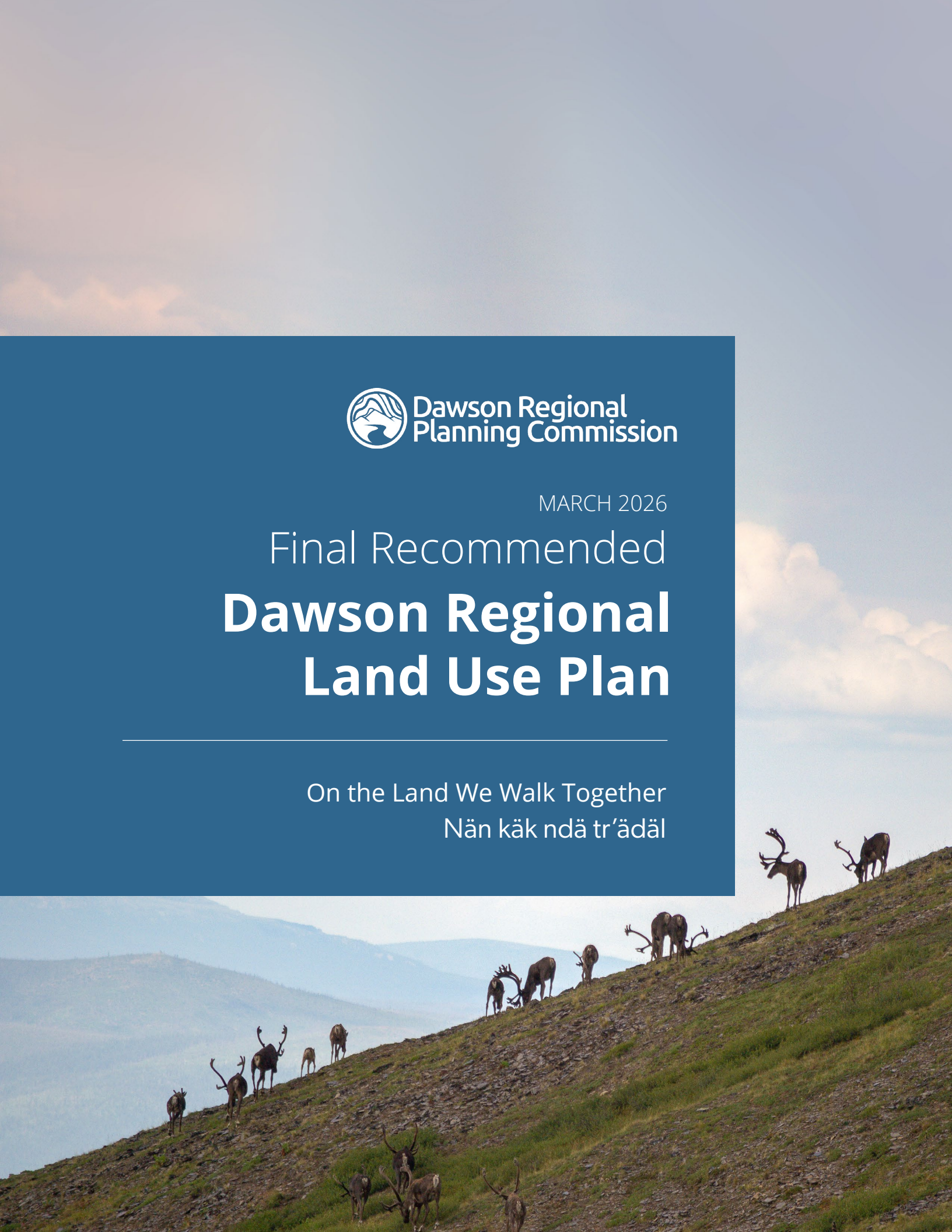
Dawson Regional Planning Commission

MARCH 2026

Final Recommended

Dawson Regional Land Use Plan

On the Land We Walk Together
Nän käk ndä tr'ädäl



Cover Photo: Government of Yukon / Justine Benjamin, The Fortymile caribou herd grazes just south of the Top of the World Highway

Message from the Commission

DRIN HǪZǪ, WELCOME

We are proud to share the Final Recommended Dawson Regional Land Use Plan. If you have been following along since the beginning, thank you for continuing to engage with this important process. If this is your introduction to the Plan, we hope you find value and see your views reflected here.

This Plan has been written by the Dawson Regional Planning Commission, a group of six dedicated community members who have come together to provide guidance about the future management of the Dawson Region. We were each nominated to the Commission by the Government of Yukon or Tr'ondëk Hwëch'in. Once nominated, we only represented ourselves and our community. We accepted our nominations because of a sense of duty to the Region and the community. The creation of this Plan is a meaningful way to implement the Final Agreement, which, importantly, is for everyone living in the Yukon, not just Tr'ondëk Hwëch'in Citizens, and is a reason many of us said yes to participating in this process. We also said yes because we have a connection to the land, the wildlife, the people, and the cultures of this Region, and we feel a sense of stewardship and responsibility to the land and to future generations.

This Plan is about ensuring the future of the people and cultures that live here, managing conflicts, and living together in a sustainable way. We've tried to do the impossible and provide both certainty and flexibility. This is a regional plan; it is not fine-scale, and it does not address everything – it should inspire future innovation and collaboration.

This Plan is grounded in co-management. There is an expectation that in the implementation of this Plan, the Tr'ondëk Hwëch'in and the Government of Yukon work together as equal and respectful partners to bring the vision and intention of this Plan to life. This Plan was developed by following the spirit and intent of the Final Agreement – we worked together and continued to talk when discussions got tough; we collaborated and listened to all of the different voices; when we didn't know how to move forward, we asked those who know more than us, including Elders. We hope that the Parties continue with this spirit and intent through negotiations, and we encourage all Yukoners to follow this same spirit and intent in their own lives.

To the people of this Region – The Dawson Region is our home. Many of our ancestors are from here, and many of our children live here. The readers and users of this Plan are our family, our neighbours, our colleagues. We tried to consider all these people and their views when making our decisions. As Commission members, we bring many priorities, worldviews, and experiences to the table. We have worked together for six years to get to this stage. There have been times when we didn't all agree, and topics that we needed to discuss many times before reaching a decision. But through this all, we never voted. We always had respectful conversations that resulted in consensus decisions, every single time. We are very proud of this outcome. We hope that everyone can see a part of themselves in this Plan. We hope this Plan brings people a better understanding of this Region and its complexities, and the different cultures and diverse wildlife and landscape it contains.

To the land and water and all the relations that live here – This Plan is for you. It is for the land and the water. It is for the two-legged, the four-legged, the winged, the finned, and the crawling. It is for guiding the relationship between the land and the water and all Yukoners and visitors to this Region.

To those who came before us – We are grateful to those who laid the foundation for how we got here today. Whether it is our own families who have taken us out on the land since we were young, the community members who showed us the way when we were first learning about the Region or how to live with land, or Tr'ondëk Hwëch'in representatives who negotiated the Final Agreement. We hope this Plan continues what you started.

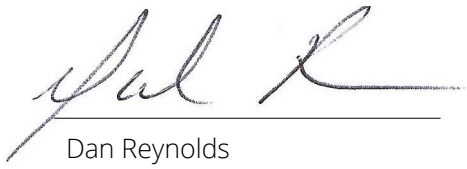
To the next generations – This Plan is for you and all those after you. We encourage you to continue this work, to continue to work together, to uphold the spirit and intent of the Final Agreement, and to work together in a good way. We encourage you to consult your Elders, to learn from those with viewpoints different than your own, and to be outside on the land, learning from it.

To the Parties – A lot of work has been done to get to this stage. We have put in so much time and energy, and we know the public and the stakeholders have, and so have you. The completion of the Final Recommended Plan represents a significant milestone in this process. It is the result of much negotiation, consultation, and consideration of input from the community, Tr'ondëk Hwëch'in, and the Government of Yukon. We are confident that the Final Recommended Plan requires limited refinement in order to become the Approved Plan. The Approved Plan must continue to reflect all these perspectives. We call on you to move ahead expeditiously. A delayed process does not meet the spirit and intent of the Final Agreements.

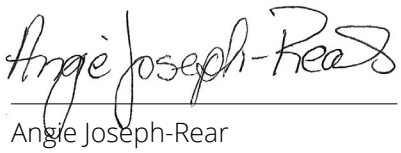
Thank you for reading this Plan and participating in this process so far. We are proud of the work we have done to date and look forward to continuing to work together in a good way.

Mähsį' cho, Thank you

Debbie Nagano, Chair



Dan Reynolds



Angie Joseph-Rear

John Flynn

Alice McCulley

Jesse Cooke

Acknowledgements

The Commission wishes to thank the following people and organizations for their time and contributions throughout the planning process.

Tr'ondëk Hwëch'in Citizens and everyone in the community of Dawson City who shared their knowledge, experience, and passion for the Region. This Plan is for you, and we hope that you see yourselves and your values represented in it.

All of the Plan Partners (stakeholders) who contributed, attended meetings, gave presentations, and provided feedback throughout the planning process. We hope you see your input reflected here.

The Parties and the many staff that they have had working on this Plan over the years. We're grateful for the political direction received from the Senior Liaison Committee and the technical assistance from the Technical Working Group and the Cumulative Effects Working Group.

Darcy Tara McDiarmid and Esther Bordet for their illustrations and artwork found throughout this Plan.

The first Dawson Regional Planning Commission and its staff (2011–2014).

The Yukon Land Use Planning Council and staff.

Staff, contractors, and past Commission members who have assisted throughout the planning process: Eric DeLong, John Glynn-Morris, Toshibaa Govindaraj, Charlotte Luscombe, Kim Melton, Katie Fraser, Nicole Percival, Kirsten Reid, Tim Sellars, Tim Van Hinte, Art Webster.

Note to readers: Words in this ***style*** are defined in the Glossary (Section 8). Numbers in brackets like this **(56)** are citations indicating where the information is from. The details of each are found in Section 9 References.

Photo: Government of Yukon / J Kennedy

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Nän käk ndä tr’ädäl – On the Land We Walk Together

Artwork: Darcy Tara McDiarmid

1.1 Tr'ondëk Hwëch'in Final Agreement

In the Yukon, governments and a Commission undertake regional land use planning as an implementation requirement of Chapter 11 of the First Nation Final Agreements (s. 11.5.1): *"Regional land use plans shall include recommendations for the use of land, water, and other renewable and non-renewable resources in the planning region in a manner determined by the Regional Land Use Planning Commission."*

"The driving force [behind the Umbrella Final Agreement (UFA) negotiations] was to protect the land so that we could protect our way of life and that future generations would have a choice: you could use the modern wage economy, as it's referred to sometimes, or your traditional lifestyle, or both. It gave people that choice about how they wanted to live."

– Albert Peter, regional and community negotiator for Na-Cho Nyäk Dun for the UFA[1]

1 Recording by Shakat Media, September 26, 2018; video courtesy of Yukon University with the Government of Yukon; mappingtheway.ca, "Perspective Series 2: the Umbrella Final Agreement".

> "The only good thing that comes out of a negotiation, the only thing that survives a good negotiation, are good relationships. … It is a constitutional document, it is paramount legislation."
>
> *– Barry Stuart, Government of Yukon, negotiator for the UFA*[2]

Photo: Government of Yukon

These agreements establish a framework for sustainable development and an integrated approach to land and resource management. They provide an opportunity for all voices to be heard and to secure a future for all Yukoners and Canadians, while upholding First Nations rights and responsibilities. The implementation of First Nation Final Agreements (FNFA) benefits everybody. The Plan also links to several other objectives and First Nation rights, as identified in the Tr'ondëk Hwëch'in Final Agreement (THFA; Appendix 2).

2 Recording by Shakat Media, September 26, 2018; video courtesy of Yukon University with the Government of Yukon; mappingtheway.ca, "Perspective Series 2: the Umbrella Final Agreement".

CHAPTER 11 CLAUSES THAT GUIDED PLAN DEVELOPMENT

Objectives

- Minimize actual or potential land use conflicts both within Settlement Land and Non-Settlement Land and between Settlement Land and Non-Settlement Land (11.1.1.2);
- Recognize and promote the cultural values of Yukon Indian People (11.1.1.3);
- Utilize the knowledge and experience of Yukon Indian People in order to achieve effective land use planning (11.1.1.4);
- Recognize Yukon First Nations' responsibilities pursuant to Settlement Agreements for the use and management of Settlement Land (11.1.1.5); and
- Ensure that 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 so as to ensure Sustainable Development (11.1.1.6).

Commission Responsibilities

- Shall ensure adequate opportunity for public participation (11.4.5.3);
- Shall recommend measures to minimize actual and potential land use conflicts throughout the planning region (11.4.5.4);
- Shall use the knowledge and traditional experience of Yukon Indian People, and the knowledge and experience of other residents of the planning region (11.4.5.5);
- Shall take into account oral forms of communication and traditional land management practices of Yukon Indian People (11.4.5.6);
- Shall promote the well-being of Yukon Indian People, other residents for the planning region, the communities, and the Yukon as a whole, while having regard to the interests of other Canadians (11.4.5.7);
- Shall take into account that the management of land, water and resources, including Fish, Wildlife and their habitats, is to be integrated (11.4.5.8);
- Shall promote Sustainable Development (11.4.5.9);
- May monitor the implementation of the approved regional land use plan, in order to monitor compliance with the plan and to assess the need for amendment of the plan (11.4.5.10).

Photo: Government of Yukon

1.2 Walking Together

The Dawson Regional Land Use Plan (the Plan) serves the land and all people who live, work, and play in the Dawson Planning Region (the Region).

The Plan guides and informs:

- Tr'ondëk Hwëch'in, whose connection to the land goes back to time immemorial.
- Newcomers, including multi-generational families who have made the Region their home.
- Visitors.
- Assessors and governments.

The Dawson Regional Planning Commission (the Commission) stewards this planning process. The current version of the Plan is one step in an ongoing relationship between people, and between people and the land. The Commission articulates this relationship as Nän käk ndä tr'ädäl (On the land we walk together). Nän käk ndä tr'ädäl reflects the stewardship responsibility everyone has to the land, and the interconnections between people and the land. It also describes the way the Commission works amongst themselves – by consensus – and with the Government of Yukon and Tr'ondëk Hwëch'in (the Parties), Affected First Nations, Plan Partners, and the public.

Nän käk ndä tr'ädäl also describes the way the Commission envisions the people of the Region relating to one another and the land under the Plan's guidance; it is about bringing together not just diverse people, but different worldviews.

> "The Tr'ondëk Hwëch'in worldview is distinct from the western scientific worldview in significant and important ways. We view the world with a holistic and long-term lens that spans generations, and prioritizes relationships, with the land and with one another, above all else."
>
> *– Tr'ondëk Hwëch'in Ecological and Land Use Monitoring Plan, 2023*

Worldviews are the lenses through which everyone sees and understands the world **(1),** and are so deeply embedded that we can forget they are there. Worldviews influence our values and how we interact with each other and our environment. They reflect the relationship of a culture to its environment and circumstances **(2)**, telling a story of a culture's history and also informing its future. There are two main worldviews at play in the Region and reflected in this Plan: that of the Tr'ondëk Hwëch'in (which aligns broadly with that of other First Nations and Indigenous Peoples globally) and the "Western" worldview that spread to the Region alongside trade and colonization, in which Western science, governance, and legal systems are embedded, and which influences all residents of the Region today.

Each person's worldview is shaped by many influences, so individuals can differ even when they share a culture or upbringing. The Region's community has a "collective worldview" that incorporates "Indigenous and non-Indigenous ideas" **(3)**. However, there are fundamental differences between these two ways of experiencing the world, especially in how they see the relationship between humans and the rest of the natural world.

Western approaches to understanding environments tend to focus on studying components of nature in isolation and concluding with rules that can be applied everywhere **(4)**. Nature and its components (often viewed exclusively as "resources") require management as they are used by people, who are generally

perceived as being separate from nature. From a Tr'ondëk Hwëch'in worldview, land and all beings are interconnected relations, including humans, who are no more important than others. In this worldview, knowledge is based on these relationships and the places in which they occur; knowledge gained elsewhere cannot be automatically applied **(5)**. Each river, mountain, animal, and plant has an inherent right to exist, regardless of the direct "value" afforded to humans. Deep knowledge of the land gained through thousands of years of relating informs the laws that guide how to live in a good way: Tr'ëhudè.

"We are of this land and therefore will change and adapt with the land. Indeed, it is the newcomers who are still learning – their identity and their relationship to this land is in its infancy. We continue to guide them in their journey to learn how to live on this land in a good way, we continue to teach them Tr'ëhudè."

– Tr'ondëk Hwëch'in, 2019[3]

Artwork: Yukon Graphic Recording

3 *Tr'ondëk Hwëch'in Governance, Law, and Cosmology,* April 2019.

Both the Plan and the need for it arise from the presence of newcomers (all people not Indigenous to this place) on this land. The Plan is written in the language of newcomers (not just English, but also the vocabularies of Western law, science, and resource management), which the Tr'ondëk Hwëch'in had to learn and master in order to work with the newcomers, even when these languages are in opposition to their own beliefs. While these are the languages and tools held in common today, the Plan will hold space for both worldviews to coexist more equally in the Region over time. The Plan uses quotes and artwork to remind readers of the different worldviews that are walking together on this land, despite its strongly Western format and language.

The Commission has found common ground among their diverse worldviews: the recognition of interconnections among all beings, the responsibilities we all share to take care of the land and be accountable to each other, and the benefits that come from healthy land–people relationships. The Plan reflects this moment in time and in the relationship between these two worldviews, which will continue to evolve. Future generations will find new ways of relating and bringing together their knowledges and learn how to better hold space for multiple ways of knowing, being, and doing.

Language is always evolving, one of the reasons that people with longstanding relationships with the Region and the Plan are important to ongoing interpretation of the Plan. The Hän language is undergoing revitalization after intense colonial disruptions, particularly residential schools. The Commission is grateful to Tr'ondëk Hwëch'in for sharing place names and vocabulary to enrich the Plan, and understands that these words may change over time, and recognizes the variance in spelling and pronunciation across communities. Visit the Yukon Native Language Centre for Hän resources, including pronunciation guidance.

1.3
Truth and Reconciliation

> "The Tr'ondëk Hwëch'in have a proud heritage and solid connection to their past. We believe a strong understanding of our history is imperative for moving our nation forward and facing the challenges presented by the future."
>
> – *Chief Ed Taylor,* Hammerstones: A History of the Tr'ondëk Hwëch'in, *2014*

Between 1874 and 1908, the Tr'ondëk Hwëch'in faced profound upheaval as gold prospectors and settlers supported by Canada's expansionist policies overran their ancestral lands **(6,7)**. This period marked the beginning of the Tr'ondëk Hwëch'in's long struggle to preserve their customs, governance, and relationship with the land.

Despite being outnumbered and displaced, the Tr'ondëk Hwëch'in continued to assert their rights, especially their right to fish for salmon, a cornerstone of their subsistence and culture **(3)**. They appealed to colonial authorities and religious figures, advocating for access to traditional fishing grounds even as these were overtaken by newcomers. Moosehide Village (Jëjik Dhä Dënezhu Kek'it), though inadequate in size and resources, became a focal point for community resilience and advocacy. Colonial laws and attitudes further marginalized Tr'ondëk Hwëch'in, restricting their participation in Canadian society while imposing regulations that ignored their traditional governance and ecological knowledge. Yet, the community

adapted and resisted. Mothers used their English literacy, often acquired through residential schools, to demand the return of their children. The Moosehide Council, established in 1921 and designed to control the community, was repurposed as a platform for asserting Indigenous rights **(7)**.

> "In retrospect, it is clear the residential school experiment was a failure. While undoubtedly some benefitted from the experience, for the most part it created a great deal of hardship for aboriginal people. It disrupted families and created difficulties for the graduates, who ended up feeling alienated from traditional ways and from white society. The children were isolated from their language and culture, and even from siblings attending the same school. Often they were punished for speaking their own language."
>
> *– Hammerstones: A History of the Tr'ondëk Hwëch'in, 2014*

The legacy of residential schools continues to impact the Tr'ondëk Hwëch'in, but healing is underway. The Tr'ondëk Hwëch'in community and government present today reflect the strength of a community that endured waves of colonization and ongoing coloniality, from early trade and missionary contact to the destructive gold rush and the imposition of Canadian governance. Through it all, the Tr'ondëk Hwëch'in have remained Dënezhu (people of this land), holding fast to their beliefs and identity while adapting and taking what is useful from the newcomers.

Reconciliation, as defined by the Truth and Reconciliation Commission, is an ongoing process of repairing relationships through awareness, atonement, and action **(8)**. The responsibility for this repair is shared by all in the Region and lies most heavily on the shoulders of newcomers – recent and generational – and their governments. Reconciliation and healing include revitalizing Indigenous law, practicing land stewardship, expanding the understanding of Tr'ëhudè, and continuing to build relationships with the land and each other. Having all Yukoners participating in enacting the Final Agreements, including the development and implementation of regional land use plans, is a collective expression of reconciliation.

> “Reconciliation is found in the respectful fulfillment of a modern treaty’s terms.”
>
> *– First Nation of Na-Cho Nyäk Dun v. Yukon*[4]

Photo: Government of Yukon / F Mueller

Tr’ondëk Hwëch’in’s role in land-use planning, as a Party and as a Plan approval body, exemplifies reconciliation in practice and reinforces the UNDRIP Act (*United Nations Declaration on the Rights of Indigenous Peoples Act*; SC 2021 c. 14), particularly Article 32 of the Declaration.

4 *First Nation of Na-Cho Nyäk Dun v. Yukon*, 2017 SCC 58, [2017] 2 S.C.R. 576.

32.1: Indigenous Peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources.

32.2: States shall consult and cooperate in good faith with the Indigenous Peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.

Articles from the *United Nations Declaration on the Rights of Indigenous Peoples Act*

"They [First Nations Peoples] acknowledged and recognized that we have to work together with other people that live here, so in the process [of the UFA] we designed mechanisms of co-management. We provided a seat at the table for non-native people to work directly with us at the community level. Renewable resource councils, the environmental assessment process, land use planning … we provided an opportunity to hear your voice and hoped that you would be able to understand us and where we're coming from, and the need to look after this land for everybody. Not just for us."

– Albert Peter, regional and community negotiator for Na-Cho Nyäk Dun for the UFA[5]

5 Recording by Shakat Media, September 26, 2018; video courtesy of Yukon University with the Government of Yukon; mappingtheway.ca, "Perspective Series 2: the Umbrella Final Agreement".

The Plan is designed to be implemented through a co-management approach between the Parties, a structure that reflects the Nation-to-Nation nature of the Tr'ondëk Hwëch'in Final Agreement. This approach is not merely administrative – it is a mechanism for restoring equity and a true balance of power that is required for reconciliation. To strengthen Tr'ondëk Hwëch'in's ability to determine and develop priorities for their Traditional Territory, the Government of Yukon must relinquish some of its authority as committed to in the signing of the THFA. This is not a loss, but a maturing of a relationship that, in the timeframe of the Tr'ondëk Hwëch'in on this land, is still in its early days. Following through on the promises of the THFA and upholding the commitments that have yet to be delivered is essential to reconciliation and to a good ongoing relationship between the Parties.

Co-management: The meaningful participation by both Parties in the management of land and public resources within the Region and the implementation of this Plan in a manner that:

- Fosters a positive, mutually respectful, and long-term relationship between the Parties;
- Upholds and honours the spirit and intent of the Final Agreements; and
- Promotes the objectives of reconciliation.

As signatories of this Plan, Tr'ondëk Hwëch'in and the Government of Yukon equally share the authority and responsibility of implementing, monitoring, reviewing, and adaptively managing the Dawson Regional Land Use Plan. Co-management applies exclusively to the Parties of the Plan and, where agreed by both Parties, affected First Nations.

1.4 Vision

"I'm proud of how we've tried to come up with something good for the whole Region, not just for any one user group."

– John Flynn, Dawson Regional Planning Commission

This Plan is a step on the way to a long and ongoing relationship between the Parties regarding land stewardship and managing human activities in the Region.

The Commission crafted the following vision statements when it was established in 2019. These vision statements guided the Commission through the creation of the Draft Plan in 2021 **(9)**, public engagement, the Recommended Plan in 2022 **(10)**, and the creation of this Final Recommended Plan in 2026. The concept of Tr'ëhudè, how to live in a good way, has been central to the Commission's three visions. The Commission wrote this Plan on behalf of all residents of the Region. It reflects the diverse backgrounds and interests of the Region's residents and of the Parties. These vision statements highlight what is important to the Commission and should guide interactions with the land and the Plan.

For the Region:

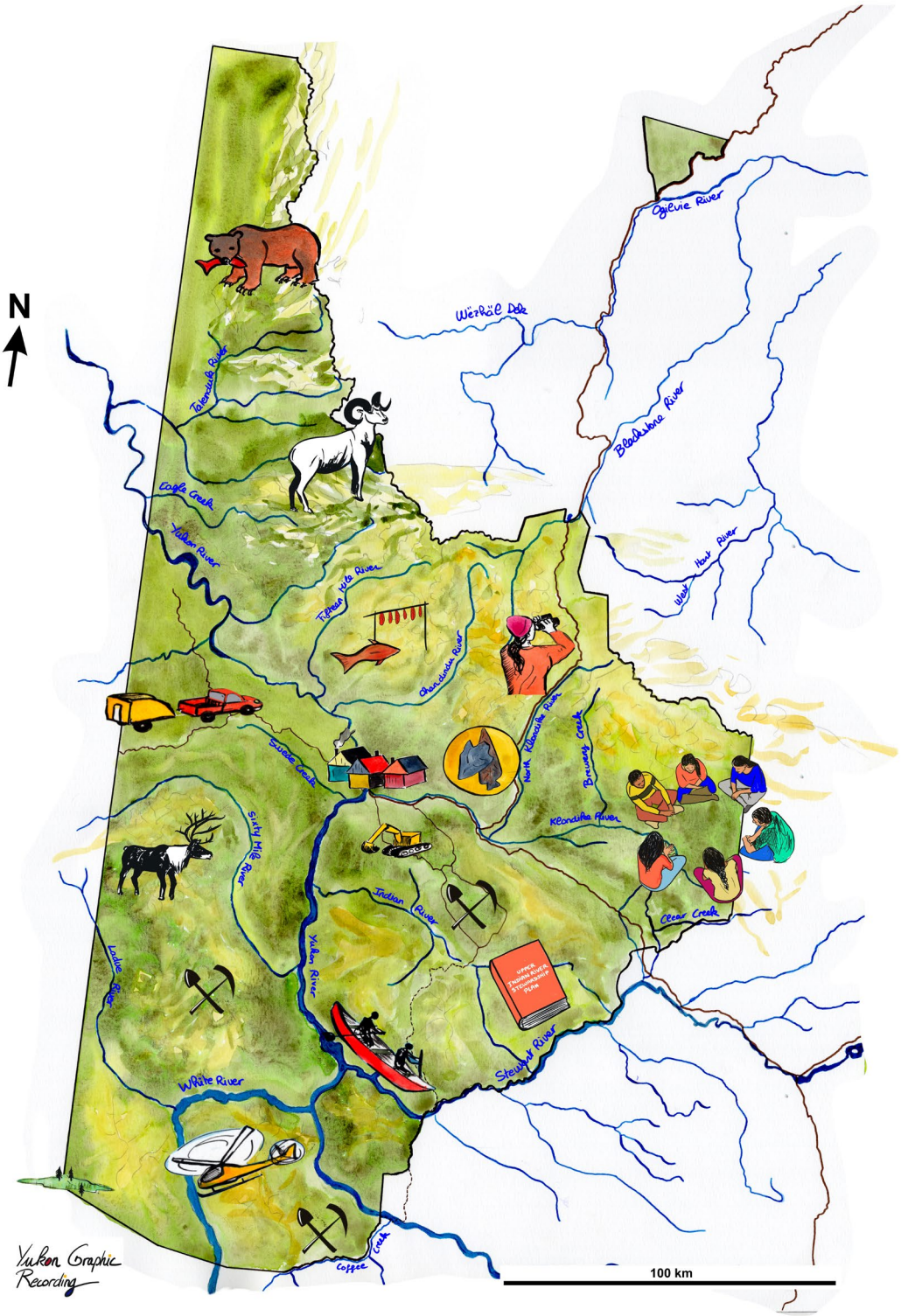
The unique landscapes enable our community to build a diverse and sustainable economy. This economy maintains a rich cultural legacy and a healthy environment along with its associated biodiversity.

For the Process:

The principles of sustainable development, respect for heritage and culture, Traditional Knowledge, and conservation of fish and wildlife habitats guide the shared and respectful use of natural resources. Ongoing community stewardship, based on consensus-building, will achieve significant and lasting social, economic, and ecological benefits for all Yukoners.

For the Plan:

The Plan reflects community values and guides the coordinated and integrated protection, management and use of land, water, and resources (THFA S.11.1.6).



Artwork: Yukon Graphic Recording

1.5 Scope

This Plan is the third in a network of regional land use plans to be produced through Chapter 11 of the First Nation Final Agreements.

The Plan provides guidance for decision-making around land and resources and will help to achieve the kind of future people in the Region want to see. It provides direction for all Yukon public lands and all First Nations Settlement Lands within the Region.

1.5.1 GEOGRAPHIC

The Dawson Region is 39,854 km^2, approximately 10% of the Yukon. The Region falls within the Traditional Territory of three self-governing First Nations **(Figure 1a)**: Tr'ondëk Hwëch'in, Vuntut Gwitchin First Nation, and First Nation of Na-Cho Nyäk Dun; only Tr'ondëk Hwëch'in has Settlement Land within the Region. White River First Nation has asserted Aboriginal rights in the southwest of the Region[6]. The Region is adjacent to two regions with approved Chapter 11 plans **(Figure 1b)**: the North Yukon (2009) **(11)** and the Peel Watershed (2019) **(12)**. Existing or proposed protected areas immediately adjacent to the planning Region include Ni'iinlii Njik (Fishing Branch) Territorial Park established under the *Yukon Parks and Land Certainty Act* (RSY 2002, c.165) as set out in the Vuntut Gwitchin Final Agreement, Kit Range / North Cache Creek in the Peel Watershed Planning Region, and Yukon Charley Rivers National Preserve in the Upper Yukon Area Plan in Alaska.

6 White River First Nation are not a self-governing First Nation under the FNFA. The regional land use planning process has been conducted in accordance with the THFA. Therefore, "Traditional Territories" is defined 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 FNFA and THFA, and as agreed to between First Nations through contiguous boundary agreements.

Figure 1a: The Traditional Territories of Tr'ondëk Hwëch'in First Nation, First Nation of Na-Cho Nyäk Dun, and Vuntut Gwitchin First Nation, as well as the asserted territory of White River First Nation.

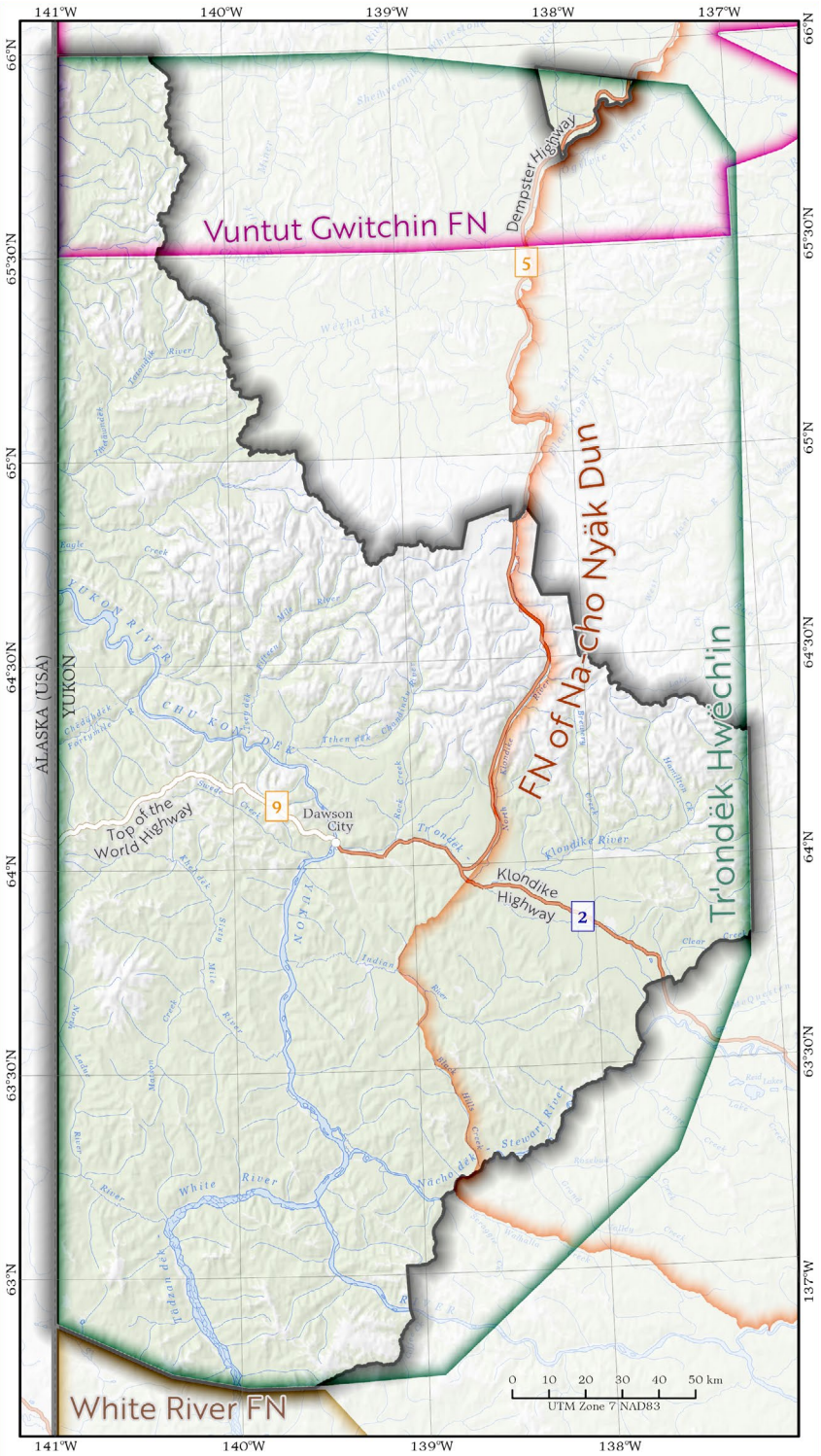


Figure 1b: Map of the three regional plans in the Yukon, current as of March 2026. The North Yukon Regional Land Use Plan was completed in 2009 and the Peel Watershed Regional Land Use Plan was completed in 2019.

In accordance with Section 11.2.2 of the THFA and the Terms of Reference for the Dawson Planning Commission, this Plan does not apply to **(Figure 2)**:

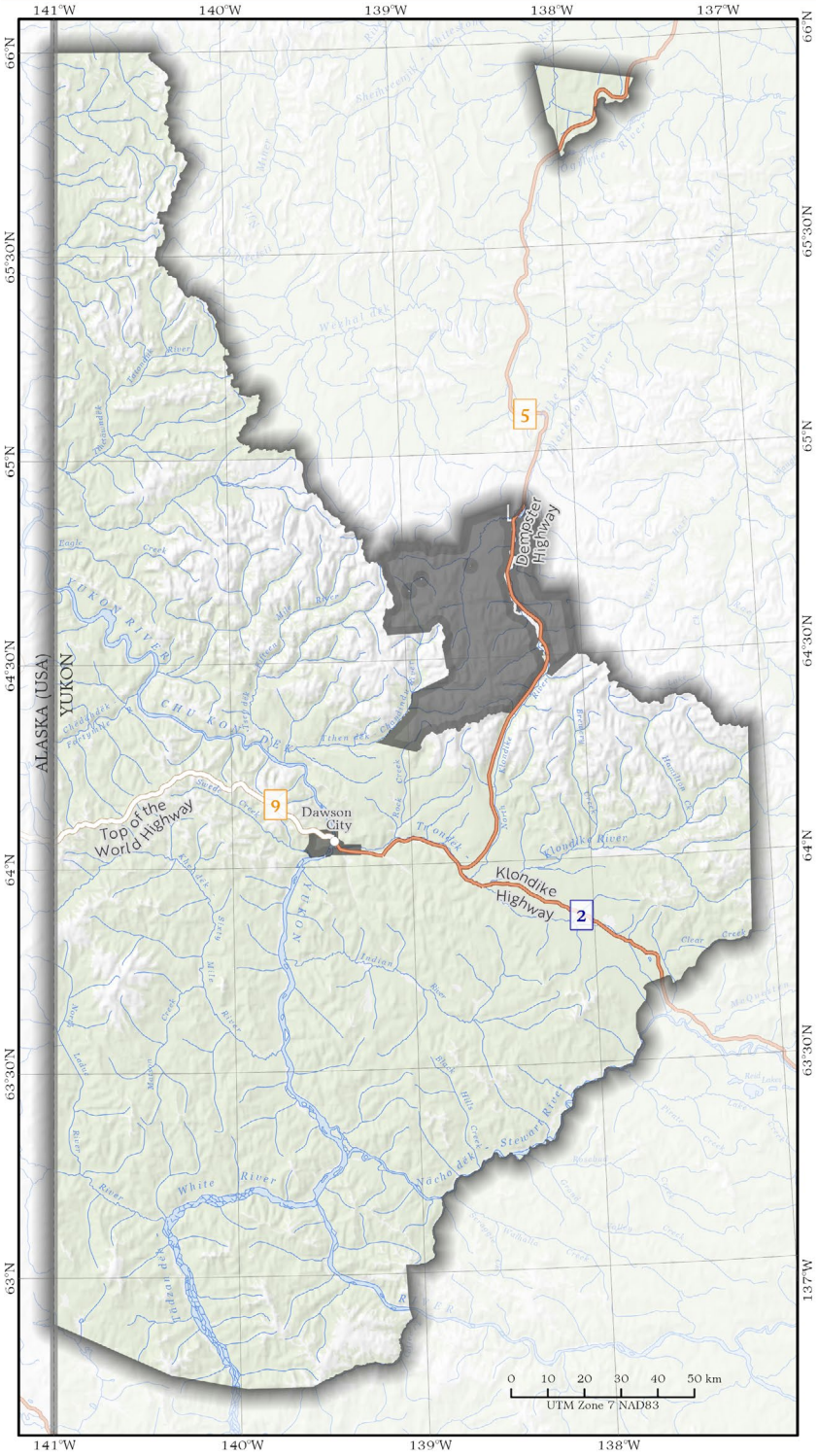
- Land within the City of Dawson and areas subject to subdivision planning or local area planning outside of a community boundary (for example, West Dawson and Sunnydale), and Tombstone Territorial Park which is planned and managed under the Tombstone Territorial Park Management Plan. These areas are combined for mapping purposes into LMU 22: Ch'ènyàng – Ddhäl Ch'èl (City of Dawson – Tombstone) and designated as "Excluded Area".
- The Klondike National Historic Sites.

1.5.2 TEMPORAL

> "Protecting the land ... provides our future generations with safe and clean lands to utilize and practise culture and traditions, such as hunting, fishing, trapping. Our ancestors always took care of our animals and the land and water. It is our job to continue to respect it by protecting it."
>
> *– Tr'ondëk Hwëch'in, Ninänkäk hǫzǫ wëk'ä̀ tr'ë̀ nòhcha (We Take Good Care of Our Land), 2020*

Photo: Government of Yukon

Figure 2: Map of the Region, highlighting where the planning process does not apply.



This Plan is an outcome of the THFA, which itself is the result of decades of negotiations by Tr'ondëk Hwëch'in to settle their land claims. This Plan becomes effective the day the Parties sign the Approved Plan, and the Commission intends it to remain in place indefinitely. It is a living document that adapts to changing environmental and social conditions. This Plan can change through numerous adaptive approaches (Section 2.3.1), including Plan amendments and Plan Review (Section 7.6.3).

This Plan is not only a product of contemporary governance, but also a continuation of a deep and enduring relationship with the land that spans generations. For Tr'ondëk Hwëch'in, Traditional Knowledge, oral histories, and cultural practices passed down through Elders and community leaders have always guided stewardship. These ways of knowing have long shaped how people care for and understand the land. For settlers, guidance has come through changing values and growing recognition of shared responsibilities and reconciliation. For the present-day community, this Plan reflects a shared commitment to honour both Indigenous and non-Indigenous perspectives and to care for the land together. It is a contemporary expression of a long-standing ethic of care, one that reaches back to ancestral teachings and forward to future generations who will continue to live in relationship with the land. This ethic of care ensures that the land remains a source of identity, sustenance, and connection for all who call it home.

1.5.3 LEGAL

The Government of Yukon, the Tr'ondëk Hwëch'in, and the Government of Canada are the primary authorities responsible for managing the land, resources, and water in the Region. Tr'ondëk Hwëch'in has 135 parcels of Settlement Land within the Region (excluding those within community boundaries) where they hold decision-making and legal powers. The Government of Yukon manages non-Settlement Lands (with both surface and sub-surface rights) as per the THFA. The Government of Canada is responsible for land management and Plan implementation due to its jurisdiction over Parks Canada, the Department of Fisheries and Oceans, and Transport Canada. However, only Tr'ondëk Hwëch'in and the Government of Yukon are Parties to the Plan.

As Parties to the Plan, the Government of Yukon and Tr'ondëk Hwëch'in are responsible for implementing this Plan through a co-management approach (Section 1.3). Tr'ondëk Hwëch'in Settlement Land is the exception, where Tr'ondëk Hwëch'in has sole decision-making authority including with respect to Plan

implementation. In the instance that the Parties cannot reach agreement on how to proceed with implementation, the Dispute Resolution process (THFA 26.3.1.3) may be followed.

The Plan does not replace existing legislation, nor does it affect First Nation constitutionally protected rights. In the case of conflict between the Plan and the THFA, the THFA shall prevail. In the case of conflict between the Plan and legislation from the Government of Yukon, the Tr'ondëk Hwëch'in, or the Government of Canada, legislation shall prevail. The Plan does not require either Party to enact or amend legislation to implement the Plan. However, the Plan must guide the Parties future decision-making in the Region (THFA 11.7.1, 11.7.2, and 11.8.1).

Other management plans overlap the Region, including The Forty Mile, Fort Cudahy, and Fort Constantine Historic Site Management Plan **(13)**, the Dawson Forest Resources Management Plan **(14)**, the Tr'ondëk-Klondike UNESCO World Heritage Site **(15)**, and the Tombstone Park Management Plan **(16)**. Best efforts are made in the Plan to provide complementary direction to the existing plans. However, if any disagreement arises between the overlapping plans, the Parties should resolve that disagreement in a way consistent with the intent of this Plan.

Photo: Government of Yukon

1.6 Context

1.6.1 ENVIRONMENT

The Region is bisected into the Taiga Cordillera Ecozone in the north and the Boreal Cordillera Ecozone in the south. The Taiga Cordillera covers most of northern Yukon and the southwest corner of the Northwest Territories, while the Boreal Cordillera is part of the boreal forest that stretches from Labrador to the Yukon **(17)**. Most of the Region is forested, with areas of alpine and subalpine terrain, taiga shrub, dry meadows, and wetlands **(18)**. Wetlands cover about 10% of the Region **(18,19)**.

Most of the Region was part of Beringia, an unglaciated landscape spanning northwestern North America to eastern Siberia **(17,18)**. This unique glacial history has created some of the highest levels of endemism in North America, making it a hotspot of biodiversity **(17,18)**. Remnant steppe ecosystems still exist on steep slopes along riverbanks and low-elevation flat areas (See also Section 5.3.6) **(17)**.

The most distinct geologic feature in the Region is the Tintina Trench, a nearly 1,000-km fault line running northwest–southeast along the margin of ancient North America **(17)**. It is also a major migration corridor for migratory birds such as sandhill cranes, tundra swans, and peregrine falcons **(17)**.

North of the fault, rocks and mountains formed from ancient coastal sediments such as shale, slate, sandstone, and chert **(18,20)**. South of the fault, pre-ice rivers concentrated gold eroding from quartz veins into placer sand and gravel deposits **(18)**.

Most of the Region lies within the Yukon River watershed, with a small area in the east draining into the Peel and Southwestern Beaufort Sea watersheds **(18,21)**. The Yukon River is the largest river in the Region, flowing from southern Yukon to Alaska and into the Bering Sea **(18,21)**. Key tributaries include the Klondike, White, and Stewart rivers. Ice jams during spring breakup have historically driven flooding on the Klondike and Yukon rivers **(22,23)**. Snowmelt and rainfall can also cause flooding, but freshet-related floods have typically been less severe **(23)**.

Photo: Government of Yukon

Between 1991 and 2020, the annual mean temperature for the Region was -3.6 °C, and precipitation averaged 318.5 mm, falling mainly in the summer **(24)**. January is the coldest month and July is the warmest, with mean temperatures of –25.7 °C and 15.9 °C, respectively.

Increasing temperatures and changing precipitation patterns have led to more permafrost thaw and more frequent and severe wildfires **(25 to 27)**. Continuous and discontinuous permafrost underlie the Region and are more widespread in the North, on north-facing slopes and in valley bottoms **(17,18,28)**.

Increased fire frequency and severity can shift spruce-dominated forests toward deciduous forests. This shift may increase carbon storage but can negatively affect animals that rely on spruce forests **(26,29)**. The Klondike Plateau has among the highest levels of fire activity in the Yukon, with an average fire cycle of approximately 100 years **(18)**.

The Region is home to species of high biocultural importance, including salmon, moose, caribou, wolves, snowshoe hares, and bears **(31)**. Many of these species have an outsized influence on their ecosystems, and people often refer to them as keystone species. The Region also supports species with limited distributions, such as collared pika, Ogilvie Mountains collared lemmings, Yukon podistera, and Bering cisco **(32)**.

1.6.2 PEOPLE AND COMMUNITIES

> "Dawson is an eclectic, inclusive, and welcoming community … a vibrant place where diversity thrives, and residents are 'in it together'."
>
> *– City of Dawson, Draft Official Community Plan, 2025*

Since time immemorial, the Tr'ondëk Hwëch'in have lived and travelled throughout the Region and beyond. They relied heavily on the river's salmon runs and continue to use fish camps along its shores. Seasonal movements supported hunting, trapping, and harvesting, and extensive trade networks facilitated resource exchange with other groups. Many of these traditional practices continue today. The Tr'ondëk Hwëch'in maintain strong cultural ties to the Region, with language, song, celebration, and land-based cultural and subsistence activities continuing to grow and recover. Important settlement areas include Tr'ochëk and Moosehide Village (Jëjik dha dezhu kek'it).

The first direct European influence in the Region occurred in 1874, when Jack McQuesten established a trading post at Fort Reliance on the Yukon River **(13)**. Twelve years later, settlers founded the town of Forty Mile to serve miners and traders who had moved into the area **(13)**. The discovery of gold in the Klondike Valley in 1896 led to the creation of Dawson City and triggered the Klondike Gold Rush **(33)**. By the summer of 1898, observers estimated that the population in Dawson City and the Klondike Valley was between 20,000 and 30,000, making it the largest population centre in Canada west of Winnipeg **(34)**. However, by 1901, the population had declined to 9,142 **(34)**.

Today, Dawson City remains the only major permanent community in the Region. Year-round residents also live in rural subdivisions around Dawson City, including Sunnydale, West Dawson, Bear Creek, Rock Creek, and Henderson Corner. There are also residential properties along major highway corridors and along the Yukon River. As of March 2025, Dawson City and its surrounding area had a population of 2,412 (5.1% of Yukon's population) **(21)**. Projections suggest the community will grow by about 2% annually **(35)**.

Compared to Yukon averages, Dawson's population is slightly older and skews towards men **(35)**. Roughly one-third of the population identifies as Indigenous **(36)**, including Tr'ondëk Hwëch'in Citizens. It also includes multi-generational settler families, recent immigrants, and residents from across Canada. Seasonal employment in tourism and resource extraction attracts a younger working demographic, particularly during the summer months. Dawson City has a campus of Yukon University.

1.6.3 ECONOMY

The Region boasts a diverse economy that includes land-based activities of mining, tourism, agriculture, and forestry alongside a traditional economy characterized by stewardship and subsistence harvesting. Dawson City is also known for its arts and culture scene, which includes educational opportunities, events that are significant tourist draws, and artist residencies.

While all the Region's economic activities can, in some way, be related to the land, the Plan focuses on those that rely most directly on, and/or impact, the land through their operations. The main employment sectors in the Region are: public administration, accommodation and food services, health care and social assistance, and construction **(37)**. The Tr'ondëk Hwëch'in Government is the largest single employer in Dawson City **(35)**.

In 2021, mining, quarrying, and oil and gas extraction directly employed approximately 110 Dawson residents **(37)**. Other economic activities, such as fuel delivery, equipment rentals, hospitality services, and transportation services, also support this sector.

Non-Renewable Resources

For well over a century, economic development in the Region has been closely linked to its mineral wealth. Commodities of potential and established economic interest in the Region include gold, copper, and silver **(38)**. The Region hosts verified deposits of critical minerals such as copper, zinc, nickel, and cobalt, underscoring its broader resource potential **(42)**.

In 2024, exploration expenditures in the Region reached a record high of $210.4 million, reflecting significant growth since 2016 (the last survey) **(39)**. That same year, the Dawson Mining District led placer mining activity, producing 92% of Yukon's gold. The Upper Indian River was particularly productive, contributing nearly half of the territory's total gold output **(40)**.

Placer mining continues to play a vital role in the local economy; in 2022, 82% of placer mining revenue flowed directly into Dawson City through wages and local spending **(41)**.

Renewable Resources

Forestry

The Region has an active forestry economy that began in the late nineteenth century **(14)**. The Dawson Forest Resources Management Plan guides forest management in the Region. The Government of Yukon, Tr'ondëk Hwëch'in, and the Dawson District Renewable Resources Council developed this Plan in partnership **(14)**.

Timber harvest generally requires access via road, trail, or river. Other land users often create this access, which can provide opportunities for the efficient harvest of mature timber **(14)**. Most forestry roads in the Region are seasonal, temporary roads, with controlled access. Land managers decommission these roads once harvest and reforestation activities are complete, in accordance with Yukon's *Forest Resources Act* (SY 2008, c.15).

Agriculture

The Region's river valleys contain good agricultural soils and a favourable climate for growing compared to many places in the Yukon **(43)**. As of 2025, there are around twenty full- or part-time commercial agricultural producers and processors in the Region, supplying vegetables, fruit (including berries), meat, eggs, bedding and nursery plants, birch syrup, hay, dairy products, and value-added products such as preserves, salves, and cured meats **(44)**. There are also many backyard farmers and gardeners producing food outside of the monetary economy **(44)**.

There is potential and demand to expand food production and value-added operations within the Region **(44)**. Warmer temperatures due to climate change may increase the viability of some crops, providing different agricultural opportunities in the future **(45)**. However, other impacts, such as increasing climate-related extreme events or significantly drier or wetter seasons may present significant challenges to local agriculture **(45)**.

In recent years, Tr'ondëk Hwëch'in has continued the development of the Teaching and Working Farm (Nän käk nishi tr'ënòshe gha hëtr'ohǫh'ą – On the land we learn to grow our food). The farm is an important education tool, employer, and revenue generator for Tr'ondëk Hwëch'in and is a valued program within the community. The farm supplies local vegetables, eggs, poultry, and pork for Tr'ondëk Hwëch'in and market sale.

Traditional Economy

Traditional economy provides a way of circulating resources within the local economy that doesn't rely solely on financial resources and benefits the whole community. The traditional economy relies on the harvest of natural resources, providing meat, fish, berries, fuelwood, and income from fur and raw materials for cultural products.

The traditional economy has direct and indirect values that link to health and well-being, spirituality, community, culture, and stewardship. The importance of traditional land-based activities is not fully reflected in their monetary contribution to the regional economy. Country food is crucially important for nutritional well-being. The activities of harvesting materials are a source of cultural value and social well-being, which people cannot easily quantify in the Western worldview.

There are many traditional travel and trading routes throughout the Region that continue to be important to the traditional economy. The Region also includes 42 trapping concessions for the harvest of furbearers, such as wolf, lynx, beaver, and marten.

Tourism

Tourism is a significant contributor to the local and territorial economies. Tourism provides both seasonal and year-round employment opportunities for residents, as well as temporary jobs for transient summer workers. Visitation rates to the Region, tourist spending, and the number of tourism employees continues to grow **(46)**.

While tourism marketing primarily presents the Yukon as a wilderness destination, the Region uniquely represents other tourism values. These include the rich cultural history of the Tr'ondëk Hwëch'in, the place of the Klondike Gold Rush, and contemporary placer mining. Dawson City offers a range of well-established services, attractions, accommodations, and businesses **(47)**. The Region also includes four big game outfitting concessions that provide employment and income.

Infrastructure

The Region contains an existing highway network used to transport goods and services to the Region (North Klondike Highway) and provide access to northern Yukon, the Northwest Territories, and Alaska (Dempster and Top of the World Highways). Climate change-related permafrost thaw affects all highways in the Region **(28)**. The Region's network of rivers is also an important historic and modern transportation link.

Yukon's electricity grid supplies Dawson City and properties along the North Klondike Highway. Hydroelectric stations power this grid and meet most of the electrical demand in these areas **(48)**. Diesel generation in Dawson City provides electricity when the Yukon-wide grid is cut off or unable to meet demand. As of 2025, this diesel generation has a capacity of up to 7 MW, and regulators have approved a further 6.5 MW for development **(48)**. A 200-kW solar array operated by the Klondike Development Organization contributes renewable energy to Yukon's grid **(49)**. Forecasting suggests electricity demand could substantially increase in the Region by 2030 **(48,50)**.

Residential properties and commercial operations outside the North Klondike Highway transmission lines rely on generators and, in some cases, solar power. Access to on-grid electricity parallels access to telecommunications. Residents and businesses that are off-grid rely on satellite internet and, where coverage exists, cellular networks.

Photo: Government of Yukon

1.6.4 CLIMATE CHANGE

> "It's with us right now, climate change. It's there. There's things changing now I never expected to change in my lifetime."
>
> *– Angie Joseph-Rear, Dawson Regional Planning Commission*

Climate change refers to long-term shifts in temperature and weather patterns, marked by fluctuating averages and more frequent and intense extreme events **(51)**. Human practices that emit greenhouse gases, such as burning fossil fuels, deforestation, and disturbing carbon-rich land, cause these changes **(51,52).** While the Region contributes little to global emissions, per capita emissions are high due to heating needs, long travel distances, and the disruption of peatlands **(53)**.

Like the rest of the territory, climate change has already influenced the Region, increasing annual average temperatures by 2°C over the last 50 years **(54)**. It has also increased the number of snow-free days each year **(55).** While climates and ecosystems are always changing, these changes are happening much faster than usual, making it hard for plants, animals, and people to adapt.

One visible example of climate change is ice breakup on the Yukon River. Ice now breaks up more than a week earlier than in 1896 **(56)**. This may increase the likelihood of ice jams and flooding risk **(25,28,57)**.

Going forward, average annual temperatures could rise by an additional 2 to 4°C by 2050 and up to 6°C by 2100 . Winter warming will be most pronounced, especially in northern parts of the Region (Appendix 4). Climate models project that annual precipitation will increase by 10 to 33% by 2050 and up to 44% by 2100 (Appendix 4).

However, as with most expressions of climate change, this is likely to vary significantly from year to year. This variability will likely make it harder to predict how much snow there will be, or how warm or cold it will be at any given time of year. This uncertainty can influence people's ability to plan and engage in land-based activities. Across the Region, climate change will likely be visible through

increased flood risk **(28)**, extreme temperatures **(58, 59)**, increased frequency and severity of wildfires **(29,30)**, and permafrost thaw and slumping **(28)**. Yukon First Nations and the Government of Yukon have declared a climate crisis in response to ongoing climate change **(53)**.

While all residents in the Region are affected by climate change, Tr'ondëk Hwëch'in Citizens are especially at risk of negative impacts because their relationship to the land is foundational to their knowledge systems, spirituality, cultural practices, and governance. As climate change alters the land and changes access to it, it will require adaptability and resilience, which the Tr'ondëk Hwëch'in have displayed throughout their long history on this land. Land planning and management need to consider potential impacts on Tr'ondëk Hwëch'in's well-being and rights.

> "Things have always changed, but now it's changing too fast."
>
> *– Debbie Nagano, Dawson Regional Planning Commission*

Photo: Government of Yukon

The Plan promotes climate resilience through value-based management directions, adaptive implementation, encouraging stewardship by all land users, and protecting landscape integrity. Landscape integrity contributes to climate resilience for fish and wildlife populations by providing time and space for them to adapt as conditions change. It also supports healthy land–people relationships and cultural practices, essential components of community well-being. In addition to management and stewardship directions, the Plan protects landscape integrity through Special Management Area designations (Section 2.3.4) and by supporting Indigenous Protected and Conserved Areas **(58)**.

Given the unpredictability of future impacts, the precautionary principle (Section 2.2.3) should remain central to climate response. The Plan encourages the Parties to engage in proactive and forward-looking governance to build climate resilience alongside the Region's residents. It's not possible to anticipate all the potential impacts of climate change, and different impacts will require different responses. The Parties should therefore decide on guidelines for decision-making in response to different impacts. They could do this by applying an existing tool, such as the RAD (Resist, Accept, Direct) framework **(42)**.

Originally developed for ecosystem management, RAD is well-suited to the complex and evolving nature of climate change and decision-makers could apply it broadly across the Region. It helps decision-makers determine when to maintain current conditions, when to accept change, and when to guide change toward beneficial outcomes. This tool allows for recognizing new opportunities (like new crops or longer ice-free access) as well as responding to negative impacts. RAD or a similar adaptive tool could leverage the existing resilience and adaptability of the Region's community to protect and preserve the Region's environment, community, culture, heritage, and economy for future generations.

1.6.5 REGULATORY REGIME

There are many agencies in the Region that steward the land, each with different levels and sources of authority.

- Tr'ondëk Hwëch'in's obligations have the deepest roots, based in the ancestral stewardship relationship between the Tr'ondëk Hwëch'in and the land. The Tr'ondëk Hwëch'in Final Agreement also recognizes these responsibilities, as well as rights to land relationship (access, use, and management). It articulates co-management responsibilities within Tr'ondëk Hwëch'in Traditional Territory and exclusive jurisdiction over Settlement Land and Tr'ondëk Hwëch'in Citizens. Tr'ondëk Hwëch'in has multiple departments that interact with land, including Natural Resources, Heritage, and Implementation.

- The Government of Yukon also has responsibilities under the THFA to co-manage lands and resources within the Tr'ondëk Hwëch'in Traditional Territory. Canada has devolved additional obligations to the Government of Yukon to steward lands and resources throughout the Yukon for the good of Yukoners and Canadians, as a result of the Yukon Northern Affairs Program Devolution Transfer Agreement **(60)** and the *Yukon Act* (S.C. 2002, c.7). Relevant departments include Energy, Mines and Resources and Environment.

- The Yukon Environmental and Socio-economic Assessment Board (YESAB) carries out project-by-project assessments within the territory, relying on the expertise of governments, Umbrella Final Agreement Boards and Committees, and knowledge holders, including individuals, civil society organizations (NGOs), and industry groups. YESAB provides recommendations on individual projects to decision bodies such as governments and regulators. The Board operates under federal legislation: the *Yukon Environmental and Socio-economic Assessment Act* (YESAA; S.C. 2003, c.7).

- The Government of Canada has devolved many of its lands and resources responsibilities to the Government of Yukon, but still has roles where federal legislation applies, such as matters relating to fish and fish habitat (Fisheries and Oceans Canada), national parks and historic sites (Parks Canada), and species-at-risk (Environment and Climate Change Canada). Outside of YESAB assessments, Canada's departments also participate in a "whole-of-government approach to Aboriginal consultation in advance of rendering a regulatory action or decision" **(23)**.

- The *Waters Act* (SY 2002, c.19) establishes the Yukon Water Board as the sole regulator of the use and deposit of waste into water in the Yukon. It has statutory obligations under the UFA and YESAA.
- The Dawson District Renewable Resources Council (DDRRC) is established under the THFA (16.6) to inform decisions specifically around renewable resources. Local knowledge holders appointed by the Government of Yukon and Tr'ondëk Hwëch'in form this council.
- The Dawson Regional Planning Commission is responsible under the THFA (11.4.2.1) for creating and stewarding this regional land use plan.

Most of these bodies currently interface with land and resource management through project-by-project YESAB assessments or industry-specific regulation and permitting. Regional land use planning provides a broader scope in both time and space. This broader scope supports more holistic decision-making and will require ongoing participation of all actors.

Photo: Government of Yukon / J Kennedy

2

Goals, Guiding Principles, and Tools

Artwork: Darcy Tara McDiarmid

2.1 Goals

Plan goals express the desired future conditions in the Region and should direct implementation and help monitor the success of the Plan.

COMMUNITY, CULTURE, AND HERITAGE

1. Land stewardship is practised by all residents of and visitors to the Region, including governments.
2. Land stewardship is promoted and supported by governments.
3. Land-based activities that strengthen connections to the land are readily available, accessible, and well-attended.
4. Tr'ondëk Hwëch'in culture and the Hän language are thriving and respected throughout the Region.
5. Traditional harvesting is actively practised and respected.
6. The community is diverse and resilient, relying on the strengths of multiple worldviews and ways of being that coexist with mutual respect.
7. The community has high capacity and resilience in people and infrastructure.
8. The community has capacity and knowledge to respond and adapt to environmental, social, and climate changes.
9. Land-related decision-making prioritizes community health and well-being.
10. Tr'ondëk Hwëch'in's heritage, as self-determined, is respected throughout the Region.

ENVIRONMENT

1. Integrity and connectivity of the landscape's diverse ecosystems are maintained, restored, and enhanced.
2. Healthy ecosystems support thriving biodiversity, including abundant fish and wildlife populations that, in turn, support sustainable harvest.
3. The integrity of values on the land is conserved via ongoing reclamation.
4. Ecosystems are managed holistically, with consideration of cumulative effects.
5. Ecosystems are stewarded to ensure their resilience to ongoing climate change.
6. Healthy ecosystems and healthy land-people relationships are interdependent.
7. Ecological integrity is valued as a part of a thriving sustainable local economy.

SUSTAINABLE ECONOMY

1. Residents of the Region have access to diverse economic opportunities that do not compromise current or future community well-being or ecological integrity.
2. Local economic activity supports a comfortable standard of living for all residents.
3. Economic activities that take place in the Region benefit all the Region's residents.
4. Land use conflicts are minimal, and there is land-use certainty across the Region.
5. To minimize impacts to the land, economic activities and development make efficient use of existing access and infrastructure.
6. The Region's economy includes a strong traditional economy, centred on cultural value and social well-being.
7. The Region's economy is largely centred on sustainable activities, provides for current and future generations, and is resilient, versatile, and responsible.
8. The Region's economy must be strong, robust, and profitable to the Region's residents.
9. The Region's economy supports multigenerational operations.

2.2 Guiding Principles

Four principles guided the development of the Plan and are intended to guide how the Plan is implemented (Section 7): sustainable development, stewardship, the precautionary principle, and adaptive implementation.

The Vision Statements (Section 1.1.3) come to life through the realization of these principles. Importantly, these principles indicate how everyone should interact with the land, under the Plan's guidance. These principles should also help assessors and regulators as they interpret and implement the Plan.

2.2.1 SUSTAINABLE DEVELOPMENT

"The most important thing when you take from Mother Earth, you put something back."

– Peggy Kormendy, Tr'ondëk Hwëch'in Citizen[7]

Sustainable development is beneficial socio-economic change that does not undermine the ecological and social systems upon which communities and societies are dependent (THFA S.11.4.5.9). The promotion of sustainable development is a requirement of a land use plan (ibid).

7 Tr'ondëk Hwëch'in Submission to the Dawson Regional Planning Commission, April 30, 2024.

There are two kinds of sustainable development: activities that do not degrade the land or undermine communities and can be sustained indefinitely, and activities that deplete resources and/or degrade land, but from which the land and communities can recover. The Plan promotes sustainable development in two ways: by emphasizing a sustainable local economy, and by providing management directions to protect ***values*** at multiple scales.

The sustainable local economy envisioned for the Region prioritizes sustainable activities over those that have a permanent negative impact on the land or people, irrespective of economic potential. It encourages economic activities that prioritize long-term sustainability over short-term gain, recognizing that the health of ecosystems is foundational to the health of communities and economies. It allows flexibility and ***resilience***, enabling future economic choice to be rooted in the values and capacities of the land and people.

Management directions in the Plan guide encouraged activities so as to minimize negative impacts while providing positive ones. Rather than focusing on specific industries or resource uses, these are based on values to support a broad, multigenerational vision for land and community well-being.

Basing directions on values also sets the stage for cumulative effects management, which is critical to ensuring the long-term health of communities and the land as sustainable development occurs. Existing and future cumulative effects ***indicators*** and ***thresholds*** should be designed to protect the integrity of ecological and social systems that sustain life and culture. This will ensure development remains genuinely sustainable by protecting elements such as soil, water, vegetation, wildlife habitat, and individual, family, and community well-being from irreversible damage.

As more values are included in the cumulative effects framework over time, the Plan will become an increasingly effective tool. It will prevent cumulative impacts from crossing ecological and socio-cultural tipping points – points beyond which systems cannot recover within a reasonable timeframe. The development footprint thresholds are a first step towards this goal. They clearly define allowable disturbance in each LMU at any one time, making reclamation not just a best practice but a requirement for ongoing sustainability.

These management tools provide certainty to proponents and residents by clearly defining where and how activities can occur across the Region over time. Limiting the amount of development at any one time, along with encouraging a diverse sustainable local economy, can dampen the boom-and-bust cycles of extractive industries. Taken together, the Plan's directions support long-term planning and investment and reduce conflict.

2.2.2 STEWARDSHIP

> “It is our law to care for the land as it cares for us. [...] 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.”
>
> *– Tr’ondëk Hwëch’in, We are Dënezhu, 2019*

This Plan encourages everyone to act as stewards of the Region to ensure the land, water, and animals are healthy for future generations. When the land is healthy, the people are healthy, and the act of stewarding also creates, restores, and maintains connections between people and the land.

Collective responsibility and actions are needed for the continued health and vitality of the Region. The implementation of this Plan should be guided by a shared responsibility and respect for the land, to reflect the values of the community and the Tr’ondëk Hwëch’in. Efforts should continue to foster and promote stewardship now and for future generations.

The Plan includes two approaches to stewardship:

Ancestral Stewardship: For Tr'ondëk Hwëch'in, stewardship is an ancestral responsibility to look after the land, waters, animals, and fish that are central to their identity. Tr'ondëk Hwëch'in signed the THFA understanding they would continue living in ways that honour their deep relationships with the land and animals.

These connections are enduring and more powerful than any written agreement. This ongoing presence and care for the land reflects a strong sense of identity rooted in ancestral territory. Stewardship, in this context, means more than reducing harm. It means creating positive impacts by reconnecting people with the land.

Community Stewardship: For non-First Nations stewards, stewardship focuses on responsible management of natural resources to ensure their availability for future generations. The care and time invested in being aware of the changes and activities on the land, or in reconnecting with it through hiking or harvesting, are ways of being a steward.

Stewardship often focuses on minimizing harm, restoring damaged ecosystems, and balancing environmental protection with economic development. While this approach may emphasize regulation and planning, it also reflects a growing recognition that human well-being is deeply connected to the health of the land, water, and wildlife. Stewardship, in this sense, is about caring for the environment through thoughtful action and long-term responsibility.

> "I am governed by laws for what I do out there. I don't just take what I am allotted, but I look at the land and think, 'What can the land tolerate?' I know lots of people who are out there working on the land, going above and beyond what they are required to do, and that is what we want to instill in everyone. It is management, but stewardship takes it to a different level."
>
> *– Dan Reynolds, Dawson Regional Planning Commission*

This Plan expresses stewardship through:

- Stewardship Directions for each value in the Plan to direct the interactions of all people with the land (Section 5).
- Governance Recommendations, Implementation Actions, and Knowledge Gaps for many values that connect to on-the-land and education opportunities.
- The value Land–People Relationship (Section 5.2.1).

2.2.3 PRECAUTIONARY PRINCIPLE

Regional planning establishes land use designations and management directions, while acknowledging uncertainty that is inherent in real-world systems. Factors include an incomplete understanding of ecosystem dynamics in the North, social dynamics, and the inability to predict the extent and character of the ongoing impacts of climate change.

The ***precautionary principle*** (when human or environmental health is at risk, proactive steps must be taken to prevent harm, even in the absence of full scientific certainty) reflects humility toward nature's complexity, respect for ecological integrity, and responsibility to future generations. It also shifts the burden of proof to those proposing potentially harmful actions. The Plan takes a conservative approach to land management through protective land use designations and strict management directions to apply the precautionary principle.

The Plan employs the precautionary principle in four main ways:

1. Application of the mitigation hierarchy:

The precautionary principle requires the careful use of the mitigation hierarchy, a tool that guides decision-making to protect Plan values by asking a series of questions about how or if a potential project, action, or activity is to be carried out. The least damaging option is prioritized: avoid, minimize, restore, and offset.

Impacts should be avoided wherever possible, especially in ecologically and culturally sensitive areas. Where impacts cannot be avoided, they must be minimized. Restoration must be centred in the Plan's values (Section 3.11), and offsetting must be guided by evidence and long-term monitoring to ensure effectiveness. By prioritizing avoidance and minimization, the mitigation hierarchy supports long-term ecosystem health and reduces the risk of irreversible impacts.

2. Regulatory action in response to risk:

When credible evidence indicates that inaction could lead to environmental harm, the precautionary principle supports proactive regulatory measures. Therefore, the Parties must be prepared to intervene to prevent damage, even if full scientific certainty is lacking. This ensures a commitment to protecting ecological integrity, rather than waiting for conclusive proof after harm has occurred.

3. Managing high-risk technologies and activities:

The Plan discourages the use of high-risk technologies or activities, especially those proposed at large scales or without a proven track record in northern environments. Technologies like heap leach extraction, which carry significant environmental risks, are not supported until they can demonstrate low risk and successful application in similar ecosystems. Innovation is encouraged, but only at small scales and with careful oversight until reliability and safety are established.

4. Tiered thresholds in cumulative effects management:

The Plan's cumulative effects framework requires three tiers of thresholds to trigger management action to protect values: advisory, cautionary, and critical. The goal of management is to maintain value health below the cautionary level, with the critical threshold being unacceptable.

The inclusion of the advisory threshold encourages proactive responses and orients management towards maintaining and enhancing value health, as opposed to merely limiting negative impacts.

2.2.4 ADAPTIVE IMPLEMENTATION

This Plan is designed to be a living document that encourages periodic change and revision. Adaptive implementation means adjusting as required, based on environmental, economic, and social change.

Users of the Plan are encouraged to remain responsive to new information, evolving community priorities, and emerging land use pressures. This includes integrating updated knowledge, monitoring outcomes of land use decisions, and applying lessons learned from past experiences. Adaptive implementation also means being open to collaboration, recognizing that effective land stewardship often requires coordination across governments, communities, and industries.

Being adaptive allows the Plan to remain relevant and resilient in the face of uncertainty. It supports innovation, enables timely responses to emerging challenges, and helps ensure that land use decisions continue to reflect the values and needs of the Region. Flexibility in implementation, while remaining grounded in the Plan's vision, will help maintain long-term ecological integrity, cultural continuity, and community well-being.

Importantly, being adaptive does not mean sacrificing certainty. The Plan provides a clear framework of values, land use designations, and management directions that offer stability and predictability for land users, regulators, and communities. Within this framework, flexibility allows for thoughtful adjustments when conditions change or new opportunities arise. In this way, certainty and adaptability work together: certainty provides a foundation for decision-making, while adaptability ensures those decisions remain effective and relevant over time.

Photo: Government of Yukon

2.3 Plan Tools

The Plan uses tools to implement its principles and vision, and to guide land use decisions across the Region. They help ensure that actions are responsive to changing conditions, grounded in evidence, and aligned with the Plan's values, and they support informed decision-making and consistent interpretation of the Plan's intent.

2.3.1 MANAGEMENT DIRECTIONS AND VALUES

"Values are essential and enduring beliefs that are shared by the members of a culture. Our values indicate what is good and appropriate, influencing our behaviour by providing overarching guidelines applicable in all situations that help us and protect us. These values, which are reflected in our traditions, customs, and protocols, inform the rules of acceptable human behaviour."

– Yukon First Nations Heritage Framework, 2012

Values are foundational to the Plan. A value is an element of, or relationship or system dependent on, the land, that is important to people in the Region. They can be tangible (for example, Caribou) or intangible (for example, Community Culture). The Commission identified 12 values through consultation with the community and Plan Partners **(Table 1).**

While values can be expressed in many ways, this set was selected to reflect what matters most and to provide broad protection for ecological, cultural, and social systems. In some cases, values were chosen not only for their direct importance, but also for their ability to safeguard related or dependent elements. Communicating these values, and how they are prioritized across the Region, is a major function of a regional land use plan.

The Management Directions (Section 5) are organized around the value(s) they are intended to protect. Each value subsection includes a description of its significance, key planning issues, goals for the desired future state, and Stewardship Directions for all land users. Many also include Implementation Actions, Governance Recommendations, and Knowledge Gaps. Because values are complex and interconnected, this section is intended to be read and considered as a whole to fully appreciate the relationships and nuances between them.

Table 1: Plan values, organized into broad categories for ease of discussion. No one value is more important than the others, and all values are interconnected.

COMMUNITY, CULTURE, AND HERITAGE	Land–People Relationship
	Community Culture
	Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
	Community Resilience
ENVIRONMENT	Water/Chu
	Plant and Animal Relations
	Salmon/Tr'ojà'
	Caribou/Wëdzey
	Moose/Jëjik
	Landscapes
	Wetlands
SUSTAINABLE ECONOMY	Sustainable Local Economy
	Current land-based activities
	Potential land-based activities

Management directions apply across the Region, wherever a value is present or may be affected. The Plan also allows for a more nuanced approach through:

- Directions that apply at the scale of a Landscape Management Unit (Section 2.3.4 and Sections 6.1 to 6.22); or
- Overlays designed to protect a value (Section 5.3.4).

2.3.2 CUMULATIVE EFFECTS MANAGEMENT

> "In our world, respect surrounds our thoughts and actions. Everything is done with respect. Our way of life generates a habit of keen attention to our surroundings. We are always aware and thinking about how to build and maintain respect as we move through space and time. The relational nature of our culture drives us to think about how our thoughts and actions impact others, including the land. This builds a tapestry of respect upon which our lives depend."
>
> *– Tr'ondëk Hwëch'in, 2024*[8]

Cumulative effects are the combined changes to values in the environment and/or society that result from past, present, and future human activities and natural processes (***stressors***). Currently, human activities are managed one project at a time and on an industry-by-industry basis. This means that stressors that affect a value like Caribou (for example, a forestry road, quartz exploration project, off-road vehicle use, and hunting pressure), are dealt with in isolation.

The effects from each stressor may be small, but when combined, they may be more than a herd can tolerate, especially when natural events like wildfire also occur. The purpose of cumulative effects management is to centre land-related decisions on the Region's values to protect what is important on a multi-generational timescale. With this holistic approach, management actions are based on the overall health of values so that negative effects are limited, and positive effects can be reinforced.

8 Tr'ondëk Hwëch'in Submission to the Dawson Regional Planning Commission, April 30, 2024.

The Plan includes initial tools to protect the Region's values immediately, as well as direction to improve existing and develop new tools. All tools are connected through a values-based ***cumulative effects framework***. The Plan envisions protection of values becoming more robust over time as the Parties co-develop ways of ***monitoring, assessing***, and ***responding*** to the health of more of the Plan's values. Eventually, people in the Region will be able to access up-to-date information on the health of values along with how they are being protected.

A regional land use plan is an appropriate place to provide guidance on cumulative effects because of its scale, scope, and generational timeframe. Though cumulative effects management is largely the responsibility of decision-makers and assessors who operate at this scale, the effects on the ground are necessarily made up of individual actions. Good stewardship is a way everyone can help protect the Region's values.

The Plan's cumulative effects management regime is intended to be adapted over time in response to new information, changes in capacity and technology, and changing conditions. This adaptation will consider cumulative effects assessment carried out during YESAB assessments, as well as any territory-wide or adjacent planning-based frameworks.

2.3.3 ACCESS MANAGEMENT

Access management balances the benefits of access, such as the ability to carry out economic development and the ability to recreate and practise culture, with the need to protect ecological and cultural values. Access includes movement by land, water, and air, and while it enables a wide range of activities, it also poses risks to wildlife, habitats, and traditional land use. Poorly planned or unmanaged access can lead to habitat fragmentation, increased harvest pressure, and long-term environmental degradation.

The Plan outlines guidelines and stewardship directions for managing access across different modes and in different parts of the Region. Access Management Plans (AMPs) are required where overlapping interests and existing access routes require coordinated planning. AMPs guide where and how access occurs, who can use it, and how impacts will be monitored and mitigated.

Ultimately, access management in the Region aims to ensure that land use supports long-term sustainability and respects Tr'ondëk Hwëch'in's use of and relationship with the land. By integrating access planning into broader land use decisions, the Plan aims to reduce cumulative effects, protect wildlife and heritage values, and maintain the wilderness character of the Region. This approach reflects a commitment to stewardship and adherence to the precautionary principle, ensuring that access supports rather than undermines the values that make the Region unique.

2.3.4 LANDSCAPE MANAGEMENT UNITS AND LAND DESIGNATION SYSTEM

Landscape Management Units

The Region is divided into discrete areas of land called ***Landscape Management Units*** (LMUs; Figure 3), consistent with other regional land use plans. Each LMU was identified and delineated based on human use, ecological properties, current and anticipated levels of development, and identified land use issues. To the extent possible, the boundaries of LMUs follow existing natural (for example, watershed, major river) or human-made (for example, highway, Tr'ondëk Hwëch'in land selections) boundaries.

Land Designation System

The designation system has three broad categories based on management or stewardship intent:

- **Integrated Stewardship Areas**
- **Special Management Areas**
- **Sub-regional Planning Areas**

These are summarized in Table 2. While LMUs have been categorized for efficiency, values vary across the Region. Land designations must therefore be considered in tandem with specific LMU directions.

Integrated Stewardship Areas

The ***Integrated Stewardship Area*** (ISA) designation identifies areas where multiple land uses, such as cultural practices, recreation, wildlife habitat, and industrial activity, occur alongside one another. Each ISA is assigned a sub-designation (ISA 1- 4) that reflects its relative tolerance for development footprint, as defined by thresholds. The general intent of ISAs is to support both existing and future sustainable economic activities in alignment with the Plan's principles; the specific types and extent of activities allowed are guided by the LMU Directions.

Special Management Areas

Special Management Areas (SMAs) are a Plan designation for areas that are intended to be formally planned through Chapter 10 processes at a later date. Land use activities in SMAs are allowed in accordance with the LMU management intent and directions. All SMAs are subject to permanent prohibition of entry for placer and quartz mining and are withdrawn from disposition for oil and gas; existing dispositions are honoured.

These areas require legal designation through co-developed SMA Management Plans, which must respect the Plan's intent and direction. The Commission should be part of these future planning processes. Co-management between Tr'ondëk Hwëch'in and the Government of Yukon is required for all decisions related to SMAs. For clarity, Tr'ondëk Hwëch'in Settlement Land Parcels are excluded from SMAs because they are not subject to co-management; they remain subject to LMU Directions and management intent.

For the purposes of Section 10.5 of the THFA, Management of Future Special Management Areas, the Government of Yukon "otherwise agrees" such that:

- The Parties to the Plan will have co-management authority for all the Special Management Areas in the Region.
- The Parties shall jointly prepare, or have prepared a management plan for each Special Management Area.
- The Parties shall jointly make best efforts to complete the management plans within five years of the establishment of the Special Management Areas.
- The Parties shall jointly review each management plan at least once every 10 years.

Sub-regional Planning Areas

This Plan identifies three areas that require sub-regional planning due to the higher levels of activity or interests in these LMUs compared to other LMUs. Detailed reasoning for this designation can be found in the individual LMU sections. The LMUs requiring sub-regional planning are:

- LMU 3: Chu Kon Dëk (Yukon River Corridor) (Section 6.3).
- LMU 12: Tr'ondëk Täk'it (Klondike Valley) (Section 6.12).
- LMU 13: Dempster Highway Corridor (Section 6.13).

Figure 3: Overview of the Landscape Management Units. Section 6 describes each of these in detail.

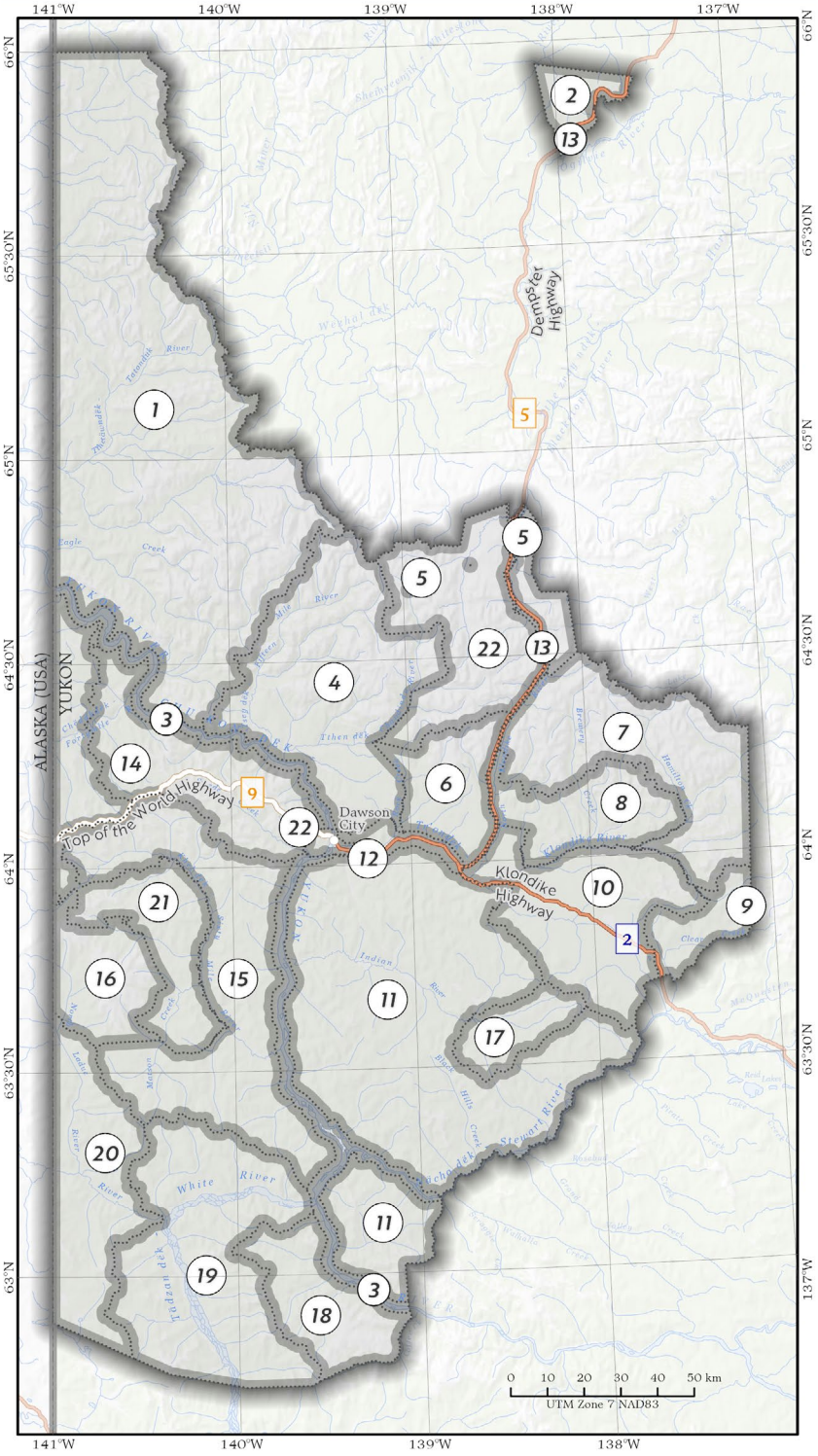
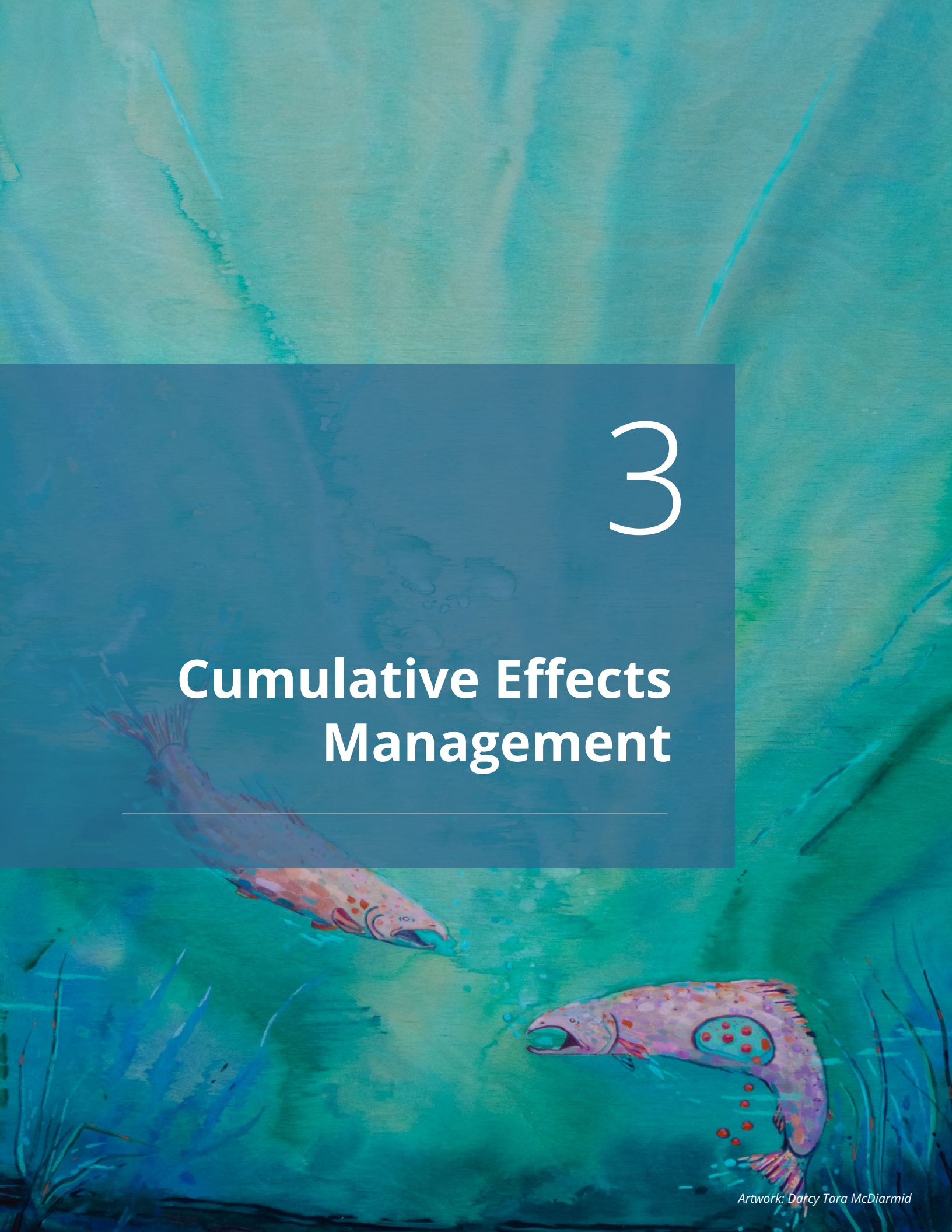


Table 2: Summary of the Land Designation System for the Dawson Region.

DESIGNATION	DESCRIPTION
Integrated Stewardship Area 1 (ISA 1)	• Development generally can occur, subject to stewardship directions and adherence to cumulative effects thresholds. • Lowest threshold for development.
Integrated Stewardship Area 2 (ISA 2)	• Development generally can occur, subject to stewardship directions and adherence to cumulative effects thresholds. • Low threshold for development.
Integrated Stewardship Area 3 (ISA 3)	• Development generally can occur, subject to stewardship directions and adherence to cumulative effects thresholds. • Higher threshold for development.
Integrated Stewardship Area 4 (ISA 4)	• Development generally can occur, subject to stewardship directions and adherence to cumulative effects thresholds. • Highest threshold for development.
Special Management Area (SMA)	• The priority is to maintain ecological integrity and cultural values. • Permanent prohibition of entry for placer and quartz mining, and withdrawn from disposition for oil and gas; existing dispositions are honoured. • Requires subsequent legal designation and the development of a management plan.
Sub-regional Planning Area	• Areas requiring further planning decisions. • Interim management directions apply until such time as further planning occurs.
Excluded Area	• Areas planned through other processes – for example, Territorial Park Management Plans or City of Dawson subdivision planning. • These areas are within the boundaries of the Dawson Regional Land Use Plan but no directions are included for them.

3

Cumulative Effects Management



Artwork: Darcy Tara McDiarmid

3.1 Introduction

Cumulative effects are the combined changes to values in the environment and/or society that result from past, present, and future human activities and natural processes (for example, Figure 4). Plan ***values*** are what matter to people who live in and have a relationship with the Region (Section 2.3.1). When values become unhealthy, people, the land, and the relationships between people and the land suffer. For Tr'ondëk Hwëch'in, these relationships are a recognized human right (31,62).

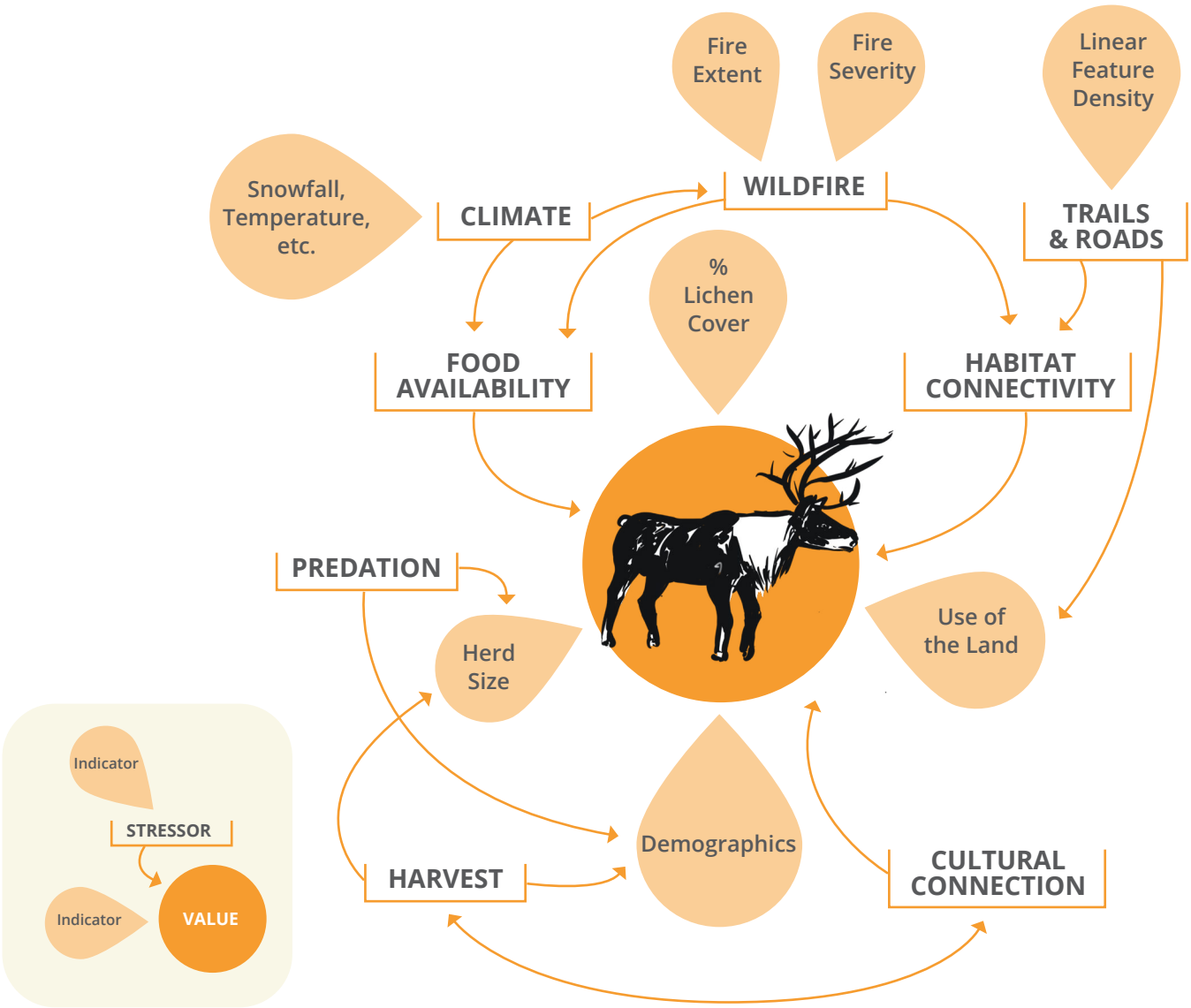
The Plan requires ***cumulative effects management*** to make sure the impacts from different activities and events don't add up and cause harm. This is a way of protecting values well into the future. It does this by centring land-related decisions on values. The ***cumulative effects framework*** defines the components and processes involved in cumulative effects management. Some parts are ready to use right away, and others will need considerable work. As the Parties apply and improve cumulative effects management, they will protect an increasing number of the Region's values for current and future generations. The Plan envisions the Region's residents having access to up-to-date information on value health and on what actions governments and partners are taking to protect them.

Why do we need cumulative effects management?

All values are part of interconnected systems that can be affected by human activities and gradual (for example, slow climate shifts) and sudden (wildfire or flooding) environmental change (***"stressors"***). In the Region, human activities currently go through assessment project-by-project and are managed on an industry-specific basis (for example, each placer mine goes through its own impact assessment, and placer mines are managed under separate regulations from timber harvest, tourism, or quartz mines). Managing responses to environmental change happens separately from managing human activities.

Cumulative effects management involves using a holistic approach that considers a wide variety of stressors to ***monitor, assess,*** and ***respond*** to changes in value health. It focuses on values instead of individual projects, industries, or environmental factors, so that impacts from different stressors can be considered together. The Plan's scope and scale make it an appropriate place to address cumulative effects.

Figure 4: Cumulative effects are all the effects that affect a value (stressors). This example shows some of the stressors that affect Caribou (the value). It also shows examples of indicators that we can measure to track value health, either by measuring the value itself (e.g., caribou herd size) or the stressors (e.g., snowfall). It is impossible to show, measure, or manage all of the things that affect caribou; cumulative effects management uses indicators that give a good picture of how the value is doing and always remains focused on the value.



In addition, YESAA requires assessors to consider the "significance of cumulative effects" (s. 42.1.d) when evaluating a project. This is difficult because the nature of cumulative effects means that the knowledge required to assess them is beyond the scope of any individual project. Implementing the Plan's cumulative effects tools will directly support YESAB in carrying out its mandate.

Why do we need a cumulative effects framework?

Cumulative effects management requires coordination among governments, agencies, industry, and other stakeholders because multiple bodies are responsible for regulating and responding to stressors and for monitoring the health of values. The Plan's cumulative effects framework is a relational structure of the elements involved in cumulative effects management. It provides a common understanding of components and processes to guide this coordination, including direction on how to improve these over time.

As of March 2026, the Government of Yukon is developing a territory-wide Ecological Cumulative Effects Framework. When this, or other broad-scale cumulative effects guidance, is complete, the Parties should consider how best to integrate it with the Plan's framework. Such guidance should only supersede that in the Plan if it provides greater protection to Plan values.

