



April 30, 2024

Dawson Regional Planning Commission
201 - 307 Jarvis Street
Whitehorse, Yukon
Y1A 2H3

via email: Dawson@planyukon.ca

Dear Dawson Regional Planning Commission,

Re: Tr'ondëk Hwëch'in's Submission to the Dawson Planning Commission

Please find attached Tr'ondëk Hwëch'in proposed modifications to your Recommended Plan for the Dawson Planning Region, submitted in accordance with 11.6.4 and 11.6.5 of the Tr'ondëk Hwëch'in Final Agreement.

Thank you very much for the excellent work you've done in recommending a comprehensive Plan for the Dawson Region. We believe your Recommended Plan honours the spirit and intent of our Final Agreement and fulfills the Objectives of Chapter 11. We support most of the Recommended Plan. However, TH believes it can be improved in places to better protect the irreplaceable cultural and environmental values in our planning region. Accordingly, we are proposing several modifications. Please consider them as constructive additions to the strong foundation you laid in the Recommended Plan.

There are concerns that Tr'ondëk Hwëch'in is not submitting the proposed modifications at the same time as Yukon Government (YG). From the outset of the renewed Dawson planning process in 2018, we tried to work in close collaboration with YG to find consensus on as much of the Plan as possible and submit simultaneous proposals to yourselves. Last September we accommodated YG's request to extend intergovernmental consultation and submit our respective notices to yourselves at the end of March 2024. That target date was communicated to you by email last October. We accommodated another request from YG for an extension in December and agreed to delay our submission until the end of April. However, to our dismay YG says it needs several more months to complete their own submission.

We have been waiting for a land use plan for many years. The Dawson planning process was first initiated in 2010. From 2014 to 2018, it was paused while the Peel litigation wound its way through the Courts. When the Dawson planning process re-commenced in 2018, we felt optimistic that the clarity provided by the Supreme Court and a new spirit of cooperation would result in a timely and productive planning process for the Dawson region.

As per the Final Agreement and our intergovernmental Memorandum of Understanding, TH and YG representatives consulted on the Plan over the past 16 months with a view to reaching as much consensus as possible. This included a meeting between TH Council and the YG Premier and Ministers in December. We didn't find as much common ground as we'd hoped, but we did find

Tr'ondëk Hwëch'in Government
PO Box 599 · Dawson City, YT · Y0B 1G0
Phone 867-993-7100 · Fax 867-993-6553 Web
www.trondek.ca

some. TH and YG are currently completing a consensus document that we will share with you within the next month.

TH's views have been fully shared with YG as part of consultation on the Plan. To the extent that we have received them, we have striven to give full and fair consideration to the views shared by YG. We are not confident that YG has shared all its views with us, but neither do we think that extending the consultation time further will provide any additional insight or breakthrough.

We understand YG intends to consult with White River First Nation (WRFN) regarding their asserted claims in the Dawson planning region, but we do not believe that should slow down the process any further. TH has established rights in the planning region. WRFN's rights are asserted. The Dawson Regional Land Use Planning process is taking place pursuant to Chapter 11 of the TH Final Agreement. WRFN is not a party to a Final Agreement. WRFN consultation cannot be allowed to compromise the implementation of the Tr'ondëk Hwëch'in Final Agreement.

For the sake of our land and the integrity of the Regional Land Use Planning process, Tr'ondëk Hwëch'in is moving to the next stage in the planning process. We ask you to do the same. Please carry out your responsibilities without further delay, pursuant to the Final Agreement and your Terms of Reference. To be clear, the proposed modifications we are sending you today conclude the Intergovernmental Consultation stage of the process.

Please note that our submission contains a narrative and several supporting documents. If you have any questions about anything in our submission, please don't hesitate to ask. Please address any questions to Katie.Fraser@trondek.ca.

Otherwise, we look forward to receiving your Final Recommended Plan and proceeding to work with YG to approve and implement a Plan for the Dawson area that promotes our cultural values, ensures sustainable development, and provides Tr'ondëk Hwëch'in meaningful participation in the management of lands, waters, and resources in our homeland.

Mähsj Cho,



Darren Taylor
Hähke, Tr'ondëk Hwëch'in

cc. Honourable Minister John Streicker, YG Minister of EMR
Honourable Minister Nils Clarke, YG Minister of Environment
Honourable Minister Gary Anandasangaree, Canada Minister of CIRNA
Honourable Minister Steven Guilbeault, Canada Minister of Environment and Climate Change
Honourable Minister Diane Lebouthillier, Canada Minister of Fisheries and Oceans
Dawna Hope, Chief First Nation of Na-cho Nyak Dun
Yukon Land Use Planning Council
Heather Mills, YG SLC Representative
Shehnaz Ali, YG SLC Representative
Tim Gerberding, TH SLC Representative
Katie Fraser, TH SLC Representative

Attachments: TH Submission to Commission on Recommended Plan
TH Proposed Modifications (spreadsheet)
Map of TH Proposed LMU modifications
TH Working Definition of Reclamation and Restoration
TH Placer-Specific Reclamation Guidelines
Chinook Rebuilding Plan PowerPoint presented to Yukon River Panel
Canada/USA Agreement of April 1, 2024, regarding Canadian-origin Yukon River
Chinook Salmon
Hart River Caribou Calving Ground Map
TH Climate Change Review of Plan
TH Speaking Notes from December 12 meeting of the principals (Hähkè & TH
Council and YG Premier & Ministers)
February 26 letter from Hähkè Taylor to YG Ministers
TH Citizen Consultation Report



Tr'ondëk Hwëch'in
Submission to the Dawson Regional Planning Commission:
Recommended Plan
April 30, 2024

FINAL

WE ARE DĚNEZHU. WE LIVE TR'ĚHUDÈ

We are DĚnezhu, the people of this land
We are Tr'ondĕk Hwĕch'in, the people of this river
following the ways Tsà'Wĕzhè traveled and remembering his journey
and the living inheritance he left us – Tr'ĕhudè,
our way of life and our law.

We are DĚnezhu, the people of this land
salmon people and caribou people
weather-watchers and story people.
Ours is a constitution of stories and promises – a promise to
listen to the land a promise to act humbly and show gratitude
for the gifts that sustain us a promise to take care of each other.

The promises Tsà' Wĕzhè made in the long-ago times are the core of our identity
as DĚnezhu 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.

Tsà' Wĕzhè used his wits to make the world safe
for us so we live Tr'ĕhudè to protect the balance
he made still telling the stories that bind us to
this land and keeping our promises so the
animals keep theirs – for all the generations yet
to be born.

That is what we mean when we say we are DĚnezhu, the people of this land
That is what it means to be Tr'ondĕk Hwĕch'in, the people of this river

Gratitude

Tr'ondëk Hwëch'in (TH) would like to thank the Commission for your efforts in drafting a Recommended Plan ("the Plan") that is consistent with the Objectives of Chapter 11 of our Final Agreement. Moving forward, we acknowledge and give thanks for your continued work in considering our response and drafting a Final Recommended Plan.

We would also like to take this opportunity to thank all members of the public and stakeholder groups who expressed their views as a part of this planning process. The Chapter 11 Land Use Planning process would not be possible without your sincere participation.

Finally, Tr'ondëk Hwëch'in extends a Mähsi Cho to all Tr'ondëk Hwëch'in Citizens who participated in consultations, most recently on the Recommended Plan. Your passion and diligence in expressing the values important to you form the foundation of all submissions we put forward to the Commission.

Definitions & Acronyms

CE – Cumulative Effects

CEWG – Cumulative Effects Working Group

ISA – Integrated Stewardship Area

LMU – Land Management Unit

Non-SL – Non-Settlement Land

SMA - Special Management Area

TH - Tr'ondëk Hwëch'in

The Commission - Dawson Regional Planning Commission

The Parties – YG and TH

The Plan – the Recommended Plan

THFA - Tr'ondëk Hwëch'in Final Agreement

TH SGA - Tr'ondëk Hwëch'in Self-Government Agreement

Tr'ëhudè – TH Way of Life, Living in a good way

WSI – Wetlands of Special Importance

YFN – Yukon First Nation

YG - Yukon government/Government of Yukon

Executive Summary

Set out below is a summary of the main issues TH wants to see addressed in the Dawson Regional Land Use Plan.

1. **Co-Management:** In the Peel case¹ the Supreme Court of Canada confirmed that "a clear objective" of Regional Land Use Plans is "to ensure First Nations meaningfully participate in land use management in their traditional territories", on both Settlement Land and Non-Settlement Land.
 - a. TH wants to see this principle strongly reflected throughout the Plan, in all Land Management Units. Examples:
 - i. For LMU 1, the Recommended Plan suggests that "the Parties shall jointly consider permitting new surface access and access routes". TH believes that all new access (in all LMUs) should be jointly considered and approved.
 - ii. For LMU 4, the Recommended Plan suggests that "Tr'ondëk Hwëch'in have the primary role in the management of the SMA in this culturally significant area." TH is not opposed to taking the primary role in managing this SMA, but not at the expense of giving YG the primary role in managing other SMAs. In our view all SMAs should be co-managed.
2. **Sustainable Development:** This is one of the Objectives of Chapter 11 that is strongly related to THFA rights relating to harvesting and water, and the THFA promise of preserving and protecting a way of life that is based upon an economic (as in traditional economy) and spiritual relationship with the land. Under the current YG regulatory regime, the resources that TH has traditionally relied upon, such as salmon, moose and caribou, are disappearing. TH supports mining but wants to see it happen in a more careful and orderly fashion. Current mining practises are not sustainable. TH wants to see the pace and intensity of mining in the Dawson planning region moderated. Among other things this means:
 - a. Strict requirements for Adequate Baseline Data prior to any industrial development, including mining exploration. We cannot ensure protection of land and water-based values if we don't know their location and extent.
 - b. Conservative Cumulative Effects thresholds that protect the environmental and cultural values of the land. TH supports mining that does not damage the environmental and cultural resources that we have traditionally relied upon for our physical and spiritual sustenance and Tr'ëhude. We want to see a working landscape where fish and wildlife thrive and where our cultural sites are respected and preserved, alongside measured and carefully managed mining.
 - c. Reclamation standards that ensure the productive capacity of our land is fully restored after mining, prior to adding the mined land back into the kitty for cumulative effects purposes. In some cases, this means managing mining projects sequentially, so as to allow the land to recover prior to authorizing the next mining project.
3. **Permanent Protection of Additional Lands and Waters:** These include the Yukon River Corridor, which is the life-blood of our people, in addition to other major River Corridors which are important not only to TH but also to First Nation of Na-cho Nyak Dun and Kluane First Nation.
 - a. TH proposes that the whole of the Yukon River Corridor in the Dawson Planning region become a SMA. This should be accompanied by a commitment to enter into a Yukon

¹ First Nation of Nacho Nyak Dun v Yukon, 2017 SCC 58 (paras. 14, 47). The Supreme Court of Canada also emphasized that Chapter 11 sets out a collaborative process for developing a land use plan (para 48).

Corridor wide planning process for the entire length of the Yukon River Corridor in Yukon, in collaboration with all affected YFNs.

- b. The Stewart River Corridor should also be a SMA, with a similar commitment to comprehensive planning with First Nation of Na-cho Nyak Dun.
 - c. The Klondike² and White River Corridors also require protection.
 - d. LMUs 1, 3, 4, 5, 6, 7, 10, 16, 17, Ladue wetlands in LMU 19, 20 and 22 (see Appendix 1 for more details) should be designated as SMAs, with clear provisions for joint TH and YG management.
 - e. TH supports IPCA consideration for LMUs 1, 3, 4, 5 & 10.
- 4. Additional Protection for Wetlands** - Wetlands are an important value that deserve effective protection. From the TH perspective the YG Wetlands Policy lacks teeth and is, on its own, insufficient to adequately protect wetlands in TH Traditional Territory.
- 5. Commitment from YG to use all Available Tools, and where necessary, develop new Tools to Achieve Objectives of Plan** - YG has tools in its existing toolbox that can be used to achieve many of the objectives of the Dawson Regional Land Use Plan, including Special Operating Areas under the *Quartz Mining Act* and *Placer Mining Act* and Land Management Zones under the *Lands Act*. The Plan needs to highlight these tools and direct YG to use them, or to work with YFNs to develop other tools where necessary.
- 6. Protection of Salmon** - Traditionally Salmon were among the most important sources of physical and spiritual sustenance for TH. TH rights to harvest and manage fish are protected under the THFA. If not for salmon, TH wouldn't be here. The Plan needs to include more focus on salmon and include more effective measures to save them. As noted by the Commission in the section of the Plan on LMU 12 Tr'ondëk Täk'it:
- Commission members recalled stories of the Tr'ondëk (Klondike) being 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.
- 7. Removal of TH Settlement Land from SMAs** - As part of the THFA, the Tr'ondëk Hwëch'in retained title to about 5 % of the Dawson Planning Region as Settlement Land. In these limited and very important areas, TH are intended to be the primary decision and law-makers. The Recommended Plan refers to SMAs as “jointly managed by both Parties”. Including Settlement Land in SMAs would therefore dilute TH management powers over those lands. Settlement Land should be protected under TH law and exclusively managed by TH.

Below is a summary table of TH's LMU proposals. In most cases, TH's LMU proposals are similar to what the Commission has recommended. TH modification details are provided in the body of this narrative and Appendix 1. In a few cases, TH proposes a direct change to LMU designations.

LMU	Recommended Plan Says	TH LMU Proposals (See Appendix 1 for proposed modifications details and Appendix 2 for map)	What TH Said in Past
1	• SMA with ISA 1	• SMA status for non-SL • ISA 1	• Support for SMA status with ISA 1
2	• ISA 2	• ISA 2	• Support for ISA 2
3	• Sub-Regional Planning Area with ISA 2	• SMA status for non-SL • ISA 1	• Recommended SMA status

² This does not include LMU 12 which is recommended for sub-regional planning.

4	• SMA with ISA 1	• SMA status for non-SL • ISA 1	• Support for SMA status with ISA 1
5	• SMA with ISA 1	• SMA status for non-SL • ISA 1	• Support for SMA status with ISA 1
6	• ISA 2	• SMA status for non-SL • ISA 2	• Recommended SMA status
7	• ISA 1	• SMA status for non-SL • ISA 1	• Recommended SMA status
8	• ISA 3	• ISA 3	• Support for ISA designation • Recommended a modified boundary
9	• ISA 4	• ISA 4	• Support for ISA destination • Recommended a modified boundary
10	• SMA with ISA 2	• SMA status for non-SL • ISA 2	• Support for SMA status with ISA 2 • Recommended a modified boundary
11	• ISA 4	• ISA 4	• Support for ISA 4 • Recommended areas for SMA status
12	• Sub-regional Planning Area	• Support for Sub-regional Planning Area	• Support for Sub-regional Planning Area
13	• Community Area	• Support for Community Area	• Support for Community Area
14	• ISA 2	• ISA 2	• Recommended areas for SMA status
15	• ISA 3	• ISA 3	• Support for ISA 3
16	• SMA	• SMA • Modified boundary	• Support for SMA status • Recommended boundary modifications
17	• ISA 2	• SMA for non-SL • ISA 2	• Recommended SMA status • Recommended boundary modifications
18	• ISA 3	• ISA 4	• Support for ISA 3
19	• ISA 1	• ISA 1 • Areas recommended for SMA	• Support for ISA 1
20	• SMA with ISA 2	• SMA • ISA 2	• Support for SMA status
21	• ISA 2	• ISA 2 • Modified boundaries	• Recommended SMA status
NEW 22	N/A	• SMA status for non-SL • ISA 1	• Recommended for SMA status

Note: This Executive Summary does not address all issues of importance to TH. It represents the main issues TH wishes to see addressed in the Plan. Other issues are addressed elsewhere in our submission.

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The Klondike Gold Rush

The Klondike Gold Rush established the backdrop against which the Dawson Regional Land Use Plan is being developed. The Hän Indians (our ancestors) were displaced from the heart of our traditional lands. Our seasonal fish camp at Trochëk was possessed by miners and we were moved across the Klondike to what became Dawson. A few months later we were moved further downriver to Moosehide. We fed the gold seekers with our salmon, moose and caribou and performed much of the manual work for Klondike entrepreneurs but otherwise were excluded from the new hierarchy. Our people were not even allowed to stay in Dawson City overnight.

Typhoid that travelled with the newcomers devastated our community, taking over half of our population. Except for low workman's wages, we did not benefit at all from the gold rush. We attached no special value to gold and did not stake any mining claims. Meanwhile our women were courted by white men and our moose and caribou began to disappear. Our children were forced to attend residential schools where they were sexually abused and beaten if they spoke their own language. The church and government made maximum efforts to eradicate our culture and traditions.

In 1906, the *Yukon Placer Mining Act* was introduced which essentially gave placer miners predominant rights over all other land users.

100 Years Later

Fast forward one hundred years and the 1906 Placer Mining Act remains largely unchanged. In 1991 the historic TH village of Tr'ochëk was badly damaged by a placer miner who didn't even have a water license. In 2024 a placer miner threatens to destroy the only cross-country ski trails the people of Dawson have ready access to – within the boundaries of the City of Dawson.

On the other hand, the treaty relationship and TH's rights have considerably evolved. The Tr'ondëk Hwëch'in Final Agreement (THFA) was ratified and Tr'ondëk Hwëch'in rights under the THFA are protected under the Constitution of Canada³. Among many other things, the THFA protects TH harvesting rights, TH culture and heritage, TH rights to quality of water, and promises to

protect a way of life that is based on an economic (as in traditional economy) and spiritual relationship between Tr'ondëk Huch'in and the land.

Chapter 11 of the THFA - LAND USE PLANNING - promises to "recognize and promote the cultural values of Yukon Indian People" 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."

Despite the promises made by YG and Canada in the THFA, it is easy to see that current land use policies and practices in the Dawson Planning Region do not protect TH rights or our relationship with the land

³ September 15, 1998

and waters are not sustainable. The assault upon our people and our lands that began with the gold rush is continuing. Our salmon are on the verge of extinction. The Hart River and Clear Creek Caribou herds are in danger. Our moose are increasingly hard to find.

In settling the Peel controversy in 2017, the Supreme Court of Canada⁴ noted that Yukon First Nation Final Agreements “play a critical role in fostering reconciliation.” The Court confirmed that Chapter 11 Regional Land Use Planning is meant to ensure that Yukon First Nations “meaningfully participate in land use planning for both settlement and non-settlement lands.” The Dawson Regional Land Use Plan is our collective opportunity for reconciliation and to move beyond the status quo and bring our people to the table where land use decisions are made—as partners—in a meaningful way, so that our way of life is protected for future generations.

Introduction

This is the Tr’ondëk Hwëch’in submission, pursuant to 11.6.4 and 11.6.5 of the TH Final Agreement, proposing modifications to the Dawson Regional Planning Commission on the Recommended Plan (“the Plan”). As noted by the Supreme Court of Canada, Chapter 11 of the Umbrella Final Agreement “establishes a process for developing regional land use plans that ensures the meaningful participation of First Nations in the management of public resources in settlement and non-settlement lands” and “ensures that Yukon First Nations can meaningfully participate in land use planning for both settlement and non-settlement lands” (emphasis added).⁵ That understanding is reflected in the Dawson Regional Land Use Planning Process Resumption Memorandum of Understanding, in which the Parties committed to work collaboratively with an aim to achieving consensus on the Dawson Regional Land Use Plan. Accordingly, TH is making comments on the entire Plan as it applies to both Settlement Land and non-Settlement Land.

This submission highlights areas where TH supports the Commission’s Plan, as well as areas TH is proposing modifications to the Plan. Where TH remains silent on certain aspects of the Plan, TH generally supports and agrees with the Commission’s approach.

There are a series of appendices at the end of this submission, which make up an integral part of our submission.

General Support for the Recommended Plan

In the main, TH supports the Plan as drafted. We believe the Commission has recommended a Plan that reflects many of the values of both Parties, as well as the public and stakeholders. We appreciate this is not an easy task. We applaud the Commission for drafting a Plan that reflects the objectives and responsibilities set out in Chapter 11 of our Final Agreement.

⁴ *First Nation of Nacho Nyak Dun v. Yukon*, 2017 SCC 58

⁵ *First Nation of Nacho Nyak Dun v. Yukon*, 2017 SCC 58, at para. 14 and para. 46

TH supports the Vision and Goals of the Plan (Dawson Regional Planning Commission, 2022, pp. 8-11). We believe they represent a substantially higher level of care for lands and waters in the Planning Region than the status quo.

We believe it is important that the Plan Vision and Goals, including TH's worldview, translate into meaningful management directions and effective implementation. We propose ways this can be achieved in this submission.

In addition to the Plan Vision and Goals, TH also supports most of the recommendations of the Commission, including:

- the Cumulative Effects thresholds (Dawson Regional Planning Commission, 2022, p. 50), with proposed additions as described in (Appendix 1) of this submission;
- an eventual territory-wide management plan for the Yukon River Corridor (Dawson Regional Planning Commission, 2022, pp. 174–179);
- the Commission's general direction on wetland protection (Dawson Regional Planning Commission, 2022, pp.98-99) with stronger language as per our proposed modifications in Appendix 1.
- the LMU boundaries as identified in the Plan with some proposed modifications for LMU 16 and an additional LMU 22 for the Steward River Corridor (see section *Wédzey Náhuzhi (Matson Uplands: LMU 16)* and Appendix 1); and
- Most of the SMA and ISA land use designations (Dawson Regional Planning Commission, 2022, pp. 41–48), with proposed modifications described in this submission and its appendices.

Important Note: TH silence on any of the Plan's recommendations indicates general support for those recommendations.

Proposed Modifications to the Recommended Plan

We see our proposed modifications as ways to improve upon the good work the Commission has done.

Most of our proposed modifications focus on protecting the land and augmenting protection for THFA rights, as well as ecological and cultural values. We also speak to the importance of maintaining TH authority over Settlement Land and meaningful participation in the management of Non-Settlement Land.

