seven times greater. Flooding is most common with the spring freshet, and can also occur due to ice jams that form during spring break-up or winter freeze-up.

The boreal forests of the region supports a wide range of values including wildlife habitat, ecological health, carbon sequestration, and a sustainable renewable resource economy.

Some key species in the region include, but are not limited to:

- Caribou (including the Fortymile, Clear Creek, Nelchina, Hart River and Porcupine herds), Moose, and Salmon.

2.4 People and Communities

The Dawson planning region is contained entirely within Tr'ondëk Hwëch'in Traditional Territory. It also contains areas of overlap* with the Traditional Territories of the First Nation of Na-Cho Nyak Dun and Vuntut Gwitchin First Nation.

**White River First Nation (WRFN), who are not a self-governing First Nation under the UFA, have identified a land selection in the southeastern corner of the region. As the regional land use planning process is being carried out in accordance with the TH Final Agreement, "Traditional Territories" is defined in the THFA in relation to the geographic area identified as a Yukon First Nation's Traditional Territory on the map referred to in 2.9.0 of the THFA, and as agreed upon between First Nations through Contiguous Boundary Agreements.*

The town of Dawson City, located 536 km north along the Klondike Highway from Whitehorse, is the only major permanent community in the planning region. The Yukon Bureau of Statistics estimate that as of December 2017 there was a population of 2,220 people residing in Dawson and the immediately surrounding area (including West Dawson, Sunnydale, Rock Creek and Henderson Corner), which represents approximately 5.7% of Yukon's total population of 38,630.

For generations, Tr'ondëk Hwëch'in people have lived and travelled in a large area of the Yukon River valley and its tributaries, spanning the Yukon-Alaska border. They relied heavily on the salmon runs of the Yukon River and continue to utilize fish camps along its shores. They hunted big game, trapped furbearers and harvested other resources by moving to different areas of the land according to the seasons. They interacted with other groups through extensive trading networks to exchange resources.

Today, Tr'ondëk Hwëch'in maintain strong cultural connections to the region. Language, song, and celebration, in addition to cultural and subsistence land use, continue to grow and thrive.

The first direct European influence came to the region when Jack McQuesten established a trading post at Fort Reliance on the Yukon River in 1874. The town of Fortymile was established ten years later to accommodate miners and traders who had moved to the area. The discovery of gold in the Klondike valley in 1896 led to the establishment of Dawson City and the subsequent Klondike Gold Rush. By the summer of 1898, Dawson City was the largest city in Canada west of Winnipeg, with a population of 40,000. Its population quickly declined to 5,000 people in 1902.

Since first contact with Europeans, Tr'ondëk Hwëch'in people and their traditional economy have been significantly impacted by economics, epidemics, and conflicts well beyond their homelands. Settlement areas important to the Tr'ondëk Hwëch'in within the region include Tr'ochëk and Moosehide/Jëjik dha dezhu kek'it.

Several settlements with permanent residents occur within the region outside of the community of Dawson. These areas include Sunnydale and West Dawson, Bear Creek, Rock Creek, and Henderson's Corner. A small number of residential properties also occur along major highway corridors.

2.5 Economy

The Region boasts a diverse economy that includes mining, tourism, agriculture, and forestry alongside a traditional economy characterized by a stewardship and subsistence mode of

production. The government sector is an important employer in the region and the fastest growing sector of the regional economy is in art, recreation, and cultural resources.

Transportation

The Region contains an existing highway network that is important to the Region and Territory for transporting goods and services to the Region, and provides access to the North and Alaska. The notable routes in the region include the Dempster Highway, the Klondike Highway, the Top of the World Highway. The Region's river network is also an important historic and modern transportation link for industry and provides tourism and cultural benefits to the Region.

2.5.1 Non-Renewable Resources

For over a century, economic development in the planning region has been closely linked to its mineral deposits, and there is a positive outlook for the long-term health of the mining industry in the Yukon. Hard rock (quartz) mining and placer mining are distinct land use activities; each has its own pattern of exploration, development, production and reclamation. 9.7% of Dawson's resident employment is in non-renewable resources (as compared to 2.3% of Yukon's population).

Hard Rock Mining

Hard rock minerals are base or precious metals including gold, siler, copper and others found in veins or loads. Hard rock mineral exploration is a significant economic activity within the planning region. In 2018, exploration expenditures in the region reached a record high of $147 million. As of July 2019, there were 14 active mineral exploration projects in the planning region being undertaken by nine companies or individuals, and as of September 2019, there were 39,466 active quartz claims in the planning region covering an area of 7779 km^2, or 19.5% of the region.

Placer Mining

Due to its unglaciated terrain and extensive mineralization, the Dawson Mining District the most productive placer mining district in the territory. In 2017, placer gold production in the Yukon was an estimated value of $120 million. As of December 2018, there were 18,291 active and pending placer claims in the planning region covering an area of 2,556 or 5.6% of the region. Claims are primarily located within the watersheds of the Klondike, Indian, west Yukon (Fortymile, Sixtymile and Moosehorn Range rivers) and Lower Stewart rivers. More than 1,900 km of placer streams (i.e., major gold bearing streams with significant mechanized placer mining operations) are found within the planning region.

2.5.2 Renewable Resources.

According to the 2016 census, 1.1% of Dawson resident employment is in renewable resources (agriculture, forestry, fishing, hunting), the same proportion as for Yukon's population (also 1.1%)- this number is not including employment in the tourism sector.

Timber

Timber harvest is active in the Dawson Region and it began in the late 19th Century. Forest management in the region is guided by the Dawson Regional Forest Resources Management Plan which was developed in partnership between Government of Yukon and Tr'ondëk Hwëch'in. Timber

harvest requires road, trail or river access and often, road access created by other land users creates opportunity for the efficient harvest of mature timber.

Agriculture

The Dawson planning region contains some of the best agricultural land in the Yukon and current agricultural production in the Dawson region is geared towards the local market. Yukon Farm Products and Services guide lists 12 farms in the Dawson area, supplying vegetables, herbs, berries, chicken, eggs, pork, preserves, syrups, ornamentals, bedding plants, field crops, hay and dairy products. Potential exists to expand food production and value-added operations.

In recent years, TH has continued the development of the Teaching & Working Farm (Nän käk nishi tr'ënòshe gha hëtr'ohọh'ay; On the land we learn to grow our food). The farm is an important education tool, employer, and revenue generator for TH and is an important program within the community. The farm supplies local vegetables, eggs, poultry and pork for TH events and market sale.

Traditional economy

Traditional economy is based on the harvest of natural resources; it provides meat, fish, berries, fuelwood and income from fur. It also provides raw materials for cultural products. There are direct and indirect values associated with the traditional economy that are linked to health and wellbeing, spirituality, community, culture, and stewardship.

The region includes 42 trapping concessions for harvest of furbearers such as wolf, lynx, beaver and marten. Several of these concessions are held by Tr'ondëk Hwëch'in First Nation (approximately 40%).

Tourism

The Dawson planning region offers considerable opportunities for tourism, and the community of Dawson includes well-established tourism services, attractions, accommodations, and businesses. Tourism in this region is a significant contributor to the local and territorial economies. While the Yukon is marketed primarily as a wilderness destination, the Dawson region uniquely represents other tourism values, including the rich cultural history of the Tr'ondëk Hwëch'in, the place of the Klondike Gold Rush, and contemporary placer mining.

Tourism provides seasonal and year-round jobs for local residents, as well as seasonal jobs for transient summer workers. Prior to the COVID pandemic, there was significant increases in visitor numbers and tourist spending, with the addition of new attractions such as the Inuvik to Tuktoyaktuk highway opening, and television production in Dawson.

The region also includes 4 big game outfitting concessions, which provide employment and income for outfitting operations in the region.

2.6 Climate Change

Climate change is anticipated to have significant impact upon the region. Warming trends in the Dawson planning region exceed those of southern regions of Canada; from 1955 to 2004 at weather stations in Dawson and Mayo reflect a warming trend of approximately 6ºC per century. Trends in precipitation over the last century show greater spatial variability, with a 29% per century decline in

precipitation in the Dawson area, yet significant increase in the Mayo (27% per century) and Pelly (30% per century) areas.

It is expected that temperature increases will be greater in Arctic and sub-Arctic regions than in southerly parts of Canada (Statistics Canada, 2011). Models also indicate that the annual average precipitation amounts are expected to increase by 10% to 40% in the Dawson area, while drier conditions are expected to the north and east of Dawson City. More precipitation is expected during the winter months than in the summer.

A changing climate can affect many of the interests and activities in the Dawson planning region. It is therefore important that consideration be given to both challenges and potential opportunities associated with climate change during the planning process.

3 Plan Concepts

The Dawson Regional Land Use Plan broadly describes the future vision of the region as recommended by the Commission. The Plan uses the following tools to communicate this vision and to guide land use management decisions in the Dawson Planning Region. These concepts have been selected to ensure consistency with good planning practice and the applied concepts in other regional land use plans in Yukon:

1. Landscape Management Units
2. Land Use Designation System
3. Special Management Direction
4. General Management Direction
5. Cumulative Effects Management

3.1 Landscape Management Units

The Dawson Planning Region has been divided into discrete areas of land. Consistent with other regional land use plans, these are called Landscape Management Units (LMUs). Each LMU is identified and delineated from the others based on a review of human use, ecological properties, current of anticipated levels of development, and/or identified land use issues. Each LMU has a distinct management intent which translates to differences in how they are designated for land use. The Commission has developed statements of management intent for each LMU, and they can be found in **Section 5.0**.

As much as possible, the boundaries of each LMU follow an existing natural (e.g. watershed, major river), or man-made (e.g. highway, TH land selections) boundary. Where applicable, LMU boundaries have been delineated to be consistent with adjacent regional land use plans.

The Plan recommends 23 LMUs within the Dawson Planning Region (see **Map 2: Appendix A**). The management intent for each LMU has been included in **Section 5.0**, including the recommended land use designation and any special management directions recommended.

3.2 Land Use Designation System

The purpose of a Land Use Designation System is to describe the management intent of each identified Landscape Management Unit (LMU). Each LMU is assigned a land use category, or zone, depending on the priority values and land use issues identified within the area, and the sensitivity of each area to disturbance.

Based on identified values and sensitivity to disturbance, different areas in the Dawson region require different land management. Some areas are more sensitive than others and require careful land management, whereas others may be less sensitive or have important economic features.

The designation system recommended for the Dawson planning region is similar to those used in other planning regions in Yukon with slight variations. It is composed of three major categories to guide the management of land use activities:

- Special Management Area; and
- Integrated Stewardship Area; and
- Overlay Zones: Corridor Areas

3.2.1 Special Management Areas

A Special Management Area (SMA) is a conservation area identified and established within a Traditional Territory of a Yukon First Nation under a Final Agreement. The level of protection within an SMA is defined in a management plan developed for each area, with management shared among the Yukon Government, First Nation Governments, and Renewable Resource Councils, depending on the area and the jurisdiction. Each SMA contains special management directions, which are provided in **Section 5.0**.

SMAs have been further categorized as follows:

Special Management Area I

An SMA I is an area managed for maximum conservation and no new industrial land use or surface access is allowed. All lands within these areas should be permanently withdrawn from any new industrial land use dispositions and surface access. These areas also require a management plan and a legal designation, which should be determined by the Parties through implementation, provided that the Plan's management intent and direction is respected.

Special Management Area II

An SMA II is an area managed for high conservation of ecological and cultural values and the intent is for long-term maintenance of wilderness character. It is not the Commissions intent that these areas receive legal designation as protected areas. Restricted industrial land use is allowed for existing mineral and other land use rights within the area, however all other lands not currently holding mineral or other land use tenure should be withdrawn on either an interim or permanent basis. The recommendation for interim or permanent withdrawal is identified in the LMU descriptions of the SMA IIs in **Section 5.0**. Restrictions to new surface access also apply depending on the area, which are further described in **Section 5.0**.

Special Management Area II

Given what is stated above regarding the Commission's intent for the SMA II land designation, we would like to engage with the community and plan partners to hear your thoughts on this land designation.

How do you feel we should approach these areas in the Recommended Plan?

Share your thoughts with us…

Visit our Engage Dawson website to let us know what you think.

3.2.2 Integrated Stewardship Areas

The Integrated Stewardship Area (ISA) designation is used to identify areas where higher levels of industrial and other development can occur. The intent of all ISAs is to enable existing and future economic activities for both surface uses and subsurface resource extraction.

ISAs allow for existing and new industrial land uses, including mining and exploration, forestry, agriculture, and other land use activities. Existing and new surface access is also allowed. Land management in these areas is based on the concept of stewardship as described in **Section 1.6.2.2**. Land use in these areas is subject to existing regulatory processes and special management directions. which depend on specific values or issues identified in each LMU.

ISAs are divided into distinct sub-zones to further indicate the relative level of conservation or development focus (see **Section 3.2.2**). These sub-zones are differentiated by their cumulative effects indicator thresholds, or *levels*. Cumulative effects indicators are tracked, monitored and compared to their sub-zone's threshold to determine conformity with each LMU.

3.2.3 Corridor Areas

In addition to SMAs and ISAs, some areas require special consideration and additional management direction to balance competing land uses and address specific planning issues. These areas require an overlay over the existing designations and are called Corridor Areas. In these areas, multiple land uses such as industrial activities, transportation, infrastructure development, tourism and recreation, and traditional economic and subsistence use intersect with key ecological values. Corridor Areas may require specific management plans, or in some cases be contained within a sub-regional plan, to address these overlapping or complex land use issues.

- Highway Corridors are defined as being 1km on both sides from center line of highway.
- Disturbance within Highway Corridors are not included in disturbance thresholds for cumulative effects management **(see Section 3.2.3)**.

Major Highway Corridors
Dempster Highway Corridor*
Klondike Highway Corridor**
Top of the World Highway Corridor.
* *sub-regional planning is recommended as per the TOR for the Dawson Regional Land Use Plan* ** *Klondike Highway Corridor is contained within LMU #13 Klondike Valley which is recommended for sub-regional planning*

3.2.4 OTHER AREAS

In accordance with the THFA and TOR, there are areas within the planning region that will not be provided a designation as they will not be planned for by the DRPC.

- Areas subject to local planning (i.e. the City of Dawson and the West Dawson / Sunnydale Local Area)
- Tombstone Territorial Park
- The Klondike National Historic Sites

Table 3.1 on the next page describes the proposed Land Use Designation System used for the Dawson Planning Region in greater detail.

Table 3-1 Summary of land designation system for Dawson Region

ISA: Integrated Stewardship Areas			
Category	**Sub-category**	**Management Intent**	**Description**
Integrated Stewardship Area *Areas where development can occur, subject to special and general management direction and monitoring of cumulative effects indicators.*	**I**	Lowest Development	• Very high ecological or heritage/cultural value within a sensitive biophysical setting • The priority in this area is to maintain ecological integrity and cultural resources • Lowest threshold for development
	II	Low Development	• High ecological and cultural values within a moderately sensitive biophysical setting • The priority in this area is to maintain ecological integrity and cultural resources and minimize land use impacts • Low threshold for development
	III	Moderate Development	• Moderate ecological and cultural values within a moderately sensitive biophysical setting • Conservative threshold for development
	IV	Highest Development	• Lower ecological or heritage/cultural value within a moderately sensitive biophysical setting • Higher threshold for development
	FPA	Future Planning Area	• Higher development pressure in the periphery of Dawson City • Highest levels of land use – no cumulative effects thresholds

SMA: Special Management Areas			
Category	**Sub-category**	**Management Intent**	**Description**
Special Management Areas *Areas managed for conservation of ecological and cultural resources, and long-term maintenance of wilderness characteristics.*	**SMA I:**	**Maximum conservation** *Maintain ecological integrity and cultural values with no industrial land use allowed*	• Recommended for permanent withdrawal from any new industrial land use and surface access • Requires a legal designation • Requires the development of a management plan
	SMA II:	**High conservation** *Maintain ecological integrity and cultural values while allowing for low levels of carefully managed land use activities.*	• Existing surface and sub-surface rights (e.g. mineral, oil/gas, forestry) rights recognized • Recommended for permanent or interim withdrawal from staking in all other areas (specific to LMU) • Recommended that lapsed tenure should not be renewed, and no new mineral staking or dispositions allowed • Surface access restrictions (e.g. thresholds) • Very low development threshold allowed under strict special management conditions

Overlay Zones: Corridor Areas *(Overlay Zones overlap the above categories.)*		
Corridor areas are for features where adjacent land requires special consideration and additional management direction beyond the designation.	**Major Highway Corridors**	Lands within the Dempster, Klondike, and the Top of the World Highway Corridors require special management (see **Section 4.1.2.1)**

3.3 Special Management Direction

Special management directions are conditions to be applied to specific Land Management Units where development is allowed. While industrial land uses are allowed within ISAs, and within existing tenure in SMA II, it is important that effects from development to priority values are avoided or minimized. This Plan aims to accomplish sustainable development through recommended special management directions. In general, the recommended special management directions fit into the following categories:

- Reduction in spatial and temporal overlap of industrial activities and ecological and cultural values. For example: timing windows for certain activities, special management for key species, no development areas;
- Minimization of adverse effects from ground disturbance to key values. For example: management strategies, access management planning;
- Coordinated development that allows for best use of land first and reduction in land use conflicts; and
- Recommendations that support future resource extraction projects.

3.4 General Management Direction

General management directions are meant to guide land use decisions in the planning region. They are communicated in this Plan in the form of strategies and recommendations and are intended to be integrated into existing regulatory processes, such as YESAB (Yukon Environmental and Socio-economic Board) project assessments and other land application review processes. General management direction for the Plan is organized around a results-based management framework.

3.4.1 Results Based Management Framework

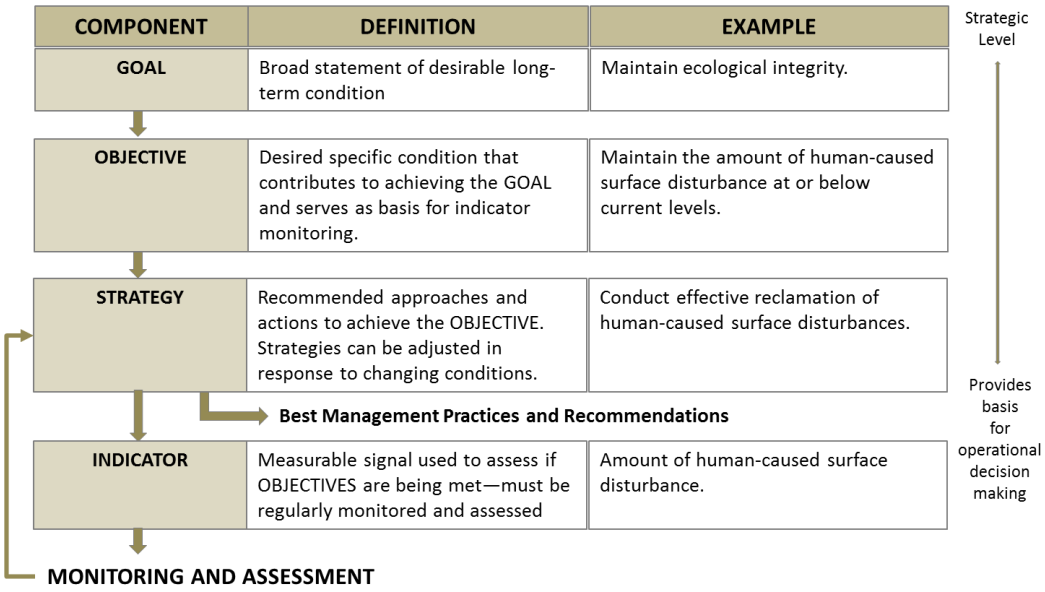

Figure 3-1 Diagram of Results Based Management Framework

A results-based management framework is a structured way to determine if the Plan goals and objectives are being met. It is a way to link general, higher-level objectives with more detailed, operational decisions. The results-based management framework and its various components are summarized in Figure 3-1 above. Goals and objectives state the desired management outcomes. Strategies are approaches and actions that land managers can use to achieve specific objectives. Direction may include ways of working that can reduce the time, intensity, impact, or duration of land-use activities.

Monitoring and assessing indicators are necessary to determine if goals and objectives are being met. Strategies can be adjusted in response to the changing status of indicators, facilitating an adaptive management process.

3.5 Cumulative Effects Management

Cumulative effects are the net changes to values in the environment and/or society that result from a land-use activity in combination with other past, present, and future activities. Managing cumulative effects is best accomplished by applying a suite of integrated and coordinated actions to land management, such as project assessment, mitigation, government policy, legislation and planning. Therefore, in applying a results-based management framework (described in **Section 3.4.1**. above) to land management, cumulative effects (or their indicators) need to be tracked and evaluated determine if goals and objectives are being met. Future land management decisions, such as Plan conformity checks or changes to the Plan (**Section 6.0**), are to be informed by these indicators.

3.5.1 Cumulative Effects Indicators

An evaluation of cumulative effects is partially achieved through the measurement of indicators (e.g., How much impact are we having on the land?). There are multiple indicators that could be selected for each value, and it can be difficult to determine which indicator is the best. In general, indicators should be:

Practical: Is the indicator feasible to monitor? Is it easy to understand?

Accurate: Does the indicator accurately reflect changes in the value?

Sensitive: How sensitive is the indicator to development or mitigation?

Relevance: Is the indicator related to the applicable impact or value?

For example, if "caribou" is selected as a value, indicators might include caribou population numbers, availability of suitable habitat, or community input on availability of caribou.

The two disturbance indicators* described below were chosen to keep consistent with other Yukon regional plans and because they indirectly relate to many regional values or issues like habitat amounts, habitat intactness, access and hunting pressure. Put more succinctly, ensuring a sustainable threshold for these two indicators should ensure impacts to several values are monitored, both directly and indirectly. However, there are a number of other potential indicators that could more directly relate to values. Some of these are discussed after the recommended indicators. The Commission is interested in hearing feedback on any of these indicators and others as they prepare their Recommended Plan.

** Note: Disturbance within an identified Highway Corridor (1km on either side of center line of highway) is not included in linear and surface disturbance calculations.*

3.5.1.1 Surface Disturbance

Surface disturbance refers to the area of land physically disturbed by human activities. This includes activities such as structures, mine sites, roads, trails, helicopter pads, gravel quarries, and seismic lines. Essentially, any activity that results in a physical footprint on the landscape. These footprints have a direct impact on habitat, and as such, tracking surface disturbance is an effective tool in cumulative effects management. It is measured as the percentage of a given area (e.g., Land Management Unit) that is disturbed.

Surface disturbance can be determined using satellite imagery together with project proposals or reports. It can also be used with maps of values to determine other indicators such as disturbance to high valued caribou habitat.

Discussion: Surface Disturbance Measurement and Recovery

Which of the following should be included in the calculation of surface disturbance and cumulative effects recovery?

1. Surface disturbances facilitate travel by wildlife and people. In forested areas, a surface disturbance can be considered recovered when vegetation growth is over 1.5 metres.
2. Surface disturbance results in increased run-off and sediment loading. Recovery is when increased run-off and sediment loading has returned to pre-disturbance levels.
3. Major surface disturbances can result in a change to the topography of an area. Recovery is when contours roughly match the original contours.

Visit our Engage Dawson website to let us know what you think.

3.5.1.2 Linear Density

Linear density is the total length of all human-created linear features (roads, seismic lines, trails) in a given area (represented as km of access per km² of area). Linear density can be used as an indicator of fragmentation (the division of larger areas of habitat into smaller areas) and accessibility.

As linear features increase on the landscape, access into previously inaccessible areas increases. In turn, greater accessibility means added opportunities for wildlife harvesting, increased predation rates, and a change in how people and wildlife use the land. Given the significant implications of added linear density, it is an effective tool in cumulative effects measurement.

Linear density can be estimated using satellite imagery together with project proposals and/or reports. Like surface disturbance, it can also be used with maps of values to determine other indicators such as access to high valued wildlife habitat.

Linear Density Discussion

Measurement of linear features as indicators of fragmentation and accessibility is difficult, as there are limitations on measurement.

Option 1: Linear features less than 1.5 metres wide are exempt from calculations. This is more reflective of the intent of tracking linear density, but measurement has proven to be inaccurate.

Option 2: Linear features less than 3 metres wide are exempt from calculations. Measurement using current technology is much more accurate, but the impact of smaller linear disturbances are ignored.

Share your thoughts with us…

Visit our Engage Dawson website to let us know what you think.

Research Recommendation	For indicators that rely on satellite imagery, different sources of imagery should be evaluated based on their cost, ease of use, resolution, update frequency and how well they can meet the definitions of the indicators. These definitions may need to be adjusted to fit the most appropriate type of imagery via a Plan amendment.

3.5.1.3 OTHER INDICATORS

Water

Water is an important and complex value for the region. In the 2000s, a "reference condition approach" was developed to monitor water quality of placer streams vs unmined streams. Several issues with this approach were found (Fisheries and Oceans Canada, 2018), and it appears to no longer be used for land and resource decisions. However, findings by Fisheries and Oceans Canada (2018) and the Yukon Placer Secretariate (2017) provide ideas for developing water indicators.

Salmon

Salmon are another important and complex value for the region and are heavily affected by factors outside of the region. To some extent water indicators would address salmon habitat concerns. **Section 4.0** recommends researching and mapping salmon habitat to support management directions prohibiting disturbing important habitats. As such, salmon-specific indicators may not be needed at this time.

Wetlands

Surface disturbance (or linear density) within mapped wetlands (or certain classes of wetlands) could easily be used as a broad indicator. Indeed, General Management Directions in **Section 4.0** prohibit disturbance to bogs and to 40% of fens. However, disturbance to the hydrology of land upstream and downstream of wetlands can affect the wetlands themselves – this makes developing a more meaningful indicator difficult. In addition, wetland mapping that would be used for indicators is done at a regional or watershed scale – this may not always be appropriate for on-the-ground decisions.

Ridge Tops Important for Caribou Migration

Certain ridgetops have been described as very important for the summer migration of the Fortymile caribou herd. These ridges are mapped and integrated with disturbance mapping to form a useful indicator.

Access Intensity

Linear density, as described above, gives an indication of access *extent,* but not necessarily access *intensity*. Traffic volumes or density of different road types could be indicators that address access intensity more directly.

Stewardship

Stewardship has been identified as a guiding principle of the Plan. As such, components of this important concept may provide for a relevant and meaningful indicator of cumulative effects in the Dawson planning region. How this concept could be used as an indicator would require much further research, however initiatives of this nature are currently being discussed at Tr'ondëk Hwëch'in in partnership with an independent researcher.

Research Recommendation	Other indicators should be evaluated for use regional plans. These evaluations should include their biological and cultural relevance as well as technical details and associated costs. Indicators of water quality and stewardship are priorities.

3.5.2 Cumulative Effects Thresholds

The thresholds recommended in the Plan provide guidance on the acceptable limits of human-caused disturbance in every LMU. The designations in Table 3-1give guidance about their intent, but they need to be able to be defined in a clear-cut, measurable, objective way. Thresholds for each designation achieve this.

These thresholds are not intended to be an absolute cap on activities. In the Integrated Stewardship Area, the Plan uses these levels to try and balance potential risks to ecological and cultural resources with economic development.

In order for indicators to be evaluated relative to an LMU's thresholds, they need to be tracked*. Some indicators can be periodically mapped and evaluated using satellite imagery. However, the status of indicators may need to be updated in between satellite-based re-evaluations. This may done using information in project proposals and project year-end reporting.

**Note: Disturbance within an identified Highway Corridor (1km on either side of center line of highway) is not included in linear and surface disturbance calculations.*

Policy Recommendation	Detailed (i.e., spatial) project proposals and year-end reporting should be mandatory for all Class 3 and 4 projects.
Recommended Action	An indicator tracking system should be developed within Yukon Government that integrates satellite derived data, project proposals, and project year-end reporting. This system is to be accessible for use in conformity checks and in proposal development.
Recommended Action	Standard estimations of disturbance indicators for different types of Class 1 and 2 projects should be developed so that some of their cumulative effects may be estimated without being onerous on proponents of smaller projects.

As discussed in the options in Table 3-2 these levels are linked to each Integrated Stewardship Area (ISA) zone, with the exception of the Klondike Valley **LMU #13. LMU #13** is exempt from surface and

linear disturbance thresholds as the appropriate indicators and their thresholds will be selected through the sub-regional planning process for that LMU.

If an indicator level in a zone is reached or exceeded, the result may be undesirable effects on ecological and cultural resources. Land-use decisions may be affected.

There are three threshold levels:

Precautionary threshold

- Up to this point, disturbance is evaluated using coarse and preliminary mapping only.
- Exceeding the precautionary threshold triggers more detailed disturbance mapping.
- Only necessary if detailed disturbance mapping is missing.

Cautionary threshold

- Means that disturbance indicators are close to reaching undesirable levels.
- Provides an early warning signal.
- Allows time for pro-active management to avert or limit potential impacts.
- Management actions may include:
    - Prescribing specific practices to project proponents;
    - Researching the health of values that are at risk; and
    - Improving the indicator mapping.

Critical threshold

- Represents the point at which the indicators have reached or surpassed acceptable levels.
- Projects that could surpass the critical threshold for that LMU will be found not to conform to the Plan during a YESAA (Yukon Environmental and Socio-economic Assessment Act) screening/evaluation. This will influence the assessment and permitting stages of the project.

Policy Recommendation	The Parties, in collaboration with the Yukon Land Use Planning Council, should work with YESAB to make Plan conformity checks more transparent. This work should include clarifying information requirements in project proposal for determining conformity. A worksheet or separate application should be considered.
Recommended Action	An on-line platform should be developed that would allow proponents to review information requirements and management directions depending on the project's location, type, and size. This information can be used by proponents to design and/or amend their project proposals, which may reduce potential delays in the assessment and permitting process. Furthermore, this application aligns with the Commission's desire to have proponents working in the Dawson planning region to take on a higher role as "stewards" of the land.

3.5.3 Cumulative Effects Framework

Addressing cumulative effects requires the measuring of specific indicators that represent values that are important in the area. However, measuring or tracking these indicators is not enough. A framework is needed to say how this information is used to guide land-use decisions, and ties together the concepts of indicators, levels, and designation system. Furthermore, a framework can highlight the ways in which the tracking of indicators can inform Plan amendments or land-use decisions. In these ways, the framework is critical to the *adaptive management* of the region.

The framework is generally consistent with other Yukon regional land use plans including the Peel and North Yukon. This approach relies on the tracking of two indicators described previously, surface disturbance and linear density. Furthermore, the four tiers of the Integrated Stewardship Areas are differentiated by their cumulative effects thresholds, as shown in Table 3.2. Thresholds are also applied to the Special Management Areas. These zones are shown in the Plan's zoning **Map 2: Appendix A**.

An important aspect of this approach is that the indicators are defined the same throughout the region, and those specific definitions are what inform Plan conformity. The indicators would initially be defined as in the Peel Watershed Regional Land Use Plan, and would consider tree cutting, soil or hydrology changes, widths of linear features down to 1.5m, and would not include disturbances that meet the Plan's definition of "Recovered".

Disturbances for the region have not been recently determined. However, the Commission, in collaboration with the Yukon Government, Tr'ondëk Hwëch'in and others is using a computer model called ALCES to help estimate current disturbance levels and estimate them in the future. At this time, the model considers only disturbances from placer and quartz mining and exploration, and does not yet look at the interaction between these disturbances and values like moose or caribou. The Commission used preliminary results and considered their tolerance for further development to

Cumulative Effects Framework Discussion

As this is a draft plan, these thresholds may change based on improvements to the ALCES model, new disturbance mapping, and feedback to this Draft Plan. The Commission staff will continue to work with a Cumulative Effects Working Group (comprised of staff from the Commission, the Yukon Government, Tr'ondëk Hwëch'in and other cumulative effects researchers) and with an ALCES consultant to better understand and manage cumulative effects.

The cumulative effects frameworks in the North Yukon and Peel regions were developed primarily to balance oil and gas activity with the habitat needs of the Porcupine Caribou Herd. However, the Dawson Region is more complex with multiple industries and wildlife values. This added complexity has also been considered. To help focus ALCES modelling in the future, the Commission has also selected the key wildlife value for each ISA.

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draft disturbance thresholds in Table 3.2. The ensured that the threshold for each ISA exceeded current disturbance levels to allow for continued development.

Table 3-2 Proposed levels of cumulative effects indicators for each Designation. Cumulative effects thresholds are calculated within each LMU of the Integrated Management Area.

Designation	Management Intent	Cumulative Effects Indicator	Precautionary Level*	Cautionary Level**	Critical Level
SMA I	No new disturbance		Tracking disturbance is unnecessary in the SMA I since no new disturbance is allowed.		
SMA II	Disturbance only in connection to existing surface and sub-surface rights		Thresholds align with ISA I or ISA II, depending on the LMU. These are defined in those LMU's Special Management Directions in Section 5.0.		
ISA Zone I	Lowest development	Surface disturbance	0.04%	0.19%	0.25%
		Linear density	0.04 km/km²	0.19 km/km²	0.25 km/km²
ISA Zone II	Low development	Surface disturbance	0.15%	0.75%	1.0%
		Linear density	0.15 km/km²	0.75 km/km²	1.0 km/km²
ISA Zone III	Moderate development	Surface disturbance	0.375%	1.875%	2.5%
		Linear density	0.375 km/km²	1.875 km/km²	2.5 km/km²
ISA Zone IV	Highest development	Surface disturbance	0.75%	3.75%	5.0%
		Linear density	0.75 km/km²	3.75 km/km²	5.0 km/km²

4 General Management Direction

This section provides general management direction for the Dawson Planning Region. General management direction identifies specific recommendations, strategies, and conditions of development that will assist land managers and assessors to meet Plan goals. The content in this section is informed by the Commission's direction, expert input (stakeholders, technical working groups, etc.), public input, YESAB project recommendation reviews, other land plans, and external research.

These recommendations and strategies are designed to achieve the Plan's core principle of sustainable development. This section is organized around the three major themes:

- **Sustainable Economy;**
- **Ecological Integrity, Conservation and Stewardship; and**
- **Culture and Heritage.**

Much of this section provides direction for areas where industrial land use activities are allowed—the ISA land category.

How to read this section

This section of the Plan is intended to be read and considered in its entirety. Economic, ecological, and cultural values in the Dawson planning region are complex and connected in many ways. For example, when considering the General Management Directions (GMD) for a value (e.g. caribou or moose), users of the Plan should also cross-reference other applicable sections that are directly related to the management of those values (e.g. transportation and access).

Each section below follows the same general format, which consists of:

Topic Overview: a broad overview of the value or resource being discussed. This sub-section is not meant to reiterate all related resource information. Rather, it is meant as a summary of the main attributes of the topic being discussed.

Key Planning Issues: A summarized list of *what the problem is* for the value or resource. The issues listed should connect to the stated objectives and recommendations.

Objectives: Statements developed by the Commission that indicate *what they would like to achieve* for that particular value or resource.

Planning Strategy:

How the objective can be achieved. The following table (Table 4-1) summarizes the difference between **management practices** and **recommendations**.

Table 4-1 Summary of Planning Strategy for General Management Directions

<table>
<tr><td>Recommended Management Practices</td><td colspan="3">Consist of approaches or actions to be used by proponents, land users and project assessors to help achieve Plan objectives. While Plan objectives define “what” outcome is intended for a particular value, strategies describe “how” the desired outcome will be achieved.</td></tr>
<tr><td rowspan="3">Recommendations to the Parties</td><td rowspan="3">Consist of broad guidance to the Parties on the use and conservation of land, water and other renewable and non-renewable resources in the planning region.</td><td>Policy Recommendations</td><td>Direction on land use issues and their management</td></tr>
<tr><td>Research Recommendations</td><td>Topics to be investigated in more detail or information gaps to be filled.</td></tr>
<tr><td>Recommended Actions</td><td>Work to be undertaken by the Parties</td></tr>
</table>

All Recommended Management Practices and Recommendations to the Parties are summarized in **Appendix B**.

Special Management Direction

For a discussion of how specific management direction is applied to each LMU, see ‘Special Management Directions’ for each LMU in Section 5.0 of this Plan. An overview of the ecological, cultural and economic values and resources referenced in this section is provided in Maps 1-6, Appendix A. Detailed maps and descriptions of resource values are contained in the *Dawson Planning Region Resource Assessment Report* (RAR) (DRPC 2020c).

The management direction proposed in this Plan can be integrated into existing processes, such as the land application review process. This Plan assumes hat whenever possible and practical, recommendations and strategies will be considered and implemented. Other management plans in effect or in preparation for the region should be consulted for additional direction and guidance, as required (refer to section *3.5 Management Plans and Other Policies* and *3.7 Best Management Practices* of the RAR, DRPC 2020c)

4.1 Sustainable Economy

The Dawson planning region contains significant economic interests. The Plan considers a range of renewable and non-renewable land uses and sectors, including mineral exploration and development, access and infrastructure, community growth and recreation, agriculture, forestry, and tourism. Sustainable development, as defined in the THFA, is a key guiding principle in the development of the regional land use plan. To ensure that development occurs with the intention of providing future generations with the wealth and abundance that the land currently provides, the Plan will need to balance economic interests with other ecological, cultural, or social values.

This section of the Plan describes objectives and strategies designed to achieve the following Plan goals related to a sustainable economy:

Draft Sustainable Economy Goals
• Provide land use certainty and minimize land use conflicts throughout the planning region. • Facilitate existing and future sustainable economic development opportunities and activities (both monetary-based and traditional) that result in socio-economic benefits to First Nations, the community of Dawson, and Yukon as a whole. • Manage access infrastructure to renewable and non-renewable resources.

4.1.1 Mineral Exploration and Development

Mining and mineral prospecting/exploration is a major contributor to Yukon's economy, with mineral production estimated at $460 million per year. The Dawson planning region has tremendous mineral potential and contains extensive opportunities for mineral exploration and development for both hard rock and placer mining. The Dawson Goldfields have been cited as a significant producer of gold in the Yukon over the last century. The mining industry, and in particular placer mining, is strongly tied to the socio-economic culture of the community of Dawson, and the history of the Klondike Gold Rush continues to bring visitors to the area from all over the world. As was indicated through public comments:

> *"The geology of the Klondike has sustained the Yukon through thick and thin for generations and every effort needs to be made to ensure a continuation of a robust mineral and exploration economy which is the heart of the Yukon culture"* (Survey response, 2019)

> *"It seems that mining and mineral exploration are blamed the most, they are a very important part of our culture, our community, our customs, economy and ability to have the variety of businesses and supplies available in our community. The culture of the mining community, some of which are now 6th generation should also be included in your considerations"* (Survey response, 2019)

The conflict between existing and future mineral exploration and mining, and conservation of ecological and socio-cultural values, was a significant challenge in the planning process. Overwhelmingly, mineral exploration and development was identified through public engagement as a planning issue and an interest for the Dawson region. The need to prioritize some areas for conservation over other interests, including mineral staking, exploration, and potential mining, is key to achieving balance and sustainable development in the planning region.

Key planning issues and interests related to mineral exploration and development include:

Mineral exploration and development have the potential to impact ecological and socio-cultural values. Issues specific to these impacts are included in applicable sections of this Plan, including the proceeding sections of sustainable economy, ecological integrity, conservation and stewardship, and culture and heritage. The following are issues and interests that have been identified for the ongoing support of the mineral exploration and development industry.

- An adequate land base must remain available for placer and hard rock exploration and mining to continue as key economic development activities.
- Minor mineral exploration can take place with limited surface or air access; however, mineral development usually requires the establishment of all-season roads and related infrastructure.
- Uncertainty on best use of land has resulted in land use conflicts between users and delays in the development assessment process.

Objectives:

1. Ensure an adequate land base is available for placer and hard rock exploration and mining to continue as key economic development activities.
2. Create certainty for proponents and the impact assessment process by providing guidance for recommended land use.
3. Recommend clear and practical operational guidelines that promote sustainable development.

Planning Strategy:

The Commission recognizes the importance of the mining industry in the Dawson planning region. A balanced approach for continued exploration and mining while conserving priority ecological and socio-cultural values will be accomplished through implementation of the land designation system and recommended management directions, which are included in the applicable sections of this Plan. In addition to the recommendations below, support for the mining industry has been provided in the following ways:

- Reduction in land use conflicts between different land-based rights holders through the recommendations of best use of land and general directions for multi-use areas
- Added clarity and certainty on what lands are accessible for mineral exploration and development within the Dawson planning region, and what conditions are necessary to achieve sustainable development within those areas

Recommended Management Practices

There are no specific management practices recommended at this time.