The Plan is not a complete guide to cumulative effects management. Rather, it provides multiple tools for managing cumulative effects in the Region. These tools are intended to be used and improved simultaneously, so that the number of values protected and the effectiveness of that protection increase over time. To avoid unnecessary complexity, tools may be retired as new and better ones are developed.

The tools are as follows:

- Cumulative effects framework to guide development of value-based ***indicators*** and related components and processes (Section 3.2 – 3.10).
- ***Reclamation framework*** to guide ***values-based reclamation*** (Section 3.11).
- Management directions framed around values (Section 5).
- Goals for each value that provide benchmarks against which value health can be measured to direct appropriate action (Section 5).
- Two broad indicators of human development footprint with tiered ***thresholds*** that trigger management responses to protect values, applied at the scale of Landscape Management Units (LMU) (Section 6).
- Priority values for each LMU (Section 6).
- Suites of management directions applied through overlays to serve values whose needs aren't met by LMU boundaries – for example, Section 5.3.4.

This section first describes the framework, then provides details on each element of cumulative effects management and defines how elements may be added, revised, or removed. It then describes the use of cumulative effects in overlays and the reclamation framework.

Implementation Actions, Governance Recommendations, and Knowledge Gaps relevant to the currently available management tools are included throughout Sections 3.3 to 3.8. Implementation Actions regarding the development of framework processes and components are found in Sections 3.2 and 3.9. No specific Stewardship Directions are found in this section. While cumulative effects management is largely the responsibility of decision-makers and managers, the effects on the ground are necessarily made up of individual actions. Following the Stewardship Directions throughout the Plan is a way everyone can help to minimize negative and maximize positive cumulative effects to the Region's values.

See Appendices 1 and 5 for selected resources for learning more about cumulative effects and their management, including indicator selection.

Photo: Government of Yukon

3.2 Cumulative Effects Framework

The Plan envisions future cumulative effects management in the Region where:

- Plan values have indicators with thresholds.
- Indicator monitoring feeds into publicly accessible value health assessments.
- Cumulative effects assessments are integrated into project-level assessments and long-term, broad-scale planning.
- Decision-makers respond quickly and appropriately to protect value health.

For this to happen, the Parties will need to co-develop many components and processes. The following section presents a framework that defines these elements and how they relate. It also explains how they should be developed, and what is available in the meantime. The Parties are responsible for "filling in" this framework over time. They must make decisions using the best available information while they are doing so.

Defining Terms

Cumulative effects management uses specific terms that need to be understood in the context of a value. A stressor for one value might be a value in its own right, or an indicator for another value. For example, wildfire extent is a stressor on caribou habitat and could also be an indicator of climate change.

Cumulative Effects: The combined changes to values in the environment and/or society that result from past, present, and future human activities and natural processes.

Cumulative Effects Management: Monitoring, assessing, and responding to changes in value health, using a holistic approach that considers a wide variety of stressors.

Cumulative Effects Framework: A relational structure of the elements involved in cumulative effects management.

Value: An element of, or relationship or system dependent on, the land, that is important to people in the Region. It often supports the integrity and well-being of communities, the environment, and/or economies.

Stressor: An environmental or societal factor that affects a value, positively or negatively.

Indicator: A measurable factor (qualitative or quantitative) that is related to a value and used to track value health.

Threshold: The level at which an indicator triggers a change in management responses. It can refer to a type of threshold (for example, cautionary or critical) or to a specific number (for example, the critical threshold for surface disturbance for LMU 18 is 4%). In this Plan, "threshold" means a management threshold. It can be based on, but is distinct from, a system threshold (for example, the level of disturbance at which caribou avoid an area).

Monitoring: Knowledge gathering related to indicators that helps inform assessment.

Assessment: The process of reviewing available knowledge on value health in relation to value goals. This often includes comparing indicator data to thresholds and using the results to guide responses. Conformity determinations are a form of assessment.

Response: Actions that limit, stop or reverse negative effects on a value, and/or increase positive effects.

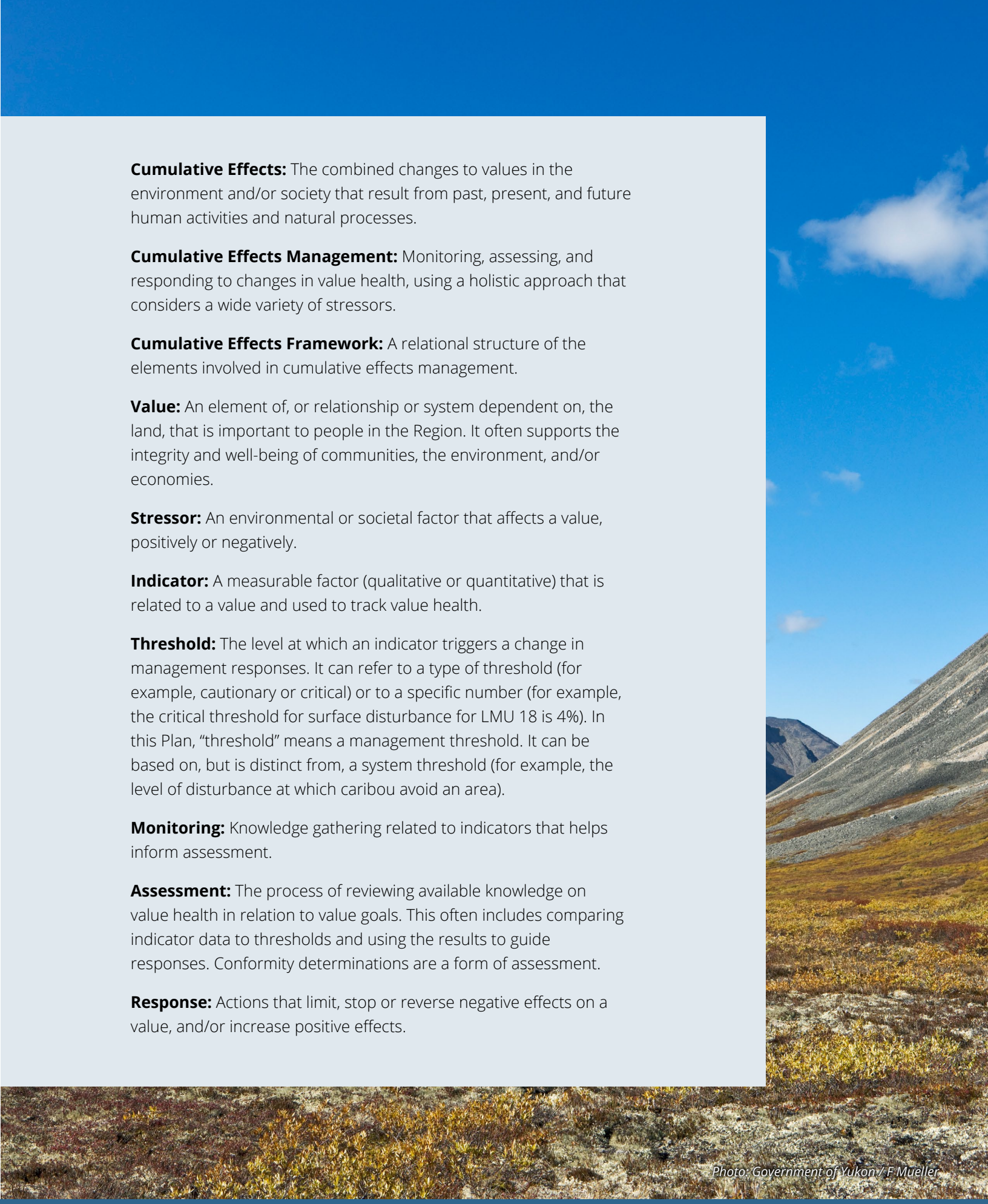


Photo: Government of Yukon / F Mueller

Component and Process Summaries

The following summaries describe how each component **(Figure 5)** and process **(Figure 6)** fits into the Plan's framework. Each summary describes how the element links to others, what it does when the framework is fully realized, what is needed to get there, and what initial tools are in place at the outset of Plan implementation. These summaries appear at the beginning of each element subsection as an aid to the reader.

Figure 5: How cumulative effects components are related. An indicator is always related to at least one value. A threshold is established for a given indicator. The value remains central to all decisions.

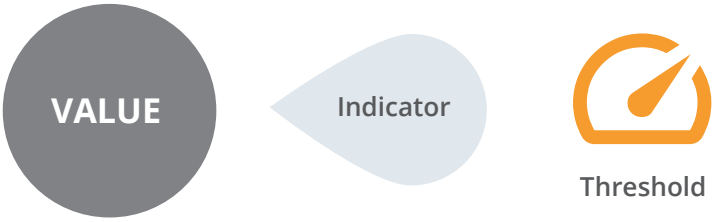
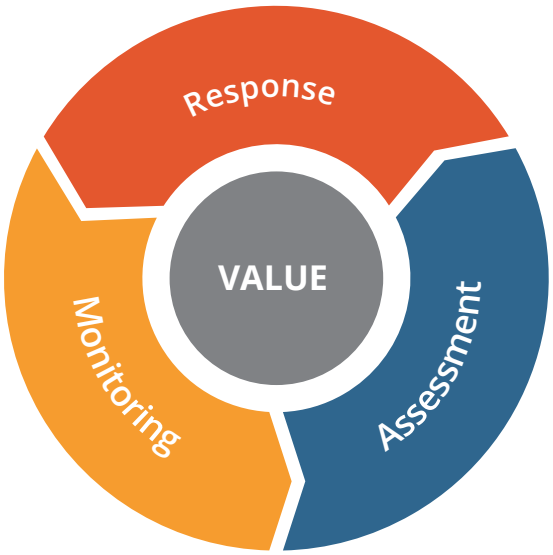


Figure 6: How cumulative effects processes are related. Indicator monitoring feeds into cumulative effects assessments that look at value health and compare it to thresholds and goals. The results of assessments dictate responses aimed to maintain or restore value health. Monitoring continues to assess whether the responses are effective, and the cycle repeats. The value remains central to all decisions.



Values are at the core of the cumulative effects framework. The Plan organizes management around 12 values that identify what is important to the people of the Region. Cumulative effects management further centres decisions on these values. This becomes more achievable over time as the Parties define indicators with thresholds for Plan values. They must also decide how best to monitor, assess, and respond to changes in value health. In the meantime, ***decision-makers*** must use the best available information on value health in the context of value goals.

Value-based ***indicators*** are measurable factors with a strong relationship to a value. Value health is tracked by monitoring these indicators. The Parties will develop indicators for Plan values that are relevant, sensitive, accurate, and practical. In the meantime, decision-makers will use two development footprint indicators – surface disturbance and linear feature density – to help monitor value health.

Indicator ***thresholds*** are indicator levels that communicate target, cautionary, and critical health ranges for the related value. Crossing a threshold triggers management actions to slow, stop, or reverse a negative trend in value health. The Parties will establish thresholds for each value-based indicator they develop. In the meantime, each LMU has thresholds for two development footprint indicators to guide decisions.

Indicator ***monitoring*** shows value health and alerts decision-makers when health is approaching a threshold. Once the Parties identify indicators and set thresholds for Plan values, they will need to set up monitoring programs or integrate existing ones. The data they (and Plan Partners) collect on indicators will inform assessments of value health. It will also trigger management responses. In the meantime, the Parties will monitor the development footprint indicators. Additionally, decision-makers will rely on ongoing monitoring related to values, especially priority values in each LMU. The Plan's values provide a scaffold to bring together monitoring from different sources. This helps decision-makers make the best decisions, even in the absence of formal cumulative effects components.

Assessment reviews available knowledge on value health and compares this to value goals. It often uses indicators and thresholds and leads to conclusions that direct appropriate responses. Knowledge comes in many forms, often from monitoring. Assessment considers past health, anticipated health, and trends. Cumulative effects assessment will inform the Commission's conformity determinations. The Parties will need to work with YESAB and those involved in other processes to integrate cumulative effects assessment on an ongoing basis. They must do this as more framework components become available. In the meantime, decision-makers will use the best available information on value health in the context of value goals. They will also use development footprint indicator levels relative to LMU thresholds to inform conformity determinations specifically, and project assessment more broadly.

Responses are all the actions that decision-makers take to maintain, encourage, or restore value health, as defined by value goals. The Plan provides broad guidance on appropriate responses to value health ranges (target, cautionary, critical). Once the Parties identify indicators and set thresholds for Plan values, they will need to identify more specific responses that apply when indicator levels reach each threshold. In the meantime, the Plan provides objectives for management actions based on development footprint indicator levels, and recommends specific responses. The Parties will begin expanding consideration of cumulative effects in ongoing management and decision-making, including giving weight to cumulative effects assessments completed at the project level.

IMPLEMENTATION ACTIONS

1	Develop cumulative effects indicators and related elements for Plan values according to the following timeline and directions. Work on multiple values in parallel and incorporate elements into cumulative effects management as they become available (all components for a value do not need to be complete before they are used). The Parties will make all decisions on adding components to the framework as equal decision-makers. This is an expression of co-management (see Section 3.9 for further details on adding, revising, and removing components). For each value: • Conduct a comprehensive value review that brings together multiple ways of knowing about the value (current health, trends, known responses to disturbance and mitigation, existing monitoring, and data availability, and so on). • Select one or more indicators for the value using models that include the value's relationships with other values and stressors – for example, causal models as described in the Marine Plan Partnership **(63)**, conceptual models used by the BC Environmental Assessment Office **(64)**, and influence diagrams as used in Metlakatla Cumulative Effects Management **(65)**. • Trial each indicator over an agreed-upon period. Then, assess each one to ensure it is relevant, sensitive, practical, and accurate. • Establish tiered thresholds using the best available knowledge. Critical thresholds should be below the point beyond which recovery is unlikely without human intervention. Cautionary and advisory thresholds should provide enough room for proactive actions to prevent reaching critical thresholds. • Clarify specific roles and responsibilities for monitoring. • Identify management actions to take at each threshold, along with responsibilities, following the guidance above. Start work on Land–People Relationship, Water, Salmon, Caribou, and Wetlands by the end of year two, and Community Resilience, Moose, and Sustainable Local Economy by the end of year four. This timeline considers value health, threats, knowledge gaps, and "nested" values, where protecting one is likely to protect others **(63)**. Community Culture, Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language, Plant and Animal Relations, and Landscapes are not prioritized for completion in the first four years. However, this does not mean they are less important than the prioritized values.
2	Incorporate disturbance from fire (including quantifying burn severity and post-fire ecosystem recovery) and permafrost thaw into cumulative effects management.
3	Report annually on the progress of cumulative effects framework elements (see guidance in Appendix 5).
4	Report annually on value health, including health range (once indicators and thresholds are established), health status relative to value goal(s), and/or inadequacies in data.

GOVERNANCE RECOMMENDATIONS

Consider and complement the Plan's cumulative effects framework when developing the territory-wide Ecological Cumulative Effects Framework (Government of Yukon).

Once the Government of Yukon's territory-wide Ecological Cumulative Effects Framework is complete, the Parties will review the Plan's cumulative effects framework and revise it if necessary to maintain the highest standard of value protection.

KNOWLEDGE GAPS

Relationships between initial values identified for cumulative effects development and potential indicators are not well characterized. Research is needed to inform the selection of indicators, setting of thresholds, and appropriate responses, and to prioritize research based on the value timeline in Implementation Action 1.

There are many ways to incorporate projected climate change impacts on values and land use patterns, including disturbances from wildfire and permafrost thaw, into cumulative effects management. Research these options to identify the most promising and achievable approaches.

There is a limited understanding of the responses of Plan values (especially Caribou, Moose, Salmon, Wetlands, Tr'ondëk Hwëch'in Culture, Heritage, and Language and Land–People Relationship) to human-caused and natural disturbance (independently and in combination). Research these responses to inform adaptation of development footprint indicators, selection of appropriate responses, and development of new indicators.

Photo: Martin Founds

3.3 Values

Values are at the core of the cumulative effects framework. The Plan organizes management around 12 values that identify what is important to the people of the Region. Cumulative effects management further centres decisions on these values. This becomes more achievable over time as the Parties define indicators with thresholds for Plan values. They must also decide how best to monitor, assess, and respond to changes in value health. In the meantime, decision-makers must use the best available information on value health in the context of value goals.

Values are the most established element of the Plan's cumulative effects framework. They are the least likely to change over time, having been identified through extensive consultation with the Parties, community, and Plan Partners. They represent what is most important to residents and to others with a connection to the Region. Most other framework elements are built around values – for example, indicators and monitoring programs.

LMU priority values are an important tool in guiding which values are considered in cumulative effects assessment. Prioritizing is not intended to diminish any value; all appear in the Plan due to their importance. Rather, prioritizing is useful because cumulative effects management becomes increasingly complex and difficult as more values are considered, due to the sheer volume of factors

involved and the interconnectedness of values. Priority values also provide certainty to proponents by constraining how many values must be considered in any individual project proposal.

Management Directions by Value

The Plan's management directions (Section 5) are oriented around values so management focuses on what people want in the Region, rather than on the stressors acting on those values. This provides resilience under changing conditions. Stressors are more likely to change over time than values (65).

For example, a direction to protect and restore salmon spawning habitat will remain useful regardless of what activities or natural events are putting pressure on that habitat. Conversely, a direction that responds to a particular threat (for example, high boat traffic) is limited. New directions would need to be created if activities or threats change.

Orienting the directions around values sets the stage for applying and improving cumulative effects management, which is also value-based. It also aligns with the precautionary principle. Waiting for a comprehensive set of indicators, thresholds, and responses is not an excuse for inaction if a value is at risk.

Management directions aim to keep values healthy, as defined by one or more goals – for example, Table 3. These goals are useful for cumulative effects assessment in the early phases of Plan implementation.

Table 3: Examples of Plan values and related goals.

VALUE	GOAL
Caribou	Healthy and resilient caribou herd populations that grow toward historic levels.
Land–People Relationship	Healthy land and harvestable species are abundant and used responsibly by community members from many different backgrounds.
Community Resilience	A resilient community with strong relationships with one another and with the land.
Sustainable Local Economy	Many locally owned and operated businesses are successful and provide local employment.

IMPLEMENTATION ACTIONS	
5	Consider Plan values and their health in planning and strategic work.
6	Use knowledge gained from ongoing monitoring of value health to inform Plan Review.

3.4 Indicators

Value-based ***indicators*** are measurable factors with a strong relationship to a value. Value health is tracked by monitoring these indicators. The Parties will develop indicators for Plan values that are relevant, sensitive, accurate, and practical. In the meantime, decision-makers will use two development footprint indicators – surface disturbance and linear feature density – to help monitor value health.

The Plan recommends choosing value-based indicators using the following criteria (64,65):

- **Relevant:** There is a strong and well-understood relationship between value health and the indicator.
- **Accurate:** The indicator accurately reflects changes in the value at temporal and spatial scales appropriate to the value.
- **Sensitive:** The indicator responds measurably to stressors and/or mitigations.
- **Practical:** The indicator can be measured with existing or achievable capacity and resources and is easy to understand.

Relevant doesn't necessarily mean direct. Indicators can still be useful if they are indirectly related to a value. For example, for Caribou, it is possible to measure an aspect of value health directly – for example, herd size. It is also possible to measure something that affects a value in a predictable way – for example, lichen cover.

Sometimes there are many steps between an indicator and its value – for example, the extent of wildfire affects lichen cover, which affects caribou herd size. These indirect indicators can still be useful if the relationships between them and the value are well understood. However, each step adds complexity and introduces room for error.

The Parties will need to balance efficiency (for example, choosing an indicator related to more than one value, or one that is very easy to measure) against effectiveness (for example, multiple indicators for one value provide a more complete picture than just one, but require more resources).

See Table 4 for examples of potential indicators for Plan values.

Table 4: Examples of Plan values and possible indicators.

VALUE	POSSIBLE INDICATORS
Caribou	Herd size
	Habitat quality – for example, percent lichen cover
	Use of migration pathways
Sustainable Local Economy	Employment rate
	Average income compared to cost of living
	Regional GDP
Community Resilience	Physical and mental health statistics
	Public infrastructure condition
	Emergency preparedness
	Income equality
Land–People Relationship	Perception of stewardship ability
	Harvestable species abundance
	Available time to be on the land
	Effort required to meet harvest needs

Development Footprint Indicators

The Plan will eventually include indicators for many values. Initially, it defines two indicators of development footprint that communicate relative acceptability of development intensity and area across the Region's Landscape Management Units (LMUs): linear feature density and surface disturbance.

Linear feature density (LFD) is the total length of all human-created linear features (that is, roads, seismic lines, trails) as a proportion of area, measured as kilometers of linear features per square kilometers of area (km/km^2). It includes only features more than 1.5 m wide due to the satellite image resolution available. Higher linear feature

density is often associated with increased habitat fragmentation and increased access. Linear feature density can significantly affect how people and wildlife use the land.

Example: If an LMU with an area of 500 km² has a combined total of 100 km of roads, trails, and cutlines, it has a linear feature density of 0.2 km/km² (100 km / 500 km²).

Surface disturbance (SD) is the percentage of area physically disturbed by human activities. It is constrained by the resolution of available satellite imagery. Common disturbances include tree clearing, vegetation removal, and earth moving. These activities are often carried out during development and/or resource extraction projects – for example, mine sites, quarries, camps, drill and helicopter pads.

The surface disturbance indicator does not include:

- Disturbance from natural events, such as wildfire, flooding, and permafrost thaw (however, human activity that follows a natural disturbance, like logging after a wildfire, is included).
- Tenured or permitted areas that remain undisturbed – for example, an undeveloped placer claim.
- The area of linear features, including roads, trails, and seismic lines (to avoid duplication with linear feature density).

Example: If an LMU with an area of 500 km² has a combined total of 30 km² disturbed by forestry and placer mining activity, and an additional 50 km² has been disturbed by forest fire, it has a surface disturbance of 6% (30 km² / 500 km² x 100).

Note: The area within 30 m from either side of the centreline of the North Klondike, Top of the World, and Dempster highways is excluded from the LMU area used to determine LFD and SD values. This acknowledges the permanence of these features on the landscape. Instead, access management directions (Section 4) apply in these areas.

Improvements

These indicators were chosen for practicality, their relationships to many of the Region's values, and consistency with earlier Yukon regional plans. However, thresholds and land use designation definitions are Plan-specific.

How effective are the development footprint indicators?

- Relevant? Somewhat: Indicators relate to multiple values, but the relationships are not well understood.
- Accurate? Needs work: Appropriate scale varies by value, so broad indicators are not particularly well-suited to any one value.
- Sensitive? Somewhat: New disturbance on the ground is visible immediately to satellite, but sensitivity will depend on how often images are taken, and purchased, and how long it takes to analyze and publish data.
- Practical? Very: Indicators can be measured with existing technology and capacity (satellite imagery), are easy to understand, and ready to be used immediately. They can also be easily and explicitly linked to permitting under existing regulations, which provides certainty.

Development footprint indicators will be more effective if they become more relevant and accurate with respect to Plan values. Adapting cumulative effects management holistically means deciding where it makes sense to improve existing indicators, and where new indicators that better meet the criteria should be added.

Potential improvements include:

- Differentiating the type, timing, and intensity of activities where disturbance has occurred.
- Differentiating linear features by width or classes of width.
- Measuring indicators at finer scales than LMU to better understand the distribution of disturbance relative to values on the landscape – for example, within certain habitats required by key species of wildlife.
- Considering the zone of influence (the extent of effects beyond the actual footprint of activity or disturbance; this is value-specific).
- Considering development footprint in combination with natural disturbances. Natural disturbances can have enormous impacts on values, especially when exacerbated by or in addition to human-caused disturbance. For example, fire is a naturally occurring phenomenon, but fire intensity and frequency are being influenced by humans through activities that affect ecosystem functions and through climate change **(66)**.

IMPLEMENTATION ACTIONS

7	Improve development footprint indicators to make them more relevant and accurate with respect to Plan values.
8	Add value-based indicators related to natural disturbance to the cumulative effects management regime. These indicators will complement development footprint indicators, which account for human-caused disturbance.
9	Revise development footprint thresholds and/or the indicators themselves as understanding of the combined impacts of natural and human-caused disturbance improves.

KNOWLEDGE GAPS

Relationships between value health and natural disturbance, and between value health and combined natural and human-caused disturbance, are not well characterized. Undertake research to establish quantitative or qualitative relationships that can support indicator and threshold establishment, and that take natural disturbance on the landscape into account.

Photo: Government of Yukon

3.5 Thresholds

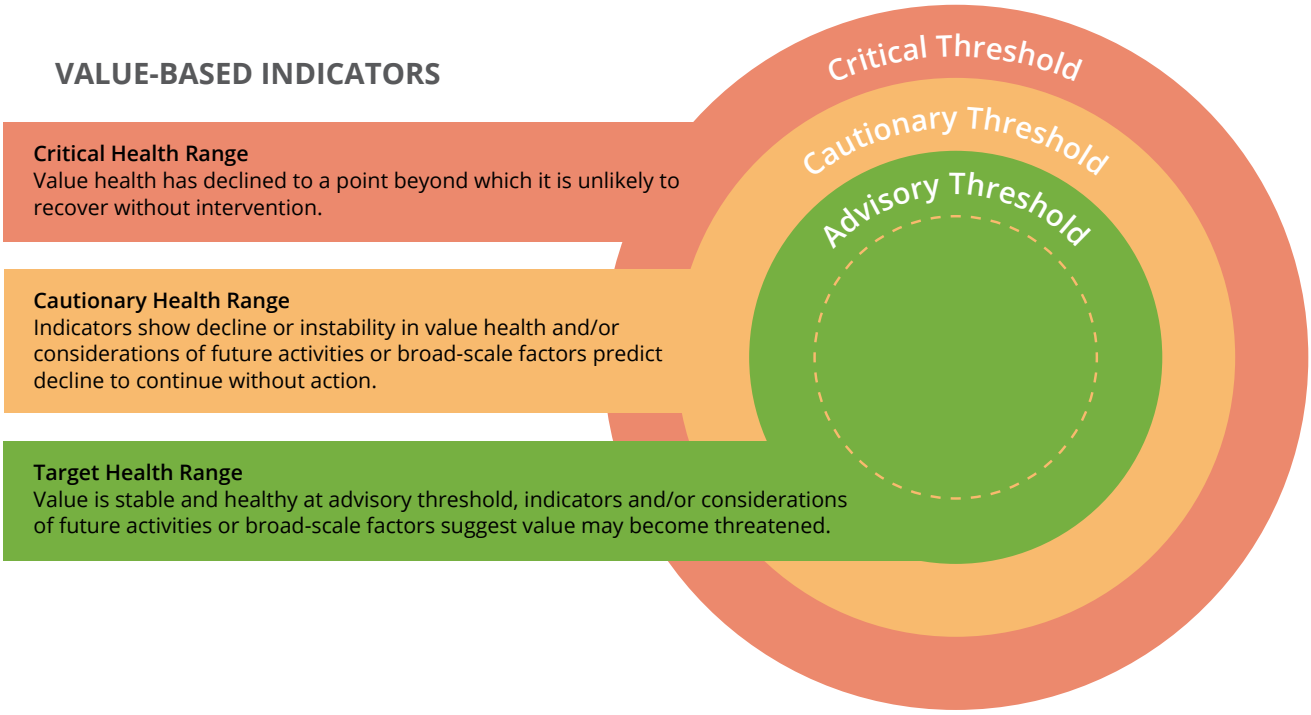
Indicator ***thresholds*** are indicator levels that communicate target, cautionary, and critical health ranges for the related value. Crossing a threshold triggers management actions to slow, stop, or reverse a negative trend in value health. The Parties will establish thresholds for each value-based indicator they develop. In the meantime, each LMU has thresholds for two development footprint indicators to guide decisions.

The cumulative effects framework uses tiered thresholds to provide clear direction for recommendation bodies and decision-makers. These thresholds aim to maintain value health **(Figure 7)**. The cautionary and critical thresholds mark boundaries between value health ranges (target, cautionary, and critical) that require different suites of responses (Section 3.8). The Plan also includes an "advisory" threshold within the target health range to support proactive management. The Plan's management directions aim to maintain value health within the target range.

It is important to identify critical thresholds, the points beyond which urgent intervention is required. However, focusing only on critical thresholds can lead to reactive responses that may be too late to protect value health, and these responses are often more costly than preventative measures.

The Plan's tiered threshold structure encourages proactive management by prompting early action if value health begins to decline. It also lays the groundwork for swift and efficient responses if value health approaches the critical threshold. Value health will change over time in response to changes in the

Figure 7: Tiered threshold structure for value-based indicators, showing value health ranges bounded by the thresholds. Cumulative effects management aims to keep value health within the target range.



environment, as well as human activities. Stewardship actions like ***reclamation*** and habitat enhancement can increase value health. Over time, they can bring it below thresholds that require restrictions on activities or development, subject to future development of reclamation guidance (Section 3.11).

Thresholds should be based in Indigenous and/or Western science. They should follow the precautionary principle and express humility about the complexity of natural systems. Thresholds may be established at the LMU-scale, or through an overlay.

Note that unless otherwise specified, "threshold" means a management threshold – a threshold established for the purposes of decision-making – not a natural threshold present in a system – for example, a tipping point for herd health in caribou, or a level of income required for a basic standard of living.

Management thresholds are often based on natural thresholds but consider other factors as well.

The following are some of the factors the Parties should consider when setting thresholds, using caribou as an example.

- **Jurisdiction:** Herds migrate across human-created boundaries – for example, Yukon–Alaska.

- **Time between action and reaction:** By the time tipping points in herd health are observed, it can be too late for effective responses (67) or, ecosystems may take decades or centuries to recover from disturbance.
- **Social factors:** Actions taken to protect a herd may result in pushback if the public is not kept informed over time about herd health and reasons for action.
- **Connections between values:** Higher linear feature density leads to avoidance by Caribou, but increased access for harvest or recreation, which support other Plan values such as Land–People Relationship. Thresholds should be set independently for each indicator, but indicators for multiple values should be considered together in the context of the vision for each LMU.

Development Footprint Thresholds

The development footprint threshold structure mirrors that for value-based indicators. Cautionary, and critical thresholds define target, cautionary, and critical indicator ranges, with an additional advisory threshold within the target range (Figure 8).

The Plan's management directions aim to keep development indicator levels within the target range for both indicators. Development footprint thresholds define allowable disturbance at any one time. Both surface disturbance and linear feature density may increase over time through additional projects, and decrease through reclamation.

The Plan establishes surface disturbance and linear feature density thresholds for each Landscape Management Unit (LMU) to communicate acceptable levels of development, one aspect of the vision for each LMU (Section 6). They will be a major part of cumulative effects management while the Parties work on value-based framework components. At the time of writing, most LMUs have room for additional development footprint within the target range for both indicators.

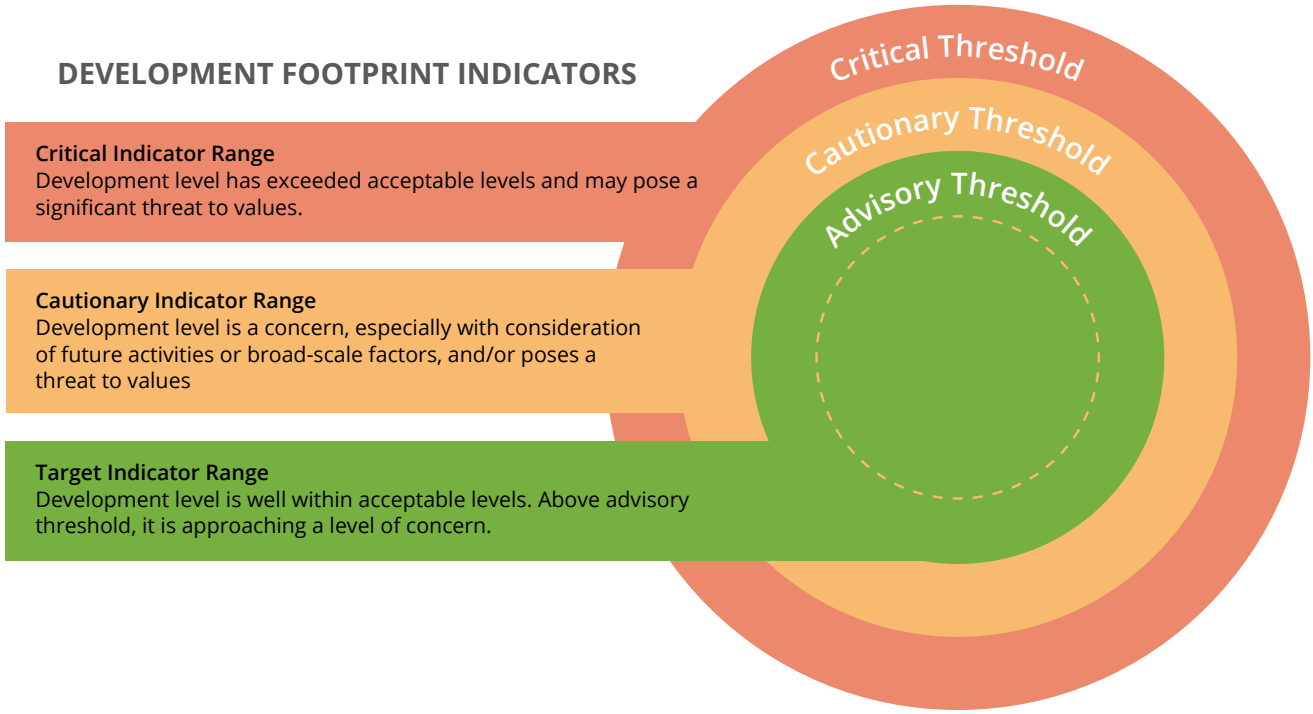
The development footprint thresholds were designed to allow ongoing activities to continue in the short-term, while constraining future activities enough to protect values and promote best practices. They were developed considering:

- The priority values in each LMU, including key species, and available information on their responses to disturbance.
- Surface disturbance and linear feature mapping as of 2020.
- A broad array of input from the Parties, public, and Plan Partners.
- Mining sector growth scenarios (the key driver of development footprint in the Region is mineral exploration and development) (67).

Thresholds are grouped by land use designation. All LMUs with a given ISA designation have the same set of thresholds, and development tolerance is higher as the ISA number increases (that is, from ISA 1 to ISA 4).

Each SMA has a set of thresholds that reflects the nature of its priority value(s) and existing dispositions, permits, and development footprint; as such, SMAs do not always have the lowest thresholds. See Appendix 6 for further discussion, including SD and LFD levels as of 2020, and a visual comparison of threshold levels, 2020 levels, and levels that affect wildlife.

Figure 8: Tiered threshold structure for development footprint indicators, showing indicator ranges bounded by the thresholds. Cumulative effects management aims to keep indicator levels within the target range.



IMPLEMENTATION ACTIONS

10	When knowledge on responses of Plan values to linear feature density and surface disturbance improves, review and revise development footprint indicator thresholds as needed.

KNOWLEDGE GAPS

Relationships between value health and development footprint indicators are not well understood. Research these relationships to inform threshold reviews.

3.6 Monitoring

Indicator ***monitoring*** shows value health and alerts decision-makers when health is approaching a threshold. Once the Parties identify indicators and set thresholds for Plan values, they will need to set up monitoring programs or integrate existing ones. The data they (and Plan Partners) collect on indicators will inform assessments of value health. It will also trigger management responses. In the meantime, the Parties will monitor the development footprint indicators. Additionally, decision-makers will rely on ongoing monitoring related to values, especially priority values in each LMU. The Plan's values provide a scaffold to bring together monitoring from different sources. This helps decision-makers make the best decisions, even in the absence of formal cumulative effects components.

Indicator monitoring provides information on the health of values, directly or through the state of stressors that affect values.

The Parties and other bodies are already engaged in ongoing monitoring programs within the Region. They can show leadership in co-management by using the Plan's framework to link these programs, and their outputs, to the values they reflect and with the decision-makers who can affect value health through management actions.

As indicators are identified, the Parties will need to co-develop and implement new monitoring programs where adequate data is not already being collected. Monitoring related to value health should be reported at the scale most relevant for the value, not necessarily at the LMU scale. Monitoring indicators over time is important because it reveals trends and provides context for each point in time. Trends can also be projected into the future to support scenario analysis.

Assessment of monitoring data relative to thresholds triggers management actions but, even in the absence of thresholds, monitoring is important. It builds collective knowledge about a value and shows trends.

The values prioritized for indicator development (Section 3.2, Implementation Action 1) should also be prioritized for monitoring. Timely and effective flow of monitoring information among agencies and governments is essential so it can inform recommendations and decisions.

Development Footprint Monitoring

Effective monitoring and integration of monitoring data into decision-making requires clarity on roles and responsibilities. It also requires a centralized digital ledger for the Region, to be administered by the Commission and accessible to the public. Initially, this will be limited to the development footprint indicators.

Development footprint monitoring will follow these steps, carried out by the responsible body in brackets:

1. Acquire satellite imagery. (Government of Yukon)
2. Interpret satellite images, evaluate which features are human-caused, and create geospatial layers for each indicator. Make these publicly available, for example, through GeoYukon. (Government of Yukon)
3. As new data becomes available, the Commission will acquire it from the Government of Yukon and update the regional ledger. (Commission)
4. Compare updated indicator levels to thresholds, and publicly share the status of each LMU with respect to its thresholds. This process will inform conformity determinations, see also Section 3.7. For example, if the SD and LFD values are between the cautionary and critical thresholds, the LMU status would be "cautionary". If the indicators are in different ranges, the range of highest concern applies. (Commission)

The effectiveness (specifically the sensitivity criteria) of the development footprint indicators depends heavily on how often monitoring occurs and how often new imagery is updated (acquired, interpreted, and published). Updating some LMUs less often will free up resources to update others more frequently.

The Plan provides a points-based system for prioritizing LMUs for these updates. The system lays out scoring for a variety of factors like LMU designation and where development levels sit relative to thresholds (Appendix 10.6). These factors will be evaluated annually. LMUs with higher scores require more frequent updates.

For example, LMU 1: Tthetäwndëk (Tatonduk) scores 5 points because it has low levels of existing development and current activity. It requires an update at least once every 10 years. In contrast, LMU 11: Goldfields scores 15 because it has higher levels of activity and is approaching the cautionary threshold for one of the indicators. It requires an update at a minimum once every five years. See Appendix 10.6 for complete details on scoring metrics and update frequency requirements.

No LMU will go without updates for longer than ten years. The Parties are responsible for considering this when they plan future updates and for ensuring there are enough resources to complete them. This ensures that each 10-year Plan Review is informed by data updated since the last review. As technologies and access to data improve, the Parties may increase the frequency of updates. Reporting and sharing of development and activity data among industry, governments, and the Commission are key to making informed decisions about how often to update indicators.

IMPLEMENTATION ACTIONS	
11	Establish a centralized ledger for the Region and populate it with the most up-to-date data for development footprint indicators. (Parties with Commission)
12	Support the Commission in developing a way for proponents to contribute information on development footprint to the regional ledger.
13	Acquire satellite imagery necessary for linear feature density and surface disturbance calculations, following frequency guidance in Section 3.6 and Appendix 6. Interpret satellite images, evaluate which features are human-caused, and create and publish geospatial layers – for example, through GeoYukon. (Government of Yukon)
14	Annually assess required update frequency for development footprint indicators for all LMUs.
15	Review and revise **Table 14** as part of adaptive implementation, to improve its ability to prioritize LMUs over time.
16	Improve resolution and increase the potential frequency of updates to development footprint indicators by considering other sources of imagery as they become available.

Photo: Government of Yukon

3.7 Assessment

Assessment reviews available knowledge on value health and compares this to value goals. It often uses indicators and thresholds and leads to conclusions that direct appropriate responses. Knowledge comes in many forms, often from monitoring. Assessment considers past health, anticipated health, and trends. Cumulative effects assessment will inform the Commission's conformity determinations. The Parties will need to work with YESAB and those involved in other processes to integrate cumulative effects assessment on an ongoing basis. They must do this as more framework components become available. In the meantime, decision-makers will use the best available information on value health in the context of value goals. They will also use development footprint indicator levels relative to LMU thresholds to inform conformity determinations specifically, and project assessment more broadly.

Effective assessment requires collaboration between knowledge-holders, recommendation bodies, and decision-makers. Knowledge-holders use indicator data (which can come in many forms) to inform expert opinion about value health and how it relates to thresholds. Decision-makers and recommendation bodies rely on these knowledge-holders for advice, and provide them with any tools and information they need to carry out an assessment. Assessment results in a conclusion about the value health range.

Assessment of cumulative effects and value health should be integrated into individual project assessments and broad-scale and long-term work, like Plan Review or legislative change. The Commission conducts a specific form of assessment when it uses cumulative effects considerations to inform conformity determinations. Projects that are likely to result in a critical threshold for any priority value within an LMU do not conform to the Plan. More holistic considerations of value health (beyond the critical threshold window) may also inform conformity.

YESAA (s. 42.1.d) requires assessors to consider the significance of cumulative effects when evaluating a project. Both the Commission, through considering cumulative effects in conformity determinations, and the Parties, through including considerations of cumulative effects on value health in their comment submissions, support YESAB in fulfilling its mandate.

Assessment should consider the past and present status of a value, and anticipate effects. This is important in predicting when thresholds may be reached (in either a positive or negative direction), and contributes to future certainty. Scenario analysis is a tool to anticipate effects, and should consider:

- Climate change predictions and consequent anticipated changes in environmental, socio-cultural, and/or socio-economic factors.
- Proposed or permitted projects that have yet to be developed.
- Anticipated positive outcomes of current and proposed activities.
- Anticipated or potential political or legislative changes.
- Trends in industries, economies. and other aspects of society that are relevant to the value.
- Trends in related values.

Importantly, these scenarios should go beyond considering levels of potential development or disturbance. They should anticipate both positive and negative cumulative effects, as well as growth and degrowth possibilities, and consider interconnected values. They should be undertaken with the aim of finding mutually reinforcing benefits instead of trade-offs between values.

Assessment of Values and Development Footprint Indicators

While many framework elements will take time to develop, the Parties and the Commission will begin to carry out cumulative effects assessment immediately through a values lens and using the development footprint indicators. In this process, the Parties have primary responsibility for values and the Commission for development footprint (see also Section 3.6). The conclusions of assessments will inform conformity determinations and direct management responses.

These assessments, and any relevant information that feeds into them, will help inform the participation of all bodies involved in project assessment. All governments and regulatory bodies active in the Region are encouraged to integrate cumulative effects assessment using these initial tools into their decision-making as soon as possible.

To assess cumulative effects to value health in the absence of indicators, the Parties will consider available information on value health in the context of value goals to guide their decisions. For example, the Government of Yukon periodically publishes caribou range assessments that include herd demographic data – for example, calf recruitment and adult sex ratio.

Until the Parties codevelop indicators for caribou, the health of herds as reflected in these data, relative to the caribou goal of "Healthy and resilient caribou herd populations that grow towards historic levels", should be a prime consideration in decision-making. Considering a value's goal(s) and health during project development and assessment uses the wide range of ongoing monitoring occurring in the Region.

Cumulative effects assessments will influence conformity determinations in the following ways:

- Any project whose proposed development would lead to a critical threshold being crossed for either development footprint indicator does not conform with the Plan.
- Any project whose projected effects are likely to severely threaten a value's health, as defined by value goals, does not conform to the Plan.

The Commission's assessment responsibilities will also include periodic calculations related to reclamation. The reclamation framework (Section 3.11) provides a mechanism to adjust calculated[9] surface disturbance and linear feature density values as reclamation proceeds.

9 Calculated surface disturbance and calculated linear feature density represent the published surface disturbance (SD) and linear feature density (LFD) values for an LMU, minus any reclamation under the reclamation framework (Section 3.11). The calculated values are used to determine LMU status for development footprint thresholds.

IMPLEMENTATION ACTIONS	
17	Develop standard estimates of surface disturbance and linear feature density for different types of Class 1 and 2 activities to reduce burden on proponents of smaller projects (Government of Yukon).
18	To enable cumulative effects assessment during project assessment, regularly update and publicly share: • Value health status in the context of value goal(s) (see Section 3.3) (Parties). • Development footprint indicator status (see Section 3.6) (Commission).
19	During project assessments, assess cumulative effects to value health by: • Identifying value health status for LMU priority values and updating if necessary. • Evaluating how/if the proponent has considered priority values and their health, and applied the mitigation hierarchy (Section 2.2.3) in a way that reflects an understanding of priority values and potential impacts of their project. • Evaluating if the project is likely to cause the health of any priority value to depart significantly from its goal(s). • Considering other existing and proposed projects and activities in the area. Values identified for indicator development and those with known health concerns should be considered to a higher standard than values that are healthy and stable.
20	During project assessments, assess cumulative effects as measured by development footprint indicators by determining the anticipated change in development footprint for the LMU based on the proposed project, and evaluating if the project is likely to result in any threshold being crossed (Commission).
21	If assessment of monitoring data shows a sudden or large change in a value, indicator, or stressor, the Parties should evaluate the ramifications for related values and collaborate to determine appropriate responses. Responses may include Plan amendments.

3.8 Responses

Responses are all the actions that decision-makers take to maintain, encourage, or restore value health, as defined by value goals. The Plan provides broad guidance on appropriate responses to value health ranges (target, cautionary, critical). Once the Parties identify indicators and set thresholds for Plan values, they will need to identify more specific responses that apply when indicator levels reach each threshold. In the meantime, the Plan provides objectives for management actions based on development footprint indicator levels, and recommends specific responses. The Parties will begin expanding consideration of cumulative effects in ongoing management and decision-making, including giving weight to cumulative effects assessments completed at the project level.

Responses are actions that slow or stop the pace or reduce the scale of activities that harm a value, and/or initiate or enhance activities that benefit a value. They vary in scope, scale, and complexity, from daily on-the-ground stewardship to emergency legislative interventions. As concerns about value health increase, the prescribed actions should be additive to those carried out when values are healthy, except where those actions would interfere with more stringent management. As with human health, actions taken while values are still relatively healthy are more effective at protecting the value. They usually require fewer resources.

An effective cumulative effects management regime includes suites of responses for each health range for a given value (as defined by indicators and thresholds) – for example, **Table 5**. When establishing these, the Parties should consider the following:

- A lack of, or uncertainty around, data is not an excuse for inaction if values are threatened (precautionary principle).
- While improved monitoring may be a required response, it is not adequate on its own to return a value to health.
- Actions that benefit more than one value should be prioritized over those that benefit one at the expense of another.
- Coordination among decision-makers, assessment bodies, inspectors/guardians, and people on the land is especially important at the response stage because of the potential interactions between responses.
- The time it takes to implement management actions, and the time it takes for values to respond, should both be considered.

By agreeing on suites of responses to be implemented when thresholds are crossed, the Parties support swift and efficient action across departments, governments, and other agencies. Which actions are most appropriate for each threshold will depend on the nature of the value and indicator(s) and the ecological, social-cultural, and socio-economic context of the value. For clarity, one indicator reaching a threshold is sufficient for triggering a response to protect a value, regardless of how many are being monitored.

Table 5: Example responses by value health range for Caribou.

VALUE HEALTH		APPROPRIATE RESPONSES	EXAMPLE
TARGET RANGE	Stable and healthy	Follow best practices, monitor value health, and improve understanding of cumulative effects on the value.	A caribou herd has a relatively stable population within the target range as defined by the goal. Parties engage in routine monitoring and actively participate in co-management plans related to the herd and activities within its range. Best practices are followed, promoted, and enforced by the Parties.
	ADVISORY THRESHOLD		
	Moderately stable and healthy but threatened	Increase monitoring and understanding of stresses to the value. Identify and prepare for proactive management actions.	Herd population is in the target range, but calf survival rates have been low for a few years. Parties increase frequency of non-invasive monitoring and community interviews to improve understanding of herd health, research the status of habitat within the herd range, and assess anticipated development projects within key habitat areas.
CAUTIONARY THRESHOLD			
CAUTIONARY RANGE	Unstable, declining, and/or threatened	Proactive management actions to slow or stop the pace and scale of impacts to the value. Increase monitoring.	Herd population is in the cautionary range, and demographics point to likely continued decline. Parties limit access to key habitat areas during key times of year, and increase rigour of assessment of activities and development within the herd range.
CRITICAL THRESHOLD			
CRITICAL RANGE	Very unstable, in steep decline, or otherwise in critical danger	Management actions that stop and, ideally, reverse the pace and scale of impacts.	The herd has declined into the critical range, and demographics predict further decline. Parties prohibit hunting, withdraw key habitat from tenure disposition, and place strict timing windows on activities within existing tenure.

Photo: Government of Yukon

Common Types of Responses

Informing Project-level Decisions

Aligning project decisions with conformity determinations, which are informed by assessing cumulative effects, is a straightforward way to integrate cumulative effects management into existing processes.

Knowledge Gathering

Increasing understanding of value health and the relationships between values, indicators, and responses can lead to better decisions and better outcomes for values. Different types of knowledge gathering (in scale, type, and intensity) are appropriate at different ranges of value health, though knowledge gathering is not a substitute for a management action or intervention. Even while enacting urgent responses, gathering information is important to inform future action. "Monitoring" is one type of knowledge gathering. The Knowledge Gaps identified for each value should guide knowledge gathering and research in the Region.

Implementation of Existing Tools

These responses include:

- Changing the frequency or intensity of compliance inspections and enforcement related to activities that are harming, or are suspected of harming, a value.
- Enacting emergency measures where the provision exists in legislation.
- Engaging in an existing process like the Yukon Fish and Wildlife Management Board regulation change process.
- Increasing stewardship through public engagement and education.
- Physical actions to accompany management decisions, such as decommissioning or repairing a road.
- Implementing provisions of existing legislation and policy for specific circumstances, like Special Operating Areas for Placer Mining (*Placer Mining Act;* SY 2003, c.13).

Governance Actions

Sometimes the action required to protect a value is not found in existing policies, plans, or legislation. In these cases, while the Plan cannot require either Party to enact or amend legislation (THFA s. 11.7.3 and 11.7.4), the Parties should explore new tools (or amendments to existing ones) in response to changing conditions or new information. This is an important part of adaptive implementation. When the Parties undertake review of legislation, strategies, and plans that affect Plan values, they should consider the health and trends of those values, and highlight them during public engagement.

Responses to Development Footprint Level

The development footprint thresholds bracket indicator ranges that require responses in a progressive approach, like those for value health. More stringent actions are required as indicator levels rise, and they should be carried out alongside those required at lower levels. The Plan provides objectives for each indicator range, along with recommended responses to meet these objectives (Table 6). They should be applied along with value-specific direction (Section 5) for an LMU's priority values.

Table 6: Management objectives and recommended responses by development footprint range.

TARGET RANGE	**Objective: Maintain** and **monitor** value health, and **maintain** acceptable level of disturbance. Recommended responses: • Follow best practices and all Plan management directions. • Respond to Knowledge Gaps through research. • Maintain ongoing monitoring. • Continue developing cumulative effects components for priority values. • Continue supporting and developing improved reclamation methods and standards, and apply them to legacy sites.
ADVISORY THRESHOLD	
	Objective: Improve understanding of value responses to disturbance, **slow** pace of development and **increase** monitoring of development footprint.
CAUTIONARY THRESHOLD	
CAUTIONARY RANGE	**Objective: Slow** or **stop** the pace of development, and **monitor** value health and development footprint. Recommended responses: • Identify and consider values at risk during project assessments. • Expand consideration of anticipated activity and development during project assessments, including within existing permits. • Increase the frequency and spatial coverage of monitoring. • Increase availability of monitoring outcomes to the public. • Employ regulatory tools such as access control and activity restrictions. • Support long-term investment by industry operators. • Encourage and engage in habitat enhancement relevant to values at risk, following the reclamation framework. • Increase on-the-ground presence – for example, inspectors from either Party. • Increase bonding and security requirements for proposed projects.
CRITICAL THRESHOLD	
CRITICAL RANGE	**Objective: Stop** and, ideally, **reverse** the pace and scale of development. Recommended responses: • Withdraw area from further tenure disposition. • Do not approve any further permits for development. • Restrict access and activities. • Require reclamation before any further disturbance can occur. • Engage in active habitat enhancement and reclamation.

IMPLEMENTATION ACTIONS	
22	In the decision phase of project assessment, make decisions that are consistent with Plan conformity as determined by the Commission, as per THFA and YESAA.
23	When development footprint metrics are updated for an LMU, identify appropriate responses using the objectives and recommendations in Section 3.8.

Photo: Government of Yukon

3.9 Adapting Cumulative Effects Management

Development of cumulative effects management components will be ongoing, and the incorporation of new components into management should face as few barriers as possible. Conversely, changing thresholds or other elements can have significant impacts on the effectiveness of management under the Plan. The Parties must give these changes careful consideration. All decisions are subject to agreement by both Parties.

The following actions can be done at any time. Decision-making authority may be delegated by the Parties to representatives in the Cumulative Effects Working Group or similar.

- Selection of indicators, thresholds, and responses related to Plan values.
- Revisions to any of the above that provide clarity or reflect improvements in methods or technology.
- Integration of existing monitoring programs.
- Identification of monitoring responsibilities.

The following may occur through Plan amendments:

- Substantive revisions to indicators.
- Substantive revisions to indicator monitoring (selection of monitoring program, or modification of an existing program).
- Revisions to thresholds.
- Substantive revisions to responses at a given threshold.

The following may only occur during Plan Review:

- Addition or revision of Plan values.
- Removal of indicators, thresholds, or responses.
- Revisions of indicators or responses that are reasonably likely to result in substantive changes in outcomes for values.

During Plan Review, the Parties should assess the cumulative effects management regime of the Plan and the above process for component development for the following:

- Are values being protected and maintained within their goal ranges? If not, why not?
- Are cumulative effects being adequately considered during project-level assessments?
- Are cumulative effects being adequately considered in high-level planning and decision-making?
- Are indicators for priority values functioning effectively?
- What proportion of values are represented in the cumulative effects framework?

Following this assessment, the cumulative effects management sections in the Plan should be revised as needed based on the learning outcomes of the previous work.

3.10 Overlays

Management directions apply across the Region, and additional management directions apply where needed in individual LMUs. Overlays are a tool to group management directions aimed at protecting a specific value at the scale most appropriate to that value, which may not match LMU boundaries. Where directions overlap, the management direction that is most effective at protecting the overlay value applies.

Overlays may include adjusted thresholds for development footprint indicators, value-based indicators, and/or other specific direction related to cumulative effects management. As cumulative effects management becomes more effective in the Region, the Parties should consider overlays as one of the tools for its application. The Plan initially includes overlays for Caribou (Section 5.2.4), and identifies one indicator within each overlay.

Photo: Government of Yukon

3.11 Values-based Reclamation

The Region's residents and visitors share responsibility for stewarding the land and water. Reclamation is a form of accountability for our actions when they have disrupted the land's ecological and cultural connections.

Not all activities require reclamation. Some activities may be low impact, like hiking and berry picking, or even provide benefits, such as spreading berry seeds. Other activities, such as building infrastructure or mineral development, can contribute to socio-economic values or community well-being (for example, contributions to the local economy or road access to communities), but have other long-lasting effects that are not desirable.

Within the context of this Plan, another reason to complete reclamation is the understanding that reclaimed land can be subtracted from the development footprint. To be successful in reclamation, we must acknowledge that reclamation is not the return of an ecosystem to its original state because:

1. It is impossible to completely remove all landscape change; we cannot go backwards.
2. Defining "original state" is complex (pre-human contact, pre-Beringia, pre-climate change?) and necessarily arbitrary.

Reclamation is the act of intentionally influencing ecosystem development after disturbance and thus requires a clear vision of what we are trying to achieve. For small, low-intensity disturbances like a hand-cut trail, reclamation to the pre-disturbance ecosystem may be possible through actions such as felling a few trees across the trail to make it impassable and allowing the forest to regrow. For larger disturbances that involve the removal of vegetation and disruption of soils, the ecosystem is transformed, which in turn transforms social and cultural connections to the place. Larger reclamation efforts are then required.

Opportunistic plant species will establish over time without reclamation; however, ecological, social, and cultural connections to places are dependent on which species establish and in what abundance. Examples include a caribou's dependence on a forest with abundant lichens, and berry pickers' (human and non-human) requirement for berry patches. Reclamation provides the opportunity to encourage ecosystem development towards specific values, such as caribou or berries.

While some plants like willows may grow more quickly than others, in general, northern ecosystems are slow to form after disturbance. It can take decades or longer for ecosystems to support the desired ecological, social, and cultural values. Adaptive management will be required over time, as ecosystem development is complex and can be unpredictable. Reclamation must be approached with humility and a commitment to continuous learning.

A one-size-fits-all approach to reclamation is likely to be unsuccessful because the land is a patchwork of ecosystems, animal populations, and topographies. Values-based reclamation offers the potential for nuanced outcomes, tailored to the unique characteristics of each LMU as indicated by the LMU priority values.

Reclamation is grounded in the Plan's values to:

- Provide direction about what system or species is the focus of localized reclamation efforts.
- Identify what reclamation outcomes look like for each LMU.
- Provide certainty to industry and the public about what values must be considered in reclamation planning in each LMU.
- Provide reclamation-specific timelines, which are independent of governments, convenience, or operators.

5-Step Values-Based Reclamation Framework

The 5-step framework (adapted from the *International Principles and Standards for the Practice of Ecological Restoration:* 68, 69) is a flexible and transparent tool to assess the progress and quality of reclamation efforts for each value in the Region. Each level represents a step along a restoration trajectory, from basic stabilization to full ecological and cultural functionality (Figure 9). This system allows for nuanced evaluation by recognizing partial progress while still aiming for long-term, values-based reclamation.

In values-based reclamation, it is essential that reclamation efforts focus on the priority values identified for each LMU. This ensures that reclamation outcomes align with the Plan's broad goals (Section 2.1). Reclaiming land to support a non-priority value may still offer benefits, but it does not directly

contribute to the Plan's vision and goals. As a result, such efforts will receive lower recognition within the step system. Focusing on priority values helps avoid a one-size-fits-all approach and supports more meaningful, place-based recovery that reflects the unique characteristics of each LMU.

The values-based reclamation framework plays a critical role in determining how much land can be returned to the available development "quantum" within each LMU **(Table 7).** Reclamation efforts that have reached Step 5, indicating full ecological function and cultural acceptability, can be fully subtracted from the total disturbance footprint. However, land that reaches a lower step contributes only partially to the quantum, reflecting incremental progress toward restoration.

This tiered approach incentivizes high-quality, values-based reclamation while recognizing and rewarding meaningful progress. It also ensures that only land meeting the highest restoration standards is counted as fully reclaimed, helping maintain ecological integrity and cultural relevance across the Region. Only land credited through this framework can be subtracted from the LMU's development footprint. This ensures that new development is tied to meaningful reclamation progress and supports long-term ecological and cultural integrity.

Figure 9: Descriptions of the five steps for reclamation in the Region. The first three steps are possible to achieve within the lifetime of a permit; steps four and five require time rather than human intervention to be achieved.

STEP 1 Early Stabilization	Site is physically stable with basic erosion control. Opportunistic plant species may be present. No clear trajectory towards priority values. Landscape threats persist at a high level.
↓	
STEP 2 Early Recovery	Physical conditions capable of supporting some biota. Early signs of ecosystem function (e.g., soil development, water retention). Some remaining threats.
↓	
STEP 3 Functional Trajectory (Reclaimed)	Low numbers of threats, intermediate in degree. Priority vegetation species are present and are likely to be self-sustaining due to the presence of intermediate levels of ecosystem functions and processes. Cultural access or use is possible but limited.
↓	
STEP 4 Culturally and Ecologically Functional (Recovered)	Ecosystem supports key services and cultural practices. Site is resilient to moderate disturbance. Threats are low in number and degree. Substantial subset of characteristic biota present (representing all species groupings), along with characteristic structure and evidence of key function and processes capable of supporting self-sustaining populations. Cultural site use is possible and likely. Overarching goal of reclamation activities.
↓	
STEP 5 Restored	Ecosystem is self-sustaining, resilient, and supports full cultural and ecological functions. Threats are effectively absent. A characteristic assemblage of biota is present, exhibiting structural and trophic complexity. Resilience is restored with the return of appropriate disturbance regimes.

The credit allocated for Step 1 is 10%. This has been intentionally set higher than zero to incentivize action and to acknowledge that once operators cease operations, wildlife will begin moving through the land with greater frequency, though not as often as they would for higher steps. Throughout the lifetime of a permit, it is possible to achieve up to Step 3; however, this is not guaranteed. To progress from Step 3 to Steps 4 and 5, ongoing stewardship and management are required by the Parties. Reaching Steps 4 or 5 is a matter of time after reaching Step 3 rather than effort, as it reflects the time required for the ecosystem to recover naturally.

Table 7: How reclamation reduces the development footprint at each step.

	CREDIT ALLOCATION
Step 1	10%
Step 2	30%
Step 3	50%
Step 4	80%
Step 5	100%

Responsibility and Assessment

Sites are assessed first at year one, and then at intervals of 5, 10, 25, 50, and 100 years, to evaluate the current level of reclamation and adjust the credited area if needed. Additional assessments may occur subject to joint approval of the Parties. These long timeframes are intentionally designed to support multi-generational planning, recognizing that meaningful ecological recovery and cultural renewal often happen over decades, rather than the life of a permit.

A centralized reclamation ledger tracks cumulative credits and changes over time, providing transparency and continuity across generations of land users and decision-makers. Reclamation progress will need to be assessed transparently and held to publicly available standards. All steps for each Plan value should be determined by the Parties. An example of what this might include is shown in Table 8; the Parties should continue working on this and include the most accurate standards.

Despite best efforts, reclamation outcomes are not always fully within a proponent's control. For example, a site may be ecologically restored, but if surrounding mines remain active, caribou may not return to the area, raising questions about how success should be measured. This highlights the importance of distinguishing between operator responsibility and land manager responsibility.

Proponents are accountable for achieving reclamation as a baseline standard by making the area suitable for the intended value. Decision-makers are subsequently responsible for facilitating broader ecological recovery, such as ensuring that caribou populations are healthy and able to reoccupy restored habitats, which corresponds to states of recovery and restoration.

Assessment of up to Step 3 should be carried out by Land Guardians, Natural Resource Officers, or other delegated authority, who are already embedded in the landscape and familiar with local conditions. For higher-level evaluations, Steps 4 and 5, enforcement agents or other designated bodies, as directed by the Parties, are responsible for verifying broader ecological and cultural outcomes.

To streamline implementation and avoid creating new oversight bodies, the Government of Yukon should incorporate this framework directly into its permitting process. By doing so, the five-year assessments can be completed as part of existing regulatory reviews, thereby reducing administrative burden while ensuring that reclamation progress is transparently tracked and aligned with long-term regional values. In order to incentivize reclamation, the Parties should establish performance-based incentives in which operators demonstrating strong reclamation performance receive administrative efficiencies while higher-risk operators face enhanced oversight. Potential incentives may include faster permitting timelines for operators with strong reclamation performance, probationary periods for new operators, and increased bonding requirements for operators with poor reclamation histories.

Table 8: Example Reclamation–Values Table. The five steps are described for each of the Plan's values, providing a transparent assessment tool for operators and assessors. This table serves as an example, and the Parties should collaborate to complete it using the best available information and metrics.

VALUE	SITE-LEVEL INDICATORS (OPERATOR RESPONSIBILITY)			CUMULATIVE EFFECTS INDICATORS (PARTIES' RESPONSIBILITY)	
	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Water/Chu	Basic erosion control	Seasonal flow re-established (quantity, presence/ absence)	Water quality meets agreed baseline standards for drinking water and aquatic life	Aquatic habitat supports native plant and animal species	Ecological function of stream (including hydrological function) is fully restored, and cultural use is supported

VALUE	SITE-LEVEL INDICATORS (OPERATOR RESPONSIBILITY)			CUMULATIVE EFFECTS INDICATORS (PARTIES' RESPONSIBILITY)	
	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Plant and Animal Relations	Site protected; unique species are protected	Soil profiles preserved	Endemic species present	Ecological function restored	Cultural relationships supported
Salmon/ Tr'ojà'	Streambed stabilized	Riparian zone restored and ecologically functioning	Salmon observed seasonally	Spawning success documented	Sustained salmon population that supports subsistence harvesting
Caribou/ Wëdzey	Ground cover stabilized	Lichen growth initiated	Habitat use observed	High-quality habitat that is consistently used (through migration corridors or annual range requirements)	Cultural use of caribou and ecological use by caribou restored; herds are resilient and populations are sustainable, supporting subsistence harvesting
Moose/Jëjik	Browse species present	Moose signs observed		Sustained moose presence	Cultural harvesting is sustainable and the moose population is sustainable
Wetlands	Roads and trails are decommissioned, and hydrology is stabilized	Early-seral wetland plants established	Amphibians return	Ecosystem services restored	Cultural wetland use is supported and wetland animals (for example, moose, beaver) are present

VALUE	SITE-LEVEL INDICATORS (OPERATOR RESPONSIBILITY)			CUMULATIVE EFFECTS INDICATORS (PARTIES' RESPONSIBILITY)	
	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Landscapes	Roads and trails are decommissioned, and soil is stabilized	Representative species have established	Consistent use by indicator species (mammals, birds)	Visual landscape restored	Cultural practices such as hunting, trapping are sustainable
Land–People Relationship	Access restored	Knowledge-sharing event or process held; youth engagement occurs			Deep cultural and community connection established
Community Culture	Access restored for select user groups		Area is used by the community		Cultural practices are thriving and access is accessible to everyone
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	Restoration led by Tr'ondëk Hwëch'in	Restoration led by Tr'ondëk Hwëch'in	Restoration led by Tr'ondëk Hwëch'in	Restoration led by Tr'ondëk Hwëch'in	Restoration led by Tr'ondëk Hwëch'in
Community Resilience	Local jobs created; skills training is offered; adaptive capacity and local leadership are strengthened		Alternate land use is established (for example, improved food security, solar farm, housing)		Full range of other, agreed-upon uses is in place; a wide range of options exists
Sustainable Local Economy	Economic activity initiated, including local employment	Reclamation-linked enterprises and/or tourism established	Long-term financial viability and benefits demonstrated		

IMPLEMENTATION ACTIONS

24 Establish Governance and Oversight

- Define roles and responsibilities for all Parties: Government of Yukon, Tr'ondëk Hwëch'in, proponents, YESAB, Land Guardians, Natural Resource Officers, and (other) enforcement agents.
- Within one year of Plan approval, form a working group, including Indigenous representation and technical experts, to oversee the development and rollout of the framework. The Commission should be an active member of this working group.
- Consider an industry advisory board.

25 Continue the development of the Reclamation Framework

- Finalize the reclamation-values tables that define ecological, cultural, and community values.
- Refine the step system with clear criteria for each level.
- Establish performance-based incentives for operators.
- Establish operator vs. land manager responsibilities, with proponents accountable for up to Step 3, and land managers / enforcement agents for Steps 4 and 5.

26 Create the Centralized Reclamation Ledger

- Design and build a digital ledger system to track reclamation credits, site assessments, and cumulative progress over time (Section 3.6).
- Ensure it is accessible to all Parties and the public, and supports long-term data storage.

27 Integrate into Permitting and Regulatory Processes

- The Government of Yukon should incorporate the framework into its permitting system, so that reclamation monitoring is part of existing review cycles.
- Align the five-year assessment intervals with current inspection or renewal timelines to avoid duplication where possible.

28 Build Capacity for Assessment

- Train land guardians and natural resource officers to assess reclamation up to Step 3.
- Designate or establish enforcement agents or independent assessors to evaluate Step 4 and 5 outcomes, as directed by the Parties or the working group.

IMPLEMENTATION ACTIONS (CONT.)

29 Pilot the Framework

- Select a few active or recently closed sites to pilot the framework.
- Conduct initial assessments, apply the step rating system, and record results in the ledger.
- Gather feedback from assessors, proponents, and communities.

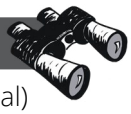
30 Refine and Scale

- Use pilot results to refine criteria, processes, and tools.
- Develop guidance documents and training materials for broader rollout.
- Scale up to include all relevant sites in the Region.

31 Monitor, Report, and Adapt

- Conduct assessments at 5, 10, 25, 50, and 100-year intervals. Additional assessments may occur subject to joint approval of the Parties.
- Use results to adjust credited areas, inform land use planning, and support adaptive management.
- Regularly review the framework to ensure it remains aligned with evolving values and changing environmental, social, and economic realities.

KNOWLEDGE GAPS



Establish reference sites throughout the Region and track these sites over the short term (annual) and long-term (decades) to understand "natural" ecosystem change. Improve understanding of how changing reference conditions can contribute to broader reclamation goals. Reclamation standards may require adaptation to meet changing climate conditions.

4

Access Management

Artwork: Darcy Tara McDiarmid

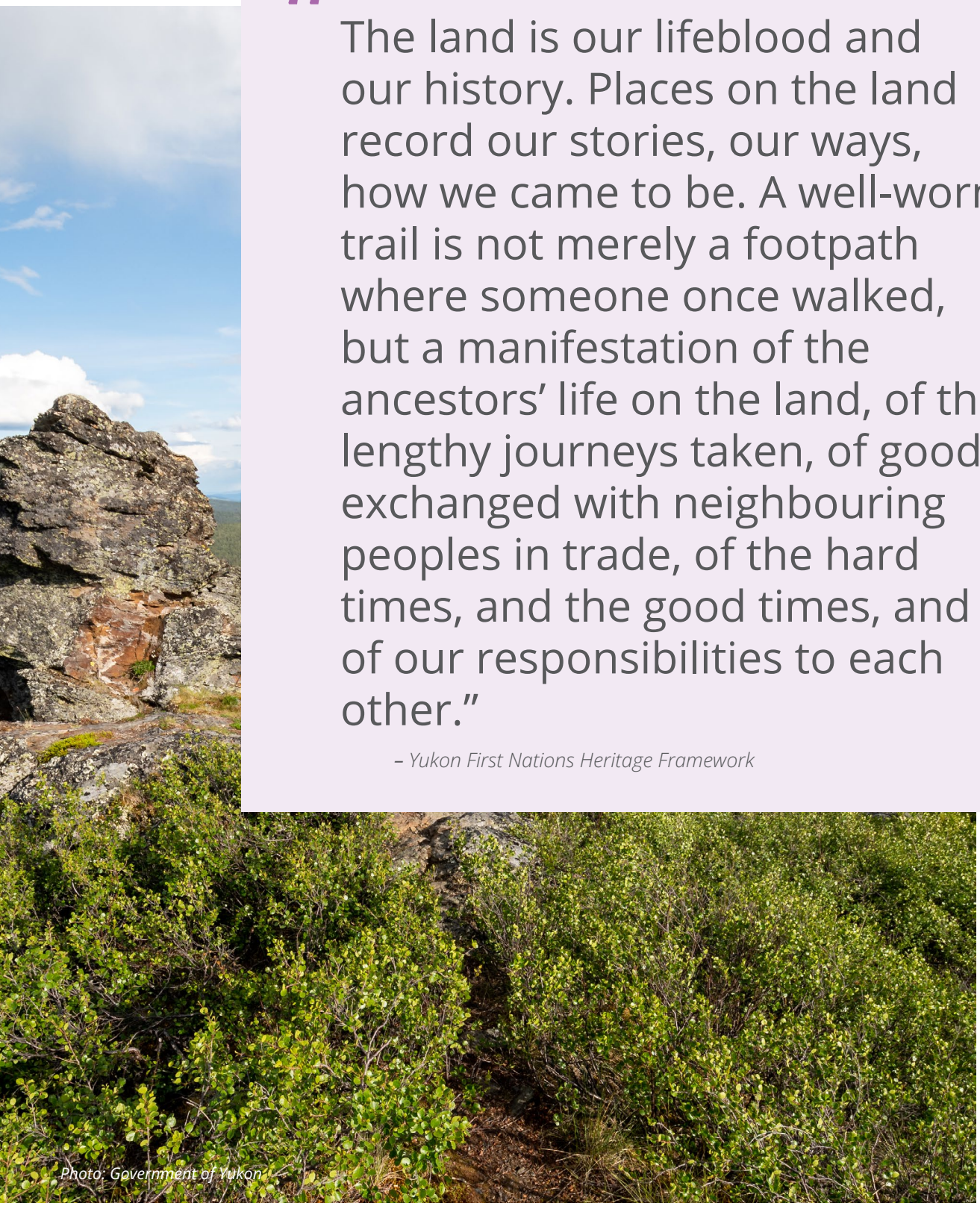


Photo: Government of Yukon

> "The land is our lifeblood and our history. Places on the land record our stories, our ways, how we came to be. A well-worn trail is not merely a footpath where someone once walked, but a manifestation of the ancestors' life on the land, of the lengthy journeys taken, of goods exchanged with neighbouring peoples in trade, of the hard times, and the good times, and of our responsibilities to each other."
>
> *– Yukon First Nations Heritage Framework*

4.1 Introduction

Access includes the movement of people and the transportation of materials by land, water, and air. It plays a critical role in shaping the positive and negative long-term impacts to the land. Economic development in the Region is closely tied to access. Access enables a wide range of activities, including mineral exploration and development, trapping and harvesting, forestry, tourism, recreation, oil and gas extraction, the delivery of goods and services, and government administration.

Beyond the formal economy, access also supports non-monetary activities such as cultural activities, recreation, and scientific research. These are vital to the Region's identity and well-being. Critically, when permanent access to Dawson City is temporarily impacted (for example, by wildfire, landslides, border closures, or infrastructure maintenance), the community is left vulnerable.

Accessing land and water, however motivated, will almost always result in some impacts on fish and wildlife habitats and populations, as well as on the ways different groups of people experience natural environments. Construction and/or repeated use of aerial, aquatic, or land routes can have lasting impacts on various species of fish and wildlife. Impacts are most concerning when new routes, especially roads, are contemplated and built, particularly through undeveloped areas. The access they provide tends to facilitate new development and invites cumulative impacts.

While it is common for resource planning initiatives to emphasize road reclamation or restoration as a strategy to mitigate such impacts, such action is costly to do effectively and faces significant challenges when it involves removing access rights from users who have become accustomed to them.

Importantly, new access routes can have a significant impact on how Tr'ondëk Hwëch'in Citizens use their Traditional Territory and exercise their hunting and harvesting rights as protected in the Tr'ondëk Hwëch'in Final Agreement. The Tr'ondëk Hwëch'in have been stewards of their Traditional Territory for millennia, and new access routes threaten this way of life if not properly planned and managed.

Existing legislation and policies have a role in managing access throughout the Region, including:

- *Yukon Environmental and Socio-economic Assessment Act* (S.C. 2003, c.7)
- *Tr'ondëk Hwëch'in Land and Resources Act* (2004)
- *Off-Road Vehicle Management Area Regulation – Territorial Lands (Yukon) Act* (O.I.C. 2011/011)
- *Resource Road Regulation – Territorial Lands (Yukon) Act* (O.I.C. 2024/186)
- *Forest Resources Act* (SY 2008, c.15)
- *Parks and Land Certainty Act* (RSY 2002, c.165)
- *Placer Mining Act* (SY 2003, c.13)
- *Quartz Mining Act* (SY 2003, c.14)

Access in the Region is continually evolving, both in terms of physical infrastructure and the frameworks used to manage it. Projects like the Northern Access Route illustrate this dynamic landscape. While it was approved to proceed, it was not grandfathered into the *Resource Road Regulation,* leaving its regulatory context somewhat undefined at the time of writing this Plan.

This underscores the need for clear, adaptable access management guidelines that can respond to changing conditions and emerging projects. In areas where multiple land uses and interests intersect, Access Management Plans (Section 4.4) are essential to minimize conflict and ensure transparent decision-making.

4.2 Access Management Guidelines

Access management guidelines are designed to inform the planning, development, use, and maintenance of travel corridors in the Region.

The guidelines apply to all users, including those undertaking economic, cultural, and recreational activities, as well as governments. Guidelines are also intended to help proponents with their project design and YESAB assessors when they review projects in conjunction with the Plan's directions.

All new and existing access throughout the Region must adhere to the following guidelines:

1. All access should be managed in ways centred on the Plan's values.
2. On Settlement Land, access is managed exclusively by Tr'ondëk Hwëch'in.
3. On non-Settlement Land, all access must be co-planned and co-managed by the Parties. Decisions on access within SMAs should be comanaged by the Parties until such time as an SMA Management Plan, which includes provisions for access, is approved by both Parties.
4. Land and water disturbed for and by access should be restored, according to the reclamation framework (Section 3.10).
5. Best efforts should always be made to use existing access. This applies to all activities on the land, including mineral exploration and development. Wherever possible, access should be restricted to nodes that serve multiple operations and reduce disturbance on the land. Specifically, access nodes should be developed for the Yukon River Corridor.
6. Where important sites for traditional economic activities have been identified, access to the site should be treated with a higher standard of care and consideration.

4.3 Access Management Directions

4.3.1 EXISTING ROADS

The Region's roads (used to mean all roads and highways) are important for many activities, including transportation, recreation and tourism, subsistence harvesting, and communications. These activities affect not just the roadway but also the area next to it. Roads must be maintained and managed to support all these land uses without undermining the heritage, social, and ecological values around them, now and into the future.

Balancing potential land-use conflicts among residential, agricultural, tourism, industrial, infrastructure, and traditional activities, while conserving key wildlife habitat and ecological integrity, should be the primary focus of road management.

Where roads occur near or cross water, special use and maintenance considerations are required to protect water and ***riparian*** and aquatic habitats. The use of permanent bridges can mitigate cumulative impacts and risks associated with repeated fording. However, permanent bridges can also increase use or access to an area where this may not be desirable, and they require ongoing maintenance to ensure user and environmental safety. The use of ice bridges can be a good solution with minimal impact from use and development, where only winter access is required.

For considerations related to major maintenance, including replacement or construction of bridges, also see Section 4.3.2. If a bridge is proposed over the Yukon River to connect the North Klondike and Top of the World highways, it must be accompanied by a sub-regional plan for LMU 3: Chu Kon Dëk (Yukon River Corridor).

Some existing roads are the result of trails and roads being developed for resource access by industry – for example, forestry, mining. Roads actively used by industry are regulated by industry regulations. For example, many placer mines

overlap with watercourses of various widths, and stream crossings (including the construction and relocation of bridges, culverts, and fords) are a regular part of activities. These activities are regulated through placer and water authorizations when they occur on-claim.

Requirements about if, when, and how to reclaim these types of roads and trails vary by industry. Regardless of how an existing road came to be (industry, historic trail routes, public infrastructure), once the public becomes accustomed to using a road, regardless of its original purpose, it is difficult to remove it from use. The Plan's reclamation framework (Section 3.11) and access management guidelines (Section 4.2) work together to guide future road planning to limit unintended consequences on the landscape.

While it may be desirable to reclaim some existing roads over time, the Plan acknowledges the Region's highways as permanent features on the landscape. As such, the area within 30 m of the centre line of the North Klondike, Dempster, and Top of the World highways is not included in development footprint indicator calculations for the LMUs they pass through or border.

The directions in this section mirror the certainty provided by development footprint thresholds elsewhere in the Region. They ensure that adequate access and infrastructure are allowed for ongoing maintenance of these important roadways, and that the values present near them will be protected. No directions are included here for the Dempster Highway as it is fully encompassed by its own LMU.

Photo: Government of Yukon

North Klondike Highway

Originally a winter road used by horse-drawn sleighs, the North Klondike Highway has evolved into a vital, year-round corridor. It connects the Region to central and southern Yukon, facilitating the movement of goods and resources, and providing essential access to the Top of the World Highway, the Dempster Highway, and the Goldfields.

The highway is used year-round by residents for recreational, economic, and cultural pursuits. Traffic increases in the summer months due to tourism, international travel to Alaska, and mineral exploration and development. The North Klondike Highway showcases the Yukon's rich ecological diversity and heritage. It winds through a variety of landscapes and ecosystems, tracing the Yukon and Klondike rivers for much of its length **(70)**.

Top of the World Highway

The Top of the World Highway is a key corridor between the Yukon and Alaska. Originally established as a wagon trail to the Sixtymile goldfields, this Highway remains an important route for mineral exploration and development in the Region, and is home to the northernmost international border crossing in North America, which is open annually from May to September.

The route and the surrounding lands have deep cultural and historical significance for the Tr'ondëk Hwëch'in, and the highway connects families living on both sides of the border. It is used year-round for hunting, harvesting, cultural activities, and recreation; it is also used seasonally by tourists.

The highway traverses unglaciated ridgetops with volcanic landforms, featuring unique ecosystems rich in biodiversity and endemic species **(71,72)**. In 2019, the Government of Yukon and the Tr'ondëk Hwëch'in co-developed the Top of the World Highway Interpretive Plan, which aims to enhance the experience for travellers by presenting stories and information about the highway and about local people, past, and present.

Key Planning Issues

- Road maintenance and development, including accessing and extracting gravel and other aggregate materials, can disturb wildlife, damage fish and wildlife habitat, and disturb heritage resources.
- Maintenance needs increase with use, particularly for areas of roads and highways that are underlain by permafrost and therefore vulnerable to climate change.
- Traffic and human use of areas along roads can affect the ecological and cultural integrity of adjacent areas, including through hunting pressure.

- More traffic increases the risk of wildlife–vehicle collisions.
- Increased regional tourism leads to more traffic and human use along roads.
- Road corridors are heavily used by First Nations exercising their rights to traditional economic and subsistence harvesting activities.
- Road corridors often see high use by off-road vehicles because of easy access; off-road vehicle use can disturb wildlife and habitat.
- Flooding, wildfires, permafrost thaw, and other climate impacts damage roads and the surrounding corridors. This increases maintenance needs and creates safety risks and the potential for disruption of transport of essential goods and services.
- Placer mining often requires construction and relocation of roads throughout a mine's lifetime, including water crossings.
- Improperly maintained bridges can affect water, fish, and aquatic and riparian habitat, including through direct destruction of habitat, increased sedimentation, or blockages to fish passage.
- Fording can result in aquatic and riparian 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.

Goals

1. The visual integrity and natural aesthetic of road corridors are maintained.
2. The cultural, economic, recreational, touristic, and natural values along road corridors are preserved.
3. Roads are maintained to a standard that ensures safe use for all users of roadways and corridors.
4. Activities along roads do not interfere with the use and enjoyment of Settlement Land, or with traditional economic activities practised in corridors.
5. Land use conflicts and cumulative effects within road corridors are minimized.
6. The ecological integrity of road corridors is maintained to ensure that harvesting, hunting, and traditional economic activities can remain sustainable.

STEWARDSHIP DIRECTIONS

1	Maintain access to aggregate materials near highways for ongoing maintenance and major future construction projects.
2	Carry out road maintenance, including accessing and extracting aggregate material, in ways that minimize negative impacts to values.
3	When using roads and adjacent corridors, do not negatively affect or restrict access to drinking water or heritage sites and resources.
4	Take precautions to avoid the introduction of invasive species.
5	When using off-road vehicles (ORVs) within road corridors, take care not to undermine cultural, wildlife, and traditional use values. Limit use to existing trails and access routes.
6	When using roads and adjacent corridors, do not jeopardize the scenic integrity and natural aesthetic of the viewscape.
7	When using and maintaining water crossings on existing roads, including on claims, apply the mitigation hierarchy with a focus on avoiding negative impacts to water, fish, and aquatic and riparian habitats.
8	Where roads cross waterways without bridges, use winter-only access (ice bridges) wherever possible.

IMPLEMENTATION ACTIONS

32	Implement safety infrastructure such as pullouts, designated viewpoints, and signage for wildlife crossings and hazardous road conditions. This should be prioritized for the Top of the World Highway.
33	Continue to implement and monitor the Top of the World Highway Interpretive Plan.
34	In collaboration with the Dawson District Renewable Resources Council and/or other relevant organizations, monitor the use of off-road vehicles within the Top of the World Highway Corridor for: • Impacts to the values identified in the adjacent LMUs; and • Identification of areas for potential off-road vehicles management areas.
35	Explore opportunities to mitigate and/or minimize wildlife–vehicle collisions along roads, and inform land users about safe driving practices, areas with elevated collision risk, and seasonal wildlife movement patterns.
36	Develop and implement strategies to avoid and minimize the spread of invasive species along roads.
37	Build resilience into transportation networks and other infrastructure that may be impacted by permafrost thaw, increases in precipitation and temperature, and other climate change-related risks.

IMPLEMENTATION ACTIONS (CONT.)

38 Assess and address climate change considerations, including information from climate risk assessments, potential variability in environmental conditions, and adaptation/ resiliency, in the design, maintenance and management of transportation infrastructure. Use an adaptive implementation approach.

GOVERNANCE RECOMMENDATIONS

Develop a North Klondike Highway Interpretive Plan that considers:

- Tourism and recreational opportunities along highway corridors.
- First Nations history, language, culture, stories, and values.
- Yukon history and stories.
- Opportunities for education through appropriate signage.
- Strategies to minimize vehicle–wildlife collisions.
- Strategies to prevent the introduction and spread of invasive species.

KNOWLEDGE GAPS

Knowledge of impacts to highway infrastructure is incomplete and continues to evolve over time. Complete geohazard monitoring and permafrost studies, and carry out ongoing monitoring, to assess the impacts of climate change on road infrastructure and the surrounding corridor.

4.3.2 NEW ROADS

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 through vegetation clearing, soil erosion, and sedimentation of nearby watercourses.
- Destroy or fragment wildlife habitat.
- Disturb or alter cultural and heritage resources.

Ecological impacts from surface access development are directly linked to socio-cultural use of an area or its resources. Over time, increased access throughout the Region has likely resulted in increased, and in some areas potentially unsustainable, harvest of moose and caribou, indirectly impacting local subsistence harvesting.

Where new roads cross waterways, particular consideration is required. Decisions on the type of infrastructure (permanent bridges, fords, culverts, ice bridges) should be made by applying the mitigation hierarchy to protect water, fish, and aquatic and riparian habitat.

The Government of Yukon manages industrial access roads on public lands under the *Resource Roads Regulation* (under the *Territorial Lands (Yukon) Act*), which has its own permit and application requirements. These regulations only apply to new roads (at the time of writing, there are no Resource Roads in the Yukon), though there are exceptions where these regulations do not override other legislation or requirements.

If a new highway is developed, or an existing road upgraded to become a highway with similar use and maintenance needs as the North Klondike or Top of the World highways, Plan Review should consider whether to apply the same exemption with respect to development footprint thresholds.

Key Planning Issues

- Roads and other linear features reduce the wilderness character of an area.
- New access, especially all-season, 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 reduced use, increased harvest pressures, and/or increased levels of predation. Caribou and moose are particularly impacted.
- Road and trail development over permafrost results in road instability and erosion, which may be exacerbated by climate change.
- Road development along ridgetops or within valley bottoms can disproportionately impact ecological and socio-cultural values.
- Inadequate management and/or ineffective reclamation of access roads can lead to increased fragmentation of habitat and increased access to wilderness areas (this can have positive and negative effects on values).
- Improperly constructed infrastructure for crossing waterways can affect water, fish, and aquatic and riparian habitat, including through direct destruction of habitat, increased sedimentation or by creating blockages to fish passage.
- Fording can result in aquatic and riparian 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.

STEWARDSHIP DIRECTIONS	
1	When planning and building new access, avoid permafrost areas, areas of high flood risk, and wetlands.
2	When planning and building new access, avoid creating loop roads.
3	Before planning or building new access, make full use of existing roads where possible. This helps avoid the need for multiple roads accessing the same area.
4	When planning ground access, prioritize winter-only options because they generally have lower environmental impacts than all-season access.
5	Reclaim new roads and trails developed for resource access as soon as they are no longer needed for that purpose.
6	When proposing a project, indicate all access requirements at the earliest stage of assessment and permitting. Include details on the location, construction methods, and planned reclamation of all access roads and trails.
7	When a proposed project involves the construction of new all-season access, prepare a project access plan that includes: • Road construction details and rationale for construction. • Applicable traffic management protocols – for example, access control, signage. • How impacts to key values in the area will be mitigated. • Detailed reclamation plans with clear closure objectives.
8	Where new access crosses waterways, the type of infrastructure (permanent bridges, fords, culverts, ice bridges) and how it is developed should be decided by applying the mitigation hierarchy to protect water, fish, and aquatic and riparian habitat. This includes on-claim roads.
9	Do not carry out work on water crossing infrastructure during sensitive time periods for fish – for example, during spawning or egg incubation. Time periods will depend on species and location as determined by Fisheries and Oceans Canada's Freshwater Timing Windows Identified for the Yukon and local knowledge. The YESAB process is the primary mechanism for ensuring local knowledge is integrated into project proposals, and proponents should treat it as a key consideration in their planning.
10	Ensure that future climate, hydrological conditions, and water quality are considered in the design of stream-crossing infrastructure.

IMPLEMENTATION ACTIONS

39 Track and monitor access development and reclamation activities, including:

- Details of any newly constructed roads and trails, including location, width, length, and surface material.
- Information on the status of roads and trails (that is, active or inactive).
- Ongoing and completed reclamation activities.

GOVERNANCE RECOMMENDATIONS

Ensure that regulations encourage the development of protective infrastructure, such as bridges, where appropriate.

4.3.3 OFF-ROAD VEHICLE ACCESS

Several types of off-road vehicles (ORVs) are used in the Region, including snowmobiles, all-terrain vehicles, and motorbikes. ORVs can be used to access remote camps or infrastructure, to manage or to harvest wildlife, and to steward the land and the wildlife. ORVs allow for better management of wildlife without damaging the habitat via road construction.

ORV activity can have negative impacts on wildlife and wildlife habitat. The *Off-Road Vehicle Management Area Regulation*[10] aims to protect designated environmentally sensitive areas and to manage the use of ORVs in those areas, including through access restrictions or limitations. There is currently a territory-wide Off-Road Vehicle Management Area (ORVMA) in alpine areas 1,400 metres or higher, where ORVs can only be used on existing trails. This ORVMA covers 6.7% of the Region.

Land use plans are a primary mechanism for identifying ORVMAs in the Yukon; while this Plan does not recommend the creation of any new ORVMAs, they may be a tool employed during Plan Review or by the ongoing Commission in response to land use changes or emerging issues.

10 *Territorial Lands (Yukon) Act,* OIC 2011/011.

Key Planning Issues

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

STEWARDSHIP DIRECTIONS	
1	Avoid use of ORVs in wetlands or landscapes with poor drainage to avoid damage to sensitive landscape features.
2	Treat ORV trails with respect; avoid trails that appear overused to minimize impacts.
3	To prevent ground damage, avoid using snowmobiles unless snow cover is at least 6 inches deep.
4	Wherever possible, limit use to existing trails and access. This is especially relevant near roadways.
5	Within migratory caribou summer habitat overlay, ORV use is only allowed on existing trails.

IMPLEMENTATION ACTIONS	
40	An ORVMA is not required at this time to protect migratory caribou summer habitat; the Stewardship Directions for the Overlay (Section 5.3.4) provide adequate protection. However, an ORVMA may be required in the future. If ongoing monitoring of these herds suggests they need additional protection, consider establishing an ORVMA as a tool.

4.3.4 AIR ACCESS

The use of aircraft (helicopter or fixed-wing airplane) is a primary mode of transportation for hard rock exploration activities, placer mine operations without all-season road access, backcountry tourism, outfitting, and wildlife research and monitoring. Air access allows access into remote parts of the Region, with limited impacts to the land, though it requires the construction and maintenance of associated infrastructure, including airstrips and helicopter pads. While some airstrips and helicopter pads require machinery for construction, many in the Region are intentionally placed on river bars or ridgetops and are created by hand.

Key Planning Issues

- Frequent overhead air traffic can lead to changes in habitat use by wildlife and affect outfitting, wilderness tourism, and socio-cultural values.
- Fuel caches can contaminate surrounding soil and/or water quality if not properly managed.
- Clearing of vegetation for aircraft landing sites results in surface disturbance, reduced wildlife habitat, and alteration to the wilderness character of an area.

STEWARDSHIP DIRECTIONS	
1	Aerial flights should follow all applicable best management guidelines for how to minimize wildlife disturbance (73,74).
2	Opportunities for shared, multi-party aircraft landing sites should be explored whenever possible.
3	Fuel caches should be well-maintained, inaccessible to wildlife, and a safe distance from watercourses.
4	Within SMAs, new airstrips should only be allowed in existing dispositions.
5	Use natural features for landing sites wherever possible.
6	Follow best practices for the use of drones.

KNOWLEDGE GAPS

There is insufficient knowledge to guide planning and use of landing sites with respect to wildlife values. Research is needed on how wildlife respond to landing sites.

4.3.5 WATER ACCESS

The Yukon Queen II was a high-speed catamaran, designed to ferry tourists along the Yukon River between Dawson City, Yukon and Eagle, Alaska. During its operation, it provided benefits beyond its commercial service; it allowed community members to connect with relations downstream in Eagle, and supported recreational use of the river by transporting canoes back to Dawson.

However, it also drew significant local opposition. Residents and river users raised concerns when they observed what happened when the catamaran went by: small boats were washed out of the water, fishnets were unmoored, riverbanks eroded, and salmon fry were washed up onto the shore. These impacts occurred even though the Queen was designed to produce minimal wake.

The 13-year story of the Yukon Queen II revealed gaps between technical expectations and real-world impacts. Responsible development and shared use of the land must prioritize ecological integrity and community values to ensure long-term sustainability. Stewardship is a shared responsibility among governments, individuals on the land, and commercial and industrial operators.

Water access in the Region is primarily by river. Using water as access can lead to fish and fish habitat disturbance, erosion, and changes in water quality, depending on the types of transportation used and associated infrastructure. Infrastructure includes docks, boat launches, and barge landings, as well as campsites and other facilities associated with human use of shoreline areas. Both infrastructure and use can contribute to enjoyment of the land and better land–people relationships, but they also carry risks of unwanted ecological consequences to rivers and riparian areas. These habitats are often sensitive, and effects can move quickly downstream.

River travel is an important mode of transportation in the Region, used for economic and socio-cultural activities. Common modes of transportation include barges, motorboats (jet and propeller), and canoes. The Yukon River offers significant opportunities for recreation, tourism, traditional economic activities, cultural activities, and industrial access along its main stem and adjacent areas. Until recently, it was also a thriving salmon fishery. Other rivers used for travel include the Klondike, Stewart, White, and Fortymile rivers, where access is predominantly via canoe, motorboat, or jetboat. Importantly, access or travel within all rivers in the Region takes place within the Region's drinking water supply.

Many placer operators use barging to transport equipment, supplies, personnel, and fuel into sites that lack adequate surface access. Using water for industrial access can have lower long-term impacts than roads, which often open up areas to increased use by other users. However, impacts to water, fish, aquatic and riparian habitats need to be closely monitored and compliance with regulations enforced, especially as river traffic increases.

Water can be used as access in the winter as well. When used as extensions of existing roads (for example, ice bridges), this type of access can have low impacts if appropriate care is taken to avoid contamination with fuel, etc. and damage to riparian areas (see Section 4.3.1 and 4.3.2 for further considerations). Different and further considerations are required should an ice road be proposed that travels along, as opposed to across, a waterway. Ice roads are not contemplated within this Plan.

Rivers can also be excellent corridors for winter travel by snowmachine, dogsled, or on foot. While there is some personal safety risk, these sorts of access create opportunities to get out on the land for a variety of pursuits and generally have low environmental impacts.

Key Planning Issues

- Aquatic and riparian habitats are sensitive to disturbance, and contamination of these environments is very difficult to contain.
- There is a high incidence of traditional use sites along waterways.
- High levels of traditional use often overlap with high tourism and recreational use – for example, on the Yukon River.
- River traffic, including tourism and recreation, has the potential to negatively impact wildlife, habitat, and cultural practices.
- Tourism and recreation may improve land–people relationships and subsequently stewardship, if they are well managed.
- The use of barges and motorboats can negatively impact aquatic and riparian habitat, including through erosion, direct damage to fish, and contamination.
- Jet boats, in particular, may have significant impacts on fish and fish habitat.
- The storage and use of fuel associated with motorized water transport poses risks to aquatic and riparian environments, which can be very sensitive to contamination.
- The construction and use of infrastructure associated with water access (landings, docks, and so on) affect water, fish, and aquatic and riparian habitat.