In this document we offer commentary on many of TH's proposed modifications. The attached spreadsheet (Appendix 1) contains modifications addressed in this narrative as well as additional modifications and details. This narrative and Appendix 1 should be read together to fully understand TH's views on the Recommended Plan. The attached map, Appendix 2, provides a visual representation of TH's proposed modifications for the Dawson Planning Region LMUs. Appendices 3-11 provide additional rationale and information and help explain how we arrived at some of our proposed modifications.

TH Final Agreement Rights

A central principle of the Plan must be to protect TH's constitutionally protected rights. This includes rights to harvest fish and wildlife under Chapter 16, rights to quantity, quality, and rate of flow of Water under Chapter 14, and rights to protection of culture and heritage under Chapter 13. In signing the TH Final Agreement, Yukon and Canada promised to protect a way of life that is based on an economic and spiritual relationship between Tr'ondek Huch'in and the land, and the cultural distinctiveness and social well-being of Tr'ondek Huch'in (see the recitals to the TH Final Agreement). Those promises cannot be kept without intact, healthy landscapes, where citizens can continue traditional activities and act as stewards of the land in a meaningful way. The modifications proposed by TH are intended to ensure the Plan protects the lands and waters in the Dawson Planning Region, so that the promises in the Final Agreement can be kept, and TH rights are respected and remain meaningful over time.

Traditional Land Management Practices (11.4.5.5 & 11.4.5.6 THFA)

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

Peggy Kormendy, 2019

11.4.5.5 and 11.4.5.6 of the THFA require the Commission to use the knowledge and traditional experience of Yukon Indian People, and take into account traditional land management practices of Yukon Indian People. It is therefore important and necessary to incorporate TH traditional land management practices and worldview into the Plan. We appreciate how the Commission has done this with the Plan Vision and we want to extend this vision throughout the Plan, including into the Cumulative Effects Framework, Access Management, Baseline Data collection and reclamation standards. Mineral development, whether for critical minerals or otherwise, needs to be managed in a way that respects our traditional practices and upholds the principles of Sustainable Development as defined in our Final Agreement.

- We ask the Commission to incorporate the following Tr'ondëk Hwëch'in cultural pillars to inform Sustainable Development in the Dawson Planning Region:

Reciprocity

Our reciprocal relationship with the land and with each other is fundamental to our existence as Dënezhu. It is the lived expression of Tr'ëhudè. The purpose of reciprocity is the maintenance of relationships. Our existence depends on the principle of mutual benefit gained through an active, long-term exchange of goods, energy, thoughts, ideas, and more. It involves sharing, acknowledgement, gratitude, and humility, all of those principles that ensure our survival. The legacy of relational sustainability is an intact homeland that will continue to support our people. Reciprocity is harmony and balance realized.

Respect

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.

Humility

We are fortunate to be a part of this land. It is our greatest teacher. The land shapes our way of being in many ways. The land is powerful. Although it cares for us, it also constantly reminds us that we are one small part of a greater life force. To think otherwise would jeopardize our survival as Dënezhu. It is humbling to know our place in this world and wise to understand that our success depends on this modesty. Thinking and acting in humble ways maintains balance within our community, our families, and ourselves.

– Dënezhu Dätr'inch'e: A Tr'ondëk Hwëch'in Declaration of Identity

Promoting Sustainable Development (11.4.5.9 THFA)

11.4.5.9 of the THFA requires the Dawson Regional Land Use Plan to promote Sustainable Development⁶. This means moderating the pace and intensity of mining in the Dawson Planning Region. Current mining practices are undermining our culture and relationship with the land. Current mining practices are not sustainable.

Set out below are ways to moderate the pace and intensity of mining that we would like to see more effectively reflected in the Plan. That does not mean that the mining resources in the Planning Region cannot be accessed over time. But it does mean that the mining resources have to be accessed in a planned and managed fashion, in a way that protects important values and areas of cultural and environmental importance, and allows disturbed lands to recover before piling on new disturbance.

1) Conservative Cumulative Effects Thresholds accompanied by rigorous Reclamation Standards. In any given LMU, limits/thresholds should be placed upon the allowed amounts of linear and surface disturbance. Linear and surface disturbance should be carefully monitored. When thresholds are reached, no further disturbance should be allowed until lands in the LMU that have been disturbed are reclaimed and put back into the kitty. Standards for reclamation should be carefully defined.

TH would like to see specific reclamation standards outlined in the Plan. TH supports the standards for recovery of human-caused surface disturbances set out at page 46 of the Peel Plan, adapted to reflect the values and local ecology of the Dawson region, where vegetation grows more quickly to greater heights (see Reclamation Standards & Restoration).

⁶ "Sustainable Development" means beneficial socio-economic change that does not undermine the ecological and social systems upon which communities and societies are dependent. [TH Final Agreement]

When all relevant conditions for reclamation are met, the land in question returns to the kitty and additional disturbance is authorized. This ensures a sustainable pace of mining that enables the land to recover prior to new disturbance.

The Plan should also direct the Parties to ensure appropriate reclamation bonding for projects in the Region (see *Reclamation Bonding* section). Proponents must be required to post the full cost of reclamation and must be held accountable if reclamation standards are not met. Accountability for reclamation will make proponents much more cautious about causing excessive disturbance. Historic examples of Quartz mining reclamation failures include the Clinton Creek, Faro and Whitehorse Copper mines. A current example is the Minto mine. There are numerous Placer mining reclamation failures, including Tr'ochëk and much of Bonanza Creek and the Indian River.

2) Access Management Planning, along with strict requirements to curtail and reclaim access (see *Access Management* section).

3) Taking steps to protect important values, such as caribou, salmon and moose. Our salmon are on the brink of extinction. Hart River Caribou are endangered. Forty Mile and Clear Creek Caribou are at a small fraction of their historic abundance. Moose are increasingly hard to find. Protecting these animals requires a conscious effort to put limits on the pace and intensity of mining allowed in the Planning Region.

4) Protection for Areas of Cultural and Environmental Importance. These areas should be off limits for mining, or in some cases subject to more rigorous disturbance and reclamation standards. See specific proposals regarding additional conservation areas and reclamation standards below.

5) Closely tied to protecting areas of cultural and environmental importance, a requirement for Adequate Baseline Data Prior to Development is critical. If the Parties agree that important cultural and environmental areas/values should not be mined, the next obvious step is to identify precisely where those areas are – before they are disturbed. Baseline data is also essential to effectively implement reclamation standards and cumulative effects thresholds.

6) Differentiating Between Types of Mining. YG wants to promote the mining of critical minerals, but that does not mean that gold mining must also be promoted. Placer mining is particularly harmful to the environment and traditional values in terms of the amount of land affected, the creation of indiscriminate access, and destruction of wetlands. In several Land Management Units, the Plan should direct that while mining for critical minerals may be permitted, other types of mining should be prohibited to reduce impacts on environmental and traditional values.

7) Co-Management (Meaningful Participation in the Management of Public Resources). In the Tr'ondëk Hwëch'in Final Agreement, the Parties promise to protect and maintain the TH way of life and relationship with the land. This cannot occur without meaningful TH input into land management decisions. YG cannot presume to protect the TH way of life while unilaterally determining what land should be mined. TH must be meaningfully included in decision making throughout the Planning Region.

8) Interim Protection while determining next steps. In a recent decision, the Yukon Court of Appeal recognized the link between project approvals and the process of land use planning. The Court noted

“that approval of a development project in an area where land use planning is occurring may undermine the land use planning process, and the s. 35 treaty rights which that process is intended to uphold, because it will reduce the amount of undeveloped land available if and when a land use plan is negotiated and implemented”.⁷ Interim protection is an important mechanism to ensure the Plan can be meaningfully implemented.

The Plan recommends interim withdrawals for some lands while the Parties develop management plans and determine appropriate next steps, including:

- Sub-Regional Planning,
- Caribou Overlays,
- Access Management Plans, and
- Wetlands.

In many instances the Parties need to undertake additional work to put management measures in place for certain aspects of the Plan. TH strongly believes that mining should be paused in those areas to maintain the existing state of the land and water and enable the Parties to complete that work in a neutral and uncompromised way. If mining continues while that work is in progress, important options may be compromised, undermining the integrity of the planning process and TH treaty rights.

Beyond interim withdrawals, which only apply to new claims, appropriate interim restrictions should also be imposed on use of existing claims, for example through Special Operating Areas with Special Operating Conditions.

Such interim protection supports the precautionary principle (see #10 below).

9) Willingness to Utilize all Tools in the Toolbox and to Develop New Tools. The Plan should direct YG to use all of the measures available in existing legislation to moderate the pace and intensity of mining; such as Special Operating Areas where Special Operating Conditions apply. Special Operating Conditions could prescribe things like restrictions on the types of equipment used to mine, buffers around valued features, etc. At the same time, the Plan should also anticipate that new tools may be available under future laws, including Successor Resource Legislation. The Plan should recommend the full use of existing tools, but should not be limited by existing tools where new tools are required. The Plan should require meaningful commitment by YG to use existing tools and to develop new or more effective tools to achieve a moderated pace of mining.

10) Utilizing the Precautionary Principle is imperative if the critical values of our lands and waters are going to be preserved. Until we understand the potential impacts of a proposed activity, the activity should not go ahead.

Further detail on most of the topics listed above can be found below and in Appendix 1.

⁷ *First Nation of Na-Cho Nyäk Dun v Yukon*, 2024 YKCA 5, para. 159.

Cumulative Effects Framework

Taking active steps to manage the cumulative effects of development is necessary to preserve the land, THFA rights, the TH way of life and the values we all share. Cumulative effects from development can significantly damage the environment and diminish our ability to exercise our treaty rights to hunt, fish and trap. The courts have acknowledged that cumulative effects that meaningfully diminish the exercise of treaty rights constitute infringement of those treaty rights, and that regulatory regimes must incorporate a consideration of cumulative effects.⁸ The Plan must include a strong cumulative effects framework to ensure that TH treaty rights are upheld and that industrial development in the region meets the Crown's constitutional obligations.

- TH supports the linear and surface disturbance cumulative effects thresholds as described in the Plan, with the improvements outlined Appendix 1.
- TH supports developing cumulative effects indicators for water quality, salmon, caribou, and socio-economic factors, and impacts to TH culture and subsistence harvesting.
- TH supports the continuation of collaborative work to further develop the Cumulative Effects Framework.

Reclamation Standards & Restoration

Through a Tr'ëhudè lens, TH considers land reclaimed when all aspects of our relationship with the land are in balance and when we are "living in a good way". This includes water quality, quantity and rate of flow, which are crucial indicators of land health and whether an area has been adequately reclaimed or restored. TH views reclamation and restoration in a holistic way, including human behaviour. It is not only the land that needs to be restored. The actions that damaged the land in the first place need to be considered and brought into balance (see Appendix 3 for TH's definition of reclamation and restoration and Appendix 4 for the *TH Placer-Specific Reclamation Guidelines*).

In keeping with Tr'ëhudè, when any land use is undertaken, restoration, i.e., bringing the land and water back to their pre-disturbance natural state, is our ultimate goal. This means adequate baseline data must be collected prior to disturbance to be able to implement reclamation or restoration from a TH perspective (see *Baseline Data* section).

Full reclamation, a concept described in the Peel Plan, is necessary to allow the land to support and sustain the exercise of TH Final Agreement rights, including rights to harvest Fish and Wildlife, to quality and quantity of Water, and to continue the TH way of life. In the absence of full reclamation, the cumulative effects of development significantly diminish the meaningfulness of these rights and the ability of TH citizens to exercise them.

- A goal of the Peel Plan is to "Ensure that any lands disturbed by human activities are reclaimed or restored to their natural state" i.e., full reclamation. The same goal should be included in the Dawson Plan.

⁸ *Yahey v British Columbia, 2021 BCSC 1287.*

- TH believes a full reclamation concept with agreed upon reclamation standards and Cumulative Effects thresholds specific to the Dawson Region’s ecology and wildlife habitat should be included in the Plan.
- TH endorses continuing collaborative work by the Parties—perhaps through the Cumulative Effects Working Group (CEWG)—throughout implementation to assist in defining robust reclamation standards. TH supports reclamation standards that are specific, measurable, culturally appropriate and jointly decided upon. Land must be restored based on these standards before they are released back into the quantum available for development.
- In the interim, until the work of developing reclamation standards has concluded, TH supports setting out specific reclamation standards in the Plan, similar to the conditions for recovery of human-caused surface disturbances set out at page 46 of the Peel Plan and developed further in the Standard Terms and Conditions relating to reclamation for Class 1-4 Activities in the Peel Planning Region (see list below). These conditions should be adapted to the values and ecology of the Dawson Region, where the vegetation grows more vigorously. Sensitive caribou habitat, wetlands and cultural values in the Dawson Region may require more conservative reclamation goals, objectives, and standards to ensure these values are protected over time. In the Peel:
 - All forested and shrubby areas disturbed by activities must be reclaimed so that the area is covered by native species of woody vegetation (trees and shrubs) at least 1.5 metres in height, such that over time the areas are returned to their natural state.
 - All areas mostly covered with vegetation less than 1.5 metres tall disturbed by activities must be reclaimed so that the area is covered with native species roughly the same height and composition as the surrounding dominant vegetation, such that over time the areas are returned to their natural state.
 - All reasonable care must be taken in carrying out exploration activities near or adjacent to a water body to prevent sediment from entering a water body, unless otherwise permitted by law. All areas disturbed by activities must be reclaimed so that runoff and/or sediment loading levels in nearby water bodies return to pre-activity levels.
 - All areas disturbed by activities must be re-sloped and contoured so that the area approximately matches the original contours.

RECLAMATION BONDING

To ensure adequate reclamation, current and future mines in the Planning Region need to have closure plans backed up with realistic, adequate and accessible financial security bonds. Companies must be held accountable and be responsible for the costs associated with reclamation, remediation, and restoration. Enforcement measures should not allow proponents to skip the territory and escape scot-free if reclamation requirements are not achieved. The cost of reclamation should not be borne by the public.

- The Plan should recommend that the Parties ensure that current and future mines in the Dawson Planning Region have closure plans backed up with realistic, adequate and accessible financial security bonds.
- Proponents should be held accountable if reclamation standards are not met.

RECLAIMING LEGACY SITES

Many mines and some major mineral exploration sites have become inactive or abandoned and are leaking contaminated water into the ground, streams and rivers. Landform disturbances have also not been rehabilitated at many historical work sites. These legacy sites should be cleaned up to reclaim and restore the land and water to its natural state.

TH would like the Commission to recommend that un-reclaimed disturbances caused by past mining and exploration, such as the Clinton Creek mine, the Horn Claims, and numerous placer-mining sites, including Tr'ochëk, be cleaned up and reclaimed. Both Canada and Yukon have responsibilities in this regard. The authorities that allowed our lands to be damaged need to atone for their behaviour. The fact that this damage occurred historically when the only value the government attached to the Dawson Planning Region was the gold underlying Klondike gravels does not excuse the damage inflicted upon our lands. Efforts need to be made to restore the productive capacity of those lands.

- The Plan should identify legacy sites (such as the Clinton Creek mine, Horn Claims, and placer mining sites, such as Tr'ochëk) that require reclamation and direct the Governments of Yukon and Canada to ensure that reclamation is undertaken as soon as possible.

Access Management

The Yukon environment is extremely sensitive to human disturbance. Increased access not only fragments habitats, but provides entry for hunters and other development to previously inaccessible areas. Access has significant impacts on wildlife and the ecological integrity of lands and water and in turn TH's Final Agreement rights and way of life. Access must be managed, in order to safeguard these values and promote Sustainable Development.

Access and transportation have influence and impact far beyond the economy. They influence almost all Plan values and all LMUs, and modes of access are the key mechanisms through which virtually all human activities and land uses are realized.

- TH supports the Plan goal that access infrastructure to renewable and non-renewable resources be established, maintained, and remediated in a way that minimizes conflicts and cumulative effects.
- To achieve that goal and the Vision and Goals of the Plan generally, and to effectively implement Special Management Directions and Priority Objectives for specific LMUs, access must be managed effectively across the region by:
 - Representing Access as a key Plan Concept alongside Cumulative Effects.
 - Directing the Parties to jointly develop access management plans throughout the Planning Region as part of Plan Implementation, which among other things prescribe:
 - Location and construction of Barge Landings;
 - Location and construction of Roads, including 4 wheeler trails;
 - Identification of access nodes to serve multiple mining operations so as to minimize disturbance, especially for Yukon River Corridor (LMU 3);
 - Entities (people, companies) with permission to use the access;
 - Prescribed purposes for which access may be used;

- Reclamation/Restoration requirements, and related bonding;
- Restrictions on ability to use mining claims to secure access to mining properties. Mining claims should not automatically bring a right of access and access on claims needs to be managed the same as access to any other type of development.
- Including recommendations for joint planning and approval of all trunk roads/road networks throughout region.
- Recommending “Full Reclamation”⁹ of access disturbance and securing adequate bonding to cover the full cost of reclamation:
- Including requiring proof of available and sufficient security, adjusted for inflation, for full reclamation at all times during exploration and mining.
- Recommending tools to minimize the ecological and cultural impacts from industrial access, including access for mining exploration, such as prescribed access (see above), baseline data requirements, effective CE thresholds and caribou overlays.
- Recommending no new access routes, unless jointly approved, in areas important for subsistence harvesting and with cultural and historic resources, or other areas of community use, including all LMUs TH is proposing as SMA. In all other areas, access must be carefully considered and planned, and require approval by both Parties.
- Ensuring access for mineral exploration is as low impact as possible, using air support and portable light rubber-tired excavators (important to minimize damage until economic viability of potential ore bodies has been proven).
- Including recommendations for requiring proof of probable feasibility of an operation (data proving the mineral deposit exists and that it is economically feasible to mine, including the cost of reclamation) prior to the use of heavy machinery.

TH believes mining laws should be amended to prevent the use of mining claims solely for the purpose of access. The Plan should be drafted to be forward-looking and contemplate such changes being made through new Successor Resource Legislation. As noted previously, the Plan should not be limited by existing legislation and policy.

- The Plan should direct the Parties to prevent the use of mining claims solely for the purpose of access. Until mining legislation is amended to prevent the use of mining claims solely for the purpose of access, the Plan should direct that, in areas where the Parties agree there should be no additional access routes, the Parties should use access management tools, such as Land Management Zones and Special Operating Conditions, to prevent claims being used solely for the purpose of access.

Steps to Protect Important Values

WĒDZEY (CARIBOU) OVERLAYS

Caribou are a good indicator for assessing and monitoring the accumulating effects of access to the land by various users. Caribou are also a good indicator for the effects of wildfire on ecosystems; caribou rely on lichen-rich older forests and subalpine shrublands that are periodically lost to wildfire. There is not

⁹ “Ensure that any lands disturbed by human activities are reclaimed or restored to their natural state.” Concept from Peel Plan.

enough scientific evidence from northern ecosystems with which to define or prescribe thresholds of cumulative human activity and disturbances (human and fire) below which a herd's viability is at limited risk. Consequently, the Plan's success conserving caribou will depend on LMU-specific Access Management Plans and the Caribou Stewardship Overlays. TH proposes the following improvements for caribou overlays in the Plan with more details provided in Appendix 1:

- Caribou Overlays are currently envisioned in the Recommended Plan in LMUs 7 and 21. If Caribou Overlays are going to be prominent parts of the Plan implementation, then the Plan needs to have a more detailed section explaining what they are (purpose, mechanics, institutional responsibilities and reviews, etc.), and provide direction as to how they will be realized, including their minimum requirements.
- To effectively manage for caribou, caribou overlays must be linked to critical caribou habitat and herd range, not limited to LMU boundaries.
- The relationship between Caribou Overlays and Access Management Planning must be clarified.

TR'OJÀ' (SALMON) — LUK CHO (CHINOOK SALMON)

You must save the salmon. If it wasn't for salmon there would not be one Indian left in the Yukon. We would have all starved. Now it's our turn to save them.

Louis Smith, KDFN¹⁰ Elder
Connecting the Broken Trail, 2023

There was a big event around the arrival of the king salmon. Every year, June and July, there was always big celebrations when the first salmon were spotted coming up the Yukon River. The event would be celebrated by dancing, singing and feasting because it was bringing life back to the community.

Gerald Isaac, 1994

Tr'o, the first part of the Hän word Tr'on''dek 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.

Helen Dobrowolsky, 2014

Yukon River Chinook and Chum salmon have always been central pillars of our culture and well-being. Until recently, Chinook and Chum salmon were mainstays of our subsistence.

Tragically, Yukon River salmon are at an historic low. Canadian origin Yukon River Chinook salmon are on the verge of extinction and are currently being evaluated by COSEWIC as a potential Species at Risk. Yukon River chum salmon are also at an historic low. In 2023, only 15,304 Chinook salmon reached the Yukon border. This is well below the Yukon River Panel Interim Management Escapement Goal of 42,000-55,000. Only 19,046 Canadian Chum reached the Yukon border on the mainstem of the Yukon

¹⁰ Permission provided for TH use. Highlights the broad importance of salmon and the Yukon River watershed to all Yukon First Nation People.

River, which is less than 25% of the Escapement Goal. In 2024 less than 11,000 Chinook are projected to reach the border. This is catastrophic.

The causes of this decline are various. Marine interceptions of Yukon River salmon in the Pollock fishery are one factor. Hatchery production is another, which causes increased stress and competition in the ocean. Overfishing in the Alaska commercial and subsistence fisheries has certainly contributed. And arching over everything else is climate change, which is warming the waters in the ocean and the Yukon River. Warmer water inhibits growth, causes salmon to use more energy when swimming and migrating, and exacerbates deadly infestations like *Ichthyophonus*.

But another important factor in the decline of Yukon River Salmon, and particularly Chinook salmon, is destruction of spawning, rearing, and overwintering habitats caused by mining and other industrial activity. Unlike the factors listed above, this factor is entirely within Yukon's ability to remedy.