Recommendations to the Parties

Through the public engagement process, the Commission heard from planning partners in the mining industry that a more consistent, streamlined and effective assessment and permitting process is necessary to ensure continued success of the industry. To this end, the Yukon Mineral Development Strategy has put forth a series of recommendations which will not be duplicated in this section but should be supported in efforts to continuously improve the process by which mineral exploration and development projects are realized.

Policy Recommendation	Allowance of continued mineral exploration and development on existing mineral tenure in SMA II, subject to existing regulatory processes and the recommendations of this Plan, including the cumulative effects guidelines.
Policy Recommendation	Allowance of continued mineral staking, exploration, and development within ISA I-IV, subject to existing regulatory processes and the recommendations of this Plan, including the cumulative effects guidelines. This includes traditional mining areas including Goldfields, Sixtymile, Fortymile, and Clear Creek as part of the continued working landscape.
Policy Recommendation	The Plan supports advanced exploration projects currently proceeding in the planning region, subject to the regulatory process and recommendations of this Plan.
Policy Recommendation	The Parties should support implementation of the recommendations of the Yukon Mineral Development Strategy related to Strategic Priority #3 to establish effective, efficient and transparent environmental and regulatory processes.

In addition, efforts to educate and support the mining industry in land reclamation and compliance should be encouraged. As our collective knowledge of mining reclamation improves over time, new techniques and strategies should be incorporated into existing regulatory processes and future Plan reviews. This strategy supports the principle of adaptive management.

Policy Recommendation	The Parties should encourage and support the continued work of the Klondike Placer Miners' Association on implementing industry-led programs such as the *Education and Compliance Program* as a means of promoting excellence in mining reclamation, strengthening partnerships, and building confidence in the placer mining industry.

4.1.2 Transportation and Access

Economic development in the Dawson planning region is intrinsically linked to access to resources, whether that is for mineral exploration and development, forestry, tourism, or other activities. This point was echoed in public feedback on identified issues and interests for the region, where public survey respondents repeatedly indicated that access roads and trails are necessary for industrial prosperity. Conversely, access development can also significantly impact the ecological integrity of an area.

> *"In order to accomplish anything from tourism, big game outfitting, day to day enjoyment of the country to mining (be it placer, quartz or grass root exploration) access is a must."* (Survey response, 2019)

"The potential development of roads is a key threat to wildlife and fish populations. Roads provide access to otherwise isolated populations which may not currently be exploited heavily." (Survey response, 2019)

Many of the impacts that can result from industrial land uses, particularly to wildlife and fish populations, are a result of the direct and indirect effects of roads, aquatic/aerial routes, and people's use of them. The importance of, and impacts from, access development and use in the Dawson planning region means all aspects of access must be carefully managed. As such, the management approaches advocated by this Plan are intended to provide opportunities to create overall access management strategies for the region as well as more specific management directions in areas experiencing increased pressure. The intent is not to inhibit industrial development by restricting access, rather it is to ensure access development can occur in the region in a responsible, and sustainable, manner.

This section first outlines the objectives for access in the planning region generally, then summarizes issues and recommendations for four different aspects of access, including existing access; new all-season surface access; air access; and water access.

Access Defined

All-season access in the context of this Plan is gravel roads and associated roadbed under the *Yukon Highways Act*. Though not always required for mineral exploration, all-season roads (or other all-season transportation infrastructure) are required for conventional approaches to developing most mineral deposits.

Winter roads in the context of this Plan are roads or routes used in the winter, typically made of compacted snow or ice ploughed over a frozen waterway or ground impassable in the summer.

Objectives:

1. Protect and manage access to resources for economic development and other values, consider new transportation corridors and infrastructure opportunities.
2. Transportation and access development will be planned for and managed to minimize impacts to key ecological or socio-cultural values

4.1.2.1 Existing Highway Access

Dempster Highway

The Dempster Highway is an important corridor for many activities, including transportation, recreation and tourism, subsistence harvesting, and communications. The highway is a unique and well-known touring route with an international reputation as one of the land wilderness highways in North America, and it is Canada's only highway to the Arctic.

There are land uses and interests that overlap along the Dempster Highway. It is promoted as a scenic tourist route and as an industrial/transportation corridor for both the Yukon and Northwest Territories. A recent fibre-optic proposal was recommended to proceed by YESAB that would see the construction of an 800 km fibre optic line from Dawson City, Yukon to Yukon/ Northwest Territories

border. The fibre optic line would be constructed primarily within the highway right-of-way (ROW) and is planned to be constructed over the next five years.

As a multi-use corridor, the highway must be maintained to support land use activity, now and into the future, without undermining the heritage, social, and ecological values around it.

Key issues and interests related to the Dempster Highway:

- Visitation rates at Tombstone Park are steadily increasing, as is the use of the Dempster Highway to access it. Increased tourism in the area may impact the ecological and cultural setting of the Dempster Highway.
- Increased traffic along the Dempster Highway can impact the stability of the road and result in increased maintenance needs.
- Gravel extraction to support Dempster Highway maintenance and future development can cause disturbances to wildlife and fish habitat.
- Wildlife viewing and highway maintenance activities may be affecting use of key wildlife habitats (e.g. mineral licks, nesting sites).
- Wildlife managers and boards are concerned that the high level of hunting along the Dempster Highway is affecting the Porcupine Caribou herd, and possibly the Hart River herd.
- The impacts of climate change on the Dempster Highway infrastructure as well as surrounding area are not well understood and require further consideration.

Planning Strategy:

Recommended Management Practices

None are recommended at this time.

Recommendations to the Parties

This Plan currently defines the corridor as being two kilometers wide (1km on either side of highway from center line). As per direction in the DRPC TOR (TH & YG 2019) and in accordance with Recommendation #10 of the Peel Watershed Regional Land Use Plan recommends subregional planning for the Dempster Highway Corridor:

Recommended Action	A sub-regional plan for the Dempster Highway Corridor should be jointly developed by the Government of Yukon, affected First Nations and the Gwich'in Tribal Council. The sub-regional plan should consider the following: • The corridor planning area should be defined jointly by the Yukon Government, affected First Nations and the Gwich'in Tribal Council. • Where the Dempster Highway passes adjacent to Special Management Areas (LMUs #5, #7 and #10), the corridor should be managed with a higher level of conservation focus. • Harvesting and traditional economic activities and concerns. • Commercial wildlife viewing activities and concerns. • The scenic integrity of the entire highway corridor should be maintained. • The impacts of climate change on the highway infrastructure and surrounding area within the corridor (including geohazard mapping and targeted permafrost study) • Unregulated backcountry access i.e., not authorized under the *Dempster Highway Development Area Regulation (1979),* particularly for off-road vehicles (ORV), should not be allowed. • As with all human-caused disturbances, high standards of restoration should apply to all new surface disturbances within the corridor (e.g., gravel pits and telecommunications infrastructure).

Top of the World Highway

The Top of the World Highway is a vital travel route between Yukon and Alaska, and traverses through vast landscapes of immense ecological and cultural importance. The highway provides residents and travellers alike a direct connection to First Nations and Yukon history and culture and is an important connector between Tr'ondëk Hwëch'in families in Yukon and Alaska. It is an essential transportation route in the summer months for mineral exploration and development; and offers year-round opportunities for subsistence harvesting, traditional economic activities, and recreation.

Anecdotal information suggests that the highway is experiencing increased usage and traffic during the summer months. Impacts from increased traffic along this important route may result in reduced use for, or effectiveness of, traditional harvesting pursuits of this important area.

Yukon Government and Tr'ondëk Hwëch'in signed a co-developed Top of the World Highway Interpretive Plan in August of 2019. The purpose of the Plan is to enhance the experience for travellers by presenting stories and information about the highway and the stories of local people form the past through present day (TH & YG 2019b). It provides for a framework for the phased

implementation of interpretive features, including signage and media representations of the highway.

Key issues and interests related to the Top of the World Highway:

- Increased traffic and human use along the highway can lead to increased litter and disturbance to wildlife.
- Uninhibited use of ORVs can affect wildlife within and adjacent to the corridor.
- Maintaining an environment conducive to carrying out traditional and recreational pursuits is important in this area.
- The impacts of climate change on the highway infrastructure and surrounding area within the corridor
- The proximity and overlap with the Fortymile caribou herd along this highway can lead to increased hunting pressure and vehicle collisions.

Planning Strategy:

Recommended Management Practices

a	Travellers and users of this area must take care to not disturb the unique biophysical and socio-cultural setting of the corridor, in particular from the use of ORVs within key ungulate, ecologically important and cultural areas. (See Appendix A: Maps 3,4,5)
b	The use of ORVs within key areas should not undermine the important biophysical attributes.
c	The scenic integrity and natural aesthetic viewscape of the highway corridor should be maintained.
d	As with all human-caused disturbances, high standards of restoration should apply to all new surface disturbances within the corridor (e.g., gravel pits, roads, and telecommunications infrastructure).

Recommendations to the Parties

Policy Recommendation	The use of this area for harvesting and traditional economic activities must be maintained.
Policy Recommendation	Opportunities to promote education and mitigation of fatal wildlife collisions along the highway should be explored.
Research Recommendation	In collaboration with the Dawson District Renewable Resource Council, the use of off-road vehicles (ORVs) within the Top of the World Highway Corridor should be monitored for • Impacts to key values (Key values described in adjacent LMU tables in Section 5.0 - LMUs #15, #16, #17 & #23) • Identification of areas for potential ORV management

Recommended Action	The Commission supports the implementation of the Top of the World Highway Interpretive Plan, with a particular emphasis on:
	• Exploring opportunities to increase the signage within the corridor. Signage should highlight the following:
	  ○ History of the area and cultural value for Tr'ondëk Hwëch'in
	  ○ Contemporary multi-use
	  ○ Information on the Fortymile caribou herd
	  ○ How travellers can minimize their impact while travelling along the highway
	• The availability of garbage/recycling bins and outhouses at key locations within the corridor should be improved.

Klondike Highway Corridor

For the purposes of this Plan, the Klondike Valley Highway Corridor is defined as a two kilometer wide area (1 km on either side of the highway) that expands from the City of Dawson municipal boundary to the end of the planning boundary.

The Klondike Highway is the only multi-use transportation corridor connecting the planning region to southern Yukon. It is the critical route for transporting goods and people to the community of Dawson and further north to the Northwest Territories via the Dempster Highway.

The highway is also a key tourism route to Dawson City and further west to Alaska via the Top of the World Highway. However, much like the Dempster and Top of the World Highway Corridors, the Klondike is challenged by a number of overlapping land uses in some locations. Balancing potential land use conflicts between residential use, agriculture, tourism, industry, infrastructure needs and traditional activities, while conserving key wildlife habitat should be the key focus in this corridor.

Key planning issues related to the Klondike Highway Corridor include:

- Access to aggregate materials near the highway for ongoing maintenance and major future construction projects.
- The corridor is heavily used by First Nations people for traditional economic and subsistence harvesting activities and these rights must be maintained.
- Multiple land uses within the corridor are most prevalent between the community of Dawson and the Dempster Corner.

Planning Strategy:

Recommended Management Practices

a	As with all human-caused disturbances, high standards of restoration should apply to all new surface disturbances within the corridor (e.g., gravel pits, roads, and telecommunications infrastructure)

Recommendations to the Parties

As a result of the overlapping land uses and issues concentrated along the Klondike Highway Corridor, this area of the Dawson planning region may require additional consideration.

Policy Recommendation	The Parties should establish a Klondike Highway Corridor Advisory Committee made up of representatives from First Nation governments, Yukon government, and applicable organizations. The Advisory Committee should guide the development of a Klondike Highway Interpretive Plan in line with the issues and interests as identified above.
Policy Recommendation	The use of this area for harvesting and traditional economic activities must be maintained.
Policy Recommendation	New spot land applications for residential development should be discouraged outside of established residential areas.
Policy Recommendation	Opportunities to promote education and mitigation of fatal wildlife collisions along the Klondike Highway should be explored and supported, within areas of high concern
Recommended Action	Opportunities to increase signage within the corridor should be explored
Recommended Action	The availability of garbage/recycling bins and outhouses at key locations within the corridor should be improved

4.1.2.2 New All-Season Surface Access

All-season surface access infrastructure includes roads and trails. New surface access presents both economic opportunities and potential environmental and cultural impacts to an area. The creation of new roads and trails opens the land to potential renewable and non-renewable economic opportunities. However, the construction of roads and trails can degrade the environment of an area through vegetation clearing, soil erosion, sedimentation of nearby watercourses, and the destruction and fragmentation of wildlife habitat. Ecological impacts from surface access development are directly linked to socio-cultural use of an area or resources. In the Dawson planning region, cumulative surface access has resulted in increased and potentially unsustainable moose harvest in some areas and an indirect impact to local subsistence harvesting.

The Northern Access Route

The Coffee Gold Mine project currently being screened by YESAB proposes the establishment and use of an all-season road, including the upgrading of existing roads and trails, and the construction of new road, for a total of 214 km (37 km of new construction). The proposed Northern Access Route (NAR) originates in Dawson City and travels along existing access roads through the Goldfields (LMU #12: East – Nächo dëk) and ends at the proposed Coffee Gold mine site, which is located approximately 130 km south of Dawson in the lower south of the planning region (LMU #20: Coffee - Tthatryän). The NAR presents significant concerns to wildlife along its route, namely from the increased accessibility of new areas for moose harvesting.

Key planning issues and interests related to all-season surface access include:

- Roads and other linear features reduce the wilderness character of an area.
- New all-season access creates the potential for increased economic activity and opportunities in the Region.
- Roads and other linear features result in a direct loss and fragmentation of wildlife habitat and cause indirect impacts on wildlife through a reduction in functional habitat, reduced use, increased harvest pressures, and/or increased levels of predation.
- Road and trail development over permafrost areas results in road instability and erosion.
- Road development along ridgetops or within valley bottoms of Major River Corridors can disproportionally impact important ecological or cultural values.
- Inadequate management tenure and/or ineffective reclamation of resource roads leads to the creation of unmaintained permanent public roads.
- Approaches to access management on new resource roads may be ineffective and unenforceable in preventing access to the backcountry. For instance, gates can be easily bypassed or removed, as well as not maintained in working condition.
- There is no formal regulatory process in place to track and monitor the cumulative development of, and impacts from, access development in the planning region.

Current Regulatory Regime for Resource Roads

Access requirements for resource development projects are generally managed by permits issued by the Department of Energy, Mines, and Resources following assessment under YESAA. Access requirements on placer or quartz claims that are proposed as part of an operator's plan are managed under mining land use permits, whereas an access road or trail (>1.5 m) built on Crown land and not within a mining land use permit is authorized by a land use permit under the Land Management Branch. Yukon's existing Land Use Regulations under the Land Management Branch have three-year time limits, and as most resource development projects exist must longer than three years, existing regulations cannot adequately regulate the entire lifecycle of a resource road from construction to reclamation. This has led to many temporary and intended-to-be privately used resource roads becoming permanent and unmanaged public roads in perpetuity. Furthermore, effective reclamation of roads and trails can be difficult to achieve in Yukon's climate.

To address these gaps, the Government of Yukon has been working on developing a new Resource Road Regulation that will specifically regulate the construction, use, closure, and decommissioning of resource roads (Yukon Government, 2018). At the time of writing, the regulations have not been completed.

Planning Strategy:

Recommended Management Practices

This Plan recommends the following management strategies for proponents, assessors, and regulatory bodies when considering access development activities. For the purposes of this section, access development includes the construction any all-season access both on and off mineral claims.

The most significant impact from increased linear disturbance in the Dawson planning region is on increased harvesting pressure on moose. As such, in addition to the management strategies below, there are supplemental recommendations specific to moose and surface access included in Section 4.2.1.2.

a	Access road and trail construction over permafrost areas and over wetlands should be avoided where practicable. In areas of discontinuous permafrost, route selection should be on frost-free, south facing slopes.
b	The creation of looped or redundant access roads or trails should be discouraged.
c	Opportunities for shared, multi-party use of roads or trails should be explored whenever possible and practical.
d	Reclamation and decommissioning should occur as soon as roads and trails are no longer needed for resource development activities.
e	Proponents should indicate, to the best of their ability, the access requirements of their projects, including the location, construction process, and reclamation details of all access roads and trails prior to entering the assessment and permitting process of their project.
f	Proponents should prepare detailed access management plans for projects that involve the construction of new all-season access in areas of high ecological or socio-cultural value and/or where existing access into the area is limited. Access management plans should include: • Road construction details and rationale for construction; • Applicable traffic management protocols (i.e. access control, signage, etc.); • How impacts to key values in the area will be mitigated; and, • Detailed decommissioning and reclamation plans.

Recommendations to the Parties

Policy Recommendation	New all-season surface access should not be allowed within LMUs #1 (North – Thetäwndëk) and #4 (Fifteen/Chandindu – Tsey dëk/Tthen dëk). Consideration of temporary winter access only in LMU#1 may be considered through a Plan amendment.
Policy Recommendation	New all-season surface access off the Dempster Highway into LMU #7 (Upper Brewery/Hamilton) should not be allowed. Access may be considered through a Plan amendment.

Policy Recommendation	The Government of Yukon is currently developing a Resource Roads Regulation that will include regulations for the entire lifecycle of resource roads, from construction to reclamation. The Commission supports the prioritized completion of the Resource Roads Regulation to better inform future land use decision-making in the planning region.
Recommended Action	The Parties should develop and implement an appropriate framework for the tracking and monitoring of access development and reclamation activities within the Dawson planning region. This tracking system should include at a minimum: • Location and details (i.e., width, length, and surface material) of any newly constructed roads and trails • Information on the status of roads and trails (i.e., active or inactive) • Any on-going/completed reclamation activities.

Recommendations for Access Management Planning

Recommended Management Practice **f** (above) has been included to address an individual project level concern for access development. This strategy should ensure smaller scale access development requirements are planned for and managed appropriately to minimize their impact. However, this strategy does not address the need to look at access development more holistically or cumulatively, which should be the responsibility of the Parties. As such, the Commission recognizes the need for additional recommendations for a higher lever of access management planning in areas experiencing higher occurrences of development. These LMUs have been identified as #12 (East – Nächo dëk), #17 (Sixtymile – Khel dëk), #9 (Clear Creek), and #20 (Coffee - Tthatryàn). Furthermore, the Commission acknowledges that there is a limited understanding of the current level of linear disturbance within the planning region.

To address the data gap for current linear disturbance in the planning region, the following is recommended:

Research Recommendation	The Parties should conduct a baseline linear disturbance study with priority given to areas experiencing increased pressure from linear development. In the order of their priority to be researched, these LMUs include #12 (East – Nächo dëk), #17 (Sixtymile – Khel dëk), #9 (Clear Creek), and #20 (Coffee – Tthatryàn).

Following the collection of this information, the Parties should explore better access management and planning for those key areas. The recommendation below is intended to foster a coordinated approach to new road and access route development in areas where significant exploration and development activities are occurring and likely to continue.

Recommended Action	In consideration of the results of the baseline linear disturbance data above, the Parties should develop overarching access management plans for the planning region, with the priority for development as follows: • #12 (East – Nächo dëk) • #17 Sixtymile – Khel dëk • #9 (Clear Creek) • #20 (Coffee - Tthatryàn) At a minimum, Access Management Plans should consider: a. Impacts to key ecological values with an emphasis on moose and caribou from increased access development b. Impacts to other land users, including the use of the land for traditional economic activities, subsistence harvesting, and trapping c. New transportation routes to areas of significant to high economic value for minerals, tourism, etc.

The timing and scope of this recommendation will be at the discretion of the Parties and will be addressed by the Parties as part of implementation planning. Specific strategies and best management practices related to road and access route siting may be included as part of this future access management planning.

This recommendation is meant to also address various values that have the potential to be impacted by access development, in particular moose, caribou, and the ability to harvest, hunt, or gather. To reduce redundancy, this section will not be repeated in each applicable section throughout the Plan. Rather, reference will be made back to these recommendations where necessary.

4.1.2.3 Off-road Vehicle Access

An Off-road Vehicle (ORV) is any motorized vehicle that can be driven off paved or gravel surfaces. People use several types of ORVs in the planning region, including snowmobiles, all-terrain vehicles (wheeled ATVs – quads or Argos-like vehicles), and motor bikes.

A new Off-road Vehicle Management Area (ORVMA) Regulation took effect on January 28, 2021 in Yukon. The Regulations have been designed to protect designated environmentally sensitive areas and to manage the use of ORVs in those areas. The Regulations support the establishment of ORVMAs in specific areas of Yukon that will have restrictions or limitations for access. However, currently, ORV use is allowed in most backcountry areas.

The new Regulations establish three ORVMAs in Yukon; only one of which is applicable in the planning region: alpine areas 1,400 metres or higher. This habitat type exists within and adjacent to several LMUs within the planning region. The Regulation recognizes regional land use planning as a primary mechanism to identify and establish additional ORVMAs, as well as through the Dawson District Renewable Resource Council (DDRRC).

Key issues related to ORV access include:

- ORV activity can have impacts on wildlife and wildlife habitat.
- ORVs can cause significant damage to soil stability and vegetation.
- ORV activity can have result in disturbances to other land users.

Planning Strategy:

Recommended Management Practices

None are recommended at this time.

Recommendations to the Parties

Policy Recommendation	The Commission supports the ability of the DDRRC to seek public input to identify areas that may require consideration under the Off-road Vehicle Management Area Regulations.

Off Road Vehicle Use

Are there any areas we should be considering for special management area status under the new ORVMA regulations?

The Regulation recognizes regional land use planning as one of the primary mechanisms to identify and establish ORVMAs. At this time, no information has been provided to the Commission that merits this consideration, and the Commission wishes to acknowledge that if residents have information to be considered to bring it to our, or the DDRRC's attention.

Share your thoughts with us…

Visit our Engage Dawson website to let us know what you think.

4.1.2.4 Air Access

The use of aircraft (helicopter or fixed wing airplane) is a primary mode of transportation for most hard rock exploration activities in the planning region. It is also used for some placer mine operations inaccessible by road as well as for backcountry tourism and outfitting. This mode of transportation requires the construction and maintenance of associated infrastructure, including airstrips and helicopter pads. These structures are scattered throughout the southern part of the region, and less numerous in the northern parts to support various land-based activities (e.g. outfitting, exploration).

Key planning issues related to air access include:

- Aerial access (by helicopters or fixed wing airplane) in key areas can result in impacts to key ecological or socio-cultural values.

- Frequent overhead air traffic can lead to changes in habitat use by wildlife.
- Fuel caches can contaminate surrounding soil and/or water quality if not properly managed.
- Clearing of vegetation for airstrips and helicopter pads results in surface disturbance, reduced wildlife habitat, and alteration to wilderness character of an area.

Planning Strategy:

Recommended Management Practices

The below are in addition to all applicable strategies for tourism in Section 4.1.4:

a	Aerial flights should follow all applicable best management guidelines on how to minimize impacts to disturbance to wildlife (Flying in Caribou Country, Flying in Sheep Country).
b	Opportunities for shared, multi-party use of airstrips and helicopter landings should be explored whenever possible.
c	Fuel caches should be well maintained, inaccessible by wildlife, and kept at a safe distance from watercourses

Recommendations to the Parties

Policy Recommendation	Within SMAs, outside of existing dispositions, new airstrips should not be allowed. Existing airstrips and landing locations can continue to be used.

4.1.2.5 WATER ACCESS

River travel is an important economic and socio-cultural mode of transportation in the planning region. The Yukon River offers robust opportunities for recreational, tourism, traditional economic, and industrial access to key sites and resources along its mainstem and within adjacent areas. Many placer and hard-rock exploration operators use barging as a means to transport equipment, supplies, personnel, and fuel into sites without adequate surface access. Other water access routes exist along the Klondike, Stewart, White, and Fortymile Rivers, however access on these smaller rivers is predominately via motorboat, jetboat, or canoe.

Stream crossings, which in this Plan are considered to include bridges, culverts, and "fording" (the direct crossing of a watercourse from bank to bank using equipment or vehicles) are prevalent in the planning region. For placer mining, where many sites include watercourses of various widths, stream crossings are necessary activities and can involve the construction and relocation of bridges, culverts, and fords within the duration of a license timeframe.

Key planning issues related to water access include:

- Transportation routes along all river corridors that involve barging, motor boating, or recreational canoeing can impact important terrestrial and aquatic wildlife habitat and cultural values.

- Improperly constructed stream crossings or barge landings can cause impacts to fish through increased sedimentation or by creating blockages to fish passage.
- Fording or the construction of fords can result in habitat degradation, including sedimentation, channel compaction, infilling, rutting, and the creation of barriers to fish passage or migration. Fording can also result in the destruction of fish, fish eggs or fish food (e.g. insects).

Planning Strategy:

Recommended Management Practices

a	Stream crossings should be constructed to minimize impacts to fish and fish habitat, including a hierarchical approach to construction with the least invasive type being applied first.
b	No construction of stream crossings should occur during sensitive time periods for fish (e.g. during spawning or egg incubation)

Recommendations to the Parties

While river travel remains a valuable mode of transportation for various industrial and recreational pursuits, there are unknowns about the impacts of certain watercrafts on the unique ecological and social-cultural setting of the planning region. In order to facilitate the continued and sustainable use of river travel, the following research initiatives are recommended:

Research Recommendation	The Parties should design and conduct a study into the ecological and social impacts of barging along the Yukon River. The study should consider, at a minimum, the impacts to fish and fish habitat and traditional land use within the Yukon River – Chu kon dëk LMU (#3). The results of the study should inform development of best management practices and guidelines by the Parties for barging within the Yukon River LMU.
Research Recommendation	The impacts to key values in LMU #21 (White – Tädzan dëk) and LMU #15 (Fortymile River - Chëdähdëk) from jet boats are not well understood. Further research into the potential for this activity to be affecting water quality and salmon habitat should be conducted in these areas, and this information should be used to develop best management practices and guidelines to better manage this activity.

4.1.3 AGRICULTURE

The Dawson planning region contains some of the most productive agricultural land in the Yukon. Suitable land includes arable land, land for the construction of related infrastructure and accessory uses, and land located within proximity to the community for market purposes. For these reasons, the Klondike Valley has been identified as containing high agricultural potential for the planning region.

As of 2018, there were approximately 40 titled lots derived from agricultural land programs as well as several Settlement Land parcels that have been identified as suitable for agriculture by Tr'ondëk Hwëch'in. Of note is the Tr'ondëk Hwëch'in Teaching and Working Farm that is a valued cultural and economic resource.

The importance of, and the desire for continued growth within, the agricultural industry in the Dawson planning region was expressed by both Parties and through public engagement. Furthermore, the impacts of a changing climate and calls to increase local food production and security are important considerations. Public comments on agriculture expressed:

> *"The growth of contemporary agriculture confirms the possibilities for low carbon vegetables."* (Survey response, 2019)

> *"Support local agriculture, particularly within already disturbed areas; make better use of historically disrupted landscapes"* (Survey response, 2019)

Overall, local food production is a growing economic input in the planning region with significant contributions to the socio-cultural context of the community, and the ability to continue fostering responsible and sustainable growth of this industry is important to the Commission.

Key planning issues and interests related to agriculture include:

- Suitable land that is both useable for agricultural use and close to the community (for market purposes) is limited and contains competing land-based rights and interests.
- Opportunities for different land uses to co-exist with agriculture in the planning region should be explored.
- Consideration of food security issues and climate change adaptation in the region's agricultural sector (See also **Section 4.2.5**).

Objectives:

1. Enhance and support access to lands for agricultural purposes and work to minimize land use conflicts with other users
2. Promote local food production

<u>Planning Strategy:</u>

Recommended Management Practices

a	In areas of suitable high agricultural value that are being developed for other temporary purposes, land should be reclaimed such that it is left in a suitable condition for agricultural development.

Recommendations to the Parties

The Commission understands that the Klondike Farmers Forum is currently conducting a feasibility study for the location and procurement of an abattoir (slaughterhouse). While agricultural livestock producers in the Dawson region are currently serviced by a mobile abattoir, the growth of the industry in this region may require more consistent and permanent infrastructure.

Furthermore, initiatives to support the multi-purpose use of land for agricultural and mining should be encouraged. The Yukon Government has begun to explore this concept, with the development of a seasonal lease agreement between a placer miner and a local producer in in the Dawson area in 2020 (Government of Yukon, 2020). The Parties should continue to foster collaborative arrangements in the Dawson planning region that support the sustainable growth of the agricultural industry.

To support the growing agricultural industry in the Dawson planning region, the following research and policy recommendations are proposed:

Policy Recommendation	The Parties should continue to explore and implement collaborative efforts where multiple interests and rights exist, such as through the development of formal multi-use arrangements between mineral rights holders and agricultural producers.
Policy Recommendation	The Parties should support implementation of the Yukon Agriculture Policy (2020), specifically related to Objective #2 (Create and Protect Agricultural Land) to increase self-sufficiency in local food production in the Dawson planning region.
Policy Recommendation	Suitable land for agricultural use that is close to the community should be prioritized for this use where practical.
Policy Recommendation	Avoid the subdivision of suitable high value agricultural land into smaller land parcels for residential, commercial or other land use.
Research Recommendation	Areas of "high" (class 3 to 5) agricultural potential within the planning region (within the Klondike Valley at a minimum) should be identified and prioritized for this use.
Recommended Action	The Parties should continue to support research into the feasibility of procuring an abattoir for the Dawson region, including the identification of a suitable location for such infrastructure.

4.1.4 Tourism

The Dawson planning region offers considerable opportunities for tourism, and the community of Dawson includes well-established tourism services, attractions, accommodations, and businesses. Tourism in this region is a significant contributor to the local and territorial economies. While the Yukon is marketed primarily as a wilderness destination, the Dawson region uniquely represents other tourism values, including the rich cultural history of the Tr'ondëk Hwëch'in, the place of the Klondike Gold Rush, and contemporary placer mining. Public comments received on the tourism industry in the planning region include:

> *"Dawson's tourism industry is vital to the continued benefit of the community."*(Survey response, 2019)

"Tourism is an important economic driver for the Dawson region, the gold rush history has been the primary theme visitors are looking for. The visitor profile is now including the adventurist and cultural experience type. Dawson has much to offer in this area and can certainly expand as well. Visitors are looking for natural habitat, wildlife and on the land experiences." (Survey response, 2019)

Tombstone Territorial Park offers significant opportunities for both guided and unguided tourism activities. Data provided by Yukon Parks indicates a considerable increase in visitation rates at the Interpretive Centre, Tombstone Mountain Campground, and the backcountry camp sites, with a 176% increase in visitation to the interpretive center from 2008 to 2018 (Government of Yukon, 2020). While the management of the Park itself is excluded from the scope of this Draft Plan, it is important to consider how this growing tourism pressure will impact the important ecological and cultural setting of the Dempster Highway area, as well as how this increase will impact the overall visitor experience in the Dawson region in general.

Other important areas for tourism in the region include the Top of the World Highway and the Klondike Valley, as well as Major River Corridors including the Yukon, Klondike, and Fortymile rivers. Impacts to the visual integrity of river viewscapes, and high levels of overhead air traffic, affect the quality of wilderness travel through these areas. Conversely, high levels of tourism traffic in these areas can have adverse impacts on wildlife, fish and their habitats, and create conflicts with other land users. Tourism attributes are identified on **Map 6: Appendix A**.

There is interest in the continued sustainable growth of the tourism industry in the region, however growth must be carefully managed. Specifically, there is potential for growth in wilderness/ecotourism and Indigenous tourism as well as in the arts.

Key planning issues and interests related to tourism include:

- There is an interest to enhance tourism experiences in the planning region while ensuring compatibility with other economic and socio-cultural values.
- Development activities that impact wilderness, wildlife and wildlife habitat, water quality, aesthetics, and heritage sites, also impact tourism values.
- High levels of overhead air traffic or improperly located mineral exploration camps diminish the wilderness experience of back country visitors or river travellers.
- Based on limited access and desired future state of certain LMUs, backcountry tourism experiences may not be suitable in all areas of the planning region.
- Tourism in the Dawson planning region has been significantly impacted from the COVID-19 pandemic.

Objectives:

1. Support and enhance tourism and recreational experiences including scenic viewscapes, and other values pertaining to tourism, including wildlife, culture, and heritage within appropriate areas of the planning region.
2. Minimize disturbance to remote land and water-based tourism activities due to aircraft use.
3. Maintain visual quality of high value tourism sites and features and retain the natural quality of high value viewscapes.

<u>Planning Strategy</u>:

Recommended Management Practices:

a	Repetitive and disruptive aerial flights should be discouraged in areas of high tourism or recreational value, including well known backcountry areas and along river corridors.

Recommendations to the Parties

Policy Recommendation	The natural scenic viewscapes within Corridor Areas, with an emphasis on the Yukon River Corridor, the Dempster Highway, and the Top of the World Highway should be preserved.
Policy Recommendation	Tr'ondëk Hwëch'in cultural history and contemporary use should be incorporated into tourism management strategies and signage for the Klondike Goldfields.
Policy Recommendation	The Parties should support the Commission's management intent for LMU #1 (North -Tthetäwdëk) such that limited access is maintained and the area does not become a significant backcountry wilderness tourism destination.
Policy Recommendation	The Parties should support implementation of the Yukon Tourism Development Strategy (Government of Yukon 2018), specifically pertaining to Goal #2 for Sustainable Tourism Development for the Dawson planning region.
Policy Recommendation	In areas of high conflict between aerial flights and tourism pursuits the following should be considered: • Setting limits to the number of allowable landings in specific areas during peak visitation times Providing information to aircraft users (e.g. local pilots, tourism operators, mineral exploration companies, etc.) about areas of concern and encouraging avoidance of key wildlife areas wherever possible (see **Appendix A: Maps 3 & 4**)
Research Recommendation	The Parties should explore issues and interests related to tourism when considering opportunities for TH to retain co-management responsibilities in LMU #4 (Fifteen – Chandindu).
Recommended Action	Management guidelines for commercial wilderness tourism and commercial wildlife viewing along the Dempster Highway, Top of the World Highway, and Yukon River Corridor should be developed as part of corridor management plans (see **Section 4.1.2.1** & **Section 5.3**).
Recommended Action	A Yukon River Corridor sub-regional plan should be developed as described in **Section 5.3**.

Recommended Action	Implement interim measures as described in **Section 5.3** for the management of the Yukon River Corridor until such a time that a holistic sub-regional plan can be developed.
Recommended Action	Opportunities to increase signage in the planning region that incorporates local artistry, Tr'ondëk Hwëch'in history, and the Han language, should be explored.

4.1.5 OUTFITTING

The Dawson planning region includes many high-quality opportunities for big game outfitting. Outfitting takes place in the northern half of the region where there are three established outfitting concessions (see **Map 6**, **Appendix A**). These concessions have associated camps and airstrips, and in some cases, titled property.

Outfitting consists of guided hunting trips in the summer and fall for Dall's sheep, grizzly bear, caribou and moose. Most trips are undertaken by airplane and ground transportation, such as by ORV, horseback or on foot. In the planning region, high quality outfitting experiences rely heavily on the maintenance of large, roadless wilderness areas.

Key planning issues related to outfitting include:

- Maintenance of functioning ecosystems that support wild populations is vital to the outfitting industry.
- Outfitting generally relies on a wilderness experience where other human activity is relatively minimal. This experience can be affected by:
    - Development of industrial activities, including new roads and associated infrastructure;
    - Improperly located resource exploration camps;
    - Excessive use of motorized ORVs and aircraft; and
    - Excessive numbers of wilderness tourists and recreational users.
- The location of outfitting camps and trails is not well documented, making it difficult to consider outfitting values during project assessments and planning.

Objective:

Maintain outfitting rights within existing outfitting concessions in the planning region.

Planning Strategy:

Recommended Management Practices

Specific management practices related to outfitting are not recommended at this time.

Recommendations to the Parties

Most of the northern part of the planning region, where outfitting concessions are located, is recommended for conservation through SMA I and II designations. The Commission is of the opinion that this recommendation is sufficient to maintain the wilderness character of the area to support high quality outfitting experiences.

Policy Recommendation	Existing outfitting rights should be maintained, and outfitting activities should be allowed in all land use designations, subject to existing legislation, regulations and the THFA.
Research Recommendation	Land use patterns associated with outfitting, including but not limited to the location of camps and trails, should be documented to facilitate improved project assessment and future resource planning.

4.1.6 Community Growth and Recreation

The Dawson planning region contains significant opportunities for residential development and recreational pursuits. As such, planning for future community growth and recreation opportunities were considered in this Plan.

> *"Community Growth to me means promoting and developing a healthy, strong community that can live sustainably with other species, both plant and animal, in the north. A healthy community promotes families. Families mean the school is thriving. A school is often the soul of the community…* (Survey response, 2019)

> *"The way Dawson's residentials area open up into several hiking path entrances is a beautiful combination of modern life and wanting to maintain close relationships with the earth."* (Youth Survey response, 2020)

Dawson City is the second largest community outside Whitehorse in the territory. As the community of Dawson continues to grow, identifying potential future areas for residential and other development outside of existing municipal and local area planning boundaries should be examined in greater detail. Areas with high recreational value for community use should also be acknowledged and maintained. Balancing the need for community growth with other land uses such as agriculture, forestry, traditional harvesting and other uses requires careful consideration. More detailed planning (e.g. sub-regional planning) is required in places such as the Dempster Highway Corridor and the Klondike Valley.

4.1.6.1 Dawson City Water Supply

Safety for the Dawson City water supply, which is fed by groundwater within the Klondike River watershed, was identified as a key issue by the City of Dawson and supported by the Commission.

In 2017, Tetra Tech Canada Inc. developed a City of Dawson Aquifer and Wellhead Protection Plan (AWHPP) for Government of Yukon, Community Services (Tetra Tech, 2017). The purpose of the plan was to provide practical protective measures to identify and manage activities and potential risks within the inferred capture zones and recharge areas of the City of Dawson's water supply wells (Tetra Tech, 2017). While the existing wellheads and the majority of the catchment is within municipal limits and not within the scope of this Plan, the Klondike River and valley are. The AWHPP indicates that there is contamination potential up the Klondike River Valley, as well as potential for migration of contamination along the Klondike River and tributaries. As such, the wellhead protection area was defined within the Klondike River Valley (up to Henderson's Corner), and tributary valleys to the south that include current and historical placer mining operations. The

AWHPP identifies several recommendations to protect and minimize risk to the Dawson City water supply. Support for relevant recommendations are included below.

Other drinking water sources have been identified for LMUs #15 (Fortymile - Chëdähdëk) and #16 (Swede Creek), and each contain special management directions in **Section 5.15 & 5.16** for consideration of this important value.

Key planning issues related to community growth and recreation include:

- The demand for land suitable for development (planned lots and spot applications) and services is growing in areas surrounding the City of Dawson.
- Additional planning is necessary to manage growth and guide development outside of municipal boundaries. Future growth areas for rural residential, commercial, and industrial land uses that cannot be accommodated within municipal and local area plan boundaries should be identified in the planning region.
- Use of recreational areas and trails is growing outside of municipal boundaries and can conflict with other land uses.
- The water source for the municipality of Dawson is located within the Klondike River watershed and safety of this catchment is a concern**.** Refer to Map 9 in the RAR for watershed boundary (DRPC 2020c).

Objectives:

1. Consider future community growth areas outside of municipal and local area plans.
2. Maintain existing trail networks and support establishment of new trails and/or the revival of historic trails.
3. Key recreational areas in the region are protected and other areas with recreational potential are identified and supported.
4. Minimize impacts to water quality in areas important for human consumption.

<u>Planning Strategy:</u>

Recommended Management Practices

a	Avoid, or minimize potential impacts of industrial land use activities (e.g. mineral exploration, forestry) within and adjacent to existing trails, including but not limited to the Discovery Trail and the Klondike Trail.
b	Maintain access to existing recreational trails by delineating their location, identifying any potential land use conflicts and recommending appropriate mitigation measures (e.g. buffers) as part of the application and review process for new land use tenure.
c	Land users working in proximity to streams that are used for human consumption should be made aware of this value and appropriate set-back distances of harmful activities should be applied.