STEWARDSHIP DIRECTIONS

1	When using water for access, treat the water and the shoreline environment with respect. In particular: • Take care not to spill fuel, leave garbage, or otherwise contaminate water and shorelines. • Respect traditional use of shorelines, including known sites and trails. • Use motorized transport in such a way as to minimize wake and avoid disrupting the environment and other users. • When using the shoreline, including camping, do not dispose of human waste in the water or in the riparian area, or disturb the riparian area.
2	When building or maintaining infrastructure related to water access, apply the mitigation hierarchy to protect fish, fish habitat, and riparian areas.

STEWARDSHIP DIRECTIONS (CONT.)

3	When building or maintaining infrastructure related to water access, no work should occur during sensitive time periods for fish – for example, during spawning or egg incubation. Time periods will depend on species and location as determined by Fisheries and Oceans Canada's Freshwater Timing Windows Identified for the Yukon and local knowledge. The YESAB process is the primary mechanism for ensuring local knowledge is integrated into project proposals; proponents should treat it as a key consideration in their planning.
4	Ensure that future climate, hydrological conditions, and water quality are considered in the design of infrastructure related to water access.
5	When proposing a project that requires water access and/or activities within a riparian area, consider and apply the mitigation hierarchy to all aspects, including infrastructure, fuel storage, camps, and outhouses related to water access or that could impact riparian areas. The goal should be to avoid negative impacts to water, fish, aquatic and riparian habitats, as well as associated cultural values.
6	When using motorized transport on rivers in winter over ice, exercise the same stewardship as with any off-road vehicles and with respect to wildlife. Take special care in riparian areas and avoid any areas that are not completely frozen.
7	When travelling on rivers in winter, exercise the same respect and stewardship with respect to traditional use areas, wildlife, contamination, and riparian areas as required on open water.

IMPLEMENTATION ACTIONS

41	Monitor and manage the use of camps, particularly outhouse facilities, along waterways popular for recreational use such as the Yukon River.
42	Provide educational opportunities for tourists and recreational river users about stewardship and respect of traditional use sites.
43	Carry out ongoing monitoring of river traffic (recreational, commercial, and industrial).

KNOWLEDGE GAPS

There is limited understanding of the current potential for rivers to become major transportation routes, and the associated risks. Research these risks and develop recommendations.

There is limited information on the ecological and social impacts of barging along the Yukon River. Carry out research to understand these impacts, with specific attention to fish and fish habitat and traditional land use.

There is limited understanding on how or if jet boats may be used on the Region's rivers in ways that do not negatively impact shorelines, fish, and fish habitat. Carry out research to develop best practices, with a focus on understanding impacts to salmon and salmon spawning areas.

4.4
Access Management Plans

Broadly speaking, access can be managed by controlling:

- Who can use the access route – for example, only industry or only Tr'ondëk Hwëch'in Citizens.
- Timing of access – for example, winter-only access.
- The activities that can be carried out – for example, no hunting.
- The means of access – for example, weight restrictions on vehicles.
- The parameters of roads and/or trails that facilitate access – for example, width restrictions.

Existing legislation and policies have a role in managing access throughout the Region, including:

- *Yukon Environmental and Socio-economic Assessment Act* (S.C. 2003, c.7)
- *Off-Road Vehicle Management Area Regulation – Territorial Lands (Yukon) Act* (O.I.C. 2011/011)
- *Resource Road Regulation – Territorial Lands (Yukon) Act* (O.I.C. 2024/186)
- *Forest Resources Act* (SY 2008, c.15)
- *Parks and Land Certainty Act* (RSY 2002, c.165)
- *Placer Mining Act* (SY 2003, c.13)
- *Quartz Mining Act* (SY 2003, c.14)

However, none of these tools are specifically designed to address access management.

Access Management Plans (AMPs) are a tool that can prescribe how access to land, water, and air is planned, developed, used, and maintained. The goal of an AMP is to balance the benefits of access, such as supporting economic development, cultural practices, and recreation, with the need to minimize negative impacts on ecological, cultural, and community values.

An AMP outlines where and how new access can occur, the Parties' roles in decision-making, and how impacts will be monitored and mitigated over time. The Parties should co-develop AMPs and both Parties must approve each AMP. The AMP should be started within five years of Plan approval and should take two years from initiation to completion. If at any point the process stalls, the Dispute Resolution process (THFA 26.3.1.3) should be followed.

Three LMUs require AMPs to be co-developed AMPs by the Parties (with input by the Commission as invited by the Parties), for the following reasons:

- **LMU 6: Tr'ondëk (Klondike)**
    - This LMU hosts a number of uses, all of which require access. There is currently limited access within the LMU, and therefore new access must be carefully managed to protect the environmental, and Community, Culture, and Heritage values.
    - Sustainable Local Economy activities, specifically forestry, require access, and the intention is not to limit or prohibit this access. Rather, the intention is to ensure that access is planned for and managed in the best way possible.
    - New access must not negatively impact the moose populations or trapping activities that occur here.
- **LMU 11: Goldfields**
    - This is the busiest LMU in the Region with multiple and overlapping interests. There are already a lot of access routes, and the proposed Northern Access Route will be part of this LMU.
    - An AMP is required to manage the existing access and any new access that will be created.
    - This LMU hosts a large number of moose. Increased access increases the hunting and predation pressures on moose; an AMP should be designed to manage access specifically with regard to moose habitat.
    - The AMP should include requirements to share access where possible to reduce further habitat fragmentation and environmental degradation.

- **LMU 15: Khel Dëk (Sixty Mile)**
    - There are many overlapping interests in the LMU, not just mineral development and exploration. An AMP will provide a framework for all values and interests to co-exist.
    - A lot of access exists already; an AMP is required to control this and ensure that access does not grow unchecked.
    - The continued and increased use of the Yukon and Sixtymile Rivers for access is of concern.
    - An AMP should specifically protect the viewscape within the LMU.

At a minimum, AMPs are required to have the following information:

- Access inventory:
    - Mapping of existing roads, trails, waterways, and airstrips.
    - Categorization of routes – for example, permanent, seasonal, temporary, decommissioned.
    - Designation of access types – for example, industrial, recreational, traditional use.
- Location, best practices, and construction details of barge landings, roads, and off-road vehicle trails.
- Identification of access nodes.
- Prescribed purpose of access and entities with permission to use access.
- Guidelines for minimizing habitat fragmentation and erosion.
- Mechanisms for adjusting access based on results from wildlife, habitat, and cultural use monitoring.
- Criteria and procedures for route decommissioning, and reclamation standards and timelines.

Until AMPs are completed, all land users are encouraged to follow the access management guidelines (Section 4.2).

IMPLEMENTATION ACTIONS	
44	Prioritize LMUs that require AMPs for development footprint mapping updates.

5

Management Directions

Artwork: Darcy Tara McDiarmid

5.1 Introduction

This section provides Management Directions for the Region, centred around the identified values (Section 2.1). Since values are complex and connected in many ways, this section should be read and considered in its entirety. Focusing management directions on values supports decision-makers in managing cumulative effects (Section 3), working towards long-term goals, and adapting to changing conditions.

The Plan places values into three broad categories to make them easier to discuss: Community, Culture, and Heritage; Environment; and Sustainable Economy. However, no value belongs to only one category, and all values are interdependent. The health of the land supports cultural practices and economic livelihoods; cultural knowledge guides stewardship and sustainable development; and economic decisions shape both ecological integrity and community well-being. Recognizing these interdependencies is essential for holistic planning that honours the complexity of the Region and ensures its resilience for future generations.

5.1.1 COMMUNITY, CULTURE, AND HERITAGE

The Region's collective culture is living and evolving. It has been shaped by the diverse traditions and shared histories of Tr'ondëk Hwëch'in, newcomers of many backgrounds, and the relationships between them. It is grounded in values of cooperation, stewardship, respect, and care for multiple perspectives. Maintaining and enhancing cultural and heritage values for all is central to sustainable development.

Culture and heritage are living systems, not static artefacts. They evolve through ongoing relationships between people, place, and practice. This includes language, seasonal activities, Traditional Knowledge, and community gatherings, all of which contribute to identity, belonging, and resilience. For the Tr'ondëk Hwëch'in, heritage and culture are 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 the Tr'ondëk Hwëch'in and the land.

The connection between land and culture runs deep for many residents of the Region. The land is not just a resource – it is a source of stories, teachings, and spiritual connection. Especially for the Tr'ondëk Hwëch'in, cultural practices such as harvesting, storytelling, and ceremony are deeply rooted in specific landscapes. When land is degraded or access is restricted, cultural continuity can be disrupted.

Community well-being as a whole is closely tied to cultural expression and heritage preservation. Art, music, and storytelling foster social cohesion and intergenerational learning, while heritage sites and cultural landscapes support tourism and local economies.

Many of the newcomers in the Region whose families have been here for generations have strong ties to the land because life a hundred years ago was more directly connected to the land. More recent newcomers can benefit from the generosity of the Tr'ondëk Hwëch'in and these settler–descendants in creating relationships with the land and learning how to be stewards.

All newcomers, regardless of how long they have been here, carry with them their own cultures that contribute to the richness of the community today, through traditions of celebration, food, stories, or teachings. The community welcomes this diversity, whether newcomers are arriving from other parts of the country or are new Canadians.

Cultural continuity depends on connectivity – between generations, between communities, and between people and place. Just as ecological connectivity supports species movement, cultural connectivity ensures that knowledge, values, and practices can be passed on and adapted to changing circumstances. Rapid environmental and social change poses risks to culture and heritage, and adaptive implementation must consider these risks and support cultural resilience through inclusive planning and long-term stewardship.

The order in which these values are presented does not imply a hierarchy. Each contributes uniquely to the Region's identity and vitality. The emphasis on Tr'ondëk Hwëch'in values reflects their foundational role in the Region's cultural landscape and the importance of upholding Indigenous rights and responsibilities.

5.1.2 ENVIRONMENT

Healthy air, water, vegetation, and wildlife are critical to life. For the Tr'ondëk Hwëch'in, all living beings are kin. Sustainable development requires keeping ecosystems healthy so they can continue to provide ecosystem services, and maintain fish and wildlife populations and their habitats, which is an important planning issue in the Region. In addition to the directions provided in this section, cumulative effects management will be crucial for ensuring the Region's environmental values are preserved for future generations.

The Plan takes a holistic view of the environment, recognizing that all elements are deeply interconnected and that the health of one component directly influences the health of others. For example, clean water depends on intact vegetation and soil systems, which in turn support wildlife and human communities. Healthy landscapes provide clean air and water, regulate climate, support mental and physical well-being, and offer cultural and recreational value. When ecosystems are degraded, these benefits diminish, leading to increased risks to public health and community resilience. These connections mean that the well-being of all species, including people, is inseparable from the health of our ecosystems.

As environmental change accelerates, whether through climate shifts, land use pressures, or pollution, the risks to ecological integrity and species survival grow. These changes can disrupt migration patterns, alter water availability, and increase the frequency of extreme events. Proactive planning and adaptive management are needed to mitigate these risks and safeguard ecological values for future generations.

The order in which values are presented does not imply a hierarchy. All elements are vital and interdependent. Three animals are highlighted within this section to draw attention to their ecological importance, cultural significance, and role as indicators of environmental health. Their inclusion underscores the broader message: protecting individual species helps protect entire ecosystems.

5.1.3 SUSTAINABLE ECONOMY

The Region's diverse economic interests are rooted in its land, people, and history. From traditional subsistence practices to resource development and creative industries, the Region's economy reflects a unique blend of cultural heritage, ecological richness, and entrepreneurial spirit.

The Plan considers a range of renewable and non-renewable land uses and sectors, and prioritizes a strong regional economy that can sustain future generations. Sustainable development, as defined in the THFA, is a guiding principle in this Plan – one that calls for long-term thinking, stewardship, and respect for the interconnected values of the Region. Economic development must be approached in a way that honours the land's capacity to provide, and upholds ecological, cultural, and social values to ensure lasting prosperity.

A Sustainable Local Economy is one that is resilient, diverse, and inclusive – like the community it supports. It sustains livelihoods while respecting the land, culture, and community. Economic activities are deeply tied to the land. Many economic practices such as hunting, fishing, gathering, artistry, and small-scale agriculture are not only sources of sustenance but also expressions of cultural identity and stewardship. Supporting these practices strengthens both economic and cultural resilience.

As with the other categories of values, economic activities are interconnected and affect each other. Infrastructure and transportation networks, for instance, influence the ability of communities to participate in and benefit from economic opportunities, and have the potential to fragment ecosystems or disrupt cultural landscapes if not planned well.

The Plan does not prioritize one economic sector over another. Instead, it recognizes the importance of a diverse, resilient economy that supports multiple pathways to prosperity. While some sectors may currently be more prominent, all economic activities are considered in relation to their long-term contributions to community well-being and ecological health.

Just as ecological and cultural values are assessed in terms of long-term impacts, economic decisions must also consider how multiple activities interact over time and space. This ensures that short-term gains do not compromise future opportunities.

Economic planning should be community-driven, reflecting the aspirations and expertise of those who live and work in the Region. This includes leadership by Tr'ondëk Hwechin, youth engagement, and support for entrepreneurs and small businesses.

Each value section follows the same format:

Value description: Main attributes and importance of the value, including planning-related issues for the value in the Region.

Goals: Specific and measurable steps that lead to a Plan goal, phrased as desired states.

STEWARDSHIP DIRECTIONS

Everyone on the land is required to follow these directions in order to achieve the goals of the value and the Plan. All Stewardship Directions apply immediately upon Plan approval.

IMPLEMENTATION ACTIONS

Directions for completing work required to implement this Plan (includes both discrete and ongoing tasks). These are the roadmap for successful implementation of this Plan; some will be immediately actionable while others will require some time. Implementation Actions are directed to one or more of Tr'ondëk Hwëch'in, the Government of Yukon, and the Implementation Committee, and may require collaboration with the Commission and/or Plan Partners.

GOVERNANCE RECOMMENDATIONS

High-level, strategic, and long-term recommendations to revise or create policy, legislation, plans, or agreements. Governance Recommendations are directed at Tr'ondëk Hwëch'in and/or the Government of Yukon. In instances when another agency may have overlapping jurisdiction (for example, Government of Canada), the Parties are expected to actively engage and collaborate with that agency to identify shared responsibilities and determine the most effective path to realizing the Plan's vision. The realization of these recommendations may require a phased or extended timeframe.

KNOWLEDGE GAPS

Recommended topics to be investigated over time to better support stewardship. A recommended direction of research is suggested where possible. Knowledge Gaps are directed at any of the following groups: Tr'ondëk Hwëch'in, the Government of Yukon, independent researchers, and other agencies.

5.2 Community, Culture, and Heritage

This section of the Plan describes Community, Culture, and Heritage values and their goals.

COMMUNITY, CULTURE, AND HERITAGE GOALS	
1	Land stewardship is practised by all residents of and visitors to the Region, including governments.
2	Land stewardship is promoted and supported by governments.
3	Land-based activities that strengthen connections to the land are readily available, accessible, and well-attended.
4	Tr'ondëk Hwëch'in culture and the Hän language are thriving and respected throughout the Region.
5	Traditional harvesting is actively practised and respected.
6	The community is diverse and resilient, relying on the strengths of multiple worldviews and ways of being that coexist with mutual respect.
7	The community has high capacity and resilience in people and infrastructure.
8	The community has capacity and knowledge to respond and adapt to environmental, social, and climate changes.
9	Land-related decision-making prioritizes community health and well-being.
10	Tr'ondëk Hwëch'in's heritage, as self-determined, is respected throughout the Region.

5.2.1 LAND–PEOPLE RELATIONSHIP

> "If the land is good, your spirit is good, and that's why it's important to be connected to the land."
>
> *– Debbie Nagano, Dawson Regional Planning Commission*

The well-being of individuals and communities depends on strong and enduring relationships with the land, each other, and all beings that share this place. For Tr'ondëk Hwëch'in, these relationships have been shaped over millennia and continue to evolve in response to changing conditions, guided by respect for the past and responsibility to future generations.

Relationships with land, fish, and wildlife are important for people of all backgrounds in the Region, though to varying degrees, and are expressed in many ways. Maintaining these relationships requires healthy ecosystems, the availability of fish, wildlife, and plants for harvest, and the ability to access the land at the right times. Continued sharing and learning between generations and across communities is essential to long-term healthy land–people relationships.

For Tr'ondëk Hwëch'in, these relationships are expressed through Tr'ëhudè, which encompasses a set of values and a way of life that they have found are necessary to maintain these relationships and allow them to "live well". This holistic worldview recognizes that everything in the universe has importance and that humans are only one small part. The land and animals are our best teachers, and in turn, we use our knowledge to care for the land, our community, and ourselves.

Over millennia, people have learned to live well in this landscape by responding to its challenges with what the land has to offer. Today, industrial development and climate change present new pressures, but through sustainable practices, communities can maintain ties to the land and uphold their legacy as stewards while adapting to change.

Many people in the Region express their relationship with the land through recreation. The Region offers opportunities for boating, paddling, camping, hiking, skiing, and motorized travel. These activities provide physical, mental, social, and spiritual benefits and contribute to tourism. For many residents, including Tr'ondëk Hwëch'in Citizens, recreation is inseparable from harvesting and stewardship. Trails and travel routes hold cultural and heritage value, supporting traditional activities such as fishing and connecting people to the land and water.

However, there is concern that some recreational users do not fully appreciate the importance of caring for the land and the damage they may cause: maintaining wilderness character and minimizing land-use conflicts are essential to preserving these values.

Ultimately, this Plan encourages all people to act as stewards of the Region to ensure that land, water, and wildlife remain healthy for future generations. By recognizing the interconnectedness of land health and human health, the Plan promotes decisions that sustain ecological integrity while supporting vibrant communities and cultural well-being.

Key Planning Issues

- Conflicts may arise between harvesting and subsistence activities and other land uses, including in the following LMUs:
    - LMU 11: Goldfields.
    - LMU 12: Tr'ondëk Täk'it (Klondike Valley).
    - LMU 14: Tay Dëkdhät (Top of the World).
- First Nations' opportunities to exercise harvesting and subsistence rights depend on the continued availability of, and access to, healthy fish and wildlife populations and intact ecological landscapes, heritage, and cultural areas.
- People may not be aware of potential damage they may cause when out on the land for recreational pursuits.
- People engaged in industrial or commercial activities on the land may not have a strong connection to place or understanding of the potential impact of their activities.

Goals

1. Healthy land–people relationships are widespread in the Region and lead to stewardship.
2. Healthy land and harvestable species are abundant and used responsibly by a wide breadth of community members of different backgrounds.
3. Land use activities do not compromise First Nations harvesting and subsistence rights as established by land claim agreements and constitutional law.
4. A diverse range of sustainable recreational opportunities exist in the Region.
5. Recreation activities are carried out in a manner consistent with the principles of stewardship and sustainability.
5. New trails and/or the revival of historic trails are developed in a manner consistent with stewardship and sustainability, and in respect of Tr'ondëk Hwëch'in's wishes for what information is made public.

STEWARDSHIP DIRECTIONS	
1	Treat the land with respect, practise reciprocity, and act with humility.
2	Minimize your impacts on the land.
3	Avoid conflicting land uses in important harvesting, cultural, and traditional use areas.
4	Do not compromise First Nations harvesting and subsistence rights.
5	Maintain access to recreational trails by delineating locations in proposals, identifying any potential land use conflicts, and applying the mitigation hierarchy.
6	Use existing trails, roads, and access points rather than creating new surface disturbances.

IMPLEMENTATION ACTIONS	
45	In collaboration with planning partners (for example, the Klondike Active Transport and Trails Society), develop a comprehensive trails plan for the Region that identifies existing trails, historic trails, no-go areas for recreation, and future trail development opportunities.
46	Consider projected climate change impacts on safety and accessibility of trail systems.

GOVERNANCE RECOMMENDATIONS

Continue collecting community-based input related to harvesting activities to support community stewardship and inform ongoing monitoring. As part of this, new metrics and additional data collection may be required.

Appropriate mitigation measures should be recommended as part of the application and review process for new land use tenure.

Promote on-the-land education and gathering opportunities.

KNOWLEDGE GAPS

There is limited information available on the impacts of development on the overall use and enjoyment on the land. Research these impacts, their extent, and potential mitigations.

5.2.2 COMMUNITY CULTURE

> "Contemporary Dawson City is a community of Indigenous and non-Indigenous people, government workers, miners, fishers, tourism workers, artists, and writers. It is a community that has integrated non-Indigenous, or newcomer, ideas and Indigenous values into its daily operations."
>
> *– Łuk Cho Anay, 2015*[11]

Photo: Government of Yukon / J Kennedy

11 Łuk Cho Anay / Big Fish Come, 2015

Community Culture as a value refers to the contemporary collective culture of all people in the Region. It is made up of all the cultures present in the Region, the number of which is increasing as newcomers continue to arrive from different parts of the world. Community Culture also comes from how those cultures relate, and the shared history of the Tr'ondëk Hwëch'in and newcomers, who began arriving in the Region in the 1850s. While this history is shared, different groups had widely different experiences of events.

The Plan speaks independently to Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language (Section 5.2.3), but THFA is an important part of the whole community's contemporary culture. The THFA is for everyone with a relationship to the Tr'ondëk Hwëch'in Traditional Territory. The THFA and the many associated boards, committees, processes, and programs guide or influence much that happens in the Region. THFA-related processes and programs include this Plan, YESAB, co-governance of education, and many programs available to all residents. The THFA and the ongoing relationships it represents are central to the community's evolving collective culture.

Many Klondike Gold Rush-era newcomers brought with them European cultures, languages, and traditions. They also brought values: self-reliance, hard work, and supporting neighbours through hard times were important then and remain so today.

Over the years, an increasing diversity of people have moved to the Region. It isn't uncommon to hear languages other than English, and there are often restaurants featuring cuisines from other countries and a wide array of imported specialty foods at the grocery stores. Community events are frequent, inclusive, and a way different groups can share and celebrate their culture.

Part of today's collective culture is telling stories from multiple perspectives: people celebrate some aspects of the gold rush, and also celebrate Tr'ondëk Hwëch'in's culture and history, which includes the truth of colonialism and its impacts. People value the land for different reasons, including as a relation, a place of beauty, a source of food or income, or all of the above.

Despite the wide range of perspectives, and land-based activities people engage in, community members generally look out for each other, value hard work, and are able to work together. The history of the Region's salmon fishery provides an example of this attitude. Non-Indigenous people learned skills and stewardship

practices from the Tr'ondëk Hwëch'in and, in working together, they challenged racial divides long present in the community **(3)**. Now, with the fishery closed, salmon conservation and restoration bring together people from all backgrounds who share the vision of plentiful salmon again in the future.

The history of the Klondike Gold Rush and the arrival of newcomers exists throughout the Region, not only at the Klondike National Historic Sites (to which the Plan doesn't apply). Many sites related to this shared history are known and interpreted, but others are not documented, and stories are still unfolding. The gold rush changed the landscape and influences how people interact with it today.

Storytelling around the gold rush animates Dawson City in the summer with tour guides in period costume leading groups along the boardwalks and Diamond Tooth Gertie's dancehall filling nightly for shows. The large tourism draw contributes economically and also creates an opportunity to share other stories and elements of the Region with visitors.

The 2023 listing of the Tr'ondëk-Klondike UNESCO World Heritage Site formally recognized eight locations in the Region as showing "dramatic modifications of land use, settlement patterns, and economy caused by the rapid and large scale of the colonising incursion of newcomers into the ancestral land of the Tr'ondëk Hwëch'in in search of gold and precious minerals. It also testifies to the intense upheaval that impacted the Indigenous people between 1874 and 1908, their dispossession from, and marginalisation in, their ancestral land, as well as their response and adaptation to the progressive colonial affirmation of the newly established Dominion of Canada **(75)**".

The Parties (and the federal government, where applicable) protect and regulate historic resources (sites and objects) primarily through the Government of Yukon's *Historic Resources Act* (RSY 2002, c.109), the THFA, and Tr'ondëk Hwëch'in's *Heritage Act* **(76)**. The Plan makes best efforts to recognize and uphold both Tr'ondëk Hwëch'in and Government of Yukon definitions, perspectives, and laws related to historic resources, while honouring Tr'ondëk Hwëch'in's right to self-define their own heritage (Section 5.2.3). This aligns with the Yukon First Nations Heritage Framework **(77)** and the multiple ways people can express the Plan principle of Stewardship (Section 2.2.2).

Key Planning Issues

- The diversity of the Region's community means there are a wide variety of perspectives on best use of land.
- The major worldviews represented by the Parties, and in the Region, have fundamentally different understandings of how people should relate to land.
- There is a collective culture alongside the individual cultures in the Region.
- Historic sites and resources relating to events since the arrival of newcomers can have very different meanings to different people.

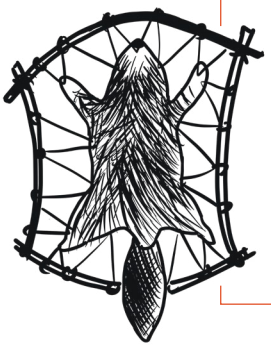
Goals

1. People of different cultures within the Region respect each other and work together towards common aims.
2. Historic sites and artefacts are respected and interpreted from a variety of perspectives.
3. There is broad and common understanding of the Tr'ondëk Hwëch'in Final Agreement and its relevance to all people, among all parts of the Region's community.

STEWARDSHIP DIRECTIONS	
1	Make best efforts to learn about the other worldviews present within the Region's community, including their perspectives on heritage and historic resources, and be considerate of them when out on the land, and in designing land-based projects. One way to do this is to attend or volunteer at cultural events such as Moosehide Gathering.
2	Share stories about the community's history, present, and possible futures from many perspectives, with each other and with newcomers.
3	During project proposals and assessments, ensure adequate mitigations are provided to protect known historic and resources, including the use of timing windows.
4	Follow best practices as well as legislated requirements (*Tr'ondëk Hwëch'in Heritage Act* **(76)** and *Government of Yukon Historic Resources Act* [RSY 2002, c.109]) when heritage and historic resources are discovered during land-based activities, with a goal of avoiding negative impacts.
5	Become familiar with the Tr'ondëk Hwëch'in Final Agreement and learn about how it applies to you and the activities you engage in.
6	Become familiar with the Official Community Plan for Dawson City.

IMPLEMENTATION ACTIONS	
47	Ensure resources on the Region's history and present-day community – including Tr'ondëk Hwëch'in history and contemporary culture, the Klondike Gold Rush from multiple perspectives, and modern co-governance – are available and promoted to current residents, newcomers, and visitors.
48	Ensure resources on the Tr'ondëk Hwëch'in Final Agreement and associated bodies, programs and processes are available and promoted to all people working on the land.
49	Create, or support the creation of, "welcome" materials for the Region, Dawson City, and/or the Klondike Valley that include modern governance and multiple worldviews.

5.2.3 TR'ONDËK HWËCH'IN CULTURE, HERITAGE, AND HÄN LANGUAGE



> "Anything and everything you do, the way you live is your heritage. I walk it, that's who I am."
>
> *– Angie Joseph-Rear, Perspectives from Four Yukon First Nations, 2015*

For Tr'ondëk Hwëch'in, heritage, culture, language, and land are inseparable **(76)**. Heritage includes oral histories and songs, the wildlife, plants, and medicines that people harvest; artefacts and specific sites; and connected, intact landscapes and waterways in which these are embedded **(76)**. Places, objects, and other beings significant to heritage and culture may or may not be recognizable through a western "heritage" lens **(76)**.

This Plan acknowledges and affirms Tr'ondëk Hwëch'in's right to define heritage-related terms and the appropriate means of protecting them on the landscape **(62)**, as they have done through their own heritage legislation **(76)**, which land users are encouraged to read. This also aligns with Article 11 of UNDRIP.

When following historic lifeways, the Hän people in the Region migrated with the seasons and movements of animals, generating stories and teachings embedded

in the land throughout the Traditional Territory and beyond **(78)**. Access to all these places remains important even where land use or the land itself has changed, because to go to these places is to revisit the past, as well as to occupy the present and the future. Stories of place are often the reason we know that landscape change has occurred.

In this way, Tr'ondëk Hwëch'in's relationship with the land benefits all residents by enriching the landscape with meaning and giving a deep-time perspective that parallels disciplines like paleontology, archaeology, and geology. Tr'ondëk Hwëch'in's heritage is not a thing of the past, as might be understood based on a Western view of "heritage" **(2)**; it is living and dynamic, simultaneously the stories of their ancestors, the stories being crafted by today's people and those that will be told by future generations. The Plan embraces a broad temporal understanding of culture and heritage (see also Section 5.1).

> "Our law requires us to respect and honour our heritage, practices, and protocols, including respect for the land and acceptance of our stewardship responsibilities towards it. Our heritage is our way of life as part of the land."
>
> *– Tr'ondëk Hwëch'in, 2016*[12]

The relationship between culture, heritage, and the land is at the core of why land-based decisions are so important for Tr'ondëk Hwëch'in, as effects on the land ripple through the people in a more direct way than for those who are less culturally connected to place. The Plan encourages stewardship by all residents and visitors to the Region, regardless of their capacity on the land, as part of respecting this relationship.

Colonial disruption of historic lifeways means that knowledge and documentation of past land use are incomplete, and new resources and sites are discovered regularly, including during land development, mineral exploration, and mineral development activities. Therefore, a cautious approach to land use and resource development is required. As land use and development in the Region increase, potential impacts to heritage resources also increase. Strong community relationships help ensure these discoveries are responded to in a good way, alongside adherence to existing regulations and the Plan's stewardship directions.

12 *Tr'ondëk Hwëch'in Heritage Act*, 2016.

Chapter 13 of the THFA lists heritage routes and sites that are important to Tr'ondëk Hwëch'in, which Regional Planning Commissions must account for when developing a regional land use plan (THFA 13.4.6.4, Schedule A and Schedule C). Mapping exercises were conducted during the planning process to identify additional sites of cultural importance. Specific heritage-related locations are included in the Plan at the discretion of Tr'ondëk Hwëch'in; however, all known sites and routes informed LMU boundaries, designations, and stewardship directions.

The protection and conservation of elements of Tr'ondëk Hwëch'in heritage and culture are crucial for maintaining traditional economies, supporting healthy land–people relationships, and allowing for ongoing cultural practices. They also provide all of the Region's residents with a deeper sense of place and contribute much to the experience and understanding of place for visitors to the Region.

> "We recognize our lands by naming our places and by hanging our stories on them. We practice ceremony when we acknowledge what we value, when we conduct ourselves well, when we sustain each other and when we celebrate our identity as Dënezhu."
>
> *– Tr'ondëk Hwëch'in, We are Dënezhu, 2023*

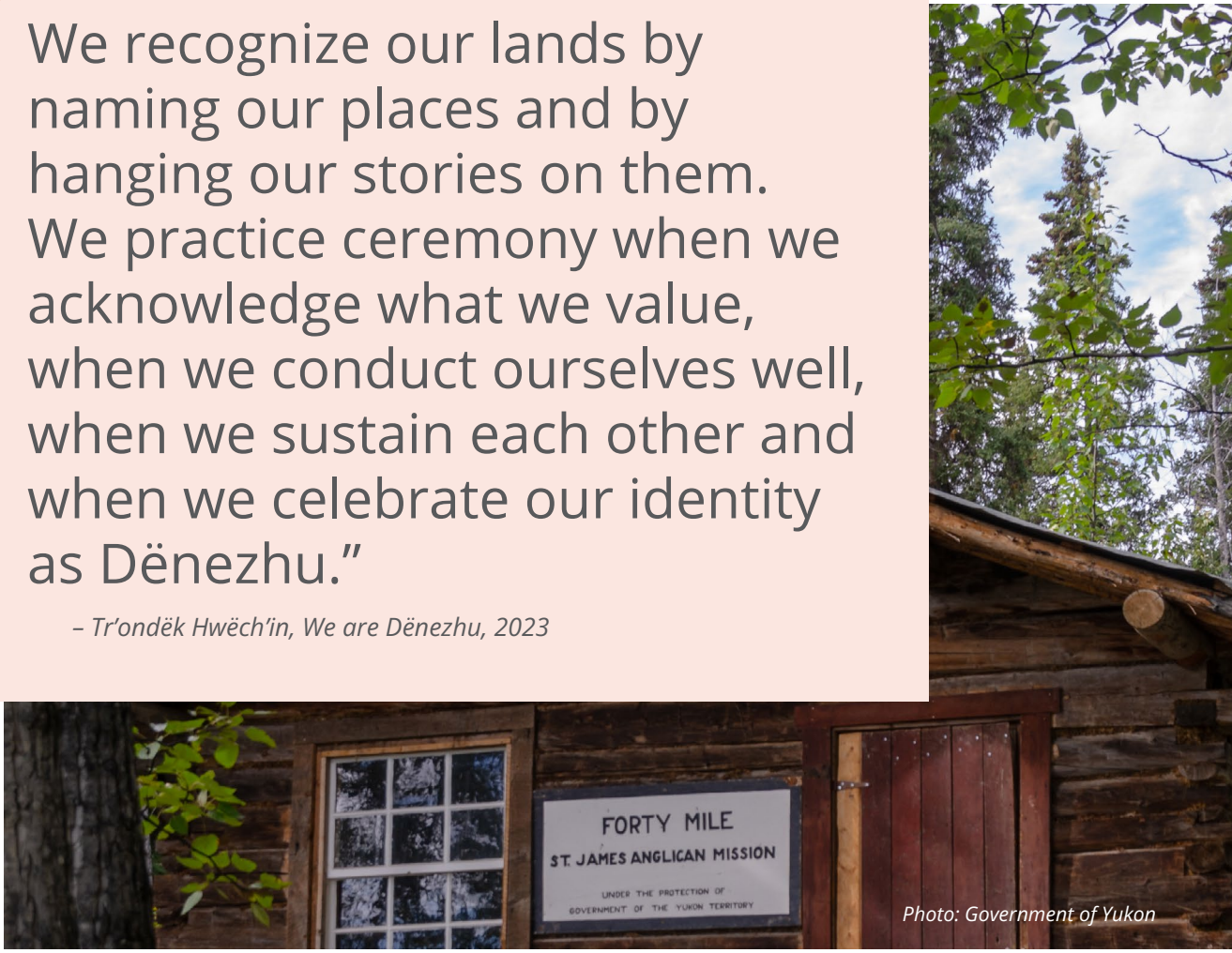


Photo: Government of Yukon

The Plan employs Hän language throughout the Plan, notably in LMU names provided by Tr'ondëk Hwëch'in (Section 6), names of places and landscape features on maps, important concepts like Tr'ëhudè, and values. Incorporating Hän language is an expression of respect for Tr'ondëk Hwëch'in's worldview, culture, and relationship with the land. Words are important and often hold knowledge that cannot be easily translated into another language.

While the Plan is written largely in English, using Hän language where available sets the stage for increasing Hän content in the future, and makes the Plan a vehicle for supporting language revitalization. This is a small but important step in reconciliation. Language is ever evolving, and the words used in the Plan may change over time as Hän is further revived (Section 1.2). To learn more, see resources listed in Appendix 1.

Key Planning Issues

- Tr'ondëk Hwëch'in's living culture and heritage are part of the land – what affects the land affects the people.
- Tr'ondëk Hwëch'in's culture and heritage enrich the land–people relationships of all residents and visitors to the Region.
- First Nations and Western worldviews have different conceptions of what constitutes heritage, and thus what ought to be protected and how **(2)**.
- The location of all specific Tr'ondëk Hwëch'in heritage and cultural resources is not known; as such they can be inadvertently disturbed.
- Conservation of heritage and cultural resources is not compatible with all other land uses; conflicts may arise.
- Landscape changes resulting from climate change pose a threat to heritage and cultural resources and sites in the Region, including to those not yet identified. The extent and degree of these threats across the Region is not well understood, and negative impacts may irreversibly affect connections to the land.

Goals

1. Healthy, connected landscapes persist as part of Tr'ondëk Hwëch'in's living heritage.
2. Tr'ondëk Hwëch'in language and traditions are thriving and respected by all people in the Region.
3. Tr'ondëk Hwëch'in cultural and heritage resources are safeguarded, and are accessible to and actively engaged with by Tr'ondëk Hwëch'in Citizens.
4. Where appropriate, Tr'ondëk Hwëch'in culture and heritage are interpreted for non-Tr'ondëk Hwëch'in audiences, enriching the sense of place of residents and visitors.
5. Strong community connections support respect for Tr'ondëk Hwëch'in culture and heritage, including through care taken upon discovery of heritage and cultural resources during land-based activities.
6. Climate change impacts to Tr'ondëk Hwëch'in heritage and cultural resources are understood and mitigated where possible.

STEWARDSHIP DIRECTIONS	
1	Learn about the broad understanding of heritage and culture of Tr'ondëk Hwëch'in and other First Nations. The Tr'ondëk Hwëch'in website is a good place to start. When doing activities on the land, be considerate and respectful of all aspects of the land.
2	During project proposals and assessments: • Provide enough measures to protect known heritage and cultural resources, including the use of timing windows. • Consider Traditional Knowledge, oral traditions, and testimony. • Ensure you have clear steps for finding and protecting heritage and cultural resources.[13]
3	Follow best practices as well as legislated requirements (*Tr'ondëk Hwëch'in Heritage Act* **(76)** and *Government of Yukon Historic Resources Act* [RSY 2002, c.109]) when you discover heritage and cultural resources during land-based activities. The goal is to avoid negative impacts.
4	Avoid or reduce land-use activities in cultural and heritage use areas during important seasonal use periods (for example, use timing windows) that Tr'ondëk Hwëch'in publicizes or that are identified during project assessment or regulation.
5	Learn Hän place names, words, and phrases, use the language with respect, and adapt usage as the language is revitalized.

13 "Resources" is used as shorthand in the directions to improve readability and align with existing legislation. It does not imply that these are meant to be "used", nor is it intended to objectify or minimize the importance of culture and heritage.

STEWARDSHIP DIRECTIONS (CONT.)

6	Within 200m of Settlement Land, proposals for projects and activities should show awareness and consideration of Settlement Land values and use. These projects and activities are subject to heightened robust monitoring and reporting.

IMPLEMENTATION ACTIONS

50	Monitor cultural and heritage resources and sites to better understand climate change impacts, and carry out mitigation measures where possible.
51	Recognizing that the process of language revitalization is ongoing, continue to incorporate Hän language and place names into Plan publications when Tr'ondëk Hwëch'in considers it appropriate.
52	Explore tools and platforms (for example, digital resources, websites, audio files, apps) to promote Hän language related to the Plan.
53	Support Tr'ondëk Hwëch'in-led initiatives to revitalize and promote Hän language.
54	Promote land-based, community, and educational initiatives that strengthen youth capacity and youth–Elder knowledge exchange.
55	Incorporate storytelling into interpretation and educational programs.

GOVERNANCE RECOMMENDATIONS

Support Tr'ondëk Hwëch'in's direction on heritage and cultural sites or trails that should not be promoted or publicized, to protect their value to Tr'ondëk Hwëch'in – for example, ancestral trails and travel routes.

Jointly develop management guidelines for identified heritage routes and sites within ISAs. For each SMA, consider routes and sites in the SMA Management Plan.

During Plan Reviews, seek updated information on sites of heritage and cultural importance to Tr'ondëk Hwëch'in. Revise the Plan as needed to protect these sites.

KNOWLEDGE GAPS

Increase understanding of heritage resources, including ancestral trails, to ensure their cultural and heritage values are appropriately managed and protected, while minimizing potential land use conflicts.

Knowledge of historic use of the land by Tr'ondëk Hwëch'in is incomplete. Support Tr'ondëk Hwëch'in's work to maintain and revive land-based stories and teachings.

Assess potential impacts of climate change on heritage and cultural resources, and identify ways to reduce these impacts.

5.2.4 COMMUNITY RESILIENCE

"It's about getting away from 'us and them' and using the strengths of Traditional Knowledge and the western system to benefit everyone."

– Jody Beaumont, Tr'ondëk Hwëch'in Education Director[14]

The Region's community is resilient when it can retain its identity and health while adapting to change. Change (which isn't necessarily good or bad) can come in many forms. It may be sudden (for example, a landslide), mid-term (for example, increased development opportunities from a rise in the price of gold) or long-term (for example, changes in caribou migratory pathways following land disturbance). Resilience is a feature of physical infrastructure, like roads, and applies to the people in the community and the landscapes.

A resilient community is intergenerational and includes people with a variety of skillsets and backgrounds to respond to challenges as they arise. It can also remain healthy as the population changes in composition and size. The Plan encourages land use, land relationships, and development that supports Community Resilience.

Responding to change can include physical actions, such as maintaining, improving, and diversifying physical infrastructure (for example, energy production and transmission, affordable housing), and social actions, such as supporting people in skills training or transfer. Land use decisions made across the Region affect the community's ability to adapt by affecting infrastructure and people's well-being, and by limiting future choices.

The Plan, therefore, encourages a long view that considers many potential futures and the needs of future generations. In addition to the discussion in this section, see other relevant values and economic activities. Some anticipated challenges the community does or may need to respond to are:

- Housing availability (including land for residential development).
- Water, food, and energy security.
- Impacts of climate change.
- Impacts of major development projects.

14 Government of Yukon, *Pathways: Stories of Collaboration, Partnership and Reconciliation* (2023).

While the Plan does not apply to LMU 22: Ch'ënyäng–Ddhäl Ch'èl Cha Nän (City of Dawson–Tombstone Territorial Park), the community is intricately connected to and dependent on the broader landscape (Section 5.3.3). The issue of affordable housing is more appropriately dealt with at the level of the municipality or sub-regional planning of areas with high residential use. However, it is worth highlighting as it is critical to ongoing Community Resilience.

Land for new development activities of all kinds is not readily available, and spot land development and residential use of mineral claims are persistent phenomena. The Central Tr'ondëk Land Management Area **(79)** has been established by Tr'ondëk Hwëch'in for future commercial and residential land use and new government facilities. Even when following the Plan's high-level guidance, individual land use decisions (for example, dispositions) that result in permanent or long-term removal of an area from other uses should be made cautiously to maintain future choice.

Continued availability of clean drinking water is a priority for all community areas, including Tr'ondëk Hwëch'in heritage sites of Tr'ochëk, Moosehide, and Forty Mile, as well as traditional hunting and fishing camps, and in the catchment areas of the Klondike River, Swede Creek, Fortymile River, and Wolf Creek.

Food security is a key component of Community Resilience. The Region's residents rely on wild harvested and locally grown food from gardens and a small agricultural sector, in addition to that transported up the highway. In recent years, multiple highway closures have focused residents' attention on the reliance on imported food and other goods. The community's need to continue to improve local food production, while maintaining or recovering fish and wildlife populations and access to them, is an important consideration for land use decisions.

Impacts from ongoing and future climate change in the Region include permafrost thaw and ground displacement, increased flooding risk, and heightened wildfire activity **(58)**. These can affect residential areas directly, as well as road and water access, and industrial and commercial activities across the Region. Land use decisions should consider potential hazards as well as potential opportunities, such as the possibility of new crops.

The potential impacts from a major development or extraction project to Community Resilience are high. Development projects, especially large ones with camps, have caused gendered violence both in the workplace and in nearby communities, with Indigenous women, girls, and Two-Spirit+ people especially at risk **(80 to 82)**. Large projects also increase loads on local infrastructure and services, including medical facilities, that can affect access by residents **(80)**.

YESAB recently completed a review of these impacts in the Yukon, which should be consulted when considering major development projects in the Region **(82)**. The Plan supports projects that maintain high standards of employee safety

(including cultural, emotional, and physical), prioritize local employment, and anticipate and mitigate potential negative social impacts to the community, alongside their commitment to environmental protection.

Key Planning Issues

- The remote location of and limited access routes into the community creates multiple vulnerabilities – for example, road closures can severely impact movement of people, fuel, and food; there are limited energy options; and so on (see also Section 4).
- Land use decisions affect Community Resilience by restricting future choice, affecting physical infrastructure and resources, and affecting community well-being.
- Change that requires resilience may come in many forms and on many timeframes, from sudden to long term.
- Community Resilience is tied to community well-being, which depends on healthy land–people relationships.
- The demand for land for residential, commercial, and industrial development and services is growing in the areas surrounding Dawson City, and there is limited suitable land available. Affordable and accessible housing is necessary for Community Resilience.
- Additional fine-scale planning is necessary to manage growth and guide development outside of municipal boundaries – for example, LMU 12.
- Increasing local food security will require a greater land base for local food production, as well as maintaining healthy fish and wildlife populations.
- Impacts from climate change are likely to increase physical hazards, which need to be considered in land disposition and infrastructure development.
- Drinking water quality for all community use areas, including Dawson City, can be negatively impacted by land use. Uncontrolled outhouses along the Klondike River (and other watercourses) are a particular concern.
- Development projects, including resource extraction, and in particular those that rely on camps, have a high risk of negative impacts to the personal safety of women, girls, and LGBTQ2S+ persons on worksites and in nearby communities.
- Development projects may contribute to local infrastructure and resilience, or add strain to existing infrastructure, services, and resources.

Goals

1. The community is resilient and has strong relationships to one another and to the land.
2. When the community changes (in composition and size), it does so in a sustainable way that upholds ecological, social, and cultural values and limits land use conflict.
3. All residents have access to clean drinking water.
4. Food security comes from healthy fish and wildlife populations, and local food production.
5. Land-based projects and development contribute to healthy, safe, and violence-free workplaces and communities, where Indigenous women, girls, and Two-Spirit+ people are respected, inherently valued, and treated equitably with dignity and justice.
6. Development projects contribute to Community Resilience by improving or adding to local infrastructure, resources, and services.

STEWARDSHIP DIRECTIONS	
1	When working in proximity to known sources of potable water, follow the mitigations defined during the assessment process to prevent contamination.
2	Only consider and propose new spot land applications for permanent dispositions within, or near, existing development nodes. This helps minimize ecological disturbance.
3	When conducting or considering climate change assessments, consider the disproportionate impacts of climate change in the North and identify ways to reduce the resulting inequality.
4	Follow the Dawson City Community Wildfire Protection Plan.
5	When engaging in projects in the region, buy locally where possible.
6	When proposing, considering, and operating projects that include a camp(s) for accommodation, implement best practices to increase personal safety at the worksite and in affected communities, including anti-violence policies, appropriate housing, access to mental wellness support, mentorship programs, and access to adequate cell phone and Internet on site.
7	When proposing and operating projects in the Region, partner with the signatories of the Yukon Strategy on MMIWG2S+ to implement the important actions that have been identified in the Implementation Plan **(83)**.

STEWARDSHIP DIRECTIONS (CONT.)

8	During project assessment, consider and identify mitigations for projected increased demands on social infrastructure directly and indirectly related to the project – for example, increased demands on health and social services and policing. Ensure service capacity is adequate to meet expanded needs before projects begin (adapted from Call for Justice 13.5, MMIWG Final Report).

IMPLEMENTATION ACTIONS

56	Build in resilience to transportation and other infrastructure that may be affected by floods, permafrost thaw, increases in precipitation and temperature, and other risks.
57	Build capacity for disaster risk reduction, with particular attention to reducing the risk and impacts of natural disasters resulting from floods, landslides, and wildfires.
58	Encourage climate preparedness education to ensure residents are prepared to respond to climate change-related events.
59	Promote climate change awareness and strategies to decrease climate anxiety.
60	Support recommendations relating to priority action 6: Resource Extraction and Major Infrastructure in the Yukon Advisory Committee on MMIWG2S+ Implementation Plan **(83)**, including: • 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). • Support the implementation of culturally relevant, gender-balanced analysis in YESAA processes (4.4). • Support a Tr'ondëk Hwëch'in-led community safety assessment (2.1a).

GOVERNANCE RECOMMENDATIONS

Promote projects that increase food security.

Incentivize sourcing local materials in new development.

Encourage fire breaks around areas of high value to the community.

Consider long-term viability of access when assessing projects and making land use decisions.

When considering new residential growth outside of Dawson City, consider at minimum:

- Resource and infrastructure access and demand.
- Needs for other land uses which may have limited available suitable growth areas.
- Long-term community needs.

Integrate climate change assessment into planning processes for development nodes by:

- Identifying areas subject to risk of increased hazards due to a changing climate – for example, flooding, geohazards, permafrost thaw, and wildfire.
- Limiting new development in these areas.
- Following best practices to mitigate risk of hazardous impacts to areas of existing or future development, or areas with high agricultural value.

Consult Evaluation of the Effects of Industrial Activities on the Personal Safety of Indigenous and non-Indigenous Women and Girls and LGBTQ2S+ Persons in Yukon (YESAB, 2022) when considering major development projects in the Region.

KNOWLEDGE GAPS

Identify all water sources used by the community, including for traditional pursuits, to enable land users to plan accordingly. This includes water sources used at important Tr'ondëk Hwëch'in heritage sites, including Tr'ochëk, Moosehide, and Forty Mile, as well as traditional hunting and fishing camps.

Investigate the potential agricultural opportunities resulting from climate change.

Assessors and decision-makers lack clear guidance on how to assess personal and community safety concerns of Indigenous and non-Indigenous women, girls, and LGBTQ2S+ persons in relation to resource extraction, development projects, and work camps (see YESAB report). Research ways for assessors and decision-makers to better assess potential impacts and evaluate mitigation plans for proposed and ongoing projects.

Few extraction or development projects have shown positive impacts for Indigenous and non-Indigenous women, girls, and LGBTQ2S+ persons, both at the worksite and in the community. Seek out examples and analyze what makes them successful.

5.3 Environment

This section of the Plan describes the Environment values and their goals.

ENVIRONMENT GOALS	
1	Integrity and connectivity of the landscape's diverse ecosystems are maintained, restored, and enhanced.
2	Healthy ecosystems support thriving biodiversity, including abundant fish and wildlife populations that, in turn, support sustainable harvest.
3	The integrity of values on the land is protected through ongoing reclamation.
4	Ecosystems are managed holistically, with consideration of cumulative effects.
5	Ecosystems are stewarded to ensure their resilience to ongoing climate change.
6	Healthy ecosystems and healthy land–people relationships are interdependent.
7	Ecological integrity is valued as a part of a thriving sustainable local economy.

Photo: Government of Yukon / R Postma

5.3.1 WATER/CHU

> "Waterways, since time immemorial, have served as a link between generations and communities, forming the arteries that connect waters, land, and people."
>
> *– First Nation of Na-cho Nyäk Dun, 2025*[15]

Water flows through the land, creating ecosystems, sustaining all animal and plant life, and supporting industries and communities. It comes in many forms and scales, from drops of rain, to ice on the river, to entire watersheds, each playing a vital role in the health and function of the Region.

Water has and continues to shape the Region by carving valleys, forming floodplains, transporting sediments, minerals, and nutrients, and creating diverse aquatic, riparian, and wetland ecosystems **(84,85)**. Communities are established around and shaped by water, and rely on it for their physical, spiritual, and mental well-being (84). Residents depend on water for transportation, subsistence, recreation, food, drinking water, and well-being.

Livelihoods within the Region are deeply tied to the presence and health of water. Significant economic drivers, like tourism and mining, exist in part because of water. Tourism is supported by activities that require water, such as fishing, canoeing, wildlife viewing, and hospitality services. Placer mining relies on water to transport and deposit gold in stream beds and gravel bars, and to separate the minerals from the sediments.

> "We are the Tr'ondëk Hwëch'in. The river people. The hammerstone people. The salmon people."
>
> *– Tr'ondëk Hwëch'in, 2024*[16]

15 First Nation of Na-Cho Nyäk Dun Submission to the Dawson Regional Planning Commission, April 3, 2025.

16 Tr'ondëk Hwëch'in Submission to the Dawson Regional Planning Commission, April 30, 2024.

Water has provided for and cared for the Tr'ondëk Hwëch'in since time immemorial, so they hold a deep responsibility to protect and care for it. This responsibility to care for the land and water is central to their identity and way of life: the name of the Hän language translates to "people of the river" **(7)**. Historically, the Tr'ondëk Hwëch'in moved seasonally along rivers and creeks throughout the Region, sustained by the water and the plants and animals it nourishes **(7)**. This ancestral connection has created a rich legacy of heritage resources along waterways. Today, these areas remain vital to Tr'ondëk Hwëch'in's living heritage. Citizens continue to go to the water for cultural, spiritual, and subsistence practices. They strengthen their connections to the land and pass on knowledge to future generations.

Water stewardship is central to the Tr'ondëk Hwëch'in and is affirmed through the THFA. The Tr'ondëk Hwëch'in have a right to water in its natural condition (14.1.1) and to the protection and use of water in an integrated and coordinated manner (11.1.1.6), which promotes and fosters the culture and heritage of the Tr'ondëk Hwëch'in (13.1.1.1). Because of water's interconnectedness to the rest of the landscape, impacts to it may undermine many other rights under the THFA, such as the conservation of fish and wildlife habitat (16.1.1.1), the right to harvest fish and wildlife (16.1.1.5) and forest resources (17.3.1), the right to preserve and enhance the renewable resources economy (16.1.1.2), and the peaceful enjoyment of Settlement Land (16.12.10.3).

Water Management

All water within the Region is part of the Yukon River watershed. This means that all water eventually flows into the Yukon River. As a result, the health of any water in the Region affects the health of the Yukon River.

Managing water and riparian areas is challenging because many activities rely on water and can affect water in many different ways. Water and aquatic ecosystems are sensitive and can be affected at a distance because water travels through the landscape. Currently, water is managed primarily by regulating its use and adjacent development. Several bodies play a role in managing water in the Region, including the Government of Yukon, Tr'ondëk Hwëch'in, DFO, the Yukon Water Board, and the City of Dawson. Each group is responsible for specific aspects of water, such as fish habitat or drinking water, or regulating activities that affect water, such as mining and residential development.

Despite all these actors, water faces several threats that are not covered by these agencies' mandates. For example, there is little oversight of tourists' behaviour around water, which can result in water contamination. Equally important to creating permit requirements and regulations is ensuring that they are followed.

Currently, the Government of Yukon and DFO are solely responsible for monitoring and compliance with respect to water. Relying on only these two agencies, each with its own mandate, limits the resources available to properly monitor and enforce regulations and requirements on the ground. Given that all water in the Region is interconnected, impacts in one area can cascade throughout the Region, underscoring the need for integrated, careful water stewardship.

The split regulatory system leaves water vulnerable to cumulative impacts from overlapping uses and activities. Rather than being protected as a vital value, water is managed primarily through its use, a practice that fails to reflect its dynamic and interconnected nature. Effective water management must take a holistic approach that considers water itself, riparian areas, and upland activities that influence its quality and quantity.

How Does the Plan Protect Water?

The broadest way the Plan protects water is through SMA designations. Forty-three percent of the Region is designated as SMAs, where limited development can occur and co-developed management plans are required. Many of these SMAs include important wetlands and sub-watersheds that store and filter the water that eventually flows into the Yukon River.

Sub-regional planning is another tool the Plan uses to protect water. Recognizing the Yukon River's diverse land uses and significant cultural, heritage, environmental, and economic values, LMU 3: Chu Kon Dëk (Yukon River Corridor) includes the Yukon River and the downstream portion of the Stewart River. It requires a sub-regional plan to address the overlapping interests that occur in river corridors. The Plan supports granting legal personhood to the Yukon River, recognizing it as an entity and honouring its value beyond human use.

The Klondike River is a major tributary of the Yukon River and the source of drinking water for Dawson City and the surrounding area. The north and south arms of the river are largely protected through SMA designations, and most of the main stem of the river lies within LMU 12: Tr'ondëk Täk'it (Klondike Valley) which requires a sub-regional plan to allow for careful consideration of all overlapping land uses.

Water is also stewarded indirectly through the management of other values. For example, tourism (Section 5.4.1) relies on clean water and healthy riparian ecosystems. Similarly, management directions that protect Community Resilience (Section 5.2.4) ensure access to clean drinking water, which is integral to the community's persistence. Protecting wetlands (Section 5.3.7) enables these natural reservoirs and filtration systems to continue providing clean water for ecological and human communities.

Additionally, this Plan protects water by:

- Following the Plan principles of sustainable development and the precautionary principle. (Section 2.2)
- Using development footprint thresholds to manage development pressures on water systems, and requiring the Parties to prioritize the development of water-specific indicators. (Section 3)
- Nominating four wetland complexes as Wetlands of Special Importance to protect areas that are essential for water filtration and storage. (Section 5.3.7)
- Managing access by water and that crosses water. (Section 4)
- Including river-specific directions in LMU Directions. (various subsections of Section 6)

> "Water gives us so much that we are obligated to make an effort to steward the water properly."
>
> *– Alice McCulley, Dawson Regional Planning Commission*

Key Planning Issues

- Water and riparian areas have high ecological value.
- Water and riparian areas provide many services to human communities, including drinking water, transport, fire protection, and flood mitigation.
- Water holds high cultural and traditional value to Tr'ondëk Hwëch'in:
    - Water is understood as the source of life.
    - Water can be a focus of ceremony and source of healing.
    - Waterways are a place for harvesting and traditional pursuits.
    - Waterways have a high incidence of traditional-use sites.
- Waterways, riparian areas, wetlands, and aquatic ecosystems are sensitive to disturbance and can be affected from a distance.
- Groundwater flows and the movement of water through the landscape are complex and not widely understood.

- Industrial activities often require water and can also impact water in many ways. In particular, placer mining requires large volumes of water and occurs mainly in or adjacent to riparian areas and wetlands. It often requires rerouting the flow of water and can result in high sediment releases.
- Recreational, commercial, and industrial activities in or near water and riparian areas can lead to:
    - Garbage accumulating along and in waterways.
    - Contamination of water with human waste.
    - Sedimentation.
    - Damage or loss of fish habitat.
- Water is managed and regulated by multiple bodies through multiple unintegrated permitting systems that do not account for its holistic nature.

Goals

1. Water quality, quantity, and rates of flow are maintained across the Region, in support of ecological and cultural integrity.
2. Overlapping uses of water and waterways are managed so they allow ongoing use without compromising water quality or ecological integrity.
3. Waterways and associated heritage sites and routes remain accessible for ongoing traditional use.
4. Viewscapes from and around water are maintained.
5. Access to water, especially drinking water, is maintained and does not compromise water quality.
6. Clean water for human consumption and healthy aquatic ecosystems are safeguarded.
7. Functional, connected riparian ecosystems support sustainable fish and wildlife populations, including supporting salmon recovery.
8. Land users act as responsible stewards of waterways and riparian areas, grounding their actions in respect, humility, and reciprocity.

STEWARDSHIP DIRECTIONS

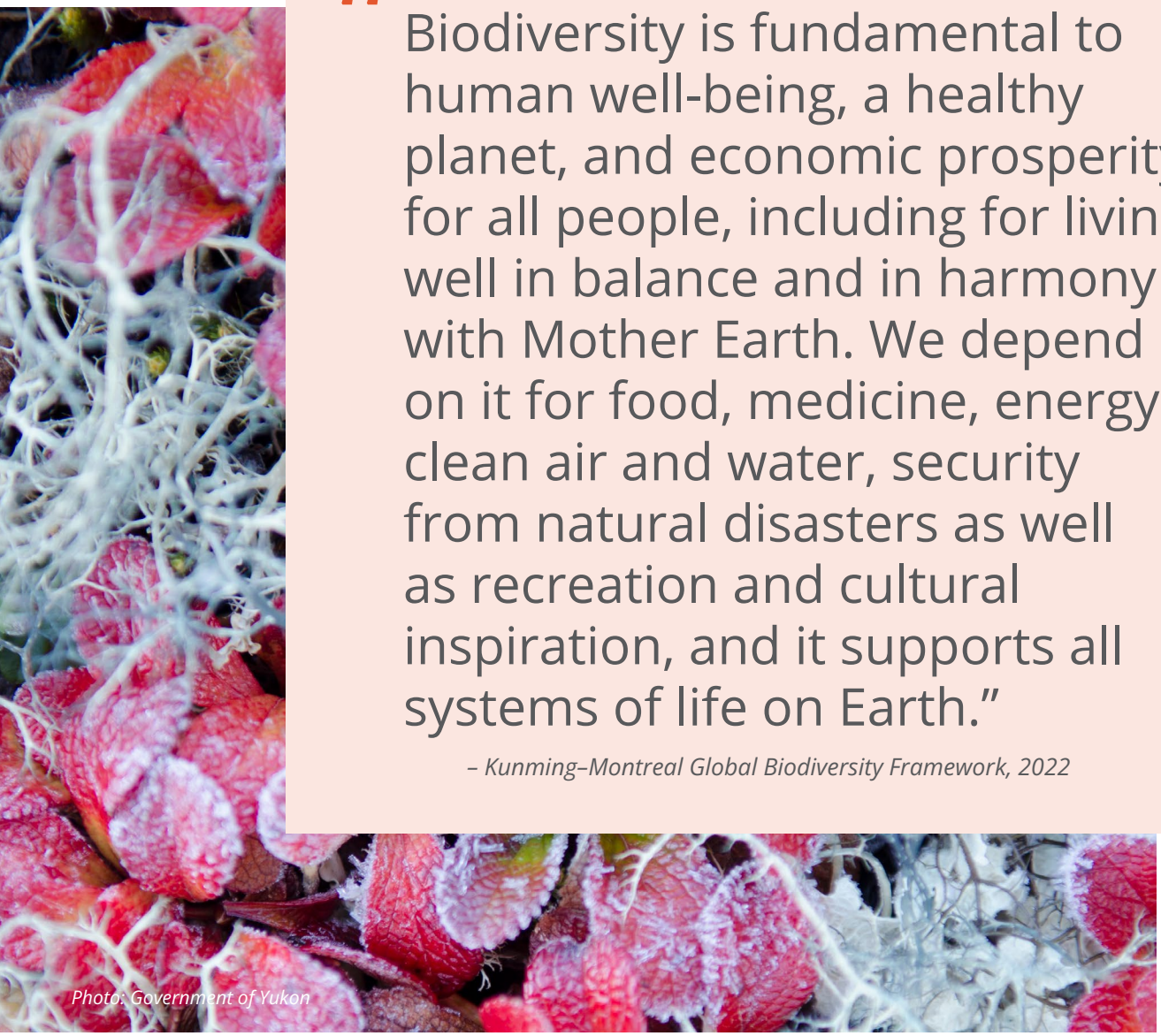
1	Treat all water with care and respect.
2	Adhere to "leave no trace" principles in and near water.
4	Use common or designated trails and access points where possible to minimize erosion and habitat damage.
5	Support and be respectful of Tr'ondëk Hwëch'in Citizens' connection to rivers.
6	Conduct activities in a manner that does not negatively impact heritage sites and resources.
7	Conduct activities in a manner that minimizes sediment runoff and erosion.
8	Take care to protect drinking water and access to it; avoid activities that harm drinking water or restrict access.
9	When proposing or reviewing development applications, consider how climate change could affect water in the project area, and include mitigation and adaptation measures.
10	Apply the mitigation hierarchy rigorously for industrial activities in or near water and riparian areas, with a strong focus on avoidance.
11	Avoid activities and development that could compromise the viewscape from and around waterways.
12	Use and manage existing barge landings in a way that minimizes negative effects to rivers and riparian areas.

IMPLEMENTATION ACTIONS

61	Explore and implement opportunities to educate land users about the respectful use of water, respectful conduct in and around water, and the importance of floodplains and riparian areas.
62	Implement clean-up initiatives along rivers to address recreational and industrial waste.
63	Develop opportunities for mentorship and knowledge exchange on water stewardship among youth, community members, and Elders.
64	Support ceremony in service of relationships with water and/or rivers.
65	Develop and support guardianship programs to improve monitoring, enforcement, and stewardship of water and adjacent areas, with a focus on biocultural water monitoring and monitoring for potential adverse impacts from industrial development.

KNOWLEDGE GAPS
The extent of climate change impacts on the Region's water is unknown. Expand ongoing monitoring of hydrologic, water quality, and climate variables throughout the Region.
The impacts of water withdrawal on aquatic habitats in the Region are not well understood. Reevaluate the current water withdrawal tracking system to explore opportunities for improvement.

5.3.2 PLANT AND ANIMAL RELATIONS



> "Biodiversity is fundamental to human well-being, a healthy planet, and economic prosperity for all people, including for living well in balance and in harmony with Mother Earth. We depend on it for food, medicine, energy, clean air and water, security from natural disasters as well as recreation and cultural inspiration, and it supports all systems of life on Earth."
>
> *– Kunming–Montreal Global Biodiversity Framework, 2022*

Photo: Government of Yukon

The Region is home to a wide variety of plant and animal species[17], all of which have a role in the ecosystems they belong to. For the Tr'ondëk Hwëch'in, animals and plants are relations and have cultural importance beyond their ecological roles: they provide material needs like food and medicine, and feature in cosmology and spirituality. The Tr'ondëk Hwëch'in have relied on the Region's ecosystems for thousands of years, and their right to these relationships and subsistence harvest are constitutionally protected in the THFA.

Healthy plant and animal populations that can support sustainable harvests now and for future generations are very important to the Region's whole community. Because of this, maintaining healthy habitats is a significant planning issue and an end goal for many values. The Plan promotes proactive stewardship and protection from threats (see also Sections 5.2.6 and 5.2.7). The Plan encourages people to show respect to all animals and plants in recognition of what they provide for us.

Plant and Animal Relations and their habitats are often protected by policy and legislation tools, many of which are organized around human activities that affect the environment, such as industry regulations. Some species of wildlife can be protected through Wildlife Key Areas (WKAs), which are mapped habitats used by animals in different seasons **(86)**. Legislation in the Region that speaks directly to wildlife includes:

- *Tr'ondëk Hwëch'in Final Agreement,* Chapter 16
- *Tr'ondëk Hwëch'in Fish and Wildlife Act* (2009)
- *Tr'ondëk Hwëch'in Heritage Act* (2016)
- *Species at Risk Act* (SC 2002, c.29)
- *Wildlife Act* (RSY 2002, c.229)
- *Fisheries Act* (RSC, 1985, c. F-14)
- *Migratory Birds Convention Act (*S.C. 1994, c.22)

The Plan speaks specifically to individual animal species for a variety of reasons. Some have extreme cultural or ecological importance or require specific management directions; some are particularly important to, or sensitive to disturbance from, cultural and economic land-based activities; some species fall into both categories.

17 The Plan uses "plants and animals" as a plain-language shorthand for all living beings generally, regardless of taxonomic grouping.

For this reason, Salmon, Caribou, and Moose are each their own value (Sections 5.3.3, 5.3.4, and 5.3.5, respectively). The presence, absence, or order of presentation of species or groups does not reflect a hierarchy; some are more visible than others in this Plan, but all are important and connected to each other. Some groupings are described below.

Birds (Chuga): The Region is home to many birds, some stay year-round, some stay for a season, and some pass through on annual migrations. Many different habitats are important to birds **(87)**. The Tintina Trench is an important flyway for vast numbers of migratory birds, whose numbers across North America have decreased by nearly a third since 1970 **(88)**. Raptors often use the same nest site year after year, some species in the alpine and others on river corridors and wetlands are critical for waterfowl and some types of songbirds **(86)**. Many birds are culturally important, like raven (tätrą') and grey jay (jorn), who feature prominently in Tr'ondëk Hwëch'in teachings. Others are harvested, including grouse, ducks, and geese.

Resident fish (Łuk): Arctic grayling (srejil), burbot (chehlùk), northern pike (ëlchän), round whitefish (łuk dhey), and other non-migratory fish are important for non-commercial harvest and can be affected by many activities through impacts to waterways and riparian areas **(89)**. Most populations live in streams, rivers, and off-channel habitats in the summer, and some are known to migrate to lakes to overwinter **(89)**.

Furbearers: Some animals, including lynx (ninju), marten (tsŭk), and beaver (tsà') are trapped for their fur, which is used to make clothing and provide income. While these animals are grouped by what they provide for people, they all have ecological roles. Beavers, for example, are "ecosystem engineers" and create habitats for other animals through their activities **(90)**. The wetlands they create also affect people by filtering water, buffering flood events, or damaging infrastructure **(90)**.

Predators: Animals like grizzly bears (shär cho) and wolves (zhur) play important ecological roles as they interact with their prey species **(31)**. They can also pose a risk to human safety if attractants are not managed well when people are out on the land **(91)**. Grizzly bear habitat requirements span large areas and multiple ecosystems, making them good indicators of landscape health **(91)**. Some predators are also trapped for their fur, such as wolves and foxes.

Insects (Gu): Insects can be easily overlooked, but they play valuable roles in ecosystems, from being food for birds and fish to pollinating plants **(92)** They can have positive and negative impacts on forest and crop health, and these patterns which may shift in response to climate change. Globally, insects are experiencing declines **(92).**

Sheep (Dëbe): Sheep live in high-elevation and alpine habitats and return to the same winter ranges, lambing areas, and migration corridors **(93)**. Key habitat for sheep in the Region includes alpine tundra, mountain ranges, and south-facing river cliffs, benches, and rocky outcrops on steep valley sides, especially in the Yukon River Corridor between the confluence of the Yukon and White rivers and Minto (year-round); and relatively snow-free, wind-swept slopes (winter) **(86)**. The highest quality sheep habitat in the Region is found in LMU 1: Tthetäwndëk (Tatonduk), LMU 4: Tsey Dëk (Fifteenmile), LMU 5: Ddhäl Ch'ël Settlement Land (Tombstone), LMU 7: Wehtr'e (Antimony), and LMU 13: Dempster Highway Corridor **(93)**.

> "The promises Tsà' Wëzhè made in the long-ago times are the core of our identity as Dënezhu, the source of our wealth, the reason we endure and the root of our kinship with the land and our animal relatives, those with fur or fins or feathers leaves or needles or berries or flowers, two legs or four legs, more legs or none who taught us how to survive, but also how to live. These promises are happy obligations because when we look after our relatives, they look after us."
>
> *– Tr'ondëk Hwëch'in, 2024*[18]

Populations in the Region are often at the northern limit of a species' range. These northern populations are especially important because shifting northward is one way species can adapt to climate change **(94)**. Some species in the Region require special consideration because they are rare, endemic (not found anywhere else), or "at-risk" (threatened, endangered, and so on). Some of these species are managed under recovery strategies or management plans by the federal government. The Yukon Conservation Data Centre tracks the location and status of species of conservation concern and rare species in the Yukon **(95)**.

18 Tr'ondëk Hwëch'in, Submission to the Dawson Regional Planning Commission: Recommended Plan (adapted from *We are Denezhu*, 2023), April 30, 2024.

Endemic species play unique ecological roles and contribute to the overall biodiversity of important ecosystems, such as low-elevation steppe meadows and alpine areas **(96,97)**. Many endemic species are vulnerable to disturbances because of their limited range and specific habitat requirements **(97)**.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) **(98)** is responsible for assessing species nationally and recommending them for listing under the federal *Species at Risk Act* (SARA; SC 2002, c.29). Listing under SARA brings into force requirements that apply on federal lands and federally managed species across the country. Some examples of federally listed species are grizzly bear, wolverine, olive-sided flycatcher, and gypsy cuckoo bumblebee.

To be listed, a species must first be assessed. This means a species or population can be at risk, but not yet identified or listed. The Yukon does not have territorial species-at-risk legislation or threat assessment, so locally threatened species that are healthy elsewhere in the country may not be identified, and locally healthy populations might be part of a federally threatened species.

The Government of Yukon has committed to establishing complementary legislation and programs to effectively monitor, assess, and protect species-at-risk **(99, 100)**. It has also identified four species (cougar, gyrfalcon, trumpeter swan, and peregrine falcon) as "specially protected" from harvest under its *Wildlife Act* (RSY 2002, c.229).

Key Planning Issues

- Land use activities have the potential to negatively impact wildlife. This can be particularly significant when critical habitats are affected, or when impacts occur during critical times of year.
- Possible impacts include:
    - Direct injury or mortality from conflict with humans.
    - Disturbance during feeding, caring for offspring, mating, or other behaviours that can lead to poor health or decreased reproductive success.
    - Disturbance resulting in avoidance behaviour, limiting an animal's access to food or other needs – for example, mineral licks.
    - Habitat degradation.
    - Habitat fragmentation.
    - Many indirect effects from altered species and ecosystem dynamics – for example, increasing predation or decreasing availability of a prey species.

- Critical habitat, sometimes documented through Wildlife Key Areas, varies widely by species, demographic, and season.
- The variety of wildlife in the Region and their habitat needs creates a large amount of information to consider.
- Many ecosystems important for wildlife are also used for human activities – for example, wetlands and waterways.
- The quality and resolution of information available on population health and the timing of wildlife movement are variable, as is the accessibility of information to project proponents or land users. Some information is intentionally not made public – for example, location of raptor nest sites to protect them from illegal activities **(86)**.
- Some animal-specific issues include the following:
    - Fish are sensitive to disturbances to their aquatic habitat, including changes in water quality and quantity, especially over-wintering and spawning areas which are critical to survival.
    - Sheep are vulnerable to disturbance from various activities (for example, low-flying aircraft), especially during lambing season in May to June.
    - Animals with large home ranges (for example, grizzly bears) or migratory species (for example, mountain caribou) require large areas of intact and connected habitat.
    - 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 spiked saxifrage and Yukon podistera.
    - Insects like bees are important for pollination of native plants and agricultural crops. Bee populations have declined in southern Canada, and some species in the Yukon are listed under SARA as *at risk*, such as the gypsy cuckoo bumblebee **(101)**. Threats include competition from honeybees and non-native insects introduced for agriculture, which may also bring diseases.
- Environmental shifts, including those related to climate change, can result in vegetation shifts and changes in land use patterns by wildlife. This can lead to changes in temporal and spatial overlaps with human activities, and potential for human–wildlife conflict.

- Invasive plant species are often adapted to establishing in disturbed areas, and can outcompete local species.
- Climate change brings opportunities for non-native species to establish and persist at increased rates, which can change ecosystem dynamics.

Goals

1. Animal and plant populations and their habitats are healthy and resilient, and able to adapt to changing conditions, including the impacts of climate change, and meet the needs of the community.
2. Ecosystems are intact and connected and can support healthy plant and animal populations.
3. Stewardship towards plants and animals is widely adopted.
4. The incidence of human–wildlife conflict is low.

STEWARDSHIP DIRECTIONS	
1	When engaging in activities on the land, treat all plants and animals with care and respect.
2	When undertaking research, monitoring, and sampling, prioritize non-invasive and minimally disruptive methods.
3	When planning and proposing projects, show how you have applied the mitigation hierarchy to: • Important habitat areas for species present in, or potentially impacted by, project activities. This is especially important for Wildlife Key Areas for species identified as priority LMU values, mineral licks, and other critical habitats, as indicated by knowledge holders. • Species of cultural and ecological importance, as identified in LMU priority values (see also Sections 5.3.3 to 5.3.5). • Timing windows that respect seasonal or condition-dependent use of habitats by animals. For example Freshwater Timing Windows Identified for the Yukon (102); avoid the Tintina Trench flyway and other high-concern areas for migratory birds during key spring and fall migratory periods; avoid disturbing wildlife from air or ground in late winter (late winter habitat), and during lambing and calving (lambing and calving grounds respectively).

STEWARDSHIP DIRECTIONS (CONT.)

4	When undertaking revegetation (for example, during reclamation), choose plant species with care to avoid introducing invasive species.
5	Do not directly disturb spawning, over-wintering, or rearing habitats for juvenile freshwater fish.
6	Avoid directly or indirectly blocking all fish migration routes.
7	Identify and document species-at-risk or rare endemic species in the project area before submitting a project for assessment.
8	Integrate federal species-at-risk recovery strategies into project plans.

IMPLEMENTATION ACTIONS

66	Monitor the spread of invasive species and respond as required.
67	Promote biocultural and climate monitoring that incorporates land-based knowledge.
68	Promote storytelling and teachings that highlight our relationships with animal and plant kin and our interconnectedness.
69	Develop and promote educational tools to encourage stewardship of wildlife habitat.
70	Continue to implement the Conservation Plan for Grizzly Bears in Yukon (91) 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”).
71	Protect sheep habitat and limit disturbance during key times (for example, lambing, over-winter).
72	Continue to implement, develop, and improve monitoring of, and management plans for, wildlife species. Integrate community monitoring and land guardian programs into existing data collection efforts.
73	Update and improve habitat suitability maps and modelling for wildlife, including Wildlife Key Areas, using all forms of knowledge.
74	Continue to monitor the distribution of federally listed species-at-risk and ensure proactive management and recovery actions can be undertaken to ensure their continued prosperity within the Region.

GOVERNANCE RECOMMENDATIONS

Regularly review, update, and improve legislation relevant to the protection and stewardship of Plant and Animal Relations.

KNOWLEDGE GAPS

Understanding of the impacts of climate change on wildlife directly, and on wildlife habitat and ecosystems at large, has many gaps. Continue to support and fund initiatives to better understand the impacts of climate change in the Region. This includes full consideration of Traditional Knowledge, which is particularly important for informing our understanding of climate change impacts in northern ecosystems. Research initiatives may include:

- 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 plants, fish, and wildlife.

In partnership with the Canadian Wildlife Service and other relevant planning partners, build knowledge of the location of key staging and nesting areas for migratory birds in the Region. Anticipate and monitor how projected climate change, such as shifts in freeze–thaw cycles, could alter accessibility, timing, and use of these areas.

There is incomplete documentation of key aquatic habitats for resident fish species in the Region. Work collaboratively with DDRRC and the YFWMB to define and map these, with a focus on spawning and over-wintering habitat within ISA3s, ISA4s, and LMU 3: Chu Kon Dëk (Yukon River Corridor). Data should be made publicly available.

The Parties should work together, and collaboratively with other planning partners (for example, DDRRC and YFWMB) to continue research to understand grizzly bears in the Region, building on recent population studies by the Government of Yukon. Management decisions for grizzly bear habitat should have a strong foundation in local and Traditional Knowledge.

Key considerations for a research and monitoring program should focus on identifying and mapping key habitat areas, as well as other research topics identified under Goal #3 of the Conservation Plan for Grizzly Bears in Yukon (2019).

To better understand how climate change may influence human–grizzly bear conflict, monitor climate change impacts to grizzly bears, including their seasonal behaviour and food sources.

Identify species-at-risk, rare endemic species, and the habitats in the Region that face the highest risk from climate change, to inform the ongoing management of activities in those areas.

5.3.3 SALMON/TR'OJÀ'

"My great grandmother, Eliza Isaac, would go down the river before salmon season, singing 'Łuk cho ko, Łuk cho ko! (No fish, no fish!)'. There were indicators that the salmon people were coming. There would be big thunder; the fireweed blossoms would reach a certain height. When the first salmon came, she'd stop singing 'Łuk cho ko! Łuk cho ko!'. Long time ago, that first fish would be shared with the entire nation – that would ensure they'd come back."

– Darcy Tara McDiarmid, Tr'ondëk Hwëch'in Citizen

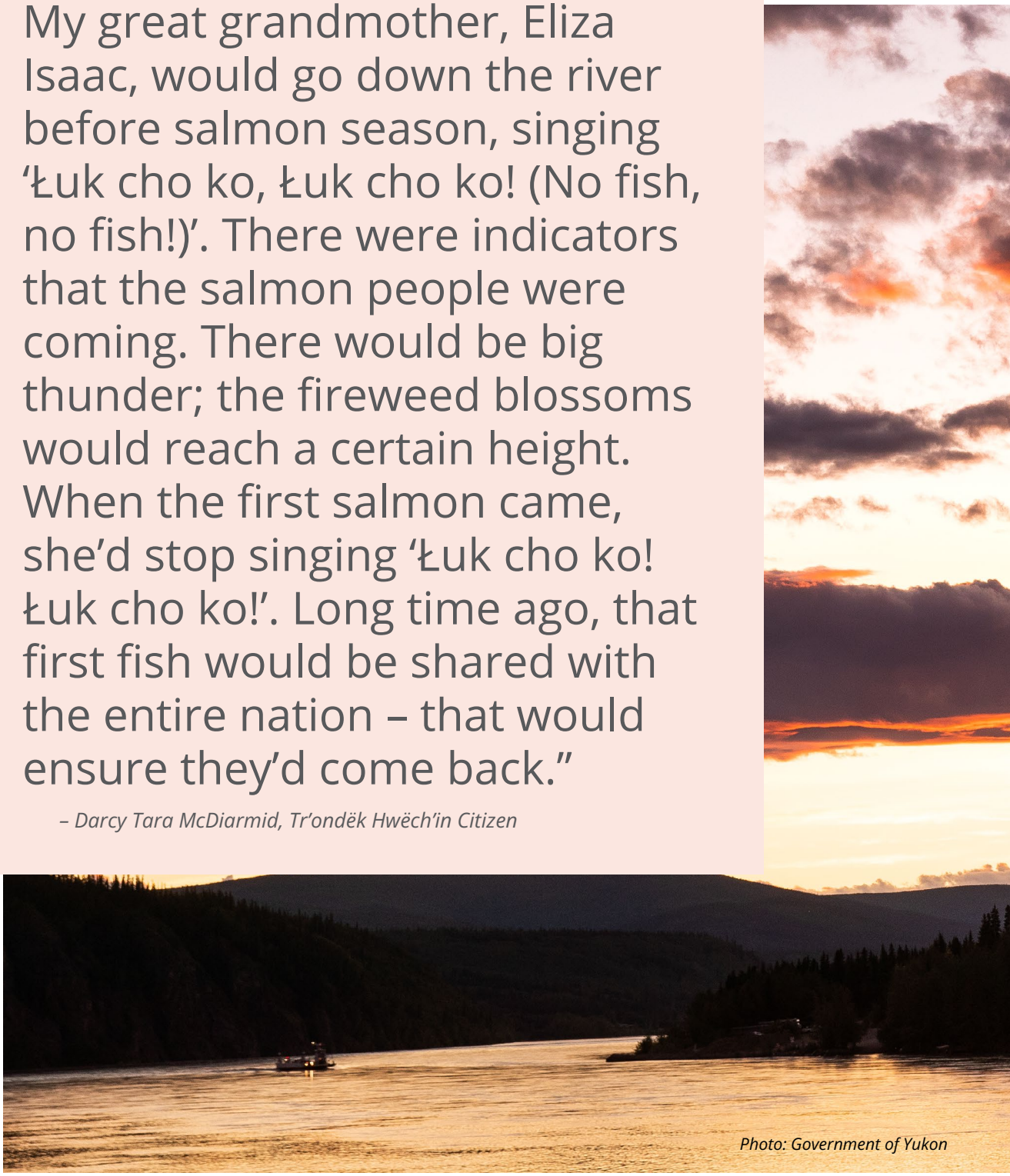


Photo: Government of Yukon

The Tr'ondëk Hwëch'in have a sacred agreement with salmon that goes back to a time when their ancestors were salmon **(3)**. They honour this bond through ceremonies, songs like "Łuk Cho Anay" ("Salmon, Come Back"), international advocacy, and abstaining from fishing when salmon numbers are low.

Historically, salmon fishing season was a time of abundance for the Tr'ondëk Hwëch'in. Even when other food was scarce, people could rely on the salmon runs, making predictable periods of socializing, trade, and celebration within and among Nations all along the Yukon River and its tributaries. The seasonal excitement continued even as colonization disrupted longstanding practices.

Salmon fed fur-traders, gold rush stampeders, their sled dogs and, eventually, global markets through a Tr'ondëk Hwëch'in-owned fish plant. Because salmon numbers have declined over recent decades, people have stopped salmon fishing entirely. Fish camps now focus on holding ceremony to maintain and strengthen relationships with salmon **(3)**.

"The salmon that have come here [to Dawson] have made it against all odds and should be celebrated."

– Alice McCulley, Dawson Regional Planning Commission

Three salmon species live in the Region: Chinook, chum, and coho **(103, 104)**. Chinook and chum undertake some of the world's longest migrations, up to 3,000 km **(104)**. Salmon require specific habitats at each life stage, and healthy riparian zones help create the conditions needed for their survival **(105)**. When salmon die, they return nutrients from the ocean to the forest ecosystem.

During the fur trade and gold rush, salmon fed the growing sled dog population as well as people. By 1898, commercial fisheries were present in the Region **(107)**. The Chinook population has been declining since the 1980s, and by 1998, returns were too low to sustain populations **(108)**. Commercial harvesting ceased in 2008 **(107)** . Multiple factors have contributed to the decline of salmon: bycatch mortality, increased predation, increased mortality from parasites, and changing ocean conditions **(109 to 112)**. Industrial development can disrupt migration and habitats, while boats can harm eggs and juveniles **(109,113 to 116)**. Climate change brings mixed effects, some aiding survival, others increasing stress and disease **(109,110)**.

In 2024, a bipartite agreement between Canada and Alaska set out objectives to address the decline of Yukon River salmon, including: a seven-year moratorium on Chinook fishing (2024 to 2031); recognition of the importance of Chinook salmon for ceremonial use and the transmission of cultural knowledge; and investigating the causes of low runs and identifying solutions **(117)**.

The Plan falls within the jurisdiction of both Parties, and therefore, both Parties must take an active role in the next steps of addressing the salmon crisis. The Parties' leadership is essential to ensuring that salmon recovery efforts are locally grounded, culturally informed, and ecologically effective. By working together, the Parties can demonstrate a shared commitment to stewardship, uphold their responsibilities under the Final Agreements, and help shape a future where salmon and their habitats are protected for generations to come.

This Plan can only direct the actions of the Parties. Two crucial players in salmon management and recovery in the Yukon – Fisheries and Oceans Canada (DFO) and the Yukon River Panel (YRP) – are outside the scope of this Plan and the direction of the Parties. However, the Parties are encouraged to play their roles to the fullest, including their participation on the YRP, and to continue advocating for salmon and their habitat.

Who Plays a Role in Salmon Stewardship in the Region?

There are many actors responsible for salmon and salmon habitat stewardship in the Region, and many more with mandates that affect salmon and salmon habitat indirectly. Overlapping authorities and gaps caused by insufficient or ineffective coordination between these actors, and between multiple management systems, can result in harm to salmon and their habitat. The main actors and management systems are described below, followed by some examples of gaps and overlaps, and potential paths forward.

Plan Parties

Tr'ondëk Hwëch'in

- Responsibility rests in their ancestral stewardship obligations to salmon.
- Management Role:
    - Leads salmon stewardship, restoration, and monitoring within their Traditional Territory.
    - Has decision-making authority over activities on Settlement Lands, and co-management responsibilities throughout their Traditional Territory.

    - Creates and implements ecological and land use monitoring plans that include culturally significant species and habitats, including salmon.
    - Participates in land use planning and YESAB assessments.
    - Contributes to the broader governance of salmon through their role on the Yukon River Panel.
- Tr'ondëk Hwëch'in Salmon Management Goals:
    - Protect salmon-bearing streams.
    - Ensure cumulative effects thresholds are respected, and continue to develop salmon- and water-specific cumulative effects thresholds.
    - Revitalize salmon populations through stock restoration and monitoring initiatives.
    - Integrate cultural values and Traditional Knowledge into habitat management.

Government of Yukon

- Responsibility rests in decision-making powers for activities and development that indirectly affect salmon habitat.
- Management Role:
    - Manages freshwater fisheries in the Yukon.
    - Manages the landscapes salmon depend on.
    - Regulates placer and quartz mining, which directly affects salmon habitat.
    - Has varying roles in management and direction of land use, water licensing, and mining regulation.
- Government of Yukon goals related to salmon management:
    - Support sustainable development while balancing environmental protection.
    - Facilitate mining and resource development under updated regulations.
    - Collaborate with First Nations on land use planning and salmon restoration.

Plan Partners

This list is not exhaustive, but it highlights some of the larger groups that have a role in salmon advocacy, stewardship, and management in the Region and beyond.

Yukon River Panel

The Yukon River Panel is a bilateral (Canada–USA) advisory body that oversees conservation and management of Canadian-origin Yukon River salmon. It sets goals for how many fish need to reach the Canadian border, recommends management actions to DFO and the Alaska Department of Fish and Game, and administers funding for salmon and salmon habitat restoration and enhancement.

The Panel includes six members from each country: Canada's representatives include one member from Tr'ondëk Hwëch'in and one from the Government of Yukon. Given these formal roles on the YRP, both Parties contribute to decisions that affect salmon management and habitat restoration. The Panel integrates Western scientific and Traditional Knowledge through its Joint Technical Committee and Traditional Knowledge Committee **(118)**.

Fisheries and Oceans Canada (DFO)

Fisheries and Oceans Canada (DFO) is the lead federal agency responsible for salmon management in Canada, including habitat protection under the *Fisheries Act* (RSC, 1985, c.F-14) and *Species at Risk Act* (SC 2002, c.29). Its responsibilities include habitat protection, stock assessment, and regulation of activities that may harm salmon or their habitat. DFO oversees salmon stock assessments (for example, Eagle sonar), regulates habitat impacts (including placer mining), and funds local initiatives in the Region. It also supports the Yukon Salmon Subcommittee (YSSC) and collaborates with the Parties on habitat and restoration efforts.

The Yukon Salmon Subcommittee (YSSC)

The Yukon Salmon Subcommittee (YSSC, established under 16.7.17 of the UFA) is the primary salmon advisory body in the Yukon. It provides formal recommendations to DFO, the Government of Yukon, and Yukon First Nations on salmon and habitat issues. Members of the YSSC form the majority of Canadian representatives on the Yukon River Panel, giving the YSSC direct influence over salmon management decisions in the Dawson Region (and beyond).

Dawson District Renewable Resources Council (DDRRC)

The Dawson District Renewable Resources Council (DDRRC, established under 16.6.1.1 of the THFA) collaborates with both the Government of Yukon and Tr'ondëk Hwëch'in to support local stewardship and conservation. It makes recommendations on fish, wildlife, and habitat management to the Minister of Environment, Yukon Fish and Wildlife Management Board, YSSC, and Yukon First Nations, and plays a direct role in salmon and habitat issues in the Region.

Council of Yukon First Nations (CYFN) and YFNSSA

The Council of Yukon First Nations, as a political advocacy body, represents Tr'ondëk Hwëch'in and other Yukon First Nations in policy discussions and nominations to key advisory boards like the Yukon Fish and Wildlife Management Board and YSSC. A sub-organization of CYFN, the Yukon First Nations Salmon Stewardship Alliance (YFNSSA), strengthens technical capacity and on-the-ground salmon initiatives **(119)**.

Yukon Water Board

The Yukon Water Board regulates the use of water or the deposit of waste into water. The Board issues authorizations for water use, including in salmon-bearing streams **(120)**.

Management Systems

DFO, the Government of Yukon, and CYFN co-developed the Fish Habitat Management System for Yukon Placer Mining (FHMS) under the *Fisheries Act* (RSC, 1985, c. F-14). It is the primary system for managing salmon habitat in the Region. The FHMS aims to balance a sustainable placer industry with the conservation and protection of fish and fish habitat to support fisheries **(121 to 123)**. The FHMS has been reviewed many times. These reviews identified key gaps and provided recommendations for improvement **(124 to 126)**. These recommendations should be integrated into future updates of the FHMS to better protect salmon populations and their habitats.

IMPLEMENTATION ACTIONS

75 Recognizing that the Government of Yukon does not have direct authority over salmon in the Region, it should still uphold the following responsibilities (Government of Yukon):

- Salmon management is not just about harvest; it is about ecosystem health, which the Government of Yukon is responsible for (*Environment Act* [RSY 2022, c.76]). Co-lead (with Tr'ondëk Hwëch'in) habitat protection efforts, particularly in placer mining zones and riparian areas, to achieve integrated and transparent salmon governance.
- Ongoing, authentic engagement in joint planning and relationship-building (with Tr'ondëk Hwëch'in and/or DFO and other bodies as listed below) to improve regulatory efficiency, build public trust, and reduce conflict.
- Support Tr'ondëk Hwëch'in in the exercise of their ancestral stewardship obligations to salmon.

76 Work to fill gaps in the management and stewardship of salmon in the Region:

- There is no single body that ensures cumulative effects are monitored or mitigated.
- Compliance inspections are insufficient.
- There is no unified coordination of salmon habitat restoration across jurisdictions.
- There is inequity in harvest policies across Canadian and U.S. jurisdictions.

The YFNSSA is a technical body with no formal decision-making power, but its advisory and capacity-building roles could be strengthened to coordinate salmon restoration across First Nations and governments.

77 Work with all relevant partners to clarify and communicate roles and responsibilities for protecting salmon and salmon habitat in the context of placer mining. Placer mining is regulated by the Department of Energy, Mines, and Resources in the Government of Yukon. The salmon-bearing streams where placer mining occurs are managed by the Department of Environment in the Government of Yukon, and the salmon themselves are managed by DFO.

This governance structure can result in inconsistent enforcement, gaps in legislation, and unclear responsibility. YESAB assessments are recommendations; enforcement is carried out by the Government of Yukon and/or federal departments. This can be complex when there are many values at play. Clarity is needed for governments, the public, and proponents.

A Framework for Land Stewardship in Support of Salmon

Given the number of actors, overlapping jurisdictions, and gaps in stewardship or management, the following framework outlines how the Parties can collaborate to support salmon stewardship throughout the Region.

1. **Governance Integration**
    - The roles and responsibilities of all organizations must be clearly defined and agreed to from the outset.
    - Jointly develop and implement salmon-related management plans and salmon habitat protection measures identified in the Plan.
    - Mandate and embrace the integration of Traditional Knowledge into all technical and policy decisions and processes.
    - Prioritize YESAB recommendations related to salmon habitat.
2. **Stakeholder Engagement**
    - Empower underutilized actors such as YFNSSA, local fish camps, and youth educators.
    - Expand community-based monitoring programs and fish camp revitalization.
    - Include non-governmental organizations and cultural educators in conservation and restoration planning.
3. **Habitat Protection**
    - Strengthen enforcement of habitat regulations in placer mining zones.
    - Though it may require work, the FHMS exists and has been agreed to by the Parties and other governments. Apply the recommendations for improvement to the FHMS and ensure stricter compliance, through enforcement, with its requirements.
    - Implement integrated watershed planning across jurisdictions.
    - Fund restoration projects, including through existing projects where support is available – for example, Yukon River Panel Restoration and Enhancement Fund.
4. **Cultural Stewardship**
    - Support programs like First Fish camps and Salmon in the Schools. If required, based on the salmon populations, be prepared to adapt these programs to ensure ongoing connections to salmon.

- Support Tr'ondëk Hwëch'in-led initiatives that combine cultural revitalization with ecological monitoring.
- Ensure salmon management decisions reflect cultural values and treaty rights.
- Promote intergenerational knowledge transfer through ceremonies and land-based education.

5. **Implementation Strategy**

    - Where management gaps are identified, develop salmon management plans, with input from all stakeholders. Where existing plans exist or are in progress (for example, Chinook and chum rebuilding plans, Tr'ondëk Hwëch'in salmon rebuilding plan), provide sustained support and strategic coordination to help these plans achieve their intended outcomes.
    - Host annual salmon summits to review progress and update strategies.
    - Contribute to shared data platforms for habitat, harvest, and restoration metrics.
    - Monitor and evaluate outcomes using adaptive management principles.

Key Planning Issues

- Salmon, their habitats, and their migratory routes face negative impacts from:
    - Industrial development and cumulative effects across large areas of land use.
    - Climate change through increasing ocean and stream temperatures, altered flows, and increased sedimentation.
    - Development that causes changes in water quantity and quality.
    - Use of high-powered motorboats, jet boats, and barges, which can cause damage to riverbanks and mouths of small tributaries.
    - Harvest (intentional and bycatch) in the open ocean, with limited regulation.
- Many factors that affect salmon are beyond the Region's boundaries.
- There is limited data on where salmon overwinter, rear, and spawn in the Region.
- Salmon management is complex, involving many bodies and government agencies (including federal and international because of their migratory nature).

Goals

1. Salmon populations are sustainable and can support Indigenous and commercial fisheries.
2. Spawning, rearing, and overwintering habitats are identified, protected, and, rehabilitated when needed.
3. Migratory routes are protected and rehabilitated.
4. Traditional teachings and cultural connections to salmon are preserved, enriched, and passed on to future generations.
5. Yukon River salmon rebuilding plans are developed and implemented.