Salmon habitats tend to be thought of as ending at or near the high-water mark of streams, rivers and lakes; i.e., the riparian zone. However, the land immediately upslope from the riparian zone is also extremely important for maintaining salmon habitat, in protecting the integrity and stability of the riparian zone, preventing sediment from running into it, and providing much needed shade for rearing juveniles. A more holistic view of salmon habitat includes both the riparian zone and the land immediately upslope from the riparian zone.

Yukon River Chinook salmon spawning distribution is relatively well known. But little is known about Yukon River Chinook juvenile rearing distribution and even less about Chinook juvenile overwintering distribution. Yukon River Chinook juveniles spend a full year in fresh water prior to out-migrating to the ocean. Oftentimes they do not rear and overwinter in the same streams in which they emerge. Juvenile Chinook are most vulnerable during overwintering, when food is scarce.

To properly manage and sustain Yukon River Chinook salmon, we need to protect Chinook salmon rearing and overwintering habitat in the Dawson planning region. To do that we need better information on the location of the habitat utilized by juvenile Chinook and better mechanisms to ensure that habitat is not damaged.

There is currently confusion over who is responsible for salmon in Yukon. The federal Department of Fisheries and Oceans (DFO) has primary responsibility for salmon in the riparian zone, but the Government of Yukon (YG) has responsibility for the lands that border and encompass the riparian zone. Further, YG manages and enforces Yukon Placer Authorizations, which sometimes enable placer miners to relocate salmon bearing streams in order to mine the gold in those streams. In theory Placer Authorizations are supposed to protect salmon based upon observed salmon occurrences and the presumed suitability of the land in question for salmon habitat. However, because of the deficit of information about Chinook rearing and overwintering areas, Placer Authorizations do not adequately protect salmon habitat. Moreover, the success of restoring prime salmon habitat after relocating a Placer stream has never been adequately demonstrated.

The THFA protects TH rights to harvest Fish for subsistence, as well as our rights to participate in the management of Fish and salmon specifically. Through the TH Final Agreement, both the governments of

Canada and Yukon have pledged to protect the TH way of life, which is inextricably linked to salmon. The decline in salmon populations has had a significant adverse impact on the ability of TH Citizens to exercise Chapter 16 harvesting rights and to maintain cultural practices and the TH way of life.

Accordingly, it is TH's view that considerably more must be done to protect salmon habitat in the Dawson planning region.

The Plan recognizes the challenges that salmon are facing and makes several good observations and recommendations to support salmon recovery. TH supports those recommendation as far as they go but believes they must be expanded and strengthened. As noted above, at present, we simply do not know where Chinook overwintering habitat is located. The same is true, to a somewhat lesser extent, of Chinook rearing habitat. If we limit avoidance of disturbance to "known" habitat, we will be doing very little to protect overwintering habitat and not enough to protect rearing habitat. We need to avoid disturbance of all "potential" habitat.

- TH would like to see a requirement for adequate baseline data prior to any disturbance in streams where salmon may spawn, emerge, rear, and/or overwinter. We must avoid disturbance to all sensitive habitat — which means we must know where that habitat is.
- TH proposes to modify the Recommended Plan by removing the words "known" and "identified" when referencing salmon habitat. For example, section 5.2.1.3 Salmon: Recommended Management Practices on page 83 states:
 - "Avoid direct disturbance to known sensitive over-wintering, rearing habitats for juveniles, as well as spawning habitat for salmon." (emphasis added).
 - "Significant levels of winter in-stream water withdrawals in known sensitive overwintering and rearing fish habitat." (emphasis added)
 - "Avoid direct or indirect blocking of identified fish migration routes." (emphasis added)
- TH wants to avoid direct disturbance of all over-wintering, rearing habitats for juveniles, as well as spawning habitat for salmon (emphasis added). TH also wants to prevent direct or indirect blocking of all fish migration routes. To ensure damage to salmon habitat is not inflicted due to lack of information, TH proposes the Plan include requirements for adequate baseline data prior to any development activities.
- TH also proposes to add a recommendation in the Plan that YG, DFO and TH work together to clarify and codify responsibility for salmon and salmon habitat in the Dawson Planning Region, with the objective of protecting and restoring 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; and
 - A fulsome TH subsistence harvest of salmon is once more supported.
- TH proposes to add the following to the Planning Strategy Objectives for Salmon:
 - Actively support the development and implementation of Yukon River Chinook Salmon Rebuilding Plans.

Chinook Rebuilding Plans

As of April 1, 2024, there are important national and international requirements for formal rebuilding plans for Canadian origin Yukon River Chinook salmon.

On the national front Yukon River Chinook in Canada are being listed as a 'major fish stock' under the *Fisheries Act*. Because our Chinook are in serious decline and are not coming close to meeting spawning escapement requirements, Canada is legally required to develop a rebuilding plan for Yukon River Chinook

When habitat loss or degradation has been identified as a contributing factor to the stock's decline, the *Fisheries Act*¹¹ requires that the rebuilding plan must take into account whether there are habitat restoration measures in place.

Habitat loss and degradation due to resource development have been identified as a factor contributing to the decline of Yukon River Chinook.

The Department of Fisheries and Oceans sponsored Workshops among representatives of the governments of Canada, Yukon and Yukon First Nations in November 2023 and March 2024. The Parties identified important Actions relating to Chinook habitat in Yukon, which includes of course the Dawson Planning Region.¹²

Action Development:

- *Overwintering Habitat Data Gap*
- *First step in understanding threats to overwintering habitat is to quantify the extent of habitat.*
- *Work collaboratively to design a study for confirming the extent of juvenile Chinook salmon overwintering habitat.*
- *Explore the use of eDNA as first presence/absence indicator. Pilot trial study for 2024-25.*
- *Valuable for future protection.*
- *Need to identify habitat parameters as presence/absence may be limited during low abundance.*

Important Actions were also identified related to the current way mining and mining land use are managed in Yukon, including the need for adequate baseline data prior to development, overhaul of the Yukon Placer Authorization, protection of habitat upslope from rivers and streams, and more stringent reclamation standards.

Action Development:

- *Improved Regulatory Regime*
- *Requirement for adequate baseline data prior to development.*
- *Protection of riparian habitat important to Chinook salmon*
- *Industrial development & Yukon Placer Authorization overhaul.*

¹¹ For prescribed 'major fish stocks', subs. 6.2(5) of the Fisheries Act

¹² See Appendix 5: slides 17 and 20 of the attached Power Point presented to Yukon River Panel on April 8, 2024.

- *Protection of habitat upslope from rivers & streams.*
- *Industrial development and effective reclamation.*
- *More stringent reclamation standards.*

Please note that these Actions are similar to the modifications proposed by TH.

On the international front, Canada and the USA signed an Agreement on April 1, 2024, calling for a complete cessation of fishing for Canadian origin Yukon River Chinook for seven years from 2024 through 2030. This Agreement also requires the Parties to develop a rebuilding plan¹³ for Canadian origin Chinook in accordance with section 22 of the Yukon River Salmon Agreement (Chapter 8 of the Pacific Salmon Treaty).

Section 10 of the seven-year Agreement (Appendix 6) identifies several factors to be addressed in the rebuilding plan, including "resource ... development"¹⁴. This is a mandatory consideration for the Chinook rebuilding plan and a major focus among both Canada and USA members of the Yukon River Panel.

The point of these references to Chinook rebuilding plans is to highlight the need for the Dawson Regional Land Use Plan to complement and support national and international efforts to preserve Yukon River Chinook.

- TH strongly encourages the Commission to include effective measures for restoring and preserving Chinook salmon and their habitat in the Dawson Planning Region in your Final Recommended Plan.

The Governments of Canada and the USA have formally acknowledged the urgent need to take timely action to save our salmon and our salmon habitat. This won't be easy. It will require all of us to tighten our belts and prioritize conservation over economic prosperity. But it must be done. The long-term well-being of our people is directly related to the well-being of salmon. Both our Land Use Plan and our Final Agreement will have failed if they do not save our salmon.

We are the Tr'ondëk Hwëch'in. The river people. The hammerstone people. The salmon people.

JEJIK (MOOSE)

. . . 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 . . .

¹³ Section 22 of the YRSA requires the Parties to develop a rebuilding plan when "chinook salmon originating in the Yukon River in Canada fall below target levels for rebuilt stocks". The past three years have seen the lowest Chinook spawning escapements in history - at about 1/3 of the spawning escapement target.

¹⁴ Resource Development must be addressed on both sides of the border. Both sides have antiquated mining regimes. The Yukon River Panel identifies placer mining in the Klondike region as one of their primary concerns when it comes to the survival of Chinook.

Next to salmon, moose was the mainstay sustenance for our ancestors and those who arrived during the Gold Rush. Moose used to roam this land with such abundance that they were often seen travelling in groups. Today, we are surprised when we see a few together and we say how abundant the moose are, even though their numbers have declined dramatically in recent decades.

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. We believe managing for moose, in particular by protecting important moose calving habitat, is sound management. If we can protect these areas from development, the moose population will have some buffer against over hunting and the unpredictability of future changes and development pressures.

- TH proposes the Plan include access management directions within moose Key Wildlife Areas (e.g., calving grounds and winter ranges) with the aim to reduce the number and density of roads, constrain new access, and restore access disturbances.
- TH proposes that the Ladue wetlands in LMU 19, important moose calving grounds, be designated as a SMA. These additions aim to protect moose populations from development to help sustain their population against outside pressures.

Additional Conservation Areas

TH believes it is necessary to add more conservation areas to the Plan to protect areas of cultural and environmental importance. We believe this is necessary to achieve a balance between industrial development and our Final Agreement rights and relationship with the land. Additional conservation areas are essential to protect TH's economic and spiritual relationship with the land. Protecting important wildlife and their habitats helps ensure TH's constitutionally protected harvest rights and rights to clean water are sustained over time.

We must take additional steps, to better protect major rivers and salmon habitat, increase protection for key caribou and moose habitat, expand protections for wetlands, and further preserve culturally important areas to TH along the Dempster.

TH does not believe SMA quantum should be tied to a pre-defined percentage. We are concerned that not enough of our land and associated conservation values are being recommended for protection in the Plan. We believe SMAs need to be large enough to protect our most important traditional values. We need vast intact areas to support our way of life.

As a society, we cannot continue to allow land use decisions in the Dawson Planning region to be determined by an antiquated mineral regulatory regime, largely based on an early 19th century world-view. With increasing international pressures, outsider interests, and federal incentives to secure and

expand mineral resource development, protecting our most sensitive and sacred values becomes even more important.

For TH, conservation means preserving the wilderness character of the land and its ability to support the subsistence and cultural needs of TH Citizens, now and in the future.

Below, we highlight a few of the key areas that in our view require additional protection. For additional information about these proposals and others, please see Appendices 1 & 2.

Chu Kon Dëk (Yukon River Corridor: LMU 3)

Tsà' Wëzhè, our most important cultural hero created the Yukon River. Today, we continue our journey with Tsà' Wëzhè by maintaining our relationship with the River. As people of the Yukon River, the River is our main artery - the life blood and heartbeat of our people.

We appreciate the Commission's recommendations for LMU 3, which acknowledge the pre-eminent value of the Yukon River to all Yukon First Nations who live along it.

- Given the cultural importance of the Yukon River to TH and other affected Yukon First Nations, TH proposes that the whole Corridor within the Planning Region be designated a Special Management Area with accompanying provisions for collective planning of the whole Corridor within Yukon among Affected YFNs and YG.
- Sub-regional planning is not our preferred option for LMU 3. After decades of waiting, we want a firm and concrete plan for this essential part of TH Traditional Territory. However, we do support the Commission's future vision for a Comprehensive Yukon River Management Plan. In our minds, this includes a Comprehensive Management Plan developed with all affected Yukon First Nations and consideration of legal Personhood for the river.
- TH proposes that a commitment to develop a comprehensive management plan for the entirety of the Yukon River with all affected YFNs be a clear recommendation in the Plan.

Wetlands

TH wants to protect wetlands in the Planning Region. Wetlands have important cultural and environmental value to TH. They protect water quality and rate of flow (Chapter 14 THFA), are the home of traditional medicines and host a diversity of animals. Wetlands support biodiversity in the Planning Region, as well as the exercise of harvesting rights under the THFA and other cultural practices. They are prime moose habitat and accordingly prime hunting and harvesting grounds for our people. Peat wetlands are also critical for sequestering carbon and abating climate change.

TH does not believe Yukon's "A Policy for the Stewardship of Yukon's Wetlands" (hereafter referred to as Yukon's Wetland Policy, or the Policy) and Wetlands of Special Importance designation is enough to protect wetlands in the Planning Region.

- Yukon's Wetland Policy states that YG will create a new land designation for Wetlands of Special Importance (WSI). It is not clear what legal protection will be provided by that designation. The policy states that: The designation as a WSI does not require the withdrawal of the area from land disposition or a prohibition of mineral staking, exploration,

and mining. Further, developing the designation will take time. In the meantime, effective interim measures need to be in place to protect the wetland from development.

- YG has indicated that administrative reserves, among other approaches, are being considered as an interim Policy tool. However, such reserves do not preclude the ownership of sub-surface rights by a third party. As policy, they are also susceptible to political changes and provide a lower level of protection. Therefore, it is unclear how these interim tools could effectively protect wetland values until such a time that regulations are developed to implement the WSI under Yukon's Wetland Policy.
- Yukon's Wetland Policy does not apply to existing tenure (claims) and approvals, and may still allow development within a WSI or in hydrologically connected areas that can affect a WSI.

- TH proposes that all bogs, marshes and fens within the planning region be fully protected, which means:
 - additional wetland mapping and investigation, as required, and
 - permanent withdrawal from placer and quartz staking.

TÄDZAN DĚK (WHITE RIVER: LMU 19)

- TH proposes that the Ladue wetlands within LMU 19 be designated as SMA, which means:
 - Permanent withdrawal of placer and quartz staking
 - No unplanned and unagreed access;
 - No development in undisturbed bogs, marshes and fens within existing tenure, except for existing permits; and
 - For existing permitted activities, TH proposes 50% permanent protection of undisturbed fens within the permitted area.

In addition to wetland values, the area within LMU 19 identified on the map (Appendix 2) is important calving ground habitat for moose (see *Moose* section).

NÄN DHÒHDÄL (UPPER INDIAN RIVER: LMU 17)

- TH proposes LMU 17 as a SMA, which means:
 - Permanent withdrawal of placer and quartz staking;
 - No development in undisturbed bogs, marshes and fens within existing tenure, except for existing permits;
 - For existing permitted activities, TH proposes 50% permanent protection of undisturbed fens within the permitted area.

TH has raised concern about the destruction of wetlands from placer mining in the Indian River valley for decades. This area is of significant cultural importance to TH. Prior to intense mining, Citizens used to frequent the area for hunting and trapping. The current level of activity has displaced our people from this valley. The wetland ecosystem has been badly damaged. Much of the landscape has not been reclaimed. TH would like to see what is left of the wetlands in the Upper Indian River remain intact. This would contribute significantly to reconciliation, and to protection of TH rights relating to harvesting.

Caribou

WEHTR'E (ANTIMONY: LMU 7)

We have respect for the caribou... That's law!

Julia Morberg, 2009

Primary Hart River Caribou calving grounds are located within LMU 7 (Appendix 7). LMU 7 is also an important grazing area for Hart River Caribou.

The Hart River caribou herd is presently listed as a species of Special Concern under the federal *Species at Risk Act* (SARA). All Canadians have a shared interest in protecting species at risk and ensuring healthy ecosystems for future generations. One of three purposes of SARA is to manage species of special concern to prevent them from becoming endangered or threatened.

According to the objectives outlined in the Management Plan for the Northern Mountain Population of Woodland Caribou (*Rangifer tarandus caribou*) in Canada, YG agreed to:

- Objective 5: Identify and assess the quality, quantity and distribution of important habitats;
 - 5.1 Delineate key habitats (e.g. winter range, calving grounds, post-calving summer range, rutting range, insect avoidance areas, travel/movement corridors, mineral licks, predator avoidance sites or other locally important sites);
- Objective 6: Manage and conserve important habitats to support healthy caribou herds;
- Objective 7: Promote conservation of the NMP of woodland caribou through environmental and cumulative effects assessments;
- Recovery measures: 7.1 Provide input into land and resource use planning forums (e.g. Environmental Assessment/Land Use Planning), including cumulative effects, to maintain caribou populations.

One of the tools in the Management Plan for the Northern Mountain Population of Woodland Caribou is to Collaborate and contribute to Land and Resource Use Planning and Environmental Assessment/Land Use permitting processes to maintain caribou habitat requirements.

- TH proposes that LMU 7 be designated a SMA with recommended boundaries. TH does not support a reduction in the size/shape of LMU 7.
 - If this is not achievable, then TH supports the Commission's recommendation of ISA 1 with interim withdrawal from any new industrial land use dispositions and surface access in place until the Access Management plan is completed or until such a time that both Parties agree to rescind the withdrawal, in addition to robust caribou overlays (see Caribou Overlays section above and in Appendix 1).

WĒDZEY NÄHUZHI (MATSON UPLANDS: LMU 16)

We used to have a lot of caribou up on the summit, each family or friends get together and go back there every summer. It used to be a whole pile of caribou going through there and they'd get as much as they could and now you can't do that and there is hardly no caribou.

Angela Harper (Malcolm), 1999

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, 1995

Given the importance of the Forty Mile Caribou to TH and other First Nations and the international efforts being made to recover the herd's population and its former herd ranges:

- TH proposes additional conservation area for the Forty Mile Caribou by expanding LMU 16/SMA to more closely align with the Forty Mile Caribou range. See geographic details in map (Appendix 2).

Additional Conservation Measures

Baseline Data

Collecting adequate baseline data to inform what values may be impacted by development activities and how we can reclaim the land in a respectful way is true to living in a good way. When we live Tr'ëhudè we sustain what is most valuable to us.

TH wants to see a clear requirement for adequate baseline data prior to any development activities (including exploration) to better understand potential adverse effects of a project on TH values.¹⁵ In addition, comprehensive baseline data is critical to meet and enforce reclamation and restoration standards.

"Adequate baseline data" is information that describes the current conditions of the valued component, the range and variability of conditions, and evaluates potential project effects. Baseline data is typically considered adequate if it:

- Characterizes aquatic, terrestrial, atmospheric, cultural, and heritage and historic resources that may be adversely affected;
- Relies on scientifically defensible and repeatable methodologies that will be used throughout all project phases to evaluate project effects;
- Determines potential pathways of effects, impact mechanisms and relevant indicators;
- Identifies terrain and environmental hazards (potential effects of the environment on the project);

¹⁵ For TH, exploration is part of development. Wherever the terms "development" or "development activities" are referenced in this document, exploration is included.

- Allows the prediction of the significance of a project’s impacts and the effectiveness of proposed mitigation activities throughout all project phases;
- Supports the design of water quality (including groundwater, where required) and environmental effects monitoring programs, that will allow for the evaluation of the actual impact on the receiving environment during and after the development of a project by comparing to baseline conditions; and
- Supports the establishment of site-specific, safe, and ecologically relevant thresholds to inform adaptive management of the project and at the Landscape Management Unit (LMU) scale.

TH believes that adequate baseline data collection and analysis is a pre-requisite for:

- Managing development at a sustainable pace.
- Maintaining the wilderness character of much of the planning region.
- Maintaining ecological and cultural integrity by ensuring terrestrial and aquatic habitats remain in a suitable condition to sustain healthy native fish populations and wildlife and communities within their natural ranges.
- Maintaining the quantity, quality, and rate of flow of water within its natural range.
- Ensuring that any lands disturbed by human activities are reclaimed or restored to their natural state.
- Recognizing, conserving, and promoting the heritage and cultural resources and values, and traditional land use practices, of affected First Nations and the Yukon.

➤ Therefore, TH proposes that the Plan direct that prior to undertaking any development activities, including exploration activities:

- Adequate baseline data on wildlife and terrestrial habitats must be collected;
- Adequate baseline data on fish, water bird, aquatic habitat and water quality must be collected;
- Adequate baseline data on heritage and historic resources must be collected;
- Spawning, Rearing and Overwintering locations of salmon and other important fish species must be documented, based on empirical observation, traditional knowledge, and inferred habitat suitability;
- Adequate baseline data regarding water quality, quantity and rate of flow must be collected;
- Surveys of wetlands, including relevant indicators of wetland health, must be conducted; and
- Existing surface disturbances must be documented.

Differentiating Between Types of Mining—Critical Minerals

TH supports carefully controlled mining of critical minerals in a manner that meets the THFA definition of “Sustainable Development.” Sustainable Development means beneficial socio-economic change that does not undermine the ecological and social systems upon which communities and societies are dependent. One of the objectives of THFA Chapter 11 (Land Use Planning) is to “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” (THFA 11.1.1.6). In developing a regional land use plan, a Regional Planning Commission must “promote Sustainable Development” (THFA 11.4.5.9).

TH supports movement away from a fossil-fuel reliant society and towards green technologies. However, we need to ensure that the way we get there does not unduly and disproportionately impact the environment of this region and those who reside here. Our home is not a hinterland to be exploited for the benefit of outside people and interests at our expense, which is the way mining has taken place in the Planning region for the past 130 years.

We recognize the need to minimize the use of internal combustion engines and move to battery power sources for motor vehicles and many other tools. As a means of combatting climate change, TH supports the Canadian Critical Minerals Strategy (2022). Among other things, the federal strategy:

1. Strives to achieve reconciliation with First Nations.
2. References UNDRIP, which includes the principle of Free, Prior and Informed Consent.

However, TH does not support YG’s approach to critical minerals, which does not support reconciliation or UNDRIP. YG seems to be utilizing critical minerals as a convenient rationale to justify mining for non-critical minerals in areas that are already overmined or have sensitive values that must be protected, such as the Hart River caribou herd calving grounds in recommended LMU 7. TH does not believe that support for mining critical minerals needs to include support for mining non-critical minerals such as gold.