Recommendations to the Parties

Policy Recommendation	In partnership with the City of Dawson, the Parties should support the implementation of the recommendations of the City of Dawson Aquifer and Wellhead Protection Plan for the Klondike River (Tetra Tech 2017), with an emphasis on the following: a. All proposed commercial/industrial development within the wellhead protection area that have the potential to contaminate groundwater should be assessed by a qualified and experienced engineer/hydrogeologist b. An educational program (through signage, meetings and brochures) should be developed to inform the public of the wellhead protection area, the water source and its value to the community, actions that contaminate the Klondike River and have the potential to impact the City of Dawson's drinking water source c. A routine monitoring program should be implemented to assess concentrations of potential contaminants present in groundwater in the Klondike River. The analysis list and sample schedule should be reviewed each year by a qualified and experienced engineer/hydrogeologist and amended based on results and identified potential risks
Policy Recommendation	New spot land applications for residential development should not be considered in the SMA designation and should be discouraged outside of established residential areas.
Policy Recommendation	Applications for new residential, commercial, or industrial development should first be considered within or in close proximity to existing settlement areas (e.g. Bear Creek, Rock Creek, Henderson's Corner).
Recommended Action	The Parties should identify all water sources used for human consumption to enable land users to plan accordingly when working in close proximity to affected streams and rivers.
Recommended Action	Develop a trails master plan for the Dawson region, in collaboration with planning partners (e.g. KATTS) that identifies existing trails, historic trails, and potential future trail development opportunities.

4.1.6.2 THE KLONDIKE VALLEY (LMU #13)

The Klondike Valley represents several unique attributes for the Dawson planning region. Notably, this area contains the vast majority of existing residential development and potential areas of

growth, as well as key areas for recreational use. As such, the Commission recommends the following:

Recommended Action	A sub-regional plan for the Klondike Valley LMU should be jointly developed by the Parties in collaboration with other planning partners as appropriate (e.g. City of Dawson). Considerations for the sub-regional plan can be found in **Section 5.13**.

4.1.7 FORESTRY

The region's forested areas are important from environmental, economic and sociocultural perspectives. The Yukon Wood Products Association (YWPA) provided comments in the fall of 2019 on the importance of the forestry industry in the planning region:

> *"Industry needs to have access to the land to carry out timber harvesting…Uncertainty is the enemy of good investment decisions."* (Thorp, 2019).

The forested areas in the planning region are an extension of the boreal forest zone that spans the continent from Yukon to the Atlantic coast in Labrador. Of the 26,223 km^2 of the planning region that lies within the Boreal ecozone, approximately 75% is covered by either coniferous (60%) or mixed (15%) forest. Most of the planning region north of the Ogilvie Mountains lies within the un-forested Taiga Cordillera ecozone.

Information provided by the YWPA to the Commission in December of 2019 indicates that the current "cut" in Dawson is relatively small and stable at around 2,500 m^3 to 3,000 m^3 per year, and that there was room for advancement of this industry (Thorp, 2019). From an economic perspective, forest resources in the region provide timber, fuelwood and other harvested forest products, and are an important part of traditional economic activities. The *Forest Resources Act* provides a planning, tenure, compliance and enforcement regime to support the management of forests in the Yukon. In addition, the Dawson Forest Resources Management Plan provides a framework for the sustainable management of a forest-based economy as outlined in Chapter 17 of the THFA.

Key planning issues and interests related to forestry include:

- A viable forestry industry and fuel wood harvesting opportunities require an adequate and accessible long-term wood supply in close proximity to the community of Dawson.
- Forest resources remain an important part of many traditional economic activities (e.g. hunting, trapping berry gathering).
- Options for a more effective of harvestable fuelwood that require clearing from placer and quartz claims should be explored

Objective:

Ensure a viable land base is available and accessible for forestry and fuel wood harvesting.

Planning Strategy:

Recommended Management Practices:

Specific management practices related to forestry are not recommended at this time.

Recommendations to the Parties:

Policy Recommendation	Allowance of continued forest resource development within ISA I-IV designations, subject to existing regulatory processes and the recommendations of this Plan, including the cumulative effects guidelines. This is generally consistent with the Forest Resource Management Zone areas identified in the Dawson Forest Resources Management Plan.
Policy Recommendation	Access to economically viable timber harvest areas in close proximity to Dawson City should be prioritized for forestry prior to other land use activities. In general, viability includes access with limited road building requirements and three to five kilometres off existing all-season roads.
Policy Recommendation	Support the strategic directions identified in the Dawson Forest Resources Management Plan as this represents a successful collaboration between the Parties and the DDRRC. However, in cases where management direction in this Plan conflicts with the Dawson FRMP, the FRMP should be brought into conformity as per Chapter 17 of the THFA.
Research Recommendation	The Parties should continue to explore the feasibility of advancing the use biomass energy in the Dawson planning region.
Recommended Action	Support the continued development of Timber Harvest Plans (THPs) within ISA designations, and specifically within the Goldfields Forest Resource Management Zone. The Goldfields THP should include development of a more effective framework for use of fuelwood within existing mineral tenure.

4.1.8 Aggregate Resources

Aggregate resources (sand, gravel and crushed stone) are critical materials for development and maintenance of transportation, municipal and industrial infrastructure. These resources are heavy materials and expensive to transport. Therefore, it is important that these resources are obtained near areas where they are intended to be used. Currently, there are approximately 40 gravel reserves and three quarry leases in the planning region - all of these land dispositions are located along the three major highway corridors (Klondike, Top of the World, Dempster) (see **Map 1, Appendix A**).

Key planning issues and interests related to aggregate resources include:

- Aggregate potential is not well documented in the planning region outside of existing sources.
- New sources of aggregate materials need to be identified and developed as existing sites are exhausted, particularly near Dawson City, and along the Klondike Highway, Top of the World Highway and Dempster Highway.
- Extracting large volumes of aggregate material to support infrastructure development disturbs large areas of land, which may create visual impacts, habitat disturbance and other adverse effects on ecological and/or sociocultural values.
- Aggregate resources may be located on existing land use tenure (e.g. mineral claims) which has the potential to create land use conflicts and regulatory ambiguity.

Objective:

Identify and protect areas of high aggregate resource potential for transportation and community needs.

Planning Strategy:

Recommended Management Practices

a	Avoid, where possible, aggregate resource extraction within sensitive fish habitats and other ecologically important areas.
b	Minimize gravel requirements for necessary infrastructure through coordinated access and geotechnical engineering.

Recommendations to the Parties

Policy Recommendation	When proposing and reviewing aggregate resource projects, priority should be given to extraction of materials near to highways and existing all-season roads.
Recommended Action	Within the ISA, the identification of potential sources of aggregate should be undertaken in advance of the assessment process for large-scale industrial and/or infrastructure projects.
Recommended Action	The Parties should seek to develop and communicate clear guidelines with respect to the process for reviewing, assessing and enforcing quarry permits to ensure consistency in the regulatory between private and government proponents.
Recommended Action	Aggregate assessments should be undertaken to identify areas of high potential for aggregate resource development within the Klondike Highway, Top of the World Highway, and Dempster Highway Corridors to support ongoing construction and maintenance activities.

4.1.9 Traditional Economy

The traditional economy includes economic inputs and gains that are not completely monetary based. The term "traditional" is not synonymous with an old way of doing things, rather it is

suggestive of long-established practices which contribute to the modernized economy. As defined by Tr'ondëk Hwëch'in, a traditional economy is based on the harvest of natural resources, providing direct value such as meat harvested, fuelwood and income from sale of cultural products, and non-consumptive values such as, for example, the cultural and social well-being of its members and passing on traditional ecological knowledge.

Participation in traditional economic activities is required for First Nations culture and community well-being. Subsistence harvesting and traditional economic activities are also important means of offsetting the high cost of food in northern communities and reduce the consumption of carbon intensive agricultural products and travel. The land claim agreements for the Tr'ondëk Hwëch'in and other affected First Nations provide for continued harvesting rights in the planning region.

Traditional economy is closely linked to heritage and culture, and in particular harvesting rights and activities in **Section 4.3.3**.

Key planning issues and interests related to a traditional economy include:

- Providing opportunities and landscapes to participate in traditional economic activities is vital to maintaining First Nations culture, community well-being, and ties to the land.
- Opportunities to participate in traditional economic activities strongly correlates to the availability of access. However, increased road access can also negatively impact the ability for residents to participate in these activities through increased harvesting pressure, reduced harvesting success, and disturbances on the land.
- There is limited information available on the impacts of development on traditional economic pursuits in the planning region, in particular to moose harvesting and overall use and enjoyment on the land.

Objectives:

1. Protection of traditional land use/economic activities and harvesting.
2. Key use areas for subsistence harvesting in the region are maintained for those activities.
3. Trapping infrastructure and resources are protected, and furbearer habitat remains intact.
4. Maintain/support trapping concessions and minimize conflicts with other land users.

Planning Strategy:

Recommended Management Practices:

a	Overlapping land users with traditional economic activities should utilize a Communication and Consultation Protocol to minimize conflict. The Protocol should ensure activities that are likely to cause disturbances to other rights holders (trappers, outfitters, etc.) are communicated and consulted on prior to.

Recommendations to the Parties:

Policy Recommendation	The Parties should support the ongoing Local Resource Knowledge Project being conducted annually by the Dawson District Renewable Resource Council. The general purpose of this study is to better understand and document changes that are taking place in the environment, with a focus on hunting access, harvested species, trapped species, moose, caribou, berries, edible plants, and fish. A mechanism to feed the results of this project into the current management regime should be explored. This information should also be considered in Plan review and amendment (**Section 6.0**).
Policy Recommendation	The Parties shall implement requirements for proponents of large-scale advanced exploration and mining companies in the Dawson planning region to prepare traditional use impact studies within a certain distance of key use areas (see **Appendix A: Map 5**).
Policy Recommendation	For settlement land parcels identified with high traditional use value, appropriate buffers in which no development can occur should be implemented
Research Recommendation	For settlement land parcels identified with high traditional use value, appropriate buffers in which no development can occur should be implemented.
Research Recommendation	The Parties should support the identification of high traditional economy value in LMUs of concern, and/or along higher uses areas, such as along highway corridors (ToW, Dempster, Klondike) and the Yukon River.
Research Recommendation	Land use patterns associated with trapping, including but not limited to the location of cabins and trails, should be documented to facilitate improved project assessment and future resource planning.

4.1.10 Resource Development and Impacts to MMIWG2S+

The Government of Yukon and the Yukon Advisory Committee on Missing and Murdered Indigenous Women, Girls, and Two-Spirited People (MMIWG2S+) developed a Yukon Strategy on MMIWG2S+ in response to *Reclaiming Power and Place: The Final Report on the National Inquiry into Missing and Murdered Indigenous Women and Girls* (Government of Yukon, 2020b). The strategy provides for four pathways that include the cooperation of all governments, partners, and contributors to join efforts to create change together.

The strategy identifies the following goals related to resource extraction and major infrastructure projects and the Yukon impact assessment process:

- Eliminate violence related to development projects in both workplaces and communities. Increase the workforce capacity, mitigate negative impacts, and improve the positive benefits for Indigenous women and Yukon communities (3.4).
- Implement culturally relevant, gender-balanced analysis in the YESAA processes (4.4)

The Commission supports the calls to action within the Yukon strategy for the resource extraction industry, as well as recent efforts by YESAB to consider gender-based violence within the assessment process from applicable resource extraction projects (e.g., YESAB 2017-0211). To further support these important initiatives the Commission recommends the following:

Policy Recommendation	The Parties shall implement requirements for proponents of large-scale advanced exploration and mining companies in the Dawson planning region to prepare gender-based socio-economic and impact assessments.
Research Recommendation	The Parties shall conduct a study on the relationship between resource and development projects and violence against Indigenous women and girls in the Dawson planning region.

4.2 Ecological Integrity and Conservation

Healthy air, water, vegetation and wildlife are critical to sustaining life. Ensuring that ecological systems are maintained is central to the definition of sustainable development. Maintaining sustainable fish and wildlife populations and their habitats is a significant planning issue for the region. Cumulative effects on wildlife species will also require further analysis and management. The need for protected and conserved areas as well as the importance of intact fish and wildlife populations was expressed repeatedly throughout public engagement, and ecological integrity, conservation, and stewardship was identified as a major interest in the region:

> *"Establish a network of protected areas within the region, with special consideration for river and stream corridors that contain spawning and rearing habitat, and corridors used by wildlife for calving, overwintering and summer feeding grounds linked with uninterrupted migratory routes (avoid habitat fragmentation)."* (Survey response, 2019)

This section of the Plan describes objectives and strategies designed to achieve the following Plan goals related to ecological integrity and conservation:

Draft Ecological Goals

- Maintain healthy aquatic and terrestrial habitats to achieve sustainable fish and wildlife populations.
- Support the natural integrity of the planning region by ensuring cumulative disturbances from human activities on the landscape are reclaimed or restored.
- Maintain Connectivity between areas of key wildlife habitat, while considering climate driven shifts in habitat
- Preserve ecologically representative areas and important ecosystem services.
- Promote awareness of, and support mitigation and adaptation to, the effects of climate change on the landscape as well as on fish and wildlife populations.

4.2.1 KEY SPECIES HABITAT

Maintaining sustainable fish and wildlife populations and their habitats is a significant planning issue for the region. Maintaining healthy terrestrial (e.g. boreal forest, taiga) and riparian (e.g. rivers, creeks, wetlands) habitats, and managing threats to these habitats (e.g. from mineral development, roads, invasive species etc.), were important considerations when developing this Plan.

> *"To protect the fish and wildlife, large tracks of land must be set aside for conservation. Particularly land that provides food and shelter for fish and wildlife. Northern land is not high-yielding so each species requires a large area of diverse habitat."* (Survey response, 2019)

The Dawson Planning Region contains a number of key species including, but not limited to, salmon, moose, caribou, sheep, fur-bearing animals, freshwater fish, birds, and species-at-risk. Wildlife is regulated under the *Yukon Wildlife Act*, or, depending on status, the federal *Species at Risk Act*. Locations of key wildlife habitat are displayed on **Map 3 & 4: Appendix A**.

First Nations people have relied on the wildlife of the region for thousands of years. Both First Nations and non-First Nations people continue to rely on these species today. The integrity of key habitat areas is essential to ensure that wildlife populations are sustained for current and future generations.

4.2.1.1 CARIBOU

Caribou in the region hold immense value from an ecological and socio-cultural perspective for the Tr'ondëk Hwëch'in and the people of the Yukon at large. The international transboundary nature of caribou migration and movements within the territory poses unique planning challenges. Special consideration must be given to ensure that populations are sustained for current and future generations.

There are five caribou herds that live in or travel through the planning region – three populations of migratory caribou, the Porcupine (PCH), Fortytmile (FMCH), and Nelchina; and two populations of Northern Mountain Caribou, the Clear Creek and Hart River (see **Map 4: Appendix A** for herd ranges).

Key planning issues related to Migratory caribou include:

The ranges of all caribou herds cover nearly the entire planning region, extending into Yukon and Alaska. Key considerations for migratory caribou include the following:

- The predominant migratory herd in the region is the FMCH, mostly due to their population size and the extent of their range within the planning boundary. The FMCH has been identified as the primary herd of concern in the planning region, given that they are that subject to current and future conflict with certain land uses in the region.
- There are three key habitats that the FMCH occupy in the region: summer range, winter range, and migratory pathways. Winter range for the FMCH is abundant in the region but use of this habitat is challenging to predict from year to year. Conversely, summer ranges and migratory pathways are well-known, and these areas are considered essential to the persistence of the FMCH in the territory.

- The PCH have been identified as threatened and may require critical habitat to be identified and protected as a result of this status.
- The planning region's alpine and subalpine ridges are key migratory routes that enable caribou to access key habitat throughout the year. These areas also offer important transportation routes and areas of interest for mineral exploration and development.
- Range use may change over time as a result of many factors, including climate change and human activities. Consistent with the precautionary principle, a high degree of harvest and management caution is warranted across herd ranges of migratory caribou.

Key planning issues related to Woodland caribou include:

- The eastern extent of the region is used heavily by woodland caribou in the spring and summer.
- Rut is a sensitive period for woodland caribou (approx. September 15 – October 10).
- Maintaining access to habitat through key migration pathways. Overlapping placer and quartz activities within key migration routes / ridges can create barriers to migration.
- Alteration of winter habitat including lichen removal, fire, and the creation of permanent structures may result in changing patterns of use over time.

Objectives:

1. Migratory Caribou: Key migration pathways are maintained, and disturbance to key habitat areas is avoided or minimized.
2. Woodland Caribou: New access infrastructure is planned for and managed to minimize adverse effects to caribou, and key habitat for overwintering and calving is protected.

Planning Strategy:

Recommended Management Practices

a	Planning for, and assessment of, placer and quartz exploration and mining activities should define and implement safe operating distances from caribou by considering tools such as estimates of the zone of influence as advised by Regional Biologists.
b	Higher densities of placer mining activity should be avoided within high quality caribou habitat.
c	High concentrations of small-scale disturbance and any large quartz exploration projects (Class 4) or quartz mines should be avoided within key migration routes.
d	The size, extent, duration and level of activities should be avoided in significant caribou habitat during important biological periods. Consider the following when determining timing windows for industrial operations: (see **Map 4: Appendix A** for locations) • Concentrated critical summer and winter habitat areas; • Migration corridors during fall and spring migration; Rutting areas for woodland caribou; and • Concentrated woodland caribou use areas.

e New road and trail development should be avoided or minimized within the following:

- Identified seasonal migration corridors (e.g. along alpine/subalpine ridges);
- That bisect corridors at critical migration pinch points; and
- Mapped caribou rutting range.

Recommendations to the Parties

To support the continued growth and survival of caribou in the Dawson planning region, the following research and policy recommendations are proposed:

Research Recommendation	The Parties should work together, and collaboratively with other planning partners (e.g. DDRRC and Yukon Fish & Wildlife Management Board, PCMB) to improve research, knowledge and understanding of caribou in the planning region. Key considerations for a research and monitoring program may include: • Improved understanding of caribou–industry interactions to support stewardship objectives and adaptive management. • Continue to monitor caribou migration patterns and habitat to accommodate for changes in development activity, habitat alteration (i.e. fire, climate shifts, etc.). • FMCH mitigations should be designed to address migration of the herd to maximize efficacy. • Undertake lichen modelling to monitor implications of possible effects of climate change (I.e., increase in fire activity, etc.) on caribou populations. • Develop caribou movement alert system to maximize efficiency and compliance for regional biologists and project proponents.
Research Recommendation	The Parties should collaborate with the Porcupine Caribou Management Board to determine the availability and suitability of habitat within LMU #2 (Eagle Plains – Ch'ëzhàn wèchèl). If required, special management directions for any future development in this area should be developed as appropriate.
Recommended Action	The Commission supports the continued implementation of the Fortymile Caribou Harvest Management Plan (FMCH HMP), and the Porcupine Caribou Harvest Management Plan (PCH HMP) to ensure survival of the herds for current and future generations.

Recommended Action	The Commission understands that the Yukon Government, DDRC, and TH are currently developing management guidelines for the Fortymile caribou herd. The Commission supports the finalization and implementation of these guidelines.
Recommended Action	The Parties should prioritize the development of access management plans in LMUs where a high degree of overlap exists between caribou habitat and development activities. As indicated in **Section 4.1.2.2**, priority LMUs for access management planning include: • **#12 (East – Nächo dëk)** • **#17 Sixtymile – Khel dëk** • **#9 (Clear Creek)** • **#20 (Coffee - Tthatryăn)** Access management plans should consider the management strategies recommended in this Plan in addition to others developed collaboratively by the Parties.

4.2.1.2 Moose

Moose are known to live throughout most of the planning region and use a variety of habitats depending on their sex and stage of life. They have been known to favour linear features on the landscape, such as roads and trails, and tend to move into river valleys in the winter to avoid deep snow. Late winter habitat, although infrequently used, is considered critical to survival during periods of high snowfall accumulation. The area southeast of Dawson City supports a stable moose population at relatively high densities. Moose are an important component of the traditional diet and are essential to the good health of the First Nation and non-First Nation people of Dawson.

Moose are fairly tolerant of disturbance from land use activities, but they are susceptible to increased harvest as a result of new road and trail access development through increased harvesting pressure and predation. Management of linear features and their use is therefore an important consideration for this species. Mitigations relating to moose are closely tied to access in the Region, see **Section 4.1.2** for further details.

Key issues and interests related to moose include:

- New and existing access features (i.e., roads and trails) contribute to hunting pressure on moose populations.
- Increased levels of development supported by new and expanded linear features such as roads and trails transect moose habitat resulting in fragmentation or loss of habitat.
- Disturbance in key calving areas could have adverse effects on recruitment of moose into the population.

Objective:

New access infrastructure is planned for and managed to minimize adverse effects to moose through overharvesting and key habitat is protected.

Planning Strategy:

Recommended Management Practices

a	Avoid or minimize development activity within seasonal use / concentration areas and movement corridors, with specific emphasis on known key calving areas, and areas of post-rut aggregation.
b	Avoid or minimize new road and trail access: • That will result in 'loop road' connections in order to decrease harvesting pressure. • Within key moose habitat areas where access is currently limited in order to minimize adverse effects from overharvesting, increased predation, and moose / vehicle collisions.

Recommendations to the Parties

To support the continued growth and survival of moose in the Dawson planning region, the following research and policy recommendations are proposed:

Policy Recommendation	The Parties should consider implementing seasonal road closures in key post-rut habitat areas during the last two weeks of the hunting season (October 15 – October 31) to mitigate pressure on moose populations (see, for example, the French Gulch Timber Harvest Plan (Yukon Government 2020c).
Research Recommendation	The Parties should work together, and collaboratively with other planning partners (e.g. DDRRC and Yukon Fish & Wildlife Management Board) to improve research, knowledge and understanding of moose in the planning region. Key considerations for a research and monitoring program may include: • Improved mapping of important riparian habitat used for calving areas and effects of land use activities on these areas. • Developing a cumulative effects indicator and threshold based on moose habitat in LMU #12 (East - Nacho dëk). Potential consideration could include a road density threshold of 0.6km/ km² (Beazley, Snaith, MacKinnon and Colville, 2004) • Continued monitoring of population trends in areas that experience significant access development and/or hunting pressure to help inform land planning decisions. • Continued work on identifying key mineral licks that are affected by land use disturbance • Long-term study involving moose and socio-cultural indicators in reclaimed placer areas to further define 'successful' reclamation and its effects on the community.

Research Recommendation	Continue to monitor moose density to contribute to access development decision making processes.
Recommended Action	The Parties should prioritize the development of access management plans in LMUs where a high degree of overlap exists between moose habitat and development activities. As indicated in **Section 4.1.2.2**, priority LMUs for access management planning include: • **#12 (East – Nächo dëk)** • **#17 Sixtymile – Khel dëk** • **#9 (Clear Creek)** • **#20 (Coffee - Tthatryăn** • Access management plans should consider the management strategies recommended in this Plan in addition to others developed collaboratively by the Parties.
Recommended Action	Promote the practice of progressive reclamation of disturbed areas to create suitable moose habitat (e.g. wetlands).

4.2.1.3 SALMON

"Salmon, particularly Chinook habitat in the Yukon River and spawning streams is a critical indicator of ecological viability" (Survey Response, 2019)

The ecological and socio-cultural importance of salmon in the region is widely known. For thousands of years the Tr'ondëk Hwëch'in people have gathered along the Yukon River during late spring and early summer to fish. More recently, the river supported a commercial salmon fishing industry. The presence of salmon influenced the rhythm of life in the region. However, this situation has changed as the abundance of salmon can no longer support even traditional harvesting the way it once did. Salmon fishing continues today in small numbers to pass on the traditional ways to youth, to keep important cultural connections, and to instill stewardship values.

Three species of salmon live in the planning region: Chinook and Chum have populations in the Yukon River, and these species are joined by Coho in the Porcupine River watershed. Despite high levels of suspended sediment near Dawson City, the Yukon River remains important migratory habitat for juvenile and adult Chinook and Chum salmon.

Salmon, like migratory caribou, are a far-ranging species as their migration route extends beyond the borders of the planning region to other parts of the Yukon and into Alaska to the Bering Sea. They use the rivers, lakes, streams and tributaries of the region to survive.

Fish Habitat Management System for Placer Mining

The Fish Habitat Management System for Yukon Placer Mining (FHMS) was designed to replace the *Yukon Placer Authorization,* which was phased out in the early 2000s. The FHMS is implemented by the Yukon Placer Secretariat and manages placer mining activities under the *Fisheries Act.* The system has two management objectives:

1. A sustainable placer mining industry in the Yukon; and
2. The conservation and protection of fish and fish habitat supporting fisheries

The FHMS consists of three main protocols: 1) an Aquatic Health Monitoring Protocol, 2) the Water Quality Objectives Monitoring Protocol, and 3) the Economic Health Monitoring Protocol. These monitoring programs are intended to help ensure the FHMS is working effectively towards its objectives. An important design feature of the FHMS is the Adaptive Management Framework, which describes how information generated from the three monitoring programs as well as traditional knowledge will be considered within the system and provides for recommendations on where adjustments may need to be made to ensure the FHMS continues to operate as intended.

Two recent reviews conducted for the Yukon Government on aspects of the FHMS, including a review completed in March of 2020 on the Adaptive Management Framework as well as a draft review of a 12-year Water Quality Monitoring Review prepared in May 2020. Both reviews make recommendations to support the improvement of the FHMS and are considered in this Plan.

Key planning issues relating to salmon include:

- The cumulative effects across large spatial scales of land use activities may cause direct and indirect habitat loss and disruption to migratory routes.
- Sedimentation in watercourses as a result of anthropogenic ground disturbance or release of surface waters high in dissolved substances from industrial activities can affect salmon habitat.
- Development along salmon bearing watercourses can result in changes to water quantity and quality.
- There is uncertainty of the effects of climate change on salmon habitat.

Objective:

Identify key habitats for various life cycle stages and minimize disturbance to key habitat and effects to water quality/quantity, while maintaining migration routes.

Planning Strategy:

Recommended Management Practices

a	Avoid direct disturbance to known sensitive over-wintering and spawning habitats for salmon.
b	Minimize surface and vegetation disturbance in riparian areas by maintaining riparian buffers/setbacks from development activities where possible.
c	Avoid significant levels of winter in-stream water withdrawals in sensitive over-wintering fish habitat.
d	Avoid or minimize adverse effects of large-scale industrial and/or infrastructure projects within river corridors.
e	Avoid direct or indirect blocking of identified fish migration routes.
g	Consider implementing timing windows for lifecycle related habitat types (i.e. overwintering habitat and water withdrawals, spawning streams etc.).a

Recommendations to the Parties

Policy Recommendation	Implement the recommendations in the *Review and Evaluation of Adaptive Management in the Fish Habitat Management System for Yukon Placer Mining.* (Olson, Nelitz, Hall, 2020).
Research Recommendation	A comprehensive, publicly accessible aquatic habitat inventory should be conducted prior to mining and other land use activities in areas that have not yet been mined to determine whether salmon habitat is at risk. Such an assessment should identify and map key habitat with specific focus on spawning and over-wintering areas.
Research Recommendation	Working with other organizations as necessary, including the Yukon Placer Secretariat and Fisheries and Oceans Canada (DFO), the Parties should continue to revaluate the effectiveness of the Fish Habitat Management System for Yukon Placer Mining.
Research Recommendation	The Parties, together with other potential planning partners (e.g. DDRRC, YSSC, DFO, YFWMB) should collaborate to implement research strategies with a focus on: • Recognizing the work done to date, continue to gain a better understanding of Yukon River Chinook salmon rearing and overwintering habitat in the planning region.

	• Developing a publicly available aquatic inventory of streams, rivers, and tributaries in areas that have not been mined, to ascertain if salmon habitat or freshwater fish habitat is likely to be at risk if developed. • Examine the current water withdrawal tracking system to explore opportunities for improvement and to better understand the impact on aquatic habitat in the Region. • Understanding and assessing the cumulative effects of land use activities on salmon and their habitat to further inform indicators and thresholds in Plan monitoring and implementation. • Research the impact of use of high-powered boats which cause significant wake and turbulence leading to damage to riverbanks and mouths of small tributaries, resulting in adverse effects to salmon and their habitat (See also research recommendation in **Section 4.1.2.5 – Water Access**)
Recommended Action	Support the finalization of the DRAFT Fish Habitat Management System 12 year water quality monitoring review (prepared by Hemmera, May 2020) and implement appropriate recommendations, including: • Section 3.3: Recommendation to undertake a major sampling effort (e.g. multiple sites, blitz sampling) be completed for the Yukon River (South and North), and Klondike river given the frequent exceedances and high levels of total suspended solids (TSS) observed at many stations. • Section 3.4: In areas experiencing regular exceedances of their applicable water quality objective, investigate the cause-and-effect relationship of total suspended solids (TSS) to evaluate if exceedances are due to natural variations in suspended solids in the watercourse, or a direct result of placer mining activity.
Recommended Action	Continue to support ongoing work on Chinook Salmon restoration projects by TH and other organizations in collaboration with potential planning partners (e.g YSSC, Fisheries and Oceans Canada, Yukon River Panel)
Recommended Action	The Parties should create/fund an education platform to educate the public on the impact of land uses on salmon habitat and mitigation through best management practices/management strategies, to communicate the cultural importance of Salmon, and to foster stewardship initiatives.

4.2.1.4 SHEEP

Sheep generally live in high-elevation and alpine habitats. Alpine tundra and mountain ranges within, and to the northwest, of the Tombstone Range are important year-round habitat for sheep. Critical winter habitat for sheep generally includes relatively snow-free, wind-swept slopes. Sheep return regularly to the same winter ranges, lambing areas and migration corridors, and consequently these habitats are considered key habitat (**see Map 4: Appendix A**),

Key planning issues related to sheep include:

- Availability of, and access to critical late winter habitat (see RAR Section 11.2.3.3 for detailed description of habitat type – DRPC 2020c).
- Sheep are vulnerable to disturbance from various activities (e.g. low-flying planes and helicopters, especially during lambing season in May - June).

Objective:

Key sheep habitat is protected and disturbance during key times (lambing, over-winter) is avoided or minimized.

Planning Strategy:

Recommended Management Practices

a	Avoid industrial activities within sensitive sheep habitats and key areas, with emphasis on winter range avoidance.
b	Implement timing windows for land use activities and restrictions on aerial access during lambing periods in LMUs with known key sheep habitat.

Recommendations to the Parties

Policy Recommendation	The Commission have recommended that LMU #1 (North - Tthetäwndëk), LMU #4 (Fifteen/Chandindu - Tsey dëk/Tthen dëk) and LMU #7 (Upper Brewery/Hamilton) are designated as SMA II in this Plan. These three LMUs contain the highest quality known sheep habitat in the Region (see Map 16 – DRPC, 2020c).

4.2.1.5 GRIZZLY AND BLACK BEARS

Approximately 6,000 – 7,000 grizzly bears are thought live in Yukon and this species can be found throughout the planning region. Their habitat requirements are an array of diverse ecosystems that occur over large areas, and as such they are indicators of healthy and large wilderness areas. However, little is known about grizzly bears in Yukon and the planning region as few studies have been conducted. In June 2018, this species was listed as a species of "Special Concern" in western Canada under the Federal Species at Risk Act. More information about bear habitat requirements and bear density in the region can be found in the DRPC Resource Assessment Report (2020c).

Black bears are also found in the region. However, black bears are not considered a 'key' species in this Plan.

Key planning issues related to grizzly and black bears include:

- Fragmentation of large tracts of land can degrade bear habitat and cause adverse effects on healthy bear populations.
- Bear-human conflicts resulting in mortality predominantly include lethal removal of bears from areas of human activity.

Objective:

Key grizzly bear habitat is protected, and more information is gathered to fill data gaps. Promote awareness of bear habitat and behaviour to reduce lethal bear/human conflicts.

Planning Strategy:

Recommended Management Practices

a	Potential attractants within backcountry industrial camps in the planning region should be properly stored and/or managed to minimize the attraction of wildlife. This includes all garbage, kitchen waste, strained solids, grey water, and fuel.

Recommendations to the Parties

Research Recommendation	The Parties should work together, and collaboratively with other planning partners (e.g. DDRRC and Yukon Fish & Wildlife Management Board) to improve research, knowledge and understanding of grizzly bears in the planning region. • Key considerations for a research and monitoring program should focus on identifying and mapping key habitat areas and other research topics identified under Goal #3 of the Conservation Plan for Grizzly Bears in Yukon (2019). • Management decisions for Grizzley Bear habitat management should have a strong foundation in local Traditional Knowledge • Decisions should be developed and promoted as an educational tool to promote stewardship of bear habitat.
Recommended Action	The Parties should implement proposed SMAs identified for conservation management in this Plan to contribute to a large-scale connected landscape that protects key grizzly bear habitat.
Recommended Action	The Parties should continue to work at implementing the Conservation Plan for Grizzly Bears in Yukon (2019) in collaboration with the Yukon Fish and Wildlife Management Board, with specific attention to Goal #2 (Take care of the land and other species that grizzly bears require).

4.2.2 Other Fish and Wildlife Habitat

Resident Fish Species

Maintaining healthy fish populations in the region is not only important to ensure overall balance in the ecological functions in the region, but it is also critical to sustaining traditional harvesting activities. There are at least 19 known resident (non-salmon) fish species that occur in the planning region. Most populations of all species live in streams, rivers and off-channel habitats in the summer, and some are known migrate to lakes to over-winter.

Key planning issues related to resident fish species:

- Fish are sensitive to aquatic habitat disturbances and changes in water quality and quantity. Both natural and human-caused changes to land and vegetation around water features affects water quality and quantity.
- Fish over-wintering and spawning areas are of critical importance to the maintenance of healthy fish populations. These areas are particularly sensitive to habitat disturbances and changes in water quality and quantity but in the Dawson planning region, their locations are poorly understood.
- Rivers, lakes and wetlands are important for both ecological function and land-use activity. The potential for impacts, and land-use conflicts, in these areas is high.

Objective:

Identify key habitat and minimize disturbance to water quality in aquatic habitat areas for aquatic species.

Planning Strategy:

Recommended Management Practices

a	The management strategies listed in the Salmon section should be considered to reduce the potential effects of land use activity on fish, aquatic habitats and water quality, where applicable.

Recommendations to the Parties

Research Recommendation	The Parties should work collaboratively to define and map key aquatic habitat for resident fish species prior to the assessment process for large-scale industrial and/or infrastructure projects focusing specifically on spawning and over-wintering habitat within ISAs III & IV and the Yukon River Corridor.

Migratory Birds and Raptors

The planning region includes many known key habitat types for migratory birds and raptors. The Tintina Trench flyway is a unique and important feature for migratory birds, especially during spring and fall migration periods. Key areas for raptors are located along river corridors and high alpine areas and wetlands are critical for waterfowl.

The Government of Canada (Canadian Wildlife Service) is responsible for the conservation and protection of migratory birds, as populations and individuals, and their nests under the Migratory Birds Convention Act.

Key issues related to migratory birds and raptors include:

- Land use activities within key habitat (e.g. river corridors, wetlands) may create adverse effects on birds, particularly during key periods (e.g. spring and fall migration).
- Migratory birds are not well represented in Yukon's Wildlife Key Areas database.

Objectives:

1. Migratory Birds: Disruption and disturbance to key habitat is avoided or minimized.
2. Raptors: Build on knowledge about key nesting areas and avoid disturbance to known nesting sites.

Planning Strategy:

Recommended Management Practices

a	As per guidance from the Canadian Wildlife Service, project planning should consider avoidance of activities in key migratory bird areas (such as the Tintina Trench) and during key migratory periods (spring and fall).
b	Avoid or minimize disturbance in areas where elevation is greater than 1000 metres to protect migratory bird specialist species that use high elevation habitats.

Recommendations to the Parties

Policy Recommendation	The Commission has recommended SMAs in this Plan that contain high quality habitat for migratory birds and raptors, including areas of high elevation (greater than 1000 metres), the Tintina Trench flyway, and wetland complexes.
Research Recommendation	The Parties should undertake research initiatives with the Canadian Wildlife Service, and other planning partners as appropriate, to build knowledge of the location of key staging and nesting areas in the planning region to further build Yukon's Wildlife Key Area database.

Species at Risk and Rare Endemic Species

The planning region contains approximately 21 terrestrial species that have been identified as "at-risk" by the Federal (Species at Risk Act) or Territorial (Wildlife Act) governments. In addition, the region is also home to rare endemic species that are not known to exist outside of the region or Territory. Some of these species are managed under recovery strategies or management plans by the appropriate levels of government. More information about the status of species-at-risk can be found in the DRPC Resource Assessment Report (2020).

Key issues relating to species at risk or endemic species include:

- The projected loss of habitat as a result of climate change and potential adverse impacts from mineral exploration and development are of particular concern for the following species: Spiked Saxifrage, Yukon Podistera, and the Bank Swallow.

Objective:

Work to identify, and minimize disturbance to, key habitats for species at risk.

Planning Strategy:

Recommended Management Practices

a	Apply mitigations for known locations of species at risk or rare endemic species as provided by Canadian Wildlife Service.
b	Avoid activity that may cause disturbance or destruction of Bank Swallow residences (occupied burrows) during the general nesting period (early May to late August) along clay/silt banks in river corridors.
c	Continue to work with Canadian Wildlife Service and other planning partners to identify and document species at risk or rare endemic species in advance of submitting a project for review.

Recommendations to the Parties

Policy Recommendation	The Parties should implement recommended SMAs, some of which contain known occurrences of species at risk and ecosystem types that are likely to contain species at risk or rare endemic species based on best available information. The recommended SMAs also provide for landscape connectivity which will help to sustain healthy habitat for other species at risk (e.g. Grizzly Bears).

4.2.3 WATER

Water is an important, and complex resource in the Region. It flows through the ground, the creeks, and the rivers of the Region; it sustains the Region's plants and animals, industries, and communities. The nature of water, in its ever-changing state, necessitates a holistic approach to first recognizing the importance of it, and second to guide the stewardship and use of it. The Plan addresses many of the issues and interests surrounding water in multiple sections throughout. The following section on Water is a synopsis of the various sections where water is addressed in the Plan.

The purpose of this section is not to provide the Planning Strategy pertaining to water specifically, but rather, to emphasize the interconnectedness of water and to highlight the sections of the Plan that address water.

Habitat

Water is habitat for the salmon and other fish species that live in, and pass through the Region. Mitigating the potential effects of land uses on the quality and quantity of aquatic habitat is of critical importance to sustaining healthy populations of salmon and other fish species. The salmon section of the GMDs makes linkages to the recommendations concerning water quality for salmon habitat. In addition, the Plan recommends that the Parties examine the current water withdrawal tracking system to explore opportunities for improvement and to better understand the impact on aquatic habitat in the region.

- Section 4.2.1.3 Salmon
- Section 4.2.2 Other Fish and Wildlife Habitat

Rivers

The many rivers of the Dawson planning region hold high ecological, economic, heritage, and cultural importance. Besides the Yukon River Corridor - Chu Kon Dëk (LMU #3), the Plan has not identified major river corridors that require specific management direction as all rivers are considered to be important. The Commission's main objective for rivers is to maintain and enhance their multi-use character while ensuring their ecological and cultural integrity remains intact. The various general management directions along with the special management direction outlined in specific LMUs contribute to achieving this objective.

Yukon River Corridor – Chu Kon Dëk (LMU #3)

The Yukon River Corridor has been assigned its own Land Management Unit, designated as a Special Management Area 2, and has been identified for future sub-regional planning. The phased approach to the stewardship of the Yukon River reflects the recognized value of the river to the territory and internationally. The Plan first recommends management direction to be immediately implemented in conjunction with a temporary withdrawal from mineral staking until such a time that a sub-regional plan is complete. The Commission is recommending that the sub-regional plan be developed to reflect a holistic approach to the stewardship of the river, recognizing that the river is an entity that extends far beyond the boundaries of the planning Region. Please refer to Section 5.3 for management direction related to the Yukon River corridor.

Community

Water for community consumption has been highlighted as a main issue for the Commission to consider in the Plan. There is emphasis on the Klondike River Watershed being of utmost importance to City of Dawson and surrounding communities' drinking water. The LMUs #15 (Fortymile - Chëdähdëk) and #16 (Swede Creek) have also been identified as important drinking water sources. **Section 4.1.6.1** supports the recommendations in the City of Dawson Aquifer and Wellhead Protection Plan (AWHPP) (Tetra Tech 2017) and has recommended sub-regional planning for LMU #13 (Klondike Valley) with specific emphasis on the importance of the area for drinking water.