STEWARDSHIP DIRECTIONS	
1	Treat salmon and their habitat with respect.
2	Avoid disturbances in salmon spawning, overwintering, and/or rearing habitats. If you cannot avoid disturbing salmon spawning, overwintering, and/or rearing habits, prepare clear reclamation plans before the project is approved.
3	Avoid using high-powered motorboats, jet boats, and barges in overwintering, rearing, and spawning habitats.
4	Avoid directly or indirectly blocking any salmon migration routes.
5	Adhere to timing windows for lifecycle-related habitat types (for example, overwintering habitat and water withdrawals, spawning streams) as per Freshwater Timing Windows Identified for the Yukon **(102)**.
6	Avoid disturbances to riparian areas in salmon spawning, overwintering, and/or rearing habitats. If you cannot avoid disturbing these riparian areas, prepare clear reclamation plans before the project is approved.
7	Avoid water crossings in areas where salmon overwinter, rear, and spawn.
8	Reduce sediment discharge in salmon spawning, overwintering, and/or rearing habitats.
9	Minimize surface and vegetation disturbance in riparian areas by maintaining riparian buffers/setbacks from development activities where possible.
10	Avoid winter in-stream water withdrawals in or upstream of sensitive overwintering and rearing fish habitat.
11	Avoid large-scale industrial and/or infrastructure projects within spawning, overwintering, and/or rearing salmon habitats.
12	Minimize disturbance to salmon for scientific research purposes, and use non-lethal sampling methods where possible.

IMPLEMENTATION ACTIONS	
78	Evaluate the existing authorizations under the *Fisheries Act* (RSC, 1985, c. F-14), the FHMS, and the adaptive management framework within the FHMS. Determine how this system can work better in the Region.
79	Include youth and community members in salmon monitoring efforts and create mentorship opportunities.
80	Expand long-term water quality monitoring to inform decision-making about salmon and salmon habitat, similar in scope to the Environment and Climate Change Canada's National Long-term Water Quality Monitoring **(127)**. In addition to the existing Klondike River station, stations should be installed at the following major watercourses: • Yukon River South and North • Sixty Mile River • Indian River • White River • Stewart River • Fortymile River • Fifteen Mile River • Twelvemile River
81	Continue to support ongoing work on salmon habitat restoration projects by Tr'ondëk Hwëch'in and other organizations, including YSSC, DFO, Yukon River Panel, and the DDRRC.
82	Expand assessment and restoration of both habitat and stocks.
83	Develop and implement cumulative effects components for salmon.
84	Strengthen enforcement mechanisms for habitat protection, especially in mining zones.
85	Develop salmon management plans that align treaty rights, habitat needs, and development pressures. This requires bringing all relevant actors to the table.
86	Develop and/or support development of a publicly accessible aquatic habitat inventory in major rivers. This should identify and map key habitats with a specific focus on spawning and overwintering habitats and their responses to climate change, to determine the factors affecting salmon habitat. This mapping should inform the classification of streams and Areas of Special Consideration identified on the Yukon Placer Fish Habitat Suitability maps for watersheds in the Region. Some projects have already started to meet this need – for example, Pacific Salmon Explorer[19]. This project should be supported.

19 Pacific Salmon Foundation, 2024; salmonexplorer.ca.

GOVERNANCE RECOMMENDATIONS

Implement the recommendations from the reviews of the FHMS for Yukon Placer Mining.

Collaborate with DFO to clarify and codify responsibility for salmon and salmon habitat in the Region. The objective is to protect and restore salmon and salmon habitat so that:

- Sufficient numbers of Canadian-origin Yukon River salmon return to Canada to meet Yukon River Panel spawning escapement goals.
- Tr'ondëk Hwëch'in can once more harvest salmon for subsistence.

Revise binational agreements to reflect ecosystem-based and culturally inclusive goals.

Mandate the integration of Traditional Knowledge into all technical and policy decisions.

Create and fund an educational platform to inform the public about:

- How to identify salmon habitats.
- The impacts of land uses on salmon and salmon habitat.
- Best management practices within salmon habitat.
- The cultural importance of salmon.
- Stewardship initiatives and opportunities.

KNOWLEDGE GAPS

Use Traditional Knowledge and local ecological knowledge to better understand the health of Yukon River Chinook salmon, the causes of low-run abundances, and possible solutions.

Continue to research ways to restore and preserve salmon and their habitat.

Examine the current water withdrawal tracking system to identify opportunities for improvement, and better how it affects salmon habitat.

Research the impacts of high-powered boats on salmon and salmon habitat, especially damage to riverbanks and mouths of small tributaries.

Research the impacts of (local) climate change on salmon and salmon habitat.

Research strategies to increase climate resilience in salmon, including identifying cold-water refugia.

Investigate how to make a stock restoration program feasible.

Investigate coho salmon life history in the Region to better understand why they are limited in abundance here, but dominant in nearby watersheds, such as Old Crow.

The combined effects of land-use activities on salmon and their habitats are not understood well enough to develop effective indicators. Research these effects and interactions to inform indicator and threshold development.

Photo: Government of Yukon

5.3.4 CARIBOU/WËDZEY

Caribou hold immense value from ecological and socio-cultural perspectives for the Tr'ondëk Hwëch'in and the people of the Region at large. Caribou serve as both indicator and umbrella species, making them ecologically significant in northern landscapes. As an indicator species, their health reflects the overall condition of boreal and alpine ecosystems: they are sensitive to changes in habitat quality, climate, and human disturbance, so declines in caribou populations often signal broader environmental stress.

As an umbrella species, conserving caribou habitat, especially large, intact areas, also protects a wide range of other species that share these ecosystems. This dual role makes caribou a focal point for conservation planning, guiding efforts that benefit entire ecological communities.

There are six caribou herds that live in or travel through the Region, and they can be grouped into three ecotypes:

- Porcupine Caribou Herd (barren-ground ecotype).
- Fortymile and Nelchina herds (migratory ecotype).
- Clear Creek, Hart River, and Klaza herds (woodland ecotype).

The combined ranges of all caribou herds cover nearly the entire Region and extend into other areas of the Yukon and into Alaska. The transboundary nature of caribou migration (international, across traditional territories, and between Canadian jurisdictions) poses unique planning challenges.

Much of the habitat of the Porcupine Caribou Herd in the Region is protected by SMA designations, which is why there is no barren-ground caribou overlay.

Migratory caribou have large numbers, large home ranges, and extensive seasonal migrations between their calving, summer, and winter ranges. Both the Fortymile and Nelchina herds have expansive home ranges that extend into Alaska. Movement between seasonal habitats plays a crucial role in the survival of migratory caribou.

Alpine summer habitat provides important food sources and offers refuge from predation and pests such as flies and mosquitoes. These conditions are particularly important for the survival of nursing cows and their calves. Winter habitat has essential forage and shelter from extreme cold and wind, helping caribou conserve energy and avoid predation during the harshest months. Migration corridors connect seasonal ranges.

Woodland caribou have adapted to treed, mountainous ranges, where they can feed on lichens on the ground and in the trees. Their calving, summer, and rutting ranges are all in the alpine, where they can access rich forage and avoid predation and pests. In winter, they generally reside in subalpine old-growth forests, relying on lichens on trees as their primary source of nutrition in the harsh climate. Caribou are generally dispersed across their home range for most of the year and only congregate within ancestral rutting ranges in the fall.

All caribou herds face the same threats: human-caused disturbances (such as roads, development projects, and climate change via changes to food availability). The cumulative impacts of these threats reduce herds' resilience to ongoing changes, especially when coupled with natural fluctuations in herd sizes. Climate change has a direct effect on caribou habitat (for example, changes to forest cover, increased wildfire occurrence and severity, shifts in pathogen distribution), and will likely reduce caribou range by affecting quality, extent, and location of suitable caribou range in the future. Changing temperatures and precipitation

may also impact caribou demographics – for example calf recruitment and adult female survival.

Reducing the impact of human-caused disturbances in caribou habitat will give them more space to adapt to climate change, thereby increasing their chances of survival. While caribou populations may never return to their historic levels, we can help support recovery and bring them closer to a sustainable population for future generations.

Goals

1. Caribou herds are healthy and resilient, and their populations grow towards historic levels.
2. Caribou habitat and migration pathways are sufficient to support historic population levels.
3. Society respects and stays connected to caribou.

Key Planning Issues

- The Fortymile herd is the primary herd of concern in the Region, given that they face current and future conflict with certain land uses. Winter range for the Fortymile caribou herd is abundant in the Region, but caribou use of this habitat is difficult to predict from year to year. Conversely, summer ranges and migratory pathways are well known and more consistent year to year. These areas are essential to the herd's persistence.
- The Committee on the Status of Endangered Wildlife in Canada has recommended that Barren-ground caribou (including the Porcupine Caribou Herd) be listed as Threatened. The process to list the population under the *Species at Risk Act* is still ongoing. If listed, a national recovery strategy would be developed, including defining critical habitat (habitat that is necessary for herd survival or recovery).
- Infrastructure like highways and industrial activity, including mining, can overlap with key migration routes and ridges, and create barriers to migration.
- Many factors may cause range use to change over time, including climate change, natural processes, and human activities. Managers must apply a high degree of caution in harvest and management strategies for all herds and herd ranges, consistent with the precautionary principle.
- Herds have different habitat needs and sensitivities at different times of year, associated with different behaviours. For example, rut (approximately September 15 to October 20) is a sensitive period for woodland herds.

- As the climate changes, caribou will be exposed to variable winters with a higher frequency of freeze-thaw events and variable snow depth, which can negatively affect populations.
- Changes to winter habitat, including lichen removal, wildfire, and the creation of permanent structures, may result in changing patterns of use over time.
- All herds face increased harvest near roads.

Stewardship Directions

Caribou herds need to be managed at scales that reflect their biological realities, such as their herd ranges and seasonal use areas, rather than boundaries created for other purposes, such as LMUs. Each ecotype has unique seasonal movements and habitat needs, so a one-size-fits-all approach can overlook critical ecological differences. Managing at the herd scale ensures that actions are ecologically meaningful, and it allows for more effective recovery strategies, monitoring, and collaboration between governments, industries, and other land users.

For these reasons, there are four groups of stewardship and management directions for caribou in the Region that apply:

1. Region-wide.
2. In the Summer Habitat Overlay – Migratory Caribou.
3. In the Winter Habitat Overlay – Migratory Caribou.
4. In the Woodland Caribou Overlay.

Important caribou habitat and industrial activities often overlap. These overlays are not intended to stop industrial activities; they are designed to ensure that caribou habitat can be protected while generally allowing for industrial activity. Each overlay is specific to the caribou herd(s) and to the habitat type.

Region-wide

STEWARDSHIP DIRECTIONS	
1	Treat caribou with care and respect.
2	When engaging in activities on the land, follow safe operating distances from caribou as determined during assessment and regulatory processes, and as advised by the appropriate and qualified staff within the Parties.
3	Promote storytelling and teachings that highlight our relationships and interconnectedness with caribou.

IMPLEMENTATION ACTIONS

87	Continue to support and implement, as appropriate, the Fortymile Caribou Harvest Management Plan, the Porcupine Caribou Harvest Management Plan, the Northern Mountain Caribou Management Plan, and other plans relevant to herds in the Region to ensure survival of the herds for current and future generations. Where possible, the Parties should provide sustained support and strategic coordination to ensure these plans are completed in a timely manner and achieve their intended outcomes. Once completed, the Parties should implement the management guidelines into assessment and regulatory processes.
88	Carry out and support ongoing monitoring of caribou herd migration, range use, and habitat choice. Monitor climate variables and industrial activities alongside this work.
89	Building on the initial lichen cover indicator, develop and implement further caribou-specific cumulative effects indicators that would apply in each overlay.
90	Develop a caribou movement alert system based on collared caribou to maximize efficiency and compliance for project proponents.

GOVERNANCE RECOMMENDATIONS

Consider climate-driven shifts in habitat requirements for all caribou herds during project assessment, policy and legislation development and Plan Review. This will help ensure the Plan and its implementation remains true to the caribou goals.
Develop, finalize, and, as required, implement international agreements on caribou that cross international boundaries. These include the Fortymile herd, for which the Fortymile caribou herd Harvest Plan (2025 to 2030) exists, and the Porcupine herd, which would benefit from an international agreement.

KNOWLEDGE GAPS

Improve understanding of caribou–industry interactions, including monitoring and assessing changes to migration patterns and habitat use in response to industrial development activity and cumulative habitat alteration – for example, development, fire, climate shifts. Research should be long term to account for changes in industrial activity over time.
Undertake habitat modelling to assess the potential effects of natural processes and climate change (for example, increased precipitation, temperatures, and fire activity) on the primary forage species (lichen) for caribou. This work should focus on how these changes affect the quality, extent, and location of lichen.
Determine the availability and suitability of habitat for Porcupine caribou within LMU 2: Horseshoe.

Migratory Caribou Overlays

The overlays are intended to support the protection and recovery of the migratory caribou herds in the Region. While these herds are distinct in origin and movement patterns, they have a large overlap in habitat and share similar ecological needs. They rely on high-elevation terrain and lichen-rich forage, and can therefore be managed with a shared overlay. There are two migratory caribou overlays, summer habitat and winter habitat, which cover different habitats and have different sets of directions. For clarity, both apply year-round.

Summer Habitat Overlay – Migratory Caribou

This overlay encompasses areas identified as critical for the Fortymile caribou herd's movement, summer foraging, and calf survival **(Figure 10)**. This overlay also covers a large portion of the Nelchina herd's range in the Yukon. This overlay applies year-round, to protect summer habitat and migration routes even when caribou are not present. Stewardship Directions for this overlay guide access, restoration, and land use with a strong emphasis on habitat protection.

STEWARDSHIP DIRECTIONS	
1	**New quartz staking and exploration** • Quartz staking and quartz exploration outside of existing tenure are prohibited.
2	**Infrastructure** • No ***permanent infrastructure*** allowed above 700 m unless explicitly permitted jointly by the Parties.
3	**Ground disturbance** • Large patches of caribou lichens on the ground are not to be disturbed. Limit the footprint of disturbance to the smallest possible area.
4	**All activities** • Minimize and mitigate the effects of all direct and indirect impacts on caribou and their habitat. All methods should be low impact both to the land and to the caribou.
5	**Existing quartz tenure** • Quartz exploration and mining are not supported throughout the overlay, including on existing tenure.
6	**Offsetting** • To offset damage to caribou habitat, all efforts should be made to reclaim existing trails and trenches.

STEWARDSHIP DIRECTIONS (CONT.)

7	**New access** • No new access is allowed outside of existing tenure unless jointly approved by both Parties. If approved, advanced exploration or a new mine would require a project access plan.
8	**Existing access** • Existing access should be controlled and used only by rights holders.
9	**Off-road vehicles** • Restrict off-road vehicle use to existing trails.
10	**Caribou presence** • All activities must stop when caribou are in the area. Operators will be given advance notice when caribou are close in order to prepare to stop work.
11	**Restoration work** • Preferred timing: late summer to early fall to minimize disturbance. All restoration activities must aim to re-establish ***functional caribou habitat***. In particular, caribou forage lichens and important willows (for example, *Salix pulchra*) should not be disturbed. • Habitat fragmentation should be avoided. Corridors between habitat patches should be a high priority for restoration activities.

IMPLEMENTATION ACTIONS

91	Apply lichen cover as a cumulative effects indicator within this overlay. A single threshold is set at 80% of lichen cover within the overlay (measured as of March 2026). If this threshold is crossed (that is, cover decreases by 20%), jointly review and revise overlay directions with a goal of providing increased protection for caribou to compensate for the loss of forage.
92	Increase public availability of herd data, including seasonal movement patterns and population trends.
93	Update herd data annually and make it accessible through a public portal.

IMPLEMENTATION ACTIONS (CONT.)

94 At each Plan Review, re-evaluate the Summer Habitat – Migratory Caribou Overlay with consideration to:

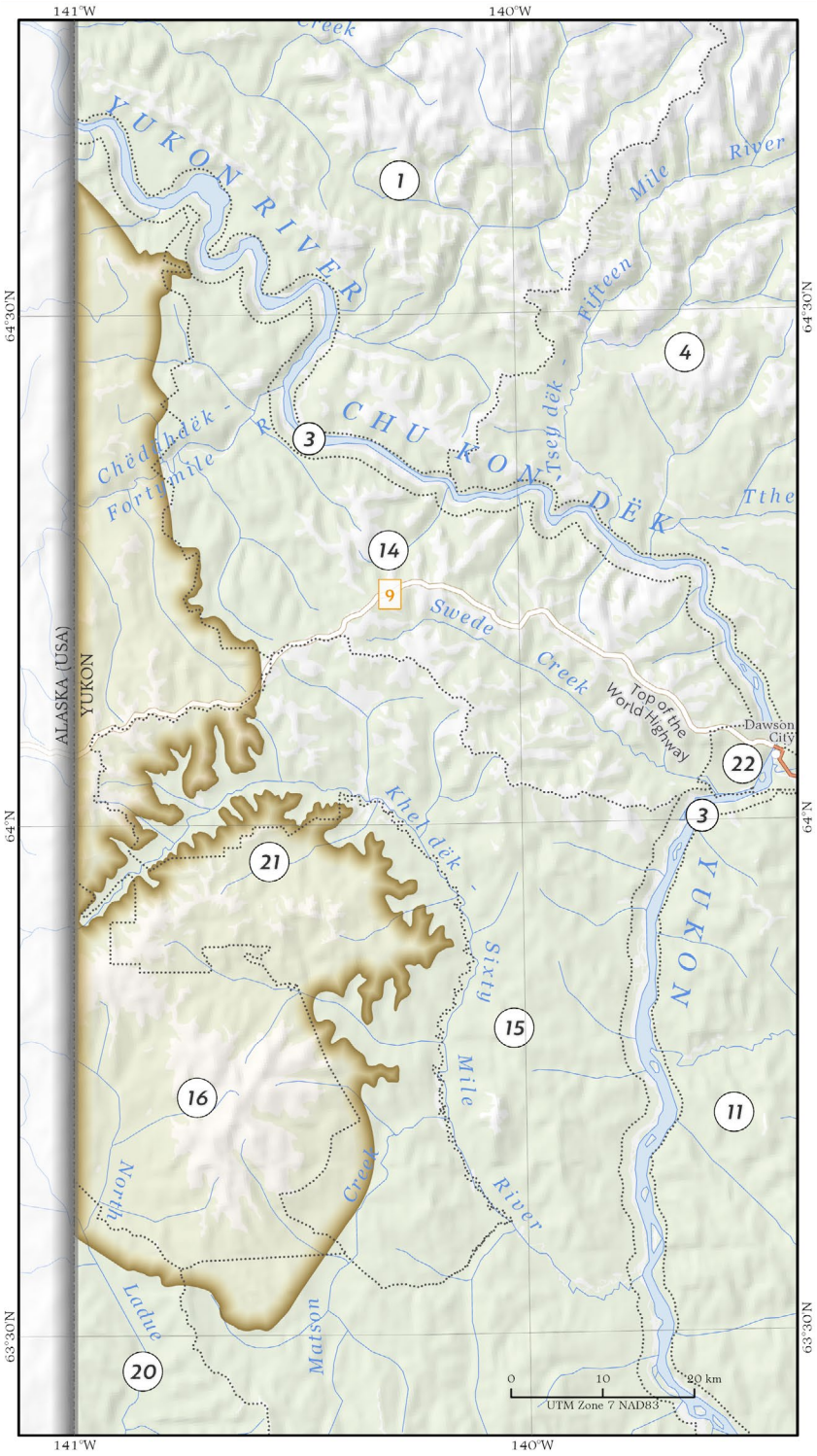
- The effectiveness of current management directions.
- New ecological data, including lichen cover data.
- Feedback from communities and stakeholders.
- Climate change impacts.
- Wildfire events.
- Trends or significant shifts in herd movement or population dynamics.

KNOWLEDGE GAPS

There are no established methods for revegetating caribou lichens in the Region's environments. Research and test potential methods, focusing on revegetation after fire and human disturbance.

Increase understanding of how wildfires affect caribou habitat and herd movement, and integrate wildfire data into future overlay updates.

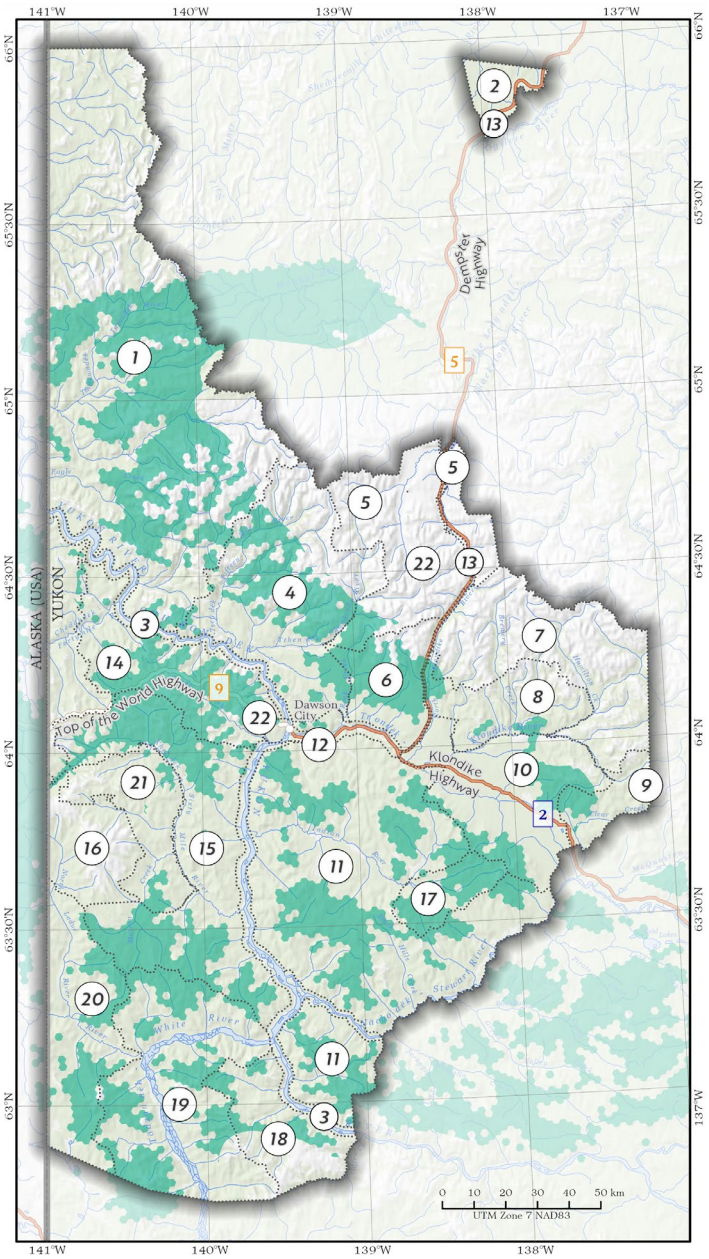
Figure 10: Summar Habitat Overlay – Migratory Caribou. This overlay covers areas identified as critical for the Fortymile caribou herds movement, summer foraging, and calf survival. This overlay also includes a large portion of the Nelchina's herd range in the Yukon. This overlay applies year-round.



Winter Habitat Overlay – Migratory Caribou

This overlay covers all mapped key winter habitat for the Fortymile caribou herd in the Region (excluding within the Summer Habitat Overlay – Migratory Caribou and the Woodland Caribou Overlay). This overlay applies year-round to protect winter habitat even when caribou are not present **(Figure 11)**. Stewardship Directions for this overlay focus on achieving no net loss of functional caribou habitat.

Figure 11: Winter Habitat – Migratory Caribou Overlay. This overlay covers all mapped key winter habitat for the Fortymile caribou herd in the Region (excluding within the Summer Habitat – Migratory Caribou Overlay and the Woodland Caribou Overlay). This overlay applies year-round.



STEWARDSHIP DIRECTIONS

1 When proposing development (subject to YESAB assessment) within this overlay (with the exception of placer mining below 700 m), apply the mitigation hierarchy with the goal of no net loss of functional caribou habitat. The Plan encourages working toward a net gain of functional caribou habitat. Proponents must respond directly to the mitigation hierarchy. This structured approach prioritizes ecological integrity and caribou habitat are prioritized. An example of the Mitigation Hierarchy Response Form is in Appendix 7.

Mitigation Hierarchy

1. **Avoid:** Activities should be avoided entirely in this overlay. If projects must occur, proponents must demonstrate how they are avoiding high-quality habitat patches by showing the locations of proposed targets, access, camps, and so on, in relation to mapped caribou habitat.
2. **Minimize:** Proponents must:
   - Use low-impact methods.
   - Limit footprint and duration of activities.
   - Avoid sensitive seasons.
   - Minimize and mitigate the effects of all direct and indirect impacts on caribou and their habitat.
   - Record and communicate all caribou observations.
3. **Restore:** All disturbed areas must be restored to functional caribou habitat (Section 3.11).
4. **Offset:** Until such time that additional beneficial offsets are described, offsets should focus on restoring trails and trenches.

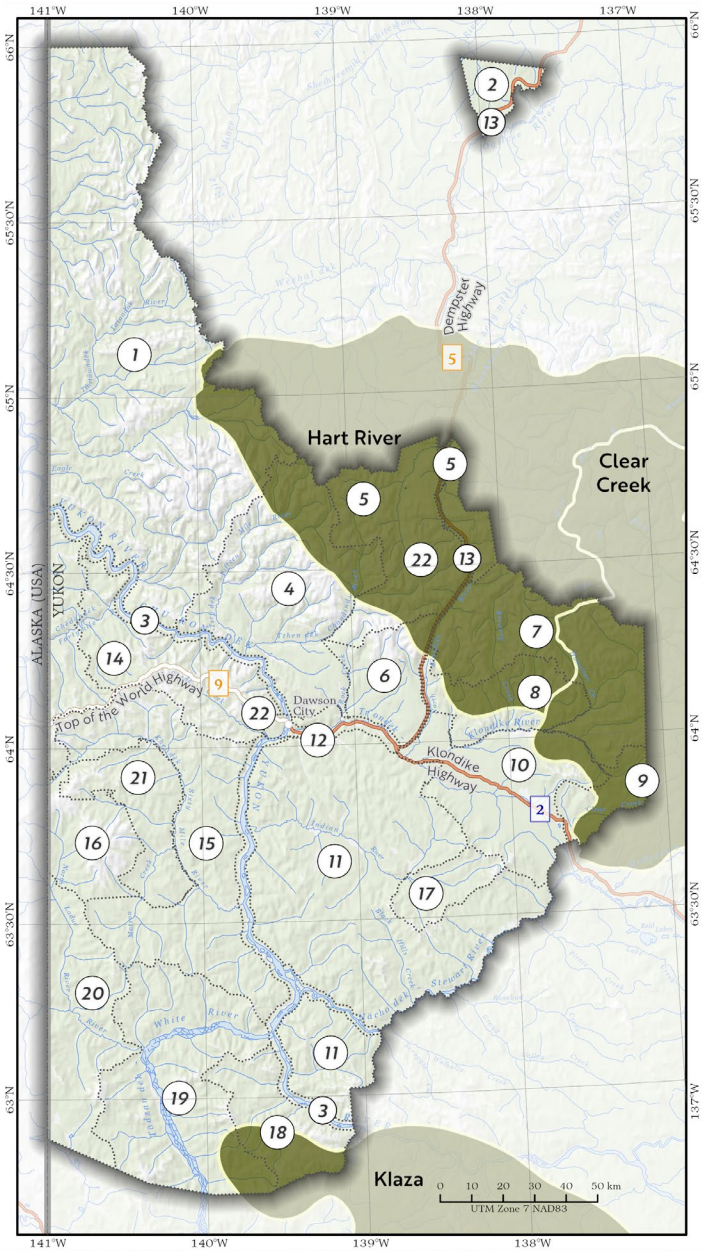
IMPLEMENTATION ACTIONS

95	Ensure all project proposals within the Winter Habitat – Migratory Caribou Overlay include a mitigation hierarchy assessment. Develop, publicize and apply review criteria to evaluate whether avoidance and minimization have been adequately pursued.
96	Apply lichen cover as a cumulative effects indicator within this overlay. A single threshold is 80% of lichen cover within the overlay (measured as of March 2026). If this threshold is crossed (that is, cover decreases by 20%), jointly review and revise overlay directions with a goal of providing increased protection for caribou to compensate for the loss of forage.
97	Maintain a public registry of restoration and offset activities, including monitoring results.
98	Adapt mitigation expectations over time, based on herd data and ecological outcomes.

Woodland Caribou Overlay

The Woodland Caribou Overlay encompasses the ranges of three distinct herds: Clear Creek, Klaza, and Hart River **(Figure 12)**. While each herd occupies a unique landscape, they share similar ecological characteristics and vulnerabilities, allowing for a unified management framework. This overlay guides land use and restoration activities to support the long-term health of woodland caribou populations.

Figure 12: Woodland Caribou Overlay. This overlay covers the range of three distinct herds in the Region: the Clear Creek, Klaza, and Hart River herds, which all share similar ecological characteristics and vulnerabilities. The overlay applies year-round.



STEWARDSHIP DIRECTIONS

1	**Alpine Protection** • No exploration is allowed in identified rutting areas from September 15 to October 15.
2	**Use of Existing Roads** • Roads in mapped rut habitat cannot be used during rut (September 15 to October 15).
3	**Winter Access** • No winter access (November 15 to February 28) except for trapping and recreation.
4	**Road Construction** • No new roads before the Na-Cho Nyäk Dun Regional Land Use Plan is complete. After it is complete, Tr'ondëk Hwëch'in, Na-cho Nyäk Dun, the Government of Yukon, and both Commissions should revisit this direction together.
5	**Road Construction** • No loop roads.
6	**Lichen Conservation** • The overlay remains a high priority for wildfire fighting, especially the winter range portion.
7	**Reclamation** • Reclamation must occur in both alpine and valley-bottom areas, with habitat-specific goals.
8	**Monitoring Requirement** • Proponents must complete annual habitat condition assessments.
9	**Mitigation Hierarchy** • Demonstrate how the project adheres to the mitigation hierarchy. Specifically: • **Avoid:** Show that the proposed project avoids key mapped habitat for caribou and, where the data exist, high-quality patches of caribou forage. Provide specific details about where all parts of this project will be located, including the main activities, access, and camps.

IMPLEMENTATION ACTIONS	
99	Increase understanding of how wildfires affect caribou habitat and herd movement. Integrate wildfire data into future overlay updates.
100	Apply lichen cover as a cumulative effects indicator within this overlay. A single threshold is set at 80% of lichen cover within the overlay (measured as of March 2026). If this threshold is crossed (that is, cover decreases by 20%), jointly review and revise overlay directions. The goal is to provide increased protection for caribou to compensate for the loss of forage.
101	Develop a cross-regional plan for the Clear Creek herd range that involves: • The Commissions and Parties from the Dawson, Peel, and Na-Cho Nyäk Dun Regional Land Use Plans. • Shared data, restoration goals, and access protocols.
102	Continue to apply findings from the existing Clear Creek Range Assessment.
103	Provide resources and coordination for the upcoming Hart River Range Assessment.
104	Use assessment results to refine Woodland Caribou Overlay boundaries and management directions, if required, during Plan Review.
105	Ensure restoration outcomes are habitat-specific and monitored for effectiveness.
106	Maintain a public registry of restoration activities and outcomes.
107	Include restoration performance in Plan Review.

5.3.5 MOOSE/JËJIK

> "Given that moose have always been there for us and have been a long-standing source of our survival, we agree to treat them with the utmost respect and not to take their lives for granted. Every year, we see people from down south come up and take moose from our family hunting spots, their bodies and racks hung in the back of trucks heading out of town. It is our responsibility to care for our moose. We can't leave them to fend for themselves with all these hunting pressures and lack of regard for their natural habitat."
>
> *– Tr'ondëk Hwëch'in, 2024*[20]

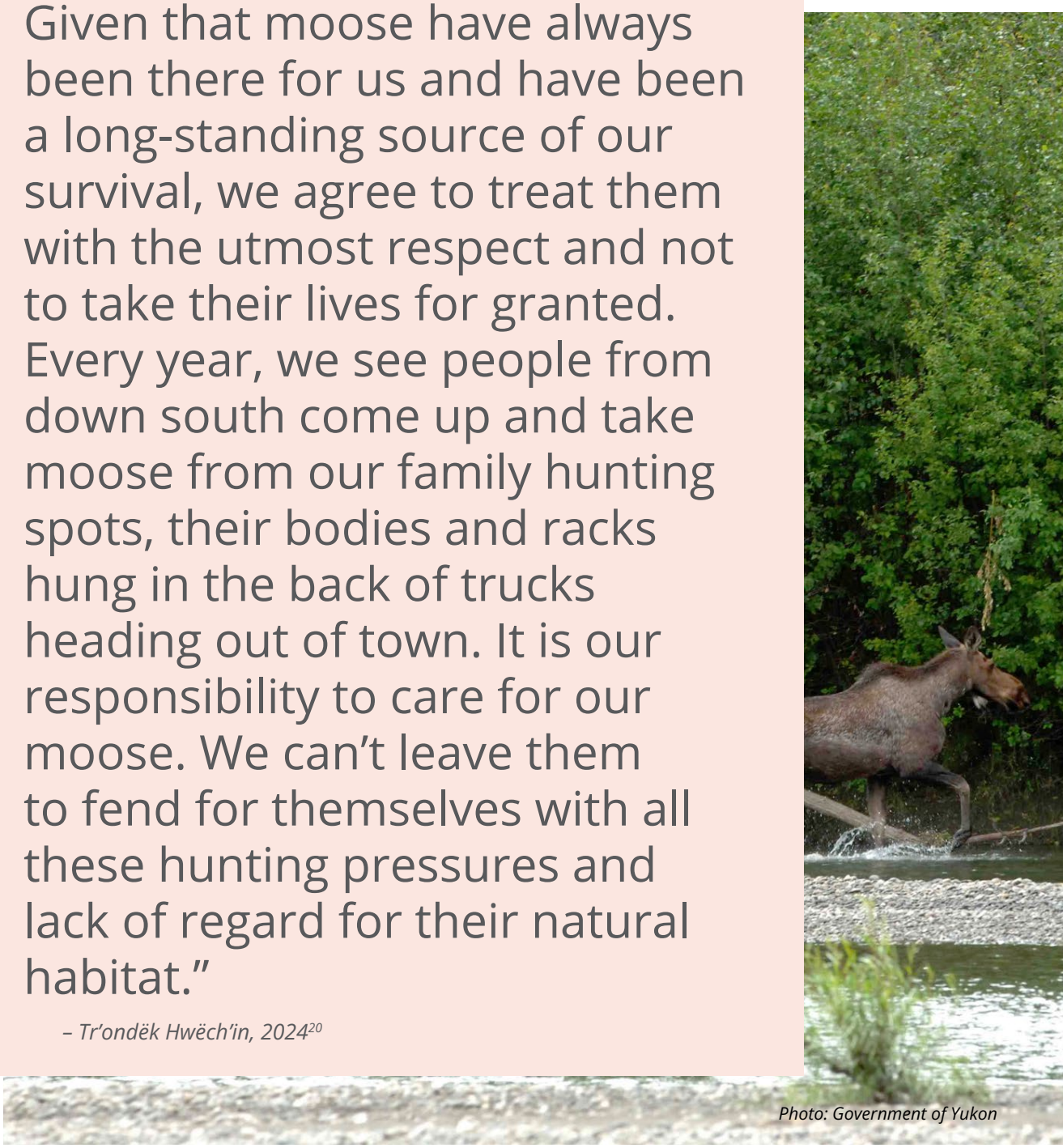


Photo: Government of Yukon

20 Tr'ondëk Hwëch'in, Submission to the Dawson Regional Planning Commission: Recommended Plan (adapted from *We are Denezhu*, 2023), April 30, 2024.

Moose are a species of cultural significance to the Tr'ondëk Hwëch'in **(31)**. They provide a major component of a traditional diet as well as hides and other materials that are used in crafts, clothing, and artwork. Moose hunting is an important seasonal activity for many people of all backgrounds in the Region, helping them connect to the land and access country foods. People also come from elsewhere in the territory to hunt moose.

Moose use different habitats depending on the season, their sex, and stage of life. Throughout the year, moose balance finding good quality food (including willows, aspen, and birch shrubs), avoiding predation, and limiting their energy use **(128)**. In spring and summer, moose can be found in riparian areas, wetlands, and mineral licks **(129)**.

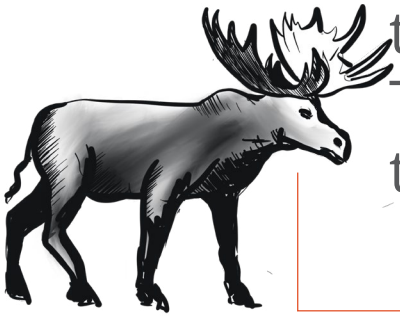
In the fall, during rut, moose travel widely. Winter movements depend largely on snowfall **(128)**. Late winter can be the hardest time of year for moose. Snow makes it difficult to travel, reach food, and escape predators, especially during years of high snowfall. Certain areas used in late winter are defined by the Government of Yukon as Wildlife Key Areas (WKAs) for moose because they are critical for survival **(86)**. Calving sites are also important to protect, and local knowledge is required to inform where these are **(86)**.

Predicting how moose will respond to impacts from climate change is difficult. It is important to monitor these responses as conditions change **(128)**. Projected increases in snowfall could make late-winter key habitats even more important. Higher temperatures could lead to increases in food availability **(130)**, but also increase pests, parasites, and diseases, such as mosquitoes and ticks **(131)**.

The Government of Yukon manages activities that affect moose, such as land use and harvest, at the scale of Moose Management Units (MMUs). It supports a management approach that maintains and restores intact ecosystems **(128)**. The Government of Yukon carries out periodic population surveys by MMU. It selects MMUs for surveys based on factors including length of time since the last survey and past, current, and anticipated harvest levels and land-use activities **(128)**.

While management and monitoring often focus on areas with high harvest, it is also important to protect areas with less harvest and development pressure. Animals can move from these areas to support harvest in easier-access areas.

> "... they use just about everything, then they teach the young people about it ... like even the hooves like, a hoof of the moose or caribou. What they do there they save the hoof like the caribou leg or hoof or whatever moose on their trail as they go along they hang it up, all the way down the trail in case somebody's hungry. They boil it and then they eat that ..."
>
> *– Peggy Kormendy, Tr'ondëk Hwëch'in Citizen*[21]



Key Planning Issues

- Moose are a culturally significant species for Tr'ondëk Hwëch'in.
- Moose are important for subsistence and licensed harvest.
- Human land use can affect important moose habitat, including Wildlife Key Areas and calving areas.
- Moose, predators, and hunters all use linear features (for example, roads and trails); increased use and development of linear features can increase harvest and predation pressure.
- New roads and trails contribute to habitat fragmentation.
- Disturbance during calving, or in calving areas, poses a risk to the moose population.

21 Tr'ondëk Hwëch'in, Submission to the Dawson Regional Planning Commission: Recommended Plan (adapted from *We are Dënezhu*, 2023), April 30, 2024.

- The projected increase in snowfall due to climate change increases the importance of already critical late-winter habitat.
- The response of moose to combined climate change impacts is hard to predict.
- Hunting can conflict with other land uses.

Goals

1. The Region maintains a resilient, healthy, and sustainable moose population.
2. The Region's residents can sustainably harvest moose into the future, at levels that meet their needs.

STEWARDSHIP DIRECTIONS	
1	Avoid or minimize development within movement corridors and areas of high or seasonal use. Specifically, avoid development in calving areas, areas of post-rut aggregation, and late-winter habitat (WKAs).
2	Avoid or minimize new access where access is currently limited or where access will result in "loop roads" connections.
3	During years of high snowfall, avoid activities that could disturb moose WKAs in late winter (February 15 to March 31).
4	In spring and summer, be alert for the presence of cow and calf moose in riparian areas and avoid disturbing them.
5	When undertaking development or activities in riparian areas, consider calving areas identified by local knowledge-holders.

IMPLEMENTATION ACTIONS

108	Continue to monitor moose population density, abundance, and composition, especially in areas that experience significant access, development and hunting pressure.
109	Limit habitat fragmentation by decommissioning roads that are no longer in use, and prioritize using existing access over creating new access.
110	Prioritize analysis and publication of data from moose surveys so that data are still relevant when shared.
111	Increase frequency of moose surveys, responding to local and Traditional Knowledge when selecting MMUs.
112	Collect data on licensed hunter residency (for example, to track where hunters are harvesting in relation to where they live) to inform future educational campaigns.
113	Support DDRRC recommendations on moose management, if required.
114	Revise moose WKAs based on incorporation of Traditional Knowledge and local ecological knowledge.
115	Review the MMUs to assess whether the current boundaries are meeting the needs of managers, hunters, the landscape, and moose.

KNOWLEDGE GAPS

Improve mapping of important riparian habitat used for calving, and describe how land use activities affect these areas.
Implement targeted monitoring of snowfall in key late-winter habitats.
Research cumulative effects indicators and thresholds based on moose habitat.
Continued work to identify key mineral licks and find ways to protect them from disturbance.
Conduct a long-term study that uses moose and socio-cultural indicators in reclaimed placer areas where moose is a priority value. Use the results to further define “successful” reclamation and its effects on the community.

5.3.6 LANDSCAPES

All the Region's landscapes have inherent value in their own right. They hold and connect ecosystems and viewscapes, provide homes for wildlife, and provide many services to people. Connectivity between habitats and ecosystems is essential. Many species rely on the ability to move freely across landscapes to find food, reproduce, and adapt to changing conditions. Fragmentation of habitats can isolate populations, reduce genetic diversity, and increase vulnerability to environmental stressors **(132)**. Maintaining and restoring ecological connectivity supports biodiversity and strengthens ecosystem resilience **(132)**.

This resilience is important to all communities, including human communities. Resilient ecosystems support wildlife populations for us to harvest, mitigate floods, and protect our drinking water. Maintaining intact landscapes is a long-term, holistic way to protect future generations and our non-human relations. Landscapes also provide the foundation for ecosystem services – such as clean water, carbon storage, and biodiversity – that are essential for sustaining life and supporting communities.

Forests

The boreal forest, which traverses North America from Alaska to Newfoundland and Labrador, covers most of the Region. Forests support high levels of biodiversity and are habitats for many of the Region's animal populations. Forests also provide opportunities like birch sap for syrup; chaga and morel mushrooms; non-commercial harvesting of personal fuelwood and timber; and hunting, fishing, and trapping.

The boreal forest is adapted to regular wildfire, which is, in fact, an important part of the ecosystem. However, ongoing climate change means that fires occur more frequently and burn hotter, which can have significant negative impacts on the forests and the species that live within them. Wildfires can also pose a significant threat to infrastructure and community well-being. The Dawson City Community Wildfire Protection Plan provides a wildfire risk management strategy and tools for increasing resilience to wildfire for Dawson City and the surrounding areas **(133)**. There are also numerous pests and diseases which threaten forests throughout the Region, though, currently, these threats occur at relatively low numbers **(134)**.

> “You don’t dig into the earth more than trail deep.”
>
> *– “Long ago” Yukon First Nations Traditional Law*[22]

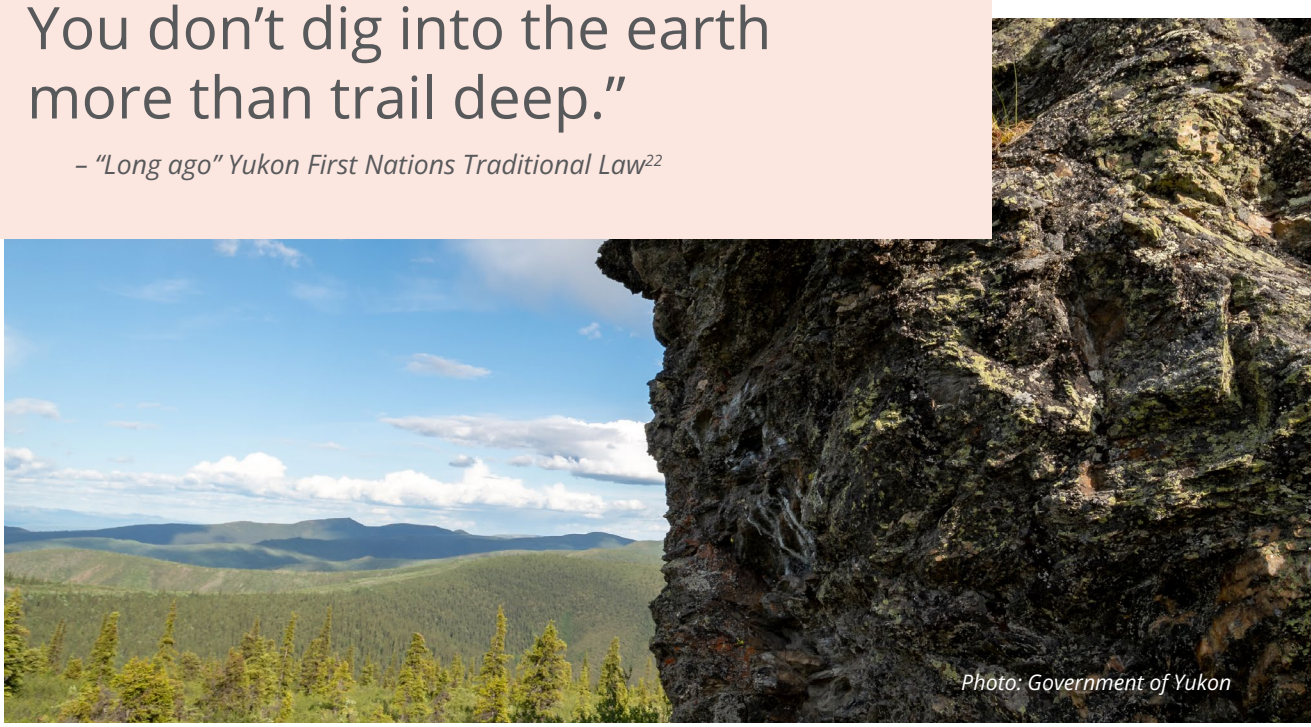


Photo: Government of Yukon

Mountains

Mountain ecosystems are vital ecological and cultural landscapes. They play a key role in the health and resilience of the broader environment. As the source of major headwaters, these high-elevation areas feed critical river systems that support biodiversity, sustain downstream communities, and maintain hydrological balance across the Region. Their steep slopes and varied elevations create many microclimates.

These conditions make mountains important climate refuges. They offer sanctuary for species under pressure from warming temperatures and contribute to overall ecosystem resilience. Mountains shape vegetation patterns, soil development, and wildlife habitat. In doing so, they contribute to the Region’s ecological richness and complexity.

Beyond their ecological significance, mountain areas hold deep spiritual and cultural meaning for Indigenous communities. These communities have long relied on them as landmarks and for traditional use, including hunting, gathering,

22 As shared by Darcy Tara McDiarmid, a Tr’ondëk Hwëch’in Citizen.

and ceremonial practices. These landscapes are woven into stories, teachings, and seasonal cycles, and reflect a strong connection between people and place. The mountains also offer recreational opportunities that foster appreciation and stewardship. They draw residents and visitors for hiking, wildlife viewing, and solitude.

Beringia

During the Last Glacial Maximum (~26,500 to 15,000 years ago), much of the Region lay within an ice-free area known as Beringia. Animal and plant populations survived in Beringia when ice sheets covered most of Canada. As glaciers retreated, populations from Beringia expanded into the newly available habitats. Many common North American plant species likely originated in Beringia and later spread across the continent.

Beringia's value is not just historical. Some of these plants and animals never moved very far, which makes Beringia a hotspot for endemic vascular plants and a significant contributor to Canada's vascular plant diversity (96). Beringia is also home to endemic animals like the collared lemming and a number of insects (see also Section 5.3.2).

Tundra

Tundra landscapes have long supported plants and wildlife uniquely adapted to harsh conditions. They act as reservoirs of biodiversity and as natural carbon sinks that have helped stabilize the global climate. Today, tundra landscapes remain vital for regulating the climate by storing significant amounts of carbon in permafrost. They also provide habitat for specialized species, sustain cultural traditions, and support scientific research on climate change.

Tundra areas offer striking viewscapes and unique recreational opportunities, from hiking and wildlife viewing to experiencing vast, open horizons that foster a sense of connection to nature. Looking ahead, as warming accelerates, tundra ecosystems will play a pivotal role in global carbon dynamics. Their preservation is essential to limit greenhouse gas release, maintain biodiversity, and protect cultural heritage in rapidly changing environments.

Wetlands

Wetlands are important landscapes in the Region. Because of their ecological, cultural, and industrial significance, they have their own Stewardship Directions (Section 5.3.7).

Key Planning Issues

- Infrastructure, including roads, development and resource extraction activities, can lead to habitat fragmentation.
- Increasing frequency and intensity of wildfires due to climate change threatens the integrity of forest ecosystems.
- Connected landscapes support ecosystem and population resilience.
- Protecting climate refugia contributes to species resilience.
- Competing land interests require balancing biodiversity conservation with forest harvesting.
- Alpine and headwater ecosystems are vulnerable to climate change and human disturbance.
- Endemic species are vulnerable to disturbance and habitat loss.

Goals

1. Landscapes are appreciated for their inherent value.
2. Viewscapes are maintained, especially when they are of community or cultural significance.
3. Critical, rare, or unique ecosystems are preserved, while recognizing that some ecosystems are likely to shift due to climate change.
4. Connected landscapes support resilient ecosystems and plant and animal populations.

STEWARDSHIP DIRECTIONS

1	Treat the land with humility and respect, recognizing your role as a caretaker rather than an owner.
2	Avoid or minimize disturbance in rare habitats and ecosystems, including steppe, riparian areas, and old-growth forests.
3	Incorporate ecosystem- or landscape-specific climate risk and mitigation and adaptation measures in development applications.
4	Identify and document rare habitats and ecosystems in the project area before submitting a project for assessment.
5	When proposing and developing projects, do not create disturbances in Wildlife Key Areas (WKAs). Do not disturb mineral licks identified by the Government of Yukon and made publicly available.
6	When proposing and developing projects, consider connectivity within and between landscapes, and make best efforts to retain connectivity.

IMPLEMENTATION ACTIONS

116	Update mapping of both human-caused and natural disturbances, including wildfire, permafrost thaw, and forest pests.
117	Maintain and restore corridors for wildlife movement across landscapes. Prioritize connectivity in zoning and restoration efforts, especially between forested areas, alpine zones, and wetlands.
118	Prioritize protecting headwater areas.
119	Prioritize identifying and protecting climate refugia for culturally and ecologically important species, for species most at risk from climate change.

GOVERNANCE RECOMMENDATIONS

Incentivize protecting areas with underlying permafrost.

KNOWLEDGE GAPS

Observe and monitor changes to rare species and ecosystems, particularly low-elevation steppe meadows and alpine areas.

Identify areas of climate refugia and develop plans to protect these areas.

Develop specific research initiatives to increase understanding of permafrost in the Region, including the following:

- Identify high-risk areas for permafrost thaw.
- Assess the impacts of permafrost thaw on local biophysical conditions, including water quality and availability, flow, and wetlands.
- Measure emissions of greenhouse gases, heavy metals, and diseases associated with permafrost thaw.
- Develop appropriate and effective mitigation measures to minimized permafrost thaw from resource and road development projects.
- Explore techniques for encouraging the re-establishment of permafrost.
- Geohazard mapping and permafrost studies along highway corridors.

Photo: Government of Yukon / D Crowe

5.3.7 WETLANDS

Wetlands are areas that typically have water at or near the ground surface during some or all of the year. An area is considered a wetland when water remains long enough for poorly drained soil to form, and for water-loving plants to become the dominant vegetation. Wetlands cover about 10 to 12% of the Region **(19,135)** and are often sites of land-use conflict because of their socio-cultural and environmental importance overlaps with a high potential for placer mining.

Wetlands support wildlife and fish communities and, for the Tr'ondëk Hwëch'in, are places of immense historic and cultural value where subsistence harvest and cultural connection can occur. There are numerous benefits that wetlands provide, including fish and wildlife habitat, water storage and regulation, carbon storage, erosion control, regulation of water flow, and flood mitigation **(136)**.

Impacts on these wetland values have downstream repercussions and risk negatively affecting interrelated environmental and social systems. Because wetlands are interconnected with the rest of the landscape, activities upstream of and adjacent to them also affect wetland health **(136)**. When they are not altered, disturbed, or thawed, wetlands are a globally significant carbon reservoir **(137)**. Wetland disruptions and thawing of permafrost releases greenhouse gases such as methane and carbon dioxide, which further contribute to climate change **(137)**.

There are five wetland classes in the Yukon: bogs, fens, swamps, marshes, and shallow open water **(138).** Their form and function are shaped by topography, hydrology, and soil conditions. Bogs typically occur in flat, poorly drained upland areas where precipitation exceeds evaporation, leading to the accumulation of peat and acidic conditions **(138)**. Fens, in contrast, are found in low-lying areas with continuous groundwater flow, resulting in more nutrient-rich and less acidic environments that support a diverse array of plant species **(138)**. Swamps are generally located in forested lowlands or along river margins, where standing or slow-moving water supports woody vegetation and dynamic ecological processes **(138)**. Bogs, fens, and some swamps are characterized by having peat, an accumulation of partially decayed vegetation or organic matter that takes a very long time to form and is difficult, if not impossible, to restore once it is disturbed **(138)**.

Marshes are wetlands dominated by plants such as grasses and sedges, while shallow open water wetlands are areas with standing water less than two metres deep that typically supporting aquatic vegetation. These wetland types are generally easy to identify on the ground.

Tr'ondëk Hwëch'in and Ducks Unlimited Canada have completed a watershed-level wetland classification mapping project in the Region. Ongoing work will produce further wetland mapping for the Region, which should help identify the extent, location, and classification of the Region's wetlands.

LMU		OPEN WATER	MARSH	FEN	BOG	SWAMP	RANKED WETLAND COVER
1	Tthetäwndëk (Tatonduk)	0.3		6.8	0.8	5.3	10
2	The Horseshoe	0.3		10.2	0.6	3.5	9
3	Chu Kon Dëk (Yukon River Corridor)	22.1	0.03	7.4	0.1	18.0	2
4	Tsey Dëk (Fifteenmile)	0.3		2.5	0.1	5.4	14
5	Ddhäl Ch'ël (Tombstone)	0.8		11.7	0.04	3.7	5
6	Tr'ondëk (Klondike)	0.1		1.2	0.4	7.5	13
7	Wehtr'e (Antimony)	0.3		1.9	0.3	5.0	15
8	Brewery Creek	0.5		2.8	1.3	7.2	11
9	Clear Creek	0.2		0.6	0.3	2.1	20
10	Tintina Trench	0.5	0.04	6.4	1.6	8.5	4
11	Goldfields	0.5	0.01	1.8	0.1	3.8	18
12	Tr'ondëk Täk'it (Klondike Valley)	2.3		5.3	0.4	17.8	3
13	Ch'ënyäng (Dawson City)	7.5		0.8	0.1	6.24	8
14	Tąy Dëkdhät (Top of the World)	0.2		0.6	0.1	2.1	21
15	Khel Dëk (Sixty Mile)	0.2		1.9	0.2	5.02	16
16	Wëdzey Nähuzhi (Matson Uplands)	0.1		1.5	0.4	1.9	19
17	Nän Dhòhdäl (Upper Indian River Wetlands)	0.04		4.1	0.5	6.01	12
18	Therian Dëk (Coffee Creek)	0.1		0.6	0.1	2.2	22
19	Tädzan Dëk (White River)	3.3	0.02	4.6	0.04	6.8	7
20	Łuk Tthe K'ät (Scottie Creek Wetlands)	0.5	0.1	7.2	0.4	8.01	6
21	Wëdzey Tąy (Fortymile Caribou Corridor)	0.2		2.1	0.2	3.8	17
22	Dempster Highway	3.9		27.2	0.2	21.6	1

The overlap between wetlands and mineral interests is largely a function of topography and geological history. Many wetlands are situated in valley bottoms, floodplains, and low-lying basins. These areas also tend to concentrate mineral deposits due to sedimentary processes and glacial activity **(139)**. They often contain gold and other valuable minerals, which makes them attractive for exploration and development **(139)**.

However, the ecological sensitivity of wetlands, combined with their cultural and subsistence importance to local communities and the ecosystem services they offer, creates a complex challenge for land use planning. In areas where wetlands and mineral interests overlap, the local placer industry is encouraged to take a measured approach and to protect cultural and ecological values. Under existing standards, completed wetland reclamation generally does not restore the original class and function **(138)**.

The current regulatory system and reporting requirements do not provide enough protection for the cultural and ecological values of wetlands. Continued improvement will be necessary to reach an acceptable level of protection. This includes successor legislation, enhancements to the Government of Yukon's Policy for the Stewardship of Yukon's Wetlands (hereafter Wetlands Policy), advancement of the cumulative effects framework, creation of a publicly available wetland inventory, and development of a reporting and monitoring system **(140).**

While the Wetlands Policy is intended to guide wetland management across the Yukon, it should only supersede the Plan's Stewardship Directions if it meets or exceeds them. Effective wetland management in the Region must be guided by the best available information, including evolving data on wetland location, functions and benefits, cultural importance and traditional use, climate change impacts, and reclamation effectiveness. As ecosystems respond to climate change, wetland characteristics are also likely to shift over time, reinforcing the need for adaptive and informed policy tools.

Mitigation Hierarchy

Because wetlands are ecologically sensitive and culturally significant, and because we know relatively little about how to restore them, the mitigation hierarchy must be applied rigorously to all development activities that intersect with wetlands. This approach provides a structured framework to reduce impacts and uphold stewardship responsibilities.

1. Avoidance is the most effective way to protect wetland values and should be prioritized wherever possible. The overlap between placer mining potential and wetland distribution is extensive, particularly in valley bottoms and low-lying basins. High-resolution imagery and detailed wetland mapping are essential tools for identifying wetlands and setting clear avoidance targets. These targets could include thresholds for the percentage of wetland area to be left undisturbed within a watershed or sub-region, especially for peat-forming wetlands like bogs and fens that are difficult or impossible to restore.

2. Land users should employ minimization strategies when avoidance is not feasible. High-resolution imagery and site-specific data are critical for designing operations that reduce the spatial footprint and hydrological disruption of wetlands. Techniques may include seasonal timing of activities, sediment control measures, and buffer zones to protect adjacent wetland functions.

3. Land users must follow the values-based reclamation framework (Section 3.11), which emphasizes values-based outcomes.

4. Offsetting is the final step when original wetland benefits cannot be fully restored. It may involve restoring historic mining disturbances elsewhere in the Region. While offsetting to alternate wetland outcomes may provide some ecological benefit, it must be carefully weighed against the loss of original wetland functions, especially cultural and subsistence values. Offset projects should be designed to complement regional conservation goals, and these projects should be subject to public reporting and review.

Wetlands of Special Importance

Through the Wetlands Policy, wetlands with unique ecological characteristics, cultural significance, or important benefits may be designated as Wetlands of Special Importance (WSI). The Government of Yukon has committed to ensuring "no loss or reduction of wetland benefits" in these areas. However, WSI designation does not automatically prohibit land disposition, mineral staking, exploration, or mining. To receive new authorization in a WSI, proponents must demonstrate during the assessment process how their project will maintain wetland benefits.

The Plan nominates four wetland complexes in the Region for Wetlands of Special Importance status **(Figure 13).** A wetland may be designated as a WSI if it meets one or more of the 10 established criteria. Each wetland complex serves as a critical carbon reservoir, making it eligible for designation on that basis alone. In addition, all four wetland complexes are likely to be considered an intact representative wetland in watersheds where further alteration or loss will cross an accepted ecological or management threshold, (per the Wetlands Policy). Pending input from Tr'ondëk Hwëch'in, the Government of Yukon may also consider each wetland complex to be considered of significant social or cultural importance. Further criteria may also be met as more data are collected.

While the WSI designation will provide some protection to the listed wetlands, and the Wetlands Policy encourages protective best practices, together they still fall short of the level of protection wetlands warrant across the Region for their cultural and ecological significance. This Plan therefore requires additional measures to protect wetlands in the form of the Stewardship Directions below, as well as recommendations to the Parties to strengthen their respective policies.

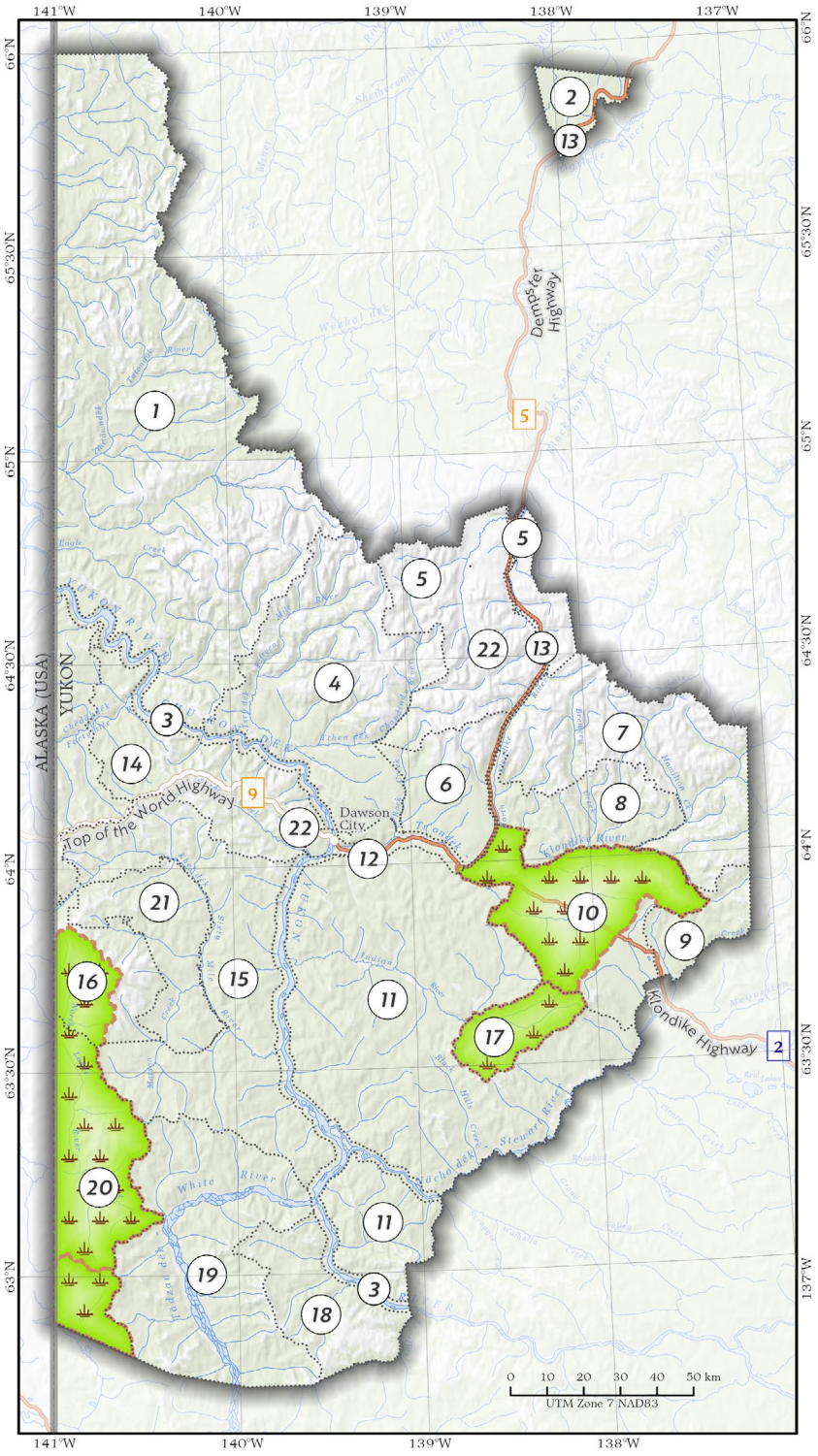
Key Planning Issues

- Wetland complexes hold high cultural and traditional value. When human activity alters wetlands, people may use the area less for harvesting, recreation, traditional pursuits, and stewardship, which reduces their connection to the land.
- When Tr'ondëk Hwëch'in Citizens cannot carry out their stewardship responsibilities to the land, both the land and people are negatively affected.
- Wetlands are vulnerable to the effects of climate change. Human activities may worsen these vulnerabilities.
- Industrial development can harm wetlands directly by destroying wetland areas and indirectly by increasing access, causing contamination, and changing water regimes.
- The Parties do not yet fully understand the extent and types of wetlands across the Region.
- Areas of high potential mineral value and high ecological and cultural value often overlap in wetland complexes in the Region.

Goals

1. Functioning wetland ecosystems persist across the Region and support wetland benefits and ecological and socio-cultural values.
2. Impacts from human activities and development do not significantly affect regional hydrology.

Figure 13:



Four nominated Wetlands of Special Importance.

1. Flat Creek Wetlands: All wetlands located in LMU 10: Tintina Trench, including wetlands within the Flat Creek, Medrick Creek, Florence Creek, Burton Creek, Parker Creek, Gates Creek, and Glacier Creek drainages, as well as portions of the Little South Klondike and North Klondike River drainages within LMU 10.

2. Upper Indian River Wetlands. Encompasses all wetlands within the Upper Indian River drainage within the Region (LMU 17: Nän Dhòhdäl [Upper Indian River Wetlands]).

3. Łuk Tthe K'ät (Scottie Creek) Wetlands: Encompasses all wetlands in the Scottie Creek drainage within the Region (LMU 20: Łuk Tthe K'ät [Scottie–Ladue Wetlands]).

4. Ladue Wetlands: Encompasses the entirety of the Ladue River catchment within the Region. This drainage extends from the confluence of the Ladue River and the White River northwest to the North Ladue River (within LMU19: Tädzan Dëk [White River]) and along the North Ladue River to the Matson Uplands, including a small portion of LMU 21 Wëdzey Tay (Fortymile Caribou Corridor) and LMU 16: Wëdzey Nähuzhi (Matson Uplands).

STEWARDSHIP DIRECTIONS

1	Treat wetlands with humility and respect, and recognize your role as a caretaker rather than an owner.
2	Rigorously apply the mitigation hierarchy when proposing development projects in or next to wetlands. Avoiding development in wetlands is always the preferred outcome.
3	All development proposals should state whether the project overlaps with wetlands[23]. Where a proposed project overlaps with wetlands, proponents should submit: • A map that identifies the location and type of wetlands using the best available data and following established mapping standards. • A wetland mitigation plan that outlines how the project follows the steps of the mitigation hierarchy. • A wetland reclamation plan for approval before work begins.
4	Minimize fragmentation of wetlands.
5	Limit water withdrawals and flow diversions upstream of wetlands.
6	The following wetlands require additional protection: • Undisturbed[24] bogs and marshes throughout the Region. • Undisturbed[24] fens in Special Management Areas. • Undisturbed[24] fens in Wetlands of Special Importance. For new projects or renewals under YESAB review, proponents will be provided with the location of these wetlands. For existing projects, proponents should make best efforts to identify them. 1. Do not carry out any activity or development in these wetlands, or within a buffer from the edge of the wetland: • 5 m for wetlands ≤1 ha. • 60 m for wetlands >1 ha. 2. Only carry out activities that do not harm the integrity of the wetland and its buffer within a further: • 60 m for wetlands ≤5 ha. • 140 m for wetlands >5 ha. These buffers apply until further evidence suggests more accurate buffer sizes.

23 Wetlands in the Region have been fully mapped, but the data are not publicly available in full at this time. However, YESAB provides wetland mapping on a project-by-project basis during its review process.

24 No disturbance from human activity resulting in linear feature density or surface disturbance.

STEWARDSHIP DIRECTIONS (CONT.)

7	Support and increase stewardship and appreciation of wetlands. Some possible approaches include hosting and participating in land-based cultural activities. You can also explore opportunities to share and learn about the ecological and cultural roles of different wetland types.

IMPLEMENTATION ACTIONS

120	Monitor, report, and annually tabulate the disturbance of wetlands at the scale of LMUs.
121	The Region would benefit from the development of a Wetland Suitability and Development Index – a project-scale tool designed to identify areas with high wetland suitability and guide decisions about development based on that suitability. Similar in approach to the FHMS, this regionally specific Index would enable fine-scale predictive wetland mapping across the Region by providing the analytical framework and inputs needed to model wetland presence, extent, and sensitivity. Possible data inputs for identifying suitability include: LiDAR, soils data, hydrology, vegetation layers, and local or Indigenous knowledge. This Index would support the maintenance of wetland benefits and functions, inform project proposals and assessments, and fill key gaps left by the territory-wide Wetlands Policy by offering operational guidance at a finer scale relevant to on-the-ground decision-making.
122	Ensure that wetland classification mapping and hydrological models are completed and shared to support the implementation of wetland disturbance thresholds. These should be completed using a scale that works for on the ground implementation of the Plan. The Parties can expand on mapping already completed by Ducks Unlimited Canada and Tr'ondëk Hwëch'in. They should prioritize detailed wetland inventories in areas with concentrations of wetlands and development interest – for example, LMU 17 : Nän Dhòhdäl (Upper Indian River Wetlands), and these should be made publicly available for use by regulators and proponents.
123	Promote biocultural and climate monitoring of wetlands that incorporates traditional and land-based knowledge.
124	Promote and support land-based cultural activities in wetland areas.
125	Recognize the role of wetland conservation in building climate resilience and promote wetland reclamation strategies that sequester carbon.
126	Encourage and, where possible, help to complete the Yukon Water Board Wetland Plan Guidelines (recognizing that completion is the responsibility of the Yukon Water Board, not the Parties).
127	Promote appreciation for wetlands through public education, focusing on understanding the values and functions of wetlands with the goal of and creating stewardship opportunities that deepen local connection to wetlands.

IMPLEMENTATION ACTIONS (CONT.)

128	Apply an adaptive approach to wetland buffers. The purpose of buffers is to protect wetland functions and benefits in areas where development is allowed. Recognizing that the recommended buffer may not be sufficient to protect certain wetland functions or benefits, use this approach to increase the recommended buffer when site-specific assessment or research is conducted. Increase buffers when the Parties agree on revised buffer widths. The Parties should consider the best available data and literature on wetland buffers to determine a solution based on the characteristics of the watershed, wetland type, and the intensity of associated land activities.
129	Offer workshops, training, or guidance documents to help proponents recognize wetland features and identify wetland classes in the field.
130	As part of fulfilling stewardship responsibilities to wetlands, encourage stewardship by industrial and commercial operators and make necessary information available. Require the rigorous application of the mitigation hierarchy in proposals and operations, with a focus on avoiding negative impacts. Further, ensure compliance with buffer-related wetland Stewardship Directions.

GOVERNANCE RECOMMENDATIONS

Provide full and permanent legal protection for WSIs, either under an existing mechanism or a new one as required. Apply full interim protection as soon as areas are nominated. (Government of Yukon)

Ensure compliance with water licenses, land use permits, and wetland policy requirements.

KNOWLEDGE GAPS

Knowledge of effective wetland reclamation strategies to restore wetland functions is incomplete.

Knowledge of how climate change affects wetlands is incomplete and limits policy decisions.

There is limited information on how wetlands resist and recover from human disturbance and to increasing climate pressures.

There is limited information on measurable indicators of wetland health.

More accurate estimates of carbon emissions from wetlands are required.

Research should establish scientifically validated buffer distances and requirements (for example, acceptable activities) for wetlands to protect wetland values. These distances and requirements should reflect ecological conditions, hydrological connectivity, and species habitat requirements.

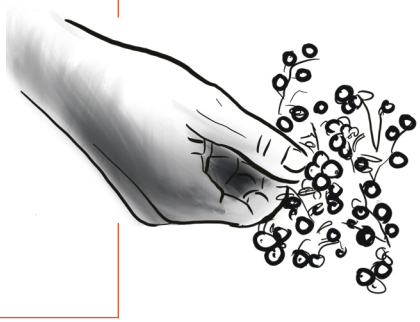
5.4 Sustainable Economy

This section of the Plan describes Sustainable Economy values and their goals.

SUSTAINABLE ECONOMY GOALS	
1	Residents of the Region have access to diverse economic opportunities that do not compromise current or future community well-being or ecological integrity.
2	Local economic activity supports a comfortable standard of living for all residents.
3	Economic activities that take place in the Region benefit all the Region's residents.
4	Land use conflicts are minimal, and there is land-use certainty across the Region.
5	To minimize impacts to the land, economic activities and development make efficient use of existing access and infrastructure.
6	The Region's economy includes a strong traditional economy, centred on cultural value and social well-being.
7	The Region's economy is largely centred on sustainable activities, provides for current and future generations, and is resilient, versatile, and responsible.
8	The Region's economy must be strong, robust, and profitable to the Region's residents.
9	The Region's economy supports multigenerational operations.

5.4.1 SUSTAINABLE LOCAL ECONOMY

> "Economies should not be separate from health, we must reimagine how economies function so they reinforce our stewardship relationship with the land, rather than fight against it."
>
> *– Individual Submission to the Draft Dawson Regional Land Use Plan, 2021*



The Sustainable Local Economy envisioned for the Region will provide sufficient economic resources for residents without harming other values. It will circulate wealth within the community, and be resilient by relying on diverse activities. Economies include the harvest, production, and distribution of goods and services, many of which ultimately come from the land. In recognition of this reliance, the Plan advocates humility.

"Economic" does not necessarily involve money; for example, harvesting fuelwood or hunting are economic activities. In the sections that follow, the Plan speaks to activities that are directly reliant on, and/or significantly affect the land, and recognizes two kinds of sustainable economic activities (Section 2.2.1): those that do not degrade the land or undermine communities, and those that deplete resources, but from which the land can recover. Robust and ongoing reclamation ensures that the integrity of the Region's landscapes is maintained. In this way, they will be able to continue to support the community's needs into the future.

To be sustainable, the economy must be profitable, because profitability ensures that businesses can reinvest in operations, support employment, and fund innovation. Without economic viability, environmental and social goals cannot endure over the long term, as financial instability undermines the capacity to implement sustainable practices.

Artwork: Yukon Graphic Recording ©2025

> "Not only does the traditional economy provide a lifestyle and economic benefit to those who are involved, the activity is rooted in stewardship [...] it provides a necessary tool to facilitate the teaching and passing on of Traditional Knowledge to the younger generations of all Yukoners."
>
> *– Dawson District Renewable Resources Council, 2021*[25]

The Tr'ondëk Hwëch'in have practised a traditional economy in the Region since time immemorial, and its modern version is part of the Region's broader economy. "Traditional" does not mean "old" or "out of use". Rather, it refers to practices that are "based on traditions and customs in keeping with the ancestral values

25 Dawson District Renewable Resources Council, Submission to the Draft Dawson Regional Land Use Plan, 2021.

of stewardship of the land and its natural resources" **(31)**. Traditional economic activities provide both tangible (for example, meat, fuelwood, income from selling trapped fur) and intangible benefits (for example, cultural and social well-being, intergenerational knowledge transfer).

Healthy environments and wildlife are essential to the traditional economy. Changes to the land (for example, from development pressure, human activity and climate change) affect Tr'ondëk Hwëch'in Citizens' ability to practise these economic activities, a recognized right under UNDRIP. While traditional economic activities are part of Tr'ondëk Hwëch'in's living heritage, many non-Indigenous residents also take part in these types of activities, which contribute to community stewardship and connection to land while providing for their own needs. Food harvested from the land is important to physical health and reduces reliance on costly and carbon-intensive imported food. The Plan envisions a thriving traditional economy as an integral part of the Region's Sustainable Local Economy into the future.

> "Indigenous Peoples have the right to maintain and develop their political, economic and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional and other economic activities."
>
> – *Article 20, United Nations Declaration on the Rights of Indigenous Peoples (2007)*

Pursuant to Chapter 22 of the THFA, a Regional Economic Development Plan (REDP) was completed in 2015. By contrast with this Plan, which speaks only to those activities that directly rely on or impact the land, the REDP included a comprehensive analysis of the socio-economic landscape of the Tr'ondëk Hwëch'in Traditional Territory, which largely overlaps with the Region. It proposed eight goals, which largely align with the Plan's goals for a Sustainable Local Economy:

- Sustainable population growth.
- Local benefits from major development projects.
- Year-round business and employment base.
- Sustainable, well-paying jobs.

- A diverse economic base.
- Available and affordable housing.
- Quality infrastructure.
- Attractive quality of life.

The REDP provided a six-year timeframe for completing the initial initiatives, with provisions for revision every five years or when Tr'ondëk Hwëch'in, the Government of Yukon, and the Government of Canada see fit. This review has not been completed at the time of writing.

The benefits people gain from employment (financial resources, a sense of contribution and belonging, the ability to gain and use skills and knowledge) are similar across sectors, though each sector has its own required skillset and culture. The combination of activities that contribute to the local economy is influenced by factors inside and outside the Region and changes over time.

In response to this variability, a selection of current and potential land-based economic activities is included as subsections of this value, with specific management directions where warranted (this list is not exhaustive). People engaged in any economic activity should also read the rest of Section 5: Management Directions, as the Stewardship Directions associated with each value apply to all land users.

The Plan's reclamation-related directions are a second response to anticipated change, especially as a way to mitigate impacts of boom-and-bust resource sectors like mining. When land-based projects include ongoing reclamation and reclamation planning from the beginning, they can provide consistent long-term employment that remains if an industry down-cycles. A third way the Plan responds to the dynamic nature of economic sectors is to encourage policy and programs that support local cross-training and skills transfer across industries.

By following the Plan, the Parties will guide overall economic system change towards Plan goals. A resilient local economy will be able to continue to sustain quality of life in the Region even as different activities come and go. By focusing management directions on the value of Sustainable Local Economy, as opposed to a specific combination of activities, the Plan builds in resilience and adaptive capacity.

The economic activity sections that follow contain activity-specific directions to protect other values and directions to encourage the sustainable pursuit of the activity. The activities are split into current and future potential activities, though the lists are by no means exhaustive.

SUSTAINABLE LOCAL ECONOMY ACTIVITIES	
Current	**Potential**
Tourism	Quartz Mining
Outfitting	Oil and Gas
Trapping	Fishing
Forestry	Renewable Energy
Agriculture	
Mineral Exploration	
Placer Mining	

Key Planning Issues

- Many of the Region's residents rely on land-based economic activities to meet their needs.
- Land-based economic activities are not necessarily compatible with one another.
- Many economic activities can negatively impact the Region's values.
- Practising traditional economic activities is vital to Tr'ondëk Hwëch'in culture and individual and community well-being. This requires healthy wildlife and land, opportunity, and access.
- Access for any economic activity (traditional, industrial, commercial) can negatively affect land and wildlife.
- Land users engaged in different economic activities have different priorities and values, and are governed by different, sometimes conflicting, regulations.
- Many of the Region's economic activities depend on external factors – for example, global travel trends and resource prices.

Goals

1. The Region's economy is diverse and resilient, centred on the local community and responsive to its needs, and composed of sustainable economic activities.
2. There is significant participation in a thriving, varied traditional economy.
3. The Region has a robust renewable resources economy (after THFA 16.1.1.2).

4. Tr'ondëk Hwëch'in Citizens' traditional uses of the land, which are constitutionally protected, are respected and supported throughout the Region, and not negatively impacted by other economic activities.
5. Many locally owned and operated businesses are successful and provide local employment.
6. All land-based economic projects in the Region provide benefits to the local community and residents that collectively outweigh any negative impacts to the Region's values.
7. Economic activities that benefit multiple Plan values are supported in favour of those that require trade-offs.
8. There is room and encouragement for new economic sectors within the Region's economy.
9. To limit risk and provide consistent, long term benefits, smaller-scale and longer time frame projects are prioritized over large-scale and short time frame projects.

STEWARDSHIP DIRECTIONS	
1	Be considerate of other land uses and communicate in advance with other land users when planning and engaging in economic activities on the land.
2	When planning and proposing projects, give special consideration to traditional economic activities that overlap with or could be affected by the project, including trapping and harvesting.
3	When proposing and considering Class 4 advanced exploration and mining projects, include traditional use impact studies and show how the project applies the mitigation hierarchy to traditional economy values.
4	Include climate change vulnerability assessments and measures for mitigation and adaptation when planning and proposing projects and activities.
5	Source materials and hire locally whenever possible.
6	Plan and undertake economic projects and activities in a way that: • Minimizes waste of energy and resources. • Minimizes carbon emissions. • Contributes to industry or sector improvements – for example, optimizing novel technologies. • Incorporates reclamation where values are negatively impacted. • Incorporates local and Traditional Knowledge.

IMPLEMENTATION ACTIONS

131	Support community-based research and monitoring, including annual surveys that gather knowledge from people accessing the land for harvest activities – for example, those carried out by Tr'ondëk Hwëch'in and the Dawson District Renewable Resource Council.
132	Use local knowledge, including that gathered through harvest surveys, into decision-making and Plan Review.
133	Promote local employment, skills development and cross-training, and support programs that contribute to these opportunities.
134	Explore and promote sustainable economic opportunities that result from climate change – for example, new agricultural possibilities.
135	Explore and promote sustainable economic opportunities that contribute to climate change mitigation and resilience – for example, renewable energy infrastructure, carbon credits, building local capacity to respond to emergencies, increasing food security.
136	Promote and incentivize economic activities that benefit multiple values and meet the Plan's definition of sustainable activities.

GOVERNANCE RECOMMENDATIONS

Review and revise the Regional Economic Development Plan for the Tr'ondëk Hwëch'in Traditional Territory so that new initiatives align with Plan goals and directions.
Continue to explore and support collaboration where multiple interests and rights exist, such as through the development of formal multi-use arrangements between land users – for example, miners, foresters and farmers.
Preserve key use areas, infrastructure, and resources that support traditional economic activities, and develop them further where required.
During project assessment, require traditional use impact studies from proponents of Class 4 exploration and mining projects.

KNOWLEDGE GAPS

There is limited information on the impacts of development on traditional economic pursuits in the Region. There is also limited information on what buffers or other tools would be sufficient to protect these activities and the lands and ecosystems they depend on. Research zones of influence and direct impacts of industries most likely to affect traditional economic activities and areas of high traditional economy value – for example, those identified in *Ninänkäk hoẓo wëk'ätr'ènòhcha: We Take Good Care of Our Land*.

KNOWLEDGE GAPS (CONT.)

Land use patterns associated with trapping and other traditional economic activities, including locations of cabins and trails, are not well documented. Research and document this land use, as well as ways this information can inform project assessment and planning, with care for confidential or sensitive information.

Tourism

Tourism offers an important path to sustainable economic activities in the Region and is a significant contributor to the regional and territorial economies. Regional tourism has mainly been based on the legacy of the gold rush, though there has been a recent shift toward wilderness tourism and cultural attractions. Tombstone Territorial Park offers significant opportunities for guided and unguided tourism, which is growing **(16)**. Management of the park itself is excluded from the scope of this Plan; however, the park's influence extends beyond its borders.

Other important areas for tourism in the Region include the Top of the World Highway, the Klondike Valley, and the Yukon, Klondike, and Fortymile rivers. Given limited access and the desired future state of certain LMUs, promoting backcountry tourism experiences may not be suitable in all areas of the Region – for example, LMU 1: Tthetäwndëk (Tatonduk). The recent designation of the Tr'ondëk–Klondike UNESCO World Heritage Site will likely be a new tourism draw.

While tourism can promote stewardship and cross-cultural connection, tourism traffic can adversely impact ecological and cultural values, including wildlife, fish and their habitats, and it can lead to conflicts with other land users **(141)**. High levels of tourism can also decrease the quality of a tourism experiences, especially when they focus on wilderness or wildlife. Impacts to the visual integrity of river and highway viewscapes, as well as high levels of overhead air traffic, affect the quality of tourism and wilderness travel.

Continued, carefully managed, and sustainable growth of the tourism industry is desirable to contribute to a Sustainable Local Economy. There is particular potential for growth in wilderness and ecotourism, culture and heritage tourism, and arts-based tourism. Directions for all values and economic activities should be read alongside the Stewardship Directions for Tourism, because of the interconnections between values and activities.

Photo: Government of Yukon

Key Planning Issues

- The sector is vulnerable to economic shocks, as seen during the COVID-19 pandemic.
- 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, noise, dust, and industrial activity diminish the wilderness experience of backcountry visitors and river travelers.
- Tourism is not always compatible with other economic or socio-cultural activities.
- Tourism can have negative impacts on values such as wildlife, habitat, cultural use, and harvest, depending on volume, location, timing, and mode of access.

STEWARDSHIP DIRECTIONS

1	Carry out tourism activities in a manner consistent with the principles of stewardship and sustainable development.
2	Land users engaged in activities that could impact tourism should consider how their activities may affect tourism values.
3	When engaging in tourism activities (as a tourist or operator), promote and follow ethical and respectful practices such as leave-no-trace principles.
4	Respect the vision of the Plan and respect culturally or ecologically sensitive areas by not promoting or encouraging tourism in these places.
5	Consider and respect LMU visions and consider current and future access when promoting backcountry tourism experiences. Backcountry tourism experiences will not be suitable in all areas of the Region.
6	When engaging in tourism activities, as a tourist or operator, use existing access and minimize impacts on the land.
7	When operating tourism activities, promote stewardship.
8	When operating tourism activities, share the history and heritage of the Tr'ondëk Hwëch'in as extensively as the history of the Klondike Gold Rush.
9	Where possible and appropriate, include Hän language in signage and promotion.

IMPLEMENTATION ACTIONS

137	Incorporate Hän language and Tr'ondëk Hwëch'in cultural history and contemporary use into tourism management strategies and signage in the Region.
138	Develop clear management guidelines for commercial wilderness tourism and commercial wildlife viewing in areas of high visitation such as the Dempster Highway, the Top of the World Highway, and the Yukon River Corridor.
139	Develop and publish best management practices for tourism industries, including wilderness tourism.
140	Consider the feasibility of tourism operators helping to monitor climate change.

GOVERNANCE RECOMMENDATIONS

Implement the Yukon Tourism Development Strategy, specifically Goal #2.
Provide educational information to aircraft users (for example, local companies that operate aircraft, tourism operators, mineral exploration companies) about areas of concern. Encourage them to avoid Wildlife Key Areas and heritage resource areas wherever possible.
Promote low-emission tourism opportunities (such as biking, walking).

GOVERNANCE RECOMMENDATIONS (CONT.)
Promote Indigenous-led tourism.
Develop tools to promote stewardship and protect values by regulating the amount of tourism and tourism impacts in the Region. Prioritize locally based operators who can demonstrate local buy-in and responsible use.

Outfitting

In the northern half of the Region, there are four outfitting concessions with camps and airstrips **(142)**. Outfitting consists of guided hunting trips for Dall's sheep, grizzly bear, wolf, caribou, and moose **(143)**. Most trips occur via airplane and ground transporation – for example, off-road vehicle, horseback or on foot **(143)**. The outfitting industry depends on healthy wildlife populations, which in turn require functioning ecosystems to thrive. To provide high-quality experiences, the industry also relies on large, undisturbed wilderness areas with minimal human activity and strong landscape connectivity.

The Plan recommends conserving most of the northern part of the Region through the Special Management Area (SMA) designation. The designation is intended to maintain the wilderness character of the area to support high-quality outfitting experiences. Outfitting is allowed in all land use designations in this Plan, subject to existing outfitting concession boundaries and legislation. Directions for all values and economic activities should be read alongside the Stewardship Directions for Outfitting, because of the interconnections between values and activities.

Key Planning Issues

- The following factors can negatively affect outfitting:
    - Development of industrial activities, including new roads and associated infrastructure.
    - Improperly located resource exploration camps.
    - Excessive use of motorized off-road vehicles and aircraft.
    - Excessive numbers of wilderness tourists and recreational users.
- Regulators have not adequately documented the location of outfitting camps and trails, making it difficult to account for outfitting values in project assessments and planning.

STEWARDSHIP DIRECTIONS	
1	Run outfitting operations in a manner consistent with the principle of stewardship.
2	Run outfitting activities in a manner consistent with the wildlife goals of the Plan.
3	When you run outfitting activities, use transportation methods that minimize carbon emissions and effects on ecosystems and wildlife.
4	Plan and prepare operations to respond to climate-related hazards.
5	When you run outfitting operations, minimize impacts on the land.
6	When you run outfitting operations, integrate Traditional Knowledge where possible.

IMPLEMENTATION ACTIONS	
141	Work with outfitters to document land use patterns associated with outfitting, including locations of camps and trails, and make this information available to inform project assessment and future resource planning and to minimize negative impacts on the industry.
142	Consider the feasibility of climate change monitoring by outfitting operations.
143	Create opportunities to share land-based knowledge from outfitters.
144	Promote and provide educational opportunities for climate-related hazard preparedness for outfitters.

GOVERNANCE RECOMMENDATIONS
Review legislation and policy governing the outfitting industry to ensure they align with Plan goals and serve all outfitters, regulators, and land users including Tr'ondëk Hwëch'in Citizens. If revisions are required, the trapping policy may provide an effective template.

Trapping

Trapping has been practised by the Tr'ondëk Hwëch'in as part of their traditional economy for millennia. It can continue indefinitely when people protect healthy wildlife and habitat and act with respect. People lived on traplines in the winter as part of their seasonal round **(6)**. Furs of animals such as wolf, lynx, beaver, and marten have long been used in clothing, crafts, and ceremonial regalia **(6)**.

The arrival of newcomers in the Region brought new tools and increased demands for fur, both through the North American fur trade, which offered new goods in exchange for furs, and to clothe people migrating into the area **(6)**. In addition to increases in direct harvest, growing human populations and activities on the land put indirect pressure on all wildlife populations, including furbearers **(144)**.

Traditionally, different areas in the Region have been trapped by specific families, with responsibility to steward the animals in that area. During the 20th century, the Government of Yukon mapped trapping concessions and established regulations and licensing (commercial) **(6)**. Chapter 16 of the THFA defines authorities related to trapline allocation and assignment among Tr'ondëk Hwëch'in, Government of Yukon, and the Dawson District Renewable Resources Council. Regardless of this system, Tr'ondëk Hwëch'in Citizens retain the right to trap, and to use, barter or sell fur (subsistence) according to Tr'ondëk Hwëch'in regulations **(145)**.

Trapping remains an important way for people to connect with the land and practise ancestral and community stewardship, and trappers are valuable community knowledge holders thanks to the time they spend on the land. Trapping can also be a way for people to practise stewardship by balancing removal of predators when also removing prey animals.

The Region has a higher-than-average rate of use of traplines and a strong youth education program. Furs are highly valued in the community for use in clothing, crafts, and artistry, ranging from sought-after items for winter clothing to moccasins showcasing local beadwork to high fashion. Directions for all values and economic activities should be read alongside the Stewardship Directions for Trapping, because of the interconnections between values and activities.

Key Planning Issues

- Trapping concessions are large areas and naturally overlap with other land uses, including traditional economic activities, recreational, commercial, and industrial uses.
- Climate change, natural disturbances, and other land uses may affect naturally fluctuating populations of furbearers, trapline infrastructure, and trapping activities.
- Trapline infrastructure and activity are not consistently considered in project proposals and assessment, often due to lack of available location information. However, making locations of cabins and trails publicly available risks opening these areas to overuse and/or disrespect.
- Siloed management of industries and activities can impact trappers and traplines.
- Trapping can be prohibitively expensive, and fur prices rise and fall in response to factors outside of the Region's influence.

STEWARDSHIP DIRECTIONS

1	When proposing projects that overlap with, or could affect, traplines, recognize and consider trapping activities and infrastructure, and propose ways to minimize negative impacts.
2	When engaging in activities on the land, respect traps, cabins, trails, and other infrastructure and equipment associated with trapping.
3	When engaged in trapping, be aware and respectful of other land users.
4	When engaged in trapping, seek and follow Traditional Knowledge and local ecological knowledge.

IMPLEMENTATION ACTIONS

145	Trappers are knowledge holders by virtue of their time on the land. Support programs to gather land-based knowledge from trappers, including the potential for climate change monitoring.
146	Support trappers by considering ways to compensate them for participating in community-based monitoring.
147	Continue to support trapper education programs, especially for youth.
148	Continue to support land–people relationships through community trapline use.
149	Improve education and communication among government departments that regulate trapping and trapline use, and activities that can affect traplines – for example, forestry, mining.

Photo: Government of Yukon

Forestry

A sustainable forest industry maintains the health and productivity of forest ecosystems, conserves soil and water resources and biological diversity, and provides social and economic benefits while supporting healthy land–people relationships. With careful management and planning, the Region's forests can sustain a vibrant, small-scale forestry industry, as well as supporting non-market harvest, non-timber uses and a traditional economy. These activities can contribute to a healthy local economy, including local employment opportunities.

The regional forestry industry includes commercial fuelwood (fire-killed spruce and green birch), biomass (wood chips), and lumber. A successful forestry industry requires a long-term wood supply that is accessible year-round and near Dawson City. The current harvest in the Region is relatively small yet stable (2,500 m^3 to 3,000 m^3 per year; Yukon Wood Products Association, 2019). In 2021, the governments of Tr'ondëk Hwëch'in and Yukon, together with the Dawson District Renewable Resources Council, set the annual allowable cut (maximum amount of timber that can be sustainably harvested) at 28,000 m^3 per year of green timber on public land **(146)**. This annual allowable cut meets objectives for forest resources for the next 10 years.

The Dawson Forest Resources Management Plan **(14)** provides a framework for the sustainable management of a forest-based economy as directed by Chapter 17 of the THFA. The *Forest Resources Act* (SY 2008, c.15) provides a planning, tenure, compliance, and enforcement regime to support the management of forests in the Yukon. Directions for all values and economic activities should be read alongside the Stewardship Directions for Forestry, because of the interconnections between values and activities.

Key Planning Issues

- There has recently been a shortage of access to fuelwood across the Yukon, including in Dawson. The primary issue is limited access to fire-killed timber in LMU 11 during winter due to excessive ice formation on resource roads.
- Fuelwood and timber harvesting can negatively affect traditional and non-timber uses of the forest.
- Forestry activities can affect ecosystem and wildlife values, directly and through increased access.
- Riparian buffer zones around disturbances help protect aquatic ecosystems and support their function.
- Climate change can affect forest health in the Region through environmental drivers and forest pest outbreaks.

STEWARDSHIP DIRECTIONS

1	Carry out forestry activities in a way that is consistent with stewardship and sustainable development principles.
2	Follow the Dawson Forest Resources Management Plan (2013).
3	Carry out road closure and reclamation as guided by the *Forest Resources Act*.
4	Wood from fire-smarting activities should be salvaged and given to the community.
5	Avoid clear-cutting or overburden removal in areas with underlying permafrost.
6	Carry out wood salvage operations (for example, post-fire or flood) in a safe manner.

IMPLEMENTATION ACTIONS

150	Implement the Dawson Forest Resources Management Plan (FRMP). Where management direction in this Plan conflicts with the Dawson FRMP, bring the Dawson FRMP into conformity, as per Chapter 17 of the THFA.
151	Continue developing timber harvest plans within LMUs designated as ISAs and SMAs where forestry is allowed.

GOVERNANCE RECOMMENDATIONS

Explore options for harvesting timber and fuelwood from placer and quartz claims. Develop a framework for use of timber for sawlogs and fuelwood within existing mineral tenure.

KNOWLEDGE GAPS

Continue exploring the feasibility of biomass energy in the Region. When doing this research, researchers must consider climate change mitigations, how climate change affects forest resource availability, and the net benefit of biomass.

Investigate methods to increase the salvage component of fire-killed wood harvest without compromising the ecological integrity of burned areas.

Photo: Government of Yukon

> “Agricultural production in the Klondike area is well supported by residents, tourists, and local businesses and there is room for more local agricultural product in our local and regional market. … Backyard farming, side-gigs, and part-time production are contributing significantly to overall food production in the area.”
>
> *– Klondike Development Organization, 2025*

Agriculture

A sustainable local agriculture sector contributes to food security and Community Resilience. It provides healthy food, fosters good land–people relationships, stewards land, and provides skills training and employment. The Region contains some of the most productive agricultural land in the Yukon; high agricultural potential has been identified in the Klondike Valley and Sunnydale **(147)**. In addition to arable land for crops, other agricultural uses of land in the Region

include infrastructure (for example, processing and retail spaces) and raising livestock **(148)**. As of 2018, there were approximately 40 titled lots derived from agricultural land programs, as well as several Settlement Land parcels that Tr'ondëk Hwëch'in has identified as suitable for agriculture.