- TH wants to see language in the Plan that supports mining for critical minerals as part of an integrated and comprehensive strategy to address climate change and protect TH rights. The strategy must address reconciliation and UNDRIP – as the federal Critical Mineral Strategy does. In addition, the strategy must address paced mineral development, in accordance with agreed upon cumulative effects thresholds, that does not adversely affect TH Final Agreement rights and cultural and subsistence needs, including salmon and caribou.
- TH wants to see language in the Plan recommending that the mining regime in the Dawson Planning Region differentiate between critical and non-critical minerals in certain LMUs.
 - We propose that exploration and mining for critical minerals be allowed in some LMUs (for example, LMU 8 – Brewery Creek), while not allowing for the exploration and mining for non-critical minerals, such as gold. We believe YG has existing tools to do this.

Climate Change

Although the Plan acknowledges the importance of addressing climate change, it is not represented in a way that reflects the urgency of climate change and its effects on the Planning Region and its inhabitants. The Plan needs to further recognize the effects of climate change, including the severity of effects in the north and the disproportionate impact on Indigenous Peoples and our way of life.

- TH proposes the Plan have stronger and more comprehensive provisions to address climate change.

Please see Appendix 8 for additional commentary on climate change.

Settlement Land

In consideration of the rights and obligations set out in the THFA, TH ceded, released and surrendered aboriginal rights to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land. TH Settlement Land comprised about 4% of TH Traditional Territory as it was configured at the Effective Date. Only 60 % of TH Settlement Land is Category A – where TH owns and has management authority over both the surface and sub-surface. This means that TH retained management authority over the sub-surface of only 2.5 % of its Traditional Territory, and less than that when grandfathered mining claims are considered.

- TH Settlement Land makes up about 6 % of the Dawson Planning region as it is configured, of which 3.6 % is Category A.

Special Management Areas and Settlement Land

The Commission has recommended that about 68% of TH Settlement Land within the Dawson Planning Region be included within designated Special Management Areas (SMAs). Under the Recommended Plan, SMAs are to be conserved and jointly managed by both Parties.

TH agrees with the goal of conservation for Settlement Land identified in the Plan as SMAs but does not consent to the inclusion of TH Settlement Land in SMAs. That would dilute TH management authority over that Settlement Land.

Special Management Areas are established as per Chapter 10 of the THFA:

- 10.3.5 provides that no SMA can be established to include TH Settlement Land without TH consent.
- 10.4.0 provides that a SMA cannot adversely affect TH treaty rights or interests without negotiation to address TH rights and TH's role in the management of the SMA itself (10.4.2).
- 10.5.2 provides that "Government (Canada or Yukon) shall prepare, or have prepared, a management plan for each Special Management Area established pursuant to a Yukon First Nation Final Agreement after the Effective Date of that Yukon First Nation Final Agreement."
- 10.5.3 provides that "Government shall review each management plan at least once every 10 years."

Unless otherwise agreed, 10.5.2 and 10.5.3 give Government the preeminent role in developing and reviewing management plans for SMAs that are established after Effective Dates—including SMAs that include Settlement Land.

The THFA provides for TH to have Self-Government powers on Settlement Land, as set out in 13.3 of the TH SGA – including power over the "use, management, administration, control and protection of

Settlement Land”. Including TH Settlement Land in SMAs would diminish TH management authority over those TH Settlement Lands.

Settlement Land should be designated under TH laws, such as the TH *Land and Resources Act*.

Given the surrender that TH made with respect to management authority and self-government powers on Non-Settlement Land, and the importance of parcels that became Settlement Land, TH is not prepared to share its management authority over the small fraction of Traditional Territory that TH retained as Settlement Land.

- To avoid confusion, the term “SMA” should not be applied to TH Settlement Land.
- Management Direction should be inserted in the Final Recommended Plan that specifies that SMAs on Non-Settlement Land should be co-managed by TH and YG, whereas TH Settlement Land should be designated under TH laws and managed exclusively by TH in a way that complements adjacent SMAs.

Integrated Stewardship Areas and Settlement Land

TH Settlement Land is owned by TH. TH Settlement Land was selected by TH for specific purposes, including traditional uses, cabins, fish camps, homesites, agriculture, and economic development, including mining, etc.

Negotiations over TH Settlement Land were fierce. Many tears were shed over the 96% of the Traditional Territory that did not become Settlement Land.

Citizens and the TH Government expect to be able to use Settlement Land for the purpose for which it was selected, or as decided otherwise by TH.

Within ISAs, TH agrees to use Settlement Land in a way that is consistent with the LMU designations and related Cumulative Effects thresholds specified in the Plan (if TH/YG consensus can be achieved on those elements of the Plan), provided that mining and other industrial uses leave reasonable space in those thresholds for TH use.

- Cumulative Effects and Settlement Land within ISAs. TH wants assurance that for Settlement Land (SL) within ISAs, a portion of the development allotment is reserved for TH use on SL.
 - This could be done by reserving a fraction of the allowed development threshold within each LMU for TH SL, equal to the proportion of SL in the LMU.
 - Ex: if 25% of an LMU is TH SL, only 75% of the allowed development threshold can occur on non-SL. 25% should be reserved for TH SL, regardless of how much development may be occurring on non-SL.

The rationale for this approach is simple: If the quantum of allowed development pursuant to a CE threshold in a LMU is entirely consumed by mining on Non-Settlement Land, TH Citizens would have to wait for the mining reclamation to conclude before developing Settlement Land within that LMU.

TH wants to see both Settlement Land and Non-Settlement Land in the Dawson planning region managed in a coordinated and complementary manner, while providing Citizens peaceful use and enjoyment of Settlement Land and respecting TH rights "to develop and administer land management programs related to its Settlement Land."¹⁶

Implementation

Co-Management

The Plan needs to go further towards TH/YG co-management and joint decision making. The Plan does not include strong enough language regarding the role that TH will play in future decision making associated with plan implementation. As noted by the Supreme Court of Canada, "under the Yukon treaties, the Yukon First Nations surrendered their Aboriginal rights in almost 484,000 square kilometres, roughly the size of Spain, in exchange for defined treaty rights in respect of land tenure and a quantum of settlement land (41,595 square kilometres), access to Crown lands, fish and wildlife harvesting, heritage resources, financial compensation, and participation in the management of public resources"¹⁷(emphasis added). The Supreme Court of Canada has further stated that it is a clear objective of Chapter 11 to ensure First Nations meaningfully participate in land use management in their traditional territories and to foster a positive, mutually respectful, and long-term relationship between the parties to the Final Agreements.¹⁸ TH sees joint management in the implementation of Chapter 11 land use plans as essential to uphold these central promises of the TH Final Agreement.

- The Plan should be modified to clarify and strengthen TH's role in the governance and management of the Planning Region through the following changes:
 - Include the following language regarding Future Special Management Areas:
 - *For the purposes of Section 10.5 of the Umbrella Final Agreement, **Management of Future Special Management Areas**, this means that the Government of Yukon "otherwise agrees" such that:*
 1. *The Parties to the Plan will have joint management authority for all of the Special Management Areas in the [Dawson Region];*
 2. *The Parties shall jointly prepare, or have prepared a management plan for each Special Management Area;*
 3. *The Parties shall jointly make best efforts to complete the management plans within five years of the establishment of the Special Management Areas; and*
 4. *The Parties shall jointly review each management plan at least once every 10 years.*
 - **Access Management** for Industrial Activities on Non-Settlement Land, including mining exploration, should be agreed to by both Parties throughout the Planning Region.

¹⁶ THFA 5.5.1.2.

¹⁷ Beckman v. Little Salmon/Carmacks First Nation, 2010 SCC 53, at para. 9

¹⁸ First Nation of Nacho Nyak Dun v. Yukon, 2017 SCC 58, at para. 47

- **Select a single term** (e.g., “co-management” or “joint”) to use consistently throughout the Plan, define the term in the Plan’s glossary, and remove any other term used inconsistently throughout the Plan.
- There needs to be consistent language throughout the Plan stating that TH and YG must jointly implement the Plan and must mutually agree to any changes to the Plan in the future, including the further development of the cumulative effects framework, and for scheduled reviews.
- There must be certainty in the Plan that co-management applies to the Parties to the Plan and, where agreed by the Parties, Affected First Nations. YG may be required to consult with other First Nations, such as White River First Nation, according to the Crown’s constitutional obligations; however, other First Nations should not be included in co-management.

Interim Measures

The Plan needs to clarify what happens to the land and water between the time the Plan is approved and fully implemented. The Plan recommends several activities that must be undertaken to inform how certain LMUs will be managed. Examples include the development of Access Management Plans, Sub-Regional Plans, designation of Wetlands Stewardship Areas and development of Stewardship Plans, application of timing windows for caribou as determined by the Parties, development of monitoring and mitigation plans, consideration of guidance provided in wildlife management plans, etc. Until those activities can be completed, the Plan should recommend effective interim measures to maintain the current state of the land and water.

In some places the Plan contains direction regarding these matters, such as in LMU 21, which calls for “interim withdrawal of all lands from quartz staking until Plan review or such a time as both Parties agree to remove withdrawal.” In other places the direction is not clear. TH does not want the lands in question to be vulnerable to staking, exploration and other forms of industrial development during the time needed for the Parties to take the steps recommended by the Plan. For example, assuming the Plan is approved as is:

- What happens in LMU 17 prior to the development of an Indian River Stewardship Plan or reclamation guidance and standards for placer miners?
- What happens in various Wetlands prior to designation as Wetlands of Special Importance and development of applicable regulations?
- TH proposes the Plan direct that until activities recommended by the Plan to protect the land are developed and implemented, interim measures, such as mineral withdrawals, must be put in place to maintain the current state of the land. TH agrees with the Commission that interim mineral withdrawal is a good interim measure to give the Parties time to do what needs to be done to put the tools in place to implement the Plan. Further to which:
 - TH must have certainty on when and how interim withdrawals can be lifted. This includes the areas of the region that the Plan directs be withdrawn on an interim basis: the Yukon River Corridor (LMU 3), Antimony (LMU 7), the Klondike Valley (LMU 12), the Upper Indian River Wetlands (LMU 17), and along the Dempster. The Plan does not provide adequate

- guidance about how and when these withdrawals will be lifted, TH's role in lifting withdrawals, or what level of protection will be provided at the time withdrawals are lifted.
- TH proposes that language be added to the effect that any decision to lift a withdrawal must be made jointly by TH and YG. Further, language should be added to allow for additional withdrawals, as needed.

Tools to Realize Plan Vision/Objectives

In order to achieve the Plan Vision and Objectives, and to effectively implement the Plan, existing and possibly new tools must be used to manage land use. YG has existing tools they can utilize and can create new tools where existing tools may not exist. In drafting the Final Recommended Plan, Commissioners should be open to including language that encourages, or where appropriate requires, YG to use existing tools or develop new tools, whether that be under current or future legislation and policies.

Existing Tools

Without commitment to utilize the full range of tools available under existing legislation or policy to implement the Plan, it will be operationally impossible to achieve the Plan Vision and Objectives for the Planning Region as a whole or the Priority Objectives set out for specific LMUs, particularly for LMUs 3, 7 and 8 – and perhaps for other areas such as LMU 1 and wetlands.

TH believes there are existing tools that should be used to implement the Plan, including:

1. **Special Operating Areas** prescribed under s. 116 (c.02) of the *Placer Mining Act* and s. 149 (c.02) of the *Quartz Mining Act* and conditions for operations within those areas that will protect the environmental, socio-economic, cultural and historical values of the area. We understand that YG has not yet prescribed any areas using these sections of the Mining Acts, but the intent of these provisions was that, as stated during the 33rd Legislative Assembly, 'they would be part of the implementation tools when those land use plans are put into effect'.
2. **Land Management Zones** under the *Territorial Lands (Yukon) Act*, which can be used where necessary "for the protection of the ecological balance or physical characteristics of any area" and where YG can make regulations respecting the protection, control and use of the surface of land and the issue of permits. YG has used these powers to implement existing land use plans e.g. by designating off-road vehicle management areas in the Peel under the *Off-road Vehicle Management Area Regulation*.
3. **Development Areas** under the *Area Development Act*, which can be used where it is considered necessary in the public interest to regulate orderly development. The Dempster Highway Development Area Regulation made under these provisions includes restrictions on development and use of vehicles.

New Tools

TH Final Agreement 11.7.3 provides that nothing in a Regional Land Use Plan requires YG to amend or create legislation to implement a land use plan. Yet equally, 11.7.3 does not prevent YG from amending or creating legislation where there is a good reason and will to do so. We note that the approved North

Yukon and Peel Regional Land Use Plans both required YG to manage resources and industrial development in a manner that went beyond existing policies, regulations, and legislation. Examples include requirements for adequate baseline data prior to any development activities, the designation of the West Hart River LMU 4 Off-road Vehicle Management Area under the *Off-road Vehicle Management Area Regulation* and de-listing the Wind River Trail as an access route under the *Highways Act*.

The important thing to note here is that the status quo is not a limiting factor when it comes to Land Use Plans. The Parties are free to evolve their thinking and expand their horizons when it comes to Chapter 11 Regional Land Use Plans and their implementation.

Successor Resource Legislation

The governments of Yukon and Yukon First Nations are presently working to develop new Yukon Resource Legislation, including a new *Yukon Placer Mining Act* and new *Yukon Quartz Mining Act*, in order to bring Yukon mining laws into compliance with Yukon First Nation Final Agreements and modern sensibilities.

It makes absolutely no sense to limit the Plan, a modern Regional Land Use Plan developed under the TH Final Agreement, and its implementation, to a land management regime that is based on archaic mining laws that have changed little since 1906, particularly when we know those laws are being replaced. In 2012, the Yukon Court of Appeal found that Yukon's mineral claim regime breached the Crown's duty to consult pursuant to section 35 of the Constitution because it allowed recording of a claim and exploratory work without consultation with affected First Nations.¹⁹ A recent case in the BC Supreme Court found that BC's similar "open entry" regime is inconsistent with the Crown's duty to consult.²⁰ This illustrates some of the fundamental shortcomings of the existing mining regime in the Yukon. Other issues include the failure of the existing legislation to recognize and protect TH treaty Final Agreement rights, TH's way of life based on an economic (as in traditional economy) and spiritual relationship with the land, and to recognise and promote the cultural values of Yukon Indian People.

We urge the Commission to continue to develop a Plan that conforms to modern values and meets the Objectives of Chapter 11, without being limited by existing mining legislation. We cannot allow outdated Yukon mining laws, which are in the process of being changed, to dictate the shape and substance of the Dawson Regional Land Use Plan or its implementation.

Based on the rationale provided in the above sections about tools, TH proposes the following modifications:

- Add language that encourages the Parties to commit to using existing and new tools as necessary to ensure the Recommended Plan's Vision and Objectives are upheld, and that the Plan is fully implemented.
- Provide clearer direction regarding Plan implementation e.g. what activities are permitted in different LMUs, particularly between different classes of ISAs (see section on Integrated

¹⁹ Ross River Dena Council v. Government of Yukon, 2012 YKCA 14.

²⁰ Gitxaala v British Columbia (Chief Gold Commissioner), 2023 BCSC 1680 (under appeal).

Stewardship Areas above). This will help the Parties determine what tools will be required to implement the Plan.

UNDRIP

TH supports the Commission's reference to UNDRIP in section 1.8 of the Plan. UNDRIP complements consultation requirements under our Final Agreement and the common law, by requiring the Crown to consult and cooperate in good faith in order to obtain TH's free, prior, and informed consent prior to the approval of any project affecting TH lands, territories and other resources, and before adopting and implementing legislative or administrative measures that may affect TH.

Integrated Stewardship Areas

ISAs are each assigned a land designation (ISA 1-4) to indicate the relative level of conservation or development focus (Table 3-1, Dawson Regional Planning Commission 2022, pp. 46). These land designations are differentiated by the development category and cumulative disturbance and linear feature indicator thresholds. Cumulative effects indicators are tracked, monitored, and compared to their designation's threshold to determine conformity with each LMU.

- ISAs should be differentiated not just by management intent and cumulative disturbance and linear feature indicator thresholds, but also by the types of activities that may be permitted. TH believes this will provide additional direction for the implementation of the Plan and clarity as to what tools will need to be used to implement the Plan. Certain activities may be inconsistent with the values and priorities for an ISA, even if they do not exceed the cumulative disturbance and linear feature indicator thresholds.
 - For example, in ISA1 where the Recommended Plan identifies very high ecological or heritage/cultural value within a sensitive biophysical setting, and a priority to maintain ecological integrity and cultural resources, TH would like to see a requirement for a permanent withdrawal from staking, to prevent further mining, as this type of activity is inconsistent with ecological and cultural integrity of the land. Access to mining claims outside the ISA could be allowed subject to restrictions that require effective planning and management (e.g. prescribing locations for roads), as could other, lower impact, activities such as outfitting and tourism within the relevant cumulative effects thresholds.
 - Alternatively, additional overlays could be used to prescribe restrictions on activities in specific ISAs, for example to prevent staking but allow access, or to allow mining for critical minerals but not more generally.

These Plan requirements to restrict some activities in certain ISAs would then need to be implemented by the Parties through appropriate new and existing tools (see sections on existing and new tools above).

Sub-Regional Planning

TH generally supports the Commission's recommendations for sub-regional planning, though as noted it is not our first choice for the Yukon River Corridor (LMU 3).

- How sub-regional planning occurs must be clear. The Recommended Plan identifies three areas for sub-regional planning: the Dempster Corridor, the Klondike Valley, and the Yukon River Corridor. The Plan must be clear with respect to how sub-regional planning will proceed, with a timeline, dedicated funding, and key deliverables identified.

Please note that THFA 11.8.0 assigns sub-regional planning to the Parties. 11.8.4 speaks to the joint development of sub-regional plans: “If Government and a Yukon First Nation agree to develop a sub-regional or district land use plan jointly, the plan shall be developed in accordance with the provisions of this chapter”.

- TH wants to be a Party to any sub-regional plan that is developed for Non-Settlement Land and proposes that the Plan recommend that the Parties agree to jointly develop any sub-regional land use plans required by the Plan.

Ongoing Development of the Cumulative Effects Framework

- Given the importance of the ongoing development of the CE Framework, which includes jointly developing reclamation standards, TH proposes the Plan recommend that the Parties continue this collaborative work as part of implementation.

Ongoing Role of the Commission

- TH proposes that the Commission continue to exist, supported by funding from Canada and YG as required, to do the following:
 - Make conformity determinations and representations to YESAB as per 12.17.1, 12.17.2, and 12.17.3 of the THFA;
 - Monitor the implementation of the Approved Plan in order to monitor compliance with the Plan and assess the need for amendment of the Plan;
 - Participate in Sub-regional planning as invited by the Parties;
 - Prepare a 5-year Status Report;
 - Participate in 10-year Plan Review; and
 - Implement and facilitate the Land Stewardship Trust.

Scenario Report

As part of Intergovernmental Consultation, the Parties conducted a Scenarios Engagement in February of 2023, with participation of Placer miners, Quartz miners, YESAB and YLUPC. The intent of this engagement was to test the Recommended Plan against current regulatory standards and practices from the perspective of the placer and quartz mining industries. The engagement demonstrated that current regulatory structures, information systems and practices will have to evolve to implement the Plan. This will likely require a phased approach to implementation, as contemplated in the Recommended Plan. The engagement helped identify steps that the Parties will need to take to support effective implementation of the Plan.

Conclusion

We thank the Commission again for all of your hard work in developing a Recommended Plan that meets the objectives of Chapter 11. Your Plan provides an excellent foundation upon which to build. In the main, we support your Plan, but we do think it can be improved upon in places. We hope our submission clearly describes how we believe the Plan should be modified to better protect important values and THFA rights in the Dawson Planning Region.

Knowing we still have a lot to learn and some distance to go, we are reminded of the wise words of our late Elder Percy Henry

We're not even animals yet.

We understand Percy to have meant that animals continue to remember how they're supposed to act and live in harmony with the land. It is us humans who have forgotten. A humbling reminder that a big part of this land use planning process is remembering and re-learning.

We ask for the strength of our ancestors to be with all of us as we continue along the sometimes challenging, yet inherently rewarding path towards a Final Recommended and Approved Dawson Regional Land Use Plan.

May their wisdom guide us to tell a new story about our homeland. A story of success that we can share with our children and their children of tomorrow. One where we come together, in challenging circumstances, to create a Plan that reflects the voices and vision of this unique region and its animals, including us.

Mähsi Cho!

Appendices

- 1) TH Proposed Modifications (spreadsheet)
- 2) Map of TH Proposed LMU modifications
- 3) TH working definition of reclamation and restoration
- 4) TH Placer-Specific Reclamation Guidelines
- 5) Chinook Rebuilding Plan PowerPoint presented to Yukon River Panel
- 6) Canada/USA Agreement of April 1, 2024 regarding Canadian-origin Yukon River Chinook Salmon
- 7) Hart River caribou calving ground map
- 8) TH Climate Change review of Plan
- 9) TH Speaking Notes from December 12 meeting of the principals (Hähke & TH Council and YG Premier & Ministers)
- 10) February 26 letter from Hähke Taylor to YG Ministers

We are also attaching the December 2022 TH Citizen Consultation Report because we believe it highlights the overwhelming sentiment from our Citizens for protecting our traditional lands and waters. We have tried to reflect that sentiment in our submission.

- 11) TH Citizen Consultation Report

Appendix 1

TH GENERALLY SUPPORTS THE RECOMMENDED PLAN. THANK YOU TO THE COMMISSION.

*Dec 2020 = Ninānkāk hqzq wēkātrenōhcha. Submitted to the Commission on Dec 1, 2020

*Nov 2021 = TH Review of the Dawson Regional Draft Plan, including appendices. Submitted to the Commission on Nov 1, 2021

*Dec 2023 = Speaking note from Hähkè Taylor and Tr’ondëk Hwëch’in Council at the DRLUP Meeting of the Principals December 12, 2023. Notes attached to the letter sent from Hähkè Taylor to Premier Pillai and Ministers Streicker and Clarke sent to YG on Jan 11, 2024. Copy of the letter and notes provided to YLUPC and Commission staff on the same day.