- Section 4.1.6 Community Growth
- Section 5.13 LMU #13 (Klondike Valley)

Economy

Water is essential for a healthy economy. The main industries in the Region rely on water in one way or another. The day-to-day operations of the mining industry, specifically placer operations, require immense amounts of water to function. Access by water is relied upon in areas where there is limited access, e.g., barges are used to transport machinery and supplies to worksites. Agriculture, though not as intense, relies on the availability of water for irrigation, and tourism and recreation opportunities are enhanced throughout the region by the presence and use of the Region's rivers.

- Section 4.1.4 Tourism
- Section 4.1.3 Agriculture
- Section 4.1.1 Mineral Development
- Section 4.1.2 Transportation and Access

4.2.4 WETLANDS

The Commission wants to acknowledge that we are at a crossroads when it comes to the difficult decision of 'disturbance' or 'activity' in wetlands in the Region. The Commission understands that other policies and processes look to regional planning to offer solutions to this very difficult planning issue, and that it is their responsibility to find a balanced solution for the Recommended Plan that works for the community and is respectful to the environment.

The Commission strongly feels that input from the community is necessary to come to a decision based on the best available scientific information, and consideration of the important cultural and economic values that are held within our wetlands.

Wetlands in the Region hold immense socio-cultural and environmental importance. They are also known to be the site of land-use conflict within the region due to the potential high mineral value that exists in some areas. As a testament to the importance of wetlands, the Commission has received input from the Parties, the public and Plan partners on this issue. The Commission believes that a comprehensive approach to wetland management is required in the region.

Wetlands are land where the water table is at, near or above the surface or which is saturated for a long enough period to promote such features as wet-altered soils, water tolerant vegetation, and biological activities which are adapted to a wet environment (National Wetlands Working Group, 1997). The wetland classes in the Yukon (as per the Canadian Wetland Classification System) are bogs, fens, swamps, marshes, and shallow open water. Bogs, fens, and some swamps are characterized by having peat, which is an accumulation of partially decayed vegetation or organic matter. Peat takes a very long time to form and is hard, if not impossible to restore once it is removed.

There are numerous ecological benefits to wetlands including (but not limited to) wildlife habitat, water storage and regulation, carbon sequestration, etc. Wetlands are important to the Tr'ondëk Hwëch'in and other First Nations as they are places of immense historic and cultural value where they can exercise their rights and traditional pursuits. More information on the value, form, and function of wetlands can be found in the Resource Assessment Report and government and industry publications.

Wetlands cover only about 10% - 12% of the planning region (Bond, 2019; Ducks Unlimited Canada 2021), and as such are considered regionally scarce. Swamps are the most common wetland type

(5.7%), followed by fens (5.5%), bogs (0.4%) and marshes (<0.1%) (Ducks Unlimited Canada 2021). There are no large open water wetland complexes in the planning region, but there are several small wetland areas and areas of bog and fen peatlands. Permafrost plays a major role in the development of wetlands in the region.

Presently the only area that has undergone an extensive wetland inventory is the Indian River Valley (McKenna, 2018). Ducks Unlimited Canada has completed a wetland classification mapping project in the Dawson planning region to be used at the watershed level. Work is underway to produce further wetland mapping for the region that should help to identify the extent, location, and classification of the region's wetlands.

What is an 'undisturbed wetland'?

An undisturbed wetland is one where natural functions of a wetland have not been significantly or directly altered by human activities either permanently or temporarily.

Key issues related to wetlands include:

- Wetlands are regionally scarce and highly valued ecosystems.
- Some wetland complexes in the planning region hold high cultural and traditional value. The impact of wetlands altered by human activity may result in; the reduced use of an area (harvesting, recreational and/or traditional pursuits); the sense that Tr'ondëk Hwëch'in have not upheld traditional laws; and a reduced connection to the land.
- Disturbance in wetland habitat from development may be considered permanent. For instance, the reestablishment of peatlands (fens and bogs) under the right conditions could take hundreds of years.
- When reclamation of wetland habitat is completed post-mining, original class and function is not often restored.
- The extent of the impact resulting from the thawing of permafrost ground beneath wetlands is unknown.
- Wetlands may support rare flora and fauna in the region.
- Industrial development has the potential to negatively impact wetland areas indirectly through increased access, contamination, and changes to water regimes and directly through loss of habitat.
- The territory's most productive placer gold mining district (Indian River Valley) overlaps with a significant wetland complex.
- There are known areas of overlap of high potential mineral value and high ecological and cultural value in wetland complexes in the Region.
- The extent and type of wetlands present in the whole region is not fully understood.

Objective:

Recognize the ecological and socio-cultural value and contributions of wetland habitat, and work to identify and protect key wetland areas.

Planning Strategy:

Recommended Management Practices

The Government of Yukon has committed to producing a wetland policy for the Yukon and this work is still in progress. YG has convened multi-stakeholder roundtable meetings to discuss methods for the stewardship of Yukon's wetlands, with reports available online (yukon.ca/en/engagements/yukon-wetlands).

Strategies for managing wetland impacts that were discussed at roundtable meetings and warrant highlighting include the following:

a	Seek to minimize the loss of wetland benefits.
b	Wetlands warrant higher levels of protection
c	Best available information will be used to guide decisions, and this may evolve as more information is available about Yukon's wetlands and their reclamation
d	**Mitigation Hierarchy** The Mitigation Hierarchy – a widely used concept in natural resource management, is a set of sequential steps that should be followed to minimize the loss and degradation of wetlands. 1. Avoid impacting wetlands, 2. Minimize unavoidable impacts, 3. Reclaim impacted wetlands, 4. In specific circumstances, offset residual wetland impacts.

4.2.4.1 WETLAND THRESHOLDS

The Commission is recommending that development in bogs, fens and marshes be limited because of their rarity in the region, long recovery times and high amount of sequestered carbon. To support wetlands stewardship, we are recommending a mitigation hierarchy as outlined in the **Recommended Management Practices** above.

Policy Recommendation	No development is to be permitted* in undisturbed bogs and marshes throughout the region.
Policy Recommendation	No development is to be permitted* in undisturbed fens in: • SMAs; and • ISAs that have specific management direction written in the Landscape Management (LMU) tables (**Section 5.0**).
Policy Recommendation	Within most of the ISAs, development is to be permitted in fens up to a certain threshold per LMU. This threshold is discussed below and will be set in the Recommended Plan.

* Does not apply to pre-existing permits.

We Want to Hear From You!

The Commission is considering a development threshold for fens between 25% and 75% for this Draft Plan which would apply to most Integrated Stewardship Areas.

These options will **not** apply to:

- Special Management Areas (SMAs)
- ISAs that have specific management direction written in the Landscape Management (LMU) tables (**Section 5.0**).
- Active permits

When reviewing please consider the following:

- ✓ Think about what the fen threshold should be and its **trade-offs** carefully.
- ✓ How could this work 'in the field'?
- ✓ Is there anything that we are missing?

Share your thoughts with us!

Let us know what you think at https://engagedawson.planyukon.ca/ **or**

If you would like to participate in one of our discussions or workshops surrounding wetlands, please email dawson@planyukon.ca

Fen threshold:

- The Commission is considering allowing the development of 25% to 75% of fens within each applicable LMU, not by claim block or permit area (the purpose of this is to take a more holistic approach to wetland management and avoid fragmentation).
- Thresholds would be based on baseline mapping from a specified point in time (which will need to be agreed to by the Parties), **not** based on the amount fens existing at the time of application.

Policy Recommendation	Development should not be permitted without adequately detailed wetland inventories in areas with concentrations of wetlands.
Research Recommendation	Parties should prioritize adequately detailed wetland inventories in areas with concentrations of wetlands and development interest.

The fen threshold will affect mineral development, with more impact on development at the lower threshold. To get a sense of how much mineral development would be affected, we calculated the amount of overlap between different types of mineral tenure and wetland classes (based on Ducks Unlimited Canada version 2 [2021] wetland inventory). Placer claims, which tend to be in valley bottoms where wetlands are often found, are more impacted than quartz claims. Our analysis therefore focused on placer claims. The results of this analysis are in Figure 4-1, below, and show how the final fen threshold (x-axis, or left to right) affects the number of current placer claims, the amount of placers claims by area, and the total amount of wetlands (all classes).

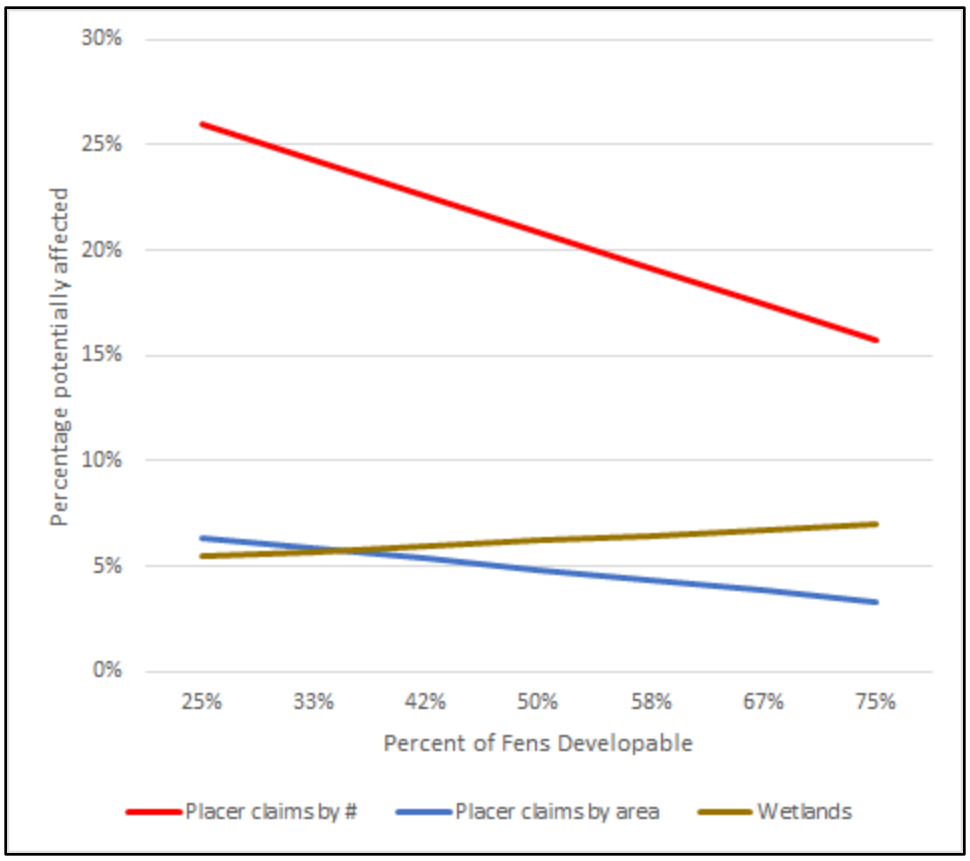


Figure 4-1 Wetlands options illustration: overlap between existing placer claims by number and area, and percent of developable fens and wetlands
Placer claim data current to December 2020. Note: the effect on wetlands is calculated using only those that overlap existing placer claims and does not consider those that could be claimed.

What are Trade-offs?

The Oxford definition of trade-off is:

"a balance achieved between two desirable but incompatible features; a compromise."

Think about what your ideal solution would be for wetlands and consider what might be lost with that solution.

TRADE-OFFS to the Threshold Approach for Wetlands

- This threshold approach may still result in fragmentation if large, contiguous areas are not kept intact.
- Development may happen at a more rapid pace in wetlands until the threshold is reached.
- Being LMU based vs. watershed based is not ecologically the best practice, however, this approach will provide certainty to proponents and clarity for assessors.

Recommendations for the Parties

Policy Recommendation	**Special Management Areas and Wetlands of Special Importance:** The Commission has recommended eight (8) SMAs in this Plan, all of which include significant wetland habitat. Scottie Creek Wetlands (LMU#22) and Upper Indian River Wetlands (LMU #19) have been put forth by the Commission to be protected as an SMA II in this Plan. These LMUs were chosen for protection due to their high cultural and ecological value that stems largely from their extensive wetland complexes. The wetlands contained within the Scottie Creek and The Upper Indian River LMUs should be considered 'Wetlands of Special Importance' by the Commission as per the concept as discussed at the Wetland Policy Roundtable.
Policy Recommendation	**Prioritization of completion of policy documents and wetland guidance** The Commission supports the prioritization of the completion of the following wetland-related government initiatives and policies: The Yukon Wetland Policy and the Yukon Water Board Wetland Plan Guidelines. The Commission also supports the prioritized completion of the Yukon Government and Tr'ondëk Hwëch'in Government's co-developed study on wetlands and guidelines for the reclamation of naturally occurring wetlands affected by placer mining in the Indian River Watershed (January 15, 2020).
Policy Recommendation	**Public Awareness** Public education initiatives to further efforts of awareness and stewardship in the Region. To promote public awareness of, appreciation for, and connection to wetlands.
Research Recommendation	**Buffers** The purpose of creating buffers is to protect wetland features and functions. The Commission recommends that the Parties consider the available data and literature on wetland buffers to determine the best solution based on the characteristics of the watershed, wetland type, and the intensity of associated land activities.
Research Recommendation	**Wetland Inventory** The Parties are to ensure that classified wetland mapping and hydrological models are done to support implementation of wetland disturbance thresholds.

Research Recommendation	**Wetland Research Initiatives** The Parties should undertake and promote research projects and initiatives that align with the DRPC objectives. These could focus on the following areas: • Effective wetland reclamation strategies to restore wetland functions. • Impacts of a changing climate on wetlands. • Cumulative impact thresholds and wetland ecosystem resilience. • Measurable indicators of wetland health Collaboration and partnerships with industry, non-profit, academic, and local and international sources of knowledge are needed to create a more complete understanding of the Region's wetlands.

4.2.5 Climate Change

Land use planning in the north must consider the reality of a changing climate and the resulting impacts, of which several are already being experienced in the Dawson planning region, including permafrost melt, infrastructure damages, as well as variable and inconsistent stream flows.

Climate change has the potential to continue significantly changing the existing biophysical conditions of the Dawson planning region, as the majority of the planning region is underlain by permafrost and is therefore susceptible to degradation and thaw from the projected average annual temperature increase by 4.7ºC to 5.3ºC by the end of 2100 (DRPC 2020c). Modelling has also demonstrated that annual average precipitation amounts are expected to increase by 10% to 40% in the Dawson area. Changes to the current fire regime are also predicted, with an increase in the projected number of fires and areas to be burned four and seven times higher, respectively, within the next 50 years (DRPC 2020c).

When considering climate change from a land use planning perspective it is important to consider the temporal scope for which you are planning for. For this Plan, the Commission has considered potential future land uses and their implications for a time horizon no less than 20 years. Given the certainty of impacts but inherent uncertainty in the magnitude of the predicted impacts, there is a need to enhance our collective understanding and awareness of climate change in the planning region through research, monitoring, and education, in addition to the development and implementation of strategies now and into the future. For these reasons, this land use plan relies heavily on the need to consider the potential impacts of climate change through the principles of adaptive management, and how it will be incorporated in future Plan updates and reviews.

The scope of a land use plan is also limited to what activities and impacts it can consider. While a robust approach to climate change must consider both ***adaptation*** as well as ***mitigation*** strategies, this land use plan focuses on adjustments to how we use our land based on the shifts anticipated by a changing climate, in addition to ways in which carbon sinks can be enhanced. In this way, a land use plan can play an important role in our efforts towards reducing the impacts of a changing climate in the Dawson planning region, but it is not the only contributor.

What is the difference between climate change *adaptation* and *mitigation*?

Climate change ***adaptation*** means adjustment in natural or human systems in response to actual or expected climate change effects, which moderates harm or exploits beneficial opportunities. By contrast, ***mitigation*** is intervention or policies to reduce the emissions or enhance the sinks of greenhouse gases (GHGs) which contribute to climate change.

(UNFCCC, 2021)

Key issues related to climate change include:

- Melting permafrost and changes to precipitation can lead to changes in overall water availability in the planning region, as well as changes to soil moisture, runoff regimes, and drainage patterns.
- Changes in permafrost may induce large changes in habitat quality, distribution and abundance, and introduce a number of new terrain hazard and geotechnical issues.
- Consideration of food security issues and climate change adaptation in the region's agricultural sector (See also **Section 4.1.3 Agriculture**).
- Changes in climate and biophysical components, such as vegetation shifts, can compromise the health and productivity of aquatic and terrestrial ecosystems, and resulting ecosystem services.
- Climate change can result in the introduction of harmful invasive species to native ecosystems.
- Altered fire cycles and impacts to the rate of spread and extent of forest insects and diseases and invasive species, as well as changes in forest regeneration and succession.
- Changes to animal species' diversity, ranges, and distribution across the landscape.

- Changes to traditional land use, subsistence harvesting success, and gathering.
- Permafrost melt and soil instability can negatively impact road transportation infrastructure as well as lesson the reliability of winter roads and increase maintenance costs.
- Altered growing seasons and water flow can impact agriculture practices and local food production as well as there is potential for reduced water availability for placer mining.

Objectives:

1. Recognize that the way habitats are distributed on the landscape could change in the next 20 years because of climate change.
2. Recommend pro-active measures to mitigate effects to permafrost.
3. Support the development of renewable energy sources in the region.

Planning Strategy:

Recommended Management Practices:

a	The potential for permafrost degradation from any road or resource development projects should be minimized (See also **Section 4.1.2 Transportation and Access**).
b	Climate change considerations, including potential variability in environmental conditions and adaptation/mitigation measures, should be assessed and addressed in the design and adaptive management of major resource development projects.
c	Development activities in previously undisturbed areas, or areas adjacent to high ecological or socio-cultural value, should ensure appropriate mitigations are in place to minimize the risk of introducing invasive species. This includes the proper cleaning of equipment and gear before leaving infested areas, using invasive species-free materials, and monitoring for new introductions.

Recommendations to the Parties

Background for the policy recommendations below include:

Special Management Areas

Ensuring ecological integrity is maintained across a broad range of environmental gradients provides the greatest opportunity for wildlife to adapt to climate change. Connected areas will allow native species to move, adapt and survive in the face of climate change. Aquatic ecosystems, including waterways, wetlands and riparian zones also provide important ecological functions and can provide resilience to climate change. The boreal forest provides essential habitat and can mitigate the impacts of climate change. Aligning with Yukon Government's *Our Clean Future Draft Report* (Government of Yukon 2020d) (Action P5) and with the *Yukon Parks Strategy 2020-2030* (Government of Yukon 2020a) (Strategic Action 4.2: Develop a Parks System Plan), the Commission recommends the identification of special management areas and the withdrawal of large intact landscapes.

Wetlands

Globally speaking, wetlands in permafrost regions are one of the most significant terrestrial carbon sinks. While wetlands do emit both methane and carbon dioxide (greenhouse gases) as the vegetation within the wetland decomposes, long-term perspectives (thousands of years) indicate that wetlands remain a globally significant carbon store as the amount of carbon they store significantly outweighs the amount of greenhouses gases they emit (Ducks Unlimited Canada, 2018). Wetlands help mitigate climate change by storing carbon, and the removal of wetland habitat and the thawing of permafrost in wetlands will *accelerate the changes that come from a warming climate.*

Policy Recommendation	The continued implementation of Yukon Government's ***Our Clean Future: A Yukon strategy for climate change, energy, and a green economy***, which includes targets to reduce greenhouse gas emissions and improve resilience to the impacts of climate change.
Policy Recommendation	***Matson Uplands*** The Matson Uplands (LMU #18) have been identified as an SMA 1 to preserve key habitat values for the Fortymile caribou herd. The Parties should consider climate driven shifts in habitat requirements for the herd at Plan review, for the location and extent of LMU #18, to ensure it remains true to its management intent.
Policy Recommendation	***Food Security*** Parties should implement policy and research recommendations in **Section 4.1.3 Agriculture**, to create and support a sustainable and reliable food network in the Dawson Region.
Research Recommendation	***Wildlife and Land Use*** The Parties should continue to support and fund initiatives to better understand the impacts of climate change in the Dawson planning region, including the full consideration of traditional knowledge, which is particularly important for informing our understanding of climate change impacts in northern ecosystems. Research initiatives may include but are not limited to: • Wildlife species-specific or multi-species vulnerability assessment, and climate induced shifts in species distribution. • How climate driven shifts impact land use patterns and the pursuit of traditional economic activities. • Identification of refugia areas for species at risk.

Research Recommendation	***Permafrost*** The Parties should continue to develop specific research initiatives in the planning region that focus on: • The location of high-risk areas for permafrost thaw. • The impacts of permafrost thaw on local biophysical conditions, including water availability and flow and wetlands. • Appropriate and effective mitigation measures for minimizing permafrost thaw from resource and road development projects. • Geohazard mapping and permafrost studies along major transportation routes, including the Dempster and Top of the World Highways.
Research Recommendation	***Energy Production*** The Parties should continue to explore the feasibility and practicality of alternative green energy sources within the planning region, including advances in hydroelectricity, biomass, geothermal, wind, and solar.
Recommended Action	***Special Management Areas*** All lands within the Special Management Area 1 (SMA 1), and all lands without existing mineral tenure within Special Management Area 2 (SMA 2) should be withdrawn from mineral staking, exploration, and development as per the recommendations of this Plan. These areas have been established with a strong emphasis on the need to preserve ecological integrity, landscape connectivity, and large intact areas of boreal forest.
Recommended Action	***Wetlands*** The Parties should implement the applicable thresholds and directions for preserving wetland habitat as per the recommendations of this Plan and the designation of wetlands of special importance in Scottie Creek Wetlands (LMU #22) and the Upper Indian River Wetlands (LMU #19).
Recommended Action	***Adaptive Management*** The Parties should follow and implement the directions recommended in Section 6.0, Plan Implementation and Review, with a particular emphasis on climate change considerations.

4.3 Culture and Heritage

The Dawson region has a rich cultural legacy that is closely tied to the history and stories of the Tr'ondëk Hwëch'in, other First Nations, the Klondike Goldrush, and the unique contemporary socio-cultural setting of the area. Maintaining and enhancing cultural and heritage values for all people is a key part of sustainable development.

For the Tr'ondëk Hwëch'in, heritage is not something from the past, but rather a way of life reflected in the beliefs, values, knowledge and practices passed on from generation to generation. The THFA recognizes and protects this way of life which is based on an economic and spiritual relationship between Tr'ondëk Hwëch'in and the land. Preserving the important history of events like the Klondike Gold Rush also help contribute to our understanding and interpretation of historical events, while other cultural values, such as placer mining, farming, art, and music, are equally valuable to residents' quality of life.

> *"Important value for Yukoners to maintain our culture. Especially crucial for First Nations to keep their culture strong."* (Survey response, 2019)

> *"[Mining and mineral exploration] are a very important part of our culture, our community, our customs, economy and ability to have the variety of businesses and supplies available in our community. The culture of the mining community, some of which are now 6th generation should also be included in your considerations"* (Survey response, 2019)

It is also important to note that management strategies and recommendations for the conservation of heritage and cultural values should not be read in isolation. These values are addressed throughout the General Management Directions in this Plan as they are closely tied to the land, and as such, tied to the activities that occur on the land, and the habitat that the land provides.

Some of the important known heritage resources and culturally important areas for the Tr'ondëk Hwëch'in and other First Nations are shown on **Map 5 in Appendix A.** These areas were identified and mapped based on information provided by the Tr'ondëk Hwëch'in, the Government of Yukon and local and traditional knowledge of Commission members and others.

This section of the Plan describes objectives and strategies designed to achieve the following Plan goals related to culture, heritage and stewardship:

Draft Socio-cultural Goals

- Promote land stewardship by upholding and enhancing cultural and heritage values of the Tr'ondëk Hwëch'in, other First Nations, and other residents of the planning region.
- Support land-based activities that strengthen connections to the land in order to promote Yukoners' health and well-being.
- Ensure traditional harvesting rights and activities are respected and sustained.

We want to hear from you!

The Region means many things to many people and the Commission would like to honour this by incorporating stories and lived experiences of the Region in the Recommended Plan. Please let us know if you have something that you would like to share by contacting us directly or visiting our engagement website.

Share your stories with us…

Visit our Engage Dawson website to contribute to the Plan.

4.3.1 Heritage Resources and Sites

Conservation and management of heritage resources received careful consideration in the development of this Plan. As resource exploration and development expands in the planning region, potential impacts to heritage resources increases. First Nations and non-First Nations heritage resources in the planning region include, but are not limited to:

- Harvestable resources (e.g. wildlife, medicines, raw materials);
- Traditional knowledge (e.g. oral histories, place names, songs);
- Trap lines, camps and caches;
- Trails and travel routes;
- Burial and sacred sites;
- Archaeological and paleontological resources; and
- Historic sites.

The Commission has made best efforts to recognize and uphold both Tr'ondëk Hwëch'in and Government of Yukon definitions, perspectives and rules related to heritage resources in this Plan. Heritage and historic resources in the planning region are regulated primarily by the THFA, the Tr'ondëk Hwëch'in Heritage Act and Yukon Historic Resources Act. Definitions of heritage resources, historic sites and objects are not reproduced in this section but rather readers are encouraged to review the THFA and legislation for further detail in this regard.

The THFA also lists heritage routes and sites that are important to the Tr'ondëk Hwëch'in. Commissions must account for these routes and sites when developing a regional land use plan (THFA 13.4.6.4, Schedule A and Schedule C). Some of these routes and sites are within the ISA while others are located within SMAs.

The location of identified heritage resources and sites is shown on **Map 5: Appendix A**. However, not all resources or their locations are known – this requires a cautious approach to land use and

resource development. In addition, in accordance to the Terms of Reference agreed to by the Parties, this Plan does not apply to the Klondike National Historic Sites.

Key issues related to heritage resources and sites include:

- Conservation of significant heritage resources and sites are important to maintain First Nations traditional economies (see Section 4.1.9 in Sustainable Economy), culture and stewardship.
- The location of all heritage resources is not known – new resources and sites are discovered regularly and, in many cases, as a result of land development or extraction activities.
- Land use conflicts may arise between conservation of heritage resources and land use activities in areas of high development activity such as, for example, within mining and exploration areas in the ISA or along highway and river corridors.

Objective:

Historic sites, burials, trails, camps and other resources are identified and preserved.

Planning Strategy:

Recommended Management Practices

a	Ensure that adequate heritage and historic resource surveys and data collection are completed, as part of the review and assessment of projects.
b	Avoid or minimize land use impacts in the vicinity of identified heritage and historic resources (e.g. use buffer zones).
c	Avoid or minimize land use activities in significant heritage areas during important seasonal use periods (e.g. use timing windows).
d	Report the discovery of any heritage and/or historic resource within an affected First Nation's traditional territory to their applicable heritage departments, in addition to the Government of Yukon
e	Where impacts to identified heritage and cultural sites and resources may occur, implement the following mitigation measures: • Establish work camps associated with resource exploration and development activities away from identified heritage routes and historic sites. • Implement immediate stop work orders if evidence of heritage or cultural values is detected, to allow Parties to assess significance.

Recommendations:

Policy Recommendation	Avoid the promotion of ancestral trails as recreational trails for use by the general public to preserve their heritage and cultural value.
Research Recommendation	The Parties should continue to research and use traditional Hän names wherever possible on mapping and other products developed through Plan implementation and monitoring.

Recommended Action	The Parties should jointly develop management guidelines for identified heritage routes and sites within the Integrated Stewardship Area (ISA).

4.3.2 STEWARDSHIP

Stewardship has been identified as a guiding principle of this Plan. The need for and importance of community or land stewardship was a common sentiment expressed from industry partners, non-profits, the Parties, and members of the public. Stewardship has been promoted in this Plan in a variety of ways including initiatives and direction stemming from Plan recommendations, the land designation system and the application of adaptive management in implementation. In addition to these recommendations, the Commission also recommends the following:

Recommended Action	The Parties should explore options for enhancing the sense of responsibility for the land for those that use it, like miners, trappers, and harvesters, within the Dawson planning region.
Recommended Action	***Dawson Land Stewardship Trust*** The Parties should consider creating a Land Stewardship Trust for the Dawson Region with the mandate to fund projects to promote the ongoing practice of stewardship of the land beyond plan approval. ***What is the Land Stewardship Trust?*** The purpose of the Land Stewardship Trust is to invite people to think differently about their relationship to the land and to encourage creative ways to be better stewards. Project proposals considered should for example, foster community and cultural connections to the land, encourage industry stewardship innovations, and provide educational/research opportunities. Funding sources to explore for the trust could be derived from community/environmental contributions from industry, educational institution partnerships, off-setting, and government grants and/or funding from all levels of government. The funding application process should be easily accessible and could be administered by existing councils or committees operating in the Region. Precedent in the Yukon for a comparable trust program is the Yukon Fish and Wildlife Enhancement Trust.

4.3.3 HARVESTING RIGHTS AND ACTIVITIES

First Nation and non-First Nation harvesting rights, activities, and areas were carefully considered in this Plan. First Nations and other residents of the region spend a considerable amount of time on the land participating in various harvesting activities. Tr'ondëk Hwëch'in continue to exercise their culture through traditional economic activities (see also Section 4.1.9 -Traditional Economy) including, but not limited to, hunting, fishing, trapping and harvesting plants. The recognition and protection of this way of life is a cornerstone of the THFA.

> *"For First Nations individuals and communities, traditional activities are a time for re-connecting with the land and its environment, bonding with family, and sharing teachings through oral knowledge and history. We pass on and sustain our culture and tradition by being on the land with our children." ((Ninänkäk hǫzǫ wëk'ätr'ënòhcha (We Take Good Care of Our Land), 2020)*

Resource harvesting by non-First Nations people in the region is also a key part of their cultural identity. While resource harvesting has an economic component, these activities are also important for maintaining and building connections to the land, as well as a sense of stewardship. This Plan strives to respect and consider all types of resource harvesting activities in the planning region.

Key issues related to harvesting rights and activities include:

- First Nations opportunities to participate in resource harvesting and other economic and cultural pursuits depend on the continued availability of, and access to, heritage and cultural areas.
- Use areas may change over time depending on the availability of resources, animal migration patterns, travel conditions and climate change.
- Land use conflicts may arise between traditional pursuits and other land development activities wherever they overlap, but particularly in multi-use areas such as within the Dempster and Top of the World Highway Corridors and along rivers.

Objectives:

1. Key use areas for subsistence harvesting in the planning region are maintained to support First Nations and non-First Nations activities.
2. Preserve and enhance the multi-use value of the Fortymile area.
3. Preserve values required to maintain stewardship duties (e.g. traditional use areas, healthy and sustainable fish and wildlife populations and their habitats).

Planning Strategy:

Recommended Management Practices

a	Subsistence harvesting activities and other traditional pursuits should be permitted in all land use designations, subject to the THFA and existing legislation and regulations.
b	Avoid or reduce the level of land use activities in important subsistence harvesting and other cultural use areas during important seasonal use periods (e.g. use timing windows) (See **Appendix A: Map 5**).

c	Adhere to appropriate buffers zones (permanent and/or temporary) around culturally important areas, especially in LMU #15 (Fortymile – Chëdähdëk) and LMU #16 (Swede Creek).

Recommendations to the Parties

Policy Recommendation	Commit to the collection of community-based input (e.g. hunters, TH citizens, other local land users) to support community land stewardship and inform the monitoring program for this Plan (see **Section 6.0 – Plan Implementation and Revision**).
Research Recommendation	Research and develop one or more cumulative effects indicators based on socio-cultural values, that incorporates traditional knowledge and on-the-land experience, for use in monitoring effectiveness of Plan recommendations (see Section 6.0 – Plan Implementation and Revision). The Parties should look to other initiatives in Canada where indicators of this nature have been developed, including for example the Metlakatla Cumulative Effects Management Program in British Columbia.

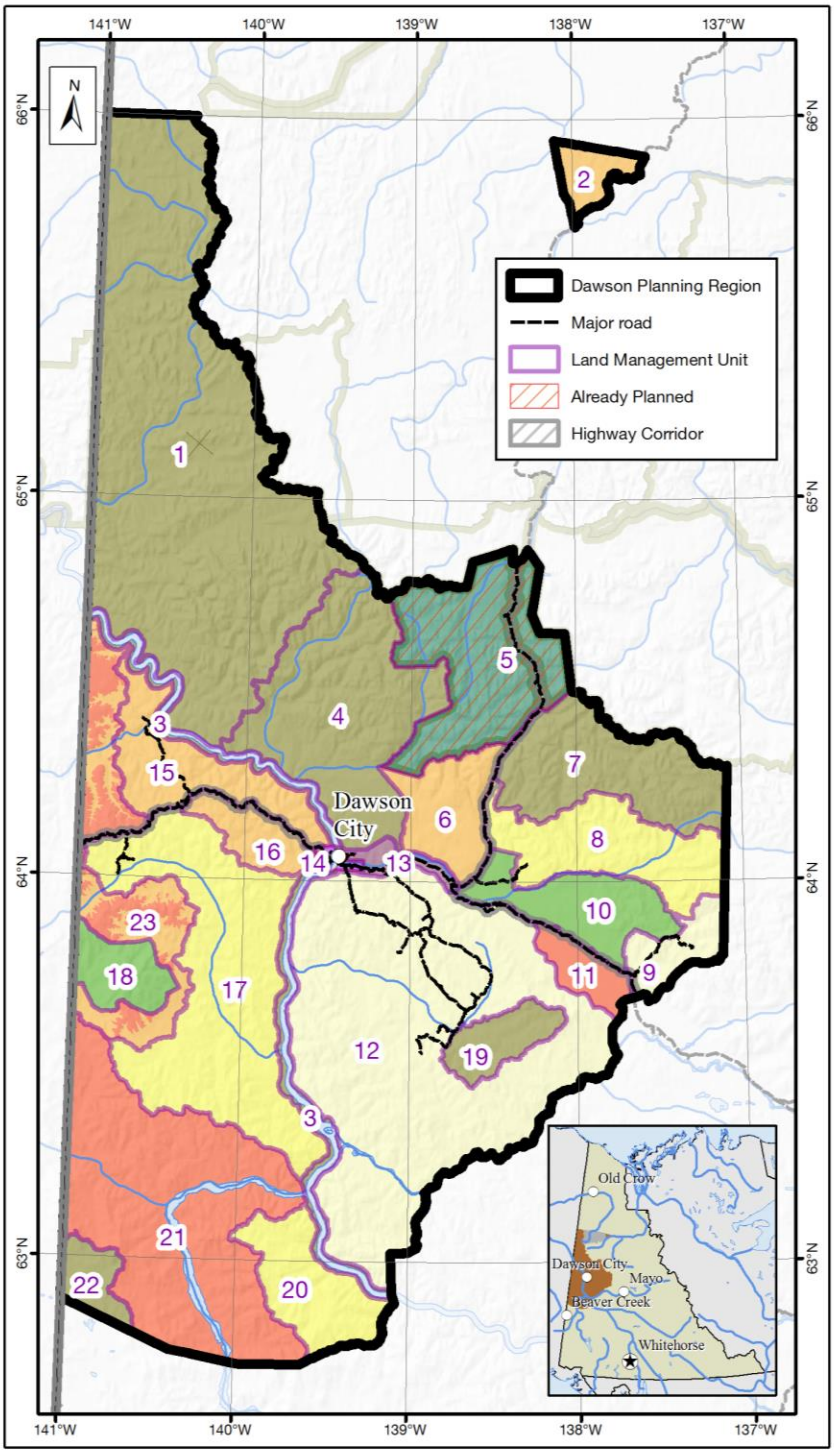
4.3.4 HÄN LANGUAGE

The Commission has made best efforts to incorporate the Hän language into this Plan by:

- Working with Tr'ondëk Hwëch'in government representatives to identify and provide a Hän name for as many LMUs as possible at this time;
- Using Tr'ondëk Hwëch'in place names on mapping, when available, for important places, rivers, mountains and other landscape features.

Policy Recommendation	Hän phrasing and place names should be incorporated into the Plan and subsequent planning documents as appropriate. Exploring tools and platforms (i.e. digital etc.) to promote language as related to the Plan should be supported as appropriate.

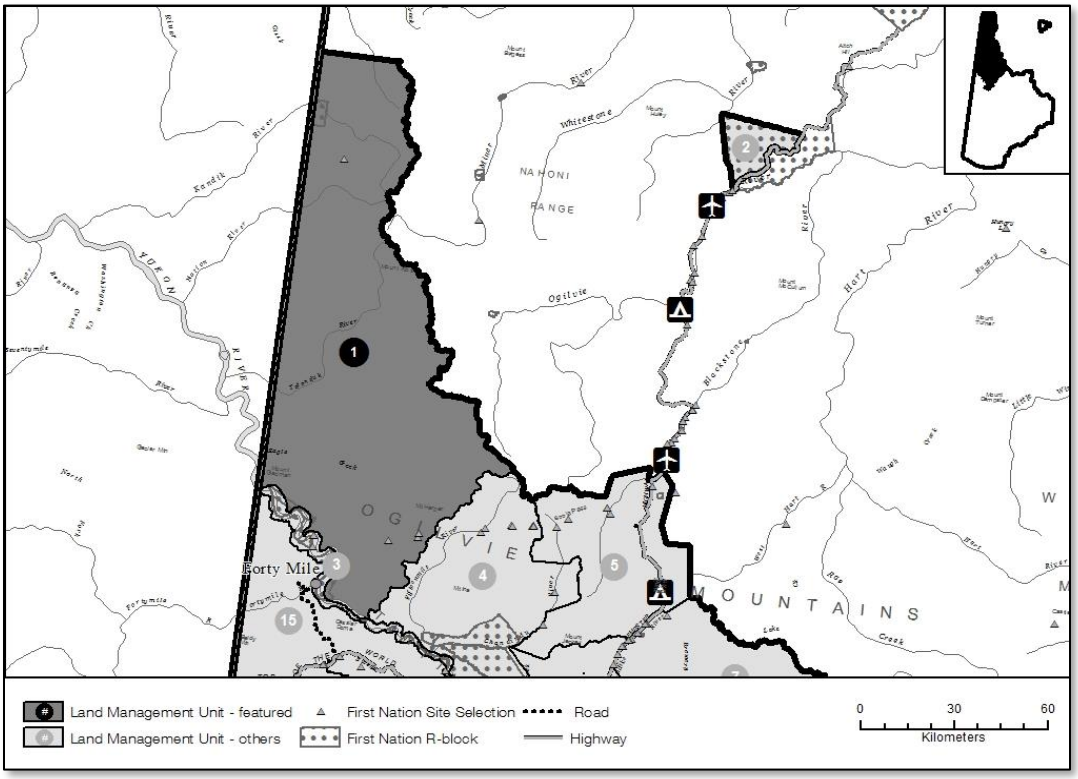
5 Landscape Management Units



Land Use Category	Area (km^2)	Area (% region)
Special Management Area		
SMA I	**1517 km^2**	**3.8%**
SMA II	**14,154 km^2**	**35.5%**
Integrated Stewardship Area		
ISA I	**5307 km^2**	**13.3%**
ISA II	**3600 km^2**	**9.0%**
ISA III	**5813 km^2**	**14.6%**
ISA IV	**7079 km^2**	**17.8 %**
Other		
Community Area, Future Planning Areas	**2380 km^2**	**6.0%**
Tombstone Park		

5.1 LMU 1: NORTH – TTHETÄWNDËK

LMU 1: North - Tthetäwndëk	
Land Use Designation:	**Special Management Area II**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-48A, TH R-4A, TH R-5A TH R-76A, TH R-77B, TH S-133B1, TH S-134B1, TH S-6B1
Area:	7950 km^2



Management Intent (*Our Vision for the LMU*)

Our management intent for this area is to focus on conservation with limited use, and to explore options for ensuring landscape connectivity, ecosystem representation, and key areas for wildlife, stewardship, and heritage are preserved. This area contains some of the most undisturbed and wild landscapes of the planning region, and it is rich in intact ecosystems, important wildlife habitat, and Tr'ondëk Hwëch'in cultural history. Access infrastructure into much of this area is limited, as is existing mineral exploration and development. This area hosts an active outfitting concession and related infrastructure. It is important that the natural state of this area remains intact, and it is important that Tr'ondëk Hwëch'in and other residents of the region are able to continue accessing and learning from this landscape. The future of this area will look similar to how it is today, with added opportunities for protection, education, and land connection.