The agriculture sector in the Region is small but diverse, with operations producing a wide variety of products, including vegetables, meat, hay, eggs, dairy, fruit, and plants **(148)**. Most producers have other sources of income besides farming, and many provide seasonal employment and/or training. As of 2024, two-thirds of surveyed producers sell their products within the Region **(149)**.

The Tr'ondëk Hwëch'in Teaching and Working Farm provides value to the community through food production, land-based training, and employment opportunities **(150)**. The agricultural sector also includes and relies on local processors, restaurants, and retailers who work with producers to get products to market. Resource camps are a significant consumer of local produce **(149)**. Local food production has the potential to contribute to tourism as well, through agritourism and food tourism **(149)**. Many local producers and processors are members of the Central Yukon Agricultural Network (CYAN, previously the Klondike Farmers' Forum). CYAN supports and advocates on behalf of producers throughout central Yukon.

Continued responsible and sustainable growth of the Region's agricultural industry is important for food security and Community Resilience in the face of climate change and a growing demand for local food **(151)**. Directions for all values and economic activities should be read alongside the Stewardship Directions for Agriculture, because of the interconnections between values and activities.

Key Planning Issues

- Land close to the community that is suitable for agricultural use is limited and overlaps with other interests.
- Suitable agricultural land across the Region is often found in valley bottoms where placer mining interests also occur.
- Food security is a key component of Community Resilience, especially in the face of climate change.
- Existing operations and future sector development depend on water availability. Climate change and other land uses may change that availability.
- Livestock has the potential to carry diseases that can affect wildlife.
- Insufficient infrastructure (physical and governance) is a barrier to agricultural sector growth **(149)**.

STEWARDSHIP DIRECTIONS

1	In areas of high agricultural potential, carry out other development and activities in a manner that does not compromise agricultural value.
2	Conduct agricultural operations in a manner consistent with stewardship and sustainable development principles.
3	Maintain ecological integrity in areas adjacent to agricultural development.
4	When carrying out activities and development in areas with existing agriculture, respect those operations.
5	When proposing, assessing, and approving new agricultural developments, consider existing and projected water availability, flood risk, and other land interests and values.
6	Support agricultural practices that sequester carbon.

IMPLEMENTATION ACTIONS

152	Support the growth and health of the Region's agricultural sector by engaging with and supporting industry groups, including the Central Yukon Agricultural Network.
153	Incentivize local food production to increase climate resilience and food security.
154	Support the ongoing operations of the Tr'ondëk Hwëch'in Teaching and Working Farm.

GOVERNANCE RECOMMENDATIONS

Support implementation of the Yukon Agriculture Policy (152).
Prioritize land that is suitable for agriculture and close to the City of Dawson for agricultural use.

KNOWLEDGE GAPS

Identify areas of "high" (class 3 to 5) agricultural potential within the Region, with priority given to LMU 12: Tr'ondëk Täk'it (Klondike Valley).
Identify barriers to growth within the agricultural sector and potential solutions. Work on this in collaboration with CYAN and other local actors (processors, retailers, and restaurant owners).
Explore agricultural techniques that reduce carbon emissions.

Mineral Exploration

A sustainable exploration industry in the Region advances geological knowledge, creates opportunities for future mineral development, and contributes to the local economy without undermining environmental, community, cultural, and heritage values. Mineral exploration aims to identify the location, size, and shape of mineral deposits **(153)**. It ranges from low-impact, small-scale prospecting to more intensive projects.

Exploration activities can focus on quartz or placer deposits. Activities can progress from trenching and soil sampling to larger operations involving camps, road construction, land clearing, fuel storage, and explosives. Classifications (Class 1 to 4) describe the increasing footprint and environmental impact of a project **(154)**. The speculative nature of exploration means that large projects that are necessary to assess ore quality and extent can result in significant cumulative effects without guaranteed benefits to the Region's economy.

Due to the Region's unique geology and deep mining history, it has long been a focal point for exploration activities targeting a variety of minerals, particularly gold **(155)**. In 2024, 11% of all active quartz exploration projects in the Yukon took place within Tr'ondëk Hwëch'in Traditional Territory, with projects primarily focusing on gold **(156).** This is a slight increase in exploration activity across the Yukon compared to 2022 and 2023 **(156)**. In 2021, quartz exploration contributed to 11% of Dawson City's total business employment **(157)**.

A consistent, streamlined, and effective assessment and permitting process is necessary to ensure the continued success of the industry in the Region. At the time of writing this Plan (March 2026), new minerals legislation is still in development. It will replace the gold rush-era legislation that currently regulates the industry (*Placer Mining Act* [SY 2003, c.13] and *Quartz Mining Act* [SY 2003, c.14]) **(158)**. Directions for all values and economic activities should be read alongside the Stewardship Directions for Mineral Exploration, because of the interconnections between values and activities.

Key Planning Issues

- Because only a small fraction of prospecting efforts lead to viable mines, a sustainable exploration industry that supports mining in the Region requires large tracts of land that can be explored.
- Because only a small fraction of prospecting efforts lead to viable mines, the exploration industry's contributions to the local economy are somewhat independent of mining itself.
- Early-stage mineral exploration can occur with limited surface or air access. However, later-stage exploration generally has greater impacts on the land – for example, linear and surface disturbance, infrastructure development.
- Climate change has the potential to increase risks related to mineral exploration, particularly in relation to infrastructure stability and seasonal reliability.
- The industry is highly sensitive to global mineral prices, which are beyond the Region's control. This can lead to fluctuations in activity levels and uncertainty about the industry's future in the Region.
- Current legislation does not provide a consistent, streamlined, and effective assessment and permitting process. This creates uncertainty and delays that may slow industry activity.
- Multiple attempts have been made to update existing legislation, but they have been largely unsuccessful because of concerns over consultation and unalignment with the FNFAs.
- There are no restrictions (timing or location) on exploration activities – for example, to protect wildlife.

STEWARDSHIP DIRECTIONS	
1	Carry out mineral exploration activities in a manner consistent with the Plan's principles of stewardship and sustainable development.
2	When proposing mineral exploration projects, include emission-reduction strategies, climate risk assessments, and mitigation and adaptation measures.
3	When proposing and developing mineral exploration projects, use the lowest-impact technologies possible.
4	When proposing mineral exploration projects that overlap with WKAs, demonstrate how you are applying the mitigation hierarchy to environmental and related socio-cultural values that may be affected.
5	When carrying out exploration activities, only stake claims for the purpose of mining.

STEWARDSHIP DIRECTIONS (CONT.)

6	Fill in excavations and trenches at the end of the project.
7	Do not carry out exploration activities within sheep WKAs during late winter and lambing season.

IMPLEMENTATION ACTIONS

155	Partner with industry organizations to provide joint educational opportunities for Tr'ondëk Hwëch'in Citizens and employees of the mineral exploration industry with the aim of fostering relationships built on trust, understanding, and respect. Examples include: • Participation of non-Citizen industry employees in Tr'ondëk Hwëch'in 101 to foster understanding of Tr'ondëk Hwëch'in culture and values. • Tours of mineral exploration operations for Citizens.
156	Increase monitoring and enforcement of permit requirements to provide consistency for the industry and ensure that development remains sustainable.

GOVERNANCE RECOMMENDATIONS

Improve the existing environmental and socioeconomic assessment, permitting, and regulatory processes to be more transparent, efficient, and fair by:

- Improving project coordination between regulatory and assessment bodies to reduce duplication.
- Ensuring consistency in inspections, assessments, as well as permitting and monitoring requirements across regulators and projects.
- Increasing transparency in inspections and compliance reporting.
- Improving cumulative effects and heritage impacts assessments.
- Establishing Yukon-wide performance standards and digital reporting tools.
- Providing training and resources to support joint stewardship between the Government of Yukon and First Nations Governments.
- Providing incentives for operators who show good stewardship.

Develop timing windows for exploration activities to protect wildlife.

KNOWLEDGE GAPS

Research alternatives to conventional methods for locating ore bodies, focusing on low-impact exploration technologies. Consider their effectiveness and feasibility.

"Placer mining has always been a vital part of the community of Dawson City as well as the greater Yukon. We are an industry that has endured the ups and downs alongside our communities and territory as a whole, and we want this to continue into the future."

– Neil Loveless, 2021[26]

Placer Mining

Placer mining is the extraction of minerals from loose deposits, such as sand and gravel, found above bedrock **(159)**. In the Yukon, placer mining generally targets gold deposits that range in size from very fine grains to nuggets **(155)**. Placer gold is separated from sediments using only water and gravity **(155)**. A sustainable placer industry creates wealth and opportunity for the Region, while stewarding the land through responsible practices such as progressive reclamation.

People first discovered gold in Bonanza Creek in 1896 **(33)**. Days later, the Klondike Gold Rush was in full swing, with creeks staked and mined from end to end **(33)**. This led to the establishment of Dawson City and the creation of the Yukon as a distinct Canadian territory, the displacement of the Tr'ondëk Hwëch'in, and damage to their lands **(6,13)**. By 1899, the gold rush had declined as easily accessible deposits decreased, and gold was discovered in Alaska **(33)**. Although many miners moved out of the Region, the social, environmental, economic, and cultural impacts of the gold rush remained, reshaping the Region and Tr'ondëk Hwëch'in's way of life **(6)**. Today, placer mining remains an important part of the Region's economy, with many residents, including Tr'ondëk Hwëch'in Citizens, continuing to work in the industry and/or own operations **(33)**.

26 Source: Yukon Water Board, *Public Interest Hearing on Placer Mining Wetlands Report*, 2021.

Placer mining often involves washing sediments from permafrost, and miners sometimes unearth ancient remains of animals. One such find happened in 2022, when miners working on Eureka Creek in the Goldfields discovered a mummified baby woolly mammoth. The miners stopped work and immediately notified Tr'ondëk Hwëch'in. Elders travelled to the site and recognized not only a chance to learn about past ecosystems, but a relative. They carried out ceremony, blessed the site and the mammoth, and moved her safely to the community with the help of the miners and Government of Yukon staff. The miners continued working the creek and continue to be involved in the story of the mammoth. Tr'ondëk Hwëch'in leads the care of Nun cho ga (big animal baby), who continues to offer teachings on what the land and plants were like at the time of her death, 36,000 years ago, and on ancestral relationships and healing.

The remoteness of many placer mines, and limited compliance inspections, make it easy for miners to keep remains privately or to simply continue work, burying a find as they move materials around, despite regulations and best practices dictating otherwise. The story of Nun cho ga illustrates what can happen when trust and relationships exist among industry and the community. It also shows how one act of trust can build relationships. A truly Sustainable Local Economy requires industry practitioners with strong community relationships.

In addition to newly discovered deposits, technological advances have allowed miners to process previously mined areas and refine gold more effectively and efficiently. In 2024, the Dawson Mining District, which covers most of the Region, was the most active placer mining district in the Yukon, accounting for 70% of all active operations **(160)**. Within the Region, the Indian River, Sixty Mile River, and Dominion Creek were the highest-producing drainages **(160)**. In 2025, there were 111 actively sluicing operations in the Dawson Region **(161)**.

Placer mining extends beyond just an economic activity – it is deeply rooted in the Region's culture and identity. The tradition of placer mining is often passed down through families, which helps build a strong sense of pride and connection to the Region. Between 2020 and 2022, the majority of placer miners in the Region worked with or employed family members, and over half were second- or third-generation placer miners **(41)**.

Operations also contribute to the community by supporting local businesses, employing and training locals, and through sponsorships and in-kind donations **(41,155)**. Placer miners improve local infrastructure through construction and maintenance, and work with other industries, such as hard rock mining. Placer mining drives tourism in the Region, not only by attracting visitors interested in the gold rush itself, but also by drawing visitors interested in historical figures like Robert Service and Jack London. These writers came to Dawson inspired by the gold rush and have become central to the Region's cultural history. Additionally, miners acting as stewards of the land have contributed to numerous paleontological and archaeological discoveries.

Placer mining in the Region is expected to grow due to the discovery of new deposits, technological advancements that enable miners to reprocess previously mined areas and refine gold more efficiently, and the steep increases in gold prices – for example, in 2025, the average price of gold increased by 34% from 2024 **(161)**. However, gold is a finite, non-renewable resource; eventually, there will be no more viable deposits. It is therefore essential to incentivize operations to build strong connections within the community, ensuring residents continue to benefit from these operations and that long-term stability is maintained throughout the life of this resource.

Placer mining must be guided by the Plan's principles of sustainable development (Section 2.2.1), the precautionary principle (Section 2.2.3), and stewardship (Section 2.2.2), ensuring it supports the community and protects the Region's environmental, socio-cultural, and economic values for future generations. Miners and the community must work together to ensure that mining benefits the Region

without compromising its future. They must also recognize and celebrate the positive impacts of mining. One example of how the placer mining industry, the community, and the Parties can work together is through the Upper Indian River Stewardship Plan. It aims to bring people with overlapping interests together to develop innovative solutions and move forward together in a good way.

The *Placer Mining Act* (SY 2003, c.13) regulates placer mining in the Yukon. Operations require assessment by YESAB, water licences from the Yukon Water Board, and, depending on activities, additional permits **(162)**. At the time of writing (March 2026), the successor minerals legislation that will replace the gold rush-era *Placer Mining Act* (SY 2003, c.13) is still in development **(158)**.

To be successful, the successor legislation must align with the spirit and intent of the FNFAs. It must also reflect the Plan's principles of sustainable development (Section 2.2.1), the precautionary principle (Section 2.2.3), and stewardship (Section 2.2.2), while focusing on protecting and strengthening the socio-cultural, environmental, and economic values of the Region. The modern legislation should also support the Region's growing placer industry through timely, consistent, and transparent assessment and regulatory processes that encourage stewardship by recognizing and rewarding good actors. Such measures are essential for the continued success and sustainability of the industry in the Region. Directions for all values and economic activities should be read alongside the Stewardship Directions for Placer Mining because of the interconnections between values and activities.

Key Planning Issues

- A consistent, streamlined, and effective assessment and permitting process is necessary to ensure the continued success of the industry in the Region.
- Placer mining often occurs in areas of high cultural and spiritual significance and can damage heritage resources and discourage Citizens from using these areas.
- Placer mining often occurs in ecologically sensitive areas and, historically, operators have conducted it in ways that have compromised both environmental and cultural values. Many sites were left unreclaimed, which has contributed to a lasting negative legacy in the Region.
- Increases in suspended sediments resulting from placer mining are harmful to fish and fish habitat.

- Placer mining often occurs in wetlands, which have high ecological, cultural, and economic value – for example, ecosystem services. See Section 5.2.7.
- Placer mining often requires the thawing of permafrost, which can disrupt groundwater and drainage patterns.
- Existing legislation does not provide a consistent definition or process for the reclamation of placer mines.
- Regulations that manage the placer industry often disadvantage smaller operators, for example, by adding bureaucratic hurdles.

STEWARDSHIP DIRECTIONS	
1	When operating a placer mine, carry out progressive reclamation.
2	Carry out placer mining activities in a manner that respects the land, the history, and the community.
3	When you discover heritage and cultural resources or paleontological artefacts, avoid negative impacts by following Best Management Practices for Fossils at Yukon Placer Mines **(163)** as well as legislated requirements: *Tr'ondëk Hwëch'in Heritage Act* **(76)** and Government of Yukon's *Historic Resources Act* (RSY 2002, c.109).
4	Operators should buy local and employ local workers to maximize benefits to the Region's community.

IMPLEMENTATION ACTIONS	
157	Encourage industry organizations that run industry-led programs such as KPMA101[27] to continue providing education and to promote excellence and innovation in mining reclamation, with a goal of strengthening partnerships and building the community's confidence in the placer mining industry.
158	Support and implement training opportunities for wetland identification for miners, enforcement staff, and inspection officials.
159	Review and revise administrative burdens on operators to ensure small operators can continue to participate in the industry and contribute to the Region's Sustainable Local Economy and the community.
160	Improve monitoring and compliance to ensure that mines operate responsibly, minimize environmental and social impacts, and act as stewards of the land.

27 An app-based training and compliance education program for placer miners, created by the Klondike Placer Miners' Association.

IMPLEMENTATION ACTIONS (CONT.)

161 Partner with industry organizations to provide joint educational opportunities for Tr'ondëk Hwëch'in Citizens and employees of the placer industry with the aim of fostering relationships built on trust, understanding, and respect. Examples include:

- Participation of non-Citizen industry employees in TH 101 to foster understanding of Tr'ondëk Hwëch'in culture and values.
- Tours of placer operations for Citizens.

GOVERNANCE RECOMMENDATIONS

When developing and approving successor minerals legislation, ensure it aligns with the spirit and intent of the THFA.

Improve permitting and assessment processes to be more timely, consistent, streamlined, and transparent, and to recognize and reward good actors to encourage stewardship. See Section 3.11 and Implementation Action 25.

Work with placer miners and the community to create a plan for the future of placer mining in the Region.

KNOWLEDGE GAPS

Quantify the amount of carbon stored in the Region and the amount released from placer mining in wetlands.

Quartz Mining

The failure of a quartz mine could be the single most devastating event in the Region in modern times, environmentally, socially, and economically. Nearly every quartz mine in the territory has failed in some way under the current regulatory system. Structural failures have led to environmental damage, economic failures have led to ongoing costs to Yukon taxpayers, and social failures have led to severe impacts on communities and families. The risks of quartz mining are great, even when mines are "successful". Under the current regulatory system, and with commonly used technologies like heap leach, the potential benefits to local communities are not worth this risk. Quartz mining needs to develop trust and social license, and must be regulated much more rigorously, before it is an appropriate economic activity for this Region.

Quartz (or hard rock) mining involves extracting minerals from solid rock through large-scale operations, such as open-pit or underground mining. This often requires both chemical and mechanical processes. A common method is heap leaching, in which crushed ore is treated with chemical solutions, such as cyanide, to dissolve and recover the target minerals **(164)**. Due to its geological history, the Region has significant mineral potential, with identified deposits of gold and critical minerals such as copper and antimony **(42,156)**.

Accessing and processing these deposits can have large negative impacts on the environment even when the strongest mitigations are in place. Risks vary with scale and methods used, and only methods and technologies with proven track records in similar environments should be considered. While there are

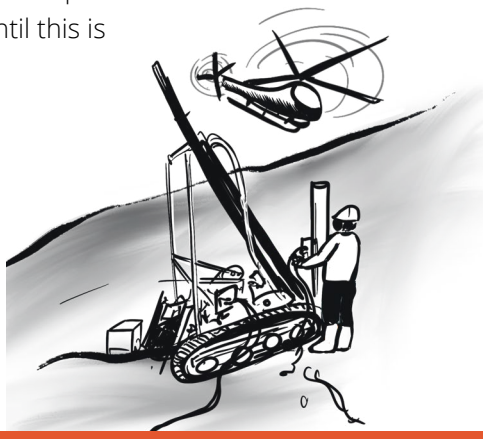
currently no active quartz mining operations in the Region, there are several exploration projects **(156)**. Directions for all values and economic activities should be read alongside the Stewardship Directions for Quartz Mining because of the interconnections between values and between activities.

Quartz operations are generally large-scale, requiring significant infrastructure and a workforce, often composed largely of non-resident employees. These projects can disproportionately affect small communities. While they can bring benefits, like local employment and skills training, they can also bring negative impacts. These impacts include increases in gender-based violence associated with male-dominated camps, increased alcohol and substance abuse and trafficking (in camp and in nearby communities) **(82)**. The added burden on local infrastructure, including medical and policing facilities, must also be anticipated and mitigated **(80)**. Even the benefits must be managed carefully to ensure they do not lead to long-term difficulties, as can happen when a mine shuts down without a transition plan for employees, and leaves a large employment gap.

As of March 2026, the *Quartz Mining Act* (SY 2003, c.14), largely unchanged since the gold rush, remains the primary means of regulating quartz mining. The successor minerals legislation intended to replace this law, committed to in the Final Agreements, is still in development. For this industry to be compatible with the Plan, it will need to be regulated in accordance with the spirit and intent of the FNFA, the Plan's principles of sustainable development (Section 2.2.1), the precautionary principle (Section 2.2.3), and stewardship (Section 2.2.2), and must safeguard and bolster the socio-cultural, environmental, and economic values of the Region.

Adequate financial security must be required to ensure the entire project lifespan, including reclamation, can be completed in alignment with Tr'ëhudè. Royalties must also be required for local governments, recognizing that operations rely on public goods, services, and infrastructure, and that other values in the Region will be affected by these operations. New legislation should also enhance safety within operations (environmental, physical, and personal).

The Plan envisions rigorous management of quartz activities, supported by a thorough regulatory system that will allow the community to benefit from quartz development without suffering from its potential negative impacts. Until this is possible, quartz mining is not compatible in this Region.



Key Planning Issues

- Common and cost-effective technologies used in quartz mining, like heap leaching, have poor record of environmental safety in northern and permafrost-rich environments.
- Yukon territorial mining legislation is outdated and insufficient to moderate the risks of quartz mining.
- Quartz operations can have large impacts on small communities.
- Current regulations are inadequate to ensure financial benefits from quartz operations flow to local communities and governments.

STEWARDSHIP DIRECTIONS

1	Do not engage in or approve heap leach mining in the Region under the current regulatory regime, and wait until low-risk technologies are proven in similar environments.
2	When proposing and considering quartz projects, rely on low-risk technologies, and trial new or unproven technologies only at small scales and in a contained way.

IMPLEMENTATION ACTIONS

162	Increase the consistency and detail of monitoring at mine sites, specifically at tailing ponds, and particularly during snowmelt when they are at greater risk of failure.
163	Improve standards, regulations, and enforcement to ensure that quartz mining occurs in a manner consistent with the Plan's principles.

GOVERNANCE RECOMMENDATIONS

Revise existing regulations or create new ones to better govern heap leach mining, prevent future harm to the community and the environment, and address the factors that led to previous failures.

KNOWLEDGE GAPS

Current common practices to extract minerals from ore bodies involve harmful chemicals that endanger ecosystems and humans. They also have poor track records of safe operation in northern and permafrost-rich areas. Research alternative methods.

Oil and Gas

A sustainable oil and gas industry is grounded in responsible stewardship of the land and water. It should ensure that development leaves a minimal footprint while contributing significantly to the Region's economic prosperity. The oil and gas industry includes both the exploration and extraction of oil and gas. Under the *Oil and Gas Act* (RSY 2002, c.162), oil refers to crude oil and other similar substances that can be recovered from surface or subsurface deposits such as oil sand and bitumen **(166)**. Gas refers to natural gas and any other substances that may be produced alongside natural gas, except oil **(166)**.

The Region overlaps with the Kandik and Eagle Plains basins. Geological studies suggest that these basins both contain some of the largest untouched oil and gas reserves in the Yukon, though they are small compared to Alaskan deposits **(167, 168)**. As of 2025, there are no active exploration or extraction activities in the Region. Extracting oil and gas within the Region is difficult due to several factors, including the remoteness of the reserves and the lack of an existing pipeline. Directions for all values and economic activities should be read alongside the Stewardship Directions for Oil and Gas, because of the interconnections between values and activities.

Key Planning Issues

- Areas with oil and gas potential often overlap with sensitive ecosystems and areas of high environmental and cultural value.
- Oil and gas activities could increase the strain on existing infrastructure.
- Exploration determines the feasibility of extracting oil and gas reserves and can leave a large footprint, even if development does not occur.
- Oil and gas development is incompatible with the realities of climate change, especially when the oil and gas produced are unlikely to be used locally.

STEWARDSHIP DIRECTIONS	
1	Conduct oil and gas exploration and development activities in a manner consistent with the precautionary principle and sustainable development.

GOVERNANCE RECOMMENDATIONS

Projections indicate further oil and gas development would significantly increase the size of the Eagle Plains community, straining resources in Dawson City. When considering any proposal for oil and gas exploration or development, require infrastructure, community, and safety planning, and require local employment.

If oil and gas deposits in the Region are proven viable, additional pipelines would be required (likely the completion of the Alaska Highway or Mackenzie Valley pipeline). Before considering or approving oil and gas development, carry out research and analysis to gain a thorough understanding of how these pipelines would be created and managed, and how the ecological, cultural, and societal impacts would be managed.

KNOWLEDGE GAPS

The feasibility of transporting oil and gas from these remote reserves using new or existing pipelines is unknown. Before proposing projects, explore this feasibility and its potential impacts.

Fishing

A sustainable fishery gives back to the community and stewards the land, water, and fish. It helps the health of the ecosystems and enables fish populations to thrive and be sustainably harvested for generations to come. Under the *Yukon Territory Fishery Regulations* (C.R.C., c.854), domestic (recreational, subsistence, and sport) and commercial fisheries can operate within the Region **(165)**. Historically, the only commercial fisheries in the Region have focused on salmon. However, recreational fisheries target various species such as salmon, grayling, and pike **(165)**.

Fisheries have a deep history within the Region. In particular, salmon fishing was a cornerstone of Dawson City's economy, with commercial fishers working on the Yukon River, and the Hän Fisheries processing facility, owned by Tr'ondëk Hwëch'in, providing jobs in Dawson City **(3)**. The decline in salmon has led to closures of recreational, commercial, and subsistence salmon fisheries in the Region, and in 1997, Tr'ondëk Hwëch'in closed the processing facility. Recreational fishing of species other than salmon continues in the Region.

The future of recreational, commercial, and subsistence salmon fisheries in the Region relies on the full recovery of salmon stocks. Sustainable commercial harvest of other species will require careful monitoring, management, and coordination of activities to ensure stocks remain healthy for future generations. Directions for all values and economic activities should be read alongside the Stewardship Directions for Fishing because of the interconnections between values and activities.

Key Planning Issues

- There are currently no commercial fisheries in the Region, and in the past only salmon were harvested commercially.
- Conflicts may arise when subsistence and other domestic fisheries occur in close proximity.
- Commercial fisheries may struggle to remain economically viable, because there are no processing facilities in the Region.

STEWARDSHIP DIRECTIONS

1	Treat fish and their habitat with respect.
2	Fishers should take measures to minimize the risk of introducing invasive species into the Region.

GOVERNANCE RECOMMENDATIONS

Better integrate Traditional Knowledge into fisheries planning and management.

KNOWLEDGE GAPS

The extent to which invasive monitoring techniques contribute to unaccounted mortality and affect populations is unknown. Research non-invasive monitoring techniques.

The feasibility of stock restoration to restore salmon populations within the Region is currently unknown. Research this possibility.

Photo: Government of Yukon

Renewable Energy

A sustainable renewable energy sector focuses on meeting the energy needs of the community and economic sectors while stewarding the environmental and cultural values of the Region. Moving away from non-renewable energy sources such as diesel and towards renewable energy, such as wind and solar, helps the Region lower greenhouse gas emissions, create local jobs and revenue, increase energy independence, and build Community Resilience.

Historically, the Region hosted a hydroelectric plant, known as the North Fork Hydro Project, which opened in 1911 between the North Klondike and the Klondike River. The project shut down in 1966, and the infrastructure was left abandoned at the site. Recognizing its redevelopment potential, the site was designated in the THFA as a hydro-electric or water storage project site, allowing the Government of Yukon or a private company to redevelop it into an operational facility **(145)**. The site's reopening has been proposed, but to date, it remains controversial and inactive **(169)**.

Currently, Dawson City and properties along the North Klondike Highway are connected to the Yukon's grid and are primarily powered by renewable hydroelectricity facilities in southern Yukon **(170)**. However, throughout most of the year, energy demand often surpasses supply. As a result, the community relies on local diesel generators. Because of the continued reliance on diesel and a growing population, this infrastructure is currently being expanded **(170,171)**.

To address the reliance on non-renewable energy, several renewable energy projects have been initiated to supply renewable energy to the community, including the Dawson City Solar Project, which opened in 2022 **(171)** and a proposed Tr'ondëk Hwëch'in-owned biomass facility **(172)**. Despite these increases in local renewables, many residences and businesses, including mine sites, remain unconnected to the grid and will continue to rely on non-renewable energy sources. Directions for all values and economic activities should be read alongside the Stewardship Directions for Renewable Energy, because of the interconnections between values and activities.

Key Planning Issues

- Many off-grid residences and businesses rely on fossil fuels due to the difficulty and cost of connecting these remote properties to the grid.
- Frequent disruption of transmission lines leaves grid-reliant residents and businesses vulnerable, particularly in winter.
- Local diesel power generation contributes to ongoing climate change, creates noise and air pollution, and relies on costly fuel transport.

- Existing diesel power infrastructure has a long lifespan, committing the community to this option long into the future.
- Hydroelectric dams can negatively impact ecosystems.
- Local solar generation can be effective during the summer due to extended daylight hours, but without battery storage it is much less viable in the winter months.
- Most renewable energy sources benefit from battery storage. However, batteries are costly, can be resource- and carbon-intensive to manufacture, and can have a large environmental footprint.
- Shifting to renewable energy remains costly, despite incentives and rebates.
- Reliance on transmission lines and limited local backup capacity is a vulnerability.

IMPLEMENTATION ACTIONS

164	Create more incentives and rebates for distributed renewable energy generation across the Region.
165	Explore options to connect residences and businesses that currently rely on non-renewable energy sources to the grid or shift to renewables.

GOVERNANCE RECOMMENDATIONS

Support the use and development of renewable energy generation projects within the Region, including advances in hydroelectricity, biomass, geothermal, wind, and solar. Support these projects at community, commercial, and individual scales.

Support residences and businesses engaged in or transitioning to the renewable energy sector.

Promote and incentivize the installation of renewable energy sources in off-grid projects.

Promote and support initiatives that move the Region towards greater energy security.

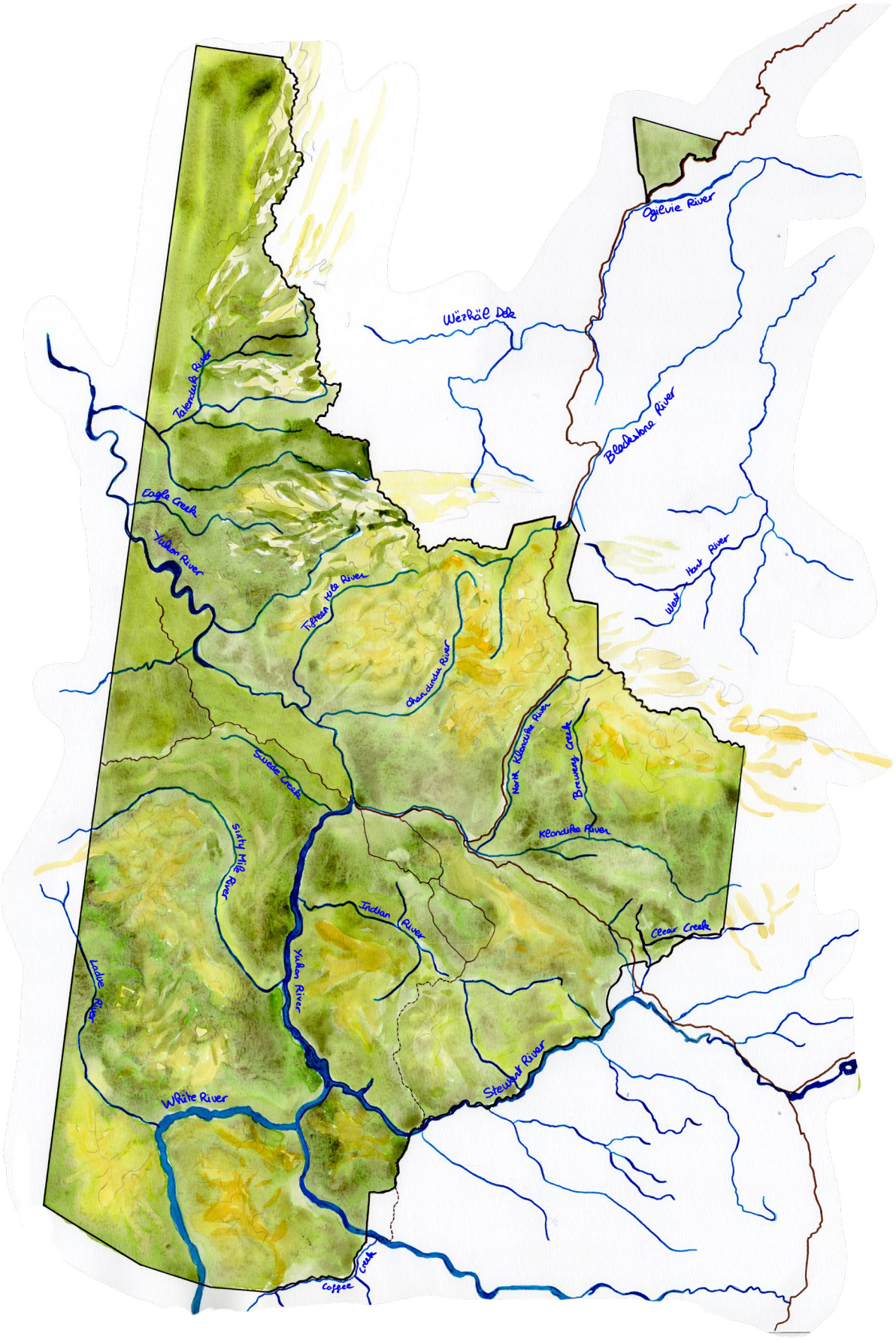
KNOWLEDGE GAPS

The relative reliance of residences and off-grid businesses on fossil fuels and renewables is unknown. Research how much fuel is used in off-grid operations and residences. Develop strategies to decrease this reliance.

6

Landscape Management Units

Artwork: Darcy Tara McDiarmid



Artwork: Yukon Graphic Recording

This section describes each of the 22 Landscape Management Units (LMUs) in the Region (Figure 14). Development footprint thresholds are listed in the context of designation in Table 9 and Table 10. Each section includes the same information:

- **LMU name and number**
- **Land Designation:**
  - Special Management Area (SMA)
  - Integrated Stewardship Area (ISA, with sub-categories 1 to 4)
  - Sub-regional Planning Area
  - Excluded Area
- **Area:** Gives the area of the LMU in km^2 and the percent (%) of the Region it covers.
- **Settlement Land:** Gives a list or count of Tr'ondëk Hwëch'in Settlement Land parcels. Where Settlement Land covers >1% of the LMU, the area of Settlement Land is included.
- **Intent Statement:** Outlines the vision and intent for the LMU. It includes a description of the LMU and reasons for the land designation
- **Tr'ëhudè and Stewardship:** Considers each LMU through the lens of Tr'ëhudè and shares stories, Traditional Knowledge, or values. This section emphasizes the importance of the land to Tr'ondëk Hwëch'in Citizens and respects and upholds their relationship with the land. This relationship is fundamental to their identity, way of life, and ancestral responsibility as caretakers. It also speaks to the community stewardship responsibilities of residents of the Region.
- **LMU Directions:** Provides specific management directions that apply in the LMU in addition to directions that apply throughout the Region. These directions are not ordered or prioritized.
- **Priority Values:** Identifies the LMUs most important or at-risk values. These values guide reclamation objectives and cumulative effects work and must be considered in project proposals and assessments. They are selected for their high importance, their level of threat, or because protecting them safeguards multiple other values.
- **Values:** Lists all Plan values and how they are represented in the LMU.
  - Not applicable: The value is not significantly represented in the LMU.
  - Insufficient information: There is not enough information at the time of writing to determine whether the value is represented, or should be listed as not applicable. Plan revisions should update these entries as more information becomes available.

Figure 14: Overview of the LMUs in the Region.

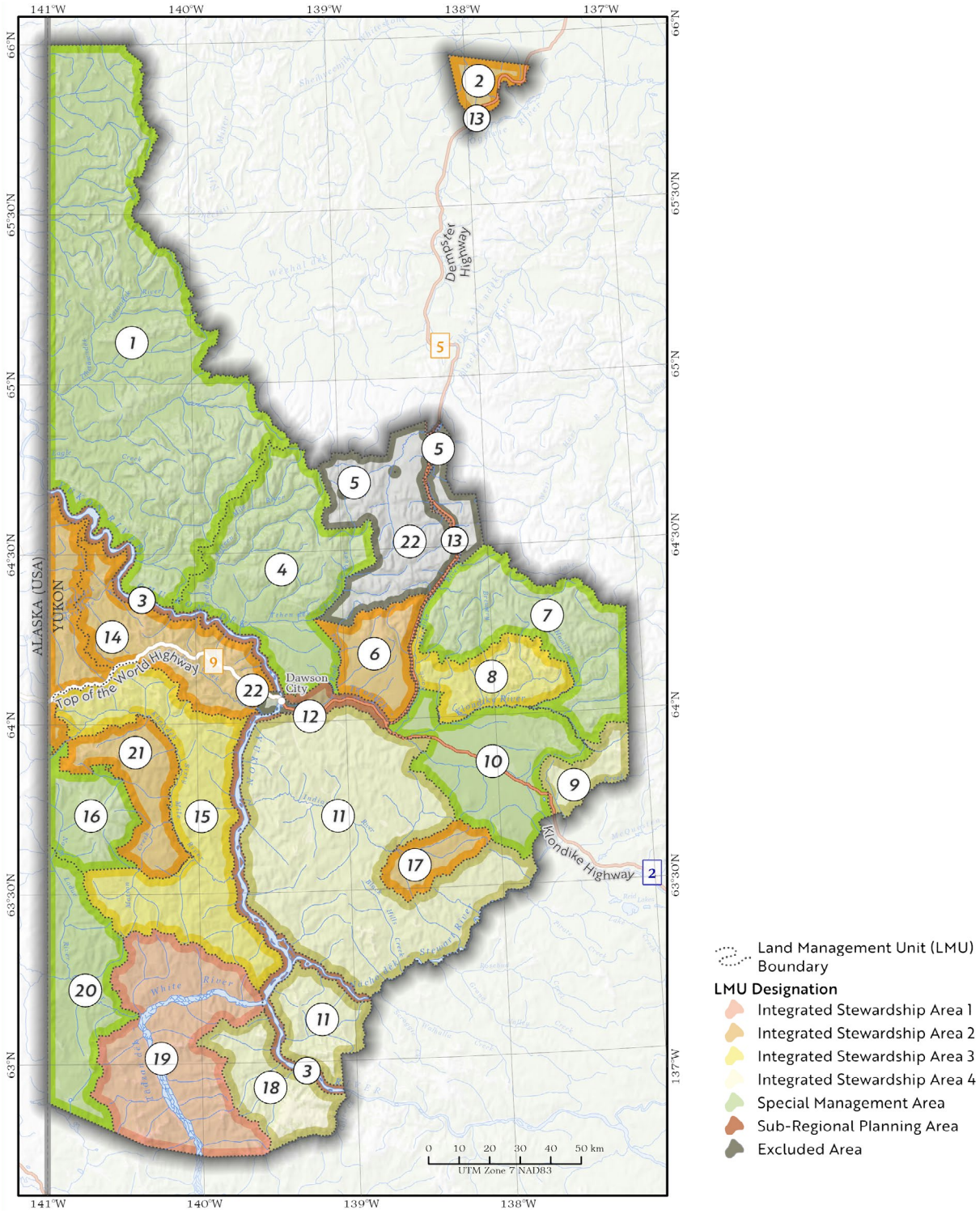


Table 9: Surface disturbance thresholds by LMU. Each LMU has a designation. ISA sub-designations have an associated surface disturbance threshold (%). Each SMA have an associated surface disturbance thresholds that match those of the ISA 1 or ISA 2 , based on their priority values and rationale for designation. For example, LMU 1 is an SMA but uses the surface disturbance thresholds of an ISA 1. Sub-regional planning areas and the Excluded Areas are not included in this table.

	SURFACE DISTURBANCE THRESHOLDS (%)		
LMUs	**ADVISORY**	**CAUTIONARY**	**CRITICAL**
ISA 1: 5, 19 SMA: 1, 4, 7	0.0625	0.1875	0.25
ISA 2: 2, 6, 14, 17, 21 SMA: 10, 16, 20	0.25	0.75	1.0
ISA 3: 8, 15	0.5	1.5	2.0
ISA 4: 9, 11, 18	1.0	3	4.0

Table 10: Linear feature density thresholds by LMU. Each LMU has a designation. ISA sub-designations have an associated linear feature density threshold (%). Each SMA uses the linear feature density thresholds that match those of ISA 1 or ISA 2, based on their priority values and rationale for designation. For example, LMU 1 is an SMA but uses the linear feature density thresholds of an ISA 1. Sub-regional planning areas and the Excluded Areas are not included in this table.

	LINEAR FEATURE DENSITY THRESHOLDS (KM/KM²)		
LMUs	**ADVISORY**	**CAUTIONARY**	**CRITICAL**
ISA 1: 5, 19 SMA: 1, 4, 7	0.0625	0.1875	0.25
ISA 2: 2, 6, 14, 17, 21 SMA: 10, 16, 20	0.125	0.375	0.5
ISA 3: 8, 15	0.25	0.75	1.0
ISA 4: 9, 11, 18	0.5	1.5	2.0

Artwork: Yukon Graphic Recording

SPECIAL MANAGEMENT AREA

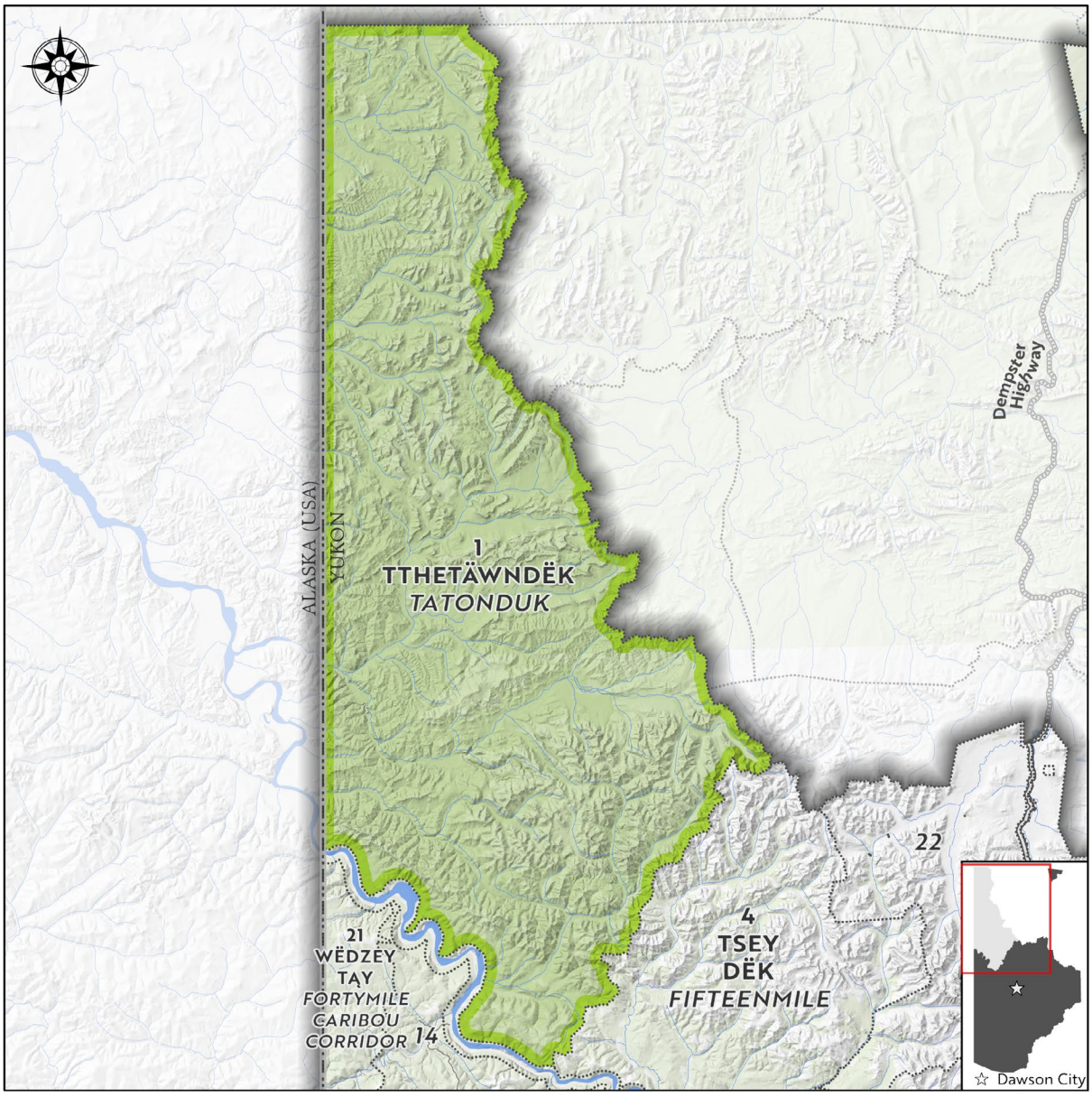
LMU 1: Tthetäwndëk (Tatonduk)

Area

7,938 km^2 (20% of the Region)

Settlement Land

1% of the LMU is Settlement Land, including Tr'ondëk Hwëch'in Settlement Land parcels TH R-48A, TH R-4A, TH R-5A, TH R-76A, TH R-77B, TH S-133B1, TH S-134B1, TH S-6B1



INTENT STATEMENT

The vision for this LMU focuses on conservation with limited use and no industrial development or exploration. The conservation priorities for this LMU are rooted in stewardship, landscape connectivity, ecosystem representation, Tr'ondëk Hwëch'in cultural values, and wildlife habitat. Future management should maintain the wilderness character, emphasize landscape connectivity with adjacent regions, and provide opportunities for cultural connectivity. Access and continued exploration activities should be carefully planned and monitored in relation to existing mineral claims to avoid disturbing wildlife, particularly sheep, and their habitat.

This LMU contains some of the most undisturbed wilderness landscapes in the Region and is rich in intact ecosystems and Tr'ondëk Hwëch'in history. It includes high-quality habitat for migratory caribou herds and is one of the main areas in the Region that the Porcupine Caribou Herd passes through. The LMU has some of the highest concentrations of sheep and grizzly bears in the Region, as well as lambing and sheep wintering habitat, and high-quality habitat for current and future grizzly populations. There are also endemic meadow habitats, species of conservation concern, and the Tatonduk River Watershed, an ecologically intact area with permanent freshwater springs.

Existing access infrastructure and industrial development (including mineral exploration and development) are limited. The area contains an active outfitting concession, traplines, and associated infrastructure. This area is designated as a Special Management Area in part to protect ecoregions that are currently underrepresented in Yukon protected areas (North Yukon Ogilvie Mountains and McQuesten Highlands).

The designation also supports species of cultural, ecological, and economic importance, including three caribou herds (Porcupine, Hart River, and Fortymile) and extensive sheep habitat. It also protects key waterways that sustain salmon populations and places that hold deep cultural significance for Tr'ondëk Hwëch'in, including traditional trails, routes, and sites essential for cultural continuity. Establishing a Special Management Area here also enhances landscape connectivity between major conservation areas, including Yukon–Charley National Preserve in Alaska, Kit Range / North Cache Creek, the Ogilvie River headwaters in the Peel Watershed, and Ni'iinlii Njik (Fishing Branch) Territorial Park.

TR'ËHUDÈ AND STEWARDSHIP

Tthetäwndëk means "Broken Stone River". The area has long been used by Tr'ondëk Hwëch'in ancestors as a travel route, and Elders have shared that this is a place of importance for wildlife. The protection of this land is essential to honour the past, support cultural continuity and the passing down of Traditional Knowledge, and provide opportunities for youth and future generations. It is a place of healing.

> "We will go back to these lands, it's who we are, that is our story."
>
> *– Debbie Nagano, Dawson Regional Planning Commission Chair*

> “I flew up there and I was in awe. I could picture the old trail where people used to travel from Blackstone to Moosehide. I got so excited when I saw the Tthetäwndëk.”
>
> *– Angie Joseph-Rear, Dawson Regional Planning Commission*

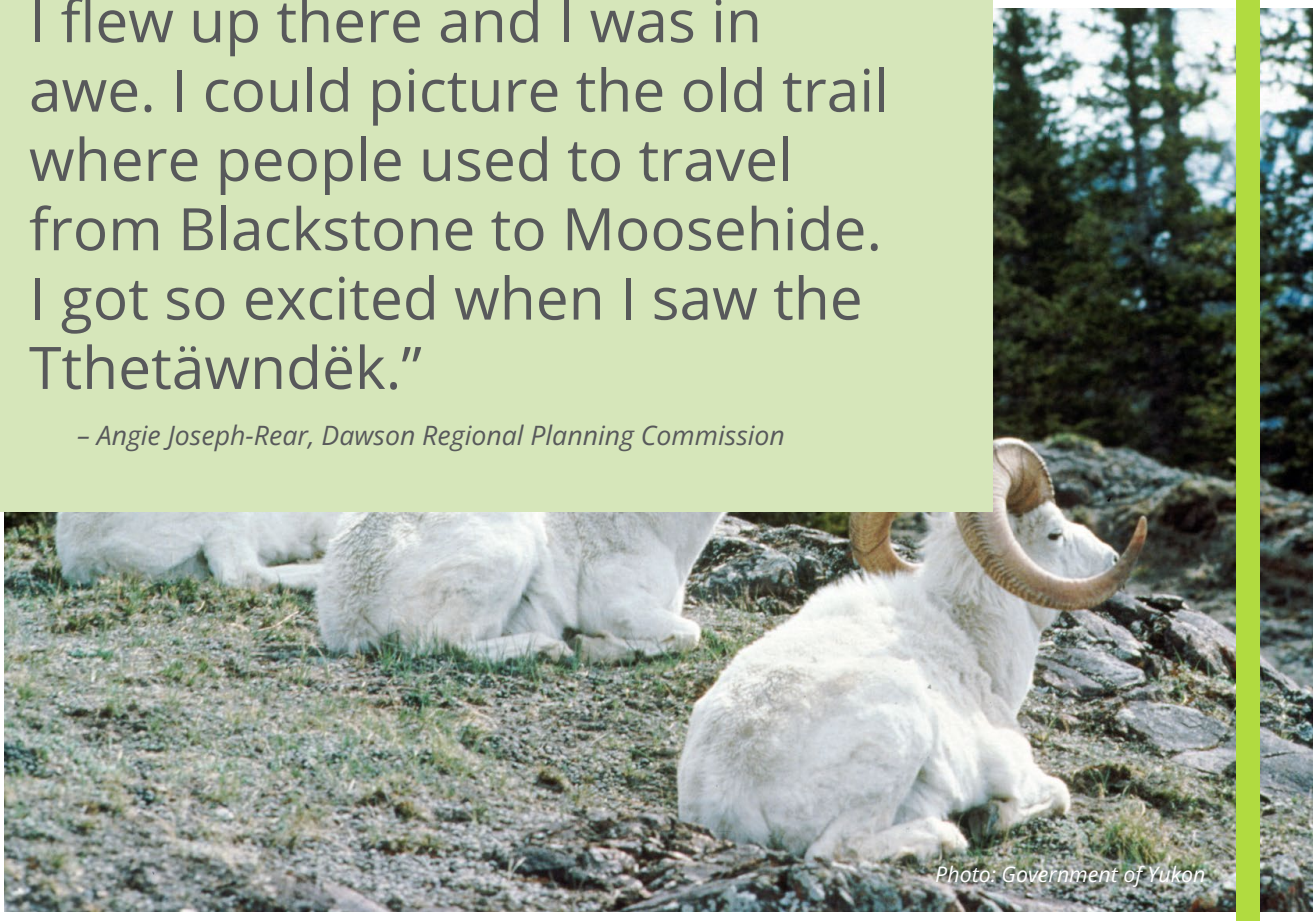


Photo: Government of Yukon

“It is my backyard, I grew up there. It made me a steward of the land. I’ve watched mining, I’ve watched the wildlife populations. I have stomped those hills, I have picked up artefacts that are 15,000 years old. … I hope that two generations from now, the outfitting industry here has shifted into a partnership with Tr’ondëk Hwëch’in so that they can use the infrastructure and be re-connected with the land. This land matters and you don’t get that kind of land a lot.”

– Dan Reynolds, Dawson Regional Planning Commission

LMU DIRECTIONS

1. Development footprint is allowed according to ISA 1 surface disturbance and linear feature density thresholds.

2. Mineral development is allowed only within existing mineral tenure. Withdraw all other lands from quartz and placer mineral staking (including critical minerals) and oil and gas dispositions.

3. No new access is currently envisioned. Any overland access would fundamentally alter the character of the area, which is currently defined by its lack of road infrastructure. The absence of road access contributes to the area's unique ecological value, including important habitat that supports wildlife and traditional land use. Maintaining this roadless condition is a priority to preserve the integrity of the landscape and the experiences it offers. An Access Management Plan is not required at this time, but if new access is required, it must be accompanied by an Access Management Plan that includes the following clauses:

    a. Where access is required, a winter road would be the only acceptable form of land access.

    b. Where access is required, both Parties must jointly agree to it. Where the Parties cannot reach agreement, they should follow Dispute Resolution (THFA 26.3.1.3).

    c. Where access is required, apply the precautionary principle.

4. If proponents demonstrate that existing mineral claims are viable to the satisfaction of both Parties, the Parties must co-approve and co-manage any new access. An Access Management Plan (Section 4.4) is required before the approval or construction of any road.

5. For activities on existing mineral tenure that overlap with mapped sheep habitat, include mitigations to reduce potential impacts to sheep habitat. Specifically, timing windows may apply in winter habitat and lambing areas. Proponents should consult the appropriate and qualified staff within each Party.

6. This area is not to be promoted as a tourism destination, as extensive use may have a negative impact on sensitive wilderness values.

7. Tr'ondëk Hwëch'in should have the primary responsibility of managing this area through the establishment of an Indigenous Protected and Conserved Area.

8. The SMA Management Plan should consider the priority values.

9. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Land users must follow Stewardship Directions for the caribou overlays (Section 5.3.4).

PRIORITY VALUES

- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Plant and Animal Relations
- Landscapes

	VALUES
Land–People Relationship	• Limited recreational hiking opportunities; access is by fly-in only. • Cultural use areas and trails offer opportunities for ancestral stewardship. • Outfitting offers opportunities for community stewardship.
Community Culture	• The LMUs, intact ecosystems and healthy wildlife populations support a sense of identity as good stewards.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• This is an important area for harvesting and gathering, especially in places with high ecological integrity. It is important for maintaining cultural ties to the land, including engaging youth and upholding stewardship duties. • Traditional trails and travel between important cultural areas (identified routes along Tatonduk River, Eagle Creek, Mount Klotz, and the Yukon River). Several Tr'ondëk Hwëch'in Settlement Land parcels were chosen for their traditional and cultural significance. • This LMU contains identified heritage resources, and there is a high likelihood of undocumented archeological sites throughout the LMU.
Community Resilience	• Healthy fish and wildlife populations support harvest and contribute to food security.
Water	• Several important and undeveloped watercourses are present, including freshwater springs.

	VALUES
Plant and Animal Relations	• High-value waterbird habitat in riparian areas, key nesting habitat for raptors. • Much of the area consists of high-elevation habitat, crucial for migratory bird specialist species. Contains the Tintina Trench Flyway, a major bird migration corridor. • Unglaciated alpine areas and low-elevation steppe meadows contain endemic species. • The LMU provides high-quality habitat for grizzly bears. • It is important habitat for freshwater fish. • There is extensive year-round Dall (thinhorn) sheep habitat coverage within the entire area. • Species-at-risk known to occur include collared pika, Yukon podistera, wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, and peregrine falcon, grizzly bear, Northern Mountain caribou population, Dawson wallflower. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, common nighthawk, transverse lady beetle, and horned grebe.
Salmon	• The Tatonduk River and Coal Creek are important migration and spawning habitat for salmon, including Chinook.
Caribou	• Fortymile caribou herd: migration and winter habitat. • Porcupine Caribou Herd: fall and spring migration and winter habitat. • Hart River herd: important habitat.
Moose	• Year-round habitat, including some WKAs for moose in late winter along major watercourses (Tatonduk River, Eagle Creek, Miner Creek).

	VALUES
Landscapes	• This LMU is part of the North Yukon Ogilvie Mountains ecoregion, which is currently underrepresented in the protected areas system for the Yukon. These mountains have been identified as a Yukon hotspot for nationally endemic species. The LMU also includes a small portion of the McQuesten Highlands, which is not currently included within the Yukon's protected areas. • It provides connectivity to other protected areas, including Yukon–Charley National Preserve in Alaska; Kit Range / North Cache Creek and Ogilvie River Headquarters in the Peel River Watershed; Ni'iinlii Njik (Fishing Branch) Territorial Park in North Yukon Planning Region; and Tsey Dëk (Fifteenmile) in the Dawson Planning Region. • Important ecosystems include low elevation steppe meadows and unglaciated alpine areas, which have endemic species (murray's draba, Dawson wallflower, william's catchfly, matted starwort, Ogilvie Mountains spring beauty, and walpole's poppy). • The LMU contains intact old-growth forests (>140 years old), and several known mineral licks. • The landscape has intrinsic values and provides remote wilderness habitat for sensitive species.
Wetlands	• There is considerable wetland coverage within much of the lowlands, including bogs, fens, and marshes, which provide important wildlife habitat and ecosystem services.
Sustainable Local Economy	• The LMU has limited tourism activities and limited access. • The area contains an active outfitting concession with associated infrastructure. • Active quartz claims are present. Mineral potential ranges from moderate to significantly prospective. Per the Yukon Geological Survey, the area contains critical mineral occurrences. • The LMU overlaps with the Yukon River North and Tatonduk landscape units of the Dawson Forest Resources Management Plan, which are designated for higher conservation focus with low potential for forestry activities. • Contains portions of two sedimentary basins (Eagle Plains and Kandik) with identified potential for oil and natural gas resources.

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 2

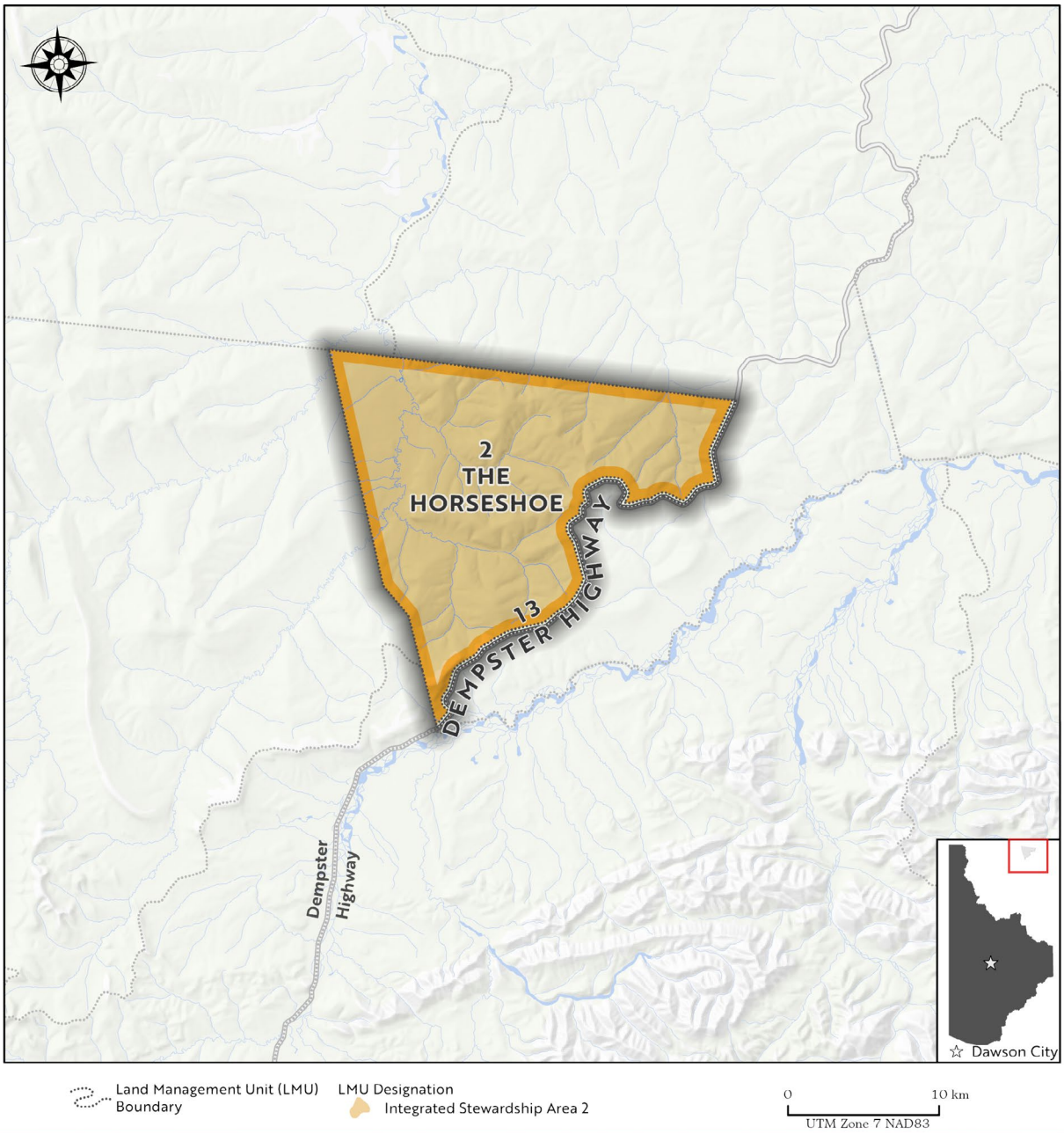
LMU 2: Horseshoe

Area

318 km^2 (0.8% of the Region)

Settlement Land

Overlaps entirely with Tr'ondëk Hwëch'in Settlement Land parcel R-49A



INTENT STATEMENT

The vision is to ensure that the habitat requirements of the Porcupine Caribou Herd are well understood and protected. This area offers important opportunities for First Nations subsistence hunting and harvesting along the Dempster Highway. Future management must preserve Tr'ondëk Hwëch'in's ability to sustainably develop their Settlement Land and ensure that the unique ecological value and cultural use of this area remain intact.

This LMU lies entirely within Tr'ondëk Hwëch'in Settlement Land parcel R-49A. It is surrounded to the north and east by an Integrated Management Area 4 in

the North Yukon Planning Region (LMU 9: Eagle Plains). Decision-makers should acknowledge and consider the different management intents and development thresholds of these two LMUs during any future development proposals.

An ISA 2 designation gives Tr'ondëk Hwëch'in the ability to guide future development decisions while ensuring the protection of critical caribou habitat. This area is culturally significant to Tr'ondëk Hwëch'in, supporting subsistence practices and traditional economic activities such as trapping and harvesting, and includes some of the most important Porcupine caribou habitat for communities. It also lies within a sedimentary basin with identified potential for oil and natural gas resources.

TR'ËHUDÈ AND STEWARDSHIP

This area is important for the Tr'ondëk Hwëch'in and their relationship with the Porcupine Caribou Herd. The name of this LMU refers to the distinctive bend in the road or "horseshoe", that serves as an identifier for people who harvest in the area.

> "The relationship between wëdzey and Tr'ondëk Hwëch'in extends back to a time without boundaries between people and wëdzey. The belief that people are wëdzey and wëdzey are people is literal. Tr'ondëk Hwëch'in have not only relied on wëdzey for survival, but wëdzey are also part of the community, with a shared history and kinship bonds."
>
> *– Tr'ondëk Hwëch'in Caribou (Wëdzey) Traditional Knowledge Summary, 2021*

LMU DIRECTIONS

1. If access is required into this LMU and the adjacent North Yukon LMU 9 for oil and gas development in the Eagle Plains basin, a coordinated approach to access management should be developed between Vuntut Gwitchin, Tr'ondëk Hwëch'in, and the Government of Yukon.
2. 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 future development in this area should be developed as appropriate, through Plan amendments or Plan Review.

PRIORITY VALUES

- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Caribou

	VALUES
Land–People Relationship	• Accessible from the Dempster Highway for recreational activities. • Offers opportunities for ancestral and community stewardship – for example, through trapping and outfitting concessions.
Community Culture	• Not applicable.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Supports First Nation land-based connections and is an active harvest area (trapping, gathering, and harvesting), especially along the "horseshoe bend" along the Dempster Highway and adjacent lands. • Has potential for undiscovered archaeological sites and infrastructure related to historic First Nation harvest activities.
Community Resilience	• Is close to the Dempster Highway and is important to community connectivity. • The community frequently harvests the Porcupine Caribou Herd here.
Water	• Is part of the headwaters of the Porcupine River watershed.

VALUES	
Plant and Animal Relations	• Provides habitat for migratory birds. • The Eagle Plains ecoregion has approximately nine grizzly bears per 1,000 km^2. • Species-at-risk known to occur include dolly varden (Western Arctic population), olive-sided flycatcher, rusty blackbird, and short-eared owl. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, transverse lady beetle, barn swallow, common nighthawk, horned grebe, wolverine, bank swallow, and lesser yellowlegs.
Salmon	• Contains waterways that feed into the Porcupine River, which is home to salmon.
Caribou	• Contains important habitat and critical migration routes for the Porcupine Caribou Herd.
Moose	• Insufficient information.
Landscapes	• Lies within the Eagle Plains ecoregion of Taiga Cordillera ecozone.
Wetlands	• Fens cover 10% of the LMU.
Sustainable Local Economy	• Lies within an identified sedimentary basin with potential for oil and natural gas resources and some presence of exploration wells. There are exploration wells in the broader area and an active oil and gas permit adjacent to the LMU. • Has moderately prospective mineral potential with medium to high confidence. • Is part of a group trapping concession and an outfitting concession. • Is adjacent to the Dempster Highway, an increasingly popular tourist driving route.

Artwork: Yukon Graphic Recording

SUB-REGIONAL PLANNING AREA

LMU 3: Chu Kon Dëk (Yukon River Corridor)

Area

1,012 km^2 (2.5% of the Region)

Settlement Land

16% of the LMU is Settlement Land, including 52 Tr'ondëk Hwëch'in Settlement Land Parcels


ALASKA (USA)
YUKON
1
☆ Dawson City
4
TSEY DËK
FIFTEENMILE
Top of the World Highway
14
TAY DËKDHÄT
TOP OF THE WORLD
21
WËDZEY TAY
FORTYMILE
16 CARIBOU CORRIDOR
Dawson City
22
12
CHU KON DËK
YUKON RIVER CORRIDOR
15
KHEL DËK
SIXTY MILE
3
11
GOLDFIELDS
19
TÄDZAN DËK
WHITE RIVER
17
11
GOLDFIELDS
18
Land Management Unit (LMU) Boundary
LMU Designation
Sub-Regional Planning Area
0 10 20 30 km
UTM Zone 7 NAD83

INTENT STATEMENT

The scope of the Dawson Regional Plan is geographically bound. However, the Yukon River is a single ecological feature and should ultimately be managed as such. The long-term vision for the future of the Yukon River is to encourage management of the river in its entirety, honouring its many functions and its importance to the people of the Yukon.

The Yukon River Corridor represents a significant multi-use area and transportation corridor in the Region. This is demonstrated by the abundance of identified heritage and cultural sites along this historic route, including Jëjik Dhä Dënezhu Kek'it (Moosehide Village). The corridor continues to be an area of immense cultural value to Tr'ondëk Hwëch'in and provides rich habitat for key species, including salmon, moose, raptors, and species-at-risk. This LMU supports a diverse range of year-round economic activities, including mining, tourism, agriculture, and recreation, and it maintains the aesthetic qualities of a northern wilderness river.

The Yukon River Corridor is the site of many competing land uses. As some of these land uses proceed, their impacts can make other uses more difficult in the future. Because of the high and competing interests in this area, and the threats to multiple values, it requires significant extra attention and resources to plan. This level of detail is beyond the scope of a regional plan. A sub-regional plan is therefore required to focus on the specific land uses and cultural importance of this area. Sub-regional planning will focus on protecting and enhancing water quality and salmon habitat, protecting the scenic values that attract tourism opportunities, preserving important cultural sites, and managing important industrial access points.

The designation as a sub-regional planning area indicates that this LMU is a priority for planning, accompanied by the appropriate time and resources. It is not intended to delay planning for this important area and should not be interpreted as such. This sub-regional plan should follow Chapter 11 of the THFA, and interim measures provided should be in place until sub-regional planning is completed.

TR'ËHUDÈ AND STEWARDSHIP

"Throughout the stories … you will hear of Smart Man, Beaver Man, and Tsà' Wëzhè. This is the Traveller, known by many names up and down the Yukon River and across the north. Tsà' Wëzhè went into the world and made it safe for us, the Dënezhu. He made agreements with the land and animals that ensured our survival: the land and animals would provide for us for as long as we lived by those agreements, for as long as we lived Tr'ëhudè. The stories of Tsà' Wëzhè, Beaver Man, Smart Man, the Traveller, teach us that Tr'ëhudè means to live in integrity, justice/balance, interdependence, and respect, and we must adhere to these values if we want the land, our culture, and our community, to survive."

– Tr'ondëk Hwëch'in Tr'ëhudè Land Vision, 2021

There are many places along the Yukon River Corridor where cultural education and connection to the land take place. This value is held strongly by Tr'ondëk Hwëch'in, and it is important that these spaces are protected so these opportunities can be preserved for youth. The river is central to the Tr'ondëk Hwëch'in cultural landscape.

"It is the history of my relations and ancestors … We must remember to treat it with respect. It is powerful and it is empowering."

– Donna Michon, Tr'ondëk Hwëch'in Citizen

LMU DIRECTIONS

Interim measures – applied upon Plan approval until sub-regional plan is approved

1. Development footprint is allowed according to ISA 2 surface disturbance and linear feature density thresholds.

2. Mineral development is allowed only within existing mineral tenure; withdraw all other lands from quartz and placer mineral staking (including critical minerals). Withdrawal is in place until the completion and approval of a sub-regional plan. When a claim expires, it should be withdrawn from further staking while interim withdrawal is in place.

3. No large-scale, permanent infrastructure is allowed before the completion of the sub-regional plan.

4. If plans to build a permanent bridge across the Yukon River (from Dawson City to West Dawson) proceed, they should be accompanied by the sub-regional plan. If the Parties intend to proceed in the absence of a sub-regional plan, they must agree to a Plan Amendment.

5. If Tr'ondëk Hwëch'in chooses to pursue an Indigenous Protected and Conserved Area, this Plan affirms that choice and recognizes it as consistent with its objectives, pending a sub-regional plan.

6. If Tr'ondëk Hwëch'in chooses to pursue Personhood for the Yukon River, this Plan affirms that choice and recognizes it as consistent with its objectives.

7. To protect Tr'ondëk Hwëch'in heritage resources, a buffer around the Forty Mile Heritage Site should be established. The boundaries should be two km beyond the Tr'ondëk–Klondike UNESCO World Heritage Site boundaries for Ch'ëdähdëk (Forty Mile), Ch'ëdähdëk Tth'än K'et (Dënezhu Graveyard), and Fort Cudahy and Fort Constantine.

8. The management of this LMU should adhere to any relevant directions set out in the Fortymile Townsite Management Plan.

Sub-regional Planning

9. Sub-regional planning should be conducted by the Dawson Regional Planning Commission and initiated within six months of Dawson Regional Land Use Plan approval. If planning is delegated to a sub-regional planning commission, members on the Dawson Regional Planning Commission should have the first option of being on the sub-regional commission.

10. The sub-regional plan will need to consider:

    - The different interests in the northern and southern portion of the Yukon River Corridor.
    - Recreation and access management.
    - Maintaining the wilderness characteristics for recreational, traditional, and tourism purposes.
    - Ongoing stewardship of salmon.

Comprehensive Yukon River Management Plan

11. A Yukon-wide plan for the health and vitality of the socio-cultural, economic, and environmental values of the entire Yukon River should be developed with all affected First Nations, territorial, and federal governments.

PRIORITY VALUES

- Community Culture
- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Community Resilience
- Water
- Salmon
- Moose
- Landscapes
- Wetlands

	VALUES
Land–People Relationship	• Areas of high recreational significance for community and visitors; activities include harvesting, hiking, paddling, boating, dog sledding, skiing, snowmobiling, transportation, and access to trapping. • Used for annual events such as the Yukon River Quest and the Yukon Quest. • The high level of use presents many opportunities for ancestral and community stewardship.
Community Culture	• A gathering place for the Region's residents now and in the past, especially historically around the fishery and currently around salmon advocacy. • Recreational and tourism activities provide opportunities for visitors and newcomers to learn about the heritage and history of the area and its people.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän language	• Location of traditional routes, historic sites, Tr'ondëk Hwëch'in land use sites, heritage reserves, historic resources, and archaeological sites. • Important area for harvesting, gathering, trapping, fishing, and travel that facilitates other land use within this important river corridor. • Opportunities for land-based learning and cultural education opportunities for Tr'ondëk Hwëch'in youth are located along the river.
Community Resilience	• River crossing to access communities. • Use by the Rangers. • Includes part of the Tr'ondëk–Klondike UNESCO World Heritage Site.
Water	• The Yukon River and its tributaries are major hydrological features in the Region and across the Yukon.

	VALUES
Plant and Animal Relations	• High-value waterbird habitat along riparian areas and raptor key areas. • Important habitat for freshwater fish. • Areas of known sheep presence within the river corridor are mapped in the WKA database. • Species-at-risk known to occur include spiked saxifrage, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, wolverine, Dawson wallflower, and peregrine falcon. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, common nighthawk, transverse lady beetle, and horned grebe. • Low-elevation steppe meadows and river sandbar / dune systems contain endemic species.
Salmon	• Important migration and spawning habitat for salmon. Tributaries to the River offer important spawning habitat.
Caribou	• Overlaps with the Fortymile and Nelchina caribou herds and includes migration corridors and winter habitat for the Fortymile caribou.
Moose	• Extensive good habitat for moose, especially calving areas.
Landscapes	• Part of the Klondike Plateau ecoregion. • Contains low-elevation steppe meadows with endemic species (Dawson Wallflower and William's Catchfly). River sandbar / dune systems contain endemic species such as Alaskan Bugseed. • Known occurrences of mineral licks. • Old-growth forests (>140 years old) in riparian areas.
Wetlands	• Wetland and riparian habitat along major watercourses.

	VALUES
Sustainable Local Economy	• May offer suitable land for agricultural purposes. • Claims along the mainstem and along several tributaries near or within the corridor. Infrastructure for mineral development includes barge landings, trailheads, and docks along the mainstem. • Overlaps with several trapping concessions. • Various landing sites and docks provide water access and there are connecting trails off some areas of the mainstem. River traffic consists of barging, tourism, and recreational boating. • Opportunities for wilderness tourism, including canoeing, fishing, hiking, camping, dogsledding, snowmobile tours, boat tours, wildlife viewing, and increased Indigenous tourism opportunities. • A thriving subsistence and commercial salmon fishery once existed on the river.

Artwork: Yukon Graphic Recording

SPECIAL MANAGEMENT AREA

LMU 4: Tsey Dëk (Fifteenmile)

Area

2,758 km^2 (6.9% of the Region)

Settlement Land

One quarter of the LMU is Settlement Land including Tr'ondëk Hwëch'in Settlement Land parcels TH R-1A, TH R-3A, TH R-64B, TH R-70B, TH R-83A, TH S-135B1, TH S-136B1, TH S-137B1, TH S-27B1

INTENT STATEMENT

The vision focuses on conservation with limited use and on ensuring landscape connectivity, ecosystem representation, and the protection of key areas for wildlife, stewardship, and heritage. Future management will see Tr'ondëk Hwëch'in leading land stewardship through an Indigenous Protected and Conserved Area. Careful management of access and sustainable tourism opportunities must respect the area's ecological and cultural significance.

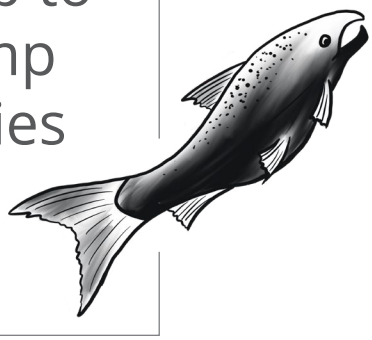
This LMU has intact ecosystems and important habitat for caribou, sheep, moose, grizzly bears, and salmon. It contains traditional routes and sites, as well as areas of high cultural importance for Tr'ondëk Hwëch'in. This area is critical for cultural continuity, as it maintains cultural ties to the land for Tr'ondëk Hwëch'in Citizens and provides opportunities to youth and future generations. There is an active outfitting concession, traplines, and associated infrastructure in this LMU, as well as opportunities for recreation and tourism (including hiking, packrafting, and snowmobiling). There are no major access roads or trails, though overland access routes are present in the winter.

The SMA designation enhances landscape connectivity between Kit Range / North Cache Creek in the Peel River Watershed, Tombstone Territorial Park, and LMU 1: Tthetäwndëk (Tatonduk). It also protects a portion of the McQuesten Highlands ecoregion, which is currently absent from Yukon's protected area system. This area offers strong potential for a sustainable tourism economy due to its proximity and accessibility to Tombstone Park, Dawson City, and the historic Yukon Ditch. Ecologically, it is a biodiversity-rich landscape with intact ecosystems and species of conservation concern, including sheep, moose, grizzly bears, salmon, and three overlapping caribou herd ranges. An Indigenous-led stewardship approach will enable Tr'ondëk Hwëch'in to exercise their stewardship obligations.

TR'ËHUDÈ AND STEWARDSHIP

This area is rich in Tr'ondëk Hwëch'in cultural history and contains important traditional routes and trails. Much of this LMU is covered by Settlement Lands which speaks to the importance of this area for maintaining cultural connectivity. The family ties to the land are shared in stories of living memory.

> "Growing up fishing with drying racks along the beaches along the Chandindu and taking salmon up to Old Crow. We learned not to camp at Fifteenmile because the grizzlies would come down."
>
> *– John Flynn, Dawson Regional Planning Commission*



LMU DIRECTIONS

1. Tr'ondëk Hwëch'in should have the primary responsibility of managing this area through the establishment of an Indigenous Protected and Conserved Area (IPCA).
2. Development footprint is allowed according to ISA 1 surface disturbance and linear feature density thresholds.
3. Mineral development is allowed only within existing mineral tenure. Withdraw all other lands from quartz and placer mineral staking.
4. For activities on existing mineral tenure that overlap with mapped sheep habitat, include mitigations to reduce potential impacts to sheep habitat. Specifically, timing windows may apply in winter habitat and lambing areas.
5. The SMA Management Plan should consider the priority values and a long-term sustainable tourism framework. Due to the high concentration of Settlement Land, this framework should be led by Tr'ondëk Hwëch'in.
6. In the absence of an SMA Management Plan, surface access (on non-Settlement Land) should be co-managed by the Parties on a project-by-project basis. Carefully managed surface access should be supported by the Parties to encourage sustainable tourism activities, forestry, Tr'ondëk Hwëch'in cultural activities, and access to a mineral deposit that has been proven viable by a proponent. If the Parties cannot reach an agreement regarding surface access, the Dispute Resolution process (THFA 26.3.1.3) should be followed.
7. Given the high concentration of Settlement Land throughout this LMU, the intention is that all decisions not on Settlement Land are co-managed by the Parties.
8. Directions in the Dawson City Community Wildfire Protection Plan should be followed.
9. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Salmon
- Plant and Animal Relations
- Caribou

VALUES	
Land–People Relationship	• Active year-round recreation opportunities. • The southern portion is reasonably accessible for community use and cultural activities. • This access creates opportunities for ancestral and community stewardship.
Community Culture	• Limited access into the backcountry via some old trails. • Opportunities to learn about history and heritage of people in the area (both Tr'ondëk Hwëch'in and generational newcomers). • Intact ecosystems and healthy wildlife populations support a sense of identity as good stewards.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Presence of traditional routes along Chandindu, Fifteenmile, and Yukon rivers. Concentration of archeological sites and historic sites are associated with the Yukon Ditch system. • Historic trails to Black City and the location of Twelvemile Village. • Fall and winter traditional use areas; presence of Tr'ondëk Hwëch'in Settlement Land parcels in proximity to community (R-3A, R-64B, R-1A, R-70B, R-83A). • Important area for family and community connections to the land.
Community Resilience	• The stewardship and harvesting opportunities in this LMU contribute to individual and community well-being.
Water	• Contains several important undeveloped watercourses and headwaters.

VALUES	
Plant and Animal Relations	• High-value waterbird habitat in riparian areas and key nesting habitat for raptors. • Much of the area consists of high-elevation habitat, crucial for migratory bird specialist species. Contains the Tintina Trench Flyway, a major bird migration corridor. • Contains good habitat for grizzly bears and freshwater fish. • Extensive sheep habitat, including winter range, lambing, and rutting areas. Large numbers of Dall's sheep are present. • Species-at-risk known to occur include Yukon podistera, collared pika, wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl and peregrine falcon. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, common nighthawk, transverse lady beetle and horned grebe. • Low-elevation steppe meadows and unglaciated alpine areas contain endemic species.
Salmon	• Chandindu and Fifteenmile rivers provide Chinook salmon spawning habitat.
Caribou	• Contains critical summer and winter habitat as well as spring/fall and summer corridors for migrating caribou (Fortymile and Porcupine herds), and important habitat for the Hart River herd.
Moose	• Good moose habitat, including later-winter (February to April) upland habitat along the Chandindu, Fifteenmile, and Yukon River north corridors. • Calving areas along rivers.
Landscapes	• Adjacent to protected areas Kit Range / North Cache Creek in Peel River Watershed, Tthetäwndëk, and Tombstone Territorial Park. • Contains low-elevation steppe meadows and unglaciated alpine habitats with endemic species, including the Ogilvie Mountains Collared Lemming. • Known occurrences of mineral licks. • Old-growth forests (>140 years old) in riparian areas.

	VALUES
Wetlands	• Some wetland habitats within the lowlands, including bogs, fens, and marshes, provide important wildlife habitat and ecosystem services.
Sustainable Local Economy	• Overlaps with the Chandindu Landscape Unit of the Dawson Forest Resources Management Plan, which is a medium priority for planning with a higher conservation focus. • Minimal upland active quartz claims, the majority of the area, is significantly to moderately prospective, and some areas are highly prospective. Low to moderate probability for placer potential. • Contains two active outfitting concessions and active trapping concessions. • Current and future tourism potential including wilderness tourism, camping, hiking, packrafting, snowmobiling, and skiing.

INTEGRATED STEWARDSHIP AREA 1

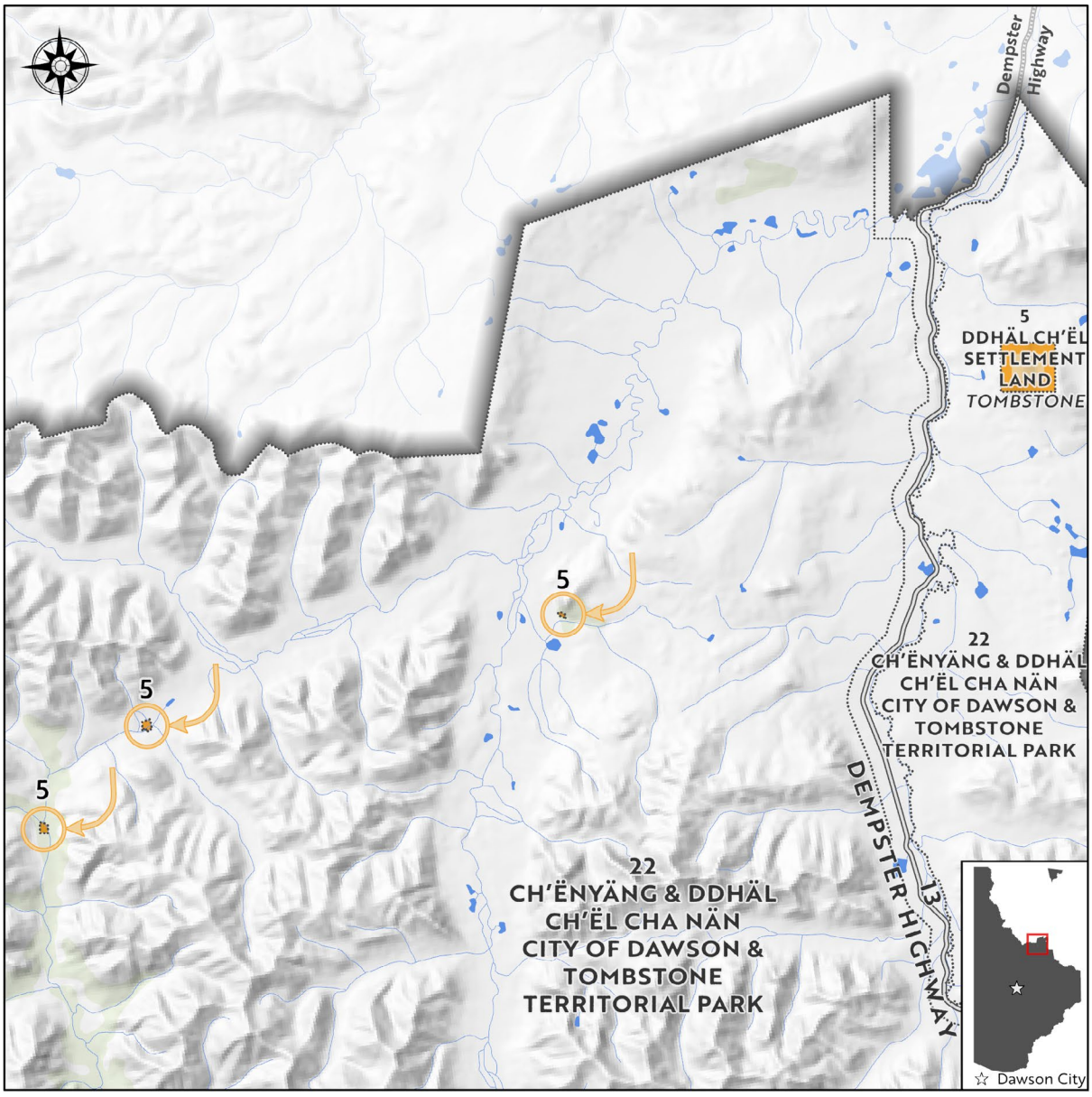
LMU 5: Ddhäl Ch'ël Settlement Land (Tombstone)

Area

2.9 km^2 (0.01% of the Region)

Settlement Land

Overlaps entirely with Tr'ondëk Hwëch'in Settlement Land including the following Settlement Land parcels TH R-19B, TH R-34B, TH S-138B1, TH S-145B1, TH S-28B1, TH S-29B1, TH S-26B1/D, TH S-208B1/D


Dempster Highway
5
DDHÄL CH'ËL SETTLEMENT LAND
TOMBSTONE
5
5
5
22
CH'ËNYÄNG & DDHÄL CH'ËL CHA NÄN
CITY OF DAWSON & TOMBSTONE TERRITORIAL PARK
22
CH'ËNYÄNG & DDHÄL CH'ËL CHA NÄN
CITY OF DAWSON & TOMBSTONE TERRITORIAL PARK
DEMPSTER HIGHWAY
13
☆ Dawson City
Land Management Unit (LMU) Boundary
LMU Designation
Integrated Stewardship Area 2
0
10 km
UTM Zone 7 NAD83

INTENT STATEMENT

This LMU is made up of multiple Settlement Land parcels within the boundaries of Tombstone Territorial Park. Settlement Land parcels within the park boundaries are not included in the Tombstone Territorial Park Management Plan, which otherwise provides a comprehensive description of the area and values, allowable activities and management direction.

The vision for these areas is largely aligned with the park's establishment objectives under the THFA, particularly recognizing and protecting a natural area abundant in wildlife, and a place rich in historic and contemporary Tr'ondëk Hwëch'in use. Future management should see Tr'ondëk Hwëch'in directing the stewardship and development of these areas in ways that complement the surrounding landscape. While the Settlement Land parcels and non-Settlement Land are distinct, management of the park and the LMU will affect each other, and values in this LMU will likely be found throughout the park.

The area as a whole supports excellent caribou, grizzly and black bear, moose, and sheep populations. These species have been sustainably harvested by subsistence hunters for thousands of years. The LMU overlaps with an active outfitting concession, traplines, and associated infrastructure. These parcels are important places for Tr'ondëk Hwëch'in to continue practising their culture and connecting to their history. Tr'ondëk Hwëch'in have used this area for generations, as evidenced by ancient campfire hearths, stone tools, and more recent hunting and fishing camps.

This LMU is designated as an ISA 1 to afford it the highest level of protection that can be exclusively managed by Tr'ondëk Hwëch'in. This complements the surrounding non-Settlement Land in Tombstone Territorial Park, which was designated as a natural environment park as part of the Tr'ondëk Hwëch'in Final Agreement. The park was selected for its tourism potential, archaeological, historical and cultural resources, mineral potential, wildlife resources, and viewing opportunities, and is an exceptional attraction for contemporary recreation and tourism. The Dempster Highway sub-regional plan will be directly adjacent to some of the parcels that make up this LMU.

TR'ËHUDÈ AND STEWARDSHIP

> "That's a God country there 'cause there's a lot of game there, everything there, so people from all over use that country because it's pretty wealthy for game and caribou, sheep, you name it, they all there."
>
> *– Percy Henry, Tr'ondëk Hwëch'in Citizen*

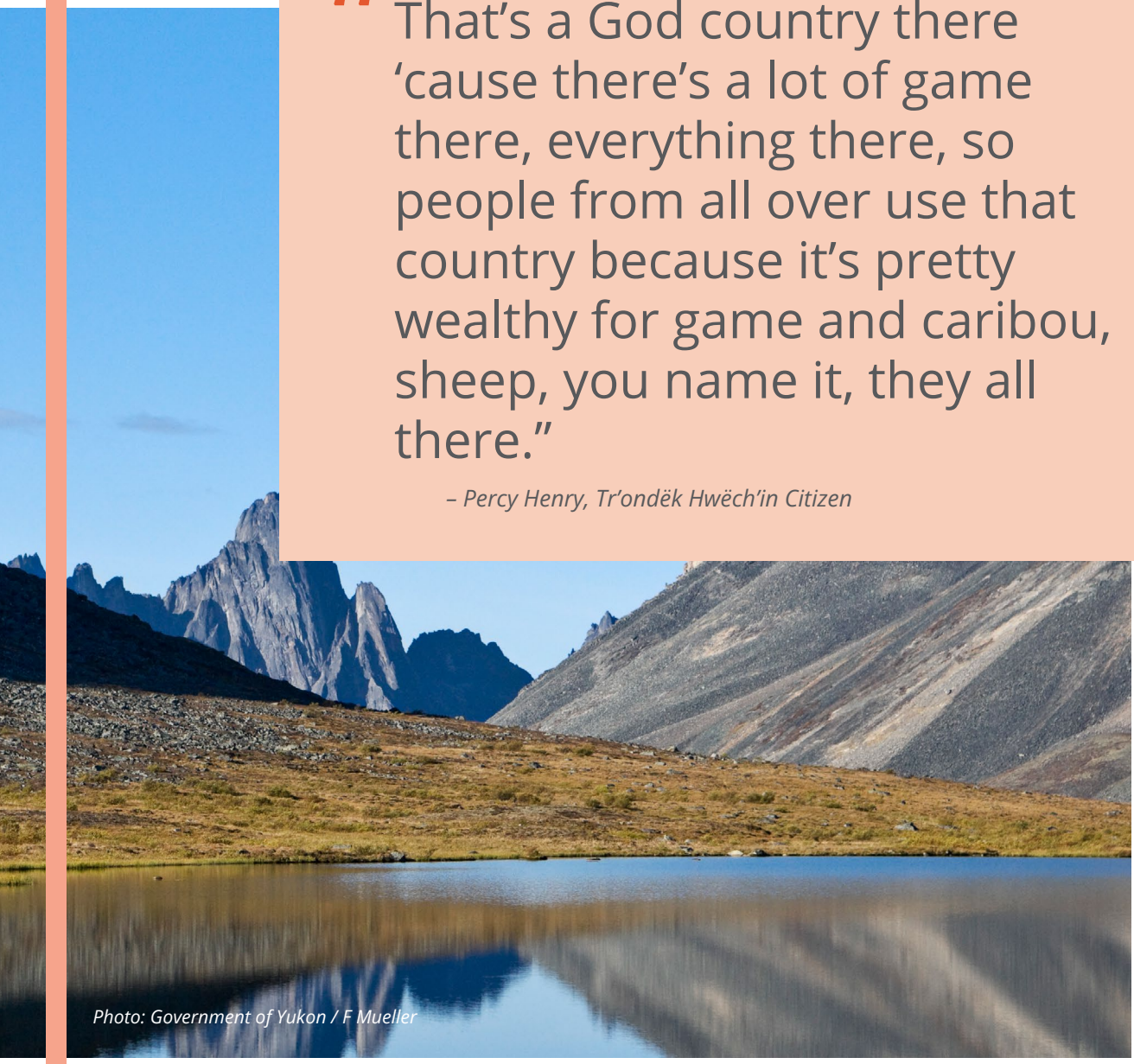


Photo: Government of Yukon / F Mueller

LMU DIRECTIONS

1. Mineral development is allowed within existing mineral tenure. Withdraw all other lands from placer and quartz mineral staking.
2. New access is strongly discouraged. Where access is required, Tr'ondëk Hwëch'in would have sole authority over access to the Settlement Land. If access routes include segments on non-Settlement Land, access must be co-managed by Tr'ondëk Hwëch'in and the Government of Yukon.
3. Existing access within the Settlement Land parcels is managed exclusively by Tr'ondëk Hwëch'in.
4. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.
5. Tr'ondëk Hwëch'in should have the primary responsibility for managing this area through the establishment of an Indigenous Protected and Conserved Area.

PRIORITY VALUES

- Land–People Relationship
- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Plant and Animal Relations
- Wetlands

VALUES	
Land–People Relationship	• Surrounding park is an important recreation area for residents of the Region and offers ongoing stewardship opportunities.
Community Culture	• Part of the "Lost Patrol Route", where a 1910 Royal Northwest Mounted Police expedition perished after losing its way between Fort McPherson and Dawson City. • Within the Tr'ondëk–Klondike UNESCO World Heritage Site. • Offers opportunities for learning about the Region's history and heritage. • The surrounding park is an important recreation area for residents of the Region.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Important area for subsistence harvesting (caribou, moose, berry picking, trapping, and snaring). • Presence of grave sites and archaeological and heritage resources. • Many Tr'ondëk Hwëch'in camps, including Black City and Sila Pass. • Traditional places of ceremony. • Presence of ochre, a natural pigment used in ceremony and art. • Important locations for Tr'ondëk Hwëch'in cultural connection to the land.
Community Resilience	• The surrounding park is an important recreation area for residents of the Region, supporting mental and physical well-being. • Proximity to the Dempster Highway supports community connectivity.
Water	• North Klondike and Blackstone River watersheds. • Important sources of drinking water for Dawson City. • Many rivers and streams provide important aquatic habitats.
Plant and Animal Relations	• Presence of beaver, grayling, and other species associated with intact river and wetland systems.
Salmon	• Some rivers in this LMU support salmon migration and rearing; juvenile salmon use portions of these rivers after they've hatched.
Caribou	• Porcupine Caribou Herd: historical range. • Hart River herd: important habitat.

	VALUES
Moose	• Good moose habitat.
Landscapes	• Dominated by Beringian terrain, an ice-free refuge during the Last Glacial Maximum. • Hotspot for endemic vascular plants. • Rugged and visually distinctive mountains.
Wetlands	• High abundance of fens and swamps; this LMU has the fifth highest wetland coverage in the Region.
Sustainable Local Economy	• Tourism is prominent in the surrounding park and along the Dempster Highway. • Nearby outfitting operations contribute to the local economy.