PROPOSED MODIFICATIONS

Theme	Recommended Plan Says	Discussion	TH Proposed Modifications	What has TH said in the past?*	Rationale
Vision and Objectives	<ul style="list-style-type: none"> Plan vision and goals are stated on p. 8 and 11, respectively 	<ul style="list-style-type: none"> TH supports the Vision and Objectives of the Recommended Plan. These would have us adopt a substantially higher level of care for lands and waters in the planning region than the status quo. TH believes that in order to achieve the vision and objectives, there needs to be a willingness and commitment to utilize all existing regulatory tools (e.g., Special Operating Areas) and to develop new tools as needed/required. In order to achieve these goals, TH believes our recommendations help achieve the visions and objectives of the 	<ul style="list-style-type: none"> In the Implementation Chapter, TH would like to see high-level language that encourages the use of all existing policy and legislative tools and encourages the development of new tools, as needed or required, to implement the plan 	<p>Dec 2023</p> <ul style="list-style-type: none"> TH recommended YG should use all the tools in YGs current toolbox to protect culturally or environmentally sensitive areas in the planning region, such as: <ol style="list-style-type: none"> Special Operating Area provisions of the Placer and Quartz Mining Acts: Land Management Zones under the Territorial Lands (Yukon) Act: Withdrawals, where necessary alongside other tools, to achieve the objectives of the Plan for an LMU, even if the LMU is an ISA. 	<ul style="list-style-type: none"> There are several existing policy and legislation tools that TH believes should be used to implement the Plan, including some that exist but have never been used. TH believes that the vision and goals of the Plan cannot be fully realized without the use of all relevant existing tools to their fullest extent and the development of new tools where existing ones are limited or not appropriate In order to achieve these goals, TH believes our recommendations help achieve the visions and goals of the Plan
Traditional Land Management Practices (11.4.5.5 & 11.4.5.6 THFA)		<ul style="list-style-type: none"> TH wants to include cultural pillars to inform Sustainable Development in the Region 	<ul style="list-style-type: none"> We ask the Commission to incorporate the following Tr’ondëk Hwëch’in cultural pillars to inform Sustainable Development in the Dawson Planning Region: Reciprocity, Respect, and Humility 		<ul style="list-style-type: none"> 11.4.5.5 and 11.4.5.6 of the THFA require the Commission to use the knowledge and traditional experience of Yukon Indian People, and take into account traditional land management practices of Yukon Indian People. It is therefore important and necessary to incorporate TH traditional land management practices and worldview into the Plan

**Sustainable
Development**

• The definition of sustainable development (SD) in the Plan is taken from Chapter 11 of the THFA: Development that is resilient, versatile, responsible, for current and future generations. SD maintains the integrity of land, water, wildlife as well as the cultural and heritage values of TH. SD must allow for the continuation and integrity of ecosystems and societies. Overall, activities that do not undermine the ecological and social system upon which communities and societies are dependent.

• TH believes the Plan could go further in specifying permitted activities in the working landscape. For example, outlining which LMUs allow quartz vs placer mining

• Include language that directs the separation of mining activity to prevent the overlap of Placer and Quartz mining within the same LMU

Dec 2020

• TH mentions a desire to minimize the potential for land use conflicts.

- The overlapping of quartz and placer mining activities in an LMU has a greater impact on the environment and makes it harder to monitor the effects of specific mining projects
- Placer mining may undermine the ability of a quartz mine to preserve water quality targets (e.g., Brewery Creek is a real-life example where proposed placer activity would have undermined Brewery Creek Mine water treatment system)
- The overlapping of quartz and placer mining activities may undermine the vision, management directions and/or objectives set out in certain LMUs (e.g., LMU 18: Vision: "It is important that this area remain open for current and future mineral interests without undermining its important environmental and cultural attributes" and Special Management Direction 3: "Efforts to enhance the use of this area for traditional economic activities and cultural/educational pursuits should be explored" -- TH Believes the vision and management direction will be undermined if there are multiple placer mines and a large hard rock mine in the LMU.
- Certain development activities may not be compatible with others

Cumulative Effects

• The Plan outlines a CE Framework that sets thresholds for acceptable level of development (including disturbance and access) envisioned for different LMUs in the region. There are four tiers of Integrated Stewardship Areas (ISA 1 to 4) that are differentiated by their cumulative effects thresholds. Linear features and surface disturbance are the current indicators proposed to monitor cumulative effects. The Plan recommends that the Parties continue to co-develop indicators for the Framework.

• TH supports the Plan's linear and surface disturbance thresholds
• TH supports the continuation of collaborative work to further develop the Cumulative Effects Framework

• **TH supports developing** CE indicators for water quality, salmon, caribou, and socio-economic factors, and impacts to TH culture and subsistence harvesting
• Add a recommendation to the Parties to commit to a workplan and timeline for further CE Framework research, including indicators and evaluating the efficacy of the Framework

Nov 2021

• TH Recommendations on the Draft Plan: To ensure that the CE framework establishes appropriate indicators for the Dawson planning region; To explicitly incorporate indicators that better reflect Tr'ondëk Hwëch'in social and cultural values (e.g., harvesting and hunting, and/or spending time out on the land), and measurable indicators of climate change, including permafrost and wildfires; To identify effective and acceptable levels of disturbance that do not undermine the key values of the region, such as moose, caribou, salmon, water, and to recognize that these values might not be the same throughout the planning region; and To provide clarity around the overall cumulative effects framework and how to assess and monitor indicators, how often disturbance mapping will occur, the process to occur when changes or exceedances are identified

Dec 2023

• We want to embrace high environmentally and culturally sound Cumulative Effects Thresholds for linear and surficial disturbance. When there is question, we want to err on the side of caution.
• We want to make solid commitments to add additional Cumulative Effects indicators to the Plan, such as water quality, abundance of species like caribou and moose, and potentially others.
• Cumulative Effects thresholds must be set at levels that protect the environment and maintain its ability to

Nov 2021

• Fire scars listed as a recommended CE framework indicator

• Conservative Cumulative Effects thresholds will help protect the environmental and cultural values of the land.
• Canadian courts have made clear that the cumulative effects of industrial development authorized by the Crown can significantly diminish the ability of First Nation citizens to exercise their rights to hunt, fish and trap in their territory as part of their way of life and therefore constitute an infringement of their Treaty rights (see *Yahey v British Columbia*, 2021 BCSC 1287).
• It is essential that the cumulative effects thresholds in the Plan are adequate to protect the TH way of life and TH's constitutionally protected rights under the TH Final Agreement.
• TH has growing concerns about the impacts of placer mining and climate change on salmonid-bearing watersheds and other fish habitat. A water quality CE indicator would require some extensive thought on how to frame it for consideration as the research is still on-going.

Cumulative Effects

• The Plan makes recommendations to the Parties to undertake further research on incorporating fire disturbances into the framework

• Fire scars can have an equally devastating effect of wildlife and development activities, especially Caribou

• Include fire scar monitoring alongside cumulative effects monitoring in areas of old growth habitat that overlap with caribou herds to build a fire history into quantitative assessments of available habitat in the event of a large fire or other climatic event.

• TH supports having wildfire scar data tracked separately in a way that can be easily layered on top of linear/surface disturbance threshold data to help with analysis and decision-making.
• The protection of critical values may require that wildfire data to be included in total disturbance calculations
• TH recognizes the variability post-fire Caribou winter range recovery (Kelsey Russell with Klaza herd showed as little as 40 years, but there are quite a few ranges where 60-75+ years has not been sufficient)

Cumulative Effects

• See cell above

• TH is concerned that a TH Citizen may not be able to develop SL for non-traditional pursuits purposes in an LMU where non-TH development activities have consumed the Cumulative Effects development quota

• TH would like to reserve rights to the CE thresholds relative to the proportional amount of SL within a given LMU

Nov. 2021

• TH supports proposed ISA designation on SL for the use on non-renewable resource extraction, under the conditions that the development does have irreversible impact and ensures economic benefits to TH citizens or TH as a whole.

• Citizens and the TH Government expect to be able to use Settlement Land for the purpose for which it was selected, or as decided otherwise by TH.
• TH agrees to use Settlement Land in a way that is consistent with the LMU designations and related Cumulative Effects thresholds specified in the Plan (if consensus can be achieved on those elements of the Plan), provided that mining and other non-TH industrial uses leave reasonable space in those thresholds for TH

Reclamation & Restoration

Reclamation and restoration is mainly discussed in sections 3 and 4 under the plan concepts and the cumulative effects framework recommendations. These indicate that the specific meanings of reclamation and restoration should be agreed upon by the parties. Indicating that restoration should be value-based and focused on the return of disturbed

• See cell above

• Full reclamation is necessary so that the landscape can support the exercise of TH Final Agreement rights, such as rights to harvest Fish and Wildlife, to quality and quantity of Water, and to continue the TH way of life, including cultural activities and stewardship responsibilities.

• TH believes a "full" reclamation concept with an agreed upon threshold should be used in the Dawson Plan, similar to what was used in the Peel Plan, but specific to the Dawson Region's ecology and wildlife habitat.

• TH believes that YGs reclamation definition does not go far enough and

• See cell above

• Include a robust definition of restoration and reclamation in the plan that incorporates a two-eyed seeing approach and is inclusive of TH's definitions. TH has provided a definition of restoration and reclamation in the appendices of our submission.

Nov 2021

• TH comments to the Commission highlighted concerns related to ambiguity in the definitions of reclamation and restoration, as well as concerns related to restoration activities that result in new wetland classes and not restored original wetland class
• TH believes that access impedes provisions of THFA because of changes caused to lands

• Through a Tr'ëhudè lens, TH considers land reclaimed when all aspects of our relationship with the land are in balance and when we are "living in a good way".
• TH views reclamation and restoration in a holistic way
• This approach to reclamation is more in keeping with Tr'ëhudè, when any land use is undertaken, restoration is our ultimate goal.

Reclamation & Restoration

• See cell above

• See cell above

• Provide interim measurable minimum standards for reclamation. An example of measurable standards based in western science comes from the Peel (note, any reclamation standards would need to be adapted to the Regional context and driven by the VSECs. E.g., sensitive caribou habitat, wetlands and cultural values in the Dawson Region may require different reclamation goals, objectives, and standards to ensure these values are protected over time)

• Provide language that set conditions prior to any development commencing (including exploration activities) that includes:

• See cell above

• TH believes the minimum standards for reclaimed or restored should come from the Peel Plan goal: "Ensure that any lands disturbed by human activities are reclaimed or restored to their natural state" i.e., full reclamation.
• In the absence of full reclamation, the cumulative effects of development will significantly diminish the ability of TH citizens to exercise their rights to hunt, fish and trap in their territory as part of their way of life and therefore constitute an infringement of TH Final Agreement rights.

<p>Reclamation & Restoration: Reclamation Bonding</p>	<ul style="list-style-type: none"> The Plan does not reference Reclamation Bonding 	<ul style="list-style-type: none"> There needs to be a mechanism to ensure sufficient funds are available for reclamation The cost of reclamation should not be borne by the public 	<ul style="list-style-type: none"> The Plan should recommend that the Parties ensure that current and future mines in the Dawson Planning Region have closure plans backed up with realistic, adequate and accessible financial security bonds. Proponents should be held accountable if reclamation standards are not met. 	<ul style="list-style-type: none"> See cell above 	<ul style="list-style-type: none"> To ensure adequate reclamation, current and future mines in the Planning Region need to have closure plans backed up with realistic, adequate and accessible financial security bonds. Companies must be held accountable and be responsible for the costs associated with reclamation, remediation, and restoration. Enforcement measures should not allow proponents to skip the territory and escape scot-free if reclamation requirements are not achieved. Achieving balance through reciprocity is an inherent cultural cornerstone of TH and is the way TH views making amends with the land and water after any activity has been undertaken.
<p>Reclamation & Restoration: Reclaiming Legacy Sites</p>			<ul style="list-style-type: none"> Include language directing the Parties to identifying legacy mining sites and include language directing the Parties to ensure that reclamation is undertaken as soon as possible 	<ul style="list-style-type: none"> See cell above 	
<p>Access Management</p>	<ul style="list-style-type: none"> The effects of access infrastructure for industrial land use have high impact on fish and wildlife population, thus they should be carefully managed. The goal of the plan is that infrastructure is established, maintained, and remediate, minimizing conflicts and cumulative effects, while also allowing people to access such recourses and supports the goals of 	<ul style="list-style-type: none"> TH supports the Recommended Plan goal that access infrastructure to renewable and non-renewable resources be established, maintained and remediated in a way that minimizes conflicts and cumulative effects. To achieve the abovementioned goal, the Vision and Goals of the Plan generally, and to effectively implement Special Management Directions and Priority Objectives for specific LMUs, access must be managed effectively. Access has significant impacts on wildlife and the ecological integrity of lands and water. 	<ul style="list-style-type: none"> Add joint planning and approval of LMU-level general access management plans to the satisfaction of YG and TH. Re-position the existing Transportation and Access Management section to Chapter 3, Plan Concepts. Expand the section to provide high-level guidance on Access Management principles for the entire Region Provide language regarding how Access Management Plans relate to Wetland Stewardship Areas (WSA) and Caribou Overlays (CO), including a specific recommendation for higher standards of access planning and development in WSA and COs that are connected to protecting the intended values 	<p>Dec 2020</p> <ul style="list-style-type: none"> Uncontrolled access routes result in disturbance to furbearers' movement corridors and/ or adversely impact trapping infrastructure. TH recommended that general management directions should protect habitat for wildlife, movement corridors and wetlands; protective thresholds for cumulative effects, development footprint, access, water withdrawal and disturbance. <p>Nov 2021</p> <ul style="list-style-type: none"> TH recommended that all SMAs are to be permanently withdrawn from any new industrial land use and surface access 	<ul style="list-style-type: none"> Access and transportation have influence and impact far beyond the economy. They influence almost all Plan values and all LMUs, and modes of access are the key mechanisms through which virtually all human activities and land uses are realized. Controlling access is critical to ensuring Sustainable Development and protecting TH's constitutionally protected harvesting rights and way of life, as well as the environmental and cultural integrity of the land. To preserve the wilderness character of the Yukon, and to protect the special relationship between Yukon Indian People and the Yukon wilderness environment, access must be carefully managed. The Yukon environment is extremely sensitive to human imprints.

**Access
Management**

• See cell above

• See cell above

• Provide language that describe principles and approaches to access, including:

1. Lands and waters that are disturbed by human activities, including lands and waters disturbed by and for access should be restored to their natural state.
2. Full reclamation bonding should be required for all industrial activities, including access, to ensure government can restore lands and waters to their natural state if the proponent is unable or unwilling to do so.
3. Industrial Access, including access for mining exploration, should be managed to minimize ecological and cultural impacts.
4. No access should be allowed in important subsistence harvesting areas, other areas of community use, and areas with cultural and/or historic resources.
5. Access throughout the planning region should be planned and approved jointly, to the satisfaction of YG and TH.
6. Wherever possible, including in the Yukon River Corridor, access nodes should be developed with the potential to serve multiple mining operations to minimize disturbance.
7. Access for mining exploration should be as

• See cell above

• See cell above

**Access
Management**

• See cell above

• See cell above

- Provide language directing the Parties to agree on appropriate access requirements, including:
 - Location and construction of Barge Landings
 - Location and construction of Roads
 - Identification of access nodes to serve multiple mining operations so as to minimize disturbance, especially for Yukon River Corridor (LMU 3)
 - Entities (people, companies) with permission to use the access
 - Prescribed purposes for which access may be used

• See cell above

• See cell above

**Access
Management**

• See cell above

• See cell above

- Include language that direct the Parties to prevent the use of mining claims solely for the purpose of access until such time that new legislation provide for this
- Provide language for joint planning and approval of all trunk roads/road networks throughout region.
- Include a requirement for “Full reclamation” of access disturbance and secure adequate bonding to cover the full cost of reclamation, including requiring proof of available and sufficient security, adjusted for inflation, for full reclamation at all times during exploration and mining.
- Provide language for tools to minimize the ecological and cultural impacts from industrial access, including access for mining exploration, such as prescribed access, baseline data requirements, effective CE thresholds and caribou overlays
- Include a recommendation for no new access routes in areas important for subsistence harvesting and with cultural and historic resources, or other areas of community use, including all LMUs TH is proposing as SMAs. In all other areas, access must be carefully considered and planned, and require approval by both Parties

• See cell above

• See cell above

**Caribou/Caribou
Overlay**

• Plan objectives are:
Objectives: 1. Healthy and resilient caribou herd populations that grow towards historic levels; 2. Habitat and migration pathways are sufficient to support historic population levels; 3. A society that respects and is connected to caribou.

• The intent of Caribou Overlays is to provide protection of the caribou population and habitat, which have high ecological and cultural values. Industrial development and access could have a potential negative impact on caribou values

• TH supports the Caribou Overlays but believes more work is needed to ensure their efficacy.

• Overlays are not yet an effective tool for the protection of the Caribou.

• The different elements of the Caribou overlay not identified in the Plan.

• Expand the Caribou Overlays section in Plan Concepts to provide greater detail about the different elements of the Overlay.

• Decouple Caribou Overlays from LMU boundaries and align Caribou overlay to critical caribou habitat and migration corridors

• Provide clarifying language that outlines relationship between Caribou Overlays and the Access Management Planning

• Provide language directing the parties to co-develop regulations for overlays

• Provide further details on the minimum standards for Caribou Overlays. TH believes that caribou overlays should include, at minimum:

- Monitoring for seasonal range loss to zones of influence from disturbances
- Monitoring for the influence of wildfires, including return of lichen in burned areas
- Evaluation of herd viability risks resulting from new access development
- Access planning and management, including mitigation measures tested with ongoing monitoring

• Add Language that require the Parties to commit to a workplan and timeline for caribou-related CE Framework research and indicators

Dec 2020

• Caribou has high cultural and ecological importance within the region

• Protection for caribou habitat and movement corridors as crucially important for TH.

Nov 2021

• Protecting habitat for wildlife is essential to meeting the objectives of Chapter 16 of the THFA, including to “ensure Conservation in the management of all Fish and Wildlife and their habitats” and to “provide for the Yukon Indian People’s ongoing needs for Fish and Wildlife.” In addition, Tr’ondëk Hwëch’in has the cultural obligation to protect these animals.

Dec 2023

• We want healthy aquatic and terrestrial eco-systems. This means maintaining and where necessary restoring abundant populations of caribou, moose, bear, and salmon - so that our people can eat the food that has nourished us for millennia

• Caribou are an appropriate indicator for monitoring the accumulating effects of access to the land by various users.

• Caribou are also a good indicator for the effect of wildfire on ecosystem processes: they rely on lichen-rich older forests and subalpine shrublands that are periodically lost to wildfire.

• There is not enough scientific evidence from northern ecosystems with which to define or prescribe thresholds of cumulative effects (human and fire) below which a herd’s viability is at limited risk.

<p>Salmon</p>	<ul style="list-style-type: none"> Plan objectives for Salmon are: 1. Stewardship of rivers enhance salmon habitat and support salmon recovery; 2. Salmon migration routes allow for salmon recovery. Salmon recognized as a key species in the region for ecological and socio-cultural reasons Several research recommendations are made to further understand Salmon in the region 	<ul style="list-style-type: none"> It is TH's view that considerably more must be done to protect salmon habitat in the Dawson planning region. Yukon River Chinook and Chum salmon have always been central pillars of our culture and well-being. Until recently, Chinook and Chum salmon were mainstays of our subsistence. Yukon River salmon are at an historic low. Chinook Salmon are on the verge of function extinction The US and Canada have agreed to suspend all fishing for a full cycle and are embarking on a rebuilding plan 	<ul style="list-style-type: none"> Include a requirement for adequate baseline data prior to any disturbance in streams where salmon may spawn, emerge, rear, and/or overwinter. In sections of the Plan related to salmon and fish, remove words “known” and/or “identified” when referring to habitat. To ensure damage to salmon habitat is not inflicted due to lack of information, TH proposes the Plan include requirements for adequate baseline data prior to any development activities 	<p>Dec 2020</p> <ul style="list-style-type: none"> Salmon is extremely significant to TH. For generations, TH people have relied heavily on the salmon runs in the Yukon River and continue to utilize fish camps along its shores. Salmon are an important component of the traditional diet and essential to good health. The importance of salmon to the broader ecosystem and economy is reflected in international agreements, national and territorial salmon research, management and stock restoration efforts and protection initiatives that have been spearheaded by Tr’ondëk Hwëch’in, amongst others. Maintaining quantity and quality of water is important for sustaining populations of salmon. <p>Dec 2023</p> <ul style="list-style-type: none"> We want healthy aquatic and terrestrial eco-systems. This means maintaining and where necessary restoring abundant populations of caribou, moose, bear, and 	<ul style="list-style-type: none"> Salmon is extremely significant to TH. For generations, TH people have relied heavily on the salmon runs in the Yukon River and continue to utilize fish camps along its shores. Salmon are an important component of the traditional diet and essential to good health. Salmon migration routes must also be identified prior to considering blocking any potential routes. Chinook Salmon are on the verge of function extinction
<p>Salmon</p>	<ul style="list-style-type: none"> See cell above 	<ul style="list-style-type: none"> TH believes it is imperative to support the work of the Salmon Subcommittee 	<ul style="list-style-type: none"> Include a planning objective for Salmon: Actively support the development and implementation of Yukon River Chinook Salmon Rebuilding Plans 	<ul style="list-style-type: none"> See cell above 	<ul style="list-style-type: none"> This work is already happening at the salmon subcommittee and should be incorporated into the plan The Department of Fisheries and Oceans is presently in the process of listing Yukon River Chinook as a 'major species'. Because Yukon River Chinook are presently not meeting escapement objectives, this carries with it a requirement to develop a Yukon River Chinook Rebuilding Plan. It is imperative that the Dawson Regional Land Use plan contain strong provisions to protect both Chinook and Chum salmon
<p>Salmon</p>	<ul style="list-style-type: none"> See cell above 	<ul style="list-style-type: none"> Uncertainty over responsibility for salmon an salmon habitat 	<ul style="list-style-type: none"> Include a recommendation that YG, DFO and TH work together to clarify and codify responsibility for salmon and salmon habitat in the Dawson Planning Region, with the objective of protecting and restoring 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 and a fulsome TH subsistence harvest of salmon is once more supported. 	<ul style="list-style-type: none"> See cell above 	<ul style="list-style-type: none"> DFO is responsible to identify the migration routes. YG shares responsibility to ensure migration routes are not disturbed. Important to recognize that salmon migration routes include routes both upstream and downstream, and include rearing and overwintering areas for Chinook. TH has acted as a guardian of the Salmon in the face of declining numbers -- in recent years TH citizens have voluntarily ended the salmon harvest. This constitutes a major shift in TH cultural practice. TH wants to play an active role with other government partners to ensure a thriving salmon population for the Yukon and to restore important cultural and subsistence practices.