Special Management Directions (*Recommendations to achieve Vision*)

1. Restricted industrial land use is allowed within existing mineral tenure.

2. Withdrawal of all other lands from staking and industrial use.
3. No new all-season surface access infrastructure permitted.
4. Consideration of temporary winter road access only with Plan variance or amendment.
5. Other land use rights (trapping, outfitting, traditional economic activities) recognized.
6. No activities on existing mineral tenure allowed within the sheep late winter range (Feb-Apr) and in identified lambing areas.
7. Limitations on air access landings may apply to reduce impacts to key wildlife values.
8. Cumulative effects thresholds match those of ISA I.

Priority Objectives

- ✓ Recognize and maintain habitat connectivity within and adjacent to the planning region.
- ✓ Representation of critical, rare, or unique ecosystems will be maintained throughout the planning region, while considering that some ecosystems are likely to shift due to climate change.
- ✓ Key caribou migration pathways are maintained, disturbance to key habitat areas is avoided or minimized.

Rationale for Designation

- Biodiversity-rich area containing endemic meadow habitats, species of conservation concern, and the Tatonduk River Watershed, which is an ecologically intact area with permanent freshwater springs.
- Area contains underrepresented or absent ecoregions within Yukon's protected area system: The North Ogilvie Mountains Ecoregion and the McQuesten Highlands, respectively.
- Area overlaps with three caribou herd ranges and extensive habitat for sheep. Both caribou and sheep are species of considerable cultural, ecological, and economic importance in Yukon.
- Area contains important waterways that provide for Chinook salmon spawning habitat.
- Establishing a conservation area will enable landscape connectivity between Yukon-Charley National Preserve in Alaska, Kit Range / North Cache Creek and Ogilvie River Headquarters in Peel River Watershed, and Fishing Branch Ni'iinlii Njik Territorial Park.
- Area contains traditional trails, routes, and sites, as well as high cultural importance and use for TH, and area is critical for cultural continuity and maintaining cultural ties to the land for TH citizens.
- Some existing mineral exploration areas but not extensive.
- Surface access infrastructure is limited to non-existent. Maintaining this status will ensure the wilderness character of the area remains intact.

Ecological Value

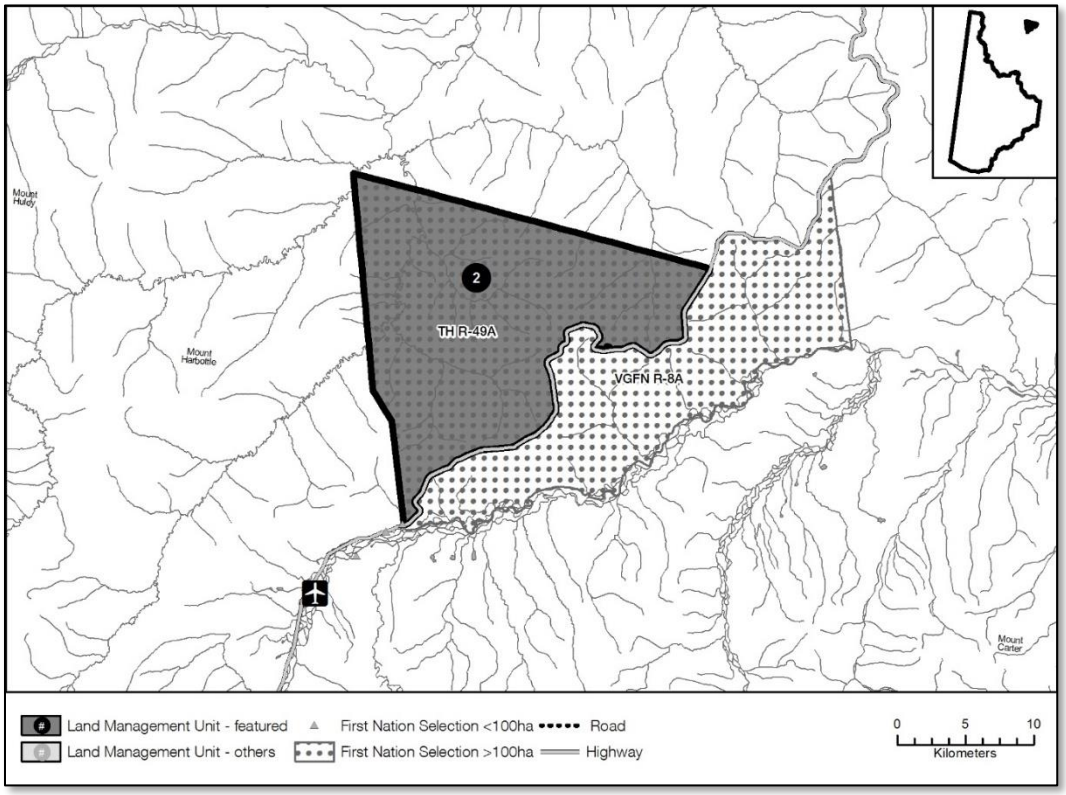
Caribou: This area overlaps with critical summer and winter habitat as well as spring/fall and summer corridors for migrating caribou (Porcupine caribou herd and Fortymile caribou herd), and important habitat for the Hart River herd.

Sheep: Extensive Dall (thinhorn) sheep habitat coverage within entire area (winter range and migration corridors)
Moose: Some key wildlife areas for moose in late winter along major watercourses (Tatonduk River, Eagle Creek, Miner Creek).
Grizzly: Contains suitable habitat for grizzly bears,
Birds: High value waterbird habitat in riparian areas, key nesting habitat for raptors. Much of area consists of high elevation (>1000 m) habitat crucial for migratory bird specialist species. Contains the Tintina Trench Flyway, a major migration corridor and contains stop over sites used by migratory birds during migration
Salmon: Coal Creek provides for chinook salmon spawning habitat
Species at Risk: Presence of Yukon Podistera (SARA Special Concern), Yukon Wild Buckwheat (SARA Special Concern), Murray's Draba (COSEWIC assessment candidate), and Peregrine Falcon (SARA Special Concern).
Vegetation and Unique Features: Contains endemic/rare species, and intact forests (>140 years old), and several known mineral licks. Also includes Mount Klotz, which contains unique assemblages of plants and insects.
Water: Several important and undeveloped watercourses. Presence of freshwater springs.
Wetlands: Available wetland mapping indicates considerable wetland coverage within much of the area lowlands, including bogs, fens, and marshes, which provide for important wildlife habitat and ecosystem services
Ecosystem Representation: Part of North Yukon Ogilvie Mountains Ecoregion which is currently underrepresented in protected areas system for Yukon. Ogilvie Mountains have also been identified as one of three Yukon hotspots for nationally endemic species. Area also a small portion of the McQuesten Highlands, which is not currently included within Yukon's protected areas system.
Landscape Connectivity: Includes intact areas that connect to Yukon-Charley National Preserve in Alaska, Kit Range / North Cache Creek and Ogilvie River Headquarters in Peel River Watershed, and Fishing Branch Ni'iinlii Njik Territorial Park in North Yukon Planning Region.
Economic Value
Mineral Resources: Isolated active Class 1 exploration quartz programs, and presence of active quartz claims. Areas of high prospectivity for mineral potential. Exploration is conducted by air access only.
Oil and Gas Resources: Contains portions of two sedimentary basins with identified potential for oil and natural gas resources: Eagle Plains and Kandik Basins.
Outfitting and Trapping: Area contains an active outfitting concession with associated infrastructure (airstrips and buildings) and some trapping.
Tourism: Limited activities and limited access. Mount Klotz identified as a high value hiking area.
Forestry: Overlaps with the Yukon River North and Tatunduk Landscape Units of the Dawson Forest Resources Management Plan. Both units are designated for high to higher conservation focus with low potential for forestry activities.
Transportation and Access: No major access roads or trails into area, some airstrips.
Traditional Economy: Areas important for harvesting and gathering along river corridors
Heritage, Social, and Cultural Value
Heritage Resources: Traditional trails and travel between important cultural areas (trails along Tatonduk River, Eagle Creek, Mount Klotz, and the Yukon River), Culturally important areas identified by TH.

Recreation: Limited recreational hiking opportunities, fly-in access only.
Stewardship: Important for maintaining cultural ties to the land for TH citizens, including engaging youth, and upholding stewardship duties.

5.2 LMU 2: EAGLE PLAINS - CH'ËZHÄN WËCHÈL

LMU 2: Eagle Plains - Ch'ëzhän wëchèl	
Land Use Designation:	**Integrated Stewardship Area 2**
Land Status:	TH Settlement Land R-49A
Area:	329 km^2



Management Intent Statement (*Our Vision for the LMU*)

Our management intent for this area is to ensure habitat requirements for the Porcupine caribou herd are well understood and protected. This area also offers important opportunities for First Nation subsistence hunting and harvesting along the Dempster Highway that must be maintained. As this LMU exists exclusively on Tr'ondëk Hwëch'in's Settlement Land parcel R-49A, it is important to preserve Tr'ondëk Hwëch'in's ability to sustainably develop their settlement land now and into the future. However, development must ensure the unique ecological value and cultural use of this area remains intact.

Special Management Directions (*Recommendations to achieve Vision*)

1. The Parties should collaborate with the Porcupine Caribou Management Board to determine the availability and suitability of habitat within this LMU. If required, special management directions for any future development in this area should be developed as appropriate.

Priority Objectives

- ✓ Key caribou migration pathways are maintained, and disturbance to key habitat areas is avoided or minimized
- ✓ Preserve key values that facilitate and recognize Tr'ondëk Hwëch'in's responsibilities as stewards of the land (healthy and sustainable fish and wildlife populations and their terrestrial and aquatic habitats)
- ✓ Preserve future opportunities/options for oil and gas development

Rationale for Designation

- This area has been identified as culturally important by Tr'ondëk Hwëch'in, and it supports subsistence use and traditional economic activities including trapping and harvesting.
- Within an identified sedimentary basin with identified potential for oil and natural gas resources. A zone 2 designation allows for Tr'ondëk Hwëch'in to determine further direction for development in this area while preserving caribou habitat.

Ecological Value

Caribou: Within the range of the Porcupine caribou herd and contains important habitat and critical migration routes for the herd

Grizzly Bear: Eagle Plains ecoregion has approximately 9 bears per 1000 km^2

Birds: Presence of habitat for migratory birds

Furbearers: Presence of low to no habitat suitability for muskrat, moderate potential for pond dwelling beaver habitat

Water: Part of the headwaters of the Porcupine River watershed

Ecosystem Representation: Eagle Plains Ecoregion of Taiga Cordillera Ecozone

Economic Value

Oil and Gas: Within an identified sedimentary basin with identified potential for oil and natural gas resources, and some presence of exploration wells within the general area and presence of previous seismic lines. There is an active permit for oil and gas adjacent to the LMU.

Mineral Resources: Moderately prospective mineral potential with medium to high confidence

Tourism and Recreation: Adjacent to Dempster highway increases potential for tourism and recreation, within an activity corridor, and near an airstrip

Outfitting and Trapping: Part of a group trapping concession and an outfitting concession

Transportation and Access: Accessible off the Dempster Highway

Traditional Economy: Presence of First Nation land use along Ogilvie River and within LMU. Very active harvest area.

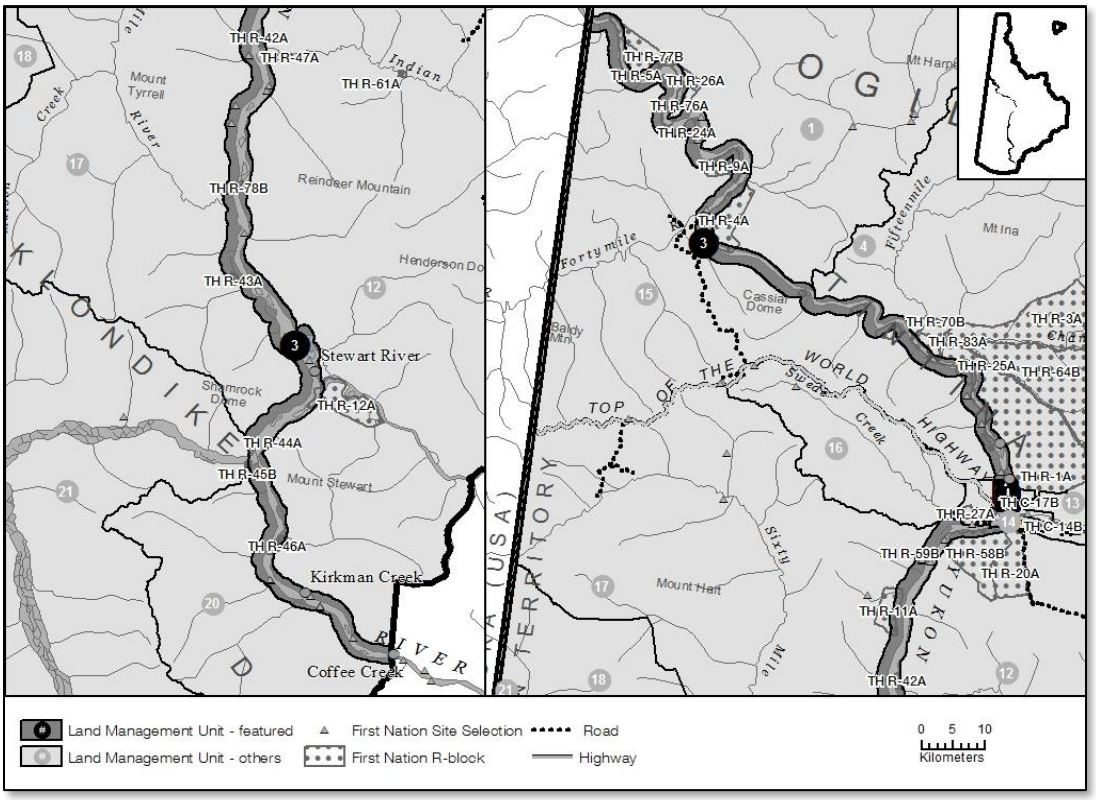
Heritage, Social, and Cultural Value

Heritage Resources: No established cabins or resources of historic value

Stewardship: Important area for connecting to the land through the practice of land use/economic activities, including trapping, gathering, and harvesting

5.3 LMU 3: YUKON RIVER – CHU KON DËK

LMU 3: Yukon River - Chu kon dëk	
Land Use Designation:	**Special Management Area II – Future Planning Area**
Land Status:	Non-Settlement Land and Settlement Land and 52 TH Settlement Land Parcels
Area:	926 km^2



Management Intent Statement (*Our Vision for the LMU*)

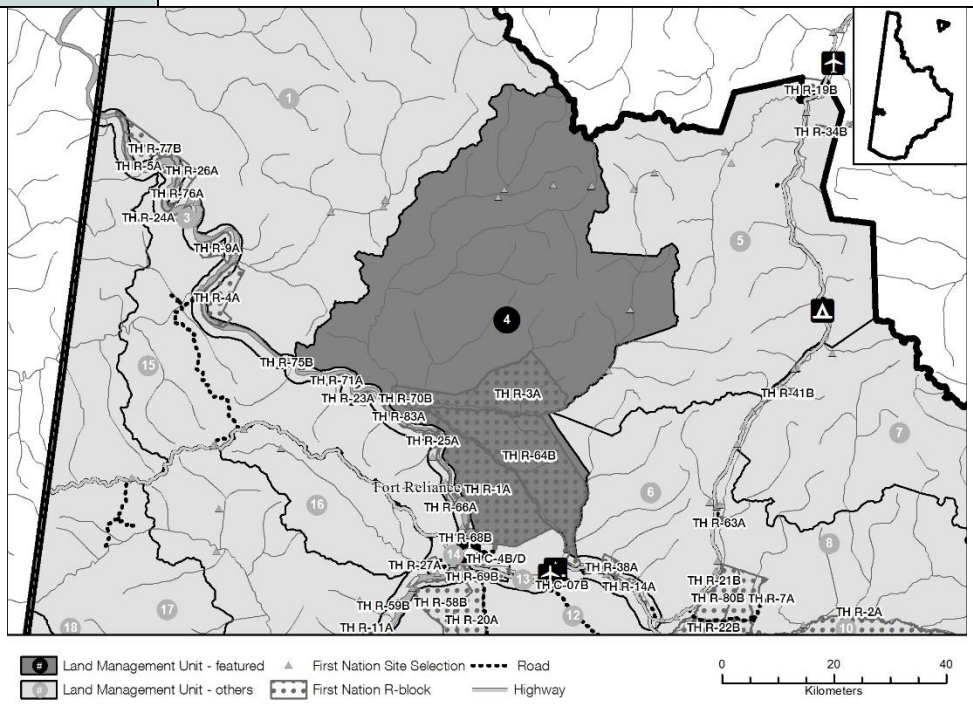
Our management intent for this area is to provide direction for a sub-regional plan that will focus on protecting and enhancing water quality and salmon habitat; protecting the scenic values that attract tourism opportunities; and managing important industrial access points. The Yukon River Corridor represents a significant multi-use area and transportation corridor for the Dawson Region. The cultural significance of this area is demonstrated by the abundance of identified cultural and sites along this historic route, and it continues to be an area of immense cultural value to Tr'ondëk Hwëch'in. The corridor provides rich habitat for key species in the region including salmon, moose, raptors, and species at risk, and it is important for facilitating a diverse range of economic development activities including mining, agriculture, recreation, and tourism. Recognizing that there are different pressures to the north and south of the corridor, the management approach for the corridor should be holistic.

Special Management Directions (*Recommendations to achieve Vision*)
1. Interim withdrawal of lands from staking and industrial use until the completion and approval of a sub-regional plan. 2. Restricted industrial land use is allowed within existing mineral tenure. 3. Sub-regional planning with stated timeline for completion in Recommended Plan. 4. Interim measures and sub-regional planning of the Yukon River Corridor should be designed with a holistic vision for the river to be ultimately managed as an entity within the Yukon Territory as additional planning regions containing the river are completed. 5. Cumulative effects thresholds match those of ISA II. 6. Consideration should be given to the differences in activity levels to the north and to the south of Dawson City for the management of the Yukon River Corridor.
Priority Objectives
✓ The multi-use value of the Yukon River Corridor is preserved ✓ Ecological value and contributions of the Yukon River Corridor will be recognized and preserved ✓ Identify key habitats for various salmon life cycle stages, and minimize disturbance to key salmon habitat and effects to water quality/quantity, while maintaining salmon migration routes ✓ Identify key habitat for resident fish species, and minimize disturbance to water quality ✓ Build on knowledge about key nesting areas for raptors, avoid disturbance to know nest sites
Rationale for Designation
• Important multi-purpose area that represents a valuable transportation route, numerous habitat qualities for terrestrial and aquatic species, and immense cultural value to the Tr'ondëk Hwëch'in • Represents high recreational, industrial, historical, and educational value and provides opportunities for angling and wildlife viewing as well as the aesthetic qualities of a northern wilderness river. • Provides for chinook salmon habitat for adults and juveniles, tributaries to the River also offer important Chinook spawning habitat
Ecological Value
Caribou: This area overlaps with two caribou herd ranges: the Fortymile and Nelchina caribou herds, and includes migration corridors and winter habitat for the Fortymile caribou
Moose: Area considered extensive good habitat for moose
Birds: High value waterbird habitat along riparian areas, and raptor key areas have been identified along the Yukon River corridor to the south
Species at Risk: Presence of Yukon Podistera (SARA Special Concern), Peregrine Falcon (SARA Special Concern), and known Spiked Saxifrage populations
Unique Features: Occurrence of known mineral licks within Corridor and rare plant species
Fish: Important salmon habitat as well as home to several resident fish species

Ecological Framework: Part of Boreal Cordillera ecozone, Klondike Plateau ecoregion
Economic Value
Mineral Resources: No overlapping claims along mainstem but along several tributaries near or within corridor. Infrastructure for mineral development, such as barge landings, trail heads, docks, along mainstem.
Trapping: Areas overlap with trapping concessions
Tourism: Yukon River Corridor offers ample opportunities for wilderness tourism through canoeing, hiking, and camping
Agriculture: Yukon River Corridor may offer suitable land for agricultural purposes
Transportation and Access: Various landing sites and docks are also associated with water access and there are connecting trails off some areas the mainstem. River traffic consists of barging and recreational boating
Traditional Economy: Areas important for harvesting and gathering and traditional land use
Heritage, Social, and Cultural Value
Heritage Resources: Location of traditional trails, historic sites, TH land use sites, heritage reserves, historic resources, and archaeological sites
Recreation: Areas of high recreational significance
Stewardship: Important area for maintaining cultural ties to the land for TH citizens, including engaging youth, and upholding stewardship duties.

5.4 LMU 4: FIFTEEN/CHANDINDU – TSEY DËK/TTHEN DËK

LMU 4: Fifteen/Chandindu – Tsey dëk/Tthen dëk	
Land Use Designation:	**Special Management Area II**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-1A, TH R-3A, TH R-64B, TH R-70B, TH R-83A, TH S-135B1, TH S-136B1, TH S-137B1
Area:	2792 km^2



Management Intent Statement (*Our Vision for the LMU*)

Our management intent for this area is to focus on conservation with limited use, and to establish shared management responsibilities between Tr'ondëk Hwëch'in and Yukon Government. The Fifteen-Chandindu area contains intact ecosystems and is relatively inaccessible, and our intent is to ensure landscape connectivity, ecosystem representation, and key areas for wildlife, stewardship, and heritage are protected. This area contains important habitat for the Fortymile, Hart River, and Porcupine caribou herds, grizzly bears, and sheep, and is important for trapping and traditional economic activities. Notably, this area is rich in Tr'ondëk Hwëch'in cultural history and contains important traditional trails between key areas. It is important that Tr'ondëk Hwëch'in gain shared management responsibilities in this culturally significant area.

Special Management Directions (*Recommendation to achieve Vision*)

1. Restricted industrial land use is allowed within existing mineral tenure
2. Withdrawal of all other lands from staking and industrial use
3. No new all-season or temporary surface access infrastructure permitted
4. Other land use rights (trapping, outfitting, traditional economic activities) recognized

5. No activities on existing claims are to occur within the sheep late winter range (Feb-Apr) and in identified lambing areas
6. Parties to explore and implement opportunities for TH to retain co-management responsibilities of area, including the consideration of establishing an Indigenous Protected and Conserved Area (IPCA)
7. Cumulative effects thresholds match those of ISA I

Priority Objectives

- ✓ Preserve key values that facilitate and recognize Tr'ondëk Hwëch'in's responsibilities as stewards of the land (healthy and sustainable fish and wildlife populations and their terrestrial and aquatic habitats)
- ✓ Historic sites, burials, trails, and camps are identified and protected or preserved
- ✓ Recognize and maintain habitat connectivity within and adjacent to the planning region

Rationale for Designation

- Area contains traditional trails, routes, and sites, as well as high cultural importance and use for TH, and area is critical for cultural continuity and maintaining cultural ties to the land for TH citizens
- Biodiversity-rich area containing intact ecosystems and species of conservation concern
- Majority of area located within McQuesten Highlands ecoregion, which is currently absent within Yukon's protected area system
- Area overlaps with three caribou herd ranges and extensive habitat for sheep, moose, and grizzly bears, all species of considerable cultural, ecological, and/or economic importance in Yukon
- Area contains important waterways that provide for Chinook salmon spawning habitat
- Establishing a conservation area will enable landscape connectivity between Kit Range / North Cache Creek in Peel River Watershed and Tombstone Territorial Park
- Contains some existing mineral dispositions with limited spatial distribution and disturbance
- Surface access infrastructure is limited to non-existent. Maintaining this status will ensure the wilderness character of the area remains intact.

Ecological Value

Caribou: Fortymile, Porcupine, and Hart River caribou herd ranges. Contains critical summer and winter habitat as well as spring/fall and summer corridors for migrating caribou, and important habitat for the Hart River herd

Sheep: Large numbers of Dall's sheep present and extensive sheep habitat throughout majority of area (winter range, lambing, and rutting areas)

Moose: Considered good moose habitat. Wildlife key areas for moose along river corridors (Chandindu, Fifteen, and Yukon River north) for late winter (February – April) upland habitat

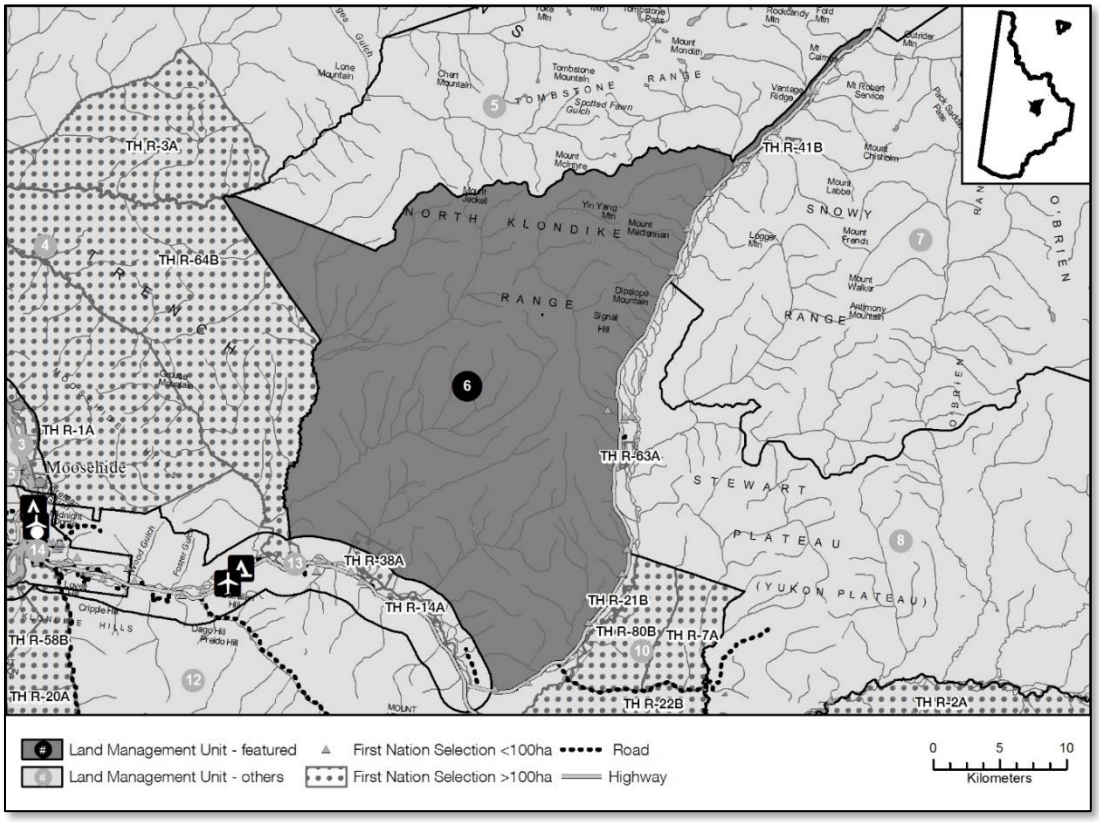
Grizzly: Contains suitable habitat for grizzly bears
Birds: High value waterbird habitat in riparian areas, key nesting habitat for raptors. Majority of area consists of high elevation (>1000 m) habitat crucial for migratory bird specialist species. Contains the Tintina Trench Flyway, a major migration corridor and contains stop over sites used by migratory birds during migration
Fish: Chandindu and Fifteen Mile Rivers provide for chinook salmon spawning habitat
Species at Risk: Presence of Yukon Podistera (SARA Special Concern), Peregrine Falcon (SARA Special Concern).
Vegetation and Unique Features: Contains endemic/rare species, some intact forests (>140 years old), and several known mineral licks.
Water: Several important undeveloped watercourses and headwaters
Wetlands: Available wetland mapping indicates some wetland habitat within area lowlands, including bogs, fens, and marshes, which provide for important wildlife habitat and ecosystem services
Ecosystem Representation: Majority of area is part of the McQuesten Highlands, which is not currently included within Yukon's protected areas system.
Landscape Connectivity: Includes intact areas adjacent to Kit Range / North Cache Creek in Peel River Watershed and Tombstone Territorial Park and opportunities for connectivity
Economic Value
Mineral Resources: Minimal upland active quartz claims, majority of area with mid-range mineral potential. Low to moderate probability for placer potential.
Outfitting and Trapping: Area contains an active outfitting concession and an active trapping concession.
Tourism: Limited hiking opportunities, air access only. Located directly adjacent to Tombstone Territorial Park.
Forestry: Overlaps with the Chandindu Landscape Unit of the Dawson Forest Resources Management Plan. Unit is designated as a forest resource management zone with a medium priority for planning and a higher conservation focus
Transportation and Access: Some access in winter/fall. No major access roads or trails into area.
Traditional Economy: Fall and winter traditional use areas, presence of TH settlement land parcels in proximity to community (R-3A, R-64B, R-1A, R-70B, R-83A)
Heritage, Social, and Cultural Value
Heritage Resources: Presence of traditional trails along Chandindu, Fifteen Mile, and Yukon Rivers and a few identified archaeological sites
Recreation: Limited hiking opportunities
Stewardship: Connection and engaging with youth on cultural values and continuity, important for maintaining cultural ties to the land for TH citizens and upholding stewardship duties

5.5 LMU 5: TOMBSTONE – DDÄL CH'ËL

LMU 5: Tombstone – Ddäl ch'ël	
Tombstone Territorial Park is a protected area established pursuant to Schedule A of Chapter 10 of the THFA and designated under the *Parks and Lands Certainty Act*. This regional land use plan will not include planning for the Park itself, but it is physically located within the Dawson planning region. As indicated in the THFA, in developing a land use plan that includes all or parts of the Park, a Regional Land Use Planning Commission shall consider the Tombstone Territorial Park Management Plan (2009). Tombstone Territorial Park supports exceptional caribou, grizzly and black bear, moose, and sheep populations. These species have been sustainably harvested by subsistence, resident and non-resident hunters for thousands of years. The location of the Park is also of significant First Nation cultural history and value, as well as an exceptional attraction for contemporary recreation and tourism.	
Land Status:	Non-Settlement Land and Settlement Land: TH R-19B, TH R-34B, TH S-138B1, TH S-145B1, TH S-27B1, TH S-28B1, TH S-29B1
Area:	2100 km^2

5.6 LMU 6: KLONDIKE – TR'ONDËK

LMU 6: Klondike - Tr'ondëk	
Land Use Designation:	**Integrated Stewardship Area 2**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-38A, TH R-64B, TH S-112B1, TH S-142B1, TH S-176B1, TH S-205B1, TH S-206B1, TH S-207B1/D, TH S-208B1/D, TH S-24B1, TH S-25B1, TH S-26B1/D, TH S-47B1, TH S-71B1, TH S-72B1, TH S-73B1
Area:	831 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to allow for limited sustainable development while ensuring the high ecological value and socio-cultural use remains intact. Located within the Tintina Trench flyway as well as along the North Klondike River, this area offers important habitat for migratory birds, raptors, furbearers, moose, and salmon. Industrial interests in this area are limited, with the exception of forestry along the Dempster Highway. This use of this area for forestry pursuits as well as continued traditional economic activities, trapping and harvesting, should be maintained.
Special Management Directions (*Recommendation to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to: 1. Activities that have the potential to disturb Chinook spawning habitat should be suspended during the Chinook spawning season (July 1 to August 15).

2. Area is considered to contain critically important habitat for regional lynx populations. Development in this area should ensure impacts to lynx and their key habitat requirements are minimized or avoided.
3. Activities that have the potential to disturb migratory bird nesting should not occur between key migration times.
4. Area represents important headwaters for drinking water catchment for City of Dawson and surrounding residential neighborhoods. Development in this area should take care in not impacting this important water source (See General Management Directions, **Section 4.1.6**).

Priority Objectives

- ✓ Minimize or avoid disruption and disturbance to migratory bird nesting and staging areas, and avoid disturbance to known raptor nest sites
- ✓ Ensure a viable land base is available and accessible for forestry and fuel wood harvesting
- ✓ Protection of traditional land use/economic activities, trapping, and harvesting

Rationale for Designation

- Heavy multi-use area with conflicting land uses, and important areas for commercial fuelwood harvesting.
- A zone 2 designation with the special management directions recommended above should allow for continued sustainable growth of the important industrial aspects of this area without undermining ecological and socio-cultural values.

Ecological Value

Caribou: Within the range of the Fortymile caribou herd and contains some key winter habitat and spring/fall migration corridor areas.

Moose: Considered extensive good moose habitat and contains key wildlife area for moose mostly for late winter (Feb-April) range for calving.

Lynx: Considered to be a regionally important lynx refugium, in which when lynx populations in surrounding areas decline, lynx populations in the Klondike valley and surroundings do not. As such this area can be considered a significant seed source for regional lynx habitats.

Birds: Presence of raptor nests along North Klondike River and within the Tintina Trench Flyway, important for migratory birds. Contains high concern habitat for migratory birds, and watercourses and ponds offer important habitat for waterfowl, including swans, cranes, ducks, geese, and shorebirds. Presence of key sharp tailed grouse habitat areas and some high elevation habitat (<1000 m) which is important for some migratory bird species.

Furbearers: Beaver and muskrat areas, lesser occurrence of wolverine, ermine, and river otter.

Fish: The Klondike River watershed offers critical habitat requirements for Chinook salmon (spawning, rearing) and important habitat for resident fish species including Arctic grayling.

Vegetation and Unique Features: Considered to contain important mineral licks for wildlife .

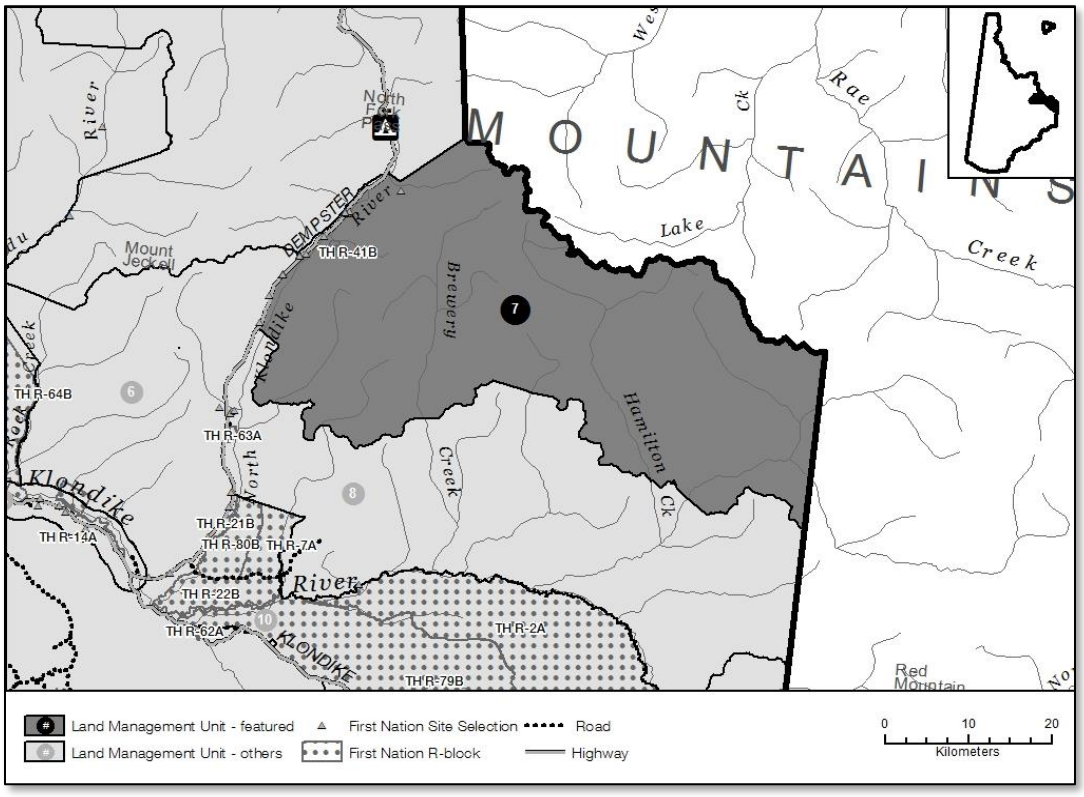
Water: Klondike River watershed offers important aquatic habitat values for key wildlife in the region as well an important drinking water source for residents of the region.

Wetlands: Presence of some wetland habitat, including bog, fen, and swamp.

Ecosystem Representation: Part of the McQuesten Highlands, an ecoregion currently absent within Yukon's protected area system.
Economic Value
Mineral Resources: High to moderate mineral potential in area, some isolated placer leases and claims, but area generally low interest for mineral exploration and development. Presence of a past mine site at Colliery for coal.
Outfitting and Trapping: Presence of active trapping concession and associated infrastructure.
Forestry: High commercial fuelwood harvesting value.
Tourism: Limited hiking opportunities, air access only. Located directly adjacent to Tombstone Territorial Park.
Transportation and Access: Low accessibility, but adjacent to both the Klondike Highway and Dempster Highway.
Energy: Presence of historical infrastructure and location of future potential use for hydroelectricity (North Fork Hydro-electric proposal).
Traditional Economy: High cultural value and contemporary use for traditional economic activities.
Heritage, Social, and Cultural Value
Heritage Resources: Occurrence of traditional trails and archaeological sites.
Recreation: Given proximity to Dawson and adjacency to main highways there is some potential for recreational pursuits in area, however access into area remains relatively absent.
Stewardship: Important areas for connecting to the land through the practice of land use/economic activities, including trapping, gathering, and harvesting.

5.7 LMU 7: UPPER BREWERY/HAMILTON

LMU 7: Upper Brewery/Hamilton	
Land Use Designation:	**Special Management Area II**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-41B, TH S-123B1, TH S-143B1, TH S-144B1, TH S-88B1
Area:	1681 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to adequately protect key wildlife habitat and aesthetic attributes along the Dempster Highway while allowing for limited mineral development and surface access within existing tenure. This area contains important wildlife habitat for species at risk, including calving, summer and rut habitat for northern mountain woodland caribou and high elevation areas for migratory birds. This area is also located adjacent to two protected areas, Tombstone Territorial Park and the West Hart River Wilderness Area, and thus offers important opportunities for landscape connectivity and wildlife movement between habitats.
Special Management Directions (*Recommendation to achieve Vision*)
1. Restricted industrial land use is allowed within existing mineral tenure. 2. Withdrawal of all other lands from staking and industrial use.

3. Surface access infrastructure off Dempster Highway only considered through Plan variance or amendment.
4. Other land use rights (trapping, outfitting, traditional economic activities) recognized.
5. Viewscape from Dempster Highway to be maintained.
6. Cumulative effects thresholds match those of ISA I.

Priority Objectives

- ✓ Work to identify and minimize disturbance to key habitats for species at risk.
- ✓ New access infrastructure is planned for and managed to minimize adverse effects to woodland caribou, and key habitat for overwintering and calving is protected.
- ✓ Representation of critical, rare, or unique ecosystems will be maintained throughout the planning region, while considering that some ecosystems are likely to shift due to climate change.
- ✓ Protect, enhance, support tourism and recreational experiences including scenic viewscapes, and other values pertaining to tourism, including wildlife, culture, and heritage.

Rationale for Designation

- Area contains important calving, summer, and rut habitat for the Hart River caribou herd, a subset of the Northern Mountain Woodland, which is a species of Special Concern under SARA. Caribou are a species of considerable cultural, ecological, and economic importance in Yukon.
- Area is located entirely within McQuesten Highlands ecoregion, an ecoregion currently absent within Yukon's protected area system.
- Establishing a conservation area will enable landscape connectivity between West Hart River Wilderness Area of the Peel River Watershed and the Tombstone Territorial Park.
- Entirety of upland areas are high elevation (>1000 m), which provides crucial habitat for migratory bird specialist species.
- Area contains existing and important mineral dispositions for exploration.

Ecological Value

Caribou: Overlap with Fortymile, Clear Creek, and Hart River caribou herd ranges. Contains critical summer and winter habitat for mountain caribou, including habitat for calving, post-calving, summer, and rutting.

Sheep: Extensive Dall's sheep habitat throughout area.

Moose: Extensive good moose habitat, wildlife key areas for moose later winter (Feb-Apr) habitat along Hamilton and Brewery Creeks.