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 2

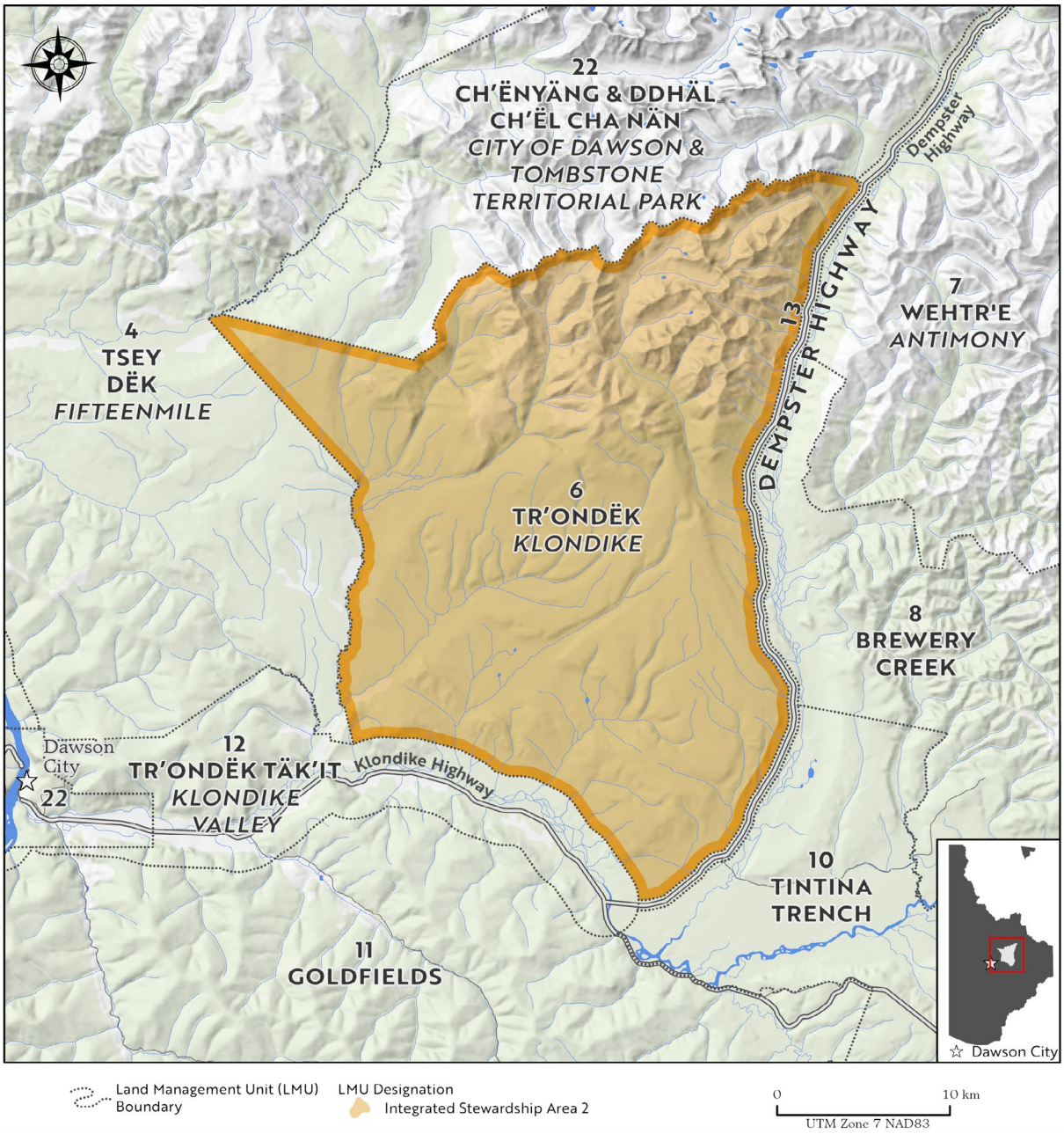
LMU 6: Tr'ondëk (Klondike)

Area

810 km^2 (2% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcels: TH R-38A, TH S-112B1, TH S-142B1, TH S-176B1, TH S-205B1, TH S-206B1, TH S-24B1, TH S-25B1, TH S-26B1/D, TH S-47B1, TH S-71B1, TH S-72B1, TH S-73B1



INTENT STATEMENT

The vision for this LMU is to maintain its high ecological and socio-cultural value while supporting forestry and traditional economic activities, including trapping and harvesting.

Located within the Tintina Trench flyway and adjacent to the North Klondike River, this area offers important habitat for migratory birds, raptors, furbearers, moose, freshwater fish, and salmon. As part of the Klondike River watershed, it also includes important sources of community drinking water, particularly Wolf Creek. Industrial interests are currently limited, with activity focused mainly on forestry

and a small number of placer claims. Supporting sustainable forestry in this LMU is a key priority. The area contains an active outfitting concession, traplines, and associated infrastructure. While access is currently limited, the LMU lies close to both the Dempster and North Klondike highways.

This LMU is designated as an ISA 2 to reflect the priority placed on protecting ecological and socio-cultural values while allowing for ongoing sustainable use. It is already heavily used, with multiple, and at times conflicting land uses, including important areas for commercial fuelwood harvesting. Additional management directions aim to support continued sustainable growth of key industrial activities while safeguarding ecological and socio-cultural values.

Current development levels classify this LMU as an ISA 2 designation; however, the long-term vision prioritizes sustainable forestry, with no future quartz mining and placer mining limited to existing tenures. For this reason at the 10-year Plan Review, the development footprint of this LMU should be reviewed. If both development footprint indicators are below ISA 1 critical thresholds, the LMU designation should change to ISA 1.

TR'ËHUDÈ AND STEWARDSHIP

> "There is a long history of Tr'ondëk Hwëch'in connections to this area. It is an area filled with history and a place of cultural continuity for Tr'ondëk Hwëch'in. There is a valley in this LMU where you can see the caribou coming down. People say that it would have been a natural place for ancestors to have camps. Arrowheads have been found in this area."
>
> *– Dawson Regional Planning Commission*

LMU DIRECTIONS

1. Mineral development is allowed only within existing mineral tenure. Withdraw all other lands from placer and quartz mineral staking.
2. No residential or agriculture development outside existing permits or tenure.
3. Due to the associated risks and the high concentration of conservation values in surrounding LMUs, heap-leach mining is not supported in this LMU under the current regulatory regime and with commonly used technologies.
4. Sustainable forestry is encouraged within this LMU.
5. This LMU is prioritized for an Access Management Plan for new and existing access. The Access Management Plan must:
    a. Recognize and account for the ongoing presence of Wildland Fire Management in this LMU.
    b. Acknowledge and plan accordingly to mitigate the impacts of increased access on moose harvesting and trapping.
    c. Consider that new access may only be acceptable by winter roads.
    d. Support requirements for all access and forestry roads to be decommissioned once permits expire.
6. At the 10-year Plan Review, the development footprint of this LMU should be reviewed. If both development footprint indicators are below ISA 1 critical thresholds, the LMU designation should change to ISA 1.
7. Tr'ondëk Hwëch'in should have the primary responsibility of managing this area through the establishment of an Indigenous Protected and Conserved Area (IPCA).
8. This LMU contains tributaries to the Klondike River that form important headwaters for drinking water catchment for Dawson City and surrounding residential neighbourhoods. Development and activities should not impact this important water source.
9. Activities that have the potential to disturb high-value salmon habitat should be prohibited.
10. This LMU contains critically important habitat for lynx populations and for migratory birds.

11. Development of the North Fork Hydro site (s 7.8.1.1 THFA) may be considered jointly by both Parties.

12. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Water
- Plant and Animal Relations
- Salmon
- Sustainable Local Economy

	VALUES
Land–People Relationship	• Given proximity to Dawson City and main highways, there is potential for recreational pursuits in this area; however, access remains relatively limited. There are several hiking opportunities along the Yukon Ditch and within the Tombstone Mountains south of the park. Snowmobiling occurs along existing trails. • Opportunities for stewardship and relationship-building exist through activities such as trapping, forestry, and salmon enhancement projects.
Community Culture	• Access is limited, but high cultural use by Tr'ondëk Hwëch'in presents possibilities for cultural education for other members of the community.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Traditional trails and archaeological sites, are present in this LMU. • This is an important area for connecting to the land through land use and economic activities, including trapping, gathering, and harvesting. It has high cultural value and contemporary use for traditional economic activities.
Community Resilience	• This LMU contains important headwaters for drinking water catchment for Dawson City.

	VALUES
Water	• Klondike River watershed offers important aquatic habitat values for wildlife and is a primary drinking water source for the Region.
Plant and Animal Relations	• There are raptor nests along the North Klondike River and within the Tintina Trench Flyway. • Watercourses and ponds offer important habitat for waterfowl, including swans, cranes, ducks, geese, and shorebirds. • There are key sharp-tailed grouse habitat areas. • Beaver, muskrat, wolverine, ermine, and river otter are present, and this LMU functions as a regionally important lynx refugium. • The Klondike River watershed offers important habitat for resident fish species including Arctic grayling. • Species-at-risk expected to occur include bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, horned grebe, barn swallow, common nighthawk, wolverine, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle.
Salmon	• The Klondike River watershed offers critical spawning and rearing habitat for Chinook salmon.
Caribou	• This LMU contains winter habitat and migration corridors for the Fortymile caribou herd.
Moose	• There is extensive good moose habitat, including important late-winter (February to April) calving habitat.
Landscapes	• This LMU is part of the McQuesten Highlands ecoregion. • It contains important mineral licks for wildlife.
Wetlands	• There is some wetland habitat, including bog, fen, and swamp.

	VALUES
Sustainable Local Economy	• This LMU contains historical infrastructure and a potential future hydroelectric generation site. • There is high presence of commercial forestry. This LMU overlaps the Klondike River Landscape Unit of the Forest Resources Management Plan, which is designated as high priority for short-term planning, and includes two active timber harvest plans: Dempster Highway and Five Mile Dempster Highway. • Mineral potential is high to moderate, with some isolated placer claims and a past coal mine. Overall, the area is generally of low interest for mineral exploration and development. • There are active trapping and outfitting concessions and associated infrastructure. • There are limited hiking opportunities (air access only) and the LMU is directly adjacent to Tombstone Territorial Park. There is potential for Indigenous tourism and interpretation along the Dempster Highway (for example, Wolf Creek), as well as opportunities for wildlife viewing and scenic views along highway.

Artwork: Yukon Graphic Recording

SPECIAL MANAGEMENT AREA

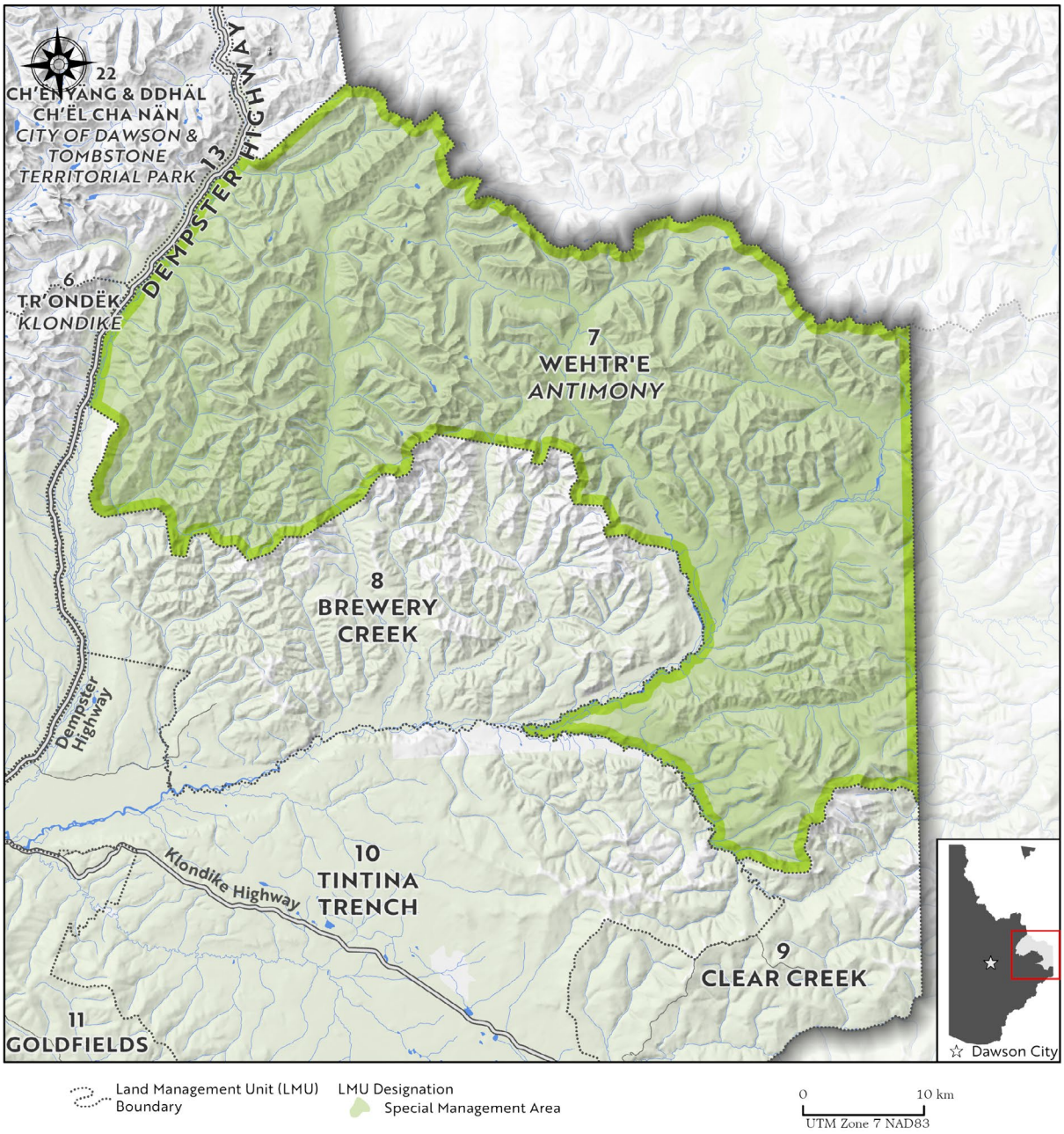
LMU 7: Wehtr'e (Antimony)

Area

2,148 km^2 (5.4% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcels: TH R-41B, TH S-123B1, TH S-143B1, TH S-144B1, TH S-88B1



INTENT STATEMENT

The vision for this LMU is to protect key wildlife habitat and aesthetic attributes along the Dempster Highway while allowing for limited mineral development within existing tenure and carefully managed surface access. The future character of this area should remain much as it is today, recognizing that some mineral development and forestry may still occur. Any development should be accompanied by management that protects key caribou habitat and reclamation to functional caribou habitat.

This area has a high conservation focus due to the critical calving, post-calving, summer, and rut habitat for the Clear Creek and Hart River caribou herds, and high-elevation habitat for migratory birds. The Clear Creek and Hart River herds are part of the Northern Mountain population of woodland caribou listed as a species of Special Concern under the federal *Species at Risk Act*. This area is located adjacent to two protected areas (Tombstone Territorial Park and the West Hart River Wilderness Area), offering important opportunities for landscape connectivity. The area contains an active outfitting concession, traplines, and associated infrastructure. There are no major roads or trails into the LMU, though some winter access exists. The Dempster Highway sub-regional plan will be directly adjacent to this LMU.

This LMU is designated as a Special Management Area to protect a portion of the McQuesten Highlands ecoregion, which is currently absent from Yukon's protected area system, and to maintain landscape connectivity between the West Hart River Wilderness Area and Tombstone Territorial Park. Preserving ecological health, connectivity, and viewscapes will also support and enhance traditional economic values and activities. The boundaries of this area have been carefully defined to support the long-term viability of caribou populations and their habitat; maintaining these boundaries is essential to achieving the Plan's environment goals.

TR'ËHUDÈ AND STEWARDSHIP

This area is important for connecting to the land and taking part in traditional economic activities, including trapping, fishing, gathering, and hunting. There is a Tr'ondëk Hwëch'in camp near here where there is concern about the quality of drinking water due to past mining activities. This concern has affected people who use the camp, as many will not drink from the creek.

LMU DIRECTIONS

1. Development footprint is allowed according to ISA 1 surface disturbance and linear feature density thresholds.
2. Mineral development is allowed only within existing mineral tenure. Withdraw all other lands from quartz and placer mineral staking.
3. Due to the associated risks, heap-leach mining is not supported in this LMU under the current regulatory regime and with commonly used technologies.
4. If new access is required, coordinated access routes for industrial activities are encouraged to reduce the linear footprint.

5. The viewscape from the Dempster Highway should be maintained; no new access from the Dempster Highway is allowed.
6. The SMA Management Plan should consider the priority values.
7. In the absence of an SMA Management Plan, surface access on non-Settlement Land should be co-managed by the Parties on a project-by-project basis. If the Parties cannot reach an agreement regarding surface access, the Dispute Resolution process (THFA 26.3.1.3) should be followed.
8. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Water
- Plant and Animal Relations
- Salmon
- Caribou
- Landscapes

	VALUES
Land–People Relationship	• There are limited off-road recreation opportunities for hiking and sightseeing from the Dempster Highway and canoeing on North Klondike River. The area contains valued viewscapes and licensed hunting opportunities. • Economic activities, including trapping and outfitting, offer opportunities for stewardship.
Community Culture	• There are opportunities for learning about Tr'ondëk Hwëch'in heritage and culture.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• There are several archeological sites and sites of heritage and cultural significance.

VALUES	
Community Resilience	• The North Klondike River feeds into the drinking water source for Dawson City and the surrounding community.
Water	• The North Klondike River and its tributaries have high ecological value.
Plant and Animal Relations	• The area provides important habitat for freshwater fish. • There is extensive Dall's sheep habitat. • Species-at-risk known to occur include Yukon podistera, collared pika, wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, horned grebe, common nighthawk, Northern Mountain caribou herds, and grizzly bears. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, and transverse lady beetle. • Some unglaciated alpine habitats contain endemic species.
Salmon	• The area provides important migration and spawning habitat for salmon.
Caribou	• The LMU contains key calving, post-calving and summer and winter habitat for Clear Creek, Hart River, and Fortymile caribou herds.
Moose	• There is extensive good moose habitat, including later winter (February to April) habitat along Hamilton and Brewery creeks.
Landscapes	• The LMU is located within the McQuesten Highlands ecoregion, which is not represented in the Yukon's protected areas system. • It presents opportunities for landscape connectivity and is adjacent to intact areas including the West Hart River Wilderness Area in Peel River Watershed and Tombstone Territorial Park. • Unglaciated alpine areas with late snowmelt provide habitat for endemic plants such as Ogilvie Mountains Spring Beauty, and unglaciated alpine with dry heath ridges are home to the Ogilvie Mountains collared lemming.
Wetlands	• There are limited wetland habitats within the lowlands, including bogs, fens, and marshes, which provide important wildlife habitat and ecosystem services.

	VALUES
Sustainable Local Economy	• The LMU is located within North and South Klondike River Landscape Units of the Dawson Forest Resource Management Plan, identified as high conservation and forest resource development focuses, respectively. • It contains active quartz claims, an active Class 1 operation near Antimony Creek, and a placer prospecting lease on a tributary to Brewery Creek. The area is highly prospective and has a strong future placer potential. Per the Yukon Geological Survey, the area contains critical mineral occurrences. • There is overlap with several trapping concessions and one active outfitting concession. • The Dempster Highway is an attraction for motorized tourists and offers opportunities for scenic views and wildlife viewing.

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 3

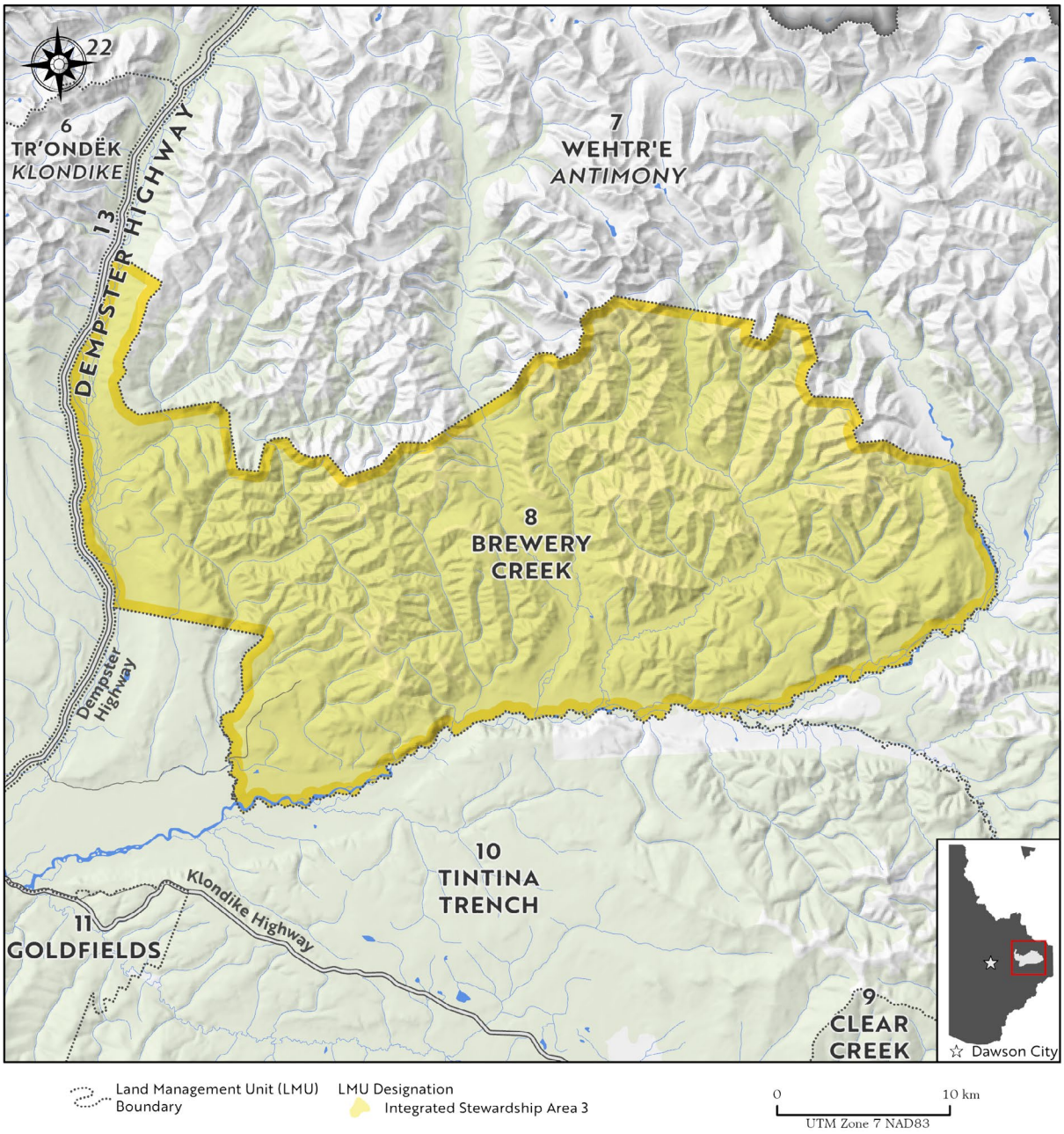
LMU 8: Brewery Creek

Area

941 km^2 (2.4% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcels: TH R-63A, TH S-159B1, TH S-203B, TH S-204B1, TH S-80B1



INTENT STATEMENT

The vision is sustainable development through cumulative effects management and the preservation of values, including water, wildlife and land–people relationships.

This LMU contains important wildlife habitat and significant socio-cultural use. Forestry is an important activity. It is important that this area remain open for current and future mineral interests without undermining its important environmental and cultural attributes. The south fork of the Klondike River is an important source of drinking water and is a salmon-bearing stream.

The LMU contains a past-producing heap-leach mine and associated infrastructure that has the potential to reopen. It also contains an active outfitting concession, traplines, and associated infrastructure. Access is via the Brewery Creek access road and secondary trails. The Dempster Highway sub-regional plan will be directly adjacent to this LMU.

An ISA 3 designation provides for measured mineral exploration and development and forestry, while protecting ecological and socio-cultural values in the surrounding landscape.

TR'ËHUDÈ AND STEWARDSHIP

> "As you drive up the Dempster Highway, you can see that this is a special place. There are lots of creeks running through the area that are crystal clear. There are beavers who have called this place home for generations. Keeping the water clean is very important as this is a place where Citizens fish – the water and fish must remain healthy."
>
> *– Dawson Regional Planning Commission*

LMU DIRECTIONS

1. The viewscape off the Dempster Highway should be maintained for its aesthetic and natural value.

2. New access into the LMU is discouraged. If new surface access is required:

    a. It must be co-decided and co-managed by the Parties; where they cannot agree, Dispute Resolution applies.

    b. Winter access is preferred over all-season access.

    c. Access via the Dempster Highway is not allowed. New access should be limited to one route from the Brewery Creek direction.

3. This area contains important habitat for sharp-tailed grouse, a species of management concern. Development in this area should be planned to minimize impacts of key habitat for sharp-tailed grouse.

4. If Brewery Creek mine becomes active again, traffic may need to be managed to ensure the continued peaceful enjoyment of the adjacent Settlement Land in LMU 10: Tintina Trench.

5. Due to the associated risks, heap-leach mining is not supported in this LMU under the current regulatory regime and with commonly used technologies.

6. With regards to the Klondike River:

    a. Do not block the flow of water in the Klondike River.

    b. No ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.

    c. Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.

    d. Use existing access points wherever possible.

    e. Access should be shared.

7. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlay (Section 5.3.4) must be followed.

PRIORITY VALUES

- Water
- Plant and Animal Relations
- Salmon

VALUES	
Land–People Relationship	• Recreational opportunities exist for canoeing, packrafting, hiking, fishing, and camping.
Community Culture	• The area contains numerous historic resources related to the Yukon North Fork Ditch. • Recreational opportunities offer residents a way to connect to and learn about the land.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Several archeological resources are documented. • Year-round traditional use area; important area for harvesting moose, caribou, small game, birds, berries, and personal fuelwood.
Community Resilience	• The North fork of the Klondike River is an important drinking water source. • There are opportunities for connecting with the land support physical and mental well-being.
Water	• The North Klondike River is a key hydrological feature.
Plant and Animal Relations	• The LMU includes high-elevation habitat that is crucial for some migratory bird species. • It contains WKAs for sharp-tailed grouse and well-established key habitat for beavers. • The Klondike River is home to resident fish species, including Arctic grayling. • Species-at-risk known to occur include collared pika, wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, horned grebe, and common nighthawk. • Species-at-risk expected in low numbers include Yukon podistera, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, and transverse lady beetle. • Unglaciated alpine terrain contains endemic plant species (Ogilvie Mountains Spring Beauty).
Salmon	• The Klondike River provides important Chinook salmon spawning habitat; salmon have been documented in the upper reaches of the river near Hamilton Creek.

VALUES	
Caribou	• The LMU contains key calving, post-calving, summer, and winter habitat for Clear Creek, Hart River, and Fortymile caribou herds.
Moose	• There is extensive good moose habitat, including late-winter (February to April) habitat, along Hamilton and Brewery creeks.
Landscapes	• The LMU is located within McQuesten Highlands ecoregion, which is not represented in the Yukon's protected areas system. • It contains several known mineral licks.
Wetlands	• Limited wetland habitats within lowlands, including bogs, fens, and marshes, provide important wildlife habitat and ecosystem services.
Sustainable Local Economy	• The LMU overlaps 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 with high timber value. • There is active quartz exploration and a past gold-producing mine at Brewery Creek, which may reopen in the future. • The LMU overlaps with several trapping concessions and one active outfitting concession.

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 4

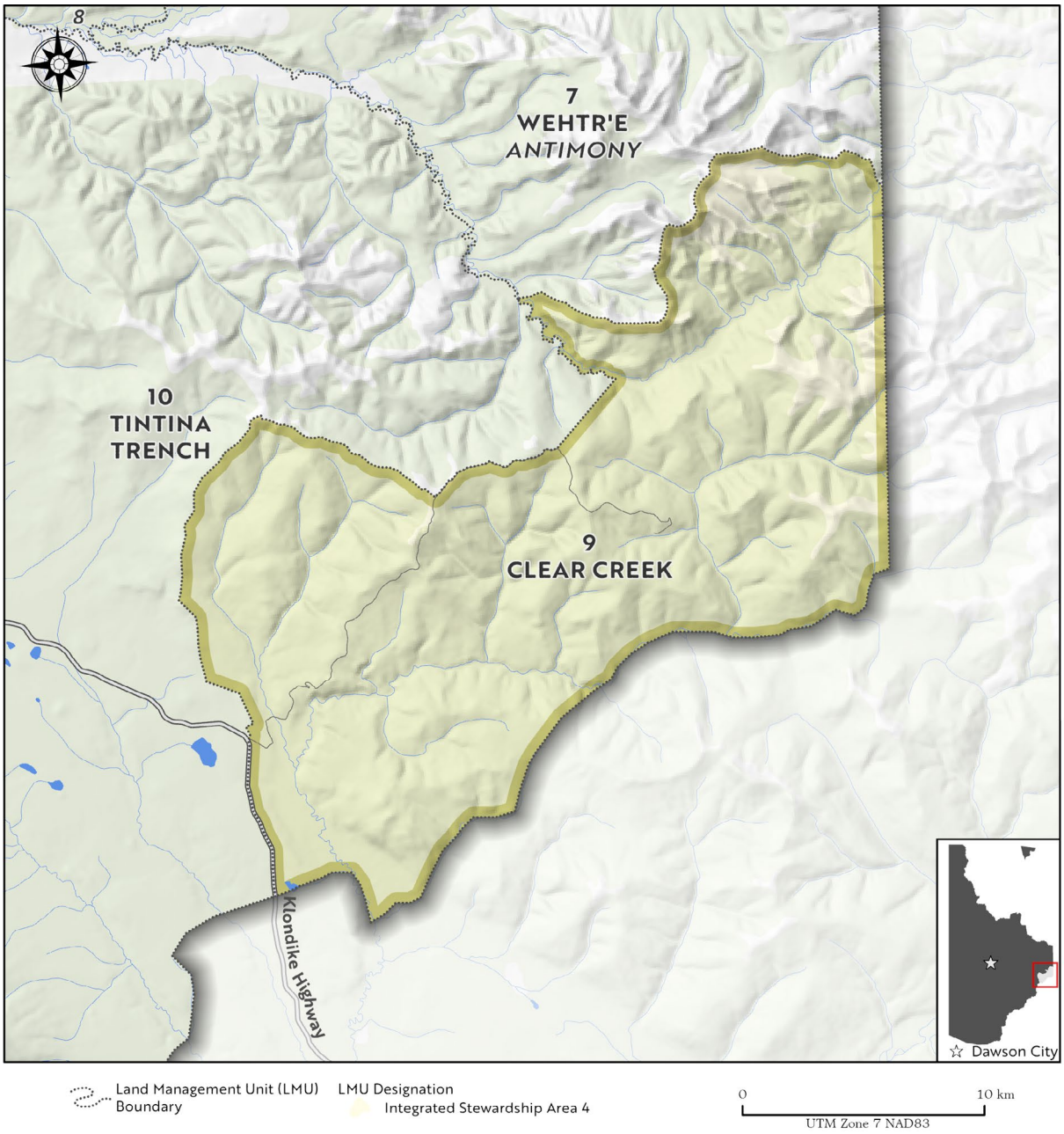
LMU 9: Clear Creek

Area

466 km^2 (1.2% of Region)

Settlement Land

18% of the LMU is Settlement Land including Tr'ondëk Hwëch'in Settlement Land parcels TH R-2A and TH R-79B



INTENT STATEMENT

The vision for this LMU is to conserve key habitat for woodland caribou while allowing for sustainable development. If access changes in the future, the vision should continue to prioritize maintaining caribou values.

This area offers important winter habitat for the Clear Creek caribou herd as well as moose populations. It is within the Stewart River watershed and contains many important community water sources, including Clear Creek.

The LMU has a long history of placer mining and has been identified as having high mineral potential. There is an active outfitting concession, traplines, and

associated infrastructure. Access into the LMU is relatively limited, although it receives high vehicle traffic in the summer due to its proximity to the North Klondike Highway and the Clear Creek road is heavily used by industry.

This LMU is designated as an ISA 4 to allow some additional development to occur in light of existing levels of disturbance. Because it is located within the Clear Creek caribou herd range and important moose habitat, it is a priority to minimize disturbance to key caribou habitat areas and to address impacts to moose through overharvesting, while allowing for ongoing placer mining.

TR'ËHUDÈ AND STEWARDSHIP

"This LMU is the gateway to the Dawson Region. There is a sign that tells people who are driving on the Klondike Highway that they are entering the Traditional Territory of the Tr'ondëk Hwëch'in. For some it is a new experience, and for others it is a welcome home. There is overlap of Traditional Territory here with the First Nation of Na-Cho Nyäk Dun and they have identified the area as being an important place for fishing, traditional camps, and the Clear Creek caribou herd."

– Dawson Regional Planning Commission

LMU DIRECTIONS

1. No exploration is allowed in identified rutting ranges during rut (September 15 to October 15).
2. When caribou are present during rut, all industrial activity within two km of caribou must stop until caribou move.
3. Any access development (roads and trails) within mapped caribou rutting habitat should be avoided.
4. If the Clear Creek Road is upgraded or closed, a 10-Year Plan Review should specifically review directions for this LMU and the related access or reclamation interests and requirements. Reclamation efforts should be geared towards restoring functional caribou habitat, rather than only decommissioning roads.
5. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlay (Section 5.3.4) must be followed.

PRIORITY VALUES

- Water
- Caribou
- Sustainable Local Economy

	VALUES
Land–People Relationship	• Industrial, commercial, and traditional economic activities offer opportunities for stewardship, especially with respect to caribou.
Community Culture	• Placer mining operations offer opportunities for long-term investment in the community.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Several identified archeological sites are clustered on the ridge above the McQuesten River and along the Klondike Highway on the northeast side of the LMU. • The area is used for traditional economy activities, especially harvesting, fishing, and gathering, particularly in areas transected by the Klondike Highway and Clear Creek Road. • The LMU includes important areas for connecting to the land through trapping, gathering, and harvesting.

VALUES	
Community Resilience	• Local employment opportunities exist in mineral exploration and development activities. • The Clear Creek caribou herd has the potential to provide harvesting opportunities, contributing to food security. • The North Klondike Highway is an important transportation route for goods and services.
Water	• Watercourses in the LMU feed into the Stewart River and include a small portion of the South Klondike River and Left Clear Creek.
Plant and Animal Relations	• The LMU is located within the Tintina Trench Flyway, which offers an important migration route for migratory birds. The presence of high-elevation habitats is important for some migratory bird species. • The LMU includes WKAs for thinhorn sheep. • Species-at-risk known to occur include wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, horned grebe, common nighthawk, short-eared owl, and barn swallow. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle.
Salmon	• Activities in the LMU have the potential to impact salmon in the Stewart and Klondike rivers through downstream movement of sediment and/or contaminants.
Caribou	• The LMU overlaps with the Fortymile and Clear Creek caribou herd ranges. • It contains key summer and winter habitat for mountain caribou, including habitat for calving, post-calving, summer, and rutting, and Wildlife Key Areas for the Clear Creek caribou herd.
Moose	• The LMU includes an important moose movement corridor.
Landscapes	• The LMU contains some old-growth forest (>140 years old) and isolated occurrences of rare or endemic species.
Wetlands	• Some wetland habitat is present in the LMU.

	VALUES
Sustainable Local Economy	• There is identified agricultural land disposition in the area along Clear Creek. • The LMU overlaps with the South Klondike River and Flat Creek landscape units of the Dawson Forest Resources Management Plan. There are no active timber harvest plans in the area. • There are limited opportunities for tourism, though there is identified potential for horseback riding activities. • The LMU contains active mineral exploration and development for both placer and hard rock interests and is an area of high mineral potential. • The LMU overlaps with trapping concessions and one active outfitting concession.

Artwork: Yukon Graphic Recording

SPECIAL MANAGEMENT AREA

LMU 10: Tintina Trench

Area

1,811 km^2 (4.5% of the Region)

Settlement Land

53% of the LMU is Settlement Land, including Tr'ondëk Hwëch'in Settlement Land parcels TH R-2A, R-7A, R-21B, R-22B, R-79B, R-80B, S-19 B1/D, S-68 B1, S-184 B1

INTENT STATEMENT

The vision for this area is to protect the important wetland ecological values and recognize and protect Tr'ondëk Hwëch'in cultural values and traditional use areas. It is a place of cross-cultural connection and reconciliation. Future management of this area should ensure that First Nations' traditional use continues unimpeded and that this valuable landscape is protected for future generations.

This area contains Tr'ondëk Hwëch'in Settlement Land parcels, including R-22B, Nänkäk Chèhôlay (Land of Plenty), which hosts year-round culture camps for Tr'ondëk Hwëch'in. The area is highly valued by the Dawson City community for

recreation, offering easy access off the Dempster Highway for activities such as hunting, fishing, trapping, hiking, and camping.

The Tintina Trench Flyway provides valuable habitat for migratory birds. The Flat Creek Wetlands provide important ecosystem services and are essential to the ecological and socio-cultural value of the Klondike River, an important habitat for spawning salmon and the source of Dawson City's drinking water. There are also areas of high agricultural value. The area contains an active outfitting concession, traplines, and associated infrastructure. The LMU is home to a significant moose population, which has ecological value and is important for subsistence harvesting and resident hunters. Tr'ondëk Hwëch'in and the Government of Yukon both have timber harvest operations within the LMU. The presence of the North Klondike Highway is also significant, as it provides vital community connections, supports transportation needs, and contributes to tourism. Secondary road access occurs through Tr'ondëk Hwëch'in Settlement Lands.

This LMU is designated an SMA because R-22B is a culturally and ecologically significant area that supports traditional economic activities and serves as a year-round host site for Tr'ondëk Hwëch'in culture camps and events. In addition, the Klondike River's North and South channels provide critical salmon spawning habitat and supply drinking water for Dawson City, and the Tintina Trench flyway offers essential migration pathways for birds and includes areas of habitat concern. With few mineral claims and minimal surface access, setting the development footprint thresholds at levels comparable to an ISA 2 helps maintain these values without restricting Tr'ondëk Hwëch'in's ability to access the land or develop infrastructure for traditional land use activities.

TR'ËHUDÈ AND STEWARDSHIP

> "Nänkäk Chèhôlay is a place where the land can provide for you and you could live forever; it is a place of healing."
>
> *– Debbie Nagano, Dawson Regional Planning Commission*

Residential school survivors chose Nänkäk Chèhôlay for Tr'ondëk Hwëch'in Citizens. It is close to Dawson City, making it an accessible place for Citizens to reconnect with the land and each other. Nänkäk Chèhôlay is important to Elders and a place where stories can be shared and Citizens can engage in cultural activities. Continued peaceful use and enjoyment of this area by Tr'ondëk Hwëch'in for traditional activities, including harvesting, recreational pursuits and forestry opportunities, is a priority.

LMU DIRECTIONS

1. Development footprint is allowed according to ISA 2 surface disturbance and linear feature density thresholds.
2. Withdraw all lands from quartz and placer mineral staking.
3. Industrial Land Use:
    a. Any industrial activity requires the agreement of both Parties.
    b. Development of the North Fork Hydro site (s 7.8.1.1 THFA) may be considered jointly by both Parties. The North Fork Hydro site is located in LMU 6 but would draw water from the river within LMU 10. If the project proceeds, LMU Direction 8 below would require changing through a Plan amendment to allow water flow to be blocked on the Klondike River.
    c. Forestry and fuelwood harvests are allowed, as guided by the Dawson Forest Resources Management Plan on non-Settlement Land, and as guided by Tr'ondëk Hwëch'in on Settlement Land.
4. In the absence of an SMA Management Plan, surface access of non-Settlement Lands should be co-managed by the Parties in consideration of sustainable development and cultural activities, including tourism, agriculture, and forestry.
5. Development should be planned to minimize impacts to identified key habitats for valued species.
6. Tr'ondëk Hwëch'in should have the primary responsibility of managing this area through the establishment of an Indigenous Protected and Conserved Area (IPCA).
7. Wetlands:
    a. Flat Creek Wetlands is nominated as a Wetland of Special Importance.
    b. No development should occur in bogs, fens, or marshes within this LMU.

8. With regards to the Klondike River:

    a. Do not block the flow of water in the Klondike River.

    b. No ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.

    c. Direct Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.

    d. Use existing access points wherever possible.

    e. Access should be shared.

9. The SMA Management Plan should consider the priority values.

10. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlay (Section 5.3.4) must be followed.

PRIORITY VALUES

- Land–People Relationship
- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Water
- Plant and Animal Relations
- Salmon
- Wetlands

	VALUES
Land–People Relationship	• Recreational activities include fishing, hiking, canoeing, boating, and camping. • There are some residential properties and land dispositions adjacent to the North Klondike Highway. • Seasonal harvesting occurs in this LMU. • Recreation and forestry activities offer opportunities for stewardship.

VALUES	
Community Culture	• Historic sites associated with the Yukon Ditch. • Camps and events held at Land of Plenty (Nänkäk Chèhôlay) are often open to the whole community, creating opportunities for learning about Tr'ondëk Hwëch'in culture and heritage, learning skills, and strengthening community bonds. • Some year-round residents live along the North Klondike Highway.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• The LMU contains known First Nation land use sites and identified features, as well as archaeological and paleontological sites. • Land of Plenty (Nänkäk Chèhôlay) hosts year-round cultural activities and is an important area for harvesting, fishing, trapping, forestry provisions, and inter-generational knowledge sharing.
Community Resilience	• A place of cross-cultural connection and reconciliation amongst First Nations and non-First Nations people. • The Klondike River is an important drinking water source. • Community harvest of fuelwood occurs in this LMU. • The North Klondike Highway is an important transportation route for goods and services.
Water	• The Klondike River is an important source of drinking water. • A few small lakes are present, which are rare in the Region.
Plant and Animal Relations	• The LMU contains waterfowl staging and breeding areas and a portion of the Tintina Trench Flyway. • It hosts key habitat for sharp-tailed grouse, beaver, otter, lynx, and freshwater fish. • There is higher-than-average grizzly bear–human conflict, likely due to high accessibility into the area. • Species-at-risk known to occur include wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, horned grebe, common nighthawk, short-eared owl and barn swallow. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle. • The LMU provides important habitat for grayling and other freshwater fish.

VALUES	
Salmon	• The Klondike River is a known salmon spawning area and provides important migration/spawning habitat for salmon.
Caribou	• The LMU overlaps with the Clear Creek and Fortymile caribou herd ranges and contains important summer and winter habitat.
Moose	• There is extensive good moose habitat with moderate moose populations.
Landscapes	• The LMU is located within McQuesten Highlands ecoregion, which is not represented in the Yukon's protected areas system. • The Tintina Trench Flyway is a migratory bird pathway. • The area contains extensive wetland complexes and rare mineral wetlands, which are important for waterfowl and moose. • The LMU contains several known mineral licks.
Wetlands	• The southern section contains wetlands within lowlands, including bogs, fens, and marshes. • The Flat Creek Wetlands are a significant staging area for migratory waterfowl.
Sustainable Local Economy	• Titled agricultural land is present at Flat Creek Hill. • There is North Fork hydroelectric potential. • Forestry activities are conducted on Settlement Land, as managed by Tr'ondëk Hwëch'in. • Overlap with the Flat Creek landscape unit of the Dawson Forest Resources Management Plan, a medium planning priority. • Mineral potential is moderate to significantly prospective. • There is overlap with one outfitting concession and several trapping concessions with associated infrastructure. • Sightseeing from the highway and an active rafting company contribute to the economy.

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 4

LMU 11: Goldfields

Area

6,058 km^2 (15.2% of the Region)

Settlement Land

2.7% of the LMU is Settlement Land, including Tr'ondëk Hwëch'in Settlement Land parcels 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

INTENT STATEMENT

The vision for this area is sustainable development supported through cumulative effects management, access management, and the identification and preservation of key areas.

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 LMU also offers many opportunities for hunting, harvesting, and gathering, and contains areas of ecological, historical, and cultural significance

to Tr'ondëk Hwëch'in. It has high tourism, forestry, and recreational value. Dawson residents share a deep and enduring connection to this area.

The LMU is bordered by the Klondike, Stewart, and Yukon rivers, each of which carries significant ecological and cultural importance. These waterways shape the landscape and support a wide range of traditional and contemporary uses. Active trapping occurs throughout the LMU, supported by a healthy furbearer population. The area also sustains a notably strong moose population, which contributes to subsistence harvesting and cultural practices. The Hunker–Bonanza loop and secondary roads provide significant access opportunities.

This is the busiest area in the Region and requires thoughtful planning to minimize conflict between user groups. Going forward, shared access and resource use will be key strategies to reduce pressure on the landscape and continue to support sustainable local economies. The Plan acknowledges the long-standing and respectful relationships between Tr'ondëk Hwëch'in and placer miners, which continue to shape land use and stewardship. The Plan's directions aim to support both sustainable economic development and cultural continuity and use of the land.

This LMU contains a high proportion of the Region's wetlands, many of which overlap with areas of mineral interest and active industry. Wetlands are culturally and ecologically significant and play a vital role in maintaining biodiversity, water quality, and landscape resilience. They present a unique stewardship opportunity, particularly for the placer mining industry, the predominant land user in this area. This LMU is not considered a sacrifice zone; instead, it is a place where responsible development, harvesting, and multiple uses can coexist (Nän käk ndä tr'ädäl). The pace and scale of industrial activity must be carefully managed to allow the land to heal, with clear thresholds and reclamation practices guiding long-term sustainability. Careful management is needed to balance development pressures with the protection of culturally and ecologically important areas.

This LMU is designated as an ISA 4 in consideration of the existing level of disturbance and the desire to allow ongoing mineral exploration and development, as these activities are major contributors to the Region's economic strength and socio-cultural fabric. In addition to supporting industry, the area plays an important role in tourism and Community Culture. It is an important area for subsistence and licensed moose harvesting, as well as traditional economic pursuits. Stewardship and LMU directions provide safeguards for wildlife habitat, ensuring that industrial activity can coexist with recreational and traditional land uses. Given the desire for continued growth of industry, this area warrants the highest thresholds for development.

TR'ËHUDÈ AND STEWARDSHIP

The gold rush that began in the late 1890s brought enormous changes to the Tr'ondëk Hwëch'in way of life, and the search for gold continues to this day. While this area is known to the outside world as an active gold mining landscape, it is first and foremost a place where Tr'ondëk Hwëch'in have travelled, gathered, and harvested for generations. It is a place of recreation, community, and harvest, and is strongly connected to Chu Kon Dëk (the Yukon River), which makes it culturally important.

> "We [Tr'ondëk Hwëch'in] have always tried to work with the placer mining industry here."
>
> *– Debbie Nagano, Dawson Regional Planning Commission Chair*

LMU DIRECTIONS

1. Opportunities to promote awareness of Tr'ondëk Hwëch'in cultural history and contemporary land use in this area should be explored.
2. Development should be planned to minimize impacts to identified key habitats for valued species.
3. Efforts to enhance the recreational aspects of this area should be explored (including the Ridge Road Heritage Trail, Discovery Claim, and Dredge #4).
4. This LMU is prioritized for an Access Management Plan for new and existing access. Specifically, the Access Management Plan must:
    a. Include ways to reduce conflict between users and user groups.
    b. Prevent traditional activities from being displaced as a result of user conflicts.
    c. Promote the use of existing access and sharing of access routes.

d. Acknowledge the proposed Northern Access Route and its impacts on this LMU and its values.

e. Address the impact of access on moose in the LMU, specifically where increased access leads to increased hunting and harvesting.

5. With regards to the Indian and Stewart rivers:

   a. Do not block the flow of water in either river.

   b. No ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.

   c. Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.

   d. Use existing access points wherever possible.

   e. Access should be shared.

6. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Community Culture
- Land–People Relationship
- Moose
- Wetlands
- Sustainable Local Economy

	VALUES
Land–People Relationship	• Important grounds for moose harvesting. • Presence of a well-travelled route (Hunker-Bonanza Loop) for recreational pursuits, as well as hiking and biking, especially along the Ridge Road Heritage Trail. The area is of high community importance for recreation and harvesting. • Many ongoing opportunities for stewardship and land–people relationships in multiple capacities.
Community Culture	• High volume of historic sites and resources related to historic mining, including the Discovery Claim and Dredge No. 4. • Paleontological discoveries contribute to Community Culture.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Significant area for paleontological resources given the ongoing ground disturbance, as well as the history of archaeological sites and recorded historic resources. • Important areas for connecting to the land through trapping, gathering, and harvesting. Ensuring wetland habitat remains intact has been noted as an important stewardship duty for Tr'ondëk Hwëch'in.
Community Resilience	• Many ongoing opportunities for stewardship and land–people relationships in multiple capacities, which contribute to individual and community well-being. • Source of economic input to the local economy. • Opportunities for shared land use and relationship-building. • North Klondike Highway is an important transportation route for goods and services.
Water	• Major watercourses and tributaries include the Indian and Stewart rivers, as well as Hunker, Bonanza, Dominion, and Sulphur creeks, and various other creeks and streams that feed into the Yukon River.

VALUES	
Plant and Animal Relations	• Important areas for sharp-tailed grouse and raptors. • Includes good habitat for beaver and muskrat. • Contains several known fish-bearing streams and rivers. • Species-at-risk known to occur include wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, horned grebe, common nighthawk, short-eared owl, and barn swallow. • Species-at-risk expected in low numbers include little brown myotis, red-necked phalarope, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle.
Salmon	• Important migration and spawning, rearing, and overwintering habitat for salmon.
Caribou	• Includes ridgetop migration routes and overwintering habitat for the Fortymile caribou herd.
Moose	• Extensive good moose habitat.
Landscapes	• Presence of some scattered occurrences of intact forest (>140 years old). • Known mineral licks
Wetlands	• Wetlands are prevalent along the Indian River and the Stewart River.

	VALUES
Sustainable Local Economy	• Potential for agricultural growth. • 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 I, Bonanza II, Mummie Pup, and Flat Creek, and there are areas of personal and commercial fuel use. Several associated access roads attributed to forest resources are in the area. • 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 and airstrips. • Active trapping concessions and associated infrastructure, including trapping routes and cabins. • High tourism value in areas related to Klondike Gold Rush history and contemporary mining, including television programs on placer mining.

Artwork: Yukon Graphic Recording

SUB-REGIONAL PLANNING AREA

LMU 12: Tr'ondëk Täk'it (Klondike Valley)

Area

199 km^2 (0.5% of the Region)

Settlement Land

9% of this LMU is Settlement Land including Tr'ondëk Hwëch'in Settlement Land parcels 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-113B1, TH S-122B1, TH S-126B1, TH S-153B1, TH S-165B, TH S-166B1, TH S-41B

INTENT STATEMENT

The vision is a balance of multiple land uses, including residential, trapping, agriculture, tourism, industry, infrastructure, and traditional activities, while conserving key wildlife habitat, a healthy watershed, and clean drinking water. The North Klondike Highway is a critical route for transporting goods and people to Dawson City, further north, and seasonally to Alaska.

The designation as a sub-regional planning area indicates this LMU is a priority for planning, accompanied by the appropriate time and resources. It is not used to

delay planning for this important area and should not be interpreted as such. This sub-regional plan should follow Chapter 11 of the THFA, and interim measures provided should be in place until sub-regional planning is completed.

TR'ËHUDÈ AND STEWARDSHIP

Tr'o, the first part of the Hän words Tr'ondëk and Tr'ochëk, refers to the rocks or "hammerstones" that were used to hammer stakes for fish weirs to catch salmon in the river. The namesake of the Klondike (Tr'ondëk) River demonstrates the importance of salmon to the Tr'ondëk Hwëch'in **(Dobrowolsky, 2014)**.

> "The Tr'ondëk was full of big king salmon which were a bright ruby red colour and in numbers so great that it seemed as though you could walk across the river on them."
>
> *– Dawson Regional Planning Commission*

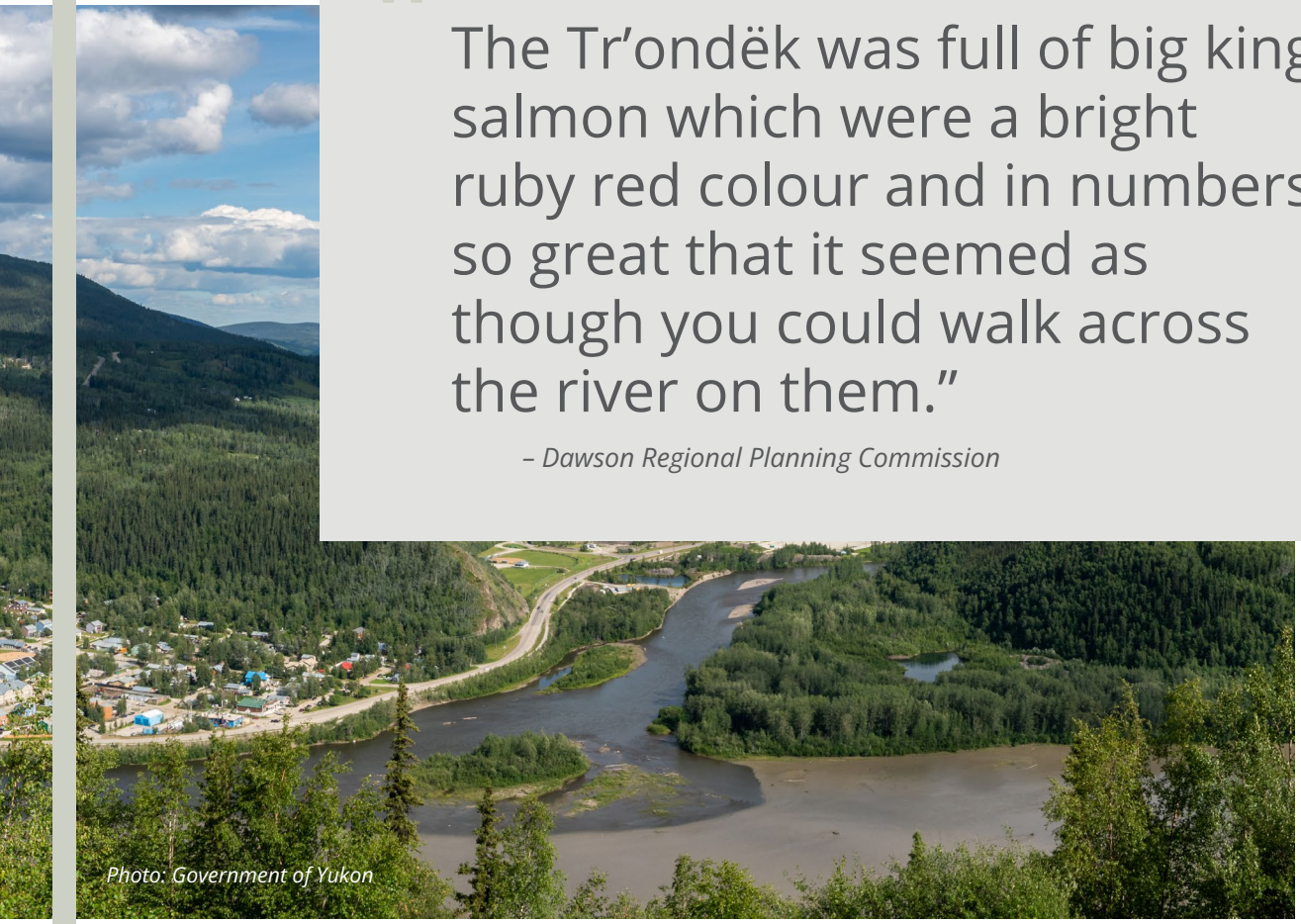
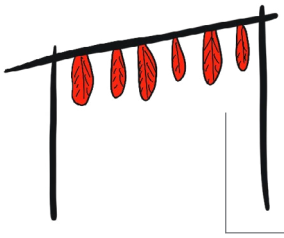


Photo: Government of Yukon



> "These things are all connected and when you learn language you start digging into the past."
>
> *– Angie Joseph-Rear, Dawson Regional Planning Commission*

LMU DIRECTIONS

Interim Measures – applied upon Plan approval until sub-regional plan approved

1. This LMU is exempt from surface and linear disturbance tracking, as the appropriate indicators will be selected during the sub-regional planning process.
2. New spot land applications for permanent dispositions are discouraged.
    a. If a land disposition is allowed to proceed, development should first be considered within or close to existing settlement areas – for example, Dawson City, Bear Creek, Rock Creek, and Henderson Corner.
    b. New residential development in areas of high potential for agriculture, forestry and/or mineral exploration are discouraged.
3. Access to existing recreational trails should be maintained, and where land use conflicts occur, appropriate mitigations should be put in place.
4. Impacts to fish in the Klondike River, in particular salmon, should be mitigated.
5. Ensure Tr'ondëk Hwëch'in Citizens have continued use and peaceful enjoyment of Settlement Land, as per the THFA. Particular attention should be given to Settlement Lands that intersect with other LMUs, such as R64B, R38A, S11B1, and C14B.
6. Expansion of Dawson City municipal boundaries would influence LMU boundaries for this LMU and potentially adjacent ones. If this occurs before sub-regional planning is complete, the Parties will work with the City of Dawson to ensure LMU values are not negatively impacted. Boundary changes would require a Plan amendment and close consideration during Plan Review.
7. Mitigate potential harmful impacts from development to the Klondike River watershed and Dawson City municipal water supply catchment area.
8. High-value agricultural land should be prioritized for agricultural purposes.

9. With regards to the Klondike River:

    a. Do not block the flow of water in the Klondike River.

    b. No ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.

    c. Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.

    d. Use existing access points wherever possible.

    e. Access should be shared.

10. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

Sub-regional Planning

11. Within three years of Plan approval, a sub-regional planning process should be initiated, following the framework of Chapter 11 of the THFA.

    a. The Commission for this sub-regional plan, as required by Chapter 11, should be composed of members of the ongoing Commission. If those members choose not to participate, the Parties should find alternate Commission members.

    b. Collaboration with other planning partners is encouraged, and this includes the City of Dawson, the Klondike Development Organization, and the Tr'ondëk Hwëch'in Community Development Corporation.

12. The goals of the sub-regional plan should include the following:

    a. Complement adjacent planning and development processes, such as the Central Tr'ondëk Land Management Area and those led by the City of Dawson.

    b. Ensure Tr'ondëk Hwëch'in Citizens have continued use and peaceful enjoyment of Settlement Land, particularly on Settlement Land parcels that intersect with other LMUs, such as R64B, R38A, S11B1 and C14B.

    c. Consider the potential impacts of climate change, particularly regarding flooding around residential areas, wildlife habitats, and permafrost slumping.

    d. Protect municipal water supply, including discouraging contamination within the catchment area.

13. The outcomes of the sub-regional plan should include the following:

    a. Identify areas suitable for new residential development, including expansion of existing residential areas.

    b. Ensure areas of high agricultural potential are prioritized for agricultural and accessory uses to enhance food security in the Region.

    c. Determine the need for future commercial and industrial land uses and identification of appropriate locations.

    d. Identify areas that have potential mixed or multiple land uses, such as agriculture and mineral development.

    e. Identify new recreation areas, including walking and biking trails and places to swim.

    f. Identify areas that are appropriate for renewable energy generation.

PRIORITY VALUES

- Community Culture
- Community Resilience
- Water
- Plant and Animal Relations
- Salmon
- Moose
- Wetlands
- Sustainable Local Economy

VALUES	
Land–People Relationship	• This is an area of high priority for recreational pursuits given proximity to the North Klondike Highway and Dawson City. Recreation includes walking, biking, hiking, swimming, fishing, off-road vehicle use. • Recreational, residential, cultural and economic use all offer opportunities for stewardship.
Community Culture	• Includes dredge piles of historical significance as well as sites associated with agricultural history and the North Fork Ditch. • Part of the Tr'ondëk–Klondike UNESCO World Heritage Site. • High concentration of residential properties relative to the rest of the Region.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Contains recorded historic resources, archaeological sites, and parts of traditional trails. • Has high cultural value and contemporary use for traditional economic activities, and includes important Tr'ondëk Hwëch'in community sites. • Due to its proximity to Dawson City, it is an important traditional use area for connecting to the land and maintaining Tr'ondëk Hwëch'in way of life.
Community Resilience	• Area of highest priority for current and future residential development. • North Klondike Highway is an important transportation route for goods and services.
Water	• Klondike River watershed offers important aquatic habitat values for wildlife and is a primary drinking water source for the Region.

VALUES	
Plant and Animal Relations	• Raptor nests are present along the Klondike River. • Watercourses and ponds offer important habitat for waterfowl, including swans, cranes, ducks, geese, shorebirds, and resident fish species including Arctic grayling. • Habitat for beaver, muskrat, wolverine, ermine, river otter, and lynx. • Species-at-risk known to occur include little brown myotis, wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, horned grebe, common nighthawk, short-eared owl, and barn swallow. • Species-at-risk expected in low numbers include gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle.
Salmon	• The Klondike River watershed offers critical spawning and rearing habitat requirements for Chinook salmon.
Caribou	• Within the range of the Fortymile caribou herd but unlikely to offer significant habitat values for caribou.
Moose	• Important habitat and movement corridor for moose; moose–vehicle collisions are frequent.
Landscapes	• Additional fine-scale planning is necessary to manage growth and guide development outside municipal boundaries.
Wetlands	• Some wetlands are present near the North Klondike Highway.
Sustainable Local Economy	• High agricultural potential in the area, given its proximity to Dawson City and suitable land for growing. • Potential for renewable energy infrastructure. • High commercial fuelwood harvesting value; overlaps with the Dome Road Timber Harvest Plan. • Mineral potential is highly prospective. There is significant interest from both placer and hard rock operators, and some mineral claims are present. • Presence of active trapping concession and associated infrastructure. • High tourism value, given its proximity to Dawson City.

Photo: Government of Yukon

SUB-REGIONAL PLANNING AREA

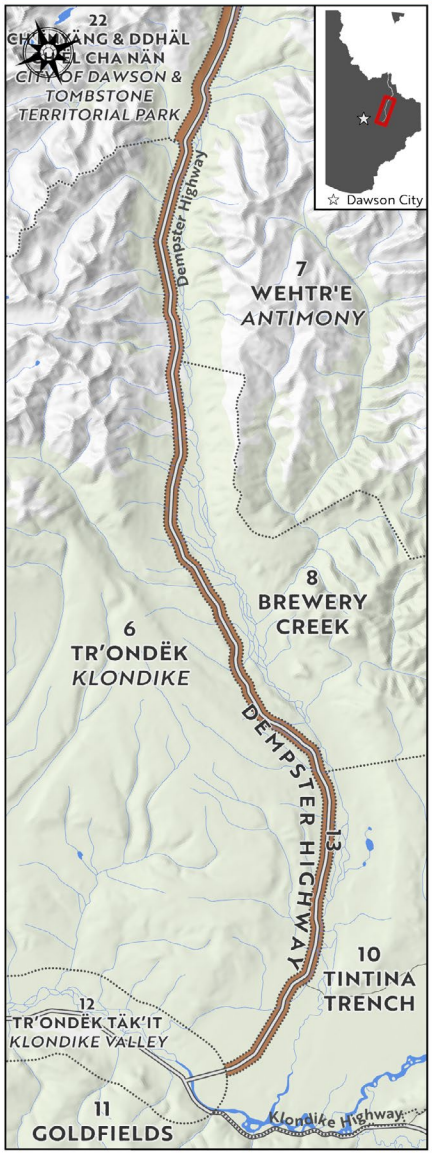
LMU 13: Dempster Highway Corridor

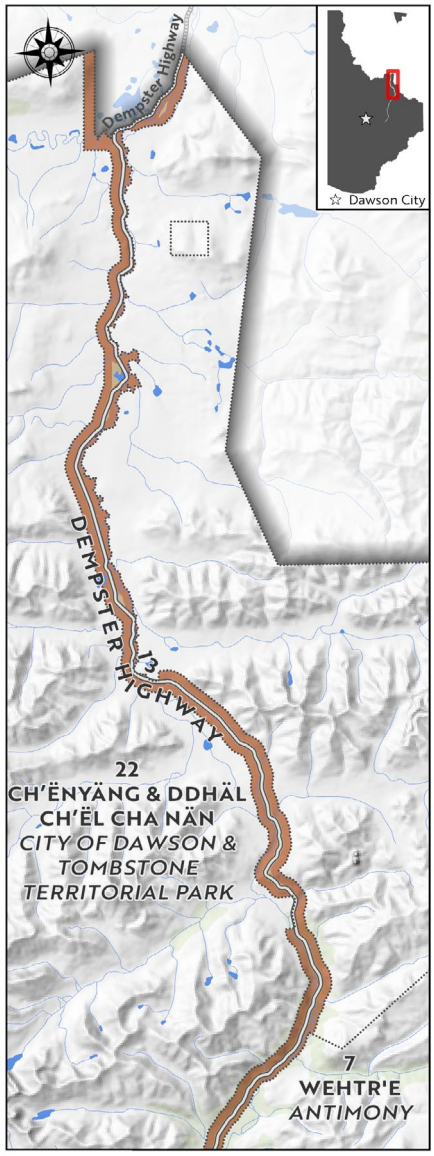
Area

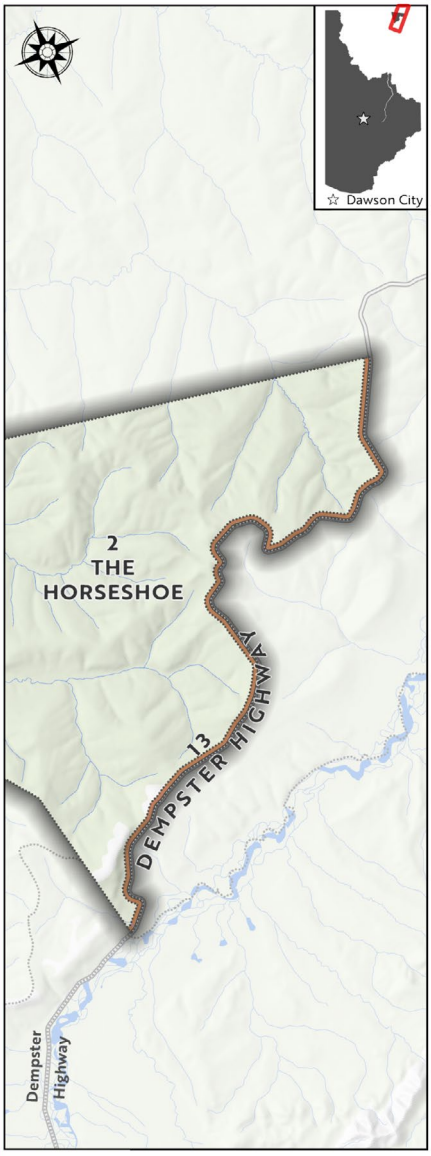
100 km (0.25% of the Region)

Settlement Land

13.9% of the LMU is Settlement Land including Tr'ondëk Hwëch'in Settlement Land parcels TH S-71B1, TH S-73B1, TH S-143B1, TH S-145B1, TH R-63A, TH S-207B1/D, TH S-26B1/D, TH S-205B1, TH S-24B1, TH S-112B1, TH S-203B, TH S-176B1, H S-204B1, TH R-21B, TH S-206B1, TH R-80B, TH S-72B1, TH S-25B1, TH S-184B1, TH S-144B1, TH S-208B1/D, TH S-123B1, TH S-142B1, TH S-80B1


22
CH'ËNYÄNG & DDHÄL
CH'ËL CHA NÄN
CITY OF DAWSON &
TOMBSTONE
TERRITORIAL PARK
Dempster Highway
☆ Dawson City
7
WEHTR'E
ANTIMONY
8
BREWERY
CREEK
6
TR'ONDËK
KLONDIKE
DEMPSTER HIGHWAY 13
10
TINTINA
TRENCH
12
TR'ONDËK TÄK'IT
KLONDIKE VALLEY
11
GOLDFIELDS
Klondike Highway
Land Management Unit (LMU) Boundary
LMU Designation
Sub-Regional Planning Area
0
5 km
UTM Zone 7 NAD83


Dempster Highway
☆ Dawson City
DEMPSTER HIGHWAY 13
22
CH'ËNYÄNG & DDHÄL
CH'ËL CHA NÄN
CITY OF DAWSON &
TOMBSTONE
TERRITORIAL PARK
7
WEHTR'E
ANTIMONY
Land Management Unit (LMU) Boundary
LMU Designation
Sub-Regional Planning Area
0
5 km
UTM Zone 7 NAD83


☆ Dawson City
2
THE
HORSESHOE
DEMPSTER HIGHWAY 13
Dempster
Highway
Land Management Unit (LMU) Boundary
LMU Designation
Sub-Regional Planning Area
0
5 km
UTM Zone 7 NAD83

INTENT STATEMENT

The near-term vision for this LMU is coordinated planning with other regional land use plans to ensure a consistent approach to stewarding this multi-use corridor. The sub-regional plan should support maintaining community access without compromising viewscapes and ecological and socio-cultural values.

There are numerous Tr'ondëk Hwëch'in Settlement Land parcels along the Dempster Highway, as well as opportunities for land-based learning and cultural education for Tr'ondëk Hwëch'in youth. Access is central to this LMU: without the access afforded by the Dempster Highway, many sustainable economy activities and living Community, Culture, and Heritage values would not exist. Changes to access, whether through lack of maintenance of the Dempster Highway or significant increases in traffic (tourism, commercial, government), could significantly alter the community's interaction with this LMU, the viewscape, and ecological integrity. Access must be a significant focus of the sub-regional plan.

This is a heavy-use area with overlapping and sometimes conflicting land uses. A sub-regional planning area designation aligns with recommendations from the Peel Watershed and North Yukon Regional Land Use Plans. The sub-regional plan will need to focus on maintained and controlled access, maintaining the viewscape for its aesthetic and intrinsic value, and overlapping uses.

The designation as a sub-regional planning area indicates this LMU is a priority for planning, accompanied by the appropriate time and resources. It is not used to delay planning for this important area and should not be interpreted as such. This sub-regional plan should follow Chapter 11 of the THFA, and interim measures provided should be in place until sub-regional planning is completed.

TR'ËHUDÈ AND STEWARDSHIP

Tr'ondëk Hwëch'in has a number of cultural camps that are accessed from the Dempster Highway, where Elders, Citizens, and youth to come together and share knowledge and practices out on the land. Residents and visitors also develop relationships with the land through recreational use, hunting, and harvesting.

LMU DIRECTIONS

Interim Measures – applied upon Plan approval until sub-regional plan approval

1. This LMU is exempt from surface and linear disturbance tracking as the appropriate indicators will be selected during the sub-regional planning process.
2. Mineral development allowed within existing mineral tenure.
3. Withdrawal of all other lands from placer and quartz mineral staking until the completion of a sub-regional plan. When a claim expires, it should be withdrawn from further staking while this withdrawal is in place.
4. The visual integrity should be maintained.
5. New access off the Dempster Highway is not allowed until a sub-regional plan is approved. If access is required, it must be agreed upon jointly by both Parties. Where the Parties cannot reach an agreement, Dispute Resolution (THFA 26.3.1.3) should be followed.
6. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.
7. With regard to the Klondike and Blackstone rivers:
    a. Do not block the flow of water of either the Klondike or Blackstone rivers.
    b. No ground disturbance or storage of contaminants (fuel storage, outhouses, waste materials, tailings ponds, and so on) within 30 m of the high-water mark.
    c. Reclamation of existing disturbances should be directed towards standards for Heritage and Water values.
    d. Where possible, always use existing access points.
    e. Access should be shared.

Sub-Regional Planning

8. To be conducted jointly by the Government of Yukon, Tr'ondëk Hwëch'in, First Nation of Na-Cho Nyäk Dun, Vuntut Gwitchin First Nation, and the Gwich'in Tribal Council, and must be in alignment with the Peel Watershed and the North Yukon Regional Land Use Plans.
9. Sub-regional planning of the Dempster Highway Corridor should occur as per Chapter 11 of the THFA and should be initiated in a timely manner upon Plan approval.

10. The sub-regional plan should consider the following:

- Alignment with directions and values laid out in all LMUs adjacent to the Dempster Highway Corridor set out in this Plan, and the Peel Watershed and the North Yukon Regional Land Use Plans.
- The *Dempster Highway Development Regulation* under the *Area Development Act* (RSY 2002, c.10).
- The visual integrity of the corridor and the adjacent LMUs.
- Directions for use of off-road vehicles.
- Coordinated access management for potential oil and gas development in the Eagle Plains basin.
- Access to aggregate materials for ongoing maintenance and future construction projects.
- The potential for increased military activity.
- Commercial activities, including tourism and outfitting.
- Increased tourism and recreational opportunities potentially negatively impacting the ecosystem and infrastructure.
- First Nations' values, knowledge, issues, and interests, for example, Tr'ondëk Hwëch'in Cultural Integrity Area Resolution.
- The continued use of First Nations' Settlement Land adjacent to or within the corridor.
- Harvesting and traditional economic activities.
- Effects of increased access on caribou herds.
- Measures to avoid the introduction of invasive species.
- Impacts of climate change on highway infrastructure and the surrounding area.
- Geohazard mapping and targeted permafrost study to identify areas vulnerable to instability and infrastructure damage.
- Development footprint is allowed according to ISA 1 surface disturbance and linear feature density thresholds.

PRIORITY VALUES

- Community Culture
- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Community Resilience
- Water
- Moose
- Landscapes
- Wetlands
- Sustainable Local Economy

	VALUES
Land–People Relationship	• Important viewscapes and opportunities for developing appreciation of and connection to nature. • Recreation, trapping, and outfitting activities provide opportunities for stewardship.
Community Culture	• High recreation value, including hiking, skiing, off-road vehicle use, berry picking, camping, and wildlife viewing. • Many opportunities for learning about the land and the history and heritage of Tr'ondëk Hwëch'in.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Past and present subsistence harvesting. • Cache Creek hosts year-round culture camps for Tr'ondëk Hwëch'in youth and families. • Occurrences of archaeological discoveries. • Connections to communities.

VALUES	
Community Resilience	• Access to northern communities (northern Yukon and Beaufort Delta, Northwest Territories) and connections between communities. • Access to the land for food security (including berry picking, hunting, snaring, and fishing). • Government of Yukon Highway Maintenance Camp. • Sewage lagoon.
Water	• North Klondike and Blackstone River watersheds. • Important sources of drinking water for Dawson City. • Many rivers and streams provide important aquatic habitats.
Plant and Animal Relations	• Abundant populations of beaver, wolf, wolverine, and grizzly bears. • Migratory birds use high-elevation habitat.
Salmon	• Migratory and spawning habitat in the North Fork River.
Caribou	• Within the annual range of the Hart River caribou herd. • Migratory corridors for the Porcupine Caribou Herd.
Moose	• Important moose habitat, especially winter habitat.
Landscapes	• Permafrost-related landscape features are common. • Much of the landscape is altered by the Dempster Highway and subsequent access. • The viewscape is highly significant.
Wetlands	• High proportion of fens and swamps.
Sustainable Local Economy	• Commercial recreation (tourism). • Two outfitting concessions and associated infrastructure (camps, airstrips). • Multiple trapping concessions.

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 2

LMU 14: Tąy Dëkdhät (Top Of The World)

Area

1,566 km^2 (3.9% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcels: TH S-90B1, TH S186B1, TH S-12B1, TH R-23A, TH R-9A, TH R-71A, TH R-24A, TH R125A

INTENT STATEMENT

The vision is for continued enjoyment of traditional and recreational pursuits while allowing for limited sustainable development to continue. Future management of this area should continue to focus on respectful tourism, mining, opportunities for cultural connections, and to maintain and enhance the cultural, community, and ecological values these activities depend on.

The LMU is an area of cultural significance to Tr'ondëk Hwëch'in and continues to offer an important recreational gathering space for residents and visitors alike.

The Fortymile River is a critical salmon-bearing stream, supporting the movement of adult and juvenile Chinook salmon and providing identified spawning habitat. This LMU hosts active placer mining, forestry, tourism, traplines, harvesting, Fortymile caribou habitat, and all-season recreational pursuits along the Fortymile River and off the highway. The Top of the World Highway runs through this LMU, making it highly accessible via highway, secondary roads, and trails. The Top of the World Highway is a major tourist route connecting the Yukon to Alaska.

Given its proximity to Dawson City, as well as the neighbourhoods of West Dawson and Sunnydale, this area represents important opportunities for community growth, connection, and wellness that must be considered alongside any industrial uses. In particular, Chu Ttho Dëk (Hän for "yellow water creek", commonly called Swede Creek) is an important source of drinking water for the community. The Clinton Creek asbestos mine in this LMU was abandoned in 1978 and is now under the care and maintenance of Government of Yukon and Government of Canada. Remediation planning is underway in collaboration with Tr'ondëk Hwëch'in, and continued work on future reclamation and closure planning is a priority due to community concerns.

This LMU is designated as an ISA 2 in recognition that it accommodates a mix of recreational, cultural, residential, and industrial activities, many of which rely on healthy ecosystems and intact viewscapes. As a highly active recreation and tourism destination, the LMU must be carefully managed to preserve values important to the broader community and Tr'ondëk Hwëch'in, while supporting multiple land uses. ISA 2 thresholds are appropriate because many of these land uses require minimal or no development footprint, thriving in the absence of development.

TR'ËHUDÈ AND STEWARDSHIP

Tąy Dëkdhät means "trail on top/high", and this route is essential for connecting to families and communities in Alaska and providing access for community members to pursue on-the-land activities.

This area is important to Tr'ondëk Hwëch'in for many reasons, particularly as a space for reconnection. For many years, Tr'ondëk Hwëch'in have not harvested the Fortymile caribou to help the herd to become healthy again. As a result, an entire generation of Citizens have not harvested caribou, and the cultural impact of this is deeply felt. The opportunity for knowledge transfer and reconnection to a traditional practices and ways of life is especially important in Tąy Dëkdhät.

LMU DIRECTIONS

1. Activities that have the potential to disturb salmon and other fish spawning sites should be restricted during known, species-dependent Freshwater Timing Windows for the Yukon (as per DFO).

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. Land users working in proximity to Mickey Creek and Swede Creek should be made aware that these streams are used for human consumption. An appropriate buffer should be explored and implemented, where appropriate, to ensure no negative impacts on these important water sources.

4. To protect Tr'ondëk Hwëch'in heritage resources, a buffer near the Forty Mile Heritage Site should be implemented. The boundaries should be the Tr'ondëk–Klondike UNESCO World Heritage Site boundaries for Ch'ëdähdëk (Forty Mile), Ch'ëdähdëk Tth'än K'et (Dënezhu Graveyard), and Fort Cudahy and Fort Constantine, buffered by an additional two km. The management of this LMU should adhere to any relevant directions set out in the Fortymile Townsite Management Plan.

5. Take care not to disturb the unique biophysical and socio-cultural setting, particularly through the use of off-road vehicles within key ungulate, ecologically important, and cultural areas. The use of off-road vehicles should not undermine cultural and wildlife values.

6. The visual integrity and natural aesthetic viewscape of the Top of the World Highway corridor should be maintained.

7. With regards to the Fortymile River:

    a. Do not block the flow of water in the Fortymile River.

    b. No ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.

    c. Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.

    d. Use existing access points wherever possible.

    e. Access should be shared.

8. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Land–People Relationship
- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Community Resilience
- Salmon
- Landscapes
- Sustainable Local Economy

	VALUES
Land–People Relationship	• Due to its proximity to Dawson City and its accessibility, this area has high recreational value for hiking, canoeing, motorists, boating, fishing, dog mushing, and snowmobiling. • There are many opportunities for stewardship, including reclamation of the Clinton Creek site, as well as through individual recreational, harvesting, and economic activities.
Community Culture	• Historic resources related to mining history (such as at Clinton Creek). • Historic resources related to Tr'ondëk Hwëch'in traditional use areas and pre-contact archaeological sites. • Easy access via the Top of the World Highway offers viewscapes that provide good opportunities to develop an appreciation of the Region's landscapes.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Pre-contact archeological sites and identified areas of high archeological potential. • Year-round traditional use area; an important area for moose and caribou harvesting, trapping, and gathering natural resources, including foods, medicines, and forest resources. Adjacent to the Forty Mile Heritage Site. • Closure planning and future reclamation of the Clinton Creek asbestos mine is a priority due to displacement of Tr'ondëk Hwëch'in Citizens from traditional-use areas.

VALUES	
Community Resilience	• Closure planning and future reclamation of the Clinton Creek asbestos mine is a priority due to community concerns. • There are residential properties in the area and drinking water sources along Mickey Creek and Swede Creek.
Water	• Important aquatic habitat values for wildlife, as well as a primary drinking water source for the Region. • Swede Creek contains ecologically and culturally important fish and aquatic resources.
Plant and Animal Relations	• High-elevation habitat is important for some migratory bird species. • Wildlife Key Areas for raptors near the mouth of Swede Creek where it enters the Yukon River. • Species-at-risk known to occur include wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, horned grebe, common nighthawk, short-eared owl, barn swallow, and grizzly bear. • Species-at-risk expected in low numbers include little brown myotis, Yukon podistera, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle. • Important habitat for freshwater fish, muskrat, and beaver.
Salmon	• The Fortymile River is an important salmon-bearing stream, particularly for the movement of adult and juvenile Chinook salmon. It also contains identified salmon spawning habitat.
Caribou	• Important winter habitat and migration corridors for the Fortymile and Nelchina caribou herds.
Moose	• Extensive good moose habitat, especially for late winter; several mineral licks known to be used by moose occur in this LMU.
Landscapes	• Presence of some intact old-growth forest (>140 years old).
Wetlands	• The Fortymile River contains identified wetlands, including bogs, fens, and swamps. • There are some swamps on the lower portion of Swede Creek.

	VALUES
Sustainable Local Economy	• Active trapping concession and associated infrastructure. • Located within the Fortymile River landscape unit of the Dawson Forest Resources Management Plan, which is designated as medium priority for short-term planning. The area has potential for high timber values, and there are active timber harvest plans along Bruin Creek that include both commercial- and personal-use fuelwood areas. Forest Management Branch has identified future development interest for both sawlog and fuelwood harvesting (commercial and personal use). The 20 Pup Timber Harvest Plan is in development. • Highly prospective; active placer mining along the Fortymile River and its tributaries, and active quartz claims.

Photo: Government of Yukon

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 3

LMU 15: Khel Dëk (Sixty Mile)

Area

2,922 km^2 (7.3% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcels: TH R-11A, TH R-43A, TH S-107B1, TH S-14B1, TH S-169B1, TH S-75B1

INTENT STATEMENT

The vision for this LMU is ongoing, sustainable economic land use that allows Caribou and other ecological values to persist. The intent is to adequately protect key caribou habitat and to support sustainable development through strong access management. Interest in this area is growing, which is increasing access into places that were previously remote. It will be important to plan and manage new and existing access so that important environmental and socio-cultural values are preserved.

This is a large LMU that includes major watersheds and multiple land uses, including mineral exploration and development, forestry, tourism, harvesting, and recreation. The Top of the World Highway, a major tourist route that connects the Yukon to Alaska, runs through this LMU, making it highly accessible via the highway, secondary roads, and trails. As the name suggests, the Sixty Mile River runs through this LMU and is an important river for grayling and juvenile Chinook rearing and winter habitat.

This LMU is designated as an ISA 3 to support continued responsible and sustainable growth of industrial activities, which are significant contributors to the Region's economic and socio-cultural well-being, while safeguarding ecological integrity. LMU directions provide clear guidance to protect wildlife, habitats, and traditional land uses.

TR'ËHUDÈ AND STEWARDSHIP

Khel Dëk means "Packsack River". Khel Dëk, or the Sixty Mile River, flows through this LMU. This is an important area for Tr'ondëk Hwëch'in, especially for harvesting. In the past, there were camps at the mouth of the Sixty Mile River and traditional travel routes through the area. Today, it continues to be used for subsistence hunting of Fortymile caribou herd, and there are ongoing efforts by Tr'ondëk Hwëch'in to reconnect with the herd through community hunts and educational camps.

LMU DIRECTIONS

1. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

2. This LMU is a priority area for an Access Management Plan for new and existing access. Specifically:

    a. There are many overlapping interests in the LMU. An Access Management Plan will provide a framework for all values and interests to co-exist.

    b. A lot of access exists already; an Access Management Plan is required to control this and ensure that access does not grow unchecked.

    c. The continued and increased use of the Yukon and Sixtymile rivers for access requires subsequent management.

    d. The viewscape within this LMU should be protected.

3. This area contains extensive moose habitat. Impacts to moose through overharvesting should be minimized. Timing windows to reduce industrial impacts to moose, as guided by qualified and appropriate staff in each Party. Sustainable harvesting levels should be promoted.

4. 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, and Aboriginal rights must be respected. All Dawson residents should be able to participate in sustainable harvests, provided that Aboriginal rights are not compromised.

5. The visual integrity and natural aesthetic viewscape of the Top of the World Highway corridor should be maintained. The Tourism plan for the Top of the World Highway is in development. When approved, it should be followed by all land users.

6. Do not disturb the unique biophysical and socio-cultural setting of the Top of the World Highway corridor, in particular with the use of off-road vehicles within key ungulate, ecologically important, and cultural areas. The use of off-road vehicles should not undermine cultural and wildlife values.

7. With regards to the Sixty Mile River:

    a. Do not block the flow of water in the Sixty Mile River.

    b. Do not allow ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.

    c. Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.

    d. Use existing access points wherever possible.

    e. Access should be shared.

PRIORITY VALUES

- Water
- Caribou
- Moose
- Landscapes
- Sustainable Local Economy

VALUES	
Land–People Relationship	• Harvest of non-timber forest products is important for the community (Top of the World Highway, Sixty Mile Road, and other secondary roads). • Recreation and relationship-building with the land occur through off-road vehicle use, hiking, berry picking, and wildlife viewing. • These activities, as well as economic pursuits, are all opportunities for stewardship.
Community Culture	• Historical mining sites on the Sixty Mile River and at Miller and Glacier creeks. • Paleontological discoveries contribute to Community Culture.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Presence of traditional trails and several archaeological sites • Several Settlement Land parcels identified, including S-14B, are important harvesting and gathering sites. • This area is particularly important for subsistence harvesting (moose, caribou, berries) and the pursuit of traditional economic activities.
Community Resilience	• Placer mining operations offer local employment and potential for long-term economic investment in the community. • Stewardship opportunities in this LMU support individual and community well-being.
Water	• The Sixty Mile River and its many tributaries flow into the Yukon River.
Plant and Animal Relations	• High-elevation habitat is important for some migratory bird species, with isolated areas of high-concern habitat along major rivers and watercourses (Matson Creek and Sixty Mile River). • Areas adjacent to the Yukon River contain raptor nests. • Good beaver habitat and moderate muskrat habitat. • No identified sheep habitat: sheep are likely occasional visitors to parts of the LMU. • Species-at-risk expected to occur include little brown myotis, spiked saxifrage, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, common nighthawk, transverse lady beetle, horned grebe, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, and wolverine.

VALUES	
Salmon	• Several streams are likely to support salmon and freshwater fish spawning and rearing habitat, though none have been mapped.
Caribou	• Contains winter and summer habitat as well as migration corridors for the Fortymile and Nelchina caribou herds.
Moose	• Extensive good moose habitat, including Wildlife Key Areas for late winter (February to April).
Landscapes	• Part of the Klondike Plateau ecoregion of the Boreal Cordillera. • Presence of intact forest (>140 years old) near Mount Tyrell and Matson Creek. • Occurrence of known mineral licks.
Wetlands	• Wetland habitat along Sixty Mile River and Matson Creek includes bogs, fens, and swamps.
Sustainable Local Economy	• Part of the Sixty Mile River Landscape Unit of the Dawson Forest Resources Management Plan, a medium priority for short-term planning, with potential for high timber values. There are no active timber harvest plans in the area. • Highly to significantly prospective for minerals. Placer exploration and mining and quartz exploration are prevalent. • Contains active trapping concessions and associated infrastructure. • Most tourism activity occurs close to the highway or is accessed from the Yukon River.

Artwork: Yukon Graphic Recording

SPECIAL MANAGEMENT AREA

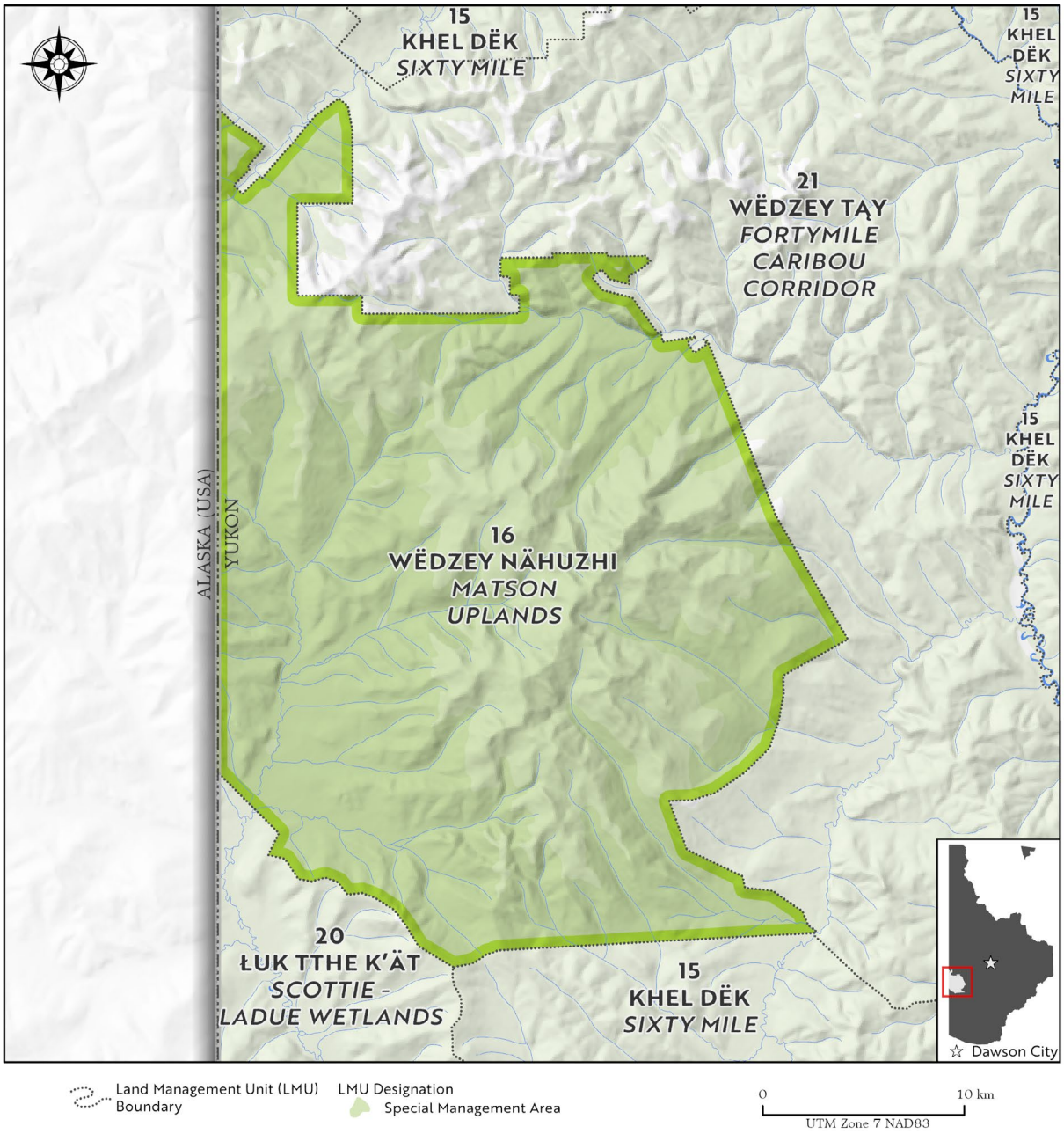
LMU 16: Wëdzey Nähuzhi (Matson Uplands)

Area

869 km^2 (2.2% of the Region)

Settlement Land

Non-Settlement Land



INTENT STATEMENT

The intent for this LMU is to preserve core summer habitat that is essential to the continued growth and survival of the Fortymile caribou herd within its Yukon range. The long-term vision is to maintain this as an area with little human influence or activity.

The Fortymile caribou herd holds significant cultural importance to the Tr'ondëk Hwëch'in and provides important opportunities for subsistence harvesting and stewardship. While much of the herd's Yukon range overlaps with areas of land use disturbance, parts of the Matson Uplands remain relatively undeveloped.

Within this LMU there is one placer claim, as well as existing all-season access, some secondary access trails, and landing strips.

This LMU is designated as a Special Management Area to protect key caribou habitat. The Matson Uplands contain key Fortymile summer habitat, winter range for both the Fortymile and Nelchina herds, and critical migration pathways for the Fortymile herd during spring, summer, and fall. Across the Region, Fortymile range overlaps with areas of high human-caused disturbance, creating a risk of habitat loss and movement barriers, particularly in key summer and migratory ranges. Protecting the remaining critical habitat and ensuring that migratory pathways remain intact – especially at pinch points – is necessary to maintain landscape connectivity, support herd viability, and uphold long-term ecological integrity in the Region.