Salmon	<ul style="list-style-type: none"> • See cell above 	<ul style="list-style-type: none"> • See cell above 	<ul style="list-style-type: none"> • Provide language directing ongoing, rigorous, and consistent water quality and salmon rearing and overwintering habitat suitability research and monitoring 	<ul style="list-style-type: none"> • See cell above 	<ul style="list-style-type: none"> • The THFA protects our rights to harvest Fish for subsistence, as well as our rights to participate in the management of Fish and salmon specifically. Ongoing data collection and monitoring is an integral part of the recovery of Salmon
Moose	<ul style="list-style-type: none"> • Plan objective: A resilient and growing moose population sufficient to support herd health, as well as current and future harvest levels. • Mitigations relating to moose are closely tied to access in the Region 	<ul style="list-style-type: none"> • TH supports the recommendation that the Parties "Undertake and evaluate values-based indicator research, with a priority placed on the impacts of human-caused disturbance on caribou, moose, salmon, and wetlands." (p.76) • Increasing surface disturbances and linear features are negatively affecting moose habitat 	<ul style="list-style-type: none"> • Provide access management direction within moose key wildlife areas (e.g., calving grounds and winter ranges) with the aim to reduce the number and density of roads, constrain new access, and restore access disturbances. • Add Language that require the Parties to commit to a workplan and timeline for moose-related CE Framework research and indicators 	<p>Dec 2020</p> <ul style="list-style-type: none"> • Moose identified as a species of particular interest to TH • Several key habitats identified, including calving grounds <p>Dec 2023</p> <ul style="list-style-type: none"> • We want healthy aquatic and terrestrial eco-systems. This means maintaining and where necessary restoring abundant populations of caribou, moose, bear, and 	<ul style="list-style-type: none"> • Moose are an important part of TH traditional harvest and diet
Additional Areas for Conservation	<ul style="list-style-type: none"> • SMA status recommended for LMUs 1, 4, 10, 16, 20 	<ul style="list-style-type: none"> • TH is happy to see several LMUs recommended to be SMAs • TH believes additional conservation areas are needed to protect key ecological and cultural values, including major rivers, portions of LMUs along the Dempster, key caribou habitat, wetlands and moose. • The Recommended Plan identifies approximately 30% of the planning region as Special Management Areas, a significant portion of which is SL. 	<ul style="list-style-type: none"> • Add SMA status for LMUs 3, 6, 7, 17, the Ladue wetlands in LMU 19 and a new LMU with a SMA status (Stewart River Corridor) • TH recommends an expanded boundary for LMU 16 (see appendices for our map) 	<ul style="list-style-type: none"> • TH has consistently outlined the importance of protecting the land and water through conservation and care land management practice done to the highest standards of stewardship. • TH has also submitted various maps that highlight our conservation priorities, including our Dec 2020 submission to the Commission re conservation priorities and the Nov 2021 submission to the Commission re the draft Plan. <p>Dec 2021</p> <ul style="list-style-type: none"> • TH recommended 60% of the Region be protected in our Conservation Priority 	<ul style="list-style-type: none"> • TH believes it is necessary to add more conservation areas to the Plan. • We believe this is necessary to achieve a balance between industrial development and our Final Agreement rights/relationship with the land • For Tr'ondëk Hwëch'in, protection and conservation means preserving the wilderness character of the land and its ability to support the subsistence and cultural needs of TH Citizens, and supports TH Citizens' relationship with the land, now and in the future • Appropriate conservation measures are required to support the ongoing meaningful exercise of TH's constitutionally protected rights. • Conservation areas are essential to protect wildlife and habitats, to maintain a high quality of water, to maintain ecosystem intactness, sustain rich biodiversity, and assist with species survival in the face of climate change
Indigenous Protected and Conserved Areas (IPCAs)	<ul style="list-style-type: none"> • The Plan directs the Parties to support the implementation of an IPCA in LMU4 	<ul style="list-style-type: none"> • TH supports the Commission's recommendation that LMU 4 be an IPCA with TH having primary management responsibility. • TH wants to pursue IPCAs on the understanding that IPCAs are: (1) Indigenous led, (2) represent a long-term commitment to conservation and (3) elevate Indigenous Rights and 	<ul style="list-style-type: none"> • Include additional recommendations promoting potential IPCAs for other LMUs that are of critical interest to TH, including LMU 1, 3, 5, and 10. • Add language that emphasizes that TH is the sole authority over conservation management of SL and co-manager with YG of SMAs that are non-SL 	<p>Nov 2021</p> <ul style="list-style-type: none"> • TH request that the Commission provide more information regarding the consideration/implementation (the what/where/and how) of establishing an Indigenous Protected and Conserved Area (IPCA) for LMU 4 	<ul style="list-style-type: none"> • To strength TH capacities to protect and conserve the land in a manner that is consistent with traditional approaches and the Plan • to protect culturally important areas and support the federal government's conservation strategy,

Wetlands

- The recommended Plan notes the socio-cultural and ecological importance of wetlands as important ecological areas, including a mention of the importance of wetlands for traditional activities and that development of these areas can result in a permanent alteration of the ecosystem.
- The Plan proposes special wetlands conservation stewardship areas; however, this designation does not protect wetlands legally nor does it withdraw them from activity
- Interim withdrawal and additional management directions are recommended for the LMU 17.
- In addition to their critical role in ecosystem health, wetlands hold immense cultural significance for TH
- We need more research to help inform effective buffer sizes, and how these buffer sizes might vary in relation to the size and type of wetlands
- TH proposes that all bogs, marshes and fens within the Region be protected, which means: additional wetland mapping and investigation, as required; and permanent withdrawal from placer and quartz staking.
- TH wants LMU 17 designated a SMA with an ISA level 2, which means: Permanent withdrawal of placer and quartz staking; No development in undisturbed bogs, marshes and fens within existing tenure, except for existing permits; for existing permitted activities, TH proposes 50% permanent protection of undisturbed fens within the permitted area. If this is deemed impossible, we support the Commission's recommendation for an Upper Indian River Stewardship Plan
- TH proposes that the Ladue wetlands within LMU 19 be designated as SMA, which means: Permanent withdrawal of placer and quartz staking; no access; no development in undisturbed bogs, marshes and fens within existing tenure, except for existing permits; for existing permitted activities, TH proposes 50% permanent protection of undisturbed fens within the permitted area. If this is deemed impossible, TH proposes a Ladue River Stewardship Plan be jointly created by the
- Dec 2020**
 - TH discussed the key roles of wetlands and ecological function, including their role: as habitat for fish and wildlife, in carbon sequestration, and as an important part of TH Citizen's traditional activities.
 - TH recommended keeping wetlands intact as they are ecological hotspots, suggesting protecting them as well as adjacent land and upstream water bodies.
- Nov 2021**
 - TH emphasized the immeasurable value of wetlands and other waterways, suggesting for these areas to have the highest value of conservation.
 - TH pointed out that it is essential to ensure the protection of such water bodies as to uphold TH rights as specified in chapters 5 and 14 of the THFA.
 - TH expressed the need to expand the wetlands of special importance considered in the plan to include areas such as the Flat Creek Wetland, as well as extending the boundaries of the already identified wetlands.
 - TH recommended that no activity should occur in wetlands and that they should have a 200m buffer zone, and that protecting permafrost is essential as well.
- Dec 2023**
 - TH requested a guarantee of the protection of all wetlands, and wanted clarification on the use of
- Wetlands have important cultural and environmental value to TH.
- Wetlands protect water quality and rate of flow (Chapter 14 THFA), are the home of traditional medicines and host a diversity of animals
- Wetlands support biodiversity in the Planning Region, as well as the exercise of harvesting rights under the THFA and other cultural practices.
- They are prime moose habitat and accordingly prime hunting and harvesting grounds for our people.
- Peat wetlands are also critical for sequestering carbon and abating Climate Change.

Rivers

- The many rivers of the Dawson Planning Region hold high ecological, economic, heritage, and cultural importance.
- Besides LMU 3: Chu Kon Dèk (Yukon River Corridor), the Plan has not identified major river corridors that require specific management direction.
- The main objective for rivers is to maintain and enhance their multi-use character by maintaining their ecological and cultural integrity and balancing their economic uses (i.e., transportation, tourism, etc.).
- Plan objectives include:
 1. Clean and pristine water. Healthy aquatic ecosystems and watersheds;
 2. Stewardship of rivers enhance salmon habitat and support salmon
- TH supports the Plan recommendation to explore personhood for the Yukon River
- TH believes the Plan can go further to protect important rivers in the Region
- TH wants to protect the Stewart River corridor
- Designate LMU 3 (Yukon River Corridor) as an SMA with restrictions on grandfather claims to be developed using hand-mining techniques, and joint access management planning.
- Modify LMU 11 (Goldfields) to create an NEW LMU (22) with an SMA designation along the Stewart River corridor with the same boundary guidelines as LMU 3 (Yukon River) as recommended by TH (i.e., between 1-2kms from the high water mark; see appendices for our map)
- TH recommends personhood for the Yukon and Stewart Rivers
- TH proposes the Commission create a new LMU along the Stewart River within the Region with the same corridor limits and management directions as described in the TH proposed language for the Yukon River Corridor (LMU 3)
- Dec 2020**
 - TH Goal for key river corridors: Conservation measures should preserve the values and characteristics that make major river corridors ecologically and socio-culturally important, including critical habitats, intact landscapes, and opportunities for appropriate cultural and non-industrial access and use.
 - Managing views capes along these river corridors by preventing visual anthropogenic activities is essential in maintaining TH's spiritual connection and continued use of the ancestral routes along these waterways.
 - Several rivers were identified as a conservation priority for TH including but not limited to the Yukon River, Stewart River, and the Indian River
- Nov 2021**
 - TH identified four key areas for conservation that included Key River Corridors (Yukon, Stewart, and Klondike Rivers)
 - TH recommended establishing a Major River Corridor designation and made recommendation for Corridors for rivers not covered under the Draft Plan, including the Klondike and Stewart River Corridors; and
 - TH recommended developing specific General Management Directions for water, that include, at a minimum: The protection of water quality, quantity, and rate of flow through and adjacent to Settlement Land as per Chapter 14 of the THFA; The need for adequate water withdrawal monitoring and treating
- Rivers in the Region are home to diverse aquatic ecosystems. Protecting these waterways ensures the health and stability of ecosystems, which are essential for maintaining biodiversity and protecting TH's harvesting rights.
- Residents of the Region rely on rivers as a source of drinking water. Contaminated water sources can pose serious health risks to both humans and wildlife.
- Protecting river water quality ensures that communities have access to safe and clean drinking water and honours the THFA.
- Water holds significant cultural and spiritual importance for TH.
- Protecting water quality and preserving natural habitats are essential for sustaining economic activities in the Region, including tourism and agriculture activities
- Healthy rivers and waterways play a crucial role in mitigating the impacts of climate change. They help regulate local climates and maintain water supplies. Protecting water resources is essential for building resilience to climate change in the Region

Rivers

- Re salmon: Minimize surface and vegetation disturbance in riparian areas by maintaining riparian buffers/setbacks from development activities where possible.
- Re forestry practices: Maintaining riparian buffer zones around on-land activity is important for protection and function of aquatic ecosystems.
- TH believes the Plan should provide greater direction regarding the protection of riparian zones
- Include a 200m riparian buffer on important rivers in the Region where the river is not within a SMA and/or in LMU recommended for sub-regional planning (Note: TH is proposing SMA status for all of LMU 3 and LMU 22)
- Rivers recommended for this buffer include: Klondike River (including North and South branches, outside of LMUs 12 & 13), Forty Mile River, Sixty Mile River, White River, and Ladue River
- Dec 2020**
 - Riparian areas adjacent to rivers and creeks offer distinct ecosystem services that protect water quality, play an important role in flood mitigation and provide valuable wildlife habitat (beaver, waterfowl, otter etc.).
- Nov 2021**
 - TH recommended that the Commission revisit the need for conservation of important waterways as well as riparian areas for the Recommended Plan
- Riparian buffers are essential as they act as natural filters, trapping pollutants, sediment, and nutrients before they reach water bodies. Additionally, they help stabilize stream banks, reduce erosion, and provide shade that regulates water temperature, creating healthier aquatic ecosystems and benefiting both wildlife and human communities.
- Functioning river ecosystems and intact riparian areas support TH cultural use along river ecosystems, such as hunting, fishing, and harvesting, because they provide necessary habitat for animals, fish and culturally important plants and berries. Protecting these rivers and their riparian ecosystems also honours the cultural significance of water and rivers to TH
- Up to 200 m riparian buffers are required in other Jurisdictions, such as Alberta (Alberta Timber Harvest Planning and Operating Ground Rules Framework for Renewal)

<p>Baseline Data</p>	<ul style="list-style-type: none"> • The plan mentions that indicators are limited by the data availability and the potential of measurement of such data. • The definition of baseline data include the physical, chemical, biological, socioeconomic, and cultural aspects of an area. • There are multiple mentions of the need of further monitoring and collection of additional data on things such as extent of wetlands, water quality, linear disturbance, and on several key species such as grizzly and black bears. • The plan mentions that indicators are currently focused on ecological components, these are surface disturbance and 	<ul style="list-style-type: none"> • TH supports the Plans recommendation for ongoing data collection, including baseline data, to allow for more effective project assessment and monitoring • TH wants to see language that requires solid adequate baseline data prior to any development, including exploration, to better understand potential adverse effects of a project on TH values and VSECs. Exploration is part of development. Wherever "development" or "development activities" are referenced, exploration is included. 	<ul style="list-style-type: none"> • Add a definition for "Adequate baseline data". TH's recommended definition is as follows: "Adequate baseline data" describes the current conditions of a valued component, including the range and variability of conditions, and evaluates potential project effects. • Include language to state that baseline data is typically considered adequate if it: <ul style="list-style-type: none"> -- Characterizes aquatic, terrestrial, atmospheric, and heritage and historic resources that may be adversely affected; -- Relies on scientifically defensible and repeatable methodologies that will be used throughout all project phases to evaluate project effects; -- Determines potential pathways of effects, impact mechanisms and relevant indicators; -- Identifies terrain and environmental hazards (potential effects of the environment on the project); -- Allows the prediction of the significance of a project's impacts and the effectiveness of proposed mitigation activities throughout all project phases; -- Supports the design of water quality (including groundwater, where required) and environmental effects monitoring programs, that will allow for the evaluation of the actual 	<p>Dec 2020</p> <ul style="list-style-type: none"> • Attention was drawn to several difficulties that arise from the lack of data, such as an accurate assessment of mining industry impacts, mentioning that it is difficult to know the real impact of such activities as externalities regarding ecological and socio-cultural impacts can not be fully quantified. • TH suggested conducting comprehensive analyses that extend to the full range of costs and benefits of such activities beyond the value of the extracted minerals, considering ecological and sociocultural externalities as well as the costs that local communities incur by allowing such activities. <p>Nov 2021</p> <ul style="list-style-type: none"> • TH noted that indicators used to inform cumulative effects management should reflect TH social and cultural values, as well as indicators of climate change and natural hazards. • TH noted concerns about out-of-date data, especially regarding the impact of current and future mining development (claims and authorizations) on key ecological areas. <p>Dec 2023</p> <ul style="list-style-type: none"> • TH proposed adding additional Cumulative Effects indicators to the plan, including water quality, abundance of wildlife, and others. 	<ul style="list-style-type: none"> • When we live Tr'èhudè, we sustain what is most valuable to us. • Collecting adequate baseline data to inform what values may be impacted and how we can return the land in a respectful way is true to living in a good way. • In the context of the Dawson Planning Region, baseline data collection and analysis should contribute to achieving the goals of the DRLUP, including: <ol style="list-style-type: none"> 1. Manage development at a sustainable pace. 2. Maintain the wilderness character of much of the planning region. 3. Maintain ecological integrity by ensuring terrestrial and aquatic habitats remain in a suitable condition to sustain healthy native fish populations and wildlife and communities within their natural ranges. 4. Maintain the quantity, quality, and rate of flow of water within its natural range. 5. Ensure that any lands disturbed by human activities are reclaimed or restored to their natural state. 6. Recognize, conserve, and promote the heritage and cultural resources and values, and traditional land use practices, of affected First Nations and the Yukon.
<p>Baseline Data</p>	<ul style="list-style-type: none"> • See cell above 	<ul style="list-style-type: none"> • See cell above 	<ul style="list-style-type: none"> • Add Language that indicates, before any development activities can begin (including exploration activities), adequate baseline data be collected on: <ul style="list-style-type: none"> -- Wildlife and terrestrial habitats -- Fish, water bird, aquatic habitat and water quality -- Heritage and historic resources -- Existing surface disturbances Spawning, Roosting and Overwintering 	<ul style="list-style-type: none"> • See cell above 	<ul style="list-style-type: none"> • See cell above

Critical Minerals

- It is noted in the Plan that Critical Minerals are a major concern for YG, some LMUs may contain critical minerals.
- TH supports the careful development of Critical Minerals
- TH believes gold is not a critical mineral
- Provide language in the Plan that supports mining for critical minerals only as part of an integrated and comprehensive strategy to address climate change and protect TH rights. The strategy must address: reconciliation; UNDRIP (as the federal Critical Mineral Strategy does); paced mineral development, in accordance with agreed upon CE thresholds and in a manner that does not adversely affect TH Final Agreement rights, cultural and subsistence needs, including salmon and caribou.
- TH wants to see language in the Plan
- Dec 2023:**
 - TH supports much of the Critical Mineral Strategy, but not at the cost of salmon and caribou ecosystems. TH wants to moderate the pace of mining, in part, through stringent regulation.
 - The development of critical mineral must respect UNDRIP and work towards Reconciliation.
- TH supports the careful and sustainable mining for critical mineral as a part of the fight against climate change.
- Gold mining in the Region does not assist in the fight against climate change, it contributes to it

Climate Change

- The plan recognizes that Climate Change is a threat to the Dawson Region and that little is known about how ecosystem function and species' behaviour will be affected
- TH believes that Plan does not go far enough to address climate change
- TH proposes the Plan have stronger and more comprehensive provisions to address climate change. Please refer to the Appendix X for an analysis of the Plan through a Climate Change lens
- Nov 2021**
 - TH Recommended:
 - To consider adding more robust and tangible recommendations that address climate change throughout the entirety of the Plan. For example, the General Management Direction sections could emphasize the impacts different industries have on climate change (i.e. transportation and the construction of roads) and the impacts from climate change on different values (the traditional economy and agriculture);
 - To review and adapt the listed objectives of the climate change section to include: Recognising the way climate change is affecting Tr'ondëk Hwëch'in rights, regional governance, and capacity; Support the development of self-sufficiency initiatives, food security, and sustainable renewable energy development;
 - In addition to mitigating the effects to permafrost
- TH stands behind the Yukon First Nations Climate Change Emergency Declaration, which states there is no greater threat today to First Nations culture, way of life, and the wellness of First Nation Citizens and communities than the impacts of climate change.

Special Management Areas and Settlement Land

- Several SL blocks are within LMUs designated as SMAs
- The Plan mentions that on SL decision-making and legal powers are held by their respective FN.
- Each SMA and its management provisions will be defined in its own individual management plan developed by YG and TH, and with input from the Renewable Resource Council and Fish and Wildlife Management Board.

- See cell above

- TH agrees with the goal of conservation and protection for the SMA LMUs of which TH Settlement Land is a part, but does not agree to include Settlement Land in SMA designations. SMA status would dilute TH management authority over Settlement Land.

- TH would like to strengthen language regarding the co-management of non-SL SMAs

- **To avoid confusion, the term “SMA” should not be applied to TH Settlement Land.**

- Management Directions should be inserted that specify that Non-SL in SMAs should be co-managed by TH and YG, whereas conserved areas on TH Settlement Land should be designated under TH laws and managed exclusively by TH within the spirit and intent of the management directions and thresholds for the LMU.

- Provide language in management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations for TH SL

- Clarify management directions regarding joint approval of access so that it is limited to non-SL access and that TH manages access on SL

- Include language clarifying that TH & YG will co-manage all SMAs on non-SL ("otherwise agree" as per THFA 10.5.1)

- TH has diligently and consistently defended the THFA and TH SGA and the rights and authority described in these agreements in all major submissions to the Commission, including the Nov 2021 submission on the Draft Plan.

Dec 2020

TH states that TH retains direct control of all Settlement Land, including the right to manage and plan for SL, and the powers to enact laws on SL.

Dec 2020

- Dënezhu dătr'inche'e states that "it is our responsibility to protect our Traditional Territory as a whole."

- TH noted the THFA citation on the meaningful participation in the management of land and resources.

- TH expressed intention to independently manage SL.

- TH discussed collaborative management between TH and YG for protected and conserved areas on non-settlement land in THTT.

Nov 2021

- Introduction states that the Region represents 75% of TH Traditional Territory (THTT) and that the THTT is their responsibility, indicating that the TH are integral not only as decision-making authority but as part of the land itself.

- TH approaches to land management and the co-management of the land are essential to the goals of reconciliation.

- TH explicitly states that there must be joint TH participation on all areas of the Region.