Birds: Extensive inclusion of high elevation (>1000 m) habitat crucial for some migratory bird species

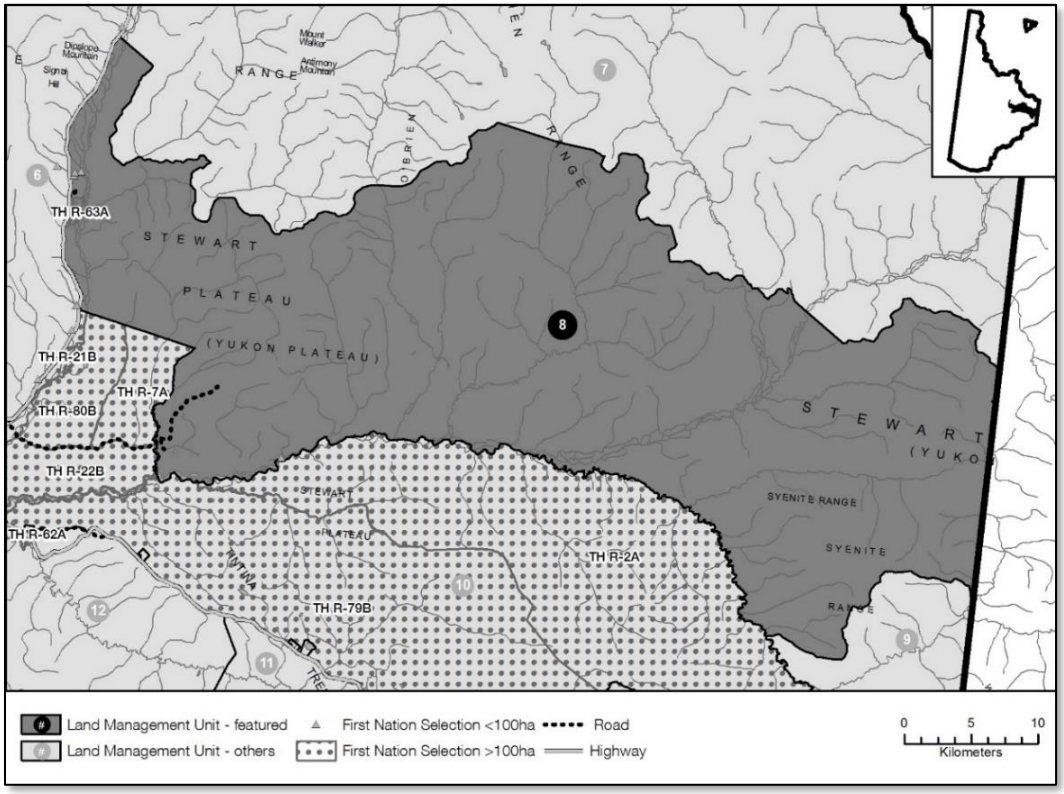
Species at Risk: Hart River caribou are a Northern Mountain Woodland ecotype, which is listed as a species of Special Concern under SARA.

Vegetation and Unique Features: A few known occurrences of rare plant species.

Wetlands: Some limited wetland habitat within lowlands including bogs, fens, and marshes, which provide for important wildlife habitat and ecosystem services.
Ecosystem Representation: Located within McQuesten Highlands ecoregion which is not represented in Yukon's protected areas system.
Landscape Connectivity: Includes intact areas adjacent to West Hart River Wilderness Area in Peel River Watershed and Tombstone Territorial Park and opportunities for connectivity.
Economic Value
Mineral Resources: Contains moderate coverage of active quartz claims, an active Class 1 operation near Antimony Creek, and a placer prospecting lease on a tributary to Brewery Creek. Contains areas of high to mid-range mineral potential and identified as a having future placer potential.
Outfitting and Trapping: Overlap with several trapping concessions and one active outfitting concession.
Tourism: No identified high use areas for tourism, located directly adjacent to Tombstone Territorial Park and the Dempster Highway, opportunities for scenic views and wildlife viewing
Forestry: Located within North and South Klondike River Landscape Units of Forest Resource Management Plan. North Klondike River identified as a high conservation focus area, and South Klondike River identified with a forest resource development focus. Specific area of upper Brewery/Hamilton does not overlap with identified leading forestry species.
Transportation and Access: No major roads or trails into area, some winter access. Adjacent to Dempster highway corridor.
Heritage, Social, and Cultural Value
Recreation: Some limited off-road opportunities for hiking, sightseeing, off Dempster Highway

5.8 LMU 8: LOWER BREWERY/HAMILTON

LMU 8: Lower Brewery/Hamilton	
Land Use Designation:	**Integrated Stewardship Area 3**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-63A, TH S-159B1, TH S-203B, TH S-204B1, TH S-80B1
Area:	1411 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area will focus on sustainable development by means of cumulative effects management, access management, and the preservation of key values. This area contains a past-producing heap-leach mine and associated infrastructure which has the potential to re-open. It is also the location of considerable adequate habitat for key wildlife species and sociocultural use. It is important that this area remain open for current and future mineral interests without undermining its important environmental and cultural attributes.
Special Management Directions *(Recommendation to achieve Vision)*
In addition to all applicable general management directions, development in this area is subject to: 1. The viewscape off the Dempster Highway should be maintained for its aesthetic and natural value. 2. With the exception of winter access, surface access infrastructure off the Dempster Highway only considered through Plan variance or amendment.

3. Heap-leach mining involves the use of chemicals, namely a cyanide-based solution, to extract precious metals from ore. Use of heap-leach mining practices in this area should take every precaution to not harm the surrounding aquatic environment. The collection of accurate and robust baseline data collection on groundwater and surface water quality parameters as well as continued monitoring for impacts will be important considerations for development in this area.
4. This area contains important habitat for sharp-tailed grouse, which are a species of management concern. Development in this area should be planned for in such a way that impacts to key habitat for sharp-tailed grouse are minimized.

Priority Objectives

- ✓ Ensure an adequate land base is available for placer mining, quartz exploration, and quartz mining to continue as key economic development activities.
- ✓ Ensure a viable land base is available and accessible for forestry and fuel wood harvesting.
- ✓ Protect, enhance, support tourism and recreational experiences including scenic viewscapes, and other values pertaining to tourism, including wildlife, culture, and heritage.
- ✓ Identify key habitat, and minimize disturbance to water quality in key aquatic habitat areas.

Rationale for Designation

- Area contains advanced hard rock exploration and potential future mine site at Brewery Creek, as well as wildlife key areas and wetlands, and is adjacent to high use areas for subsistence, cultural, and traditional economic activities.
- A zone 3 designation will allow for continued mineral exploration and development and forestry to occur without undermining the ecological and socio-cultural value of the surrounding area.

Ecological Value

Caribou: Overlap with Fortymile and Clear Creek caribou herd ranges. Contains critical summer and winter habitat for mountain caribou, including habitat for calving, post-calving, summer, and rutting.

Moose: Extensive good moose habitat, wildlife key areas for moose later winter (Feb-Apr) habitat along Hamilton and Brewery Creeks.

Furbearers: Contains key habitat for beavers (winter range).

Birds: Includes high elevation (>1000 m) habitat crucial for some migratory bird species and part of the Tintina Trench flyway. Contains key wildlife areas for sharp tailed grouse.

Fish: The Klondike River provides important Chinook salmon spawning habitat and salmon have been documented in the upper reaches of the river near Hamilton Creek. The Klondike River is also home to resident fish species, including Arctic Grayling.

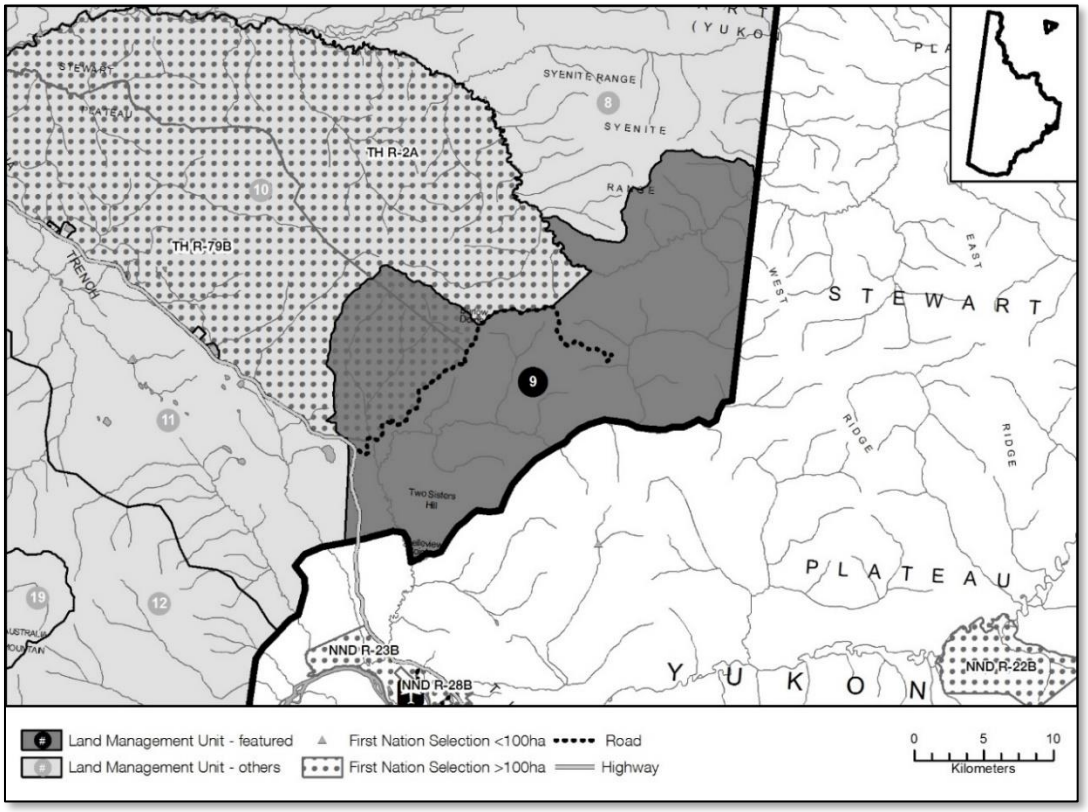
Vegetation and Unique Features: One identified location for Yukon Podistera, some occurrences of rare or endemic plant species, and presence of mineral licks

Wetlands: Some limited wetland habitat within lowlands including bogs, fens, and marshes, which provide for important wildlife habitat and ecosystem services.

Ecosystem Representation: Located within McQuesten Highlands ecoregion which is not represented in Yukon's protected areas system.
Economic Value
Mineral Resources: Active quartz exploration and location of past gold producing mine at Brewery Creek, which may re-open in the near future.
Outfitting and Trapping: Overlap with several trapping concessions and one active outfitting concession.
Tourism: No identified high use areas for tourism, located directly adjacent to the Dempster Highway, opportunities for scenic views and wildlife viewing.
Forestry: Overlap with the South Klondike River landscape unit of the Dawson Forest Resources Management Plan, which is designated as a medium priority for forest resource development in the short-term. This landscape unit is considered to have high timbers values, and there is a completed Timber Harvest Plan for North Fork, and areas for personal as well as commercial fuel use.
Transportation and Access: Adjacent to Dempster highway corridor, contains portion of Brewery Creek access road, and secondary trails.
Traditional Economy: Important area for fall moose harvesting and fishing.
Heritage, Social, and Cultural Value
Recreation: Off-road opportunities for hiking and sightseeing off Dempster Highway or Brewery Creek access road, opportunities for fishing, harvesting, and camping on North Klondike River.
Heritage Resources: Area contains numerous historic resources related to the Yukon North Fork Ditch.
Recreation: Recreational opportunities exist off the Dempster and Brewery Creek access roads.
Stewardship: Important areas for connecting to the land through the practice of land use/economic activities, including trapping, gathering, and harvesting.

5.9 LMU 9: CLEAR CREEK

LMU 9: Clear Creek	
Land Use Designation:	**Integrated Stewardship Area 4**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-2A and TH R-79B
Area:	473 km^2



Management Intent Statement (*Our Vision for the LMU*)

Our management intent for this area is to protect key habitat for woodland caribou while allowing for sustainable development. This area offers important habitat requirements for the Clear Creek caribou herd including habitat for calving, post-calving, summer, and rutting. This area also contains considerable mineral interests and development, and it has been identified as having high to significant mineral potential. Other activities in this area include active trapping and harvesting.

Special Management Directions (*Recommendations to achieve Vision*)

In addition to all applicable general management directions, development in this area is subject to:

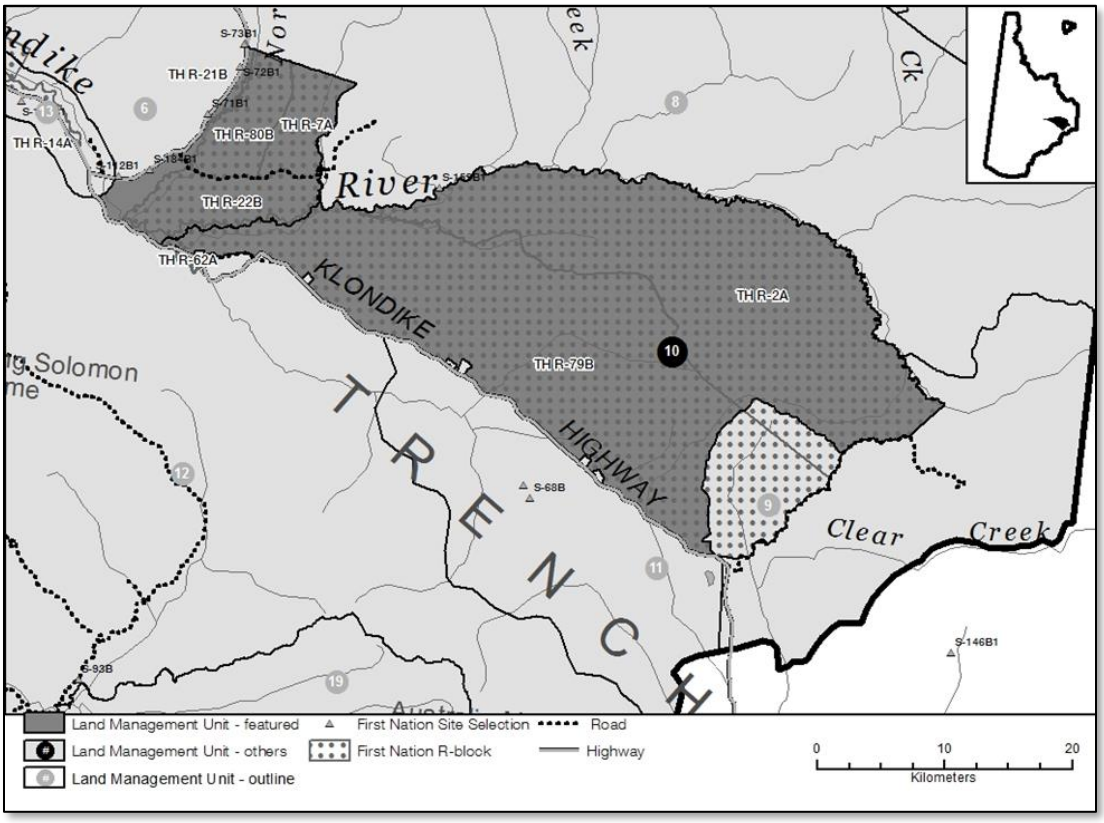
1. Industrial activities within caribou fall breeding (rut) habitat should be suspended during the key rutting period, September to October (or if suggested otherwise by a Regional Biologist) each year.
2. Any access development (roads and trails) within caribou fall breeding (rut) habitat should be discouraged.

Priority Objectives
✓ New access infrastructure is planned for and managed to minimize adverse effects to caribou, and key habitat for overwintering and calving is protected. ✓ Ensure an adequate land base is available for placer mining, quartz exploration, and quartz mining to continue as key economic development activities.
Rationale for Designation
• This area is located within important caribou herd ranges (Clear Creek) and moose habitat. • It is imperative to minimize disturbance to key (summer and winter) caribou habitat areas and to address impacts to moose through overharvesting while allowing for sustainable development. • In addition to the special management directions recommended above, a Zone 4 designation meets the management intent of the area.
Ecological Value
Caribou: Overlap with Fortymile and Clear Creek caribou herd ranges. Contains critical summer and winter habitat for mountain caribou, including habitat for calving, post-calving, summer, and rutting and key wildlife areas for the Clear Creek caribou herd.
Sheep: Overlap with a wildlife key area for Thinhorn sheep.
Birds: Within the Tintina Trench flyway which offers an important migration route for migratory birds, some presence of high elevation (>1000 m) habitat important for some migratory bird species.
Vegetation or Unique Features: Presence of some intact forest (>140 years old) and isolated occurrences of rare or endemic species.
Water: Little South Klondike River and Left Clear Creek.
Wetlands: Some wetland habitat near Klondike Highway.
Water: Contains Little South Klondike River channel and Left Clear Creek.
Economic Value
Mineral Resources: Area contains active mineral exploration and development for both placer and hard rock interests and is of high mineral potential.
Outfitting and Trapping: Overlap with trapping concessions and one active outfitting concession.
Tourism: Limited opportunities for tourism, identified potential for horseback riding activities in area.
Agriculture: Identified agricultural land disposition in area along Clear Creek .
Forestry: Overlap with the South Klondike River and Flat Creek landscape units of the Dawson Forest Resources Management Plan. No active timber harvest plans in area.
Transportation and Access: Portion adjacent to Klondike Highway, and contains secondary access road along Clear Creek and associated off roads.
Traditional Economy: Area could be used for harvesting, hunting, and gathering.

Heritage, Social, and Cultural Value
Recreation: Limited opportunities for recreation or use of the area for this purpose.
Heritage Resources: No identified heritage resources or sites in area.
Stewardship: Important areas for connecting to the land through the practice of land use/economic activities, including trapping, gathering, and harvesting.

5.10 LMU 10: UPPER KLONDIKE

LMU 10: Upper Klondike	
Land Use Designation:	**Special Management Area I**
Land Status:	TH Settlement Land TH R-21B, TH R-22B, TH R-2A, TH R-79B, TH R-7A, TH R-80B, TH S-184B1
Area:	984 km^2



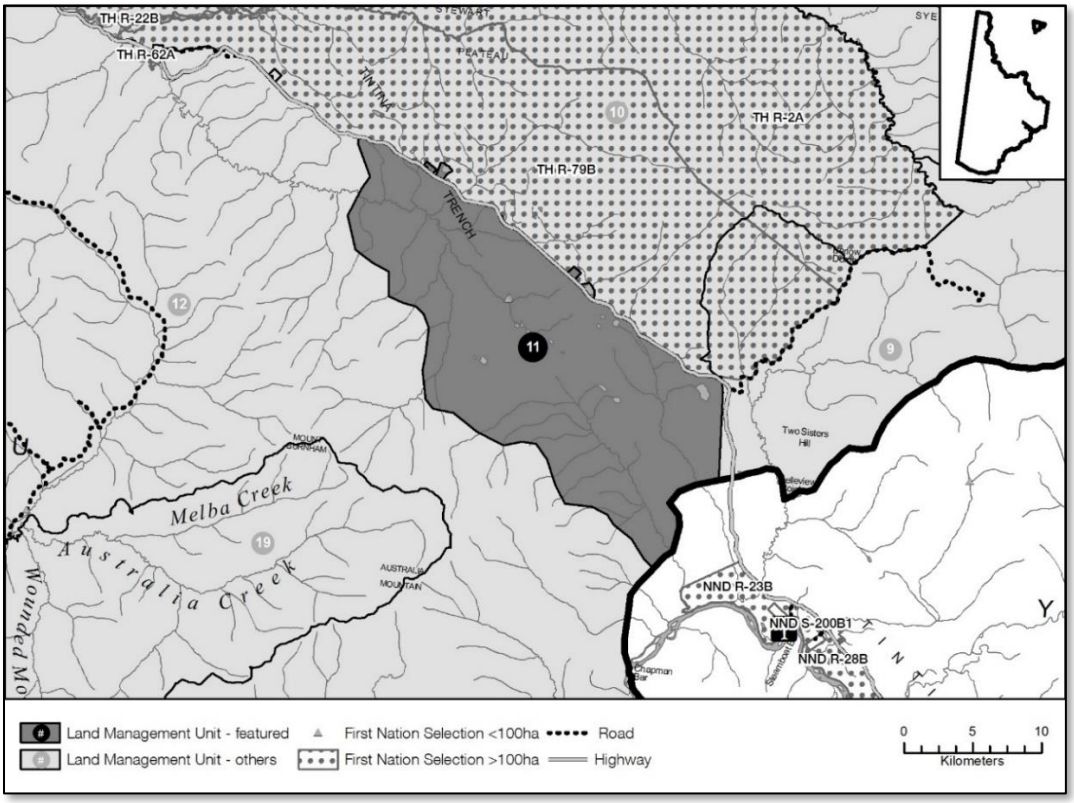
Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to preserve the deep cultural connection to the land and active use of the area by Tr'ondëk Hwëch'in citizens. The Upper Klondike area consists of five different Tr'ondëk Hwëch'in Settlement Land blocks, including R-22B, also known as Land of Plenty, which hosts year-round culture camps for Tr'ondëk Hwëch'in. This area offers significant opportunities for Tr'ondëk Hwëch'in land-based activities, including harvesting, recreational pursuits, and forestry opportunities, and is also located within key habitat for caribou, moose, and migratory birds. A key feature in this area is the Klondike River, which provides important habitat for spawning chinook salmon.
Special Management Directions (*Recommendation to achieve Vision*)
1. Withdrawal of all lands from staking, industrial use, and surface access. 2. Other land use rights (outfitting, trapping and traditional economic activities) recognized.

3. This designation is not intended to limit Tr'ondëk Hwëch'in's ability to access the land and develop infrastructure for traditional land use activities.
Priority Objectives
✓ Protection of traditional land use/economic activities, harvesting, and cultural use by Tr'ondëk Hwëch'in ✓ Maintain the Tintina Trench as a major migratory corridor for birds ✓ Minimize disturbance to key salmon habitats for various life cycle stages
Rationale for Designation
• This area is important for traditional economic activities and contemporary use by Tr'ondëk Hwëch'in, and it hosts several year-round culture camps and events. • The Klondike River (North and South channels) provide for important Chinook salmon spawning habitat • Non-existent mineral claims and minimal surface access.
Ecological Value
Caribou: Overlaps with the Clear Creek and Fortymile caribou herd ranges, and contains important summer and winter habitat
Moose: Overlaps with extensive good moose habitat, moderate moose populations
Birds: Contains a portion of the Tintina Trench flyway, an important spring and fall migration pathway for migratory birds, as well as areas of high concern habitat for migratory birds. Contains areas of sharp-tailed grouse key habitat.
Furbearers: Beaver key habitat (year-round)
Fish: Klondike River is known Chinook salmon spawning habitat
Vegetation and Unique Features: Presence of known mineral licks and occurrences of rare plant species
Water: Klondike River is an important drinking water and salmon spawning drainage, and contains few small lakes, which are rare in the region
Wetlands: Some limited wetland habitat within lowlands including bogs, fens, and marshes, which provide for important wildlife habitat and ecosystem services
Ecosystem Representation: Located within McQuesten Highlands ecoregion which is not represented in Yukon's protected areas system
Economic Value
Mineral Resources: No current mineral tenure in area.
Outfitting and Trapping: located within an outfitting concession and several trapping concessions.
Forestry: Located within the Flat Creek Landscape Unit of Forest Resource Management Plan, which is identified for medium priority for planning in the short-term and is designated for forest resource development. Forestry activities conducted on Settlement Land Blocks as managed by TH
Transportation and Access: Secondary road access through TH Settlement lands and Brewery Creek mining area. Adjacent to Klondike highway corridor.

Traditional Economy: Contains known First Nation land use sites and identified features
Heritage, Social, and Cultural Value
Heritage Resources: Contains known First Nation land use sites and identified features, as well as known archaeological and paleontological sites
Recreation: Sites of recreational fishing, hiking, camping
Stewardship: Extensively overlaps with TH settlement land blocks and area generally provided year-round opportunities for land-based activities and cultural connection for TH

5.11 LMU 11: Flat Creek Wetlands

LMU 11: Flat Creek Wetlands	
Land Use Designation:	**Integrated Stewardship Area 1**
Land Status:	Non-Settlement Land and TH Settlement Land S-68B1, S-19B1/D
Area:	368 km^2



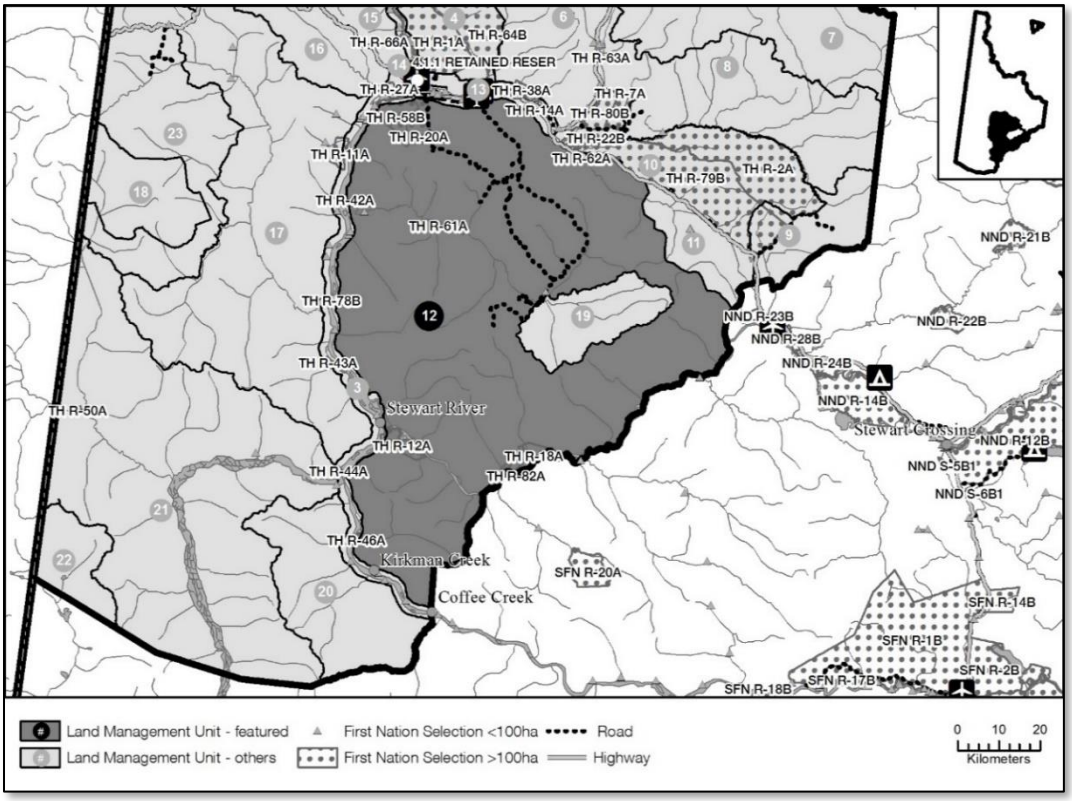
Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to preserve the current use of this landscape for fuel-wood harvesting, trapping, and hunting. This area also contains important wetland habitat that is integral to the ecological and socio-cultural value of the Klondike River watershed. Future interests in this area are likely to occur from forestry as well as continued use for hunting, trapping, and traditional economic activities, however it offers limited opportunities for mineral exploration and development.
Special Management Directions (*Recommendation to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to: 1. This area contains important habitat for sharp-tailed grouse, which are a species of immediate management concern. Development in this area should be planned for in such a way that impacts to key habitat for sharp-tailed grouse are minimized.

Priority Objectives
✓ Recognize the ecological and socio-cultural value and contributions of wetland habitat, and work to identify and protect key wetland areas. ✓ Ensure an adequate land base is available and accessible for sourcing fuel wood consistent with the objectives of the Forest Resource Management Plan. ✓ Protection of traditional land use/economic activities, trapping, and harvesting.
Rationale for Designation
• This area remains relatively low for mineral prospectivity and interest and contains several socio-cultural values. • A zone 1 designation allows for continued growth of fuelwood activities, and in combination of the recommendations of this Plan, the management intent of this area is met.
Ecological Value
Caribou: Within the range of the Fortymile caribou herd but is not known to contain key habitat for caribou.
Moose: Extensive good moose habitat and moderate moose populations.
Birds: Contains waterfowl staging and breeding areas Part of the Tintina Trench flyway which is important for migratory birds and contains key areas for sharptailed grouse. Contains a high percentage of modelled high concern habitat for migratory birds.
Furbearers: Active trapping in area and contains beaver key habitat (year-round).
Vegetation and Unique Features: Contains some intact forest (>140 years old).
Water: A few scattered small lakes, including Barlow and McKay lakes. Major creeks include Flat Creek watershed, Gravel, and Slough creeks .
Wetlands: Contains wetland habitat, including fens, bogs, and swamps.
Ecosystem Representation: Part of the McQuesten Highlands, an ecoregion currently absent within Yukon's protected area system.
Economic Value
Mineral Resources: No active mineral tenure in area, some historical hard rock exploration interest. Mineral potential in area is moderate to low.
Outfitting and Trapping: Active trapping concession and some related infrastructure, including a cabin. Part of one outfitting concession.
Forestry: Part of the Flat Creek Landscape Unit of the Dawson Forest Resource Management Plan. Area was identified as medium priority for planning in the short-term.
Transportation and Access: Adjacent to Klondike Highway and contains smaller secondary access points into area.
Traditional Economy: Opportunities for harvesting and gathering natural resources

Heritage, Social, and Cultural Value
Heritage Resources: Presence of archaeological, paleontological resources, and recorded historic resources. Includes portion of Whitehorse Dawson Overland Trail.
Residential: Presence of some residential properties and land dispositions adjacent to the Klondike Highway.
Recreation: Some potential given location near Klondike Highway and back trails. Includes portion of Whitehorse Dawson overland trail which offers recreational opportunities.

5.12 LMU 12: EAST - NÄCHO DËK

LMU 12: East - Nächo dëk	
Land Use Designation:	**Integrated Stewardship Area 4**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-12A, TH R-18A, TH R-20A, TH R-46A, TH R-47A, TH R-58B, TH R-61A, TH R-62A, TH R-82A, TH S-18B1, TH S-93B
Area:	6606 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area will focus on sustainable development by means of cumulative effects management, access management, and the identification and preservation of key areas. We will also work towards enhancing and promoting the rich Tr'ondëk Hwëch'in cultural significance of this area. The mining industry remains a significant economic activity for the region, and the Dawson Placer Mining District is by far the most productive placer mining district in the territory. This area also offers ample opportunity for hunting, harvesting, gathering, and contains areas of ecological, historical, cultural significance and offers high tourism and recreational value
Special Management Directions (*Recommendation to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to: 1. Opportunities to promote awareness of Tr'ondëk Hwëch'in cultural history and contemporary land use in this area should be explored.

2. This area contains important habitat for sharp-tailed grouse, which are a species of immediate management concern. Development in this area should be planned for in such a way that impacts to key habitat for sharp-tailed grouse are minimized.
3. This area is particularly important for subsistence harvesting (Moose) and the pursuit of traditional economic activities. The ability for residents to continue using the land in this way must be maintained.
4. Presence of several historic sites and the Ridge Road Heritage trail which represents significant tourism and recreational potential. Efforts to enhance the recreational aspects of this area should be explored.

Priority Objectives

- ✓ Ensure an adequate land base is available for placer mining, quartz exploration, and quartz mining to continue as key economic development activities.
- ✓ New access infrastructure is planned for and managed to minimize adverse effects to moose through overharvesting, and key habitat is protected.
- ✓ Protection of traditional land use/economic activities, trapping, and harvesting.

Rationale of Designation

- Area should remain open for mineral exploration and development, which is a significant contributor to the region's economic and socio-cultural environment.
- General management directions and the special management directions above should ensure adequate protection of wildlife habitat and that the multi-industrial nature of this area can co-exist with recreational and traditional pursuits.
- Taking into consideration the current level of activity as well as continued growth and importance of the area for industry warrants a high threshold for development, a zone 4 designation.

Ecological Value

Caribou: Area overlaps with the Fortymile and Klaza caribou herd ranges, and there are important ridge top migration routes and overwintering habitat within this area.

Moose: Considered extensive good moose habitat, and important grounds for moose harvesting.

Birds: Key areas for sharp-tailed grouse and raptors, and within the general range of migratory birds.

Furbearers: Watercourses of good to excellent quality for stream dwelling beaver habitat suitability, and key habitat areas for beaver. Low to moderate habitat suitability for muskrat.

Fish: Contains several resident fish bearing streams and rivers.

Vegetation and Unique Features: Presence of some scattered occurrences of intact forest (>140 years old)

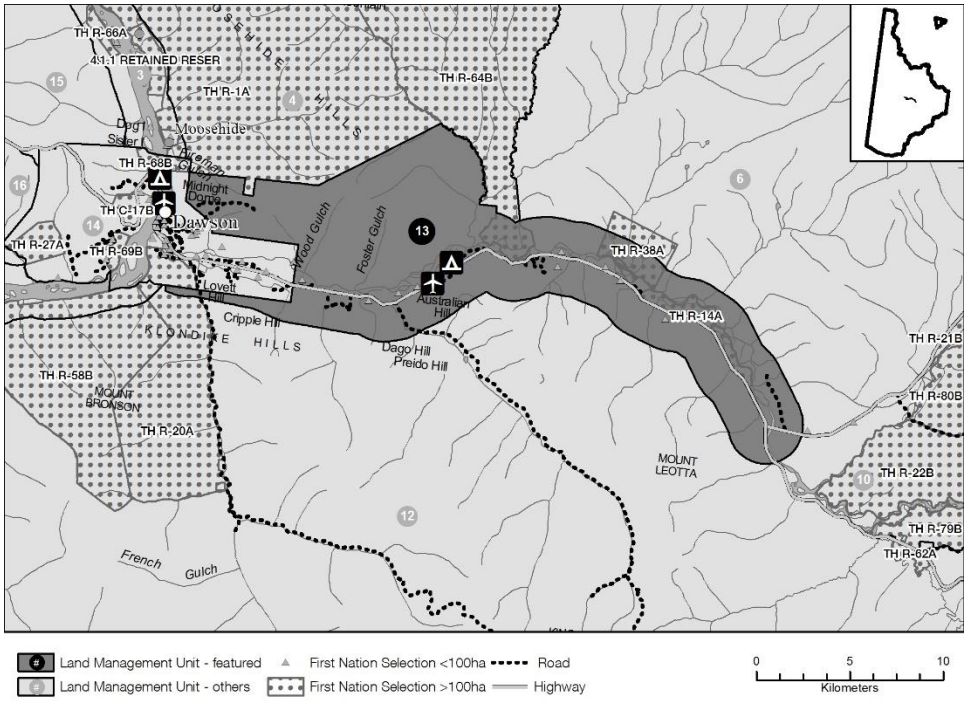
Water: Large area with numerous watersheds. Major watercourses and tributaries include Hunker, Bonanza, Dominion, and Sulphur Creeks, as well as the Indian and Stewart Rivers, as well as various smaller streams that enter the Yukon River.

Wetlands: Wetlands prevalent along Indian River and Stewart River.

Economic Value
Mineral Resources: Area of significant value for mineral resources for both placer and hard rock mining. Presence of numerous active mineral tenure and permits and associated infrastructure, including roads, drill pads, staging areas, camps, cutlines, helicopter pads, airstrips etc.
Outfitting and Trapping: Active trapping concessions and associated infrastructure, including trapping routes and cabins
Forestry: Goldfields is a landscape unit of high priority for planning in the short-term under the Dawson Forest Resources Management Plan. Active Timber Harvest Plans include Dominion, French Gulch, Bonanza, and Flat Creek, and there are areas of personal and commercial fuel use. Several associated access roads attributed to forest resources in area.
Agriculture: potential for growth within this industry in areas of high suitability for agriculture, including suitable soil conditions close to Dawson City, as well as areas for grazing and farm related infrastructure
Tourism: High tourism value in area related to Gold Rush history and contemporary television programs on placer mining
Transportation and Access: Significant transportation route offered by Hunker-Bonanza loop and off-roads.
Traditional Economy: Important areas for subsistence harvesting, hunting and gathering
Heritage, Social, and Cultural Value
Heritage Resources: High volume of historic sites and resources within this area related to Gold Rush history. Significant area for paleontological resources in particular given nature of disturbance in area as well as archaeological sites and recorded historic resources.
National Historic Sites: National Historic Sites in this area: Discovery Claim and Dredge No.4.
Recreation: Presence of a well travelled route (Hunker-Bonanza Loop) for recreational pursuits, as well as hiking and biking, in particular along the Ridge Road, and use of settling ponds as community swimming holes.
Stewardship: Important areas for connecting to the land through the practice of land use/economic activities, including trapping, gathering, and harvesting. Ensuring wetland habitat remains intact has been noted as an important stewardship duty for TH.

5.13 LMU 13: KLONDIKE VALLEY

LMU 13: Klondike Valley	
Land Use Designation:	**Integrated Stewardship Area – Future Planning Area**
Land Status:	Non-Settlement Land and TH Settlement Land TH C-14B, TH C-16B, TH C-7B TH R-14A, TH R-20A, TH R-38A, TH R-64B, TH S-106B1, TH S-112B1, TH S-113B1, TH S-122B1, TH S-126B1, TH S-153B1, TH S-165B, TH S-166B1, TH S-41B
Area:	168 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for the Klondike Valley is to recommend for the development of a sub-regional plan. This area of the planning region contains multiple and extensive competing land interests, including residential, industrial, recreational, and agricultural interests as well as various wildlife and socio-cultural values. It is also a critical route for transporting goods and people to the community of Dawson and further north, thus represents a significant transportation corridor in the planning region. Balancing potential land use conflicts between residential use, trapping, agriculture, tourism, industry, infrastructure needs and traditional activities, while conserving key wildlife habitat, a healthy watershed and clean drinking water should be the key focus in this corridor.
Special Management Directions (*Recommendations to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to:

1. This LMU is exempt from surface and linear disturbance tracking as the appropriate indicators will be selected through the sub-regional planning process.
2. The following directions should be considered interim until the development and implementation of a sub-regional plan:
   a. New spot land applications for residential development should be discouraged outside of established residential areas.
   b. Special consideration of the Klondike watershed due to it being the main source of drinking water for Dawson residents (see **Section 4.1.6** for General Management Direction relating to Dawson City water supply).
   c. Applications for new residential, commercial, or industrial development should first be considered within or in close proximity to existing settlement areas (e.g. Bear Creek, Rock Creek, Henderson Corner).
   d. New residential development in areas of high potential for agriculture, forestry and/or mineral exploration should be discouraged.
   e. Avoid, or minimize, potential impacts of industrial land use activities (e.g. mineral exploration, forestry) within and adjacent to existing trails, including but not limited to the Discovery Trail and the Klondike Trail.
   f. Maintain access to existing recreational trails by delineating their location, identifying any potential land use conflicts and recommending appropriate mitigation measures (e.g. buffers) as part of the application and review process for new land use tenure.

A sub-regional plan for this LMU should consider the following.

- Establishment of guidelines and evaluation criteria for spot land applications.
- Undertaking detailed land suitability analyses to identify areas for future residential development by first considering expansions to existing residential areas (e.g. Bear Creek, Rock Creek, Henderson's Corner).
- Areas of "high" (Class 3 to 5) agricultural potential within the planning area should be identified and prioritized for agricultural and accessory uses.
- Undertake a detailed commercial and industrial land study to determine the need for, and location of, future development areas and potential servicing options.
- Complementary zoning for lands adjacent to the City of Dawson municipal boundary, based on direction in the Official Community Plan and Zoning By-law.
- Support more detailed planning of the Central Tr'ondëk Land Management Area (CTLMA) as a future community growth area for TH.
- Delineate the catchment area for the City of Dawson municipal water supply. Compatible and incompatible land uses should be determined within the catchment area to protect the water supply from potential contamination.
- Support the development of and integrate the results of a community led wildfire protection plan.

- Support the identification and preservation of key areas for recreation within the valley, including walking/biking trails and outdoor aquatic amenities.