TR'ËHUDÈ AND STEWARDSHIP

> "We have abused both the herd and the land. The land is waiting for an apology. Until then, the herd will not be productive and give itself to people."
>
> *– Alex Van Bibber, Tr'ondëk Hwëch'in Citizen*

LMU DIRECTIONS

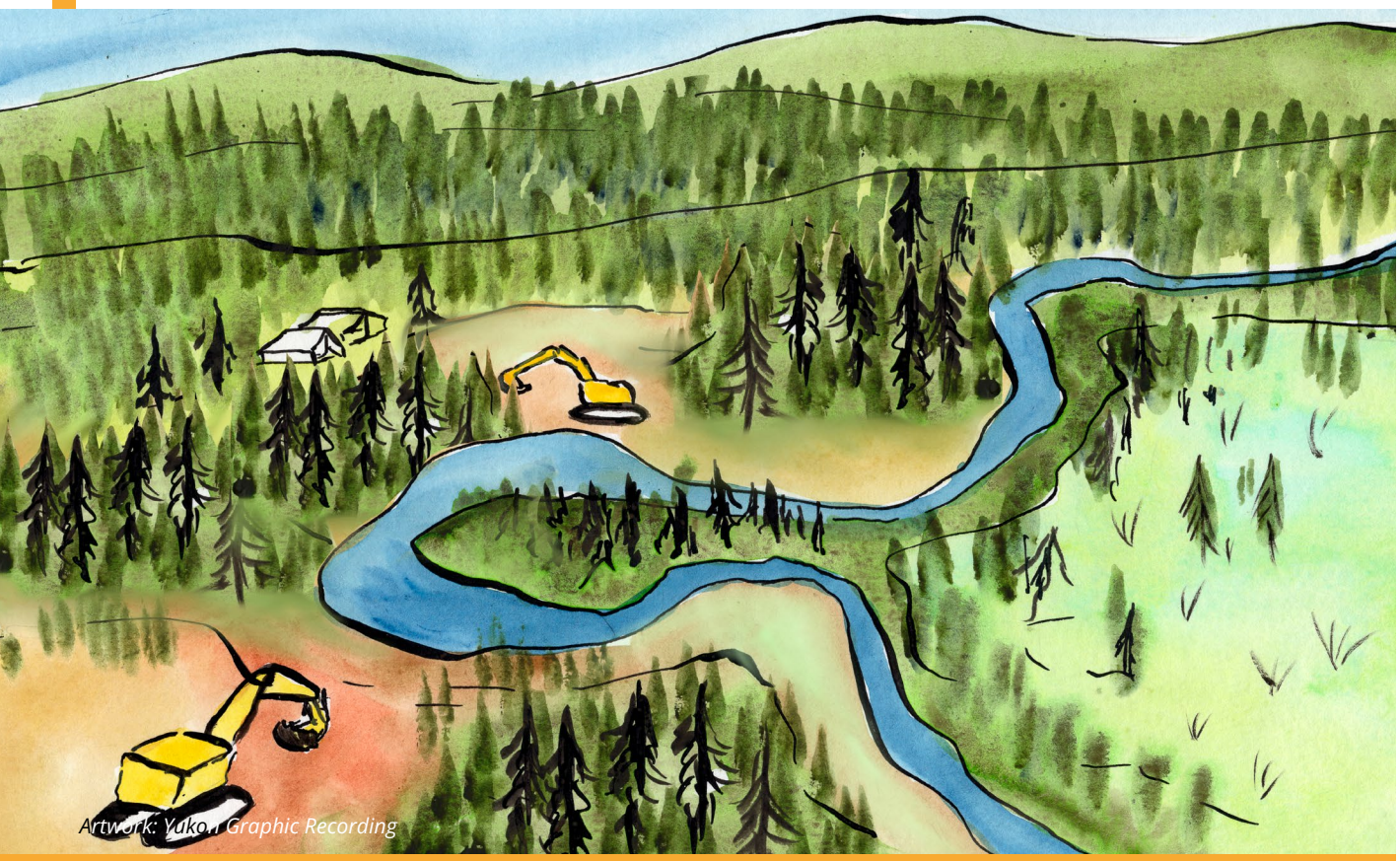
1. No additional land disturbance or development are supported in this LMU, including in existing tenure.
2. Development footprint is allowed according to ISA 2 surface disturbance and linear feature density thresholds.
3. Mineral development is allowed only within existing mineral tenure. Withdraw all other lands from quartz and placer mineral staking.
4. Access:
    a. No new surface access.
    b. Continued use of existing access.
5. This LMU should be prioritized for reclamation activities. At the 10-year Plan Review, the development footprint of this LMU should be reviewed. If both development footprint indicators are below ISA 1 critical thresholds, the development footprint thresholds should be revised to be equivalent to ISA 1 thresholds.
6. Wildfires should be prioritized for suppression to protect key habitat of the Fortymile caribou herd.
7. Off-road vehicle use should be restricted to existing trails only. An off-road vehicle management area (ORVMA) is not required at this time but may be considered in the future if the use of off-road vehicles changes.
8. The SMA Management Plan should consider the priority values.
9. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Caribou
- Landscapes

	VALUES
Land–People Relationship	• Some recreation activities occur on trails. • The Fortymile caribou herd presents a unique opportunity for community members to see a large, intact herd of wildlife and appreciate the scale of a migratory herd and the landscape it depends on; this LMU is important to their persistence.
Community Culture	• The Fortymile caribou herd's presence and health support a sense of identity as good stewards.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Oral history of caribou fences in this area and the potential for archeological resources associated with caribou harvesting activities. • This traditional use area is important for trapping. It has high ecological importance for moose and caribou habitats that support subsistence harvest. There are ongoing efforts by Tr'ondëk Hwëch'in to reconnect with the Fortymile herd through community hunts and educational camps.
Community Resilience	• Not applicable.
Water	• Surface water drains into Ladue wetland complex at the southern edge of the LMU.
Plant and Animal Relations	• High-elevation habitat is crucial for some migratory bird species. • Species-at-risk known to occur include collared pika, Dawson wallflower, and wolverine. • Species-at-risk expected in low numbers include Yukon podistera, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, transverse lady beetle, barn swallow, common nighthawk, horned grebe, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, and short-eared owl.

VALUES	
Salmon	• While predominantly high elevation, surface waters eventually drain into salmon-bearing waterways.
Caribou	• Identified as critical habitat for Fortymile caribou herd persistence. • Contains winter and summer habitat as well as migration corridors for the Fortymile and Nelchina caribou herds.
Moose	• Insufficient information.
Landscapes	• Landscape connectivity from Alaska into the Yukon, which is necessary for caribou migration. • Important ecosystems include low-elevation steppe meadows and unglaciated high-elevation alpine (> 1,300 m), both of which have endemic species (William's Catchfly and Arctic Primrose, respectively).
Wetlands	• The Ladue River drainage, which overlaps the southern portion of the LMU, consists primarily of swamps, fens, and bogs.
Sustainable Local Economy	• Overlaps with the Sixty Mile River Central Landscape Unit of the Dawson Forest Resources Management Plan, which is designated as medium priority for short-term forest resource development. However, the area is high elevation and has limited forest resource potential. • No active quartz claims or permits are in this area, but high-to-medium mineral potential. • Overlaps with a trapping concession.



Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 2

LMU 17: Nän Dhòhdäl (Upper Indian River Wetlands)

Area

485 km^2 (1.2% of the Region)

Settlement Land

Non-Settlement Land

INTENT STATEMENT

The vision is a healthy wetland environment co-stewarded by Tr'ondëk Hwëch'in, where Citizens will be able to access the area for cultural pursuits. The intent for this LMU is to limit the scale of development within the upper drainage of the Indian River, protect the function of much of the upper Indian River wetland complex, and respect and protect cultural, ecological, and traditional economic values. The Indian River Valley is experiencing a conversion of its wetland landscape and widespread loss of peatlands. The upper drainage of the Indian

River continues to experience exploration and mining but remains relatively less developed.

There is an opportunity to learn from the past and create a new way of doing things – one that is more respectful of environmental and cultural values and reflects sustainable development in a meaningful way. Some mineral development may still occur, but it will be held to a high standard of excellence, guided by limits to surface and wetland disturbance, a higher standard of progressive reclamation practices, and community stewardship in partnership with industry organizations and individual operators.

Limiting cumulative effects is essential to maintaining this area in a state where Tr'ondëk Hwëch'in can continue to exercise their rights, and where all community members can continue to use the area for enjoyment and licensed harvesting. This can be achieved by slowing the pace and scale of development and focusing on a high standard of reclamation.

Wetlands are critical ecosystems that support specialized wildlife habitat, provide essential ecological services, and serve as one of the most significant terrestrial carbon sinks. Beyond their ecological roles, wetlands hold deep socio-cultural significance – they provide harvesting opportunities, sustain cultural vitality and social connections, and support stewardship. Functional restoration of peat wetlands after disturbance is currently considered effectively impossible.

At the same time, the Indian River watershed is Yukon's most important placer gold-producing area, and its upper reaches are identified as having high potential for future activity. It is important to continue to protect these ecosystems while allowing the ongoing activities that contribute significantly to the Region's economic strength and socio-cultural fabric.

An ISA 2 designation allows ongoing industrial activities but requires progressive reclamation by industry to safeguard wetlands. The Parties must collaborate to develop the Upper Indian River Stewardship Plan to align overlapping interests, move forward together in a good way, and develop viable solutions for wetland reclamation.

TR'ËHUDÈ AND STEWARDSHIP

The Indian River area is an incredibly important place for Tr'ondëk Hwëch'in Citizens, which has been clearly demonstrated by the ongoing and growing concern expressed throughout the planning process.

> "The Indian River Valley that exists today is much different from the broad, sweeping wetland habitat it used to be. With the increase in activity levels and lack of reclamation and destroyed habitat, I don't feel as comfortable with harvesting down there anymore. I don't even want to drive down there for leisure … I find it depressing, because I see a loss from all the change, including the loss of my ability to have a successful harvest … The land provides, and we obviously rely on it."
>
> *– Darren Taylor, Tr'ondëk Hwëch'in Citizen, Public Interest Hearing on Placer Mining in Wetlands (Government of Yukon, 2021)*

LMU DIRECTIONS

1. This LMU is nominated as a Wetland of Special Importance.
2. Development footprint is allowed according to ISA 2 surface disturbance and linear feature density thresholds.

3. Mineral development is allowed only within existing mineral tenure. Interim withdrawal of all lands from placer and quartz staking. Withdrawal can be jointly reassessed by the Parties either upon completion of an Upper Indian River Stewardship Plan (below), at the time of the 10-year Plan Review, or when both Parties agree to remove interim withdrawals. When a claim expires, it should be withdrawn from further staking while the interim withdrawal is in place.

4. No disturbance to field-verified, undisturbed marshes and bogs.

5. Development in undisturbed fens is limited to 50% of fen area within each claim block or permit area. Fen thresholds are based on mapped presence of fens as of 2022, not on the number or extent of fens at the time of application.

6. This LMU is a priority for the development of socio-cultural indicators as a part of the cumulative effects framework led by Tr'ondëk Hwëch'in, due to the cultural importance of this area.

7. This LMU has significant overlapping interests: it is likely to be the site of significant placer mining activity in the future, it has high cultural value to Tr'ondëk Hwëch'in, and its wetlands are of high ecological significance. In anticipation of future interests, and to ensure activities are done Tr'ëhudè (in a good way), an Upper Indian River Stewardship Plan must be co-developed by the Parties in the spirit of co-management. The Parties should collaborate with industry to complete this plan, and the Commission will be a valuable resource to the Parties during its development. The goals of the plan should be to determine how multiple overlapping interests can move forward together in Tr'ëhudè and to find solutions for wetland reclamation. Innovation and creative approaches to achieving these goals are highly encouraged. The development of this plan should be guided by ancestral and community stewardship and Traditional Knowledge.

   This plan should consider:

   a. How new access will be managed and how to encourage shared access.

   b. Opportunities for partnerships and collaborations (industry partners, Traditional Knowledge holders, academic institutions, environmental non-governmental organizations, and so on), particularly for wetland restoration techniques and experience from outside jurisdictions.

   c. Stricter reclamation requirements than required by the Plan at large.

8. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

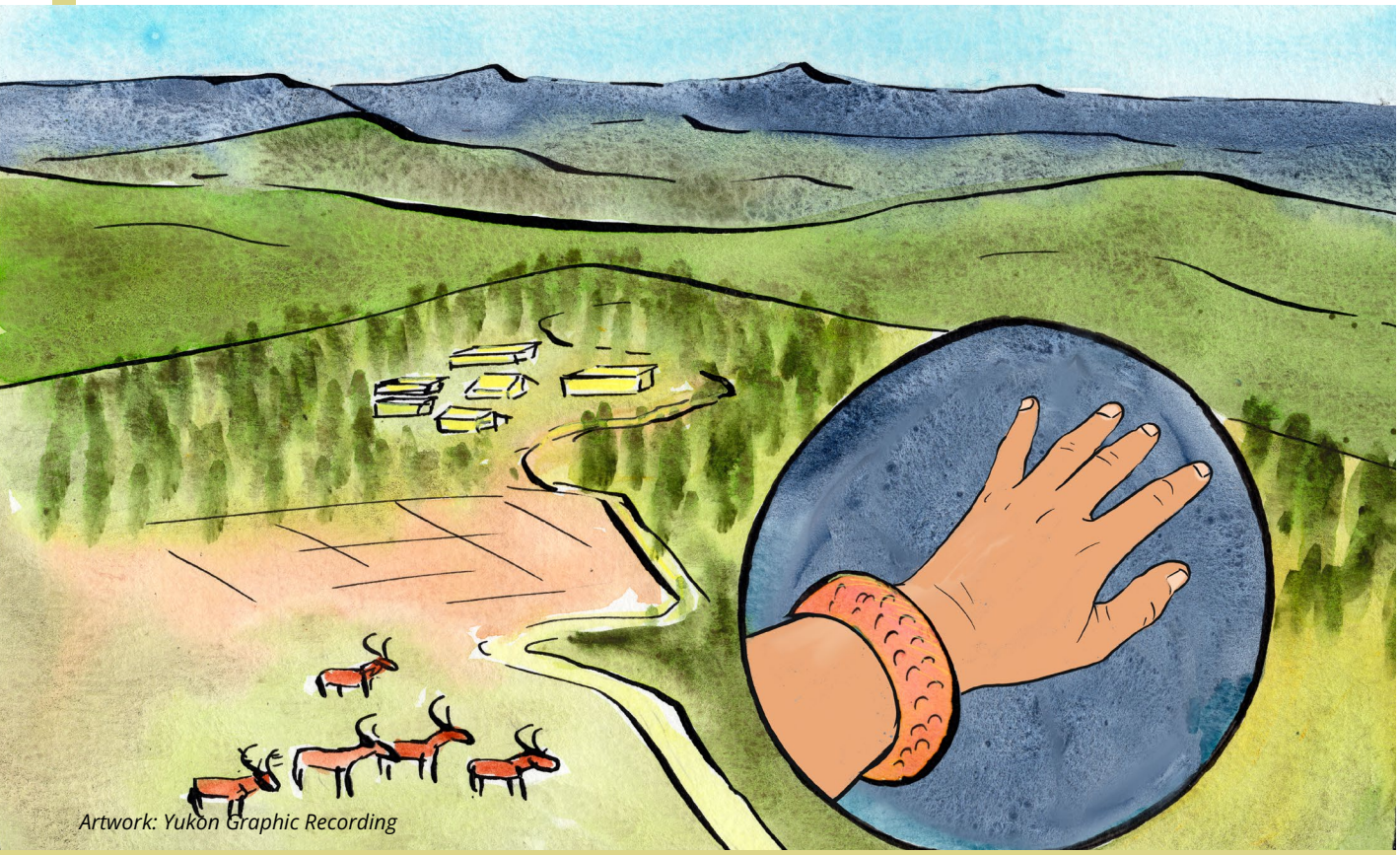
PRIORITY VALUES

- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Water
- Wetlands
- Sustainable Local Economy

	VALUES
Land–People Relationship	• Residents use the area seasonally for land-based practices, including harvesting. • Harvesting and economic activities offer opportunities for both ancestral and community stewardship.
Community Culture	• Strong opportunities for shared stewardship and relationship building between industry and Tr'ondëk Hwëch'in. • High levels of access and the presence of Tr'ondëk Hwëch'in cultural sites create opportunities for community members to learn about the land and Tr'ondëk Hwëch'in culture and heritage.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Opportunities for harvesting and trapping. • Numerous occurrences of recorded historic resources, archaeological sites, and paleontological sites. • High traditional use area for Tr'ondëk Hwëch'in, supporting cultural connection and Land–People Relationships.
Community Resilience	• Highly accessible, high-quality habitat that supports harvest and contributing to local food security. • Stewardship and harvesting opportunities support individual and community well-being.
Water	• Contains the headwaters of the Indian River, which flows into the Yukon River.

	VALUES
Plant and Animal Relations	• Wetlands provide important staging and nesting habitat for songbirds and waterfowl. • Wetlands offer important habitat for beaver and muskrat. • Species-at-risk known to occur include bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, horned grebe, common nighthawk, short-eared owl, barn swallow, and wolverine. • Species-at-risk expected in low numbers include little brown myotis, red-necked phalarope, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle.
Salmon	• Flows into the Upper Indian and Yukon rivers, both of which contain salmon spawning and migratory habitat.
Caribou	• Contains important migration routes and winter habitat for the Fortymile caribou herd.
Moose	• Favourable year-round habitat for moose, including WKAs for moose for late winter (February to April).
Landscapes	• Wetland landscapes provide extensive and important wildlife habitat. • High levels of development in the surrounding landscape risk isolating wildlife and disrupting hydrological connections between wetland landscapes in this LMU and beyond.
Wetlands	• Wetlands represent roughly 10% of the LMU, mainly fens and swamps. • Ensuring wetland habitat remains intact has been identified as an important stewardship duty for Tr'ondëk Hwëch'in.

	VALUES
Sustainable Local Economy	• Located within the Goldfields Landscape Unit of the Forest Resource Management Plan, with a timber harvesting plan. • The Indian River watershed is the most important placer gold-producing watershed in the Yukon; more than 50% of the Yukon's placer gold is derived from this watershed every year. Active placer claims and permits overlap with wetland habitat. The Upper Indian River drainage includes existing or prospective areas, including Wounded Moose, Melba Creek, and Australia Creek. Secondary tributaries are currently relatively free of placer activity but are highly prospective. • Contains a single trapping concession and potential associated trapping infrastructure. • Accessible via secondary roads and may offer tourism opportunities through gold mining interest and/or wildlife viewing.



Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 4

LMU 18: Ttthetryän dëk (Coffee Creek)

Area

997 km^2 (2.5% of the Region)

Settlement Land

Non-Settlement Land

INTENT STATEMENT

The vision for this LMU is that it continues to support Caribou, Moose and other wildlife while allowing sustainable development to proceed. Key values, including tributaries to the Yukon River, will be preserved through cumulative effects management. The area hosts an active advanced hard rock exploration program with associated infrastructure and is the site of a potential hard rock mine. It is also contains key habitat and migration corridors for the Fortymile caribou and Nelchina caribou herds. It is important that this LMU remains open for current and future mineral interests without undermining its environmental and cultural values.

This LMU is directly adjacent to LMU 3, Yukon River Corridor, which is designated as a sub-regional planning area because of its high cultural and ecological importance. The discrepancy between the intent of LMUs 3 and 18 should be acknowledged and considered in all future decisions. This LMU is currently relatively disconnected from LMU 11. However, the proposed Northern Access Route would create substantial opportunities for new access, which will require careful consideration.

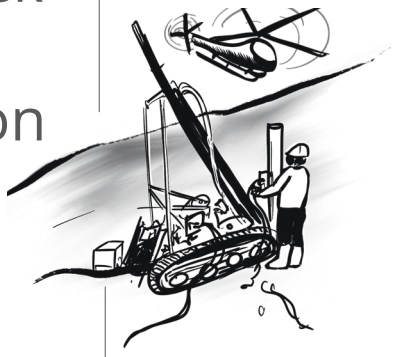
The ISA 4 designation provides adequate opportunity for mining to continue while placing limits on development in recognition of ecological and cultural values. The LMU contains key caribou habitat and sites of cultural history and significance to Tr'ondëk Hwëch'in, and it is important that these values are protected during ongoing industrial development.

TR'ËHUDÈ AND STEWARDSHIP

Ttthetryän Dëk means "copper creek". The Coffee Creek area was historically a source of copper, which was used pre-contact to make copper knives and jewelry.

"There are traditional routes and trails in this area that connected the people of Tr'ondëk Hwëch'in to the people of Alaska. The people of Alaska were the keepers of Tr'ondëk Hwëch'in songs and dances. The connection to Alaska is a connection to our language, traditions, and culture."

– Angie Joseph-Rear, Dawson Regional Planning Commission



LMU DIRECTIONS

1. This area contains important caribou migration routes and ridgetops. The Government of Yukon and Tr'ondëk Hwëch'in should identify appropriate conditions to minimize impacts to these areas from future development.
2. There are small, isolated sheep populations adjacent to this LMU that are particularly sensitive to disturbance. Land and air access into this area should take every precaution to minimize disturbance to sheep, especially during lambing season.
3. Efforts to enhance the use of this area for traditional economic activities and cultural or educational pursuits should be supported.
4. Due to the associated risks, heap-leach mining is not supported in this LMU under the current regulatory regime and with commonly used technologies.
5. If the Northern Access Route proceeds, there will be significant disturbance within this LMU.
    a. If the Northern Access Route has its own project access plan, care must be taken to ensure that the intent of this LMU is met within that plan. If a project access plan is not required, this LMU will require an Access Management Plan.
    b. The Northern Access Route will likely include the construction of a barge landing in known sheep habitat. Care must be taken to ensure that sheep and their habitat are not disturbed.
6. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Water
- Caribou
- Sustainable Local Economy

VALUES	
Land–People Relationship	• Low recreation potential, except for limited use along the Yukon River. • Mineral activities offer opportunities for stewardship. • Trapping concessions offer opportunities for relationships with the land and stewardship.
Community Culture	• Past and present use for community harvesting and trapping.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Presence of archaeological sites and recorded historic resources near the Yukon River; the area is culturally significant to Tr'ondëk Hwëch'in. • Important for maintaining Tr'ondëk Hwëch'in's way of life and connections to the land.
Community Resilience	• Mining operations can impact Community Resilience in both positive (for example, impact benefit agreements) and negative (for example, structural failures and social harms) ways. • While not directly used for community drinking water, maintaining the quality of the water of the Yukon River is of high importance to the community's sense of stewardship and connection to the land.
Water	• Bordered to the north by the Yukon River and contains many of its tributaries. • Coffee Creek is a tributary to the Yukon River.
Plant and Animal Relations	• High-elevation habitat is important for some migratory bird species. • Watercourses are likely to contain resident fish species. • Scattered sheep habitat along the Yukon and White rivers, with small, isolated sheep populations adjacent to this LMU that are sensitive to disturbance. • Species-at-risk known to occur include bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, horned grebe, common nighthawk, short-eared owl, barn swallow, and wolverine. • Species-at-risk expected in low numbers include little brown myotis, red-necked phalarope, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, and transverse lady beetle.

	VALUES
Salmon	• Coffee Creek is a tributary of the Yukon River, which has salmon spawning habitat. Contaminants in this creek must be managed so as to not affect salmon and their habitat in the Yukon River.
Caribou	• Contains key summer and winter habitat for the Fortymile, Nelchina, and Klaza caribou herds, as well as key ridges for migration.
Moose	• Contains good habitat for moose and is potentially a source population for moose moving into more highly harvested areas.
Landscapes	• Important ecosystems include low-elevation steppe meadows, unique riparian streams, and intact forests (>140 years old).
Wetlands	• Wetlands identified on small tributaries to the Yukon River.
Sustainable Local Economy	• Within the Yukon River South landscape unit for the Dawson Forest Resource Management Plan, which has been designated as medium priority for long-term planning. • Highly prospective, and the site of significant mineral exploration and development; contains an advanced hard rock exploration project and potential future hard rock mine site. • Contains overlapping trapping concessions.

Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 1

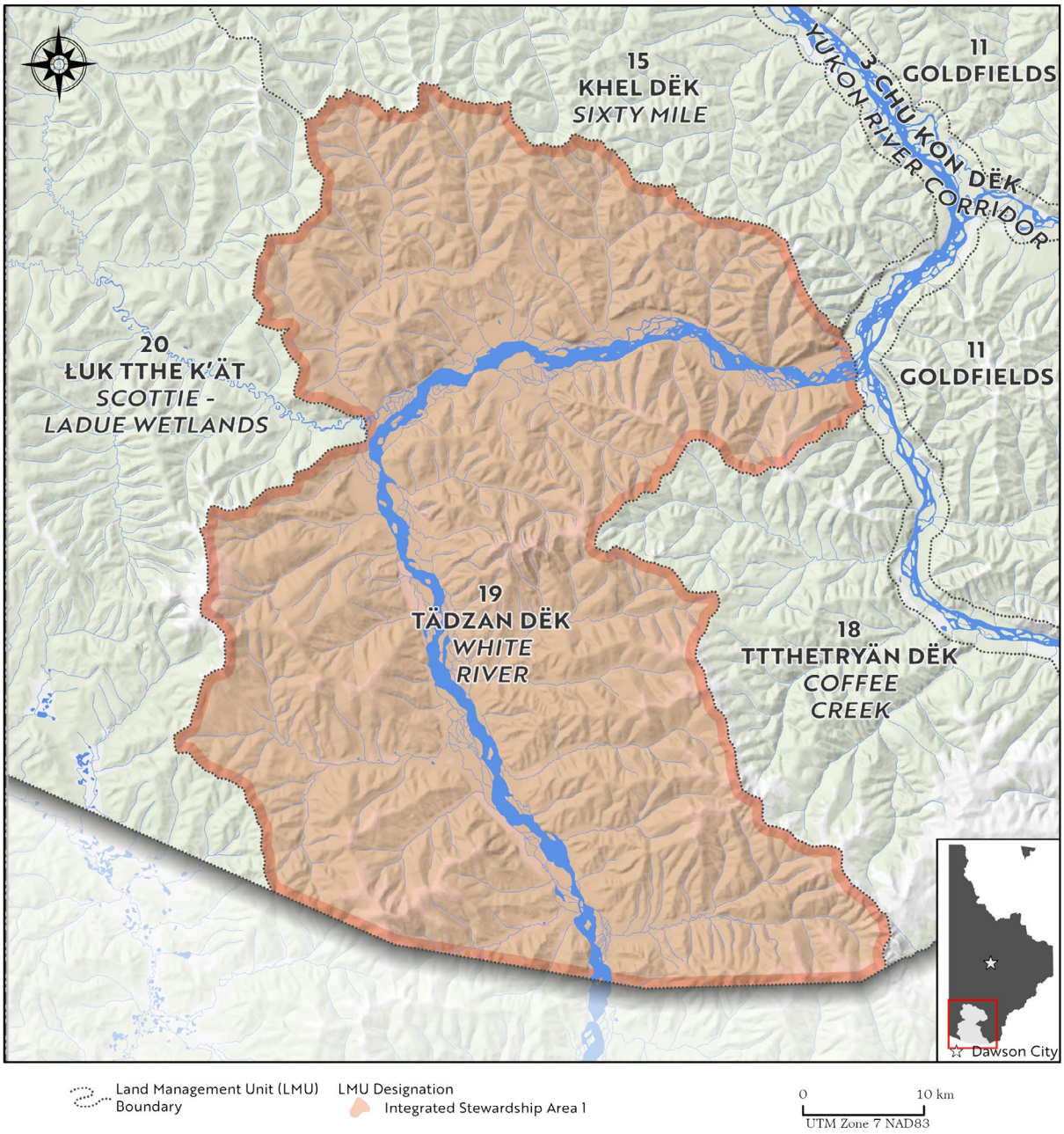
LMU 19: Tädzan Dëk (White River)

Area

2,852 km^2 (7.2% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcels: TH R-44A, TH R-45B, TH R-50A, TH S-17B1



INTENT STATEMENT

The vision is healthy ecosystems that support wildlife and cultural relationships, while allowing limited, sustainable development.

This LMU contains many Tr'ondëk Hwëch'in artefacts and heritage sites, including historic trails and burial sites. It also includes abundant intact wetland habitat, which has strong intrinsic value and provides important ecosystem services for fish and wildlife, including caribou, sheep, moose, salmon, and migratory birds. While there is localized mineral exploration and development, the area as a whole remains relatively undeveloped and difficult to access.

The LMU is designated as an ISA 1 to preserve wetland and habitat values and cultural connections, while still allowing a small amount of additional development, including on Settlement Land.

TR'ËHUDÈ AND STEWARDSHIP

Along this river, you can see white ash embedded in the cliffs from a volcanic eruption thousands of years ago. The river runs white with silt; if you are quiet when you paddle, you can hear the silt hitting against the bottom of your canoe.

At its confluence, the distinct water flowing from the White River into the Yukon is a breathtaking sight. The stories of this river and the events that occurred long ago are an important part of Tr'ondëk Hwëch'in's history.

LMU DIRECTIONS

1. Development should take every precaution to minimize disturbance to the isolated sheep populations and sheep habitat along the White River.
2. No new access through, or development in, mapped caribou habitat or wetlands.
3. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.
4. With regards to the White River:
    a. Do not block the flow of water in the White River.
    b. Do not allow ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.
    c. Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.
    d. Use existing access points wherever possible.
    e. Access should be shared.

PRIORITY VALUES

- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Water
- Plant and Animal Relations

VALUES	
Land–People Relationship	• Generally inaccessible for recreation, but there are recreational boating opportunities on the White River.
Community Culture	• Not applicable.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Several archaeological resources and heritage sites, and a traditional trail along the White River. • The mouth of the White River is a traditional gathering place. • This area is important for maintaining the Tr'ondëk Hwëch'in way of life and connections to the land, including important areas for harvesting and hunting.
Community Resilience	• Potential source population for moose moving into more highly harvested areas.
Water	• Contains the White River and its tributaries, which feed into the Yukon River.
Plant and Animal Relations	• Areas of frequent use by migratory birds, including Sandhill Cranes and key areas for raptor nesting (Golden Eagle and Peregrine Falcon key habitat on White River). • Key beaver habitat along the North Ladue River year-round, as well as important stream and pond-dwelling habitat. • Isolated populations of sheep at lower elevations along the White River and near its mouth. • Species-at-risk expected to occur include little brown myotis, spiked saxifrage, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, common nighthawk, transverse lady beetle, horned grebe, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, and wolverine. • Species-at-risk known to occur includes grizzly bear. • Important habitat for freshwater fish.
Salmon	• Important habitat for migrating and spawning salmon along the White River.
Caribou	• Key migration routes and winter habitat for the Fortymile and Nelchina caribou herds.
Moose	• Extensive good moose habitat, including WKAs for late winter use.

VALUES	
Landscapes	• Part of the Klondike Plateau ecoregion and the Boreal Cordillera ecozone. • Includes remnant rare mammoth steppe ecosystem, low-elevation steppe meadows, unique riparian streams. • Presence of known mineral licks.
Wetlands	• Contains wetlands that provide important habitat for birds. • Ensuring wetland habitat remains intact has been noted as an important stewardship duty for Tr'ondëk Hwëch'in.
Sustainable Local Economy	• The White River Landscape Unit of Dawson Forest Resources Management Plan is designated as a hinterland forest zone with a low priority for long-term planning. • Predominantly high to significantly prospective mineral potential, with active placer exploration and mining, and quartz exploration tenure within the area. • Active trapping concessions in the area. • This is not a high-visitor use area, but has potential for increased wilderness tourism activities, especially due to its remoteness.

Artwork: Yukon Graphic Recording

SPECIAL MANAGEMENT AREA

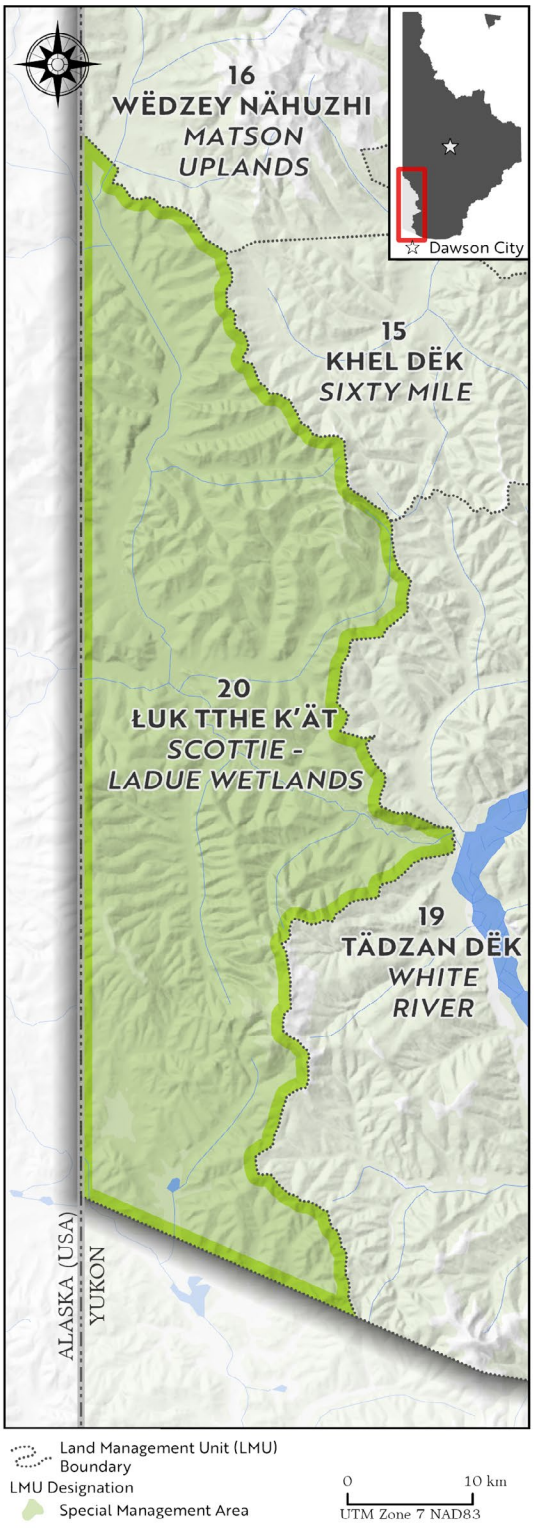
LMU 20: Łuk Tthe K'ät (Scottie–Ladue Wetlands)

Area

1,637 km^2 (4.1% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcel: TH R-50A


16
WËDZEY NÄHUZHI
MATSON
UPLANDS
Dawson City
15
KHEL DËK
SIXTY MILE
20
ŁUK TTHE K'ÄT
SCOTTIE -
LADUE WETLANDS
19
TÄDZAN DËK
WHITE
RIVER
ALASKA (USA)
YUKON
Land Management Unit (LMU) Boundary
LMU Designation
Special Management Area
0
10 km
UTM Zone 7 NAD83

INTENT STATEMENT

The vision is to protect the function of the wetland complex as fully as possible and to respect the cultural and ecological values it holds. The area has deep intrinsic value and is important for maintaining ecological, social, and cultural connections for Tr'ondëk Hwëch'in. The long-term vision for this LMU is that industrial development will end, with the ultimate goal of fully protecting the wetland complex in its entirety for its ecological and cultural value.

This LMU is a Special Management Area to protect the Scottie Creek and Ladue River wetland complexes. Protecting these will help safeguard important ecosystems, including valuable waterfowl staging and nesting habitat and moose calving grounds. The SMA will also protect the cultural and heritage resources in the LMU, as well as provide protection for a portion of the Klondike Plateau ecoregion, and will support landscape connectivity beyond the boundaries of the Region.

TR'ËHUDÈ AND STEWARDSHIP

Wetlands provide many socio-cultural values for Tr'ondëk Hwëch'in, including their inherent value on the landscape, harvesting opportunities, preservation of social connections and cultural vitality, and the ability to practise stewardship. Stewardship is a central tenet of Tr'ondëk Hwëch'in culture.

Ensuring wetland habitat remains intact is an important stewardship duty for Tr'ondëk Hwëch'in. Although Scottie Creek is not currently an area of high traditional activity, preserving this area so that future generations can reconnect with it is important to Tr'ondëk Hwëch'in Citizens.

LMU DIRECTIONS

1. Development footprint is allowed according to ISA 2 surface disturbance and linear feature density thresholds.
2. Mineral development is allowed only within existing mineral tenure. Withdraw all other lands from quartz and placer mineral staking.
3. Due to the associated risks, heap-leach mining is not supported in this LMU under the current regulatory regime and with commonly used technologies.
4. Access:
    a. Continued use of existing winter access road.
    b. Outside of gaining access to existing dispositions, new surface access is not allowed.

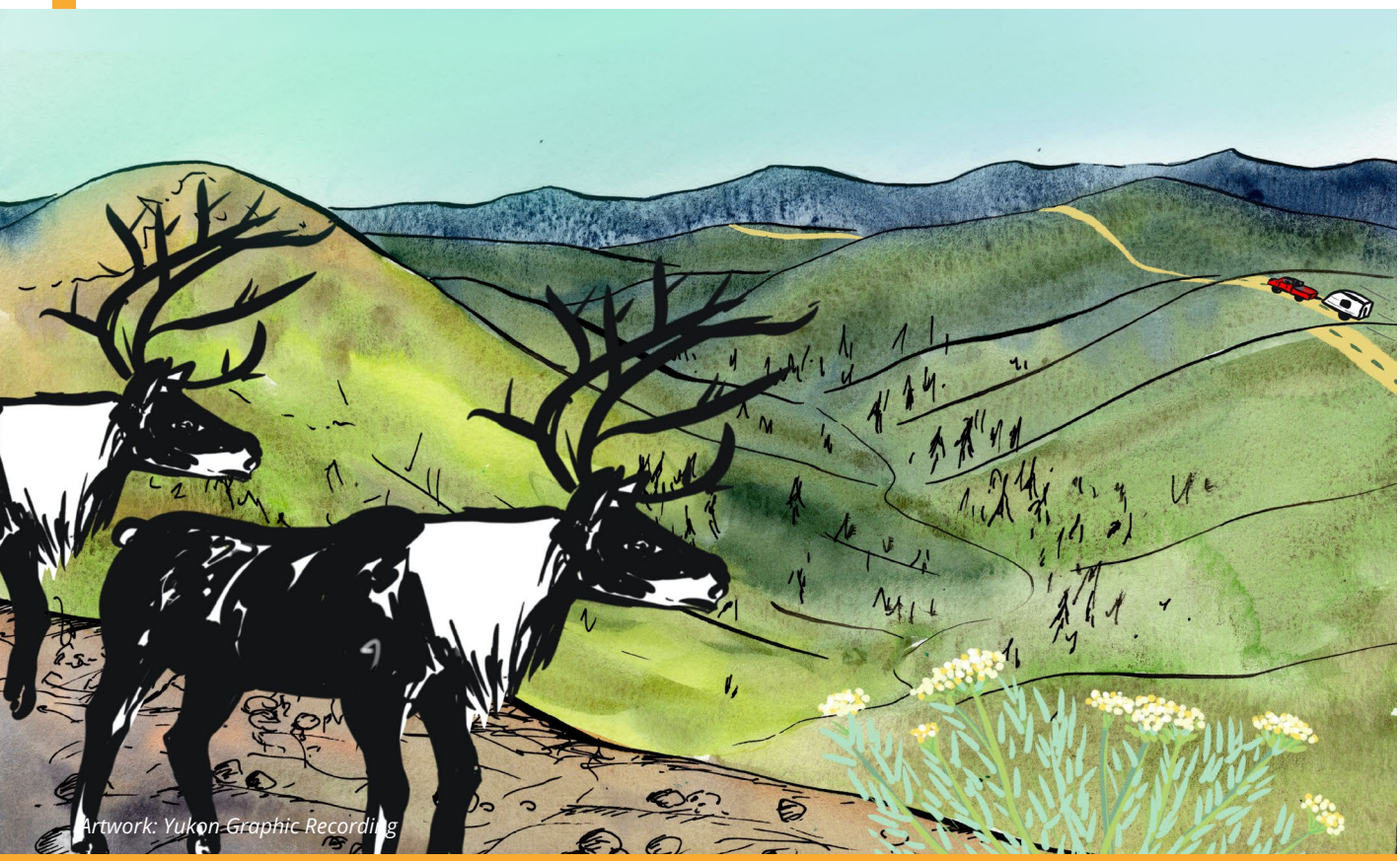
5. Scottie Creek Wetlands and Ladue Wetlands are nominated as Wetlands of Special Importance.
6. The SMA Management Plan should consider the priority values.
7. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language
- Plant and Animal Relations
- Wetlands

	VALUES
Land–People Relationship	• Mining and trapping activities provide opportunities for stewardship.
Community Culture	• Archeological and traditional sites provide opportunities for community members to learn about the Region's history and heritage.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• High traditional use area with trails and camps; one identified archaeological site. • Limited access results in limited opportunities for harvesting and gathering.
Community Resilience	• Wetlands provide significant ecosystem services, including water filtration and flood attenuation.
Water	• Ladue and White rivers.

	VALUES
Plant and Animal Relations	• Important waterfowl staging and nesting habitat. • Scottie Creek Flats is a year-round Wildlife Key Area for beaver and muskrat. • Species-at-risk known to occur is the grizzly bear. • Species-at-risk expected to occur includes little brown myotis, spiked saxifrage, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, common nighthawk, transverse lady beetle, horned grebe, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, and wolverine. • The North Ladue River contains habitat of high concern for migratory birds. • The Yukon Floater is Yukon's only known freshwater mussel.
Salmon	• The presence of the Yukon Floater suggests there may once have been salmon in Scottie Creek.
Caribou	• Located within the winter ranges of the Fortymile and Nelchina caribou herds.
Moose	• Moderate moose populations exist within areas of extensive good moose habitat.
Landscapes	• Represents the Klondike Plateau ecoregion.
Wetlands	• Contains extensive, largely undisturbed wetlands that host rare and endemic species such as Weak Sedge, Beach-head Iris, and Yukon Floater.
Sustainable Local Economy	• Located within the White River Landscape Unit of the Forest Resources Management Plan, identified as low priority for planning with a high conservation focus. • Significantly prospective, with active placer and quartz claims. • Active trapping concession. • Currently minimal interest in tourism activities.



Artwork: Yukon Graphic Recording

INTEGRATED STEWARDSHIP AREA 2

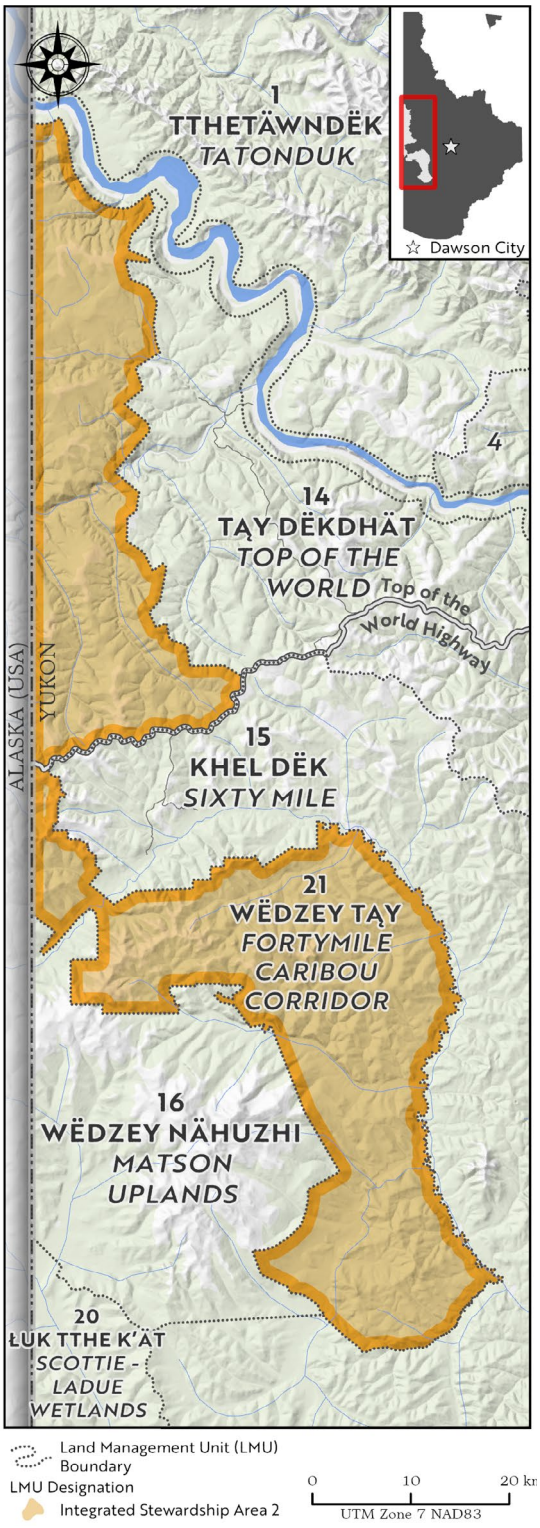
LMU 21: Wëdzey Tąy (Fortymile Caribou Corridor)

Area

1,841 km^2 (4.6% of the Region)

Settlement Land

Includes the following Tr'ondëk Hwëch'in Settlement Land parcel: TH S-13B1


1
TTHETÄWNDËK
TATONDUK
☆ Dawson City
4
14
TĄY DËKDHÄT
TOP OF THE
WORLD
Top of the
World Highway
ALASKA (USA)
YUKON
15
KHEL DËK
SIXTY MILE
21
WËDZEY TĄY
FORTYMILE
CARIBOU
CORRIDOR
16
WËDZEY NÄHUZHI
MATSON
UPLANDS
20
ŁUK TTHE K'ÄT
SCOTTIE -
LADUE
WETLANDS
Land Management Unit (LMU) Boundary
LMU Designation
Integrated Stewardship Area 2
0
10
20 km
UTM Zone 7 NAD83

INTENT STATEMENT

The vision is for the ongoing presence and health of the Fortymile caribou herd on the landscape. The management intent is to protect habitat needs and migration routes, while allowing limited, specific development.

Future management of this area should continue to support the ongoing health and population of the Fortymile caribou herd. As such, quartz exploration and development are not supported in this LMU under current regulatory and technological limitations and best practices. This is intended to ensure that Tr'ondëk Hwëch'in harvest rights and stewardship responsibilities are not compromised.

Caribou populations across North America are experiencing widespread and sustained declines, underscoring the need for immediate and targeted conservation measures. Current mining legislation and practices pose a high risk of significant negative impacts on caribou, particularly on ridgetops – the primary migratory corridors that often coincide with areas of high quartz prospectivity. The Fortymile herd faces severe cumulative pressures from existing and proposed development, with barriers to movement and habitat loss identified as major threats.

Maintaining migration pathways and minimizing habitat disturbance are critical to preventing further decline. Quartz exploration and development on ridgetops directly undermines caribou conservation objectives. Interim land withdrawals are therefore essential to prevent additional threats until robust, enforceable protections for caribou and their habitat are in place.

The LMU is designated as an ISA 2 in consideration of the existing development footprint. While the priority is protecting caribou, a small amount of additional development is allowed.

TR'ËHUDÈ AND STEWARDSHIP

"Caribou have provided food, traditional supplies/tools, and clothing for the Tr'ondëk Hwëch'in people for thousands of years, and it is critical that this connection remain for future generations. As stewards of this land, it is crucial that the Tr'ondëk Hwëch'in protect caribou and their habitat as it is a part of cultural continuity and a way of life. Tr'ondëk Hwëch'in did not harvest the Fortymile caribou herd for decades due to the depletion of the herd. In recent years the herd has rebounded to some extent and the Tr'ondëk Hwëch'in have recently started to rebuild a cultural connection through subsistence harvesting activities."

– Adapted from Tr'ondëk Hwëch'in Review of the Dawson Regional Draft Plan, 2021

"We are protecting the land, animals, and environment that can't speak for themselves."

– Debbie Nagano, DRPC Chair

LMU DIRECTIONS

1. Due to the associated risks, heap-leach mining is not supported in this LMU under the current regulatory regime and with commonly used technologies.
2. Interim withdrawal of all lands from quartz staking until:
    a. Plan Review, at which point the Parties and the Commission, informed by the most recent information, including the health of the herd and updated mineral legislation, would work together to decide whether the interim withdrawal should be lifted; or
    b. Such a time as both Parties agree to remove withdrawal; or
    c. When a Fortymile caribou plan is created and deemed sufficient to protect the herd by both Parties. This plan would have to contain sufficient direction regarding the prioritization of the herd in relation to any industry.
3. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.2.4) must be followed.
4. Development footprint is allowed according to ISA 2 surface disturbance and linear feature density thresholds.
5. When a claim expires it should be withdrawn from further staking while interim withdrawal is in place.
6. Development should take special precautions to ensure minimal disturbance to caribou, their habitat, and migration routes. Proponents should:
    a. Follow timing windows for caribou as determined by the Parties during the assessment and regulatory process.
    b. Identify and avoid areas with suitable lichen habitat before undertaking mineral development activities.
    c. Apply reclamation standards that maximize the regrowth of caribou-suitable habitat, including lichen, and avoid reclamation that leads to dense, wide thickets of willow in major creek or river bottoms.

d. Include specific wildlife monitoring and mitigation plans in their project that consider impacts to caribou and, at a minimum, establish a phased approach to actions taken when caribou are present.

7. Fire suppression options should be considered in areas and implemented if deemed necessary by the Parties to protect important caribou habitat (especially lichen areas) as a response to the potential increase in frequency and intensity of fire activity due to climate change.

8. With regards to the Fortymile and Sixty Mile rivers:

   a. Do not block the flow of water in either the Fortymile or Sixtymile rivers.

   b. Do not allow ground disturbance or storage of contaminants (including fuel storage, outhouses, waste materials, and tailings ponds) within 30 m of the high-water mark.

   c. Reclamation of existing disturbances should be directed towards standards that protect heritage and water values.

   d. Use existing access points wherever possible.

   e. Access should be shared.

9. This area is located within important caribou herd ranges. It is crucial to maintain key caribou migration pathways and to minimize disturbance to key habitat. Stewardship Directions for the caribou overlays (Section 5.3.4) must be followed.

PRIORITY VALUES

- Caribou
- Landscapes

VALUES	
Land–People Relationship	• Significant recreational opportunities, predominantly from off-road vehicle use, hiking, berry picking, wildlife viewing, and winter recreation, due to proximity to the Top of the World Highway and the presence of several secondary roads. • Harvesting, recreational and economic activities offer opportunities for stewardship.
Community Culture	• The Fortymile caribou herd's presence and health supports a sense of identity as good stewards.
Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language	• Presence of traditional routes (Glacier Creek) and several archaeological sites. • First Nation land-based connections to this area; active harvest area for moose, caribou, and berries.
Community Resilience	• Healthy and sustainable caribou populations contribute to a resilient community, including through food security.
Water	• Fortymile and Sixty Mile rivers.
Plant and Animal Relations	• High-elevation habitat, which is important for some migratory bird species. • Species-at-risk known to occur include Yukon podistera, collared pika, wolverine, bank swallow, lesser yellowlegs, olive-sided flycatcher, rusty blackbird, short-eared owl, horned grebe, Dawson wallflower, and common nighthawk. • Species-at-risk expected in low numbers include little brown myotis, gypsy cuckoo bumble bee, Suckley's cuckoo bumble bee, western bumble bee mckayi subspecies, barn swallow, and transverse lady beetle.
Salmon	• Fortymile and Sixty Mile rivers are both salmon-bearing rivers.
Caribou	• Important winter and summer habitat and key spring and fall migration corridors for the Fortymile and Nelchina caribou herds.
Moose	• Lowlands provide good moose habitat.
Landscapes	• Part of the Klondike Plateau ecoregion. • Important ecosystems include low-elevation steppe meadows and unglaciated high elevation alpine areas (>1,000 m), which have endemic species.

	VALUES
Wetlands	• Wetland habitat along major watercourses, including bogs, fens, and swamps.
Sustainable Local Economy	• Part of Sixty Mile River Landscape Unit of Dawson Forest Resources Management Plan. The area is a medium priority for short-term planning and has high potential for timber values. There are no active timber harvest plans in the area. • Moderately prospective for minerals with pockets of high to significant potential. Placer exploration and mining are prevalent in the area, as well as areas of active quartz exploration. • Active trapping concessions and associated infrastructure. • Tourism activities such as wildlife viewing and winter recreation occur in close proximity to the Top of the World Highway or the Yukon River.

Artwork: Yukon Graphic Recording

EXCLUDED AREA

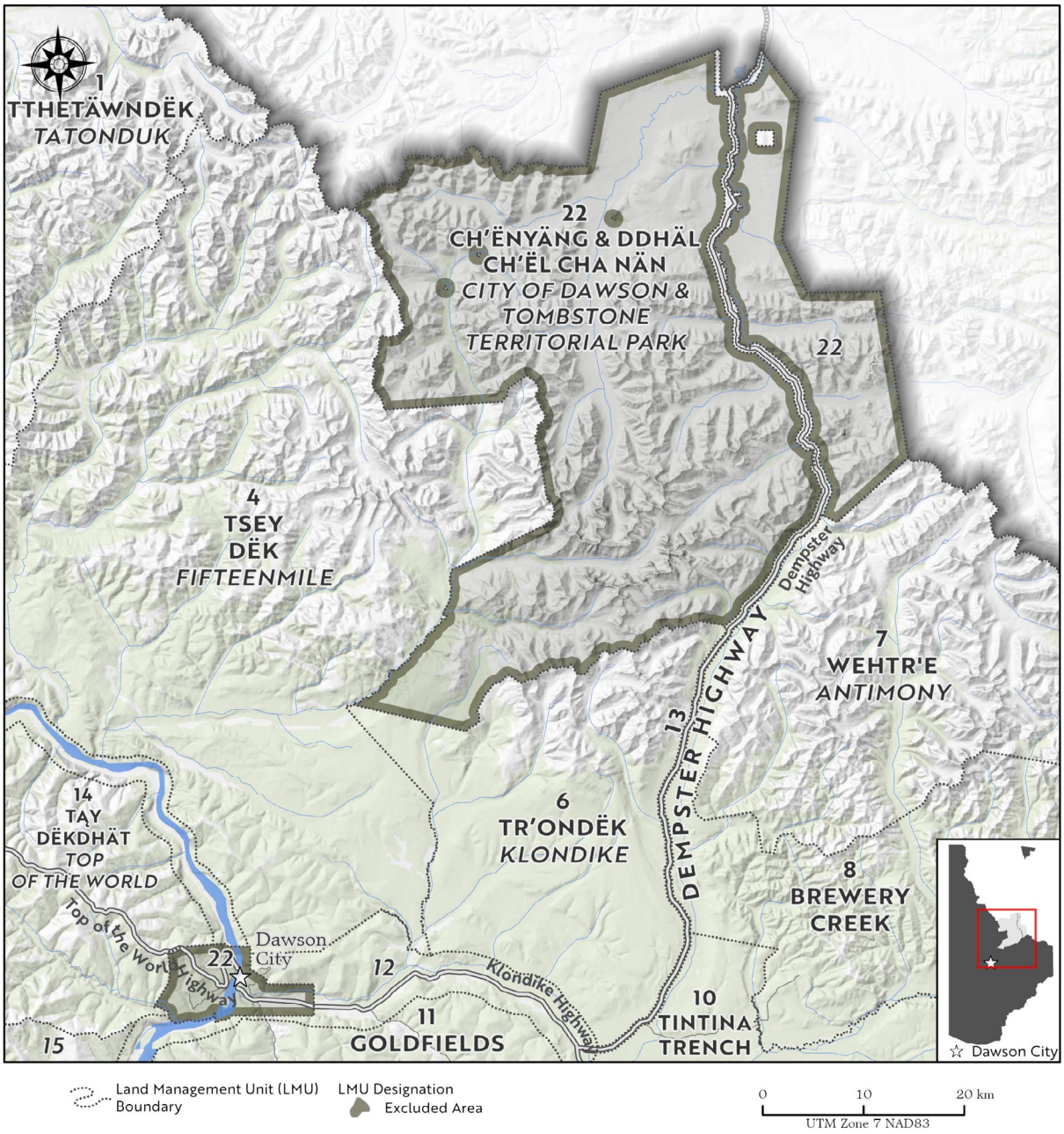
LMU 22: Ch'ënyàng and Ddhäl Ch'èl Cha Nän (City of Dawson and Tombstone Territorial Park)

Area

2,129 km^2 (5.3% of the Region)

Settlement Land

Includes 75 Tr'ondëk Hwëch'in Settlement Land parcels



This LMU encompasses the areas within the Region to which this Plan does not apply. It includes Dawson City and adjacent community areas across the Yukon River, named Ch'ènyàng because it was a moose lick area before the gold rush era. It also includes Tombstone Territorial Park (with the exception of Settlement Lands in the park boundary), also called Ddhäl Ch'èl Cha Nän, Hän for 'ragged mountain land'. For more details on where the Plan applies, see Section 1.5.1.

7

Implementation

Artwork: Darcy Tara McDiarmid

7.1 Introduction

A collaborative approach to management will be essential if this Plan's vision, goals, and directions are to be realized. For the Plan to be successful, and as a step towards reconciliation, it must be jointly implemented by the Parties, who must mutually agree to any future changes to the Plan. Implementing this Plan will help ensure that the Objectives of Chapter 11 of the THFA are achieved.

Plan implementation will be an ongoing process. This section outlines the vision for implementation, identifies some tools that may be used, and defines key milestones. Monitoring, evaluation, and revision will be required for the Plan to be effective and for its goals and objectives to be met.

7.2 Implementation Roles

7.2.1 THE PARTIES

As Plan signatories, the Parties will have the primary responsibility for implementing this Plan (THFA s. 11.7.0). The Plan provides guidance to enable the Parties to make well-informed decisions on land and resource management in the Region. Nothing in this Plan is intended to diminish the ability of the Parties to make land and resource decisions under their current authority. The Plan will be implemented by the Government of Yukon in accordance with its legislation, policies, and decision-making processes, and by the Tr'ondëk Hwëch'in Government in accordance with its legislation, policies, customs, traditions, and decision-making processes.

To fully implement this Plan, the Parties should make the best use of all existing policy and legislative tools, including those currently in use and those not yet in use. For example, Special Operating Areas for quartz and placer mining, Water Protection Areas, and Tr'ondëk Hwëch'in community plans or area development land use plans (Tr'ondëk Hwëch'in Self-Government Agreement, S 25.1.1.1) may all be useful tools in the full realization of this Plan.

The planning process to date has been a public process. The Parties are encouraged to share future decisions with the Commission, Tr'ondëk Hwëch'in Citizens, the community of Dawson City, and the broader public. While nothing in this Plan can require the Parties to develop new legislation (THFA s. 11.7.3 and 11.7.4), where there are gaps in legislation, particularly in holdover legislation from the gold rush era, the Parties should make best efforts to develop new tools and legislation.

In cases where the Parties are directed in this Plan to co-develop a tool or subsequent plan (for example, the Upper Indian River Stewardship Plan), the development and implementation of the tool or plan should be prioritized by the Parties and be carried out together.

This Plan, and its intentional use of and focus on co-management, is intended to initiate a new, positive, and collaborative relationship between the Parties with regard to land management, where neither Party holds the balance of power. It is the hope that this Plan can be implemented the way it was developed – in a good way.

7.2.2 THE COMMISSION

The Commission is legislated to operate beyond the submission of the Final Recommended Plan under the THFA (s. 11.4.5.10) and YESAA (s. 44-1). YESAB has stated that no other body can replace the Commission in its mandated role for conformity determinations **(173)**. The Commission that participates in Plan Implementation is not intended to be a new Commission, but a continuation of the Commission that has guided the creation of this Plan. If new Commission members are required, the nomination process will follow the THFA (s. 11.4.2.1).

Throughout implementation and the life of the Plan, the Commission will meet seasonally or more frequently as required. The Commission will be supported by a secretariat that can legally act on its behalf – for example, for conformity determinations.

The Commission's participation in monitoring and implementing the Plan provides a net benefit to everyone involved. Some of the benefits of an active Commission include the following:

- Provides a connection to the Plan and maintains corporate knowledge of the Commission process and the Plan. The Commission created this Plan: if there is uncertainty surrounding the interpretation of the Plan or the intention of certain directions, the Commission can provide clarification. Interpretation of the Commission's intention should not be left to the discretion of the Parties.
- Provides dedicated resources and staff time to Plan implementation. Both Parties have many other and ongoing responsibilities; the Commission and its secretariat can provide dedicated and continuous capacity to Plan implementation. While the Parties have the ultimate authority to implement this Plan, the Commission can provide invaluable support.
- Works locally and in collaboration with Tr'ondëk Hwëch'in and the YESAB office in Dawson. The Commission has developed strong relationships with Planning Partners in the Region and elsewhere, which will aid implementation and monitoring activities.
- Holds annual planning days. Modelled after regional land use planning practices in the Northwest Territories, these would serve as a public reminder of the Plan's purpose and importance. They would provide opportunities for public updates on major projects or any changes to the Plan, including information for proponents, while creating space for community questions and input. These events reinforce transparency and the Plan's status as a living document that evolves with community needs and regional priorities.
- Leads the sub-regional planning process.

Beyond its role in interacting with the YESAB process, the Commission's role to "monitor the implementation of the approved regional land use plan" (THFA, s. 11.4.5.10) may take many forms. As stewards of the Plan and the Region, the Commission may monitor implementation to ask:

- Is the Plan achieving its goals and advancing the Vision?
- Is the Plan being implemented fully and appropriately?
- Would more clarification assist with interpreting the Plan?
- How is the Plan interacting with the regulatory system and vice versa?
- Is co-management successful, and are the Parties collaborating?
- Is implementation following the timeline as outlined?

- How is Traditional Knowledge being used?
- Are there new land uses, environmental or societal conditions, or legislation to be considered at the five- or ten-year review?

IMPLEMENTATION ACTIONS	
166	If the Parties establish an Implementation Committee, develop Terms of Reference that, among other things, specify the Commission's role(s) in implementation.

7.2.3 OTHER BODIES

At the discretion of the Parties, other bodies may have a role in implementation. Until the Parties decide how to jointly implement the Plan, the roles and responsibilities of these other bodies remain undetermined. These bodies may include: the Government of Canada; YESAB; YLUPC; and other UFA boards and committees.

Photo: Government of Yukon

7.3 Capacity Building

In conjunction with industry-led initiatives and the ongoing work of Tr'ondëk Hwëch'in and the Government of Yukon, this Plan will ensure that people who live, work, and play in the Region are stewards with a shared responsibility to the land for future generations. Effective implementation of this Plan will depend in part on having sufficient technical resources and capacity in the Region.

IMPLEMENTATION ACTIONS

167 Collaborate to jointly enhance capacity by:

- Strengthening institutional arrangements, consistent with the THFA and other relevant legislation and policies.
- Facilitating ongoing technical cooperation between and among Tr'ondëk Hwëch'in and the Government of Yukon departments.
- Involving independent scientists and advisors, as needed, to support research and monitoring initiatives.
- Coordinating communication strategies that promote the Plan to non-technical audiences.

168 Explore and implement ways to communicate the Plan to residents, Yukoners, and visitors, promoting individuals' sense of stewardship while in the Region. These may include:

- Plain language versions.
- Video or audio accompaniments.
- Storytelling.
- School curriculum.
- Visitor information.

169 Support ongoing Indigenous-led planning work (for example, IPCAs) and use it to inform Plan implementation.

7.4 Sub-regional Planning

Three LMUs are designated for sub-regional planning: LMU 3: Chu Kon Dëk (Yukon River Corridor), LMU 12: Tr'ondëk Täk'it (Klondike Valley), and LMU 13: Dempster Highway Corridor **(Table 11)**. This section outlines the vision, goals, and process for sub-regional planning.

Vision

Sub-regional plans will share the vision of the regional plan within which they fall. If a sub-regional plan spans multiple regional plans (for example, LMU 22: Dempster Highway Corridor), the visions of all regional plans will guide that of the sub-regional plan.

Goals and Key Deliverables

- The main deliverable is a land use plan for the sub-region, to be completed within the timeline agreed to by Parties at the outset of sub-regional planning.
- Sub-regional plans will focus on key issues or values specific to the sub-region.
- Sub-regional plans will focus on relationships and resource management.
- Sub-regional plans will have a vision, a stewardship statement, objectives, management directions, and Implementation Actions. They may also include landscape management units, land designations, specific management directions, and cumulative effects thresholds.

Process and Timeline

- The sub-regional planning process will be a condensed version of regional planning **(Figure 15).** Per the Final Agreements (11.8.4), a sub-regional plan shall be developed in accordance with the provisions of Chapter 11 – for example, the representation formula for the Commission and the approval process.

- The Parties and Commission may delegate work to a sub-regional planning commission.
- The sub-regional planning process will include:
    - Compiling background information with a focus on the distinct values of the sub-region and identifying key planning issues.
    - Engagement with the community (or communities) and planning partners.
    - Preparing a recommended plan (followed by community and planning partner engagement).
    - Preparing a final recommended plan for approval by the Parties.
- In recognition of the smaller scale and scope of these plans, and to be efficient with time and resources, a draft plan phase is not necessary.

Funding

- By signing this Plan, the Parties are committing to three areas designated for sub-regional planning in the Region. For further clarity, this is interpreted to mean that the Government of Yukon is agreeing to UFA clause 11.9.4.
- If Government initiates the development of a sub-regional or district land use plan by a planning body, the planning body established to prepare that plan shall prepare a budget for the preparation of the plan which shall be subject to review by Government, and Government shall pay those expenses which it approves.
- Funding for sub-regional planning will come from land claims implementation funding under UFAIP Schedule 1, Part 2.

Implementation Requirements

- Once a sub-regional plan is completed, the following implementation activities will become part of the Commission's ongoing responsibilities:
    - Conformity determinations for projects within the sub-region.
    - Sub-regional plan amendments and reviews.

Table 11: Details of the three required sub-regional plans, including the lead body, the timeframe for starting the plan, and the scope (geographic and major considerations).

	WHO	WHEN	SCOPE

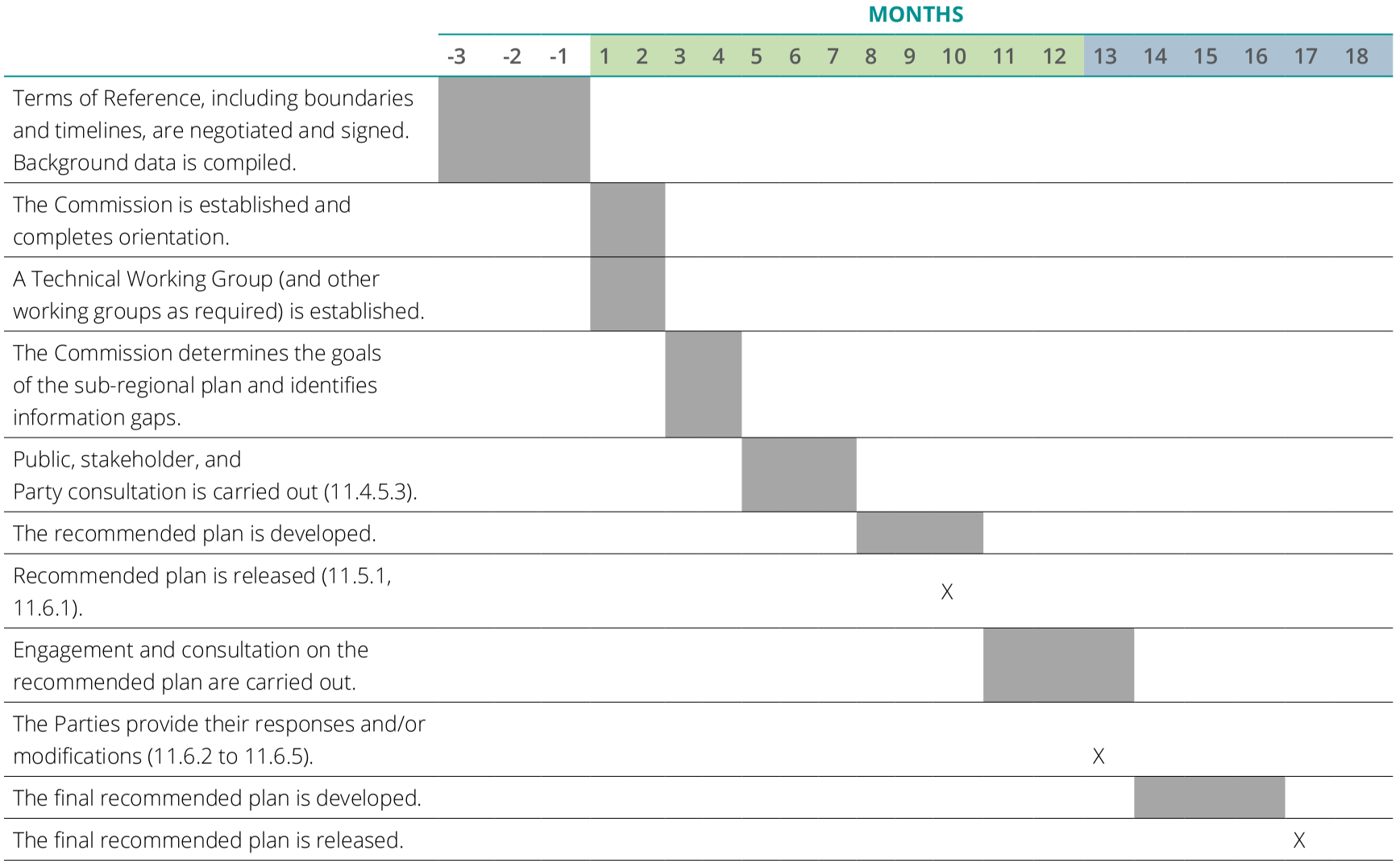
LMU 3: Chu Kon Dëk (Yukon River Corridor)	The Commission is the primary body responsible for sub-regional planning. The Commission will:
	• Engage with the public, plan partners, and affected First Nations.
	• Work closely with the Parties, who will ultimately approve, reject, or modify the sub-regional plan.
		Initiated within six months of regional plan approval.	• Scope and geographic extent to align within Dawson Region boundary
			• The sub-regional plan should consider:
			  • Transportation and access.
			  • Garbage and pollution.
			  • Heritage and cultural value.
			  • Tourism.
			  • Recreation.
			  • Salmon.
			  • Viewscapes.
			  • Interconnection with other regions.

LMU 12: Tr'ondëk Täk'it (Klondike Valley)	The Commission is the primary body responsible for sub-regional planning. The Commission will:
	• Engage with the public.
	• Work closely with the Parties, who will ultimately approve, reject, or modify the sub-regional plan.
		Initiated as soon as possible, and within three years of regional plan approval.	• Aims to guide future land use priorities and avoid land use conflicts.
			• Should complement planning and development within the City of Dawson and the Central Tr'ondëk Land Management Area.
			• The sub-regional plan should consider:
			  • Residential development.
			  • Water quality.
			  • Multiple, overlapping land uses.
			  • Multi-use zoning.
			  • Climate change adaptation.

	WHO	WHEN	SCOPE

LMU 13: Dempster Highway Corridor	To be planned jointly by the Parties to the North Yukon, Peel, and Dawson Regional Land Use Plans, through a sub-regional planning commission.	Timing to be determined by the Parties to the North Yukon, Peel, and Dawson Regional Land Use Plans.	• Planning scope and extent should be defined jointly the Parties.
			• The sub-regional plan should consider:
			  • Cultural value.
			  • Harvesting.
			  • Tourism and commercial wildlife viewing.
			  • Transportation and access (including unregulated backcountry access).
			  • Viewscapes.
			  • Caribou.

Figure 15: Timeline and requirements for sub-regional plans.



7.5 Conformity

Conformity determinations are a key tool for ensuring the Plan's vision and goals are achieved. Proposed projects and activities in the Region must be assessed to evaluate whether they conform to this Plan. The Commission is responsible for completing conformity determinations (YESAA s. 44.1 and THFA 12.17.1), acting as the voice of the Plan.

To be in conformity, proposed projects must be designed in a way that is consistent with all relevant Plan directions and respects applicable thresholds. Proponents are expected to clearly demonstrate this consistency in their proposals, including providing proposed extent of surface disturbance and linear features.

A conformity determination must clearly explain why a project does or does not conform to the Plan. By giving weight to conformity determinations, recommendation and decision bodies can actively support implementation of the Plan and the First Nation Final Agreements. If a project is determined to be non-conforming, YESAB shall, to the extent possible, identify mitigations to bring it into conformity or recommend that the project not proceed (YESAA, s. 44.3). YESAB may also recommend that the project proceed.

If a non-conforming project is allowed to proceed by the decision bodies (THFA 12.17.5 and YESAA 81.2), a Plan variance may be granted. The process for variances is outside of the scope of the Commission and/or the Plan, but any variance must be tracked in a publicly available database.

IMPLEMENTATION ACTIONS

170	Create a publicly available database to track non-conforming projects or activities, accessible to the Parties, Commission, and YESAB. This may or may not be the same registry used for administrative changes and amendments.

7.5.1 CONFORMITY DETERMINATION – STANDARD OPERATING PROCEDURE

Conformity determinations will be required as soon as the Approved Plan is signed. The following outlines the standard operating procedure.

Roles and Responsibilities

COMMISSION	Publishes and maintains guidance for conformity determinations.
	Conducts conformity determinations and publishes them to YESAB Online Registry (YOR).
	Requests additional information through YOR when needed.
	Uploads public comments on YOR regarding conformity status.
YESAB	Maintains YOR and processes adequacy review.
PROPONENT	Provides required information for conformity determination.
	Responds to information requests.

Process

1. Publish guidance (standing requirement)
    - The Commission maintains formal guidance documents and checklists on its website at all times.
    - Guidance includes all required information for a project to conform.
    - Guidance is generic (with respect to project type) and available to all proponents prior to project submission.
2. To support an efficient process, the Commission will begin reviewing projects during YESAB's adequacy stage of project assessment. This approach is intended to reduce the likelihood of delays to the YESAB process associated with conformity determinations.
3. The Commission will require a new Terms of Reference, as the existing Terms expire once the Final Recommended Plan is completed. In this new Terms of Reference, the Commission will delegate authority for completing conformity determinations to its staff.

4. Conformity determination

   - If all required information is present, the Commission can complete a conformity determination.
   - If clarification is required or missing details are identified, the Commission may, at its discretion, upload comments requesting that YESAB obtain more information from the proponent. YESAB is not obligated to act on this request.
   - When it has enough information, the Commission will upload a conformity determination as a public comment on YOR. If a subsequent comment to YOR provides new information relevant to conformity, the Commission may choose to do another conformity determination.
   - The YESAB review process continues regardless of the Commission's determination and regardless of the Commission's ability to submit a conformity determination.
   - All requests and responses are uploaded to YOR and remain publicly available.

7.6 Implementation Guidelines and Priorities

7.6.1 IMPLEMENTATION GUIDELINES

Implementation guidelines will be needed to help assessors, regulators, and proponents understand how to use and interpret the Plan. The Parties, in collaboration with the Commission, should determine the content and scope of these guidelines.

IMPLEMENTATION ACTIONS	
171	In collaboration with the Commission, develop implementation guidelines within one year of Plan approval that outline how the Plan will be implemented.

7.6.2 IMPLEMENTATION PRIORITIES

The success of this Plan will depend in part on completing additional planning products, such as Access Management Plans. Recognizing that the Parties have final discretion over implementation, Table 12 outlines the intended order and timelines for these additional products. In general, the Parties are encouraged to begin with simpler tasks where the structure is already laid out in the Plan, to build early momentum and strengthen working relationships.

There are 173 Implementation Actions identified throughout the Plan. In Appendix 8, these actions are grouped and prioritized by when work on them should begin (within year 1; within years 2 to 5; within years 6 to 10).

Table 12: Prioritization of additional planning products required as part of Plan implementation.

DELIVERABLE	TIMELINE
Sub-regional planning for LMU 3: Chu Kon Dëk (Yukon River Corridor)	Begin in **Year 1**.
Reclamation Framework	Form a working group within **Year 1** to oversee the development and rollout of the framework**.** See Section 3.11 for the full list of implementation requirements related to reclamation.
Sub-regional planning for LMU 12: Tr'ondëk Täk'it (Klondike Valley)	Begin by end of **Year 3**.
Cumulative effects	By end of **Year 2**, start development of value-based indicators and related components as per the schedule in Section 3.2.
Status report	Create and publish in **Year 5**.
Upper Indian River Stewardship Plan for LMU 17: Nän Dhòhdäl (Upper Indian River Wetlands)	Begin as soon as possible and complete by **Year 5**. Interim withdrawals remain in place until the Stewardship plan is complete and approved by both Parties.
Access Management Plans for LMU 6: Tr'ondëk (Klondike), LMU 11: Goldfields, and LMU 15: Khel Dëk	Complete by end of **Year 5**. Each plan should take about two years from initiation to completion. If the process stalls at any point, the Dispute Resolution process (THFA 26.3.1.3) should be followed.
SMA planning for all six SMAs	Complete by **Year 10**. Plans should be developed in the following order, based on existing activity and dispositions. If the process stalls at any point, the Dispute Resolution process (THFA 26.3.1.3) should be followed: LMU 7: Wehtr'e (Antimony) LMU 10: Tintina Trench LMU 20: Łuk Tthe K'ät (Scottie Creek and Ladue Wetlands) LMU 4: Tsey Dëk (Fifteenmile) LMU 1: Tthetäwndëk (Tatonduk) LMU 16: Wëdzey Nähuzhi (Matson Uplands)
Sub-regional planning for LMU 13: Dempster Highway Corridor	Complete by **Year 10**.
Plan Review	Begin in **Year 10**.

7.7 Plan Monitoring and Revision

7.7.1 PLAN MONITORING

By regularly monitoring and adjusting the Plan, decision-makers become adaptive managers who can respond to changing circumstances in the Region and continue moving towards the Plan's goals and objectives. As part of plan monitoring, the Parties will establish a record of their actions in relation to the Plan.

IMPLEMENTATION ACTIONS

172 Produce an annual Implementation Report that details implementation activities and impacts. The Commission, with input from the Parties, could compile this report as part of their ongoing stewardship of the Plan. This report should be publicly available and should consider:

- Progress on Plan implementation.
- Ongoing surface disturbance and linear feature tracking and mapping.
- Progress of sub-regional, SMA, and Access Management Planning.
- Progress on cumulative effects and reclamation frameworks.
- Parties' experience of co-management.
- Feedback on project assessment, including from proponents and YESAB.
- Volume and outcomes of conformity determinations.
- Feedback from First Nation Final Agreements boards and committee – for example, YESAB, YLUPC, DDRRC.

7.7.2 STATUS REPORT

Every five years, the Commission will review the Plan's intent against the progress of its implementation and determine whether it is having the desired impacts. Changes may be required based on the outcomes of this review.

However, major changes are not anticipated at this stage. This status report should be completed regardless of how much progress has been made on implementation. The Commission will complete the report with information and support from the Parties, and it will be made publicly available.

7.7.3 PLAN REVISION

The Region will experience environmental, economic, and social changes over time. This Plan is therefore designed as a living document that can be updated when needed. The Plan may be revised in the following ways:

Administrative Change

Cause: Minor technical changes that do not affect the intent of the Plan. This includes, for example, spelling or grammatical changes, clearer descriptions, correcting inaccurate information, filling Knowledge Gaps, and updating information in response to Plan implementation.

Action: The Parties share the intended change with the Commission. If the Commission or its delegate sits on the Parties' Implementation Committee, this can be done internally.

Outcome: A notice of change is added to a public registry hosted by the Commission, and the change will be reflected in the Revised Plan after the 10-year Plan Review.

Amendment

Cause: A major change of the Plan, including revisions to the Plan's management strategies or original intent as approved by the Parties. Both Parties must be in consensus about the intended change. Examples include LMU boundary changes or amalgamations, changes to cumulative effects thresholds, or situations where multiple variances have been permitted for a similar activity. Amendments may be proposed when a variance is granted multiple times.

Action: The Parties jointly make a recommendation and inform the Commission. The Parties seek public input, including from the Commission, and then review that input before deciding whether to grant the amendment.

Outcome: If the amendment is granted, a notice of change is added to the public registry, and the change will be reflected in the Revised Plan after the 10-year Plan Review. If the amendment is not granted, the rationale is recorded in the public registry. If an amendment is granted as a result of multiple variances, specific changes may be made during Plan Review regarding what does or does not conform to the Plan.

Plan Review

Cause: A 10-year re-evaluation of the whole Plan to assess whether it has been effective in achieving its vision and goals and to make changes to directions and recommendations if necessary. In addition to the required 10-year interval, the Parties can jointly agree to begin a Plan Review at any time.

Action: Prior to the Plan Review, the Parties and the Commission will jointly develop a procedure for Plan Review that defines the scope of the review and assigns responsibilities. A Plan Review is a Commission-driven process. Some options for scope include the following:

- Review the entire Plan.
- Review specific LMUs where there has been a change in land use or a significant natural event has occurred – for example, if a large wildfire burns an entire LMU or if a new and previously unaccounted-for land use activity is dominant in an LMU.
- Review specific Plan components that may or may not have been completed – for example, Access Management Plans and their requirements, SMA plans and their progress, or the progress of the cumulative effects framework

Outcome: The outcome(s) of the Plan Review will be reflected in the Plan going forward.

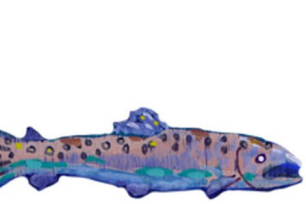
IMPLEMENTATION ACTIONS

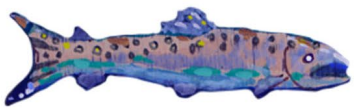
173 Jointly develop a Plan Review process with the Commission following approval of the Plan in anticipation of the first Plan Review. Plan Reviews should occur at least every 10 years and should do the following:

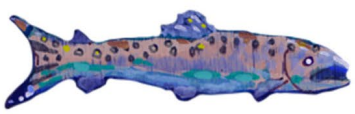
- Evaluate the success of the Plan against vision and goals and review whether these are still relevant and applicable.
- Reassess value health, including availability of new information, technology, and knowledge (Section 3.9).
- Assess progress of Implementation Actions, Governance Recommendations, and Knowledge Gaps.
- Review demand for land and resources.
- Account for new understanding of climate change impacts on values.
- Incorporate all administrative changes and amendments, and assess the number of these to consider whether that may signal a need for change.
- Review LMU boundaries and designations and make changes if necessary.
- Review status and effectiveness of caribou overlays, SMA plans, sub-regional plans, Access Management Plans, and cumulative effects and reclamation frameworks.
- Review the status of Chuu Tl'it Gwan'an (the North Yukon Annex) with the Parties and Vuntut Gwitchin (if required).

8

Glossary







Artwork: Darcy Tara McDiarmid

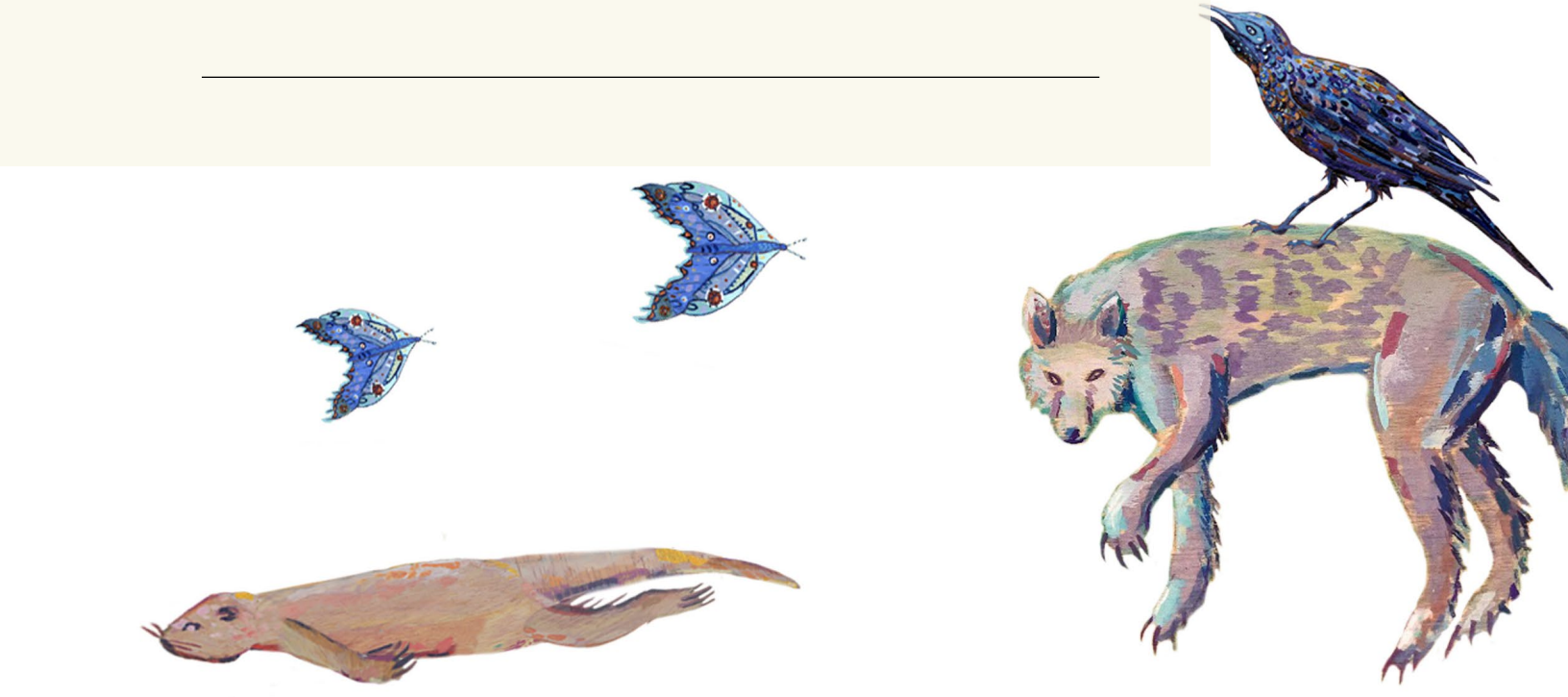
Access	The physical and legal ability to reach, use, or traverse land. Includes infrastructure such as roads and trails, as well as the rights and permissions associated with land use.
Assessment (cumulative effects)	The process of reviewing available knowledge on value health in relation to value goals, often by comparing indicator data to thresholds, and using this to inform responses.
Co-management	The meaningful participation by both Parties in the management of land and public resources within the Region and the implementation of this Plan in a manner that: • Fosters a positive, mutually respectful, and long-term relationship between the Parties. • Upholds and honours the spirit and intent of the Final Agreements. • Promotes the objectives of reconciliation. As signatories of this Plan, Tr'ondëk Hwëch'in and the Government of Yukon equally share the authority and responsibility of implementing, monitoring, reviewing, and adaptively managing the Dawson Regional Land Use Plan. Co-management applies exclusively to the Parties to the Plan and, where agreed by both Parties, affected First Nations.
Cumulative Effects	The combined changes to values in the environment and/or society that result from past, present, and future human activities and natural processes.
Cumulative Effects Framework	A relational structure of the elements involved in cumulative effects management.
Cumulative Effects Management	Monitoring, assessing, and responding to changes in value health, using a holistic approach that considers a wide variety of stressors.
Decision-makers	Elected officials, legislative bodies, and administrative officials who are given authority under legislation to make decisions on specific matters. They are bound by principles of procedural fairness and must base their decisions on evidence, laws, and public interests, often requiring significant public consultation.
Endemic Species	Of species or populations, having restricted range.
Functional Habitat	Habitat that supports a specific population, species or ecosystem. It may be specific to a season, demographic or behaviour (for example, foraging, breeding, migration) and often requires specific vegetation communities. There may also be requirements related to human activity and disturbance levels, hydrology, and connectivity to other landscapes or habitats.

Indicator (cumulative effects)	A measurable factor (qualitative or quantitative) that is related to a value and used to track value health.
Inspectors	Persons delegated under the authority of either Party or Canada to monitor activities on the land and/or enforce compliance with the respective government's legislation – for example, Tr'ondëk Hwëch'in Fish and Wildlife Stewards, Government of Yukon Natural Resource Officers.
Integrated Stewardship Area (ISA)	An area where multiple land uses (such as cultural practices, recreation, wildlife habitat, and industrial activity) occur alongside one another. Sub-designations (ISA 1 to 4) reflect relative tolerance for development footprint, with ISA 4 having the highest tolerance.
Landscape Management Unit	A discrete area of land defined as part of a regional land use plan. LMUs are based on human use, ecological properties, identified land use issues, and natural features.
Linear Feature Density (LFD)	The total length of all human-created linear features (that is, roads, seismic lines, trails) over 1.5 m in width, as a proportion of area. Measured as kilometres of linear features per square kilometre of area (km/km^2). Calculated linear feature density is the published LFD value for an LMU minus any reclamation as per the reclamation framework (Section 3.11).
Monitoring (cumulative effects)	Knowledge gathering related to indicators that informs assessment.
Permanent Infrastructure	Fundamental facilities, systems, and assets that support a community, economy, or region's functioning and are built to be long-lasting.
Precautionary Principle	When human or environmental health is at risk, proactive steps must be taken to prevent harm, even in the absence of full scientific certainty.
Reclamation	The act of intentionally influencing ecosystem development after disturbance.
Reclamation Framework	A flexible and transparent tool to assess the progress and quality of reclamation efforts for each value in the Region.
Resilience	The capacity of interconnected social, economic, and ecological systems to cope with a hazardous event, trend, or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure. Resilience is a positive attribute when it maintains capacity for adaptation, learning, and/or transformation.
Response (cumulative effects)	Actions that limit, stop, or reverse negative effects on a value and/or increase positive effects.

Riparian	Of the shoreline and nearby land along flowing water (streams, rivers, and so on). Used to describe zones or areas with specific types of vegetation and soils, influenced by moving water and related processes.
Special Management Area (SMA)	A Plan designation for areas that are intended to be formally planned through Chapter 10 processes at a later date.
Stressor	An environmental or societal factor that affects a value, positively or negatively.
Surface Disturbance (SD)	The percentage of area physically disturbed by human activities visible in available satellite imagery, excluding linear features. Calculated surface disturbance is the published SD value for an LMU minus any reclamation as per the reclamation framework (Section 3.11).
Sustainable Development	Beneficial socio-economic change that does not undermine the ecological and social systems upon which communities and societies are dependent (THFA S.11.4.5.9).
Threshold (cumulative effects)	The level at which an indicator measure triggers a change in management responses. Can refer to a type of threshold (for example, cautionary, critical) or an actual metric (for example, the critical threshold for surface disturbance for LMU 18 is 4%). Used in the Plan to refer to a management threshold, which can be based on but is distinct from a system threshold (for example, level of disturbance at which caribou avoid an area).
Value	An element of the land, or a relationship or system dependent on the land, that is important to people in the Region. Values often contribute to the integrity and well-being of communities, the environment, and/or economies.
Values-based Reclamation	Reclamation that aims to restore landscapes with the goal of supporting a specific value. For example, if the priority value in an area is Caribou, values-based reclamation will aim to restore functional caribou habitat.
Well-being	The presence of the highest possible quality of life in its full breadth of expression, focused on, but not necessarily exclusive to: good living standards, robust health, a sustainable environment, vital communities, an educated populace, balanced time use, high levels of democratic participation, and access to and participation in leisure and culture. (174)
Withdrawal (of land)	A land area that is not available, either permanently or temporarily, for land disposition, oil and gas and/or mineral exploration activities. Land withdrawals are enacted or terminated by an Order-in-Council from the Government of Yukon.

9

References



Artwork: Darcy Tara McDiarmid

1. Hedlund-de Witt A, Center for Environmental Philosophy, The University of North Texas. World-views and Their Significance for the Global Sustainable Development Debate: Environmental Ethics. 2013;35(2):133 to 62.

2. Yukon First Nations. Yukon First Nations Heritage Framework. 2012.

3. Winton A. Łuk Cho Anay. Tr'ondëk Hwëch'in Government; 2015.

4. Mantyka-Pringle C, Beaumont J, Clarke C, Ayoub N, Kortsalo P, Saal S, et al. Walking in two worlds: insights from implementing a Tr'ondëk Hwëch'in approach to bridging knowledge systems in conservation and land use planning. Ecology and Society [Internet]. 2025;30(2). Available from: *ecologyandsociety.org/vol30/iss2/art22/*.

5. Gonet J. Worldview violence and Non-Human People in (conservation) science. Ecology and Society [Internet]. 2024;29(4). Available from: *ecologyandsociety.org/vol29/iss4/art11/*.

6. Dobrowolsky H. Hammerstones: A History of the Tr'ondëk Hwëch'in. second. Tr'ondëk Hwëch'in; 2014.

7. Winton A. Tr'ondëk Hwëch'in Governance, Law, and Cosmology. Tr'ondëk Hwëch'in Heritage Department; 2019.

8. Truth and Reconciliation Commission of Canada. What We Have Learned: Principles of Truth and Reconciliation. Winnipeg: Truth and Reconciliation Commission of Canada; 2015.

9. Dawson Regional Planning Commission. Draft Plan [Internet]. 2021. Available from: *dawson.planyukon.ca*.

10. Dawson Regional Planning Commission. Recommended Plan [Internet]. 2022. Available from: *dawson.planyukon.ca*.

11. North Yukon Planning Commission. North Yukon Regional Land Use Plan [Internet]. 2009. Available from: *planyukon.ca*.

12. Peel Watershed Planning Commission. Peel Watershed Regional Land Use Plan [Internet]. 2019. Available from: *planyukon.ca*.

13. Campbell J, Fletcher E, Hammer TJ. The Forty Mile, Fort Cudahy, and Fort Constantine Historic Site Management Plan. Tr'ondëk Hwëch'in First Nation 2006.

14. Dawson Forest Management Planning Team. Dawson Forest Resources Management Plan [Internet]. Government of Yukon; 2013. Available from: *Yukon.ca/sites/default/files/emr/emr-dawson-forest-resources-management-plan.pdf*.

15. World Heritage Advisory Committee. Tr'ondëk–Klondike Management Plan. UNESCO World Heritage Convention; 2020.

16. Tombstone Territorial Park Steering Committee. Tombstone Territorial Park Management Plan [Internet]. Yukon Parks; 2009. Available from: *Yukon.ca/sites/default/files/env/env-tombstone-territorial-park-management-plan.pdf*.

17. Roots CF, Smith CAS, Meikle JC. Ecoregions of the Yukon Territory: biophysical properties of Yukon landscapes. Summerland, B.C.: Agriculture and Agri-Food Canada, Research Branch; 2004.

18. Grods J, Francis S, Meikle JC, Lapointe A. Regional Ecosystems of West-Central Yukon, Part 1: Ecosystem descriptions. West Kelowna, BC; 2012.

19. Bond JD. Analyses of regional wetland distribution using predictive ecosystem mapping data sets for west-central Yukon and east-central Alaska. 2018.

20. Hart C. The Geological Framework of the Yukon Territory. Yukon Territory, Canada: Yukon Geological Survey; 2001 p. 11.

21. Government of Yukon. Watersheds - 1M [Internet]. Yukon Territory, Canada: Geomatics Yukon; 2016. Available from: *yukon.maps.arcgis.com/home/item.html?id=315d9f7048554bb8b91ad18cb27ec14e*.

22. Turcotte B, Saal S. Flooding in Dawson City: Exposure analysis and risk reduction recommendations [Internet]. Yukon Territory, Canada: YukonU Research Centre; 2022 p. 90. Available from: *yukonu.ca/sites/default/files/inline-files/Final_report_flooding_Dawson_CS-YRC.pdf*.

23. Environment and Climate Change, Government of Canada. Flooding events in Canada: Yukon [Internet]. 2009. Available from: *canada.ca/en/environment-climate-change/services/water-overview/quantity/floods/events-yukon.html*.

24. Environment and Climate Change Canada. Canadian Climate Normals 1991-2020 Data [Internet]. 1991. Available from: *climate.weather.gc.ca/climate_normals/results_1991_2020_e.html?searchType=stnProv&lstProvince=YT&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=422000000&dispBack=0*.

25. Perrin A, Jolkowski D. Yukon Climate Change Indicators and Key Findings 2022 [Internet]. Yukon University: YukonU Research Centre; 2022 p. 126. Available from: *yukonu.ca/sites/default/files/inline-files/Indicators2022_FinalReport_Oct2022.pdf*.

26. Mack MC, Walker XJ, Johnstone JF, Alexander HD, Melvin AM, Jean M, et al. Carbon loss from boreal forest wildfires offset by increased dominance of deciduous trees. Science. 2021;372(6539):280–3.

27. Baltzer JL, Day NJ, Walker XJ, Greene D, Mack MC, Alexander HD, et al. Increasing fire and the decline of fire adapted black spruce in the boreal forest. Proc Natl Acad Sci U S A. 2021;118(45):e2024872118.

28. Roy LP, Laxton S. Dawson City Landscape Hazards: Geoscience Mapping for Climate Change Adaptation Planning.

29. Palm EC, Suitor MJ, Joly K, Herriges JD, Kelly AP, Hervieux D, et al. Increasing fire frequency and severity will increase habitat loss for a boreal forest indicator species. Ecological Applications. 2022;32(3):e2549.

30. McCoy VM, Burn CR. Potential Alteration by Climate Change of the Forest-Fire Regime in the Boreal Forest of Central Yukon Territory. Arctic. 2005;58(3):276–85.

31. Tr'ondëk Hwëch'in Government. Tr'ondëk Hwëch'in Ecological and Land Use Monitoring Plan: 2023-2025. Dawson, YT: Tr'ondëk Hwëch'in Department of Natural Resources; 2023 p. 41.

32. Government of Canada. *Species at Risk Act* [Internet]. Jan 26, 2022. Available from: *canada.ca/en/environment-climate-change/services/species-risk-public-registry/species-list.html*.

33. Parks Canada. Discovery Claim National Historic Site [Internet]. 2022. Available from: *parks.canada.ca/lhn-nhs/yt/klondike/culture/lhn-hns-disc*.

34. Government of Yukon. Community Statistics. 2023. Community Statistics - Dawson. Available from: *community-statistics.service.yukon.ca/pages/dawson*.

35. City of Dawson. Official Community Plan. City of Dawson; 2025.

36. Statistics Canada Government of Canada. Profile table, Census Profile, 2021 Census of Population - Dawson, Town (T) [Census subdivision], Yukon [Internet]. 2022.

37. Statistics Canada. Labour Force by Industry (Census 2021) [Internet]. 2022. Available from: *community-statistics.service.yukon.ca/datasets/yukon:labour-force-by-industry-census-2016/about*.