Dec 2023:

- TH makes an explicit call for the YG to uphold its consultation commitments with TH as well as a

- TH gave up rights and title to 96% of its Traditional Territory in exchange for meaningful participation in the management of public resources, including Chapter 11 Land Use Planning. For TH, the planning process does not stop with the drafting of the document but also extends to the implementation and management of lands and water throughout the Planning Region, especially areas of cultural and ecological significance.

- In light of TH's Final Agreement and Self-Government Agreement, TH is best positioned to manage, conserve and protect its Settlement Land

- TH intends to retain full management authority over its own Settlement Land and does not want that diluted in any way

- TH has an ancestral obligation to steward the land and the THFA allows for the co-management of SMAs.

- TH wants to continue to meaningfully participate in the planning and management of lands within its Traditional Territory

- In the Peel case the Supreme Court of Canada confirmed that "a clear objective" of Regional Land Use Plans is "to ensure First Nations meaningfully participate in land use management in their traditional territories", on both Settlement Land and Non-Settlement Land.

Special Management Areas and Settlement Land

ISAs and Settlement Land

- Several SL parcels are located within ISA LMUs.
- There are several SL parcels, including many smaller SL parcels, located within the working landscape. TH is concerned that industrial activity will interfere with the peaceful use and enjoyment of SL.
- Add a 200m buffer, where no industrial activity should occur, around SL parcels that are not surrounded by bordered by SMAs. Within the buffer, all mining activity should be restricted to hand-mining, only.

Dec 2020

- TH states that TH retains direct control of all SL, including the right to manage, and plan the region, as well as the powers to enact laws in it.

Nov. 2021

- To avoid land use conflicts and to provide a base for traditional activities for TH citizens.

Nov. 2020

- TH supports proposed ISA designation on SL for the use of non-renewable resource extraction, under the conditions that the development does not have irreversible impact and ensures economic benefits to TH citizens or TH as a whole. Note, this reserved right would represent a minimum.

- Many of the smaller SL blocks were selected by specific TH individuals or families. They often have a special significance to the people who identified these areas for Settlement Land.

- Buffers around these SL parcels are necessary to protect the peaceful use and enjoyment of SL by our Citizens and their pursuit of traditional economic activities and land

- Citizens and the TH Government expect to be able to use Settlement Land for the purpose for which it was selected, or as decided otherwise by TH.

- TH agrees to use Settlement Land in a way that is consistent with the LMU designations and related Cumulative Effects thresholds specified in the Plan (if consensus can be achieved on those elements of the Plan), provided that mining and other non-TH industrial uses leave reasonable space in those thresholds for TH

ISAs and Settlement Land

- See cell above
- TH Settlement Land was selected for specific purposes, including traditional uses, cabins, fish camps, homesteads, agriculture activities, and general economic development
- TH is concerned that a TH Citizen or the TH Government may not be able to develop SL for non-traditional pursuits purposes in a LMU where development
- TH would like to reserve rights to the CE threshold relative to the proportional amount of SL within a given LMU

Implementation

- The parties have the responsibility for implementing the plan, according to the legislation, policies and decision-making processes of both YG and TH, in addition to the customs and traditions of TH. The parties should work together in order to implement the Plan.
- TH would like to see additional triggers for Plan review and modification
- Provide an additional trigger for plan review and modification that is linked to extreme weather events and geologic events (e.g., fire, flood, landslides)

Nov 2021

- TH suggested that the commission to be more comprehensive on its inclusion of climate change measures and effects on several topics, as it is the greatest threat to the wellness of first nations.
- TH asked for explicit clarification on how climate change will be considered in an adaptive management implementation.
- TH recommended the commission to propose proactive measures of climate change adaptation and mitigation, and asserts that climate change and its effects should be triggers for a plan review.

- Enhances adaptive management by providing a mechanism to adapt and respond to evolving risks, ensuring the Plan remains relevant, resilient, and responsive to changing conditions.

Implementation

- See cell above

• TH would like to see further clarifying language regarding Plan implementation

- Include consistent language throughout the Plan stating that TH and YG must jointly implement the Plan and must mutually agree to any changes to the Plan in the future, including the further development of the cumulative effects framework, and for scheduled reviews
- There must be certainty in the Plan that co-management applies to the Parties to the Plan and, where agreed by the Parties, Affected First Nations. Consultation may be required for other First Nations, such as White River First Nation, according to the Crown’s constitutional obligations; however, these First Nations should not be included in the co-management process.

Nov 2021:

- Section 5 is entirely focused on the co-management and on the co-implementation of the plan by the parties, pointing out the need to explicitly stating that joint management and joint implementation are critical to the plan.
- TH requested clarification on the implementation of adaptive management and on the definition and process of defining cumulative effects framework.

- The Supreme Court of Canada noted: “under the Yukon treaties, the Yukon First Nations surrendered their Aboriginal rights in almost 484,000 square kilometres, roughly the size of Spain, in exchange for defined treaty rights in respect of land tenure and a quantum of settlement land (41,595 square kilometres), access to Crown lands, fish and wildlife harvesting, heritage resources, financial compensation, and participation in the management of public resources “ (Beckman v. Little Salmon/Carmacks First Nation, 2010 SCC 53, at para. 9)
- The Supreme Court of Canada has further stated that it is a clear objective of Chapter 11 to ensure First Nations meaningfully participate in land use management in their traditional territories and to foster a positive, mutually respectful, and long-term relationship between the parties to the Final Agreements (see First Nation of Nacho Nyak Dun v. Yukon, 2017 SCC 58, at para. 47).
- TH sees joint-implementation of Chapter 11 land use plans as essential to uphold these central promises of the TH Final Agreement.
- See cell above

Implementation

- See cell above

• TH would like to see further clarifying language regarding co-management of SMAs

- The Plan should be modified to clarify and strengthen TH’s role in the governance and management of the Planning Region through the following changes, include the following language as adapted from the Peel Plan regarding Future Special Management Areas: For the purposes of Section 10.5 of the Umbrella Final Agreement, Management of Future Special Management Areas, this means that the Government of Yukon “otherwise agrees” such that:

1. The Parties to the Plan will have joint management authority for all of the Special Management Areas in the [Dawson Region];
2. The Parties shall jointly prepare, or have

- See cell above

Implementation

- See cell above

• The Plan does not provide adequate guidance about how and when withdrawals will be lifted, TH’s role in lifting withdrawals, or what baseline of protection will be provided at the time

- Include language indicating that lifting any interim withdrawals in the Region must be jointly agreed to by TH & YG.
- Include language to allow for additional withdrawals if needed as per to principles of

Nov 2021:

- Mention on the need for withdrawals to protect areas in LMUs and that any decision to lift mineral withdrawal should be a joint decision made by TH and YG.

- As stewards of the land, TH must have certainty over when and how withdrawals can be lifted.
- This is the approach used in the Peel for Wilderness Areas.

Co-Management

• Recommendations co-management or joint managements and decision making, however, there is little guidance on process.

• Co-management and joint decision making are not adequately addressed in the Recommended Plan. The Recommended Plan does not include strong enough language regarding the role that TH will play in future decision making associated with plan implementation.

• The Plan should be modified to clarify and strengthen TH’s role in the governance and management of the Planning Region through the following changes, include the following language as adapted from the Peel Plan regarding Future Special Management Areas: For the purposes of Section 10.5 of the Umbrella Final Agreement, Management of Future Special Management Areas, this means that the Government of Yukon “otherwise agrees” such that:
1. The Parties to the Plan will have joint management authority for all of the Special Management Areas in the [Dawson Region];
2. The Parties shall jointly prepare, or have prepared a management plan for each Special Management Area;
3. The Parties shall jointly make best efforts to complete the management plans within five years of the establishment of the Special Management Areas; and
4. The Parties shall jointly review each management plan at least once every 10 years.

Dec 2020

• TH noted that "it is our responsibility to protect our Traditional Territory as a whole."
• THFA citation on the meaningful participation in the management of land and resources.
• TH expressed intention to independently manage SL.
• All areas identified in the submission contributed to the upholding of TH rights under the THFA, moreover there is an explicit mention of collaborative management between TH and YG for protected and conserved areas on non-settlement land in TH Traditional Territory.

Nov 2021

• Introduction states that the Region represents 75% of TH Traditional Territory and that TH has an ancestral responsibility to care for and steward the land, indicating that TH are integral not only as decision-making authority but as part of the land itself.
• Upholding TH approaches to land management and the co-management of the land are essential to reconciliation.

Dec 2023

• There is an explicit call for the YG to uphold its consultation commitments with TH as well as a statement on TH's meaningful participation in the management of SL and non-SL as well.

• As noted by the Supreme Court of Canada, “under the Yukon treaties, the Yukon First Nations surrendered their Aboriginal rights in almost 484,000 square kilometres, roughly the size of Spain, in exchange for defined treaty rights in respect of land tenure and a quantum of settlement land (41,595 square kilometres), access to Crown lands, fish and wildlife harvesting, heritage resources, financial compensation, and participation in the management of public resources “ (Beckman v. Little Salmon/Carmacks First Nation, 2010 SCC 53, at para. 9).
• The Supreme Court of Canada has further stated that it is a clear objective of Chapter 11 to ensure First Nations meaningfully participate in land use management in their traditional territories and to foster a positive, mutually respectful, and long-term relationship between the parties to the Final Agreements (see First Nation of Nacho Nyak Dun v. Yukon, 2017 SCC 58, at para. 47).
• TH sees co-management in the implementation of Chapter 11 land use plans as essential to uphold these central promises of the TH Final Agreement.

Co-Management

• See cell above

• See cell above

• TH proposes that Access Management for Industrial Activities on Non-Settlement Land, including mining exploration, should be agreed

• See cell above

• See cell above

Co-Management

• The Plan uses both terms, co-management or joint management, interchangeably.

Use of both co-management and joint management in the plan

• Select a single term (e.g., “co-management” or “joint”) to use consistently throughout the Plan -- preference for co-management as this is more commonly used in the literature
• Include a definition in glossary for the selected term

• See cell above

• For clarity and consistency

Co-Management

- See cell above
- TH would like to strengthen language regarding the co-management of non-SL SMAs
- Include language clarifying that TH & YG will co-manage all SMAs on non-SL ("otherwise agree" as per THFA 10.5.1)

Dec 2020

- Dënezhu dät'r'inche'e states that "it is our responsibility to protect our Traditional Territory as a whole."
- TH noted the THFA citation on the meaningful participation in the management of land and resources.
- TH expressed intention to independently manage SL.
- TH discussed collaborative management between TH and YG for protected and conserved areas on non-settlement land in THTT.

Nov 2021

- Introduction states that the Region represents 75% of TH Traditional Territory (THTT) and that the THTT is their responsibility, indicating that the TH are integral not only as decision-making authority but as part of the land itself.
- TH approaches to land management and the co-management of the land are essential to the goals of reconciliation.
- TH explicitly states that there must be joint TH participation on all areas of the Region.

Dec 2023:

- TH makes an explicit call for the YG to uphold its consultation commitments with TH as well as a

- TH has an ancestral obligation to steward the land and the THFA allows for the co-management of SMAs.
- TH wants to continue to meaningfully participate in the planning and management of lands within its Traditional Territory
- In the Peel case the Supreme Court of Canada confirmed that "a clear objective" of Regional Land Use Plans is "to ensure First Nations meaningfully participate in land use management in their traditional territories", on both Settlement Land and Non-Settlement Land.

Management Directions

- Management directions (MDs) appear throughout the Plan. There are general management directions that apply to the entire Region and Special Management Directions that apply to specific LMUs and/or values
- Some MDs direct for co-management and/or co-approval or development projects in SMA designated LMUs
- Edit any language that directs co-management of co-approval of development projects to specify that this is in relation to non-SL, only

Nov 2021

- TH asked for clarification on the extent of adaptive management as well as on the role of co-management, as it is imperative for TH to make clear the objectives of the THFA Chapter 11 will be met. TH marks the relevance of ensuring their participation on the management of public resources throughout the region in crown land and settlement land.
- TH specified that co-management should be explicitly reflected on several sections: Guiding principles, Plan goals, General Management Direction, and Plan recommendations. Ensuring that TH meaningfully participates in the management through the region. Both in crown land and settlement land.

Dec 2023

- TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land.
- TH does not want its authority over SL to be diluted in any way

Interim Measures

- The Plan recommends several activities that must be undertaken to inform how certain LMUs will be managed.
- The Plan needs to clarify what happens to the land and water between the time the Plan is approved and fully implemented
- TH endorses the continued development of the CE Framework throughout implementation to assist in defining reclamation standards.

- Until the recommended activities can be completed, the Plan should mandate appropriate interim measures to maintain the current state of the land and water.
- TH proposes that interim reclamation standards that are specific, measurable and tailored to the Dawson Region (for example the Peel standards, which are measurable) are put in place until the Parties have completed their collaborative work on developing reclamation standards.
- The Plan should direct the Parties to prevent the use of mining claims solely for the purpose of access. Until mining legislation is amended

Nov 2021

- Recommendation: To explicitly state what interim measures should be considered prior to the completion of the sub-regional plans in these important areas. (2024 NOTE: While TH references interim measures for sub-regional planning areas in 2021, we are now raising this issue as it relates to the entire region and the successful implementation of the Plan)

- To ensure the vision and objectives of the Plan are achieved, interim measures must be in place
- Until such time as all recommended activities are completed, the status quo is not acceptable.
- The protection of the land and orderly, paced development in areas where it is permitted in critical to Plan implementation, ensuring the continuance of TH's way of life, and reconciliation

Tools to Realize Plan Vision & Objectives

- The Plan puts forth many recommendations that will require the use of existing policy and legislative tools and some that will require new tools be developed
- In drafting the Final Recommended Plan, Commissioners should be open to including language that encourages, or where appropriate requires, YG to use existing tools or develop new tools, whether that be under current or future legislation and policies.

- Add language that encourages the Parties to commit to using existing and new tools as necessary to ensure the Recommended Plan's Vision and Objectives are upheld, and that the Plan is fully implemented.
- Provide clearer direction regarding Plan implementation e.g. what activities are permitted in different LMUs, particularly between different classes of ISAs (see section on Integrated Stewardship Areas above). This will help the Parties determine what tools will be required to implement the Plan.

Dev 2023

- TH asked YG if it is willing to use all the tools in the current toolbox to protect culturally or environmentally sensitive areas in the planning region, tools such as: a. Special Operating Area provisions of the Placer and Quartz Mining Acts; b. Land Management Zones under the Territorial Lands (Yukon) Act; c. Withdrawals, where necessary alongside other tools, to achieve the objectives of the Plan for an LMU, even if the LMU is an ISA.
- TH asked YG if it is willing to make commitments to develop new tools, if necessary, to achieve

- In order to achieve the Plan Vision and Objectives, and to effectively implement the Plan, existing and possibly new tools must be used to manage land use.
- YG has existing tools they can utilize and can create new tools where existing tools may not exist.
- Without commitment to utilize the full range of tools available under existing legislation or policy and a willingness to develop new tools, where needed, to implement the Plan, it will be operationally impossible to achieve the Plan Vision and Objectives for the planning region as a whole or the Priority Objectives set out for specific LMUs

Integrated Stewardship Areas

- ISAs are defined as areas with multiple activities happening on the land and of not having high conservation value.
- The plan divides them into 4 categories number 1 having the most strict disturbance threshold and the 4 the least strict.
- Most LMUs, including all ISAs, are assigned a specific land designation (ISA 1-4) to indicate the relative level of conservation or development focus.
- Cumulative effects indicators are tracked, monitored, and compared to their designation's ISA designation CE threshold to determine conformity with each LMU.
- The Plan provides very high-level guidance on development activities permitted in an LMU, e.g., industrial

- TH recommends that ISAs should be differentiated not just by management intent, cumulative disturbance and linear feature indicator thresholds, but also by the types of activities that may be permitted.
- TH would like to see a greater degree of detail regarding the types of activities allowed in an LMU. For example, whether all types of mining are permitted in an LMU or if only certain types of mining are allowed in certain LMUs (e.g., LMU 7)

Dec 2023:

- There are multiple requests for clarification by TH on YG's stance on mining and its specific provisions.

- Certain activities may be inconsistent with the values and priorities for an ISA, even if they do not exceed the cumulative disturbance and linear feature indicator thresholds.
- To provide additional direction for the implementation of the Plan and clarity as to what tools will need to be used to implement the Plan.

<p>Integrated Stewardship Areas</p>	<ul style="list-style-type: none"> • The plan recommends a permanent withdrawal from all SMA, including the non-renewal of lapsed tenure. • An interim withdrawal from staking is recommended until a decision is reached on LMU 7, the same recommendations is made for LMU 21, including the mention 	<ul style="list-style-type: none"> • Staking is allowed in some LMUs where the Plan also identifies very high ecological or heritage/cultural value 	<ul style="list-style-type: none"> • Add a permanent withdrawal from staking in LMUs with ISA1 where the Recommended Plan identifies very high ecological or heritage/cultural value within a sensitive biophysical setting. Alternatively, additional overlays could be used to prescribe restrictions on activities in specific ISAs, for example to prevent staking but allow access, or to allow mining for critical minerals but not more generally. 	<p>Dec 2020</p> <ul style="list-style-type: none"> • TH suggested the withdrawal of the conservation areas from staking which includes all wetlands • Proposed stewardship area 1 regions are mentioned to have a priority of reclamation and protection against disturbance. <p>Nov 2021</p> <ul style="list-style-type: none"> • TH called for an interim withdrawal of several LMUs, to consider impact on culturally and ecologically significant areas. • Lifting any withdrawal should be a joint decision made by both TH and YG. <p>Dec 2023</p>	<ul style="list-style-type: none"> • It is imperative to TH that sensitive areas are afforded a degree of protection, even in the working landscape, to preserve ecological integrity and cultural heritage while balancing resource development demands
<p>Sub-Regional Planning</p>	<ul style="list-style-type: none"> • The Recommended Plan identifies three areas for sub-regional planning: the Dempster Corridor, the Klondike Valley, and the Yukon River Corridor. 	<ul style="list-style-type: none"> • How Sub-regional planning occurs must be clear. 	<ul style="list-style-type: none"> • TH would like to see additional language regarding sub-regional planning, including a recommendation for TH & YG to jointly undertake sub-regional planning on non-SL with the participation of the Commission, as invited by the Parties • TH wants to be a Party to any sub-regional 	<p>Nov 2021:</p> <ul style="list-style-type: none"> • TH mentions joint management and co-management, and joint implementation, of all LMU whether they are SL or non-SL. Section 6 has a specific recommendation on the joint management of sub-regional planning units. 	<ul style="list-style-type: none"> • TH believes a strong mandate from the commission regarding sub-regional planning, including a degree of detail that reduces possible confusion of misinterpretation regarding how and when the process is to proceed, will help ensure that planning activities occur in a timely fashion
<p>Ongoing Development of the CE Framework</p>	<ul style="list-style-type: none"> • The Plan recommends that further development of the CE Framework continue 	<ul style="list-style-type: none"> • Continuing the development of the CE Framework 	<ul style="list-style-type: none"> • Given the ongoing importance of the development of the CE Framework, TH supports this collaborative work as part of implementation, including the joint development of reclamation and restoration standards. 	<p>Nov 2021</p> <ul style="list-style-type: none"> • Recommendation: To ensure that the cumulative effects management framework establishes appropriate and additional indicators for the Dawson planning region; <p>Dec 2023</p> <ul style="list-style-type: none"> • We want to make solid commitments to add additional Cumulative Effects indicators to the Plan, such as water quality, abundance of species like caribou and moose, and potentially others. • Over time, TH wants to add Cumulative Effects 	<ul style="list-style-type: none"> • Collaborative development of the CE framework, including identifying appropriate indicators and developing definitions, is critical to the success of the Plan and effective implementation

Ongoing Role of the Commission	<ul style="list-style-type: none"> The Plan recommends that Parties and YLUPC should continue to fund the DRPC. This work will include: <ul style="list-style-type: none"> Plan monitoring as per S 11.4.5.10. Sub-regional planning. Conformity checks and representations to YESAB. The 5-year Status Report and 10-year Plan 	<ul style="list-style-type: none"> The role of the Commission as it relates to implementing the plan needs to be clarified by the Parties 	<ul style="list-style-type: none"> TH proposes that, through funding from Canada and YG as required, the Commission continue to exist to do the following: <ul style="list-style-type: none"> Make conformity determinations and representations to YESAB as per 12.17.1, 12.17.2, and 12.17.3 of the THFA; Monitor the implementation of the Approved Plan in order to monitor compliance with the Plan and assess the need for amendment of the Plan; Participate in Sub-regional planning as invited by the Parties; 	<ul style="list-style-type: none"> TH has consistently supported the work of the Commission 	<ul style="list-style-type: none"> As per S 11.4.5.10 of the THFA, a Commission “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.” An ongoing Commission would increase capacity for Plan Implementation, Conformity Checks, Variances and Amendments, Monitoring, and Revision. To allow for local knowledge to inform Implementation activities and reduce confusion as to how the Plan should be interpreted. A “Plan champion”, independent of the Parties, may aid in Plan implementation.
LMU-Specific Modification	<p>Tthetäwndek (Tanduk) - SMA</p> <p>Area of high cultural and ecological relevance, recommended for conservation with limited use. Industrial land use permitted within ISA 1 CET. Includes non-SL and SL parcels: TH R-48A, TH R-4A, TH R-5A, TH R-76A,</p>	LMU 1	<ul style="list-style-type: none"> Remove SMA status from SL Provide language to Special Management Directions that directs the parties to jointly approve an access management plan (not just jointly consider access management) Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL Provide language that acknowledge that TH will manage and conserve SL in a way that Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL 	<p>Dec 2020</p> <ul style="list-style-type: none"> TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits. It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy. <p>Nov 2021</p> <ul style="list-style-type: none"> Support for SMA status with ISA 1 TH suggested further archeological research, and <p>Dec 2020</p> <ul style="list-style-type: none"> LMU included in the Northern Area conservation region, but also proposed as a Stewardship Area 1, aiming for increased management to protect the interest of TH citizens and their traditional pursuits. <p>Nov 2021</p> <ul style="list-style-type: none"> Support for ISA 2 TH suggested consideration to linkages to the Dempster Corridor and other LMUs and highlighted the 	<ul style="list-style-type: none"> TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land. TH does not want its authority over SL to be diluted in any way TH wants to ensure co-manage access <ul style="list-style-type: none"> TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land. TH does not want its authority over SL to be diluted in any way
LMU-Specific Modification	<p>Horseshoe - ISA 2</p> <p>Intended to support subsistence hunting and harvesting, and to ensure the habitat requirements of the Porcupine caribou herd are met. SL parcel R-49A</p>	LMU 2			