Priority Objectives

✓ The multi use value of the Klondike Valley is preserved, and key values protected

Rationale for Designation

- A sub-regional plan is an appropriate avenue for planning for this multi-purpose area. Until then, adherence to the recommended special management directions above will ensure the overall management intent of the area is met.

Ecological Value

Caribou: Within the range of the Fortymile caribou herd but area unlikely to offer habitat values for caribou

Moose: Area represents important habitat and corridor for moose and vehicle collisions are frequent

Lynx: Considered to be a regionally important lynx refugium, in which when lynx populations in surrounding areas decline, lynx populations in the Klondike valley and surroundings do not. As such this area can be considered a significant seed source for regional lynx habitats.

Birds: Presence of raptor nests along Klondike River and watercourses and ponds offer important habitat for waterfowl, including swans, cranes, ducks, geese, and shorebirds.

Furbearers: Beaver and muskrat areas, lesser occurrence of wolverine, ermine, and river otter

Fish: The Klondike River watershed offers critical habitat requirements for Chinook salmon (spawning, rearing) and important habitat for resident fish species including Arctic grayling

Water: Klondike River watershed offers important aquatic habitat values for key wildlife in the region as well an important drinking water source for residents of the region

Wetlands: Presence of some wetland habitat near Klondike Highway

Economic Value

Mineral Resources: Presence of mineral claims and interest for placer and hard rock

Outfitting and Trapping: Presence of active trapping concession and associated infrastructure

Forestry: High commercial fuelwood harvesting value

Tourism: High tourism value given proximity to Klondike Highway and to Dawson for hiking, gold rush history viewing, etc.

Agriculture: High agricultural potential in area given proximity to market in Dawson City as well as favourable land for growing

Transportation and Access: Klondike Highway is the major transportation route in the region

Traditional Economy: High cultural value and contemporary use for traditional economic activities, includes important community sites for First Nation land use

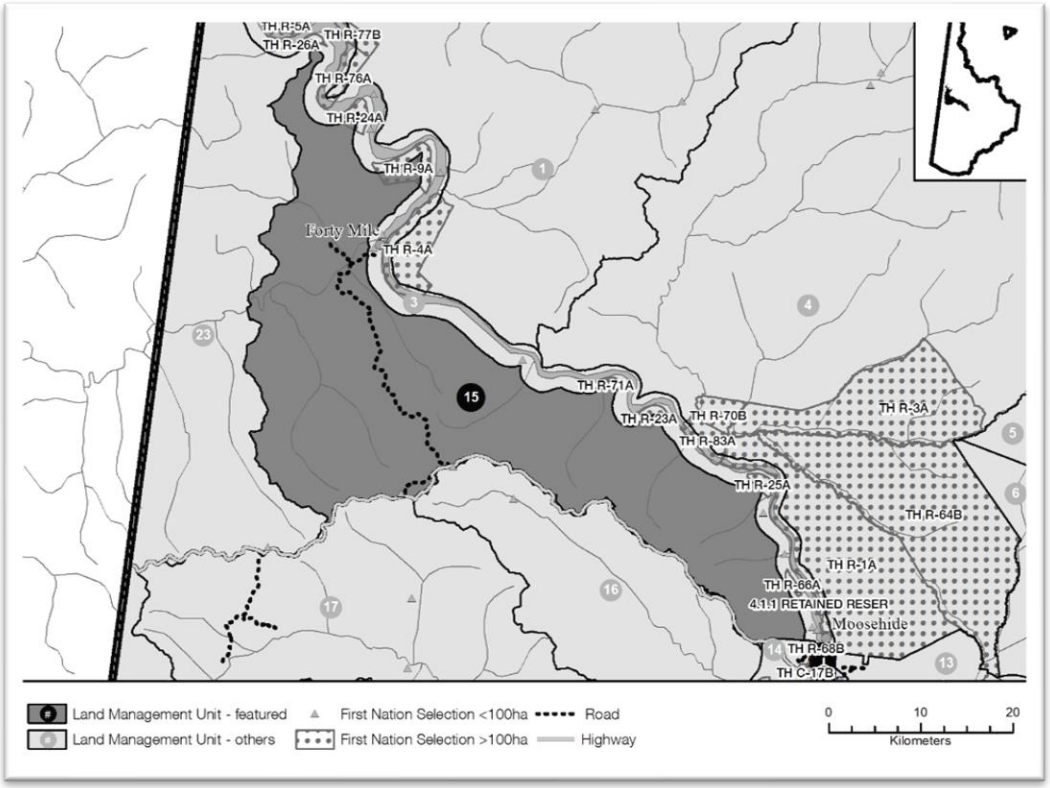
Heritage, Social, and Cultural Value
Heritage Resources: Occurrence of recorded historic resources, archaeological sites, and parts of traditional trails. Includes dredge piles of historical significance
Residential: Area of highest priority for current and future residential development
Recreation: Area of high priority for recreational pursuits given high residential use, proximity to the highway, and Dawson City. Recreation in this area includes walking, biking, hiking, swimming, fishing, ORV use, etc.

5.14 LMU 14: Dawson City

LMU 14: Dawson City	
The Regional Land Use Plan will not apply to land within the City of Dawson and areas subject to subdivision planning or local area planning outside of a municipal boundary (including West Dawson and Sunnydale). However, the Dawson Regional Planning Commission is to consider adjacent areas, their designations, and land uses, in the development of their Plan.	
Land Status:	Non-Settlement Land and 75 TH Settlement Land parcels
Area:	81 km^2

5.15 LMU 15: FORTYMILE RIVER - CHËDÄHDËK

LMU 15: Fortymile River - Chëdähdëk	
Land Use Designation:	**Integrated Stewardship Area 2**
Land Status:	Non-Settlement Land and 75 identified TH Settlement Land Parcels
Area:	1118 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to preserve its important cultural and contemporary multi-use value.. The Fortymile River watershed hosts active placer mining, trapping, forestry, harvesting, and recreational pursuits along the Fortymile River, and this area also contains a past producing and abandoned asbestos mine and associated buildings at Clinton Creek. Notably, this area is also located generally in an area of cultural significance to Tr'ondëk Hwëch'in and continues to offer an important recreational gathering space for residents of the planning region and visitors alike.
Special Management Directions (*Recommendations to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to: 1. Activities that have the potential to disturb Chinook spawning redds should be suspended during the Chinook spawning season (July 1 to August 15). 2. The operation of large, high powered tourist watercraft on the Fortymile River should not result in appreciable mortality to juvenile or adult salmon, or disruption of their habitats

3. Given the multiple land use nature of this area, industrial pursuits should be communicated to other rights holders, including residential property owners, trappers, and to Tr'ondëk Hwëch'in, on an annual basis prior to the commencement of activities.
4. Land users working in proximity to Mickey Creek should be made aware of the stream's use for human consumption. An appropriate buffer for ensuring no negative impacts occur to this important water source should be explored and implemented where appropriate

Priority Objectives

- ✓ Ensure the multi-use value of the Forymile River area is preserved and potential land use conflicts are minimized
- ✓ Protection of traditional land use/economic activities, trapping, and harvesting
- ✓ Key recreational areas in the region are protected, other areas with recreational potential are identified and supported

Rationale for Designation

- The Fortymile River is an important salmon bearing stream, in particular for the movement of adult and juvenile Chinook salmon, as well as contains identified salmon spawning habitat
- The Fortymile River watershed supports various recreational, cultural, residential, and industrial activities. Maintaining this area for its multiple purposes is important, but requires some additional direction for minimizing conflicts
- Allowing for disturbances to remain within a zone 2 designation in combination with the special management directions above will meet the management intent of this area.

Ecological Value

Caribou: Overlap with the Fortymile and Nelchina caribou herds' ranges as well as important habitat areas for winter and spring/fall corridors

Moose: Considered extensive moose habitat and contains key wildlife areas for moose, including for late winter habitat

Birds: Some presence of high elevation (>1000 m) habitat important for some migratory bird species

Furbearers: High to medium habitat suitability for muskrat and beaver, and active trapping concession

Fish: Important habitat for Chinook salmon (spawning, adult, and juvenile life stages) and Chinook spawning has been identified in the upper reaches of the Fortymile River near the Alaskan border.

Vegetation and Unique Features: Presence of mineral licks which are important wildlife habitat features

Water: Important aquatic habitat for wildlife as well as drinking water for residents of the area

Wetlands: The Fortymile River contains identified wetland habitat, including bogs, fens, and swamps

Economic Value

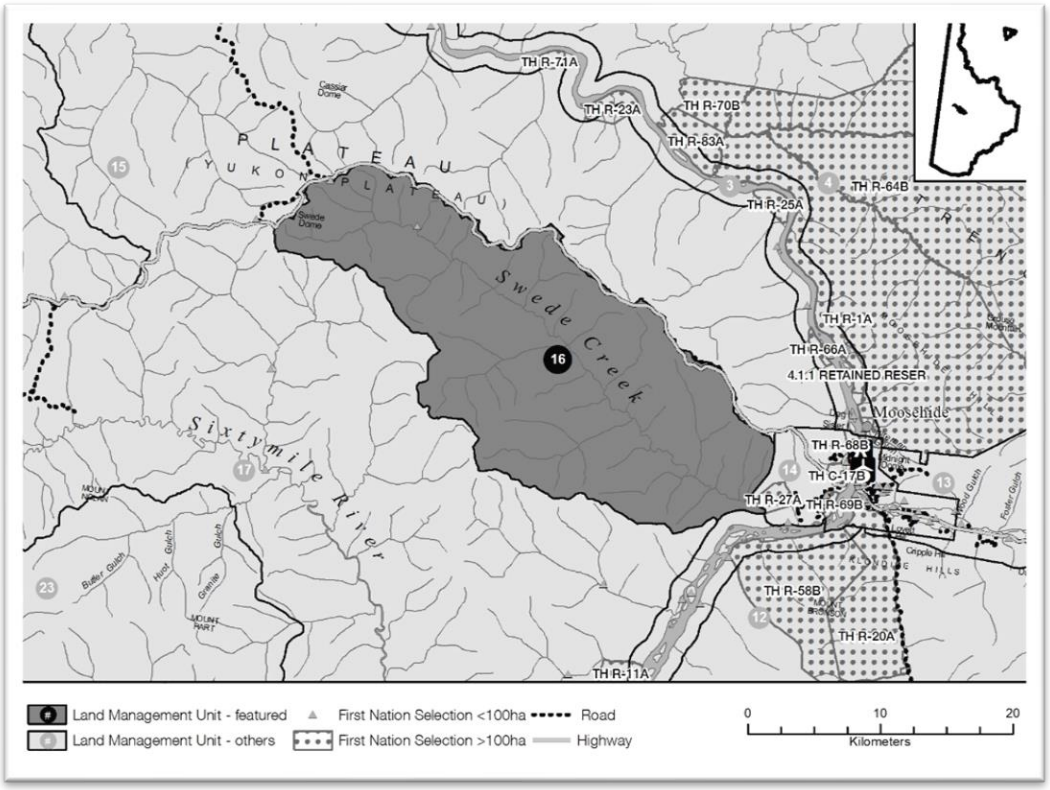
Mineral Resources: Active placer mining along tributaries to, and including, the Fortymile River. Active quartz claims and class 1 notifications.

Outfitting and Trapping: Active trapping concession and presence of associated infrastructure.

Forestry: Located within the Fortymile River landscape unit of the Dawson Forest Resources Management Plan, which is designated for a medium priority for planning in the short-term. Area is considered to have potential for high timber values, and there are active timber harvest plans along Bruin Creek that include both commercial and personal use fuelwood areas.
Transportation and Access: Presence of a major access road off the Top of the World Highway into Fortymile River boat launch and Clinton Creek mine site
Traditional Economy: Areas of high value for harvesting, gathering, trapping and other traditional economic pursuits
Tourism: Tourism opportunities along the Fortymile river and along existing access infrastructure into this area for camping, canoeing, berry picking, hiking, and winter activities.
Heritage, Social, and Cultural Value
Heritage Resources: Presence of historic resources related to Klondike Goldrush and previous industrial mining activity at Clinton Creek.
Abandoned Mine Site: Clinton Creek asbestos mine was abandoned in 1978 and is now under the care and maintenance of Government of Yukon. Remediation planning is underway.
Residential: Properties in area and drinking water source along Mickey Creek
Recreation: High recreational value for hiking, canoeing, motorists, boating, fishing
Stewardship: Areas of high value for harvesting and cultural sustenance

5.16 LMU 16: SWEDE CREEK

LMU 16: Swede Creek	
Land Use Designation:	**Integrated Stewardship Area 2**
Land Status:	Non-Settlement Land and Settlement Land TH S-12B1 and TH S-90B1
Area:	472 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to preserve its contemporary recreational use and community value while allowing for limited sustainable development to continue. Given Swede Creek's proximity to Dawson City, as well as the neighborhoods of West Dawson and Sunnydale, this area represents important opportunities for community growth and wellness that must be considered alongside any industrial uses. The area is an important source of drinking water for the community. It also holds significant cultural value for Tr'ondëk Hwëch'in and offers important aquatic habitat for salmon.
Special Management Directions (*Recommendations to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to: 1. Given the multiple land use nature of this area, industrial pursuits should be communicated to other rights holders, including residential property owners, community users, trappers, and to Tr'ondëk Hwëch'in, on an annual basis prior to the commencement of activities. Industrial activities should take necessary precautions to minimize impacts to other users of the area.

2. Land users working in proximity to Swede Creek should be made aware of the stream's use for human consumption and agricultural purposes. An appropriate buffer for ensuring no negative impacts occur to this important water source should be explored and implemented where appropriate.

Priority Objectives

- ✓ Key recreational areas in the region are protected, and other areas with high recreational potential for the community are identified and supported.
- ✓ Protection of traditional land use/economic activities, trapping, and harvesting.
- ✓ Minimize impacts to water quality in areas important for human consumption.

Rationale for Designation

- Swede Creek has been identified as an area of high cultural and recreational value that requires additional directions.
- Allowing for disturbances to remain within a zone 2 designation in combination with the special management directions above will meet the management intent of this area.

Ecological Value

Caribou: Within the range of the Fortymile and Nelchina caribou herds. Presence of caribou winter habitat and within a migration corridor area for spring/fall

Moose: Considered extensive good moose habitat and includes a moose key area for late winter habitat

Birds: Wildlife key areas for raptors (golden eagle and peregrine falcon) near mouth of Swede Creek where it enters the Yukon River

Furbearers: Poor stream dwelling suitability for beavers along Swede Creek

Fish: Presence of juvenile rearing habitat for salmon and habitat for resident fish species

Vegetation and Unique Features: presence of some intact forest (>140 years old)

Water: Swede Creek is defined as a watercourse that contains ecologically or culturally important fisheries or aquatic resources. It is also an important drinking water source for community

Wetlands: Some identified and mapped wetland habitat on lower portion of Swede Creek, predominately swamp

Economic Value

Mineral Resources: Active placer tenure overlapping with Swede Creek mainstem and tributaries

Outfitting and Trapping: Active trapping concession

Forestry: Active forestry cutting permit on lower reaches of Swede Creek

Transportation and Access: Limited use road along main stem of Swede Creek

Agriculture: Adjacent to areas used for agriculture. Settlement Land Parcel R-27A downstream of area on Swede Creek, which was identified for future economic and commercial potential for agriculture or residential purposes

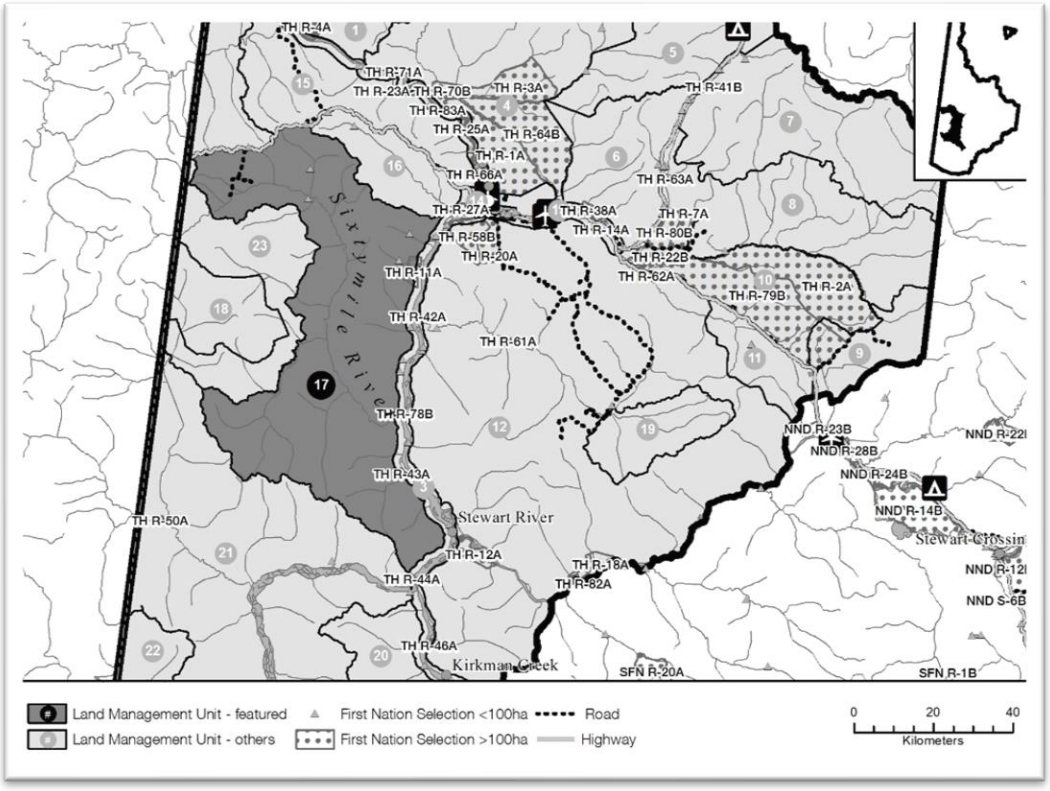
Heritage, Social, and Cultural Value

Heritage Resources: Historic walking trail

Water Use: Swede Creek has been identified as the only year-round access for potable water for nearby residents
Residential: Area is nearby residential areas, and adjacent to West Dawson and Sunnydale Local Area Plan that includes the mouth of Swede Creek.
Recreation: Fishing, walking trails, unorganized camping
Stewardship: Area of high First Nation land use along Swede Creek, and important area for connecting to the land through the practice of land use/economic activities, including trapping, gathering, and harvesting

5.17 LMU 17: SIXTYMILE – KHEL DËK

LMU 17: Sixtymile	
Land Use Designation:	**Integrated Stewardship Area 3**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-11A, TH R-43A, TH S-107B1, TH S-14B1, TH S-169B1, TH S-75B1, TH S-79A1
Area:	3148 km^2



Management Intent Statement (*Our Vision for the LMU*)

Our management intent for this area is to adequately protect key caribou habitat and to ensure sustainable development, through strong access management recommendations. This area is a large land mass containing major watersheds and multiple land uses, including mineral exploration and development, forestry, tourism, harvesting, and recreation. Unique to this area is the Top of the World Highway, which represents an important seasonal multi-use access corridor. Interest in this area is growing, which includes increased opportunities for access into previously remote areas. It will be important that access infrastructure is planned for and managed to ensure maintenance of important environmental and socio-cultural values.

Special Management Directions (*Recommendations to achieve Vision*)

In addition to all applicable general management directions, development in this area is subject to:

1. This area is located within important caribou herd ranges and considered extensive moose habitat. It is imperative to maintain key caribou migration pathways and to minimize disturbance to key

(summer and winter) habitat areas, and that impacts to moose are minimized through overharvesting:

a. Avoid disturbance in key caribou migration pinch points along major routes and ridges

b. Timing windows that reduce industrial impacts to moose and caribou should be applied

c. Access management planning as per policy recommendation in Access GMDs (**Section 4.1.2**)

2. This area is particularly important for subsistence harvesting and the pursuit of traditional economic activities. The ability for residents to continue using the land in this way must be maintained

Priority Objectives

- ✓ Ensure an adequate land base is available for placer mining, quartz exploration, and quartz mining to continue as key economic development activities
- ✓ New access infrastructure is planned for and managed to minimize adverse effects to moose through overharvesting, and key habitat is protected
- ✓ Key caribou migration pathways are maintained, and disturbance to key habitat areas is avoided or minimized
- ✓ Protection of traditional land use/economic activities, trapping, and harvesting

Rationale of Designation

- Area should remain open for mineral exploration and development, which is a significant contributor to the region's economic and socio-cultural environment
- General management directions and the special management directions above should ensure adequate protection of wildlife habitat and that the multi-industrial nature of this area can co-exist with recreational and traditional pursuits
- A zone 3 designation will allow for continued responsible and sustainable growth of industrial pursuits in this area without undermining the ecological integrity of the area

Ecological Value

Caribou: Within the range of the Fortymile and Nelchina caribou herds, and contains areas of important winter and summer habitat as well as within key migration corridors in the spring and fall

Moose: Extensive good moose habitat and contains several wildlife key areas for moose, predominately for late winter (Feb-April).

Birds: Area of high elevation habitat (>1000 m) which is important for some migratory bird species, and areas adjacent to the Yukon River can contain raptor nests (incl. Peregrine falcon and golden eagle). Isolated areas of high concern habitat for migratory birds along major watercourses (Matson Creek and Sixtymile River)

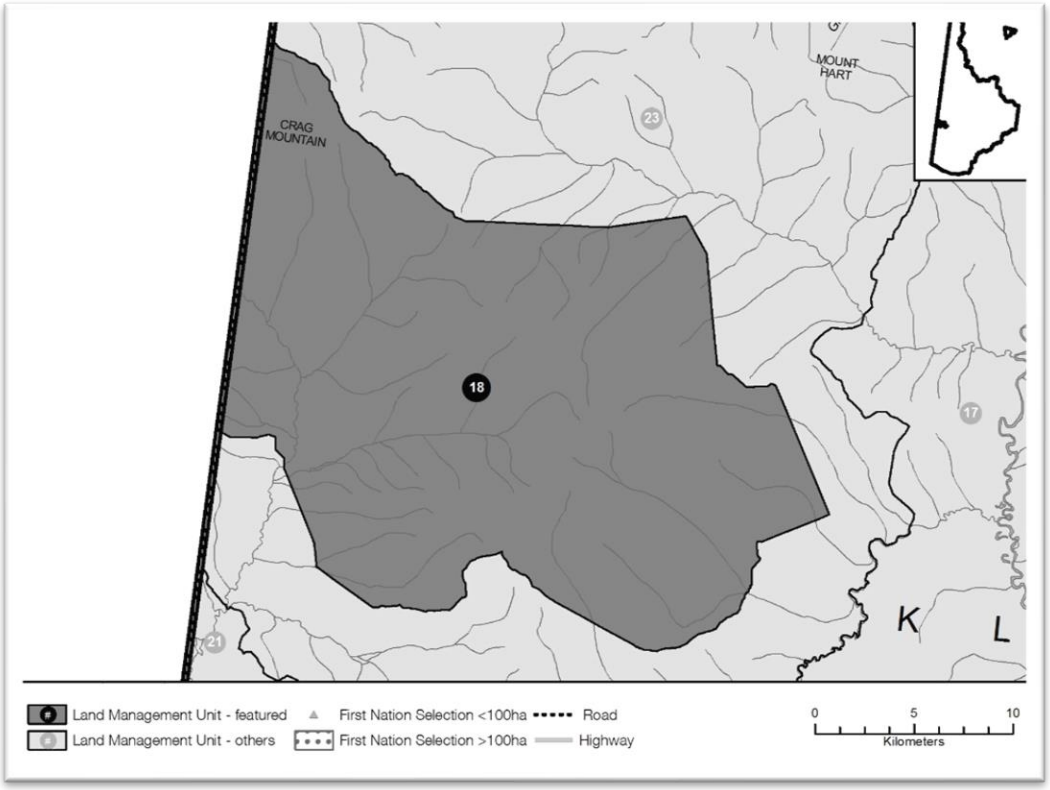
Furbearers: Areas of excellent suitability for stream dwelling beaver habitat and some good to fair suitability for pond dwelling habitat. Presence of isolated moderate to low muskrat habitat suitability.

Fish: No occurrence of mapped salmon spawning habitat, likely some presence of resident fish species in various watercourses within area

Vegetation and Unique Features: Presence of intact forest (>140 years old) near Mount Tyrell and Matson Creek. Occurrence of known mineral licks.
Wetlands: Wetland habitat along Sixtymile River and Matson Creek include bogs, fens, and swamps
Ecosystem Representation: Part of Klondike Plateau ecoregion of the Boreal Cordillera
Economic Value
Mineral Resources: Predominately considered moderately prospective for minerals with pockets of high to significant potential. Placer exploration and mining is prevalent in area as well as areas of active quartz exploration.
Outfitting and Trapping: Active trapping concessions and presence of associated infrastructure
Forestry: Part of Sixtymile River Landscape Unit of Dawson Forest Resources Management Plan. Area was designated for forest resource management with a medium priority for planning in the short-term. Considered to include potential for high timber values. No active timber harvest plans in area.
Tourism: Top of the World highway adjacent, which is an important area for tourism in the region. Most tourism activity would occur within proximity to the highway or accessed off the Yukon River
Transportation and Access: Area is accessible via the Top of the World highway and several secondary roads
Traditional Economy: Settlement Land parcel S-14B is an important harvesting and gathering site
Heritage, Social, and Cultural Value
Heritage Resources: Presence of traditional trails and several archaeological sites
Recreation: Adjacency to Top of the World Highway and presence of several secondary roads represents significant recreational opportunities in this area, predominately from ORV use, hiking, berry picking, wildlife viewing
Stewardship: Area is used for subsistence hunting of Fortymile caribou and there are ongoing efforts by Tr'ondëk Hwëch'in to reconnect with the herd through community hunts and educational camps.

5.18 LMU 18: MATSON UPLANDS

LMU 18: Matson Uplands	
Land Use Designation:	**Special Management Area I**
Land Status:	Non-Settlement Land
Area:	533 km^2



Management Intent Statement (*Our Vision for the LMU*)

Our management intent for this area is the preservation of core summer habitat required for the continued growth and survival of the Fortymile caribou herd within its Yukon range. The Fortymile caribou herd is of significant cultural importance to Tr'ondëk Hwëch'in and offers important opportunities for subsistence harvesting and stewardship. While much of the herd's Yukon range overlaps with land use disturbance, parts of the Matson Uplands remain relatively underdeveloped. It is important that habitat requirements for the herd be prioritized in this area, and conservation of the Matson Uplands will align with the Commission's overall objective for the preservation of this important caribou herd.

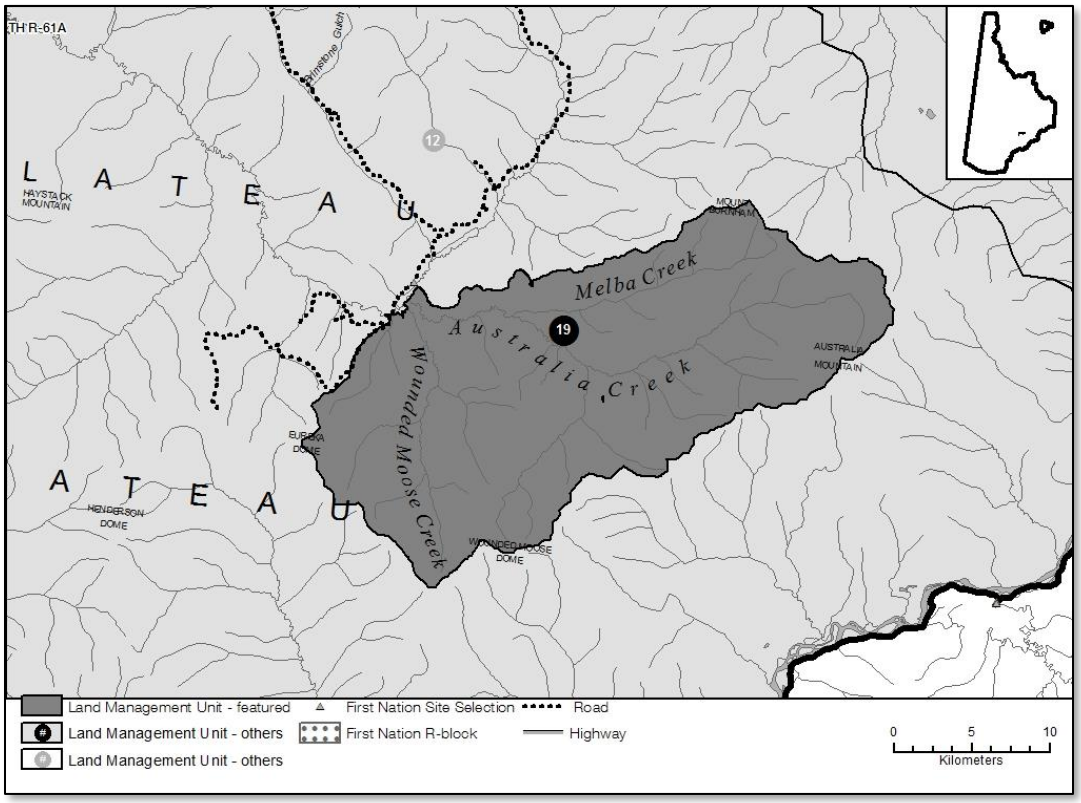
Special Management Directions (*Recommendation to achieve Vision*)

1. Withdrawal of all lands from staking, industrial use, and new surface access
2. Other land use rights (trapping, traditional economic activities) recognized

Priority Objectives
✓ Disturbance to key caribou habitat is avoided and key migration pathways are maintained ✓ Protection of traditional land use/economic activities and harvesting ✓ Preserve key values that facilitate and recognize Tr'ondëk Hwëch'in's responsibilities as stewards of the land (healthy and sustainable fish and wildlife populations and their terrestrial and aquatic habitats)
Rationale for Designation
• Matson uplands have been identified as containing key summer habitat for migratory caribou (Fortymile caribou herd and Nelchina) as well as overlapping with critical migration pathways for the herd during spring, summer, and fall. • The Fortymile caribou herd overlaps with areas of high human-caused disturbance, and the herd is experiencing a cumulative impact from development • Major issues facing the herd are barriers to movement and loss of habitat. It is important that the remaining critical habitat within this area be preserved, and migratory pathways of this herd not be impeded or bisected at critical pinch points.
Ecological Value
Caribou: This area overlaps with two caribou herd ranges: the Fortymile and Nelchina caribou herds and includes migration corridors and winter and summer habitat for caribou. Identified as key habitat for Fortymile caribou herd persistence.
Birds: Extensive inclusion of high elevation (>1000 m) habitat crucial for some migratory bird species
Unique Features: Unglaciated areas > 1300 m in elevation, presence of rare endemic plant species
Ecological Framework: Part of Boreal Cordillera ecozone, Klondike Plateau ecoregion
Landscape Connectivity: Area contains landscapes connecting from Alaska into Yukon necessary for caribou migration
Economic Value
Mineral Resources: No active quartz claims or permits in this area, but is high to medium mineral potential
Trapping: Area overlaps with trapping concession
Forestry: Overlaps with the Sixty Mile River Central Landscape Unit of the Dawson Forest Resources Management Plan. Unit is designated for medium priority for short-term forest resource development, however area is high elevation and limited in forest resource potential
Transportation and Access: Some secondary access trails into area, as well as air access
Heritage, Social, and Cultural Value
Stewardship: Area is used for subsistence hunting of Fortymile caribou and there are ongoing efforts by Tr'ondëk Hwëch'in to reconnect with the herd through community hunts and educational camps.

5.19 LMU 19: UPPER INDIAN RIVER WETLANDS

LMU 19: Upper Indian River Wetlands	
Land Use Designation:	**Special Management Area II**
Land Status:	Non-Settlement Land
Area:	481 km^2



Management Intent Statement (*Our Vision for the LMU)*

Our management intent for this area is to protect the function of the upper Indian River wetland complex as fully as possible to respect cultural and ecological values. Wetlands within the Indian River valley hold strong intrinsic socio-cultural and ecological value, but as mineral development continues within the watershed, the valley is experiencing a landscape conversion of wetland habitat and widespread loss of peatlands. While the upper drainage of the Indian River continues to experience moderate levels of exploration and mining, it remains relatively less developed. The Commission would like to explore options for mineral development to continue in this area by implementing disturbance thresholds for wetland types and preserving the most socio-culturally and ecologically important areas that cannot be restored.

Special Management Directions (*Recommendations to achieve Vision*)

1. Restricted industrial land use is allowed within existing mineral tenure
2. Interim withdrawal of all other lands from staking and industrial use. Withdrawal can be reassessed at time of Plan review or reconsidered by Parties at completion of the Yukon Wetland Policy

3. Development within undisturbed wetlands is subject to the following:
    a. No disturbance to field-verified marshes, fens, and bogs
    b. Development in all other wetland types subject to general management directions for wetlands (**Section 4.2.4)**
    c. Robust reclamation and restoration practices
2. Cumulative effects thresholds match those of ISA II

Priority Objectives

- ✓ Recognize the ecological and socio-cultural value and contributions of wetland habitat, and work to identify and protect key wetland areas
- ✓ Protection of traditional land use/economic activities and harvesting
- ✓ Preserve key values that facilitate and recognize Tr'ondëk Hwëch'in's responsibilities as stewards of the land (healthy and sustainable fish and wildlife populations and their terrestrial and aquatic habitats)

Rationale for Designation

- Wetlands are relatively rare in the Dawson planning region covering approximately 10% of the landscape.
- Wetlands provide specialized habitat for wildlife, including terrestrial animals, numerous species of birds, and aquatic species, provide important ecosystem services, and are one of the most significant terrestrial carbon sinks
- Wetlands offer numerous socio-cultural values, as expressed by TH, in inherent value on the landscape, harvesting opportunities, preservation of social connections and cultural vitality, and stewardship
- Restoration of bog/fen wetland habitat is effectively impossible following disturbance.
- The Indian River watershed has been identified as the most important placer gold producing watershed in Yukon and the upper reaches have been identified as high potential for future placer activity

Ecological Value

Caribou: Overlaps with the Fortymile caribou herd range. Migration routes and winter habitat present on Wounded Moose Dome to Australia Mtn.

Moose: Area contains favourable year-round habitat for moose, and overlaps with wildlife key areas for moose for late winter (Feb-April)

Beaver/Muskrat: Wetlands offer important habitat for beaver and muskrat

Birds: Wetlands are important staging and nesting habitat for songbirds and waterfowl

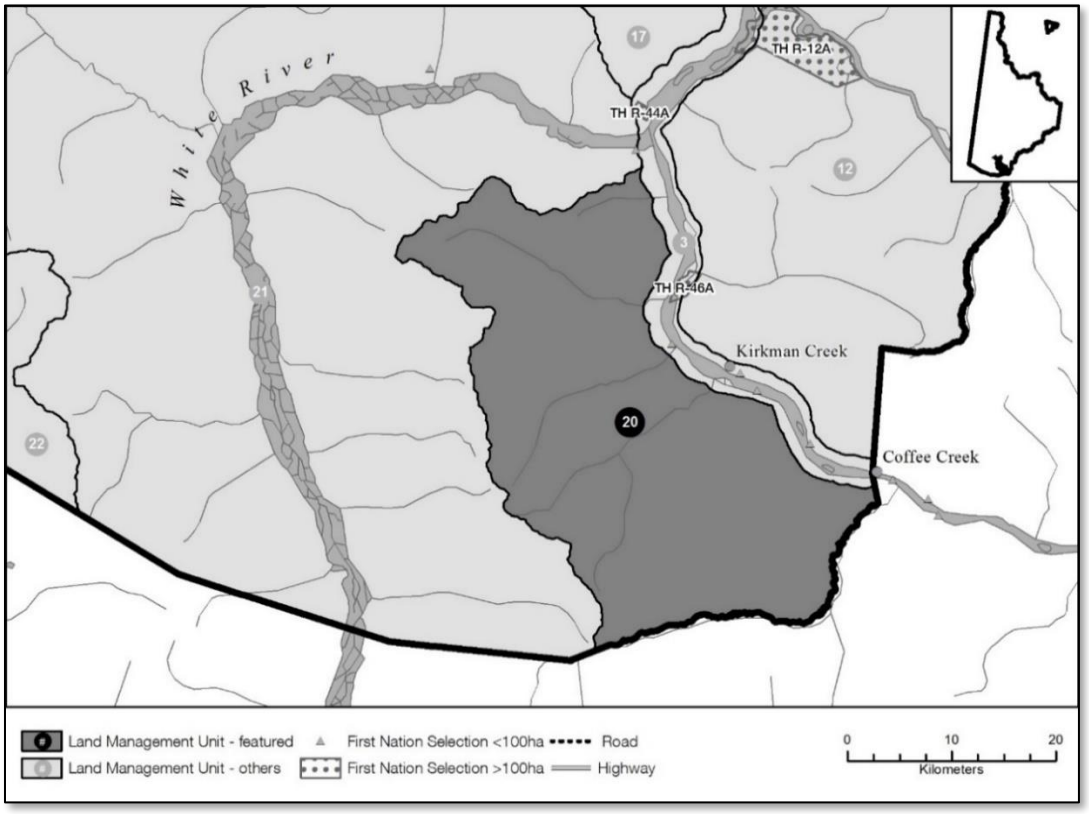
Species at Risk: Wetland habitat may provide habitat for common species at risk found in the planning region

Wetlands: Upper Indian River drainage majorly consists of swamp, fen, and bog wetland habitat

Ecosystem Representation: Wetlands represent roughly 10% of the planning region
Landscape Connectivity: Wetlands are often considered at the wetland complex level given the nature of their interconnectedness and cumulative function. Isolated wetland habitat is less productive.
Climate Change Mitigation: Wetlands in permafrost regions are one of the most significant terrestrial carbon sinks.
Economic Value
Mineral Resources: The Indian River watershed has been identified as the "most important placer gold producing watershed in Yukon" and more than 50% of the Yukon's placer gold is derived from the watershed every year. Extensive coverage of active placer claims and permits overlapping with wetland habitat within upper Indian river drainage along major existing or prospective areas including Wounded Moose, Melba Creek, and Australia Creek. Secondary tributaries relatively absent of placer activity but highly prospective. Some quartz claims and active permits directly adjacent to area.
Outfitting and Trapping: located within one trapping concession, potential for presence of associated trapping infrastructure
Tourism: Accessible via secondary roads, may see limited tourism opportunities through gold mining interest and/or wildlife viewing
Forestry: Located within the Goldfields Landscape Unit of Forest Resource Management Plan with an active timber harvesting plan for the area.
Transportation and Access: Access into upper drainage exists but is limited to secondary mining roads
Traditional Economy: Opportunities for harvesting, hunting, and gathering
Heritage, Social, and Cultural Value
Heritage Resources: Numerous occurrences of recorded historic resources, archaeological, and paleontological sites
Recreation: Limited use for recreational purposes, likely focused on those living seasonally within the area
Stewardship: Stewardship is a central tenant of TH culture. Ensuring wetland habitat remains intact has been noted as an important stewardship duty for TH

5.20 LMU 20: COFFEE - TTHATRYÄN

LMU 20: Coffee - Tthatryän	
Land Use Designation:	**Integrated Stewardship Area 3**
Land Status:	Non-Settlement Land
Area:	1000 km^2



Management Intent Statement (*Our Vision for the LMU*)

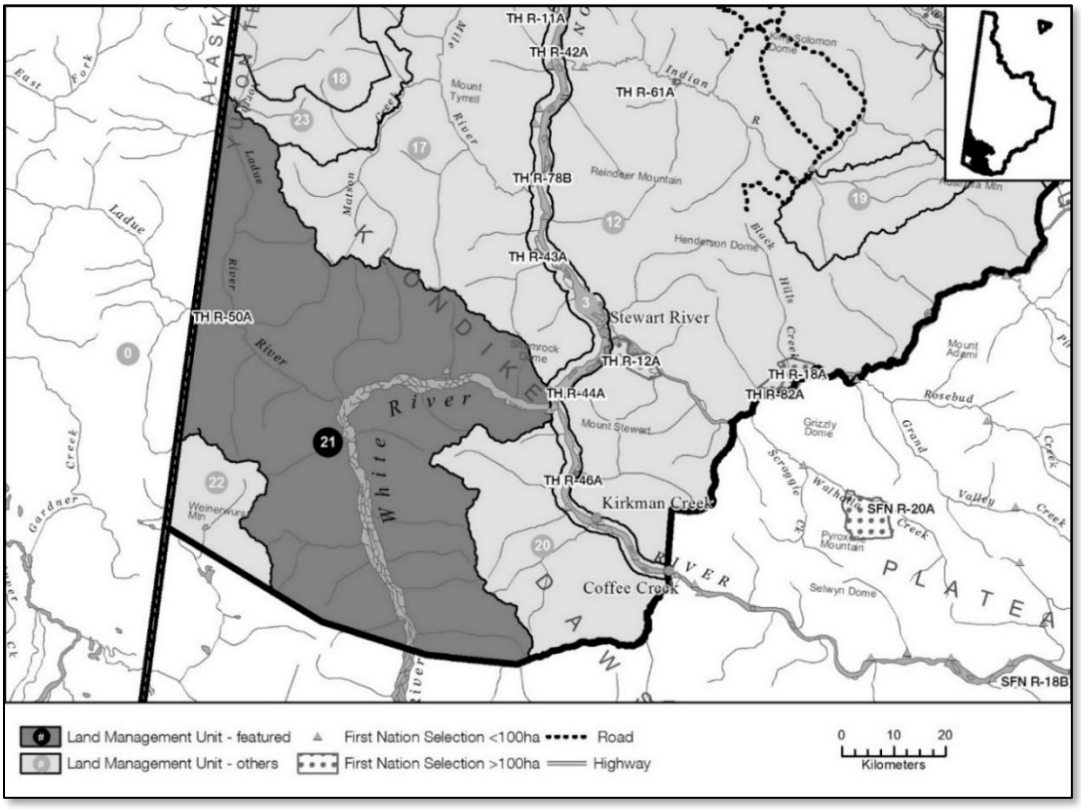
Our management intent for this area will focus on sustainable development by means of cumulative effects management, access management, and the preservation of key values. It is important that this area remain open for current and future mineral interests without undermining its important environmental and cultural attributes. This area hosts an active advanced hard rock exploration program with associated infrastructure, and the site of a potential hard rock mine. It is also the location of considerable adequate habitat for the Fortymile caribou and Nelchina caribou herds. While existing access in this area remains relatively unconnected to the East LMU, the Northern Access Route would offer substantial opportunities for connection and increased accessibility.