38. Bond JD, Lipovsky PS. Surficial geology, soils and permafrost of the northern Dawson range. Yukon Exploration and Geology. 2011;19–32.

39. Natural Resources Canada. Total Mineral Resource Development, Province and Territory, 2016 [Internet]. Natural Resources Canada; 2025. Available from: *natural-resources.canada.ca/our-natural-resources/minerals-mining/mining-data-statistics-and-analysis/25093*.

40. van Loon S. Yukon placer mining 2024 development and exploration overview.

41. Yukon Bureau of Statistics. Placer Miners Survey Report, 2023 [Internet]. Yukon Territory, Canada: Government of Yukon; 2023 p. 32. Available from: *Yukon.ca/sites/default/files/ybs/fin-placer-miners-survey-report-2023.pdf*.

42. Lewis LL, Relf C. Yukon critical minerals inventory, 2021. Yukon Territory, Canada: Yukon Geological Survey; 2021 p. 84. Report No.: 23.

43. Yukon Agriculture State of the Industry Report 2010-2011-2012 [Internet]. Yukon Territory: Government of Yukon, Department of Energy, Mines and Resources, Agriculture Branch; Available from: *emrlibrary.gov.yk.ca/agriculture/state_of_the_industry/2010-2012.pdf*.

44. Klondike Development Organization, Klondike Farmers Forum. Report on Klondike Agriculture Production and Development Potential [Internet]. Dawson City, Yukon: Klondike Development Organization; 2025 p. 27. Available from: *klondikedevelopment.com/wp-content/uploads/2025/07/Report-on-Klondike-Agriculture-Prodn-and-Devt-2025.pdf*.

45. Kermode Consulting. Multi-Year Development Options for Yukon Agriculture [Internet]. Yukon Territory, Canada: Government of Yukon; 2022. Available from: *Yukon.ca/sites/default/files/emr/multi-year_development_options_for_yukon_agriculture.pdf*.

46. Yukon Bureau of Statistics. Tourism Employment [Internet]. Yukon Bureau of Statistics; 2019. Available from: Yukon.ca/sites/default/files/ybs/pthrm_tourism_19.pdf.

47. Klondike Visitors Association. Dawson City Yukon. [cited 2025 Nov 17]. See & Do. Available from: *dawsoncity.ca/see-do-new*.

48. Yukon Environmental Socioeconomic Assessment Board. YESAB Project 2023-0150 Callison Generating Station (Project Description) [Internet]. 2023. Available from: *yesabregistry.ca/projects/2f99d542-ff3a-4307-b98c-3384c488a245*.

49. Klondike Development Organization [Internet]. [cited 2025 Sept 29]. Klondike Development Organization. Available from: *klondikedevelopment.com*.

50. Yukon Environmental Socioeconomic Assessment Board. Decision Document - Callison Generating Station Project. 2023.

51. Government of Canada. Government of Canada. 2018. Climate change concepts. Available from: *canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services/basics/concepts.html*.

52. Government of Yukon. What causes climate change [Internet]. Available from: *our-clean-future.Yukon.ca/climate-change-yukon/what-causes-climate-change*.

53. Government of Yukon. Our Clean Future [Internet]. Available from: *our-clean-future.Yukon.ca/sites/default/files/2023-10/env-our-clean-future.pdf*.

54. Streicker J. Yukon Climate Change Indicators and Key Findings 2015. Whitehorse, Yukon: Northern Climate ExChange, Yukon Research Centre, Yukon College; 2016.

55. Box JE, Colgan WT, Christensen TR, Schmidt NM, Lund M, Parmentier FJW, et al. Key indicators of Arctic climate change: 1971–2017. Environ Res Lett. 2019 Apr 8;14(4):045010.

56. Government of Yukon. Interim State of the Environment Report 2024 [Internet]. Yukon Territory, Canada: Government of Yukon; 2024 p. 71. Available from: *Yukon.ca/sites/default/files/env/env-state-of-the-environment-interim-report-2024.pdf*.

57. National Round Table on the Environment and the Economy. True north: adapting infrastructure to climate change in Northern Canada. Ottawa: National Round Table on the Environment and the Economy; 2009.

58. Hennessey R, Jones S, Swales S, Duerden F. Dawson Climate Change Adaptation Plan [Internet]. Northern Climate ExChange, Yukon Research Centre, Yukon College; 2011. Available from: *yukonu.ca/sites/default/files/inline-files/Dawson_CAP_final_2011.pdf*.

59. Calvin K, Dasgupta D, Krinner G, Mukherji A, Thorne PW, Trisos C, et al. IPCC, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Internet]. First. Geneva, Switzerland: Intergovernmental Panel on Climate Change (IPCC); 2023 July [cited 2025 Aug 5]. Available from: *ipcc.ch/report/ar6/syr*.

60. Indigenous Circle of Experts. We Rise Together: The Indigenous Circle of Experts' Report and Recommendations.

61. Government of Canada, Government of Yukon. Yukon Northern Affairs Program devolution transfer agreement between the Government of Canada and the Government of the Yukon. Ottawa: Indian and Northern Affairs Canada; 2001. p.228.

62. UN General Assembly. United Nations Declaration on the Rights of Indigenous Peoples. Oct 2, 2007.

63. Marine Plan Partnership for the North Pacific Coast (MaPP). A Framework for the assessment and management of cumulative effects on the North Pacific Coast. 2020.

64. BC Environmental Assessment offices. Guidelines for the selection of valued component. 2013.

65. Metlakatla Stewardship Society. Metlakalta Cumulative Effects Management: Methods, results, and future direction of a First Nation-led CEM program [Internet]. Prince Rupert, Canada; 2019. Available from: *metlakatlacem.ca*.

66. Johnstone JF, Allen CD, Franklin JF, Frelich LE, Harvey BJ, Higuera PE, et al. Changing disturbance regimes, ecological memory, and forest resilience. Frontiers in Ecol & Environ. 2016 Sept;14(7):369–78.

67. Dawson Regional Planning Commission. Exploring the Cumulative Effects of Future Land Use in the Dawson Planning Region. 2022 Sept.

68. Gann GD, McDonald T, Walder B, Aronson J, Nelson CR, Jonson J, et al. International principles and standards for the practice of ecological restoration. Second edition. Restoration Ecology [Internet]. 2019;27(S1). Available from: *onlinelibrary.wiley.com/doi/10.1111/rec.13035*.

69. Young RE, Gann GD, Walder B, Liu J, Cui W, Newton V, et al. International principles and standards for the ecological restoration and recovery of mine sites. Restoration Ecology. 2022 Nov;30(S2):e13771.

70. Government of Yukon. North Klondike Highway Interpretive Plan 2004 [Internet]. Government of Yukon; 1996. Available from: *Yukon.ca/sites/default/files/tc-north-klondike-highway-interpretive-plan.pdf*.

71. Yukon Conservation Society. Yukon South Beringia Priority Place Initiative. Yukon South Beringia Priority Place Initiative. Available from: *yukonsouthberingia.ca/yukon-south-beringia*.

72. Government of Yukon. Top of the World Highway Interpretive Plan [Internet]. 2019. Available from: *Yukon.ca/sites/default/files/tc/tc-top-of-the-world-highway-interpretive-plan_0.pdf*.

73. Government of Yukon. Flying in Sheep Country. Whitehorse, Yukon; 2002.

74. Government of Yukon. Flying in Caribou Country. Whitehorse, Yukon; 2010.

75. UNESCO World Heritage Centre. UNESCO World Heritage Centre. 2023. Tr'ondëk–Klondike. Available from: *whc.unesco.org/en/list/1564*.

76. Tr'ondëk Hwëch'in Government. *Tr'ondëk Hwëch'in Heritage Act*. Aug 28, 2016.

77. Yukon First Nations. Yukon First Nations Heritage Management Framework (Draft). Yukon First Nations; 2012.

78. Carcross/Tagish First Nation, Champagne and Aishihik First Nations, Ta'an Kwach'an Council, Tr'ondëk Hwëch'in, Sheila Greer, Catherine Bell. Yukon First Nations Heritage Values and Resource Management: Perspectives from Four Yukon First Nations [Internet]. Yukon First Nations Heritage Values and Resource Management: Perspectives from Four Yukon First Nations; 2015. Available from: *sfu.ca/ipinch/sites/default/files/resources/reports/yfn_ipinch_report_2016.pdf*.

79. Tr'ondëk Hwëch'in Government. *Tr'ondëk Hwëch'in Land and Resources Act* [Internet]. 2004. Available from: *trondek.b-cdn.net/wp-content/uploads/2024/05/Land-and-Resources-Act-With-Regulations.pdf*.

80. Reclaiming power and place: the final report of the National Inquiry into Missing and Murdered Indigenous Women and Girls. Ottawa: Privy Council Office; 2019.

81. Liard Aboriginal Women's Society. Never Until Now: Indigenous & racialized women's experiences working in Yukon and northern British Columbia mine camps [Internet]. Watson Lake, Yukon; 2021 Aug. Available from: *liardaboriginalwomen.ca/index.php/resources/about-3/reports/109-laws-mining-final-report/file*.

82. Vector Research, Hanson and Associates, Jen Jones Consulting. Evaluation of the effects of industrial activities on the personal safety of Indigenous and non-Indigenous women and girls and LGBTQ2S+ persons [Internet]. Yukon Environmental Socioeconomic Assessment Board; 2022. Available from: *yesab.ca/wp-content/uploads/2023/08/20220425_Personal-Safety-Literature-Review.pdf*.

83. The Yukon Advisory Committee on MMIWG2S+. Implementation Plan: Yukon's Missing and Murdered Indigenous Women, Girls and Two-Spirit+ People Strategy [Internet]. Government of Yukon; 2023. Available from: *Yukon.ca/sites/default/files/wged/wged-implementation-plan-changing-the-story-upholding-dignity-justice.pdf*.

84. Wang H, He G. Rivers: Linking nature, life, and civilization. River. 2022;1(1):25–36.

85. Clarke M. Hydrological processes and landscape formation by rivers. African Journal of Geography and Regional Planning. 2024;11(1):1–2.

86. Department of Environment, Government of Yukon. Yukon Wildlife Key Area Inventory User's Manual. 2014 Apr.

87. Eckert CD, Grünberg H, Sinclair P. Checklist of the Birds of Whitehorse [Internet]. Government of Yukon; 2017. Available from: *Yukon.ca/sites/default/files/env/env-checklist-birds-whitehorse.pdf*.

88. The State of Canada's Birds. Birds Canada and Government of Canada (ECCC); 2024.

89. Government of Yukon. Yukon freshwater fishes [Internet]. Government of Yukon; 2019. Available from: *Yukon.ca/sites/default/files/env/env-yukon-freshwater-fishes.pdf*.

90. Parks Canada. Government of Canada. 2019. Beavers: 5 ways beavers keep our ecosystems healthy. Available from: *parks.canada.ca/pn-np/mb/riding/nature/animals/mammals/castors-beavers*.

91. Yukon Grizzly Bear Conservation and Management Plan Working Group. Conservation Plan for Grizzly Bears in Yukon [Internet]. Government of Yukon; 2019. Available from: *Yukon.ca/sites/default/files/env/env-conservation-plan-grizzly-bears.pdf*.

92. Vanbergen AJ. Threats to an ecosystem service: pressures on pollinators. Frontiers in Ecology and the Environment. 2013;11(5):251–9.

93. Department of Environment. Science-based guidelines for management of Thinhorn Sheep in Yukon [Internet]. Government of Yukon; 2019. Available from: *Yukon.ca/sites/default/files/env/env-science-based-guidelines-management-thinhorn-sheep-yukon.pdf*.

94. Rehm EM, Olivas P, Stroud J, Feeley KJ. Losing your edge: climate change and the conservation value of range□edge populations. Ecol Evol. 2015 Sept 14;5(19):4315–26.

95. Government of Yukon. Conservation Data Centre. 2024. Find species data. Available from: *Yukon.ca/en/species-data#nav-view-conservation-data-centre-data*.

96. Yukon Conservation Society. Yukon South Beringia Priority Place. Yukon South Beringia. Available from: *yukonsouthberingia.ca/yukon-south-beringia*.

97. Kraus D, Enns A, Hebb A, Murphy S, Drake DAR, Bennett B. Prioritizing nationally endemic species for conservation. Conservation Science and Practice. 2023;5(1):e12845.

98. Committee on the Status of Endangered Wildlife in Canada. Committee on the Status of Endangered Wildlife in Canada. 2025. Cosewic - About us. Available from: *cosewic.ca/index.php/en/about-us.html*.

99. Environment and Climate Change Canada. Accord for the Protection of Species at Risk [Internet]. Government of Canada; 2014. Available from: *canada.ca/en/environment-climate-change/services/species-risk-act-accord-funding/protection-federal-provincial-territorial-accord.html*.

100. Government of Yukon. Protecting Yukon's species-at-risk and their habitats [Internet]. Government of Yukon; Available from: *Yukon.ca/sites/default/files/env/env-protecting-yukon-species-at-risk-and-habitats_0.pdf*.

101. Government of Yukon. Yukon species-at-risk [Internet]. 2025. Available from: *Yukon.ca/en/science-and-natural-resources/fish-and-wildlife-species/yukon-species-risk*.

102. Fisheries and Oceans Canada. Freshwater Timing Windows Identified for the Yukon [Internet]. 2013. Available from: dfo-mpo.gc.ca/pnw-ppe/timing-periodes/yk-eng.html.

103. Pacific Salmon Foundation. Yukon State of Salmon, 2024 Report [Internet]. Available from: *stateofsalmon.psf.ca*.

104. Fisheries and Oceans Canada. Pacific Region integrated fisheries management plan, July 1, 2024-June 30, 2025, Yukon River, Yukon Territory, chinook, chum, and coho. Vancouver; 2024 p. 118.

105. Naiman RJ, Bilby RE, Schindler DE, Helfield JM. Pacific Salmon, Nutrients, and the Dynamics of Freshwater and Riparian Ecosystems. Ecosystems. 2002 June 1;5(4):399–417.

106. Larocque A, Simard SW. Legacy of salmon-derived nutrients on riparian soil chemistry and soil fertility on the Central Coast of British Columbia, Canada. Front For Glob Change [Internet]. 2023 Dec 19;6. Available from: *frontiersin.org/journals/forests-and-global-change/articles/10.3389/ffgc.2023.1010294/full*.

107. Moncrieff C., How People of the Yukon River Value Salmon.

108. Yukon River Panel. Yukon River Salmon Agreement Handbook [Internet]. Yukon River Panel; 2005. Available from: *yukonsalmon.org/wp-content/uploads/Yukon-River-Salmon-Agreement-Handbook.pdf*.

109. Murdoch A, Connors BM, Lapointe NWR, Mills Flemming J, Cooke SJ, Mantyka-Pringle C. Multiple environmental drivers across life stages influence Yukon River Chinook salmon productivity. Can J Fish Aquat Sci. 2024 Jan;81(1):97–114.

110. Cunningham CJ, Westley PAH, Adkison MD. Signals of large-scale climate drivers, hatchery enhancement, and marine factors in Yukon River Chinook salmon survival revealed with a Bayesian life history model. Global Change Biology. 2018;24(9):4399–416.

111. Crozier LG, Burke BJ, Chasco BE, Widener DL, Zabel RW. Climate change threatens Chinook salmon throughout their life cycle. Commun Biol. 2021 Feb 18;4(1):222.

112. Seitz AC, Courtney MB, Evans MD, Manishin K. Pop-up satellite archival tags reveal evidence of intense predation on large immature Chinook salmon (Oncorhynchus tshawytscha) in the North Pacific Ocean. Can J Fish Aquat Sci. 2019 Sept;76(9):1608–15.

113. Neuswanger JR, Wipfli MS, Evenson MJ, Hughes NF, Rosenberger AE. Low productivity of Chinook salmon strongly correlates with high summer stream discharge in two Alaskan rivers in the Yukon drainage. Can J Fish Aquat Sci. 2015 Aug;72(8):1125–37.

114. Pentz SB, Kostaschuk RA. Effect of placer mining on suspended sediment in reaches of sensitive fish habitat. Environmental Geology. 1999 Jan 1;37(1):78–89.

115. Greig SM, Sear DA, Carling PA. The impact of fine sediment accumulation on the survival of incubating salmon progeny: Implications for sediment management. Science of The Total Environment. 2005 May 15;344(1):241–58.

116. Merz JE, Brown RA, Sellheim K, Zeug SC. Disruption of natural disturbance regime decouples habitat and life stage in a keystone species. Ecosphere. 2024;15(10):e70017.

117. Government of Canada, Fisheries and Oceans Canada. Government of Canada. 2024. Yukon River chinook salmon 2024 to 2030. Available from: *pac.dfo-mpo.gc.ca/fm-gp/salmon-saumon/yukon-chinook-agreement-quinnat-accord/index-eng.html*.

118. The Yukon River Panel. The Yukon River Panel. [cited 2025 Nov 5]. About Us. Available from: *yukonriverpanel.com/about-us/yukon-river-panel*.

119. Yukon First Nations Salmon Stewardship Alliance. Yukon First Nations Salmon Stewardship Alliance. 2024. About - Yukon First Nations Salmon Stewardship Alliance. Available from: *yfnssa.ca/about*.

120. Yukon Water Board. Yukon Water Board. 2025. About us | Yukon Water Board. Available from: *yukonwaterboard.ca/about-us*.

121. Yukon Placer Water Quality Working Group. Fish Habitat Management System for Yukon Placer Mining: Water Quality Objectives Monitoring Protocol [Internet]. Yukon Placer Secretariat; 2008. Available from: *emrlibrary.gov.yk.ca/placer_secretariat/fish_habitat_management_system/water_quality_objectives_monitoring_protocol_nov08.pdf*.

122. The Yukon Placer Aquatic Health Working Group. Fish Habitat Management System for Yukon Placer Mining: Aquatic Health Monitoring Protocol [Internet]. Yukon Placer Secretariat; 2008 [cited 2025 June 12]. Available from: *emrlibrary.gov.yk.ca/placer_secretariat/fish_habitat_management_system/aquatic_health_monitoring_protocol.pdf*.

123. The Yukon Placer Economic Health Working Group. Fish Habitat Management System for Yukon Placer Mining: Economic Health Monitoring Protocol [Internet]. Yukon Placer Secretariat; 2008 [cited 2025 June 12]. Available from: *emrlibrary.gov.yk.ca/placer_secretariat/fish_habitat_management_system/economic_health_monitoring_protocol_Nov_2008.pdf*.

124. Olson E, Nelitz M, Hall A. Review and Evaluation of Adaptive Management in the Fish Habitat Management System for Yukon Placer Mining. Government of Yukon Department of Energy, Mines and Resources; 2020.

125. Fisheries and Oceans Canada. Evaluation of the reference condition approach for Yukon placer mining monitoring [Internet]. Fisheries and Oceans Canada; 2018. Available from: *waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/40761289.pdf*.

126. Yukon Placer Secretariat. Implementation Status Review of the Fish Habitat Management System Summary 2017 [Internet]. Yukon Placer Secretariat; 2017. Available from: *emrlibrary.gov.yk.ca/placer_secretariat/implementation-status-review-of-the-fish-habitat-management-system-summary-2017.pdf*.

127. Environment and Climate Change Canada. Government of Canada. National Long-term Water Quality Monitoring Data - Open Government Portal. Available from: *open.canada.ca/data/en/dataset/67b44816-9764-4609-ace1-68dc1764e9ea*.

128. Yukon Department of Environment. Science-based guidelines for management of moose in Yukon. Yukon Territory, Canada; 2016. Report No.: MR-16-02.

129. Ayotte JB, Parker KL, Arocena JM, Gillingham MP. Chemical composition of lick soils: Fucntions of soil ingestion by four ungulate species. Journal of Mammalogy. 2006 Oct;87(5):878–88.

130. Tape K, Sturm M, Racine C. The evidence for shrub expansion in Northern Alaska and the Pan□Arctic. Global Change Biology. 2006 Apr;12(4):686–702.

131. Kutz SJ, Jenkins EJ, Veitch AM, Ducrocq J, Polley L, Elkin B, et al. The Arctic as a model for anticipating, preventing, and mitigating climate change impacts on host–parasite interactions. Veterinary Parasitology. 2009 Aug;163(3):217–28.

132. Parks Canada. Government of Canada. 2025. National Program for Ecological Corridors - Nature and science. Available from: *parks.canada.ca/nature/science/conservation/corridors-ecologiques-ecological-corridors*.

133. Wildland Fire Management. Dawson City Community Wildfire Protection Plan [Internet]. Government of Yukon; 2024. Available from: *Yukon.ca/sites/default/files/2024-12/Dawson_CWPP_2024_Final.pdf*.

134. Energy, Mines and Resources. 2022 Yukon forest health report. Yukon Territory, Canada: Government of Yukon; Report No.: ISSN 1708-9360.

135. Ducks Unlimited Canada. Ducks Unlimited Canada Dawson Wetland Mapping: Statistics & Maps [Internet]. 2021. Available from: *dawson.planyukon.ca/resource-assessment-report-2020-final/wetlands-overview-dawson-region-duc/?layout=file*.

136. Conlisk E, Chamberlin L, Vernon M, Dybala K. Carbon data for: Evidence for the Multiple Benefits of Wetland Conservation in North America [Internet]. Point Blue Conservation Science; 2022. Available from: *nrdc.org/sites/default/files/evidence-multiple-benefits-wetlands-conservation-report-202301.pdf*.

137. Harris LI, Richardson K, Bona KA, Davidson SJ, Finkelstein SA, Garneau M, et al. The essential carbon service provided by northern peatlands. Frontiers in Ecology and the Environment. 2022;20(4):222–30.

138. Ducks Unlimited Canada. Yukon Wetland Field Guide. 1st ed. Edmonton, AB; 2024.

139. Yukon Water Board. Public Interest Hearing on Placer Mining Wetlands Report [Internet]. Yukon Water Board; 2021. Available from: *yukonwaterboard.ca/sites/default/files/2024-05/Public%20Interest%20Hearing%20on%20Placer%20Mining%20Wetlands%20Report%202021-08-24%20%28large%29.pdf*.

140. Government of Yukon. A policy for the stewardship of Yukon's wetlands [Internet]. Government of Yukon; 2022. Available from: *Yukon.ca/sites/default/files/env/env-policy-for-stewardship-of-yukons-wetlands.pdf*.

141. Yukon Bureau of Statistics. Yukon Resident Perceptions of Tourism Survey Report [Internet]. Yukon Territory, Canada: Government of Yukon; 2021. Available from: *open.Yukon.ca/information/39a7dea2-5728-473a-8729-7e2482adddfd/resource/438697c9-9fc3-3949-ae34-8f1f60e1ba66/download/tc-tourism-perceptions-survey-2021-report.pdf*.

142. Geomatics Yukon. Outfitting Concessions - 250k [Internet]. 2021. Available from: *open.Yukon.ca/data/outfitting-concessions-250k*.

143. McDowell Group, Vector Research. Yukon Outfitters Socio-Economic Profile and Situational Analysis [Internet]. Government of Yukon; 2016. Available from: *emrlibrary.gov.yk.ca/EcDev/YOA_Socio-Economic_Profile.pdf*.

144. Milligan H. Licensed harvest trends in Yukon: 1980 to 2014. Yukon Territory, Canada: Government of Yukon; Report No.: MR-18-05.

145. Tr'ondëk Hwëch'in Government, Government Of The Yukon, Government of Canada. The Tr'ondëk Hwëch'in Final Agreement [Internet]. 2011 [cited 2025 July 25]. Available from: *rcaanc-cirnac.gc.ca/eng/1297209099174/1542826344768*.

146. Department of Energy, Mines and Resources. Dawson Forest Resources Management Plan - Annual Allowable Cut: Written Reasons for Determination [Internet]. Government of Yukon; 2021. Available from: *Yukon.ca/sites/default/files/emr/emr-dawson-annual-allowable-cut-written-reasons-determination.pdf*.

147. Department of Energy, Mines and Resources. West Dawson and Sunnydale Local Area Plan [Internet]. Government of Yukon; 2013. Available from: *Yukon.ca/sites/default/files/emr/emr-west-dawson-sunnydale-local-area-plan.pdf*.

148. Klondike Farmers Forum, Klondike Development Organization. Farming in the Klondike Survey Results [Internet]. Klondike Development Organization; 2024. Available from: *klondikedevelopment.com/wp-content/uploads/2025/02/2024_AgricultureKlondike_PresShare_Feb2025.pdf*.

149. Klondike Development Organization, Klondike Farmers Forum. Report on Klondike Agriculture Production and Development Potential. Dawson City, Yukon: Klondike Development Organisation; 2025.

150. Tr'ondëk Hwëch'in Government. Tr'ondëk Hwëch'in Government. 2024 [cited 2025 Nov 6]. Tr'ondëk Hwëch'in Farm. Available from: *trondek.ca/our-programs-services/wellness/thfarm*.

151. Upland Agricultural Consulting. Multi-year Development Options for Yukon Agriculture. 2022.

152. Department of Energy, Mines and Resources. Cultivating Our Future: 2020 Yukon Agriculture Policy [Internet]. Government of Yukon; Available from: *Yukon.ca/sites/default/files/emr/emr-cultivating-our-future-2020-yukon-agriculture-policy_0.pdf*.

153. Natural Resources Canada. Mining and mineral resource development in Canada [Internet]. 2011. Available from: *natural-resources.canada.ca/minerals-mining/canadian-mineral-exploration*.

154. Government of Yukon. Government of Yukon. 2022. Determine the class of your quartz mining exploration program. Available from: *Yukon.ca/en/doing-business/licensing/determine-class-your-quartz-mining-exploration-program*.

155. Paul Kishchuk. Yukon Placer Mining Economic Profile. Dawson City, Yukon: Klondike Placer Miners' Association; 2018.

156. Naber TV, Sack PJ. Yukon hardrock mining, development and exploration overview 2024.

157. Yukon Bureau of Statistics. Estimation of the Impact of Placer Mines on the Economy and Labour Market of Dawson City, Yukon [Internet]. Klondike Placer Miners' Association; 2021. Available from: *kpma.ca/wp-content/uploads/2023/03/Estimation-of-the-Impact-of-Placer-Mines-on-the-Economy-and-Labour-Market-of-Dawson-City-Yukon.pdf*.

158. Government of Yukon. New minerals legislation: condensed discussion paper. Government of Yukon; 2023.

159. *Placer Mining Act* [Internet]. SY 2003, c 13 2003. Available from: *laws.Yukon.ca/cms/images/LEGISLATION/PRINCIPAL/2003/2003-0013/2003-0013_2.pdf*.

160. van Loon S. Yukon placer mining 2024 development and exploration overview.

161. Syd Van Loon. Yukon Placer Exploration and Mining Overview. Yukon Geological Survey presented at: Yukon Geoscience Forum and Trade Show; 2025 Nov 17; Whitehorse, Yukon.

162. Yukon Water Board. Placer Water Licence And Class 4 Mining Land Use Approval Application Form [Internet]. Yukon Water Board; 2022. Available from: *yukonwaterboard.ca/sites/default/files/2024-07/Form%20-%20Placer%20Undertaking%20Application.pdf*.

163. Tourism and Culture. Best Management Practices for Fossils at Yukon Placer Mines [Internet]. Government of Yukon; 2014. Available from: *Yukon.ca/sites/default/files/tc/tc-best-practices-fossils-at-placer-mines.pdf*.

164. Yukon Chamber of Mines. Yukon Chamber of Mines. 2023. Yukon Mining 101. Available from: *yukonminers.org/yukon-mining-101*.

165. Legislative Services Branch. Yukon Territory Fishery Regulations [Internet]. June 23, 2023. Available from: *laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._854*.

166. *Oil and Gas Act* [Internet]. RSY 2002, c. 162 2002. Available from: *laws.Yukon.ca/cms/images/LEGISLATION/PRINCIPAL/2002/2002-0162/2002-0162.pdf*.

167. Hannigan PK. Petroleum resource assessment of the Kandik Basin, Yukon Territory, Canada -- Rev. Rev. Whitehorse: Dept. of Economic Development, Oil & Gas Resources Branch; 2000.

168. Government of Yukon. yukon-oil-and-gas-annual-report-2016 [Internet]. Yukon Territory, Canada: Energy, Mines, and Resources; 2016 p. 12.

169. New Era North Fork Hydro. New Era North Fork Hydro. 2021 [cited 2025 Oct 16]. New Era North Fork Hydro. Available from: *neweranorthfork.ca/history.html*.

170. Energy, Mines, and Resources. Yukon's energy context [Internet]. Government Of Yukon; 2018 [cited 2025 Oct 16]. Available from: *emrlibrary.gov.yk.ca/energy/emr-yukon-energy-context-2018.pdf*.

171. Klondike Development Organization. Klondike Development Organization. 2022. Dawson City Solar Project Connects to the Yukon electrical grid. Available from: *klondikedevelopment.com/dawson-city-solar-project-connects-to-the-yukon-electrical-grid*.

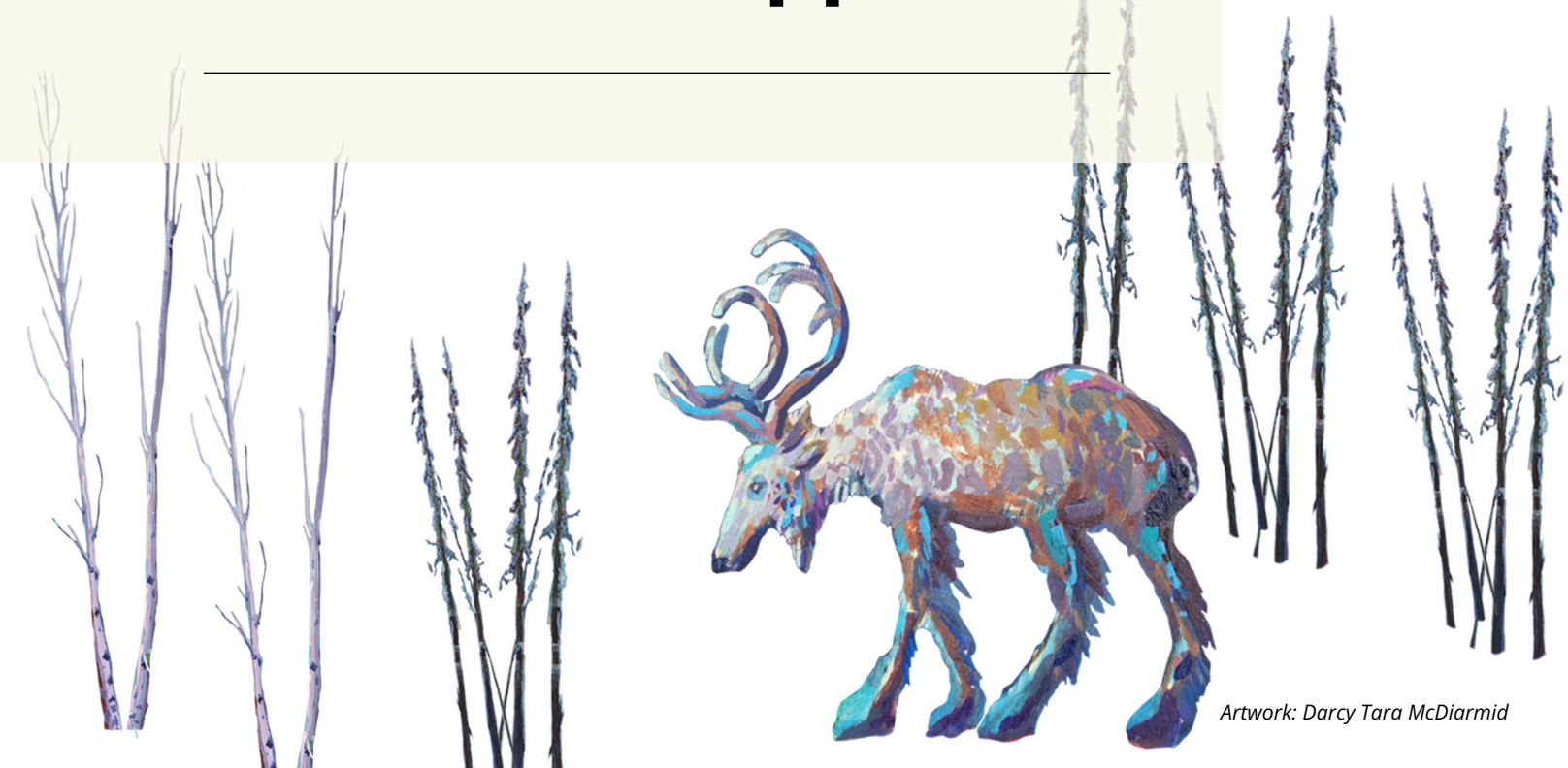
172. Yukon Environmental Socioeconomic Assessment Board. YESAB Registry. 2025. Biomass District Energy System. Available from: *yesabregistry.ca/projects/c717c8ca-ed5d-41cd-af22-72f5b872cf06*.

173. Yukon Environmental Socioeconomic Assessment Board. Policy Guidance: Regional land use plan considerations in YESAA project assessments [Internet]. Whitehorse, Yukon; 2024 Oct p. 14. Available from: *yesab.ca/wp-content/uploads/2024/10/2024-10-31-YESAB-Policy-Guidance-Regional-Land-use-Plan-Considerations-in-YESAA-Project-Assessments.pdf*.

174. Canadian Index of Wellbeing. How are Canadians Really Doing? The 2016 CIW Report. Waterloo, ON: Canadian Index of Wellbeing and University of Waterloo; 2016.

10

Appendix



Artwork: Darcy Tara McDiarmid

10.1
Recommended Resources

By its nature, a land use plan covers a wide variety of topics. It is not possible to provide detailed information on everything, so this section points Plan readers to a few key resources. In many cases, the Plan encourages awareness and education on different topics to enable better stewardship – this section is intended to support that.

This list is intentionally short. The bibliography provides a complete listing of references that contributed to the Plan, and offers many additional, relevant sources of information.

Tr'ondëk Hwëch'in Heritage, Culture, and History

The Tr'ondëk Hwëch'in government website (***trondek.ca***) is a good place to start to learn about Tr'ondëk Hwëch'in history, heritage, culture and modern governance. The Dänojä Zho Cultural Centre in Dawson City provides a more specific focus on Tr'ondëk Hwëch'in heritage. Attending or volunteering at cultural events like the Moosehide Gathering is another way to gain a better understanding of the Tr'ondëk Hwëch'in community and worldview.

Hän Language

The Yukon Native Language Centre provides free Hän language resources in written and audio formats (***ynlc.ca/han***). The Hän page of the First Voices website offers an interactive online resource for learning vocabulary (***firstvoices.com/han***).

Cumulative Effects

The framework in the Plan is based on two main influences, both of which present more realized examples of what the framework could, and hopefully will, become. Interested Plan users are encouraged to see how these frameworks are being implemented as inspiration for what cumulative effects management could look like in the Region.

The Metlakatla Cumulative Effects Management Program describes itself as a "first-of-its-kind Indigenous-led cumulative effects management program developed by the Metlakatla First Nation in 2014" (***metlakatlacem.ca***). The Marine Plan Partnership is a collaboration between seventeen First Nations and the Government of British Columbia that guides planning across the Nations' territories, including cumulative effects management (***mappocean.org***).

10.2
Tr'ondëk Hwëch'in Final Agreement

The Plan has been written to align with the spirit and intent of the Tr'ondëk Hwëch'in Final Agreement (THFA). The THFA guides the regional land use planning process specifically through Chapter 11 and defines objectives and requirements for many related processes. References to land use planning are also found outside Chapter 11, for example with respect to heritage considerations (Chapter 13) and development assessment (Chapter 12). The Commission considered many sections of the THFA in developing this Plan.

With respect to the Chapter 11 requirements for a Commission:

11.4.5 IN DEVELOPING A REGIONAL LAND USE PLAN, A REGIONAL LAND USE PLANNING COMMISSION:

11.4.5.3 Shall ensure adequate opportunity for public participation

Throughout the development of the Draft, Recommended, and Final Recommended plans, the Commission has been committed to ensuring Plan Partners and the public are aware of, informed about, and engaged in the planning process. They have used many tools to accomplish this, including public meetings, Plan Partner roundtables, surveys, workshops, school presentations, and radio broadcasts. The Commission has received and considered thousands of pages of input, as well as audio submissions, from the Parties, affected First Nations, Plan Partners, residents and the public.

11.4.5.4 Shall recommend measures to minimize actual and potential land use conflicts throughout the planning region

The Commission has provided many tools to minimize land use conflict, including their fundamental approach of "Nän käk ndä tr'ädäl" (On the Land We Walk Together), which is meant to encourage land users to consider and respect each other as well as the land itself. It is also intended to help people think about the land, resources, and water in an interconnected way. The Commission has further encouraged this through value-oriented management directions and cumulative effects management. LMU directions and priority values are also intended to reduce land use conflict by providing certainty and clarity.

11.4.5.5 Shall use the knowledge and traditional experience of Yukon Indian People, and the knowledge and experience of other residents of the planning region

Throughout the planning process, the Commission has sought both Traditional Knowledge and Western knowledge. A wealth of knowledge has been shared with the Commission. The Plan has adopted the concept of ancestral stewardship of the land, water, and resources as its inspiration, and has incorporated the Tr'ondëk Hwëch'in cultural pillars of respect, humility, and reciprocity throughout.

11.4.5.6 Shall take into account oral forms of communication and traditional land management practices of Yukon Indian People

The Commission includes Tr'ondëk Hwëch'in Citizens who have shared their intrinsic knowledge of the Region. Various approaches were used to support the inclusion of oral forms of communication, such as audio recordings and hosting tea circles. The Plan reflects Traditional Knowledge and practices by including Tr'ëhudè statements for each of the Landscape Management Units, requiring equity in consideration of Indigenous and Western knowledge, and upholding Tr'ondëk Hwëch'in's ancestral stewardship responsibilities.

11.4.5.7 Shall promote the well-being of Yukon Indian People, other residents for the planning region, the communities, and the Yukon as a whole, while having regard to the interests of other Canadians

The Commission wants all residents of, and visitors to, the Region to be able to see themselves in the Plan, while recognizing that the Plan will have wider impacts beyond the Yukon. This is exemplified in "Nän käk ndä tr'ädäl" (On the Land We Walk Together). Requiring co-management in line with the spirit and intent of the THFA is a way the Plan speaks to the well-being of all Tr'ondëk Hwëch'in and all Yukoners with a relationship to the Region. The inclusion of socio-cultural values like Community Culture and Community Resilience explicitly support an inclusive approach to well-being.

11.4.5.8 Shall take into account that the management of land, water and resources, including Fish, Wildlife and their habitats, is to be integrated

The Commission sees the land, water, fish, and wildlife as interconnected and has sought to give fish and wildlife a voice in the planning process. The Commission believes that a healthy economy and society are based on a foundation of healthy ecosystems. The Plan's tools and approaches facilitate integrated landscape management, especially through the requirement for co-management and joint decision-making among the Parties. Orienting management around values and adopting a cumulative effects framework further support integrated management.

11.4.5.9 Shall promote Sustainable Development

The Plan adopts sustainable development as one of its principles and values a Sustainable Local Economy based on activities that meet the THFA definition of sustainable. The Plan takes a multi-generational view and encourages long-term thinking that supports opportunities and a healthy environment for future generations. The cumulative effects and reclamation frameworks support sustainable development.

11.4.5.10 May monitor the implementation of the Approved Regional Land Use Plan, in order to monitor compliance with the Plan and to asess the need for amendment of the Plan

The Commission should have an active role in Plan implementation, as set out in the THFA and YESAA. Required and potential roles, along with the benefits of an active Commission, are described in Section 7.

10.3
Timeline/History of the Plan

The Dawson Regional Land Use Plan is one step in an ongoing relationship between the Tr'ondëk Hwëch'in and the Government of Yukon. A major aspect of this relationship is the stewardship of land and the management of human activities that affect land (meaning land, water, and all living beings). The land use planning process was signed into law in 1998 with the THFA, though the relationship began much earlier. The collaboration required to implement the Plan is intended to support a positive future relationship between these two governments.

Milestones

2006: Tr'ondëk Hwëch'in requests the establishment of a regional land use planning commission as per the THFA.

2011: The Commission is established.

2011 to 2014: The Commission publishes foundational documents, including an Interests and Issues Report (2011), a Resource Assessment Report (2013), and Plan Alternatives (2014).

2014: The Parties suspend the planning process until the legal proceedings relating to the Peel Watershed planning process are resolved (First Nation of Na-Cho Nyäk Dun v. Yukon, 2017 SCC58).

2019: Planning resumes with a new Commission, who crafts a new vision, updates foundational documents, and develops and implements a public engagement strategy. The Commission begins work on Draft Plan.

2021: The Commission releases the Draft Plan in June, and seek feedback from the Parties, Plan Partners, and the public, then begins work on the Recommended Plan.

2022: The Commission releases the Recommended Plan. The Parties engage with the public and Plan Partners.

2024: The Parties provide proposed modifications in April (Tr'ondëk Hwëch'in) and December (Government of Yukon).

2025: The Commission reviews the Parties' responses and crafts the Final Recommended Plan.

2026: The Commission releases the Final Recommended Plan in March.

10.4
Climate Change Models

In considering future climate change, it is important to use scenarios that outline a range of potential future greenhouse gas emissions pathways. This helps account for variability and uncertainty. Climate projections considered in the Plan include a moderate emissions reduction scenario (SSP245, Figure 16), and a "worst case" high emissions scenario (SSP585, Figure 17) where emissions continue to rise significantly.

Climate projections were extracted in September 2023 from climatedata.ca, the official source of climate projections for Canada. The data presented in Figure 16 and Figure 17 represent the median range of projections (10th to 90th percentiles) for two 30-year future periods (2041 to 2070 and 2071 to 2100), for two climate scenarios SSP245 and SSP285. Projections are expressed as changes compared to a 1971 to 2000 baseline.

Figure 16: Projected seasonal temperature changes for the 2040s under climate scenario SSP245 (Relative to 1971 to 2000 baseline).

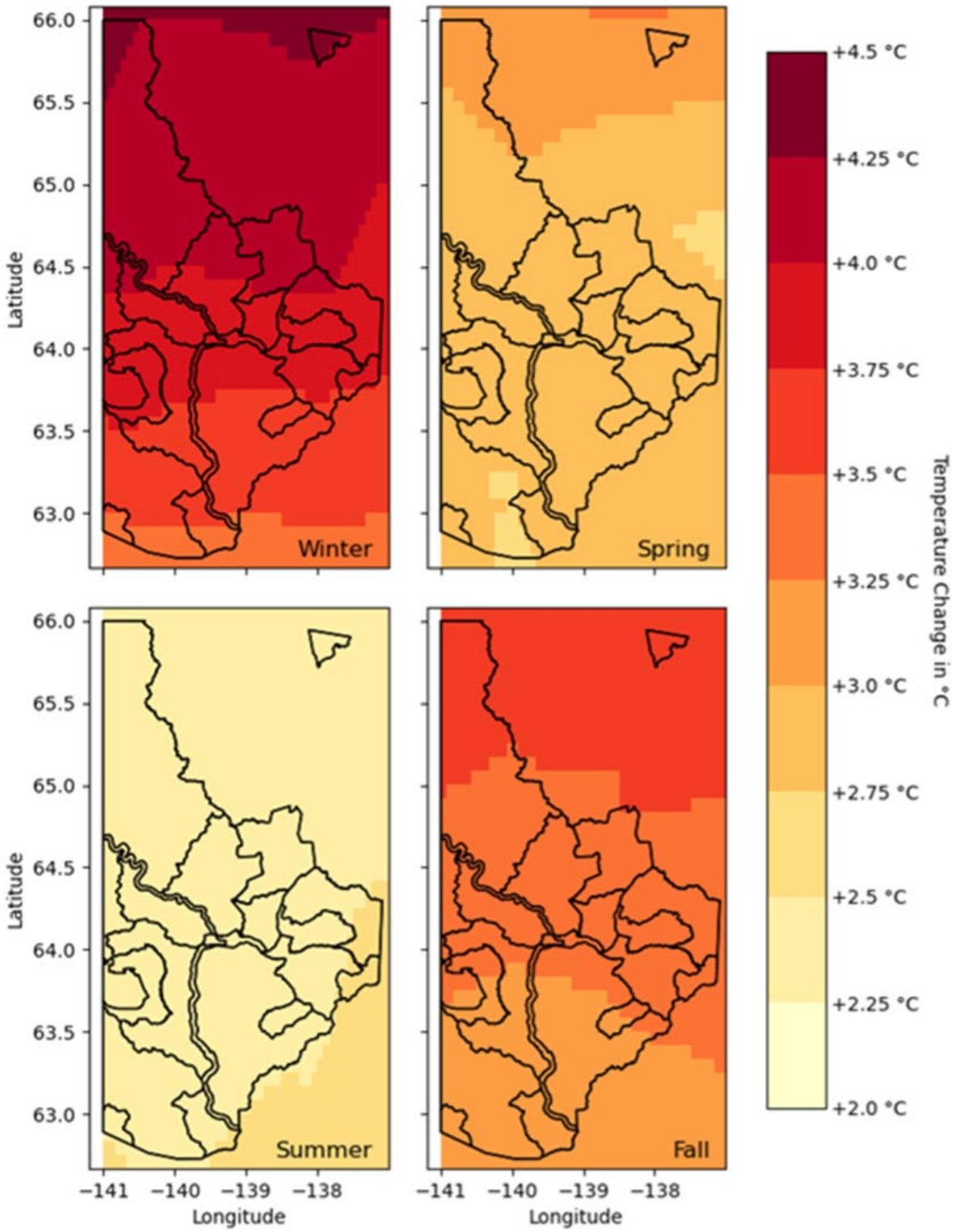
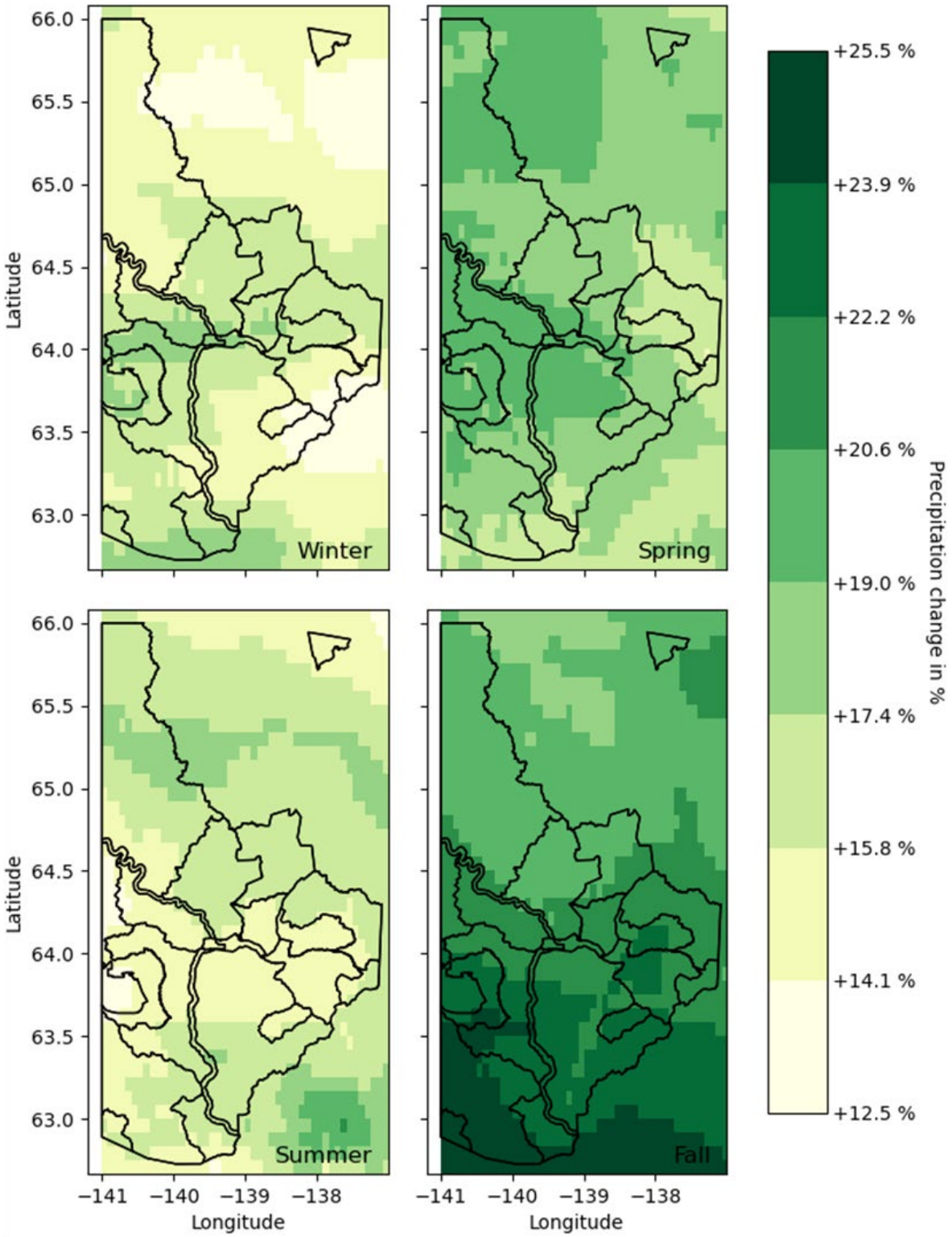


Figure 17: Projected seasonal precipitation changes for the 2040s under climate scenario SSP245 (Relative to 1971 to 2000 baseline).



10.5
Cumulative Effects Framework Development and Reporting

Much work is required to support effective cumulative effects management in the Region. Developing framework components for Plan values is a major part of this work. The Parties and other relevant bodies are encouraged to look to previous work in the Region, as well as research and programs elsewhere, to help guide this development. The following is a short list of recommended technical resources:

- Metlakatla Cumulative Effects Management program (***metlakatlacem.ca***) – provides detailed processes for component development with an accessible public interface, and is an example of a community- and First Nation-led program being implemented.
- Marine Plan Partnership (***mappocean.org/***) – provides detailed processes for component development, many resources, and examples of collaborative implementation between First Nations and non-First Nations governments.
- Exploring the Cumulative Effects of Future Land Use in the Dawson Planning Region (2022) – report prepared for the Commission by the Cumulative Effects Working Group. Provides initial work on indicators for Caribou and related socio-cultural values.
- Canadian Index of Wellbeing (***uwaterloo.ca/canadian-index-wellbeing***) – presents a suite of indicators relevant to socio-cultural and socio-economic values, with detailed technical resources.

To remain accountable and transparent, the Parties are directed to report annually on the progress of developing cumulative effects elements. The report should reference each value and include its health status, if known, along with:

- Any new indicators identified for a value
- Any new or adjusted thresholds
- Existing monitoring programs that may inform cumulative effects assessments of the value

Updates should describe work completed during the year and summarize the current status of components for each value. This information can be compared with the timeframes for framework development identified in Section 3 and used to inform assessment and refinement of the cumulative effects framework itself.

10.6
Development Footprint Indicators

Surface disturbance and linear feature density are the most fully developed indicators in the Plan. This section provides more details on monitoring requirements for these indicators to guide implementation, a visual comparison to assist Plan users in understanding what these numbers mean on the land, and indicator levels (as of 2020) that informed Plan development.

Indicator Monitoring Frequency

The following points-based system guides prioritizing LMUs for development footprint indicator updates (see also Section 3.6). The system lays out scoring for a variety of factors to be evaluated annually (Table 13). LMUs with higher scores require more frequent updates (Table 14).

Table 13: Points system for prioritizing LMUs for development footprint indicator updates: number of points assigned for seven criteria.

POINTS	0	1	2	3	4	5
LMU Designation		SMA	ISA 1	ISA 2	ISA 3	ISA 4
Linear Feature Density range	Target	Target (above Advisory)		Cautionary		Critical
Surface Disturbance range	Target	Target (above Advisory)		Cautionary		Critical
Reported activity[a]	None	Low		Medium		High
Distance to next threshold (LFD) [a]	>50%	35%	25%	15%	10%	5%
Distance to next threshold (SD)[a]	>50%	35%	25%	15%	10%	5%
Existing overlay or re-quired Access Manage-ment Plan (AMP)	None	Winter Habitat Overlay – Migratory Caribou			AMP	Summer Habitat Overlay – Migratory Caribou, Woodland Caribou Overlay

[a]Each year, the Parties will review industry reports for main industries in each LMU and estimate additional disturbance.

[a]The amount of disturbance between the threshold above the last recorded value and the last recorded value, divided by the amount of disturbance between the thresholds bounding the last recorded value. If the last recorded value is under the advisory threshold, the lower boundary will be zero.

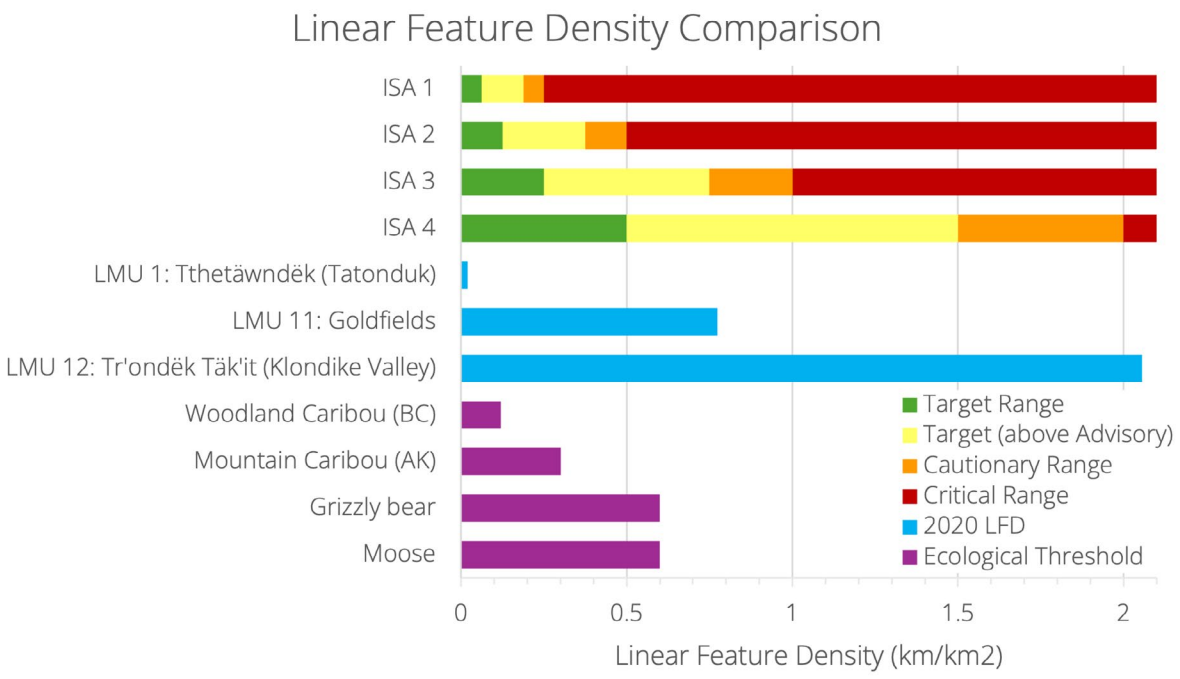
Table 14: Points system for prioritizing LMUs for development footprint indicator updates: update frequency based on priority score.

TOTAL POINTS	0–9	10–14	15–19	20–24	25–30
UPDATE FREQUENCY (YEARS)	10	8	5	3	2

Visual Comparison of Indicator Values

Figure 18 is a visual comparison of some linear feature density values to help land users understand what the numbers mean on the land. It compares linear feature density thresholds for ISAs with current (as of 2020) values from a range of LMUs, as well as ecological thresholds. The ISA thresholds are the boundaries between the indicator levels in the graph – for example, the critical threshold is between the cautionary range (orange) and the critical range (red). There is no upper limit to the critical range. The three LMUs show how linear disturbance varies across the Region. LMU 1: Tthetäwndëk (Tatonduk), a largely wilderness area, had 0.02 km/km^2 of linear features when last measured. LMU 12: Tr'ondëk Täk'it (Klondike Valley), a highly populated and developed area, had just over 2 km/km^2; relatively small increases in linear feature density can mean a lot. To show the effect relatively small numbers can have, four ecological thresholds for wildlife are included – sourced from **(67)**. The ecological thresholds are the density of linear features shown to impact wildlife and its use of an area, based on research in similar environments to the Region. Moose and grizzly bears showed a response at just over 0.5 km/km^2, and caribou have been observed to be even more sensitive.

Figure 18: Comparison of linear feature density (LFD) values, including LFD thresholds for ISAs 1 to 4, current (as of 2020) LFD values for three LMUs, and ecological thresholds (Linear Feature Densities at which wildlife species have shown a negative response).



Initial Development Footprint Indicator Values

Development Footprint Indicator values were one of the factors the Commission used when establishing thresholds and LMU designations. Table 15 shows these initial values, which reflect disturbance on the ground as of 2020. The area within 30 m from either side the centreline of highways is excluded from LFD and SD calculations. Relative values for each indicator are directly comparable to threshold tables. Absolute values have been calculated for each LMU to provide an easier metric to understand from an on-the-ground perspective. Note that a value of zero doesn't necessarily mean no development is present, but rather that there is too little to show up at this resolution. All values are rounded up.

Table 15: Development Footprint Indicator Values by LMU as of 2020, colour-coded to show indicator levels relative to thresholds. EXA: Excluded Area.

LANDSCAPE MANAGEMENT UNITS					LINEAR FEATURE DENSITY		SURFACE DISTURBANCE	
Name, designation, and associated thresholds for non-ISAs				Total Area (km^2)	Relative (km/km^2)	Absolute (km)	Relative (% area)	Absolute (km^2)
1	Tthetäwndëk (Tatonduk)	SMA	(ISA 1)	7938.55	0.02	158.32	0.00	0.03
2	The Horseshoe	ISA 2		318.34	0.50	158.17	0.15	0.47
3	Chu Kon Dëk (Yukon River Corridor)	SRPA	(ISA 2)	1012.28	0.22	223.51	0.12	1.22
4	Tsey Dëk (Fifteenmile)	SMA	(ISA 1)	2758.01	0.14	376.10	0.00	0.13
5	Ddhäl Ch'ël Settlement Lands (Tombstone)	ISA 1		2.95	0.00	0.00	0.00	0.00
6	Tr'ondëk (Klondike)	ISA 2		809.60	0.31	254.96	0.27	2.17
7	Wehtr'e (Antimony)	SMA	(ISA 1)	2147.62	0.02	51.13	0.00	0.06
8	Brewery Creek	ISA 3		941.25	0.29	277.39	0.55	5.14
9	Clear Creek	ISA 4		466.44	0.62	289.49	1.67	7.77
10	Tintina Trench	SMA	(ISA 2)	1810.94	0.26	466.10	0.12	2.15
11	Goldfields	ISA 4		6057.68	0.77	4687.04	2.38	143.95
12	Tr'ondëk Täk'it (Klondike Valley)	SRPA	(NA)	198.48	2.06	408.18	5.70	11.31
13	Dempster Highway	SRPA	(NA)	100.35	2.75	275.89	2.99	3.00
14	Tąy Dëkdhät (Top of the World)	ISA 2		1566.12	0.33	518.81	0.37	5.81
15	Khel Dëk (Sixty Mile)	ISA 3		2922.03	0.36	1046.61	0.75	22.01
16	Wëdzey Nähuzhi (Matson Uplands)	SMA	(ISA 2)	868.81	0.29	249.32	0.01	0.11
17	Nän Dhòhdäl (Upper Indian River Wetlands)	ISA 2		485.08	0.48	234.41	0.25	1.23
18	Ttthetryän Dëk (Coffee Creek)	ISA 4		996.51	0.16	157.24	0.41	4.08
19	Tädzan Dëk (White River)	ISA 1		2851.49	0.00	3.16	0.00	0.00
20	Łuk Tthe K'ät (Scottie Creek and Ladue Wetlands)	SMA	(ISA 2)	1637.01	0.32	531.33	0.15	2.50
21	Wedzey Tąy (Fortymile Caribou Corridor)	ISA 2		1841.33	0.30	555.47	0.18	3.33
22	Ch'ënyäng – Ddhäl Ch'èl (City of Dawson – Tombstone)	EXA	(NA)	2128.97	0.15	329.90	0.67	14.24
	Regional totals			39859.84	0.27	10922.66	0.54	216.46

Colour Legend for Indicator Range

Target range	Critical range
Target range – above advisory threshold	No threshold in Plan
Cautionary range	

10.7
Example Mitigation Hierarchy Response Form

This form is an example of what should be required from proponents proposing projects within the Winter Habitat – Migratory Caribou Overlay (with the exception of placer mining below 700 m).

Proponent Mitigation Hierarchy Response Form

Section A: Project Overview

Project Name:

Location:

Type of Activity:

Duration:

Season(s) of Operation:

Section B: Mitigation Hierarchy Response

1. Avoidance
    a. Have you considered alternative locations outside of this overlay? If yes, explain why they were not selected.
    b. Demonstrate the proposed location of targets, access routes, camps, and so on, and show how these are all outside of mapped high-quality caribou habitat.
2. Minimization
    a. What methods will you use to reduce physical disturbance?
    b. How will you minimize noise, light, and seasonal impacts?
    c. Will you use existing trails or infrastructure? If yes, describe which ones.
3. Restoration
    a. Describe your restoration plan.
    b. Explain how restored areas will support functional caribou habitat.
4. Offset
    a. Are offsets proposed?
    b. If so, detail location, type of offset, and expected ecological benefit.

10.8
Implementation Actions

The Implementation Actions from throughout the Plan have been prioritized for completion based on five categories:

Priority 1 – To be started within the first year after Plan approval

Priority 2 – To be started within the first two to five years after Plan approval

Priority 3 – To be started within the first six to 10 years after Plan approval

Ongoing – Actions that are already happening and should continue to be supported

N/A – Actions that are required after a defined trigger

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
3.2	1	Develop cumulative effects indicators and related elements for Plan values according to the following timeline and directions. Work on multiple values in parallel and incorporate elements into cumulative effects management as they become available (all components for a value do not need to be complete before they are used). The Parties will make all decisions on adding components to the framework as equal decision-makers. This is an expression of co-management (see Section 3.9 for further details on adding, revising and removing components). For each value: • Conduct a comprehensive value review that brings together multiple ways of knowing about the value (current health, trends, known responses to disturbance and mitigation, existing monitoring, data availability, and so on). • Select one or more indicators for the value using models that include the value's relationships with other values and stressors – for example, causal models as described in the Marine Plan Partnership **(63)**, conceptual models used by the BC Environmental Assessment Office **(64)**, and influence diagrams as used in Metlakatla Cumulative Effects Management **(65)**. • Trial each indicator over an agreed-upon period. Then, assess each one to ensure it is relevant, sensitive, practical, and accurate. • Establish tiered thresholds using the best available knowledge. Ccritical thresholds should be below the point beyond which recovery is unlikely without human intervention. Cautionary and advisory thresholds should provide enough room for proactive actions to prevent reaching critical thresholds. • Clarify specific roles and responsibilities for monitoring. • Identify management actions to take at each threshold, along with responsibilities, following the guidance above. The following timeline considers value health, threats, Knowledge Gaps, and "nested" values, where protecting one is likely to protect others **(63)**. Start work on Land–People Relationship, Water, Salmon, Caribou, and Wetlands by the end of year two, and Community Resilience, Moose, and Sustainable Local Economy by the end of year four. Community Culture, Tr'ondëk Hwëch'in Culture, Heritage, and Hän Language, Plant and Animal Relations, and Landscapes are not prioritized for completion in the first four years. However, this does not mean they are less important than the prioritized values.	**1**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
3.2	3	Report annually on the progress of cumulative effects framework elements (see sample reporting table in Appendix 5).	**1**
3.6	11	Establish a centralized ledger for the Region and populate it with the most up-to-date data for development footprint indicators. (Parties with Commission)	**1**
3.6	12	Support the Commission in developing a way for proponents to contribute information on development footprint to the regional ledger.	**1**
3.6	13	Acquire satellite imagery necessary for linear feature density and surface disturbance calculations, following frequency guidance in Section 3.6 and Appendix 6. Interpret satellite images, evaluate which features are human-caused, and create and publish geospatial layers – for example, through GeoYukon (Government of Yukon).	**1**
3.6	16	Improve resolution and increase the potential frequency of updates to development footprint indicators by considering other sources of imagery as they become available.	**1**
3.7	19	During project assessments, assess cumulative effects to value health by: • Identifying value health status for LMU priority values and updating if necessary • Evaluating how/if the proponent has considered priority values and their health, and applied the mitigation hierarchy (Section 2.2.3) in a way that reflects an understanding of priority values and potential impacts of their project • Evaluating if the project is likely to cause the health of any priority value to depart significantly from its goal(s) • Considering other existing and proposed projects and activities in the area Values identified for indicator development and those with known health concerns should be considered to a higher standard than values that are healthy and stable.	**1**
3.7	20	During project assessments, assess cumulative effects as measured by development footprint indicators by determining the anticipated change in development footprint for the LMU based on the proposed project, and evaluating if the project is likely to result in any threshold being crossed. (Commission)	**1**
3.8	22	In the decision phase of project assessment, make decisions that are consistent with Plan conformity as determined by the Commission, as per THFA and YESAA.	**1**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
3.11	24	Establish Governance and Oversight • Define roles and responsibilities for all Parties: Government of Yukon, Tr'ondëk Hwëch'in, proponents, YESAB, Land Guardians, Natural Resource Officers, and (other) enforcement agents. • Within one year of Plan approval, form a working group, including Indigenous representation and technical experts, to oversee the development and rollout of the framework. The Commission should be an active member of this working group. • Consider an industry advisory board.	**1**
3.11	25	Continue the development of the Reclamation Framework • Finalize the reclamation-values tables that define ecological, cultural, and community values. • Refine the step system with clear criteria for each level. • Establish performance-based incentives for operators • Establish operator vs. land manager responsibilities, with proponents accountable for up to Step 3 and land managers/ enforcement agents for Steps 4 and 5.	**1**
3.11	26	Create the Centralized Reclamation Ledger • Design and build a digital ledger system to track reclamation credits, site assessments, and cumulative progress over time (Section 3.6). • Ensure it is accessible to all Parties and the public and supports long-term data storage.	**1**
4.4	44	Prioritize LMUs that require AMPs for development footprint mapping updates.	**1**
5.2.2	49	Create or support the creation of "welcome" materials for the Region, Dawson City, and/or the Klondike Valley that include modern governance and multiple worldviews.	**1**
5.2.3	53	Support Tr'ondëk Hwëch'in-led initiatives to revitalize and promote Hän language.	**1**
5.3.2	71	Protect sheep habitat and limit disturbance during key times – for example, lambing, over-winter.	**1**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.3.3	75	Recognizing that the Government of Yukon does not have direct authority over salmon in the Region, uphold responsibilities to the following (Government of Yukon): • Whole ecosystem health: Salmon management is not just about harvest, it is about ecosystem health, which the Government of Yukon is responsible for (*Environment Act* [RSY 2022, c.76]). Co-leading (with Tr'ondëk Hwëch'in) habitat protection efforts, particularly in placer mining zones and riparian areas, to achieve integrated and transparent salmon governance. • Ongoing, authentic engagement in joint planning and relationship-building (with Tr'ondëk Hwëch'in and/or DFO and other bodies as listed above) to improve regulatory efficiency, build public trust, and reduce conflict. • Support Tr'ondëk Hwëch'in in the exercise of their ancestral stewardship obligations to salmon.	**1**
5.3.3	83	Develop and implement cumulative effects components for salmon.	**1**
5.3.4	89	Building on the initial lichen cover indicator, develop and implement further caribou-specific cumulative effects indicators that would apply in each overlay.	**1**
5.3.4	91	Apply lichen cover as a cumulative effects indicator within this overlay [Summer Habitat – Migratory Caribou]. A single threshold is set at 80% of lichen cover within the overlay (measured as of March 2026). If this threshold is crossed (that is, cover decreases by 20%), jointly review and revise overlay directions with a goal of providing increased protection for caribou to compensate for the loss of forage.	**1**
5.3.4	95	Ensure all project proposals within the Winter Habitat – Migratory Caribou Overlay include a mitigation hierarchy assessment. Develop, publicize, and employ review criteria to evaluate whether avoidance and minimization have been adequately pursued.	**1**
5.3.4	96	Apply lichen cover as a cumulative effects indicator within this overlay [Winter Habitat – Migratory Caribou]. A single threshold is set at 80% of lichen cover within the overlay (measured as of March 2026). If this threshold is crossed (that is, cover decreases by 20%), jointly review and revise overlay directions with a goal of providing increased protection for caribou to compensate for the loss of forage.	**1**
5.3.4	97	Maintain a public registry of restoration and offset activities, including monitoring results.	**1**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.3.4	100	Apply lichen cover as a cumulative effects indicator within this overlay [woodland caribou]. A single threshold is set at 80% of lichen cover within the overlay (measured as of March 2026). If this threshold is crossed (that is, cover decreases by 20%), jointly review and revise overlay directions. The goal is to provide increased protection for caribou to compensate for the loss of forage.	**1**
5.3.5	109	Limit habitat fragmentation by decommissioning roads that are no longer in use, and prioritize using existing access over creating new access.	**1**
5.3.7	127	Promote appreciation for wetlands through public education, focusing on understanding the values and functions of wetlands with the goal of creating stewardship opportunities that deepen local connection to wetlands.	**1**
5.3.7	130	As part of fulfilling stewardship responsibilities to wetlands, encourage stewardship by industrial and commercial operators and make necessary information available. Require the rigorous application of the mitigation hierarchy in proposals and operations, with a focus on avoiding negative impacts. Further, ensure compliance with buffer-related wetland stewardship directions.	**1**
5.4.1	156	Increase monitoring and enforcement of permit requirements to provide consistency for the [mineral exploration] industry and ensure that development remains sustainable.	**1**
5.4.1	158	Support and implement training opportunities for wetland identification for [placer] miners, enforcement staff, and inspection officials.	**1**
5.4.1	159	Review and revise administrative burdens on [placer mining] operators, to ensure small operators continue to participate in the industry and contribute to the Region's Sustainable Local Economy and the community.	**1**
5.4.1	160	Improve monitoring and compliance to ensure that [placer] mines operate responsibly, minimize environmental and social impacts, and act as stewards of the land.	**1**
5.4.1	162	Increase the consistency and detail of monitoring at [quartz] mine sites, specifically at tailing ponds, and particularly during snowmelt when they are at greater risk of failure.	**1**
5.4.1	163	Improve standards, regulations, and enforcement to ensure that quartz mining occurs in a manner consistent with the Plan's principles.	**1**
7.1.2	166	If the Parties establish an Implementation Committee, develop Terms of Reference that, among other things, specifically details the Commission's role(s) in implementation.	**1**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
7.4	170	Create a publicly available database to track non-conforming projects or activities, accessible to the Parties, Commission, and YESAB. This may or may not be the same registry used for administrative changes and amendments.	**1**
7.5.1	171	In collaboration with the Commission, develop implementation guidelines within one year of Plan approval that outline how the Plan will be implemented.	**1**
7.6.1	172	Produce an annual Implementation Report that details implementation activities and impacts. The Commission, with input from the Parties, could compile this report as part of their ongoing stewardship of the Plan. This report should be publicly available and should consider: • Progress on Plan implementation. • Ongoing surface disturbance and linear feature tracking and mapping. • Progress of sub-regional, SMA, and Access Management Planning. • Progress on cumulative effects and reclamation frameworks. • Parties' experience of co-management. • Feedback on project assessment, including from proponents and YESAB. • Volume and outcomes of conformity determinations. • Feedback from First Nation Final Agreements boards and committees – for example, YESAB, YLUPC, DDRRC.	**1**
3.2	2	Incorporate disturbance from fire (including quantifying burn severity and post-fire ecosystem recovery) and permafrost-thaw into cumulative effects management.	**2**
3.2	4	Report annually on value health, including health range (once indicators and thresholds are established), health status relative to value goal(s) and/or inadequacies in data.	**2**
3.3	5	Consider Plan values and their health in planning and strategic work.	**2**
3.4	7	Improve development footprint indicators to make them more relevant and accurate with respect to Plan values.	**2**
3.4	8	Add value-based indicators related to natural disturbance to the cumulative effects management regime. These indicators will complement development footprint indicators, which account for human-caused disturbance.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
3.6	14	Annually assess required update frequency for development footprint indicators for all LMUs.	**2**
3.6	15	Review and revise Table 14 as part of adaptive implementation, to improve its ability to prioritize LMUs over time.	**2**
3.7	17	Develop standard estimates of surface disturbance and linear feature density for different types of Class 1 and 2 activities to reduce burden on proponents of smaller projects. (Government of Yukon)	**2**
3.7	18	To enable cumulative effects assessment during project assessment, regularly update and publicly share: • Value health status in the context of value goal(s) (see Section 3.3). (Parties) • Development footprint indicator status (see Section 3.6). (Commission)	**2**
3.11	27	Integrate into Permitting and Regulatory Processes • Government of Yukon should incorporate the [reclamation] framework into its permitting system, so that reclamation monitoring is part of existing review cycles. • Align the five-year assessment intervals with current inspection or renewal timelines to avoid duplication where possible.	**2**
3.11	28	Build Capacity for Assessment • Train land guardians and Natural Resource Officers to assess reclamation up to Step 3. • Designate or establish enforcement agents or independent assessors to evaluate Step 4 and 5 outcomes, as directed by the Parties or the working group.	**2**
3.11	29	Pilot the Framework • Select a few active or recently closed sites to pilot the [reclamation] framework. • Conduct initial assessments, apply the step rating system, and record results in the ledger. • Gather feedback from assessors, proponents, and communities.	**2**
4.3.1	32	Implement safety infrastructure such as pullouts, designated viewpoints, and signage for wildlife crossings and hazardous road conditions. This should be prioritized for the Top of the World Highway.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
4.3.1	34	In collaboration with the Dawson District Renewable Resources Council and/or other relevant organizations, monitor the use of off-road vehicles within the Top of the World Highway Corridor for: • Impacts to the values identified in the adjacent LMUs. • Identification of areas for potential off-road vehicle management areas.	**2**
4.3.1	35	Explore opportunities to mitigate and/or minimize wildlife–vehicle collisions along roads, and inform land users about safe driving practices, areas with elevated collision risk, and seasonal wildlife movement patterns.	**2**
4.3.1	36	Develop and implement strategies to avoid and minimize the spread of invasive species along roads.	**2**
4.3.1	37	Build resilience into transportation networks and other infrastructure that may be impacted by permafrost thaw, increases in precipitation and temperature, and other climate change-related risks.	**2**
4.3.1	38	Assess and address climate change considerations, including information from climate risk assessments, potential variability in environmental conditions, and adaptation/resiliency, in the design, maintenance, and management of transportation infrastructure. Use an adaptive implementation approach.	**2**
4.3.2	39	Track and monitor access development and reclamation activities, including: • Details of any newly constructed roads and trails, including location, width, length, and surface material. • Information on the status of roads and trails (active or inactive). • Ongoing and completed reclamation activities.	**2**
4.3.5	41	Monitor and manage the use of camps, particularly outhouse facilities, along waterways popular for recreational use such as the Yukon River.	**2**
4.3.5	42	Provide educational opportunities for tourists and recreational river users about stewardship and respect of traditional use sites.	**2**
4.3.5	43	Carry out ongoing monitoring of river traffic (recreational, commercial, and industrial).	**2**
5.2.1	45	In collaboration with planning partners (for example the Klondike Active Transport and Trails Society), develop a comprehensive trails plan for the Region, that identifies existing trails, historic trails, no-go areas for recreation, and future trail development opportunities.	**2**
5.2.1	46	Consider projected climate change impacts on safety and accessibility of trail systems.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.2.2	47	Ensure resources on the Region's history and present-day community – including Tr'ondëk Hwëch'in history and contemporary culture, the Klondike Gold Rush from multiple perspectives, and modern co-governance – are available and promoted to current residents, newcomers, and visitors.	**2**
5.2.2	48	Ensure resources on the Tr'ondëk Hwëch'in Final Agreement and associated bodies, programs, and processes are available and promoted to all people working on the land.	**2**
5.2.3	50	Monitor cultural and heritage resources and sites to better understand climate change impacts, and carry out mitigation measures where possible.	**2**
5.2.3	54	Promote land-based, community, and educational initiatives that strengthen youth capacity and youth–Elder knowledge exchange.	**2**
5.2.3	55	Incorporate storytelling into interpretation and educational programs.	**2**
5.2.4	56	Build in resilience to transportation and other infrastructure that may be affected by floods, permafrost thaw, increases in precipitation and temperature, and other risks.	**2**
5.2.4	57	Build capacity for disaster risk reduction, with particular attention to reducing the risk and impact of natural disasters resulting from floods, landslides, and wildfires.	**2**
5.2.4	58	Encourage climate-preparedness education to ensure residents are prepared to respond to climate change-related events.	**2**
5.2.4	60	Support recommendations relating to priority action 6: Resource Extraction and Major Infrastructure in the Yukon Advisory Committee on MMIWG2S+ Implementation Plan **(83)**, including: • 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). • Support the implementation of culturally relevant, gender-balanced analysis in YESAA processes (4.4). • Support a Tr'ondëk Hwëch'in-led community safety assessment (2.1a).	**2**
5.3.1	62	Implement clean-up initiatives along rivers to address recreational and industrial waste.	**2**
5.3.1	63	Develop opportunities for mentorship and knowledge exchange on water stewardship among youth, community members, and Elders.	**2**
5.3.1	64	Support ceremony in service of relationships with water and/or rivers.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.3.1	65	Develop and support guardianship programs to improve monitoring, enforcement, and stewardship of water and adjacent areas, with a focus on biocultural water monitoring and monitoring for potential adverse impacts from industrial development.	**2**
5.3.2	67	Promote biocultural and climate monitoring that incorporates land-based knowledge.	**2**
5.3.2	69	Develop and promote educational tools to encourage stewardship of wildlife habitat.	**2**
5.3.2	73	Update and improve habitat suitability maps and modelling for wildlife, including Wildlife Key Areas, using all forms of knowledge	**2**
5.3.3	76	Work to fill gaps in the management or stewardship of salmon in the Region: • There is no single body that ensures cumulative effects are monitored or mitigated. • Compliance inspections are insufficient. • There is no unified coordination of salmon habitat restoration across jurisdictions. • There is inequity in harvest policies across Canadian and U.S. jurisdictions. The YFNSSA is a technical body with no formal decision-making power, but its advisory and capacity-building roles could be strengthened to coordinate salmon restoration across First Nations and governments.	**2**
5.3.3	77	Work with all relevant partners to clarify and communicate roles and responsibilities for protecting salmon and salmon habitat in the context of placer mining. Placer mining is regulated by the Department of Energy, Mines, and Resources in the Government of Yukon. The salmon-bearing streams where placer mining occurs are managed by the Department of Environment in the Government of Yukon, and the salmon themselves are managed by DFO. This governance structure can result in inconsistent enforcement, gaps in legislation, and unclear responsibility. YESAB assessments are recommendations; enforcement is carried out by the Government of Yukon and/or federal departments. This can be complex when there are many values at play. Clarity is needed for governments, the public, and proponents.	**2**
5.3.3	78	Evaluate the existing authorizations under the *Fisheries Act* (RSC, 1985, c. F-14), the FHMS, and the adaptive management framework within the FHMS. Determine how this system can work better in the Region.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.3.3	79	Include youth and community members in salmon monitoring efforts and create mentorship opportunities.	**2**
5.3.3	80	Expand long-term water quality monitoring to inform decision-making about salmon and salmon habitat, similar in scope to the Environment and Climate Change Canada's National Long-term Water Quality Monitoring (44). In addition to the existing Klondike River station, stations should be installed at the following major watercourses: • Yukon River South and North • Sixty Mile River • Indian River • White River • Stewart River • Fortymile River • Fifteen Mile River • Twelvemile River	**2**
5.3.3	84	Strengthen enforcement mechanisms for habitat protection, especially in mining zones.	**2**
5.3.4	88	Carry out and support ongoing monitoring of caribou herd migration, range use, and habitat choice. Monitor climate variables and industrial activities alongside this work.	**2**
5.3.4	90	Develop a caribou movement alert system based on collared caribou to maximize efficiency and compliance for project proponents.	**2**
5.3.4	92	Increase public availability of herd data, including seasonal movement patterns and population trends.	**2**
5.3.4	93	Update herd data annually and make it accessible through a public portal.	**2**
5.3.4	99	Increase understanding of how wildfires affect caribou habitat and herd movement. Integrate wildfire data into future overlay updates.	**2**
5.3.4	103	Provide resources and coordination for the upcoming Hart River Range Assessment.	**2**
5.3.4	106	Maintain a public registry of restoration activities and outcomes.	**2**
5.3.5	111	Increase frequency of moose surveys, responding to local and Traditional Knowledge when selecting MMUs.	**2**
5.3.5	112	Collect data on licensed hunter residency (for example, to track where hunters are harvesting in relation to where they live) to inform future educational campaigns.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.3.5	115	Review the MMUs to assess whether the current boundaries are meeting the needs of managers, hunters, the landscape, and moose.	**2**
5.3.6	116	Update mapping of both human-caused and natural disturbances, including wildfire, permafrost thaw, and forest pests.	**2**
5.3.6	119	Prioritize identifying and protecting climate refugia for culturally and ecologically important species, for species most at risk from climate change.	**2**
5.3.7	120	Monitor, report, and annually tabulate the disturbance of wetlands at the scale of LMUs.	**2**
5.3.7	122	Ensure that wetland classification mapping and hydrological models are completed and shared to support the implementation of wetland disturbance thresholds. These should be completed using a scale that works for on the ground implementation of the Plan. The Parties can expand on mapping already completed by Ducks Unlimited Canada and Tr'ondëk Hwëch'in. They should prioritize detailed wetland inventories in areas with concentrations of wetlands and development interest (for example, LMU 17), and these should be made publicly avail-able for use by regulators and proponents.	**2**
5.3.7	123	Promote biocultural and climate monitoring of wetlands that incorporates traditional and land-based knowledge.	**2**
5.3.7	124	Promote and support land-based cultural activities in wetland areas.	**2**
5.3.7	125	Recognize the role of wetland conservation in building climate resilience and promote wetland reclamation strategies that sequester carbon.	**2**
5.3.7	126	Encourage and, where possible, help to complete the Yukon Water Board Wetland Plan Guidelines (recognizing that completion is the responsibility of the Yukon Water Board, not the Parties).	**2**
5.3.7	129	Offer workshops, training or guidance documents to help proponents recognize wetland features and identify wetland classes in the field.	**2**
5.4.1	131	Support community-based research and monitoring, including annual surveys that gather knowledge from people accessing the land for harvest activities – for example, those carried out by Tr'ondëk Hwëch'in and the Dawson District Renewable Resource Council.	**2**
5.4.1	133	Promote local employment, skills development and cross-training, and support programs that contribute to these opportunities.	**2**
5.4.1	135	Explore and promote sustainable economic opportunities that contribute to climate change mitigation and resilience – for example, renewable energy infrastructure, carbon credits, building local capacity to respond to emergencies, increasing food security.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.4.1	136	Promote and incentivize economic activities that benefit multiple values and meet the Plan's definition of sustainable activities.	**2**
5.4.1	137	Incorporate Hän language and Tr'ondëk Hwëch'in cultural history and contemporary use into tourism management strategies and signage in the Region.	**2**
5.4.1	139	Develop and publish best management practices for tourism industries, including wilderness tourism.	**2**
5.4.1	145	Trappers are knowledge-holders by virtue of their time on the land. Support programs to gather land-based knowledge from trappers, including the potential for climate change monitoring.	**2**
5.4.1	149	Improve education and communication among government departments that regulate trapping and trapline use, and activities that can affect traplines – for example, forestry, mining.	**2**
5.4.1	153	Incentivize local food production and increase climate resilience and food security.	**2**
5.4.1	154	Support the ongoing operations of the Tr'ondëk Hwëch'in Teaching and Working Farm.	**2**
5.4.1	155	Partner with industry organizations to provide joint educational opportunities for Tr'ondëk Hwëch'in Citizens and employees of the mineral exploration industry with the aim of fostering relationships built on trust, understanding, and respect. Examples include: • Participation of non-Citizen industry employees in Tr'ondëk Hwëch'in101 to foster understanding of Tr'ondëk Hwëch'in culture and values. • Tours of mineral exploration operations for Citizens.	**2**
5.4.1	161	Partner with industry organizations to provide joint educational opportunities for Tr'ondëk Hwëch'in Citizens and employees of the placer industry with the aim of fostering relationships built on trust, understanding, and respect. Examples include: • Participation of non-Citizen industry employees in TH 101 to foster understanding of Tr'ondëk Hwëch'in culture and values. • Tours of placer operations for Citizens.	**2**
5.4.1	164	Create more incentives and rebates for distributed renewable energy generation across the Region.	**2**
5.4.1	165	Explore options to connect residences and businesses that currently rely on non-renewable energy sources to the grid or shift to renewables.	**2**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
7.2	167	Collaborate to jointly enhance capacity by: • Strengthening institutional arrangements, consistent with the THFA and other relevant legislation and policies. • Facilitating ongoing technical cooperation between and among Tr'ondëk Hwëch'in and the Government of Yukon departments. • Involving independent scientists and advisors, as needed, to support research and monitoring initiatives. • Coordinating communication strategies that promote the Plan to non-technical audiences.	**2**
7.2	168	Explore and implement ways to communicate the Plan to residents, Yukoners, and visitors, promoting individuals' sense of stewardship while in the Region. These may include: • Plain language versions. • Video or audio accompaniments. • Storytelling. • School curriculum. • Visitor information.	**2**
3.3	6	Use knowledge gained from ongoing monitoring of value health to inform Plan Review.	**3**
3.11	30	Refine and Scale • Use pilot results to refine criteria, processes, and tools. • Develop guidance documents and training materials for broader rollout. • Scale up to include all relevant sites in the Region	**3**
3.11	31	Monitor, Report, and Adapt • Conduct assessments at 5, 10, 25, 50, and 100-year intervals. Additional assessments may occur subject to joing approval of the Parties. • Use results to adjust credited areas, inform land use planning, and support adaptive management. • Regularly review the framework to ensure it remains aligned with evolving values and changing environmental, social, and economic realities.	**3**
5.2.3	52	Explore tools and platforms (for example, digital resources, websites, audio files, apps) to promote Hän language related to the Plan.	**3**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.2.4	59	Promote climate change awareness and strategies to decrease climate anxiety.	**3**
5.3.1	61	Explore and implement opportunities to educate land users about the respectful use of water, respectful conduct in and around water, and the importance of floodplains and riparian areas	**3**
5.3.2	66	Monitor the spread of invasive species and respond as required.	**3**
5.3.2	68	Promote storytelling and teachings that highlight our relationships with animal and plant kin and our interconnectedness.	**3**
5.3.3	82	Expand assessment and restoration of both habitat and stocks.	**3**
5.3.3	85	Develop salmon management plans that align treaty rights, habitat needs, and development pressures. This requires bringing all relevant actors to the table.	**3**
5.3.3	86	Develop and/or support development of a publicly accessible aquatic habitat inventory in major rivers. This should identify and map key habitats with a specific focus on spawning and overwintering habitats and their responses to climate change to determine the factors affecting salmon habitat. This mapping should inform the classification of streams and Areas of Special Consideration identified on the Yukon Placer Fish Habitat Suitability maps for water-sheds in the Region. Some projects have already started to meet this need – for example, Pacific Salmon Explorer. This project should be supported.	**3**
5.3.4	94	At each Plan Review, re-evaluate the Summer Habitat – Migratory Caribou Overlay with consideration to: • The effectiveness of current management directions. • New ecological data, including lichen cover data. • Feedback from communities and stakeholders. • Climate change impacts. • Wildfire events. • Trends or significant shifts in herd movement or population dynamics.	**3**
5.3.4	101	Develop a cross-regional plan for the Clear Creek herd range, that involves: • The Commissions and Parties from the Dawson, Peel, and Na-Cho Nyäk Dun Regional Land Use Plans. • Shared data, restoration goals, and access protocols.	**3**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.3.4	104	Use assessment results to refine Woodland Caribou Overlay boundaries and management directions, if required, during Plan Review.	**3**
5.3.4	105	Ensure restoration outcomes are habitat-specific and monitored for effectiveness.	**3**
5.3.4	107	Include restoration performance in Plan Review.	**3**
5.3.5	110	Prioritize analysis and publication of data from moose surveys so that data are still relevant when shared.	**3**
5.3.5	114	Revise moose WKAs based on incorporation of Traditional Knowledge and local ecological knowledge.	**3**
5.3.7	121	The Region would benefit from the development of a Wetland Suitability & Development Index – a project scale tool designed to identify areas with high wetland suitability and guide decisions about development based on that suitability. Similar in approach to the FHMS, this regionally specific Index would enable fine scale predictive wetland mapping across the Region by providing the analytical framework and inputs needed to model wetland presence, extent, and sensitivity. Possible data inputs for identifying suitability include: LiDAR, soils data, hydrology, vegetation layers, and local or Indigenous knowledge. This Index would support the maintenance of wetland benefits and functions, inform project proposals and assessments, and fill key gaps left by the territory wide Wetlands Policy by offering operational guidance at a finer scale relevant to on the ground decision-making.	**3**
5.3.7	128	Apply an adaptive approach to wetland buffers. The purpose of buffers is to protect wetland functions and benefits in areas where development is allowed. Recognizing that the recommended buffer may not be sufficient to protect certain wetland functions or benefits, use this approach to increase the recommended buffer when site-specific assessment or research is conducted. Increase buffers when the Parties agree on revised buffer widths. The Parties should consider the best available data and literature on wetland buffers to deter-mine a solution based on the characteristics of the watershed, wetland type, and the intensity of associated land activities.	**3**
5.4.1	132	Use local knowledge, including that gathered through harvest surveys, into decision-making and Plan Review.	**3**
5.4.1	134	Explore and promote sustainable economic opportunities that result from climate change – for example, new agricultural possibilities.	**3**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.4.1	138	Develop clear management guidelines for commercial wilderness tourism and commercial wildlife viewing in areas of high visitation such as the Dempster Highway, the Top of the World Highway, and the Yukon River Corridor.	**3**
5.4.1	140	Consider the feasibility of tourism operators helping to monitor climate change.	**3**
5.4.1	141	Work with outfitters to document land use patterns associated with outfitting, including locations of camps and trails, and make this information available to inform project assessment and future resource planning.	**3**
5.4.1	142	Consider the feasibility of climate change monitoring by outfitting operations.	**3**
5.4.1	143	Create opportunities to share land-based knowledge from outfitters.	**3**
5.4.1	144	Promote and provide educational opportunities for climate-related hazard preparedness for outfitters.	**3**
5.4.1	146	Support trappers by considering ways to compensate them for participating in community-based monitoring.	**3**
5.4.1	152	Support the growth and health of the Region's agricultural sector by engaging with and supporting industry groups including the Central Yukon Agricultural Network.	**3**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
7.6.3	173	Jointly develop a Plan Review process with the Commission following approval of the Plan in anticipation of the first Plan Review. Plan Reviews should occur at least every 10 years and should do the following: • Evaluate the success of the Plan against vision and goals and review whether these are still relevant and applicable. • Reassess value health including availability of new information, technology, and knowledge (Section 3.9). • Assess progress of Implementation Actions, Governance Recommendations, and Knowledge Gaps. • Review demand for land and resources. • Account for new understanding of climate change impacts on values. • Incorporate all administrative changes and amendments, and assess the number of these to consider whether that may signal a need for change. • Review LMU boundaries and designations and make changes if necessary. • Review status and effectiveness of: caribou overlays, SMA plans, sub-regional plans, Access Management Plans, cumulative effects and reclamation frameworks. • Review the status of Chuu Tl'it Gwan'an (the North Yukon Annex) with the Parties and Vuntut Gwitchin (if required).	**3**
4.3.1	33	Continue to implement and monitor the Top of the World Highway Interpretive Plan.	**Ongoing**
5.2.3	51	Recognizing that the process of language revitalization is ongoing, continue to incorporate Hän language and place names into Plan publications when Tr'ondëk Hwëch'in considers it appropriate.	**Ongoing**
5.3.2	70	Continue to implement the Conservation Plan for Grizzly Bears in Yukon (91) 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").	**Ongoing**
5.3.2	72	Continue to implement, develop, and improve monitoring of and management plans for wildlife species. Integrate community monitoring and land guardian programs into existing data collection efforts.	**Ongoing**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
5.3.2	74	Continue to monitor the distribution of federally listed species-at-risk and ensure proactive management and recovery actions can be undertaken to ensure their continued prosperity within the Region.	**Ongoing**
5.3.3	81	Continue to support ongoing work on salmon habitat restoration projects by Tr'ondëk Hwëch'in and other organizations, including YSSC, DFO, Yukon River Panel, and the DDRRC.	**Ongoing**
5.3.4	87	Continue to support and implement, as appropriate, the Fortymile Caribou Harvest Management Plan, the Porcupine Caribou Harvest Management Plan, the Northern Mountain Caribou Management Plan, and other plans relevant to herds in the Region to ensure survival of the herds for current and future generations. Where possible, the Parties should provide sustained support and strategic coordination to ensure these plans are completed in a timely manner and achieve their intended outcomes. Once completed, the Parties should implement the management guidelines into assessment and regulatory processes.	**Ongoing**
5.3.4	102	Continue to apply findings from the existing Clear Creek Range Assessment.	**Ongoing**
5.3.5	108	Continue to monitor moose population density, abundance, and composition, especially in areas that experience significant access, development and/or hunting pressure.	**Ongoing**
5.3.6	117	Maintain and restore corridors for wildlife movement across landscapes. Prioritize connectivity in zoning and restoration efforts, especially between forested areas, alpine zones, and wetlands.	**Ongoing**
5.3.6	118	Prioritize protecting headwaters.	**Ongoing**
5.4.1	147	Continue to support trapper education programs, especially for youth.	**Ongoing**
5.4.1	148	Continue to support land–people relationships through community trapline use.	**Ongoing**
5.4.1	150	Implement the Dawson Forest Resources Management Plan (FRMP). 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.	**Ongoing**
5.4.1	151	Continue developing timber harvest plans within LMUs designated as ISAs and SMAs where forestry is allowed.	**Ongoing**
5.4.1	157	Encourage industry organizations that run industry-led programs such as KPMA101 to continue providing education and to promote excellence and innovation in mining reclamation, with a goal of strengthening partnerships and building the community's confidence in the placer mining industry.	**Ongoing**

SECTION	#	IMPLEMENTATION ACTIONS	PRIORITY
7.2	169	Support ongoing Indigenous-led planning work (for example, IPCAs) and use it to inform Plan implementation.	**Ongoing**
3.4	9	Revise development footprint thresholds and/or the indicators themselves as understanding of the combined impacts of natural and human-caused disturbance improve.	**N/A**
3.5	10	When knowledge on responses of Plan values to linear feature density and surface disturbance improves, review and revise development footprint indicator thresholds as needed.	**N/A**
3.7	21	If assessment of monitoring data shows a sudden or large change in a value, indicator, or stressor, the Parties should evaluate the ramifications for related values and collaborate to determine appropriate responses. Responses may include Plan amendments.	**N/A**
3.8	23	When development footprint metrics are updated for an LMU, identify appropriate responses using the objectives and recommendations in Section 3.8.	**N/A**
4.3.3	40	An Off-Road Vehicle Management Area is not required at this time to protect migratory caribou summer habitat; the Stewardship Directions for the overlay (Section 5.3.4) provide adequate protection. However, an Off-Road Vehicle Management Area may be a required tool in the future. If ongoing monitoring of these herds suggests they need addi-tional protection, consider establishing an Off-Road Vehicle Management Area as a tool.	**N/A**
5.3.4	98	Adapt mitigation expectations over time, based on herd data and ecological outcomes.	**N/A**
5.3.5	113	Support DDRRC recommendations on moose management, if required.	**N/A**

Dawson Regional Planning Commission