Special Management Directions (*Recommendations to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to: 1. Area contains important caribou migration routes and ridgetops. Future development should minimize impacts to these areas by working with Yukon Government and Tr'ondëk Hwëch'in to identify appropriate conditions. 2. Adjacent to this LMU there are small isolated sheep populations that are particularly sensitive to disturbance. Access via land and air into this area should take every precaution to minimize disturbance to sheep. 3. Efforts to enhance the use of this area for traditional economic activities and cultural/educational pursuits should be explored 4. Heap-leach mining involves the use of chemicals, namely a cyanide-based solution, to extract precious metals from ore. Use of heap-leach mining practices in this area should take every precaution to not harm the surrounding aquatic environment. The collection of accurate and robust baseline data collection on groundwater and surface water quality parameters as well as continued monitoring for impacts will be important considerations for development in this area.
Priority Objectives
✓ Key caribou migration pathways are maintained, and disturbance to key habitat areas is avoided or minimized ✓ Ensure an adequate land base is available for placer mining, quartz exploration, and quartz mining to continue as key economic development activities
Rationale for Designation
• Area contains an active mineral exploration and potential mine site and ensuring that there is an adequate land base for mining to continue as a key economic development activity in the planning region is important. • The area also contains key habitat for caribou and sites of cultural history and significance to Tr'ondëk Hwëch'in. • An ISA 3 designation with special management directions should meet the management intent for this area.
Ecological Value
Caribou: Within the range of the Fortymile, Nelchina, and Klaza caribou herds. Contains important summer and winter habitat, as well as key ridges for migratory caribou in the spring and fall
Moose: Contains good habitat for moose
Sheep: Considered to contain scattered sheep habitat generally and adjacent to isolated sheep populations along Yukon and White rivers.
Birds: Presence of high elevation habitat (>1000 m) important for some migratory bird species
Fish: Watercourses likely to contain resident fish species
Vegetation and Unique Features: Presence of some intact forests (>140 years old)

Water: Contains tributaries to Yukon River
Wetlands: Some wetland habitat identified on small tributaries to Yukon River, including swamp and fen
Economic Value
Mineral Resources: High mineral potential and presence of significant mineral exploration and development. Area contains advanced hard rock exploration project and potential future mine site
Outfitting and Trapping: Overlapping trapping concessions
Forestry: Within Yukon River South landscape unit for the Dawson Forest Resource Management Plan, which has been designated for a medium priority for long-term planning as area has higher conservation focus.
Transportation and Access: Not currently accessible via land from Dawson but contains considerable access within from past and contemporary mineral exploration and development in area. Northern Access Road will result in increased access into this LMU
Traditional Economy: Area has considerable historical value for harvesting and hunting
Heritage, Social, and Cultural Value
Heritage Resources: Presence of archaeological sites and recorded historic resources near Yukon River and area contains cultural significance to Tr'ondëk Hwëch'in.
Recreation: Low recreation potential except for limited use off Yukon River

5.21 LMU 21: WHITE – TÄDZAN DËK

LMU 21: White	
Land Use Designation:	**Integrated Stewardship Area 1**
Land Status:	Non-Settlement Land and TH Settlement Land TH R-44A, TH R-45B, TH R-50A, TH S-17B1
Area:	4124 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to focus on maintaining key values, including wetlands, caribou, sheep, and migratory birds, while allowing for continued sustainable development. This area is relatively undeveloped and inaccessible, having some very localized mineral exploration and development. It is understood that this area contains abundant intact wetland habitat, which holds strong intrinsic value and provides important ecosystem services to wildlife. Wetland habitat remains relatively rare in the Dawson planning region, covering approximately 10% of the landscape.
Special Management Directions (*Recommendations to achieve Vision*)
In addition to all applicable general management directions, development in this area is subject to: 1. Development within undisturbed wetlands is subject to the following: o No disturbance to field-verified marshes, fens, and bogs

- Development in all other wetland types subject to general management directions for wetlands (Section 4.2.4)

2. Area contains isolated sheep population. Development in this area should take every precaution to minimize disturbance to sheep and sheep habitat along the White River.
3. The frequency of use and potential impacts from off-road vehicles in this area is not well understood. In line with Section 4.1.2.3, if this activity becomes an issue, appropriate avenues should be explored for consideration under the current regulations.

Priority Objectives

- ✓ Recognize the ecological and socio-cultural value and contributions of wetland habitat, and work to identify and protect key wetland areas
- ✓ Key sheep habitat is protected and disturbance during key times (lambing, over-winter) is avoided or minimized

Rationale for Designation

- The Commission wishes to recognize the ecological and socio-cultural value and contributions of wetland habitat to the overall diversity of the planning region, which are relatively rare (covering approximately 10%).
- With the additional development allowed under an ISA 1 designation, in combination with the strict conditions on development in wetland habitat, the management intent for this area will be met.

Ecological Value

Caribou: Within the range of the Fortymile and Nelchina caribou herds and includes key migration routes

Moose: Extensive good moose habitat and contains key wildlife areas for moose (late winter)

Sheep: Isolated populations at the mouth of the White River

Birds: Considered to contain areas of frequent use by migratory birds, including sandhill cranes. Also includes key areas for raptor nesting (golden eagle and peregrine falcon key habitat on White River). Area also contains wetlands that provide important habitat for birds. The North Ladue in particular is known to contain high concern habitat for migratory birds.

Furbearers: Key habitat area for beaver along the North Ladue river for year-round all functions, as well as important stream and pond dwelling habitat. Moderate to nil habitat suitability for muskrat

Fish: Movement of adult and juvenile Chinook salmon along White River

Vegetation and Unique Features: Presence of known mineral licks

Wetlands: Presence of identified and mapped wetland habitat, including fen, bog, and swamp

Ecosystem Representation: Part of the Klondike Plateau ecoregion and the Boreal Cordillera ecozone

Economic Value

Mineral Resources: Active placer exploration and mining and quartz exploration tenure, and moderate to high mineral potential within the area.

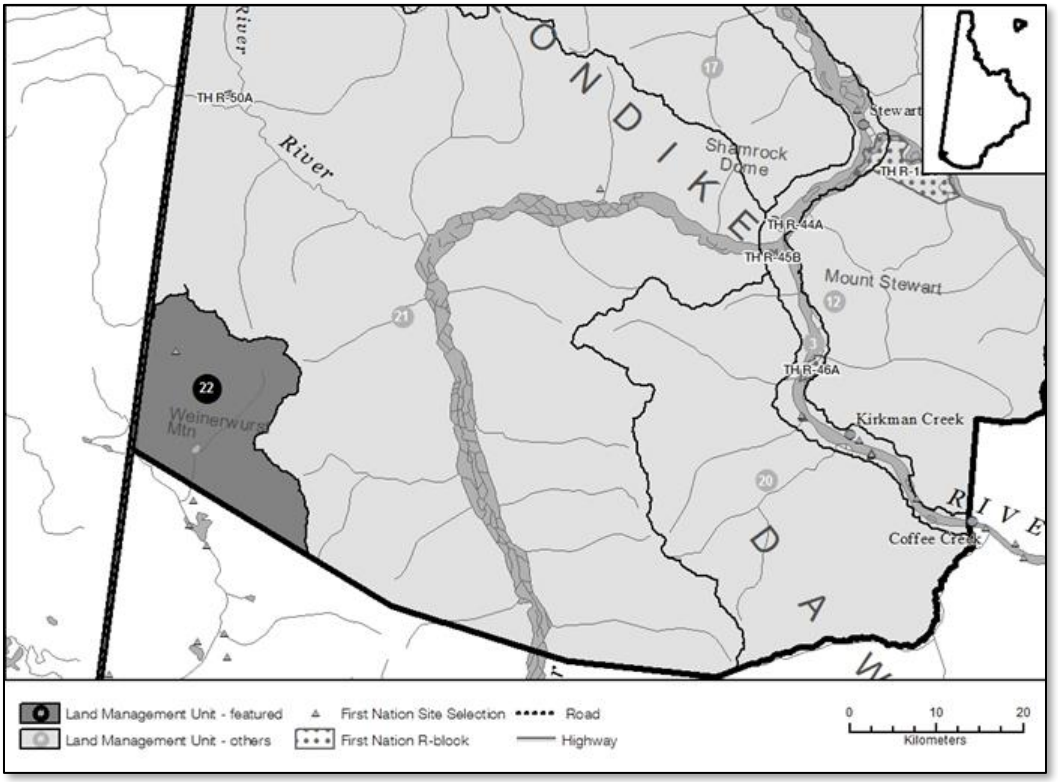
Outfitting and Trapping: Active outfitting and trapping concessions in area

Forestry: White River Landscape Unit of Dawson Forest Resources Management Plan designated as a hinterland forest zone with a low priority for planning in the long-term.

Transportation and Access: Except for North Ladue the area is fairly absent of any secondary access roads or trails. Some access does exist along North Ladue as part of mineral interests in area.
Traditional Economy: Important areas for harvesting and hunting
Heritage, Social, and Cultural Value
Heritage Resources: Several archaeological resources and a cabin, traditional trail along White River
Recreation: Recreational boating opportunities up White River, but area remains quite inaccessible for recreational purposes
Stewardship: Stewardship is a central tenant of TH culture. Ensuring wetland habitat remains intact has been noted as an important stewardship duty for TH.

5.22 LMU 22: Scottie Creek Wetlands

LMU 22: Scottie Creek Wetlands	
Land Use Designation:	**Special Management Area II**
Land Status:	Non-Settlement Land, WRFN S-147B
Area:	355 km^2



Management Intent Statement (*Our Vision for the LMU*)
Our management intent for this area is to protect the function of the wetland complex as fully as possible to respect cultural and ecological values. Protection of this area supports the Commission's commitment to providing opportunities for connectivity beyond the boundaries of the region, respecting space for traditional economic activities, and conserving wetlands as important habitat. This area represents the largest intact wetland complex in the region, and it offers important waterfowl staging grounds and nesting habitat. Access into the area is limited, as is the existing mineral tenure. The area also holds deep intrinsic value for maintaining ecological, social, and cultural connections with adjacent regions and into Alaska.
Special Management Directions (*Recommendations to achieve Vision*)
1. Restricted industrial land use is allowed within existing mineral tenure 2. Withdrawal of all other lands from staking and industrial use 3. Development within undisturbed wetlands is subject to the following:

a. No disturbance to field-verified marshes, fens, and bogs

b. Development in all other wetland types subject to general management directions for wetlands (Section 4.2.4)

c. Robust reclamation and restoration practices

4. Parties should explore the option of establishing this area as a Habitat Protection Area (HPA)
5. Cumulative effects thresholds match those of ISA II

Priority Objectives

- ✓ Recognize the ecological and socio-cultural value and contributions of wetland habitat, and work to identify and protect key wetland areas
- ✓ Protection of traditional land use/economic activities and harvesting
- ✓ Preserve key values that facilitate and recognize Tr'ondëk Hwëch'in's responsibilities as stewards of the land (healthy and sustainable fish and wildlife populations and their terrestrial and aquatic habitats)

Rationale for Designation

- Wetlands are relatively rare in the Dawson planning region, covering approximately 10% of the landscape.
- Wetlands provide specialized habitat for wildlife, including terrestrial animals, numerous species of birds, and aquatic species.
- Wetlands provide important ecosystem services, such as water filtration and groundwater recharge
- Wetlands are one of the most significant terrestrial carbon sinks and are thus leaving these habitat types undisturbed is important for climate change mitigation
- Wetlands offer numerous socio-cultural values, as expressed by TH, in inherent value on the landscape, harvesting opportunities, preservation of social connections and cultural vitality, and stewardship
- Protecting the Scottie Creek wetland complex will protect valuable waterfowl staging and nesting habitat.
- Low prospectivity for mineral potential
- Identified for protection as part of preliminary discussions between Yukon Government and White River First Nation

Ecological Value

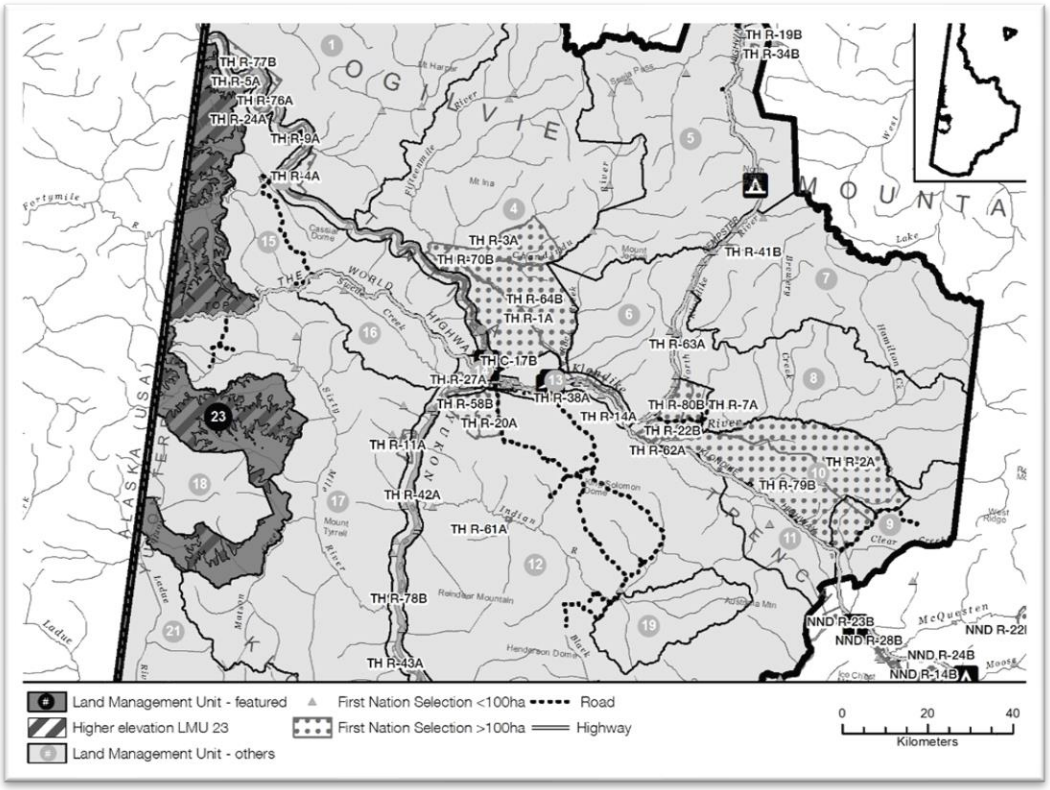
Caribou: Located within the ranges of two caribou herds: the Fortymile and Nelchina caribou herds, and overlapping with key winter habitat

Moose: Within areas considered extensive good moose habitat, moderate moose populations

Birds: Important waterfowl staging and nesting habitat
Beaver/Muskrat: Scottie Creek Flats considered a wildlife key area for beaver and muskrat for all functions year round
Species at Risk: Wetland habitat may provide habitat for common species at risk found in the planning region
Wetlands: Contains extensive undisturbed wetland habitat
Ecosystem Representation: Wetlands represent roughly 10% of the planning region
Landscape Connectivity: Wetlands are often considered at the wetland complex level given the nature of their interconnectedness and cumulative function. Isolated wetland habitat is less productive. Potential to retain connectivity from this area into adjacent planning regions
Economic Value
Mineral Resources: Minimal existing mineral tenure in complex with low prospects
Outfitting and Trapping: Located within an outfitting concession and a trapping concession
Tourism: Access into area is limited thus are tourism opportunities
Forestry: Located within the White River Landscape Unit of the Forest Resource Management Plan. Unit identified as a low, long-term priority for planning with a high conservation focus
Transportation and Access: Currently no road or trail access into area
Traditional Economy: Limited access into area thus limited opportunities for harvesting and gathering
Heritage, Social, and Cultural Value
Heritage Resources: One identified archaeological site in area, WRFN have expressed high cultural value
Stewardship: Stewardship is a central tenant of TH culture. Ensuring wetland habitat remains intact has been noted as an important stewardship duty for TH.

5.23 LMU 23: FORTYMILE CARIBOU CORRIDOR

LMU 23: Fortymile Caribou Corridor	
Land Use Designation:	**Integrated Stewardship Area 2 (in lower elevations** **Integrated Stewardship Area 1 (in higher elevations)** This LMU has been split into two zones based on elevation and location to better manage ridgetops key to the migration of Fortymile caribou. **Higher elevations** are those areas above 700 meters above sea level to the north of the Top of the World Highway, and above 1000 meters above sea level to the south of the Top of the World Highway. **Lower elevations** are below those areas.
Land Status:	Non-Settlement Land and TH Settlement Land TH S-13B1
Area:	1921 km^2



Management Intent Statement (*Our Vision for the LMU*)

Aligning with the Special Management Area identified within the Matson Uplands, our management intent for the Fortymile caribou corridor is to adequately preserve habitat requirements and migration routes for the Fortymile caribou herd, while allowing for limited sustainable development.

Special Management Directions (*Recommendations to achieve Vision*)

In addition to all applicable general management directions, development in this area is subject to:

1. Development in this area should take special precautions to ensure minimal disturbance to caribou, their habitat, and migration routes. This includes but is not limited to:

    a. No major infrastructure should be developed within specified ridgetops important for caribou migration (see **Map 2 & 4 Appendix A**).

    b. Application of timing windows as determined by the Regional Biologist for key areas and activities.

    c. Project proponents should work with the Yukon Government Regional Biologist to identify, and avoid, areas with suitable lichen habitat prior to developing exploration or mine plans.

    d. Reclamation standards should be applied that maximize the regrowth of caribou suitable habitat, including lichen.

    e. Projects should develop and implement specific wildlife monitoring and mitigation plans that consider impacts to caribou, and at a minimum, establishes a phased approach to actions taken when caribou are present.

2. Tr'ondëk Hwëch'in rights to harvest the Fortymile caribou herd in this area must not be compromised, in particular within areas adjacent to the Top of the World Highway.

Priority Objectives

- ✓ Key caribou migration pathways are maintained, and disturbance to key habitat areas is avoided or minimized

- ✓ Preserve values required to maintain Stewardship duties (healthy and sustainable fish and wildlife populations and their terrestrial and aquatic habitats)

- ✓ Key use areas for subsistence harvesting in the region are preserved, and the right to conduct these activities remains intact.

Rationale for Designation

- The Fortymile caribou herd overlaps with areas of high human-caused disturbance and the herd is experiencing a cumulative impact from development. Major issues facing the herd are barriers to

movement and loss of habitat. As such, key caribou migration pathways must be maintained, and disturbance to key caribou (summer and winter) habitat areas, should be minimized. • Maintaining the current level of disturbance in addition to strong special management directions on development should ensure minimal impacts to the Fortymile caribou herd in this area.
Ecological Value
Caribou: Within the range of the Fortymile and Nelchina caribou herds, and contains areas of important winter and summer habitat as well as within key migration corridors in the spring and fall, and the key summer corridor for Fortymile caribou
Moose: Considered good habitat for moose in lowlands
Birds: Contains areas of high elevation habitat (>1000 m) which is important for some migratory bird species
Vegetation and Unique Features: Known occurrence of Yukon Podistera
Wetlands: Wetland habitat along major watercourse, including bogs, fens, and swamps
Ecosystem Representation: Part of Klondike Plateau ecoregion of the Boreal Cordillera
Economic Value
Mineral Resources: Predominately considered moderately prospective for minerals with pockets of high to significant potential. Placer exploration and mining is prevalent in area as well as areas of active quartz exploration.
Outfitting and Trapping: Active trapping concessions and presence of associated infrastructure
Forestry: Part of Sixtymile River Landscape Unit of Dawson Forest Resources Management Plan. Area was designated for forest resource management with a medium priority for planning in the short-term. Considered to include potential for high timber values. No active timber harvest plans in area.
Tourism: Top of the World highway adjacent, which is an important area for tourism in the region. Most tourism activity would occur within proximity to the highway or accessed off the Yukon River
Transportation and Access: Area is accessible via the Top of the World highway and several secondary roads
Traditional Economy: Settlement Land parcel S-14B is an important harvesting and gathering site
Heritage, Social, and Cultural Value
Heritage Resources: Presence of traditional trails (Glacier Creek) and several archaeological sites
Recreation: Adjacency to Top of the World Highway and presence of several secondary roads represents significant recreational opportunities in this area, predominately from ORV use, hiking, berry picking, wildlife viewing
Stewardship: Area is used for subsistence hunting of Fortymile caribou and there are ongoing efforts by Tr'ondëk Hwëch'in to reconnect with the herd through community hunts and educational camps.

6 Plan Implementation and Revision

The implementation of a land use plan is an important part of the planning process. Establishing an effective implementation framework is an essential component of any plan if its goals, objectives and recommendations are to be realized. This section outlines a variety of tools that will be used to implement the recommendations in this Plan. Periodic monitoring of Plan implementation activities provides an opportunity to evaluate its effectiveness, to determine if goals and objectives are being met, and to determine whether the Plan has been used in land and resource decision-making processes. If land use circumstances change in the region, changes to the Plan may be necessary.

Putting a Plan into action is a shared responsibility and collaboration is a key part of the process. The Parties will need to build and maintain strong relationships with individuals, groups, other government agencies and UFA boards, and adjacent First Nations to achieve successful implementation. Collaboration and participation are encouraged as part of the planning process in order to find alternative solutions, build trust and accountability, recognize diverse interests and ultimately make better decisions.

6.1 Plan Implementation

The Parties to the Plan are the Yukon and Tr'ondëk Hwëch'in governments. They will make best efforts to implement the Plan in its entirety. However, Plan implementation is at the discretion of the Parties. Nothing in this Plan diminishes the ability of the Parties to make land and resource decisions under their current authority. This Plan provides a framework and tools that enable the Parties to make well-informed land and resource management decisions. The Plan also provides guidance to land and resource users when developing project proposals, and when conducting land use activities in the region. Following approval of the Dawson Regional Land Use Plan, the Parties will develop a detailed Plan implementation strategy on both Settlement Land and Non-Settlement Land.

6.2 Implementation Responsibilities

The Parties (Yukon and Tr'ondëk Hwëch'in) have primary responsibilities for implementation for the Dawson Regional Land Use Plan. Implementation responsibilities may also involve other groups, including the following:

- Government of Canada;
- Yukon Environmental and Socio-economic Assessment Board (YESAB);
- Yukon Land Use Planning Council (YLUPC); and
- Other UFA boards and committees.

Until an agreement between the Parties has been reached, implementation roles and responsibilities for other groups remain undetermined.

Recommended Action	The Parties should jointly establish an Implementation Committee and develop an Implementation Plan within one (1) year of Plan approval.

6.3 Landscape Management Unit Designations

Implementing Landscape Management Unit (LMU) designations depends on which category applies to each area: Special Management Area (SMA) or Integrated Stewardship Area (ISA)

6.3.1 Special Management Areas

For the purposes of this Plan, Special Management Areas (SMAs) are conservation areas identified and established within a Traditional Territory of a Yukon First Nation under a Final Agreement. Chapter 10 of the THFA describes how SMAs may be created and managed. The Parties must decide what legal designation may be given to each SMA, ensuring that the decision is consistent with this Plan (THFA 10.6.1.1).

Special Management Areas are divided into two categories that require different implementation approaches: Special Management Area I and Special Management Area II.

6.3.1.1 Special Management Area I

An SMA I is an area managed for maximum conservation and no new industrial land use or surface access is allowed. All lands within these areas should be permanently withdrawn from any new industrial land use dispositions and surface access. These areas also require a management plan and a legal designation, which should be determined by the Parties, provided that the Plan's management intent and direction is respected.

6.3.1.2 Special Management Area II

An SMA II is an area managed for high conservation of ecological and cultural values and the intent is for long-term maintenance of wilderness character. **However, the intent of this designation is not to prohibit all development or activities on existing land use tenure**. Restricted industrial land use is allowed, recognizing existing mineral and other land use rights within the area, however all other lands not currently holding mineral or other land use tenure should be withdrawn on either an interim or permanent basis, and may require a management plan, at the discretion of the Parties. Restrictions to new surface access also apply depending on the area (refer to Landscape Management Unit summaries in **Section 5.0**).

6.3.2 Integrated Stewardship Areas

The ISA designation is used to identify areas where higher levels of industrial and other development can occur. The intent of all ISAs is to enable existing and future economic activities for both surface uses and subsurface resource extraction. Land management in these areas is based on the concept of stewardship.

The intention in ISAs is to put an emphasis on creating a landscape where human activities happen in a respectful way with the health of land at the forefront of decision making. Through management directions and thresholds, the focus will be on minimizing negative environmental and cultural effects, restoring areas of imbalance, and protecting ecological values while allowing economic development activities to continue. Through an integrated stewardship approach the aim is to not simply manage or control the industrial use of the land, but rather to create a holistic mindset that all land users have a duty to care for the land.

This Plan, in conjunction with industry led initiatives, the work of Tr'ondëk Hwëch'in, and Territorial regulations and policy will ensure that people who live, work and play in the Dawson Region are stewards with a shared responsibility to the land for future generations.

Recommended Action	Continued work on the Tr'ondëk Hwëch'in Ninä'nkäk Hozo Wëk'ä'tr'ë'no'hcha Land Stewardship Framework should be encouraged and supported as a means of informing the Plan implementation process and future land use planning initiatives in TH Traditional Territory.

Cumulative effects indicators, including existing disturbances, must be tracked and monitored to determine conformity within each LMU. It is at the discretion of the Parties to determine the process for tracking indicators and for ensuring that thresholds are kept below cautionary or critical levels. Decisions made by the Parties will be informed by:

- Indicator levels;
- Other management plan recommendations; and
- Advice from third parties such as, for example, YESAB and YLUPC.

6.3.3 Subregional Plans

This Plan recommends the development of subregional plans for the following areas of the planning region:

- Dempster Highway Corridor (see Section 4.1.2.1), and
- Yukon River Corridor (see Section 5.3).

The sub-regional plans should be developed collaboratively between the governments of Yukon and Tr'ondëk Hwëch'in in accordance with Section 11.8.0 of the THFA.

6.4 Plan Conformity

New land uses, or the expansion of existing uses, proposed in the region must be assessed to evaluate if they conform to this Plan. Checking the conformity or agreement of land uses ensures that the Plan is being implemented as intended. The evaluation of such proposals should be linked to YESAA Development Assessment Process as generally described in Section 12.17 of the THFA.

However, if this Commission does not continue following the approval of this Plan, YLUPC may be tasked with performing conformity checks (THFA 11.3.4). Plan conformity checks in other Yukon planning regions have been completed in this way.

Recommended Action	A Plan conformity evaluation process should be developed by the Parties as soon as possible following Plan approval that involves an appropriate third-party board or committee (e.g. YLUPC). Since YESAB conducts a high volume of project reviews in the planning region and there is limited capacity to undertake conformity checks, the Parties should consider the following: • Prioritize the tracking of baseline information on linear density and surface disturbance, and associated conformity checks, in areas where a high volume of project reviews are typically submitted (i.e. East, Sixtymile, Clear Creek). Focus should be on areas that have not yet been disturbed by development. • Triage YESAB projects by type (smaller vs. larger projects)

6.4.1 Implementation Guidelines

Once the Plan is approved by the Parties and an Implementation Plan is established, implementation guidelines may be used to provide further detail with respect to how recommendations will be implemented. Such guidelines typically contain information requirements, interpretation and conformity criteria to help guide project proponents and regulators. The content and scope of implementation guidelines should be determined by the Parties and may include guidance on:

- Interpretation of the Plan's goals, objectives and recommendations;
- Interpretations of boundaries shown on maps;
- Information requirements for proponents that request an amendment or variance to the Plan; and
- The process for determining if a proposed project or land use activity conforms to the Plan and criteria to be applied during the evaluation.

Recommended Action	Parties should consider jointly developing Implementation Guidelines which detail the manner in which recommendations in the Plan will be implemented.

6.5 Plan Amendment and Review

This Plan is not intended to be a rigid or static document. The Dawson Planning Region, like all regions, is subject to environmental, economic, and social changes over time, and as such, regional land use plans in Yukon are designed to be 'living documents' that are open to periodic change and revision. The THFA provides for these revisions.

A process for reviewing and changing the Plan supports the principle of adaptive management. Adaptive Management means responding to changing land use and/or environmental conditions as new or better information (including traditional knowledge) becomes available, or if the Plan is not adequately achieving the social, environmental or economic Plan goals as intended. It is a management philosophy that applies a structured, iterative process to decision-making. The principle of adaptive management provides flexibility; and through continued research, monitoring, and reflection, adjustments can be made to the Plan and planning tools to ensure the Plan goals are met.

The Plan may need to be revised when:

- New land management concepts emerge;
- New land and resource information becomes available;
- Technology, or knowledge (including traditional knowledge) about land use effects, develops.
- Management values that the Plan is based upon change; or
- Demand for land and resources in the region changes.

6.6 Plan Revisions

There are three ways in which this Plan may be revised:

- **Plan Variance** – when minor changes to the Plan are necessary;
- **Plan Amendment** – when the Plan needs revisions to its management strategies; and
- **Plan Review** – when the entire Plan is re-evaluated, usually when it needs major changes and revisions.

6.6.1 Plan Variance and Amendment

Planning cannot foresee all future land use circumstances or issues. From time to time, the Plan may require minor changes (variances) or more substantial changes (amendments). The Parties will need to develop a process and criteria for considering these small changes to the Plan. However, amendments and variances should continue to uphold the guiding principles, goals and objectives of the Plan. In addition, Plan amendment and variance processes should include meaningful opportunities to engage with, and obtain feedback from, proponents and the public.

Plan Variances should be considered by the Parties if they agree that:

- The variance request is minor in nature;
- The variance request is desirable for the appropriate development, use or conservation of lands, water and/or resources;
- The variance request does not result in an undesirable precedent for other land use activities of similar nature to occur; and
- The general intent and purpose of the Plan are maintained.

Plan Amendments are a planning tool that can be used when more substantial changes to the Plan are necessary or desired. The primary difference between an amendment and a variance is the

scope of the request. For example, a variance may be used to recognize a legal non-conformity land use whereas a change in the designation of all or part of an LMU would require an amendment.

In considering amendments to this Plan, the Parties should be guided by the following:

- The need for the proposed change;
- The implications of the proposed change on the Region's ability to achieve the overall goals, objectives and recommendations expressed in this Plan; and
- The conformity of the amendment with recommendations in the Plan, applicable Federal, Territorial policies and legislation and the THFA.

Recommended Action	A process for assessing Plan Variances and Amendments should be developed within one (1) year of Plan approval by the Parties. Such a process should consider the following: • Who may request Plan variances or amendments (e.g. individuals, proponents, public bodies); • Application guidelines, supporting documentation requirements and standards for complete applications; • Review timelines and evaluation criteria for applications; and • Public notice and engagement requirements.

The following table outlines a recommended process for accepting, reviewing and making decisions on Plan Variances and Amendments to this Plan.

Table 6-1 Recommended process for plan variances and amendments

Process Step	Description
1. Pre-submission consultation meeting	• The applicant and the Parties meet to discuss the application, submission requirements and other supporting technical information required to assist the Parties and other agencies in their evaluation.
2. Complete application submission	• The application is submitted to the Parties and the application is reviewed to ensure all prescribed information has been provided. • Applicants are notified in writing whether the application is considered "complete".

3. Notice of application and public comment period	• The Parties issue a public notice that a variance or amendment to the Plan has been received and is being reviewed. • A public commenting period is established to receive input and feedback on the application.
2. Circulation Period	• The application is circulated to all relevant departments and agencies that the Parties deem necessary. • Comments received from departments and agencies are summarized and made public in a draft decision report from the Parties.
3. Public Meeting	• The Parties provide notice and hold a public meeting to provide an opportunity for the applicant, individuals and other interested groups to make oral and/or written submissions regarding the application.
4. Decision Report	• The Parties prepare a final decision report summarizing the application review and analysis in addition to all public and agency comments received. • The Parties decide on whether to approve, refuse or defer a decision on the application. The Parties document the rationale for their decision in the report.
5. Notice of Decision	• The Parties notify the applicant of the decision and rationale in writing. • The Parties issue a public notice of decision on the application.

Recommended Action	Plan Variances and Amendments should be considered by the Parties no earlier than the second anniversary of plan approval.

6.6.2 PLAN REVIEW

The periodic review of a Plan in its entirety is a key part of any planning process. The Plan review stage is an opportunity for the Parties, planning partners and the public to evaluate the extent to which the Plan remains effective in achieving its vision, goals and objectives. Through Plan monitoring, the Parties can assess the success of specific recommendations and subsequently make targeted changes to ensure that these goals and objectives are realized or adjusted as required. Significant changes to this Plan may include, for example, changes to LMU boundaries, the Land Use Designation System, or General Management Directions.

Research Recommendation	Undertake research (both traditional and western science approaches) to identify changing social, economic and ecological needs in the planning region.
Recommended Action	The Parties should jointly develop a framework for ongoing monitoring of the Plan. This framework should include methods and techniques for: • Tracking of cumulative effects indicators including establishment of a regional database for compiling surface disturbance and land remediation data; • Providing opportunities to support ongoing land stewardship by TH citizens (e.g. on-the-land stewardship monitors)
Recommended Action	The Parties should jointly develop a Plan review process following approval of the Plan. Plan reviews should occur on an agreed upon schedule, or whenever Yukon and TH agree that a review is required. In this regard, the Parties should consider the following: • Initiating a comprehensive Plan review at a minimum every ten years; • Including opportunities for public engagement in the Plan review process; and • Re-establishing the Commission to play a role in Plan review.

The following table outlines key considerations for the Parties when conducting future Plan reviews.

Table 6-2 Recommended considerations in future plan reviews

Plan Review Task	Actions
1. Evaluate success of Plan in achieving goals and objectives	• Determine the extent to which recommendations from the Plan have been implemented. • Consider if goals and objectives are still relevant and/or achievable. • If necessary, revise Plan content based on evaluation.
2. Evaluate status of any interim land withdrawal areas	• Review if changes are needed to interim land withdrawal areas in SMA II designations. • Assess whether SMA II or ISA category is appropriate.

3. Develop and implement additional indicators	• Consider including habitat targets for focal species in specific LMUs. • Consider developing indicators of water quantity (e.g. maximum water withdrawals by watercourse or watershed) and water quality (e.g. stream crossing index, CCME water quality index) to complement current terrestrial indicators. • Consider developing an indicator for land stewardship in collaboration with the TH Land Stewardship Framework initiative. • Consider inclusion of regional sustainability indicators (see Table 6.3)
4. Refine LMU boundaries	• Consider refining LMU boundaries to better match more detailed base data (1:50,000 CanVec)
5. Refine boundaries of Major River Corridors	• Consider refining boundaries of Major River Corridors to better reflect topography and river valley features (1:50,000 CanVec) • Consider zoning system for Major River Corridors that is complementary to the existing land designation system proposed in the Plan.
6. Establish a zoning system for Dempster and Klondike Highway Corridors	• Consider zoning system for the Dempster and Klondike Highway Corridors in light of sub-regional plans prepared for these areas.
7. Evaluate interim measures for the Yukon River Corridor	• Re-evaluate interim measures for the Yukon River Corridor with regard to the status of other regional planning processes in Yukon.
8. Develop and incorporate more detailed wetland mapping	• Develop more detailed wetland mapping for the region with priority given to LMUs with higher levels of development within wetland habitat.
9. Refine application of cumulative effects indicators and thresholds	• Consider weighting the effects of linear disturbance in different ways for different habitat types (e.g. floodplains versus upland habitats). • Incorporate new information on revegetation rates, other remediation techniques and standards for surface disturbances, if necessary. • Incorporate current information on social carrying capacity and community well-being.

Table 6-3 Potential regional indicators for sustainable development

Category	Indicator	Current Indicator Status	Description
Socio-economic	TH Citizen Stewardship and time-on-the-land	Not currently reported	Provides measure of TH citizen participation in stewardship activities, subsistence economy and traditional pursuits. Indicator development could be in collaboration with TH Land Stewardship Framework initiative.
	Availability of Current Use Areas	Not currently reported	Provides measure of loss/gain of current use areas for subsistence harvesting and cultural purposes as a result of other land use activities. Information could be obtained in collaboration with TH Lands & Resources Department.
	Regional Gross Domestic Product (GDP)	From Yukon Economic Development	Provides a measure of regional economic activity and production.
	Regional Production by Sector	From Yukon Economic Development	Provides a measure for comparing the contribution of each sector to the greater regional economy.
	Human use and activity levels	Not currently reported	Provides for a measure of human use and activity levels by LMU (e.g. number of tourists, hunters, etc. accessing certain areas)
Ecological	Population status of regional caribou herds	From Yukon Environment and TH Fish & Wildlife Department	Provides a measure of the current health of the caribou populations in the region (FMCH, Hart River, Porcupine, Clear Creek, Nelchina)

Category	Indicator	Current Indicator Status	Description
	Caribou herds' use of summer/winter habitat and migration corridors	From Yukon Environment and TH Fish & Wildlife Department	Change in the use of summer habitat, winter habitat and migration corridors should b tracked over time. Possible links to changing land use patterns should be determined.
	Regional habitat integrity	Examined during periodic Regional Assessments	Regional assessment of land habitat conditions for focal species (e.g. moose, salmon, migratory birds) including identifying areas of concern. Surface disturbance and linear density indicators provide measures of habitat integrity.
	LMU habitat integrity	Examined during periodic Regional Assessments	Assessment of land habitat conditions in each LMU, with priority given to areas with higher levels of development. Surface disturbance and linear density indicators provide measures of habitat integrity.
	Regional aquatic habitat integrity	Examined during periodic Regional Assessments	Regional assessment of aquatic habitat conditions including identifying areas of concern. Consider developing indicators of water quantity (e.g. maximum water withdrawals by watercourse or watershed) and water quality (e.g. stream crossing index, CCME water quality index).
	LMU (or watershed) aquatic habitat integrity	Examined during periodic Regional Assessments	Assessment of aquatic habitat conditions for each LMU including identifying areas of concern. Consider developing indicators of water quantity (e.g. maximum water withdrawals by watercourse or watershed) and water quality (e.g. stream crossing index, CCME water quality index).

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