LMU-Specific Modification	Chu Kon Dëk (Yukon River Corridor) - Sub-Regional Planning Area	LMU 3	<ul style="list-style-type: none"> • Designate non-SL in LMU as SMA • Modify boundaries of the LMU to be a minimum of 1Km from the high water level, accept in areas where the full valley bottom exceeds 1Km, in which case, the LMU boundary should extend to 2Km from the high water level. If sub-regional planning is deemed to be the best option, add language that outlines a joint planning process among TH and Government • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and • Remove SMA status from SL • Change language to direct the parties to jointly approve (not just jointly consider) access management • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language that acknowledged that TH • Remove SMA status from SL • Provide language to Special Management Directions that directs the parties to jointly approve an access management plan (not just jointly consider access management) • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language that acknowledged that TH • Designate non-SL in LMU as SMA • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • If SMA status is deemed appropriate, provide language that acknowledge that TH will manage and conserve SL in a way that supports a way of 	<p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Yukon, Klondike and Stewart rivers as conservation areas, as they play a critical role in many aspects such as natural habitat, the salmon ecosystem, water source for the population, cultural significance to TH, and other aspects such as connectivity and ecotourism values, etc. <p>Nov 2021</p> <ul style="list-style-type: none"> • Recommended SMA status 	<ul style="list-style-type: none"> • The Yukon River is of vital importance to TH, other First Nations, and the Yukon Territory as a whole. • TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land and does not want to dilute that authority in any way.
LMU-Specific Modification	Tsey Dëk (Fifteenmile) - SMA	LMU 4	<ul style="list-style-type: none"> • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language that acknowledged that TH • Remove SMA status from SL • Provide language to Special Management Directions that directs the parties to jointly approve an access management plan (not just jointly consider access management) • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Designate non-SL in LMU as SMA • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • If SMA status is deemed appropriate, provide language that acknowledge that TH will manage and conserve SL in a way that supports a way of 	<p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits. • It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy. <p>Nov 2021</p> <ul style="list-style-type: none"> • Support for SMA status with ISA 1 <p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits. • It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy. <p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits. • It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy. <p>Nov 2021</p> <ul style="list-style-type: none"> • Recommended SMA status • TH suggested to ensure that impact to lynx must be avoided, as well as listing special protection to water 	<ul style="list-style-type: none"> • TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land. • TH does not want its authority over SL to be diluted in any way
LMU-Specific Modification	Ddhäl Ch'ël (Tombstone) - SMA	LMU 5	<ul style="list-style-type: none"> • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language that acknowledged that TH • Remove SMA status from SL • Provide language to Special Management Directions that directs the parties to jointly approve an access management plan (not just jointly consider access management) • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Designate non-SL in LMU as SMA • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • If SMA status is deemed appropriate, provide language that acknowledge that TH will manage and conserve SL in a way that supports a way of 	<p>Nov 2021</p> <ul style="list-style-type: none"> • Support for SMA status with ISA 1 <p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits. • It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy. <p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits. • It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy. <p>Nov 2021</p> <ul style="list-style-type: none"> • Recommended SMA status • TH suggested to ensure that impact to lynx must be avoided, as well as listing special protection to water 	<ul style="list-style-type: none"> • See cell above
LMU-Specific Modification	Tr'ondëk (Klondike) - ISA 2	LMU 6	<ul style="list-style-type: none"> • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL • If SMA status is deemed appropriate, provide language that acknowledge that TH will manage and conserve SL in a way that supports a way of 	<p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits. • It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy. <p>Nov 2021</p> <ul style="list-style-type: none"> • Recommended SMA status • TH suggested to ensure that impact to lynx must be avoided, as well as listing special protection to water 	<ul style="list-style-type: none"> • This LMU falls within TH's Cultural Integrity Area. The Cultural Integrity Area includes key wildlife habitat for many species of wildlife and is consequently a highly used area within TH Traditional Territory. It is an area of very high value to TH, and to the environmental integrity of TH Traditional Territory. • TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land. • TH does not want its authority over SL to be diluted in any way

**LMU-Specific
Modification**

Wehtr'e (Antimony) - ISA 1 LMU 7

Key Caribou habitat, envisioned for conservation focus with limited development of existing mineral tenure and carefully managed surface access. Interim withdrawal in place. Includes non-SL and SL parcels: TH R-41B, TH S-123B1, TH S-143B1, TH S-

- Designate non-SL in LMU as SMA
- Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL
- Provide language that acknowledge that TH will manage and conserve SL in a way that supports a way of life that is based upon a spiritual and economic relationship with the land and complements adjacent DRLUP SMAs on Non-SL.

Dec 2020

- TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits.
- It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy.

Nov 2021

- Recommended SMA status
- TH reaffirmed its goals of protecting waterways, wetlands, and the caribou habitat.
- TH also recommends to emphasize the ecological

- See cell above

**LMU-Specific
Modification**

Brewery Creek - ISA 3 LMU 8

Area set for sustainable development and preservation of key values. Includes non-SL and SL parcels: TH R-63A, TH S-159B1, TH S-203B, TH S-204B1, TH S-80B1

- Add a Special Management Direction that provides a 200m buffer around SL parcels where no industrial activity should occur. Within the buffer, grandfathered claims and any new claims permitted should be restricted to hand-mining, only.
- Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL
- Provide language to restrict future mineral development to Critical Minerals, only

Dec 2020

- TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits.
- It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy.

Nov 2021

- Support for ISA designation
- Recommended a modified boundary

• This LMU falls within TH's Cultural Integrity Area. The Cultural Integrity Area includes key wildlife habitat for many species of wildlife and is consequently a highly used area within TH Traditional Territory. It is an area of very high value to TH, and to the environmental integrity of TH Traditional Territory.

• Buffers around these SL parcels are necessary to protect the peaceful use and enjoyment of SL by our Citizens and their pursuit of traditional economic activities and land uses

• Given the strong cultural connection to this area and ecologically sensitive values, mineral extraction should be limited to critical minerals, as they are critical for society. Gold is not a critical mineral.

• TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land.

• TH does not want its authority over SL to be diluted in any way

• Buffers around these SL parcels are necessary to protect the peaceful use and enjoyment of SL by our Citizens and their pursuit of traditional economic activities and land uses

• TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land.

• TH does not want its authority over SL to be diluted in any way

**LMU-Specific
Modification**

Clear Creek - ISA 4 LMU 9

Area set for sustainable development and preservation of key habitat areas for woodland caribou. Includes non-SL and SL parcels: TH R-2A and TH R-79B

- Add a Special Management Direction that provides a 200m buffer around SL parcels where no industrial activity should occur. Within the buffer, grandfathered claims and any new claims permitted should be restricted to hand-mining, only
- Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL

Dec 2020

- TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits.
- It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy.

Nov 2021

- Support for ISA designation

• Buffers around these SL parcels are necessary to protect the peaceful use and enjoyment of SL by our Citizens and their pursuit of traditional economic activities and land uses

• TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land.

• TH does not want its authority over SL to be diluted in any way

**LMU-Specific
Modification**

**Tintina Trench - SMA w/
ISA 2** LMU 10

Area designated for conservation purposes and traditional pursuits. It is also a source for water for Dawson City and holds significance to the Nacho Nyäk Dun First Nation as well. Some industrial, timber and agricultural uses are allowed. Includes non-SL and SL parcels: TH R-2A, R-7A, R-21B, R-22B, R-79B, R-80B, S-19 B1/D, S-

- Remove SMA status from TH SL
- Provide language that acknowledge that TH will manage and conserve SL in a manner that respects the spirit and intent of the LMU objective and management direction and TH approaches to conservation

- Strike the language in the square brackets from Special Management Direction 1.c. and modify it to state: "Any industrial activity must consider the strong conservation value of this area, take into consideration the objectives, values, and rationale listed in this Plan ~~and would require agreement of both Parties~~. Any proposed **industrial activity on non-SL requires the agreement of both Parties**."

- Provide language to management directions
- Add a Special Management Direction that provides a 200m buffer around SL parcels where no industrial activity should occur. Within the buffer, grandfathered claims and any new claims permitted should be restricted to hand-mining, only
- Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL

Dec 2020

- TH proposed the Northern Area as a conservation region due to its high wildlife value, role in migration pathways, and its extensive uses for traditional pursuits.
- It is a key preservation area for contribution to the region's climate change resilience, and essential to the Hän culture and traditional economy.

Nov 2021

- Support for SMA status with ISA 2
- Recommended a modified boundary
- TH reaffirmed its goals of protecting waterways, wetlands, and the caribou habitat.
- TH recommended placing permanent and interim withdrawals in key areas, such withdrawals should not be removed without TH agreement.

Dec 2020

- Wetlands were identified as conservation areas due to their key ecological and cultural functions.
- TH emphasizes the role of the region as a once significant harvest area for citizens, containing important habitat for many species.
- TH stated its goal mitigating and limiting the impacts of mining, with a focus on wetland protection.

Nov 2021

- Support for ISA 4
- Recommended areas for SMA status
- TH suggested the inclusion of the Steward River as a special corridor and points out the need of further monitoring to collect baseline data, as well as

- TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land.
- TH does not want its authority over SL to be diluted in any way

**LMU-Specific
Modification**

Goldfields - ISA 4 LMU 11

Area designated for sustainable development with preservation of key areas. The area comprises bast portions of the Indian and Stewart Rivers, with prevalent wetlands along them. Includes non-SL land and SL 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-

- Buffers around these SL parcels are necessary to protect the peaceful use and enjoyment of SL by our Citizens and their pursuit of traditional economic activities and land uses
- TH ceded, released and surrendered aboriginal rights and title to more than 96% of TH Traditional Territory, retaining exclusive management authority and many Self-Government powers only on TH Settlement Land.
- TH does not want its authority over SL to be diluted in any way

<p>LMU-Specific Modification</p>	<p>Tr'ondëk Tāk'it (Klondike Valley) - Sub-Regional Planning Area LMU 12 Contains non-SL and SL 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</p>	<ul style="list-style-type: none"> • TH supports the Sub-regional Planning Area designation 	<p>Dec 2020</p> <ul style="list-style-type: none"> • TH proposed the Yukon, Klondike and Stewart rivers as conservation areas, as they play a critical role in many aspects such as natural habitat, the salmon ecosystem, water source for the population, cultural significance to TH <p>Nov 2021</p> <ul style="list-style-type: none"> • TH reaffirmed its goals of protecting waterways and wetlands, • TH recommended permanent and interim withdrawals in key areas, such withdrawals should not be removed without TH agreement. • TH supported sub-regional planning for this LMU and points out the need of further monitoring to collect baseline data, as well as managing for higher standards of water quality and flowrate through 	<ul style="list-style-type: none"> • TH believes this is an appropriate designation
<p>LMU-Specific Modification</p>	<p>Ch'ënyäng (City of Dawson) - CA LMU 13 Comprised of non-SL and 72 THSL parcels.</p>	<ul style="list-style-type: none"> • TH support Community Area designation • TH does not support mining in the Community Area 	<p>Nov 2021</p> <ul style="list-style-type: none"> • TH supported LMU designation and pointed out the need of further monitoring to collect baseline data, as well as managing for higher standards of water quality and flowrate through adjacent settlement areas. 	<ul style="list-style-type: none"> • see cell above
<p>LMU-Specific Modification</p>	<p>Tay Dëkdhät's (Top of the World) - ISA 2 LMU 14 The goal of this area is to enhance cultural and community values while allowing limited sustainable development. Chu To Dëk (Swede Creek) is a source of drinking water. It also contains the Clinton</p>	<ul style="list-style-type: none"> • Add a Special Management Direction that provides a 200m buffer around SL parcels where no industrial activity should occur. Within the buffer, grandfathered claims and any new claims permitted should be restricted to hand-mining, only • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL 	<p>Dec 2020</p> <ul style="list-style-type: none"> • TH stated it goals for highway corridors is to balance the multiple uses while minimising habitat disturbance. <p>Nov 2021</p> <ul style="list-style-type: none"> • Recommended areas for SMA status • TH suggested buffers to all areas of cultural significance to TH Citizens. • TH mentioned the value of the area for chum and other species. • Reclamation of Clinton Creek site is needed 	<ul style="list-style-type: none"> • Buffers around these SL parcels are necessary to protect the peaceful use and enjoyment of SL by our Citizens and their pursuit of traditional economic activities and land uses • TH does not want its authority over SL to be diluted in any way
<p>LMU-Specific Modification</p>	<p>Khel Dëk (Sixty mile) - ISA 3 LMU 15 Area envisioned to protect key caribou habitat areas and to allow for sustainable development. Includes non-SL and SL parcels: TH R-11A, TH R-43A, TH S-107B1, TH S-14B1, TH S-</p>	<ul style="list-style-type: none"> • Add a Special Management Direction that provides a 200m buffer around SL parcels where no industrial activity should occur. Within the buffer, grandfathered claims and any new claims permitted should be restricted to hand-mining, only • Provide language to management directions clarifying that TH is the sole authority to prepare, approve, review, and modify plans and regulations within TH SL 	<p>Dec 2020</p> <p>TH suggested management focused on preserving the integrity of caribou ecosystem, especially the connection between Matson Uplands (LMU 16) and the Dawson Range in the south.</p> <ul style="list-style-type: none"> • This goal conflicts with current mining uses. <p>Nov 2021</p> <ul style="list-style-type: none"> • TH suggested at least a designation of the LMU as ISA 2 as the proposed designation contradicted the management statement. 	<ul style="list-style-type: none"> • see cell above

LMU-Specific Modification

Wédzey Nāhuzi (Matson Uplands) - SMA
 Core summer habitat for the Fortymile Caribou Herd. Management direction outline no new surface access to the LMU. Non-SL.

- TH proposes modified boundaries for this LMU. Please refer to our map in this submission
- Add language that directs the parties to jointly approve (in addition to jointly consider) access management if any form of new access or access infrastructure is contemplated

- Dec 2020**
- Fortymile and the southern tip of the planning region are proposed as Stewardship Area 1, prioritizing the conservation of areas important for Caribou.
- Nov 2021**
- Support for SMA status
 - Recommended boundary modifications
 - The draft LMU boundary did not meet the needs of the caribou herd which should be prioritized above all else.

- To provide additional protection for the Forty Mile Caribou
- The protection and recovery of Caribou in the region is critical to ecosystem integrity and to ensure that TH's harvest rights and way of life are upheld

LMU-Specific Modification

Nān Dhòhdāl (Upper Indian River Wetlands) - ISA 2
 The area comprises part of the Indian River Wetland, prioritizing the limitation of development, and high standards of reclamation. Non-SL.

LMU 17

- Designate LMU as an SMA, which means:
 - Permanent withdrawal of placer and quartz staking;
 - No development in undisturbed bogs, marshes and fens within existing tenure, except for existing permits;
 - For existing permitted activities, TH proposes 50% protection of undisturbed fens within the permitted area.

- Dec 2020**
- Wetlands are identified as conservation areas due to their key ecological and cultural functions.
 - Wetlands are ecological hotspots and considered under high level threat across Canada, moreover, they provide essential function to the water function and fish and wildlife depend on them.
 - Wetland disturbance represents a disproportional loss to regional biodiversity.
- Nov 2021**
- Recommended SMA status
 - Recommended boundary modifications
 - TH reaffirmed its goals of protecting waterways, wetlands, and the caribou habitat.
 - TH recommended a permanent and interim withdrawals in key areas, such withdrawals should not be removed without TH agreement.
 - Permafrost and wetlands should always be protected.

- TH has raised concern about the destruction of wetlands from placer mining in the Indian River valley for a decade or more.
- This area is of significant cultural importance to TH. Prior to intense mining, Citizens used to frequent the area for hunting and trapping. The current level of activity has displaced our people from this valley.
- The wetland ecosystem has been badly damaged. Much of the landscape has not been reclaimed.
- TH would like to see what is left of the wetlands in the Upper Indian River remain intact.
- This would contribute significantly to reconciliation, and to protection of TH rights relating to harvesting.

LMU-Specific Modification

Therian Dēk (Coffee Creek) - ISA 3
 The area is envisioned as one focused on sustainable development. The area is a migration corridor for two caribou herds. Non-

LMU 18

- Designate LMU as ISA 4
- Add Language to general management directions that placer mining should not occur until such time that the Coffee Creek Quartz Heap Leach Mine has been reclaimed
- Add Language to allow for carefully considered CE exceedances for the proposed Coffee Creek Quartz Heap Leach Mine

- Dec 2020**
- The southern tip of the planning region was proposed as Stewardship Area 1, prioritizing the conservation of areas important for Caribou.
- Nov 2021**
- Support for ISA 3
 - TH stated that any placer development should not interfere with baseline data collection and monitoring,

- In order to better protect the land and to allow for more accurate monitoring of the effects of mining activities, TH does not want to see two types of mining occurring in this LMU
- Limiting the quartz and placer mining overlap will also aid in more effective CE monitoring and implementation

<p>LMU-Specific Modification</p>	<p>Tädzan Däk (White River) - ISA 1 LMU 19</p> <p>The area has many key ecological functions, includes the Ladue Wetlands and is within the range of two caribou herds. It is recommended to allow the lowest level of development. Comprises non-SL and SL parcels: TH R-44A, TH R-45B, TH R-50A, TH S-17B1</p>	<ul style="list-style-type: none"> • Designate the Ladue Wetlands to be designated as an SMA, which means: <ul style="list-style-type: none"> -- Permanent withdrawal of placer and quartz staking -- No unplanned or unagreed access; -- No development in undisturbed bogs, marshes and fens within existing tenure, except for existing permits; and -- For existing permitted activities, TH proposes 50% protection of undisturbed fens within the permitted area. • Add a Special Management Direction that provides a 200m buffers around SL parcels where no industrial activity should occur. • Add additional language to the Special Management Direction that directs the parties to jointly consider and approve any future access 	<p>Dec 2020</p> <ul style="list-style-type: none"> • Wetlands are identified as conservation areas due to their key ecological and cultural functions. • Wetlands are ecological hotspots and considered under high level threat across Canada, moreover, they provide essential function to the water function and fish and wildlife depend on them. • Disturbance to wetlands represents a disproportional loss to regional biodiversity. <p>Nov 2021</p> <ul style="list-style-type: none"> • Support for ISA 1 • TH reaffirmed its goals of protecting waterways, wetlands, and the caribou habitat. • TH recommended placing permanent and interim 	<ul style="list-style-type: none"> • The Ladue Wetlands are important calving ground habitat for moose, an underrepresented value in the Plan. • This habitat needs to be protected because it is critical moose habitat and protecting it will help safeguard moose populations from hunting pressures. • The area is also of cultural significance to TH and Citizens have identified this area as an important place that requires more protection.
<p>LMU-Specific Modification</p>	<p>Luk Tthe K'ät (Scottie Creek Wetlands) - SMA LMU 20</p> <p>Designated mainly as a conservation wetland complex. Non-SL</p>	<ul style="list-style-type: none"> • TH proposes modified boundaries for this LMU. Please refer to our map in this submission • Add language to Special Management Direction that indicates that any new access should be jointly considered and agreed to, if deemed acceptable • Add a Special Management Direction that provide a 200m buffer around SL parcels where no industrial activity should occur. Within the buffer, grandfathered claims and any new claims permitted should be restricted to hand- 	<p>Dec 2020</p> <ul style="list-style-type: none"> • Wetlands are identified as conservation areas due to their key ecological and cultural functions. • Wetlands are ecological hotspots and considered under high level threat across Canada, moreover, they provide essential function to the water function and fish and wildlife depend on them. • Their disturbance represents a disproportional loss to regional biodiversity. <p>Nov 2021</p> <ul style="list-style-type: none"> • Support for SMA status • TH reaffirmed its goals of protecting waterways, wetlands, and the caribou habitat. • TH recommended placing permanent withdrawals 	<ul style="list-style-type: none"> • Access is the means through which any future development in the LMU will occur. As such, TH must be a co-manager of future access
<p>LMU-Specific Modification</p>	<p>Wédzey Tąy (Fortymile Caribou Corridor) - ISA 2 LMU 21</p> <p>The designation permits some industrial activity. The plan mentions that the area will prioritize the preservation of the caribou corridor. Includes non-SL and SL parcel TH S-13B1.</p>	<ul style="list-style-type: none"> • TH proposes modified boundaries for this LMU. Please refer to our map in this submission • Add language to Special Management Direction that indicates that any new access should be jointly considered and agreed to, if deemed acceptable • Add a Special Management Direction that provide a 200m buffer around SL parcels where no industrial activity should occur. Within the buffer, grandfathered claims and any new claims permitted should be restricted to hand- 	<p>Dec 2020</p> <ul style="list-style-type: none"> • Fortymile was proposed as a conservation area due to its ecological importance a key summer role as a caribou herd habitat, as well as being used by Alaskan herds. • Fortymile and the southern tip of the planning region are proposed as Stewardship Area 1, prioritizing the conservation of areas important for Caribou. <p>Nov 2021</p> <ul style="list-style-type: none"> • Recommended SMA status 	<ul style="list-style-type: none"> • To provide additional protection for the Forty Mile Caribou • The protection and recovery of Caribou in the region is critical to ecosystem integrity and to ensure that TH's harvest rights and way of life are upheld • TH does not want its authority over SL to be diluted in any way

**LMU-Specific
Modification**

The area of this proposed NEW LMU
LMU is found mostly
within recommended
LMU 17 (I don't think it
includes LMU 17) (ISA 2)
LMU 11 (ISA 4).

- Create a new LMU along the Stewart River within the Region with the same corridor limits and management directions as described in the TH proposed language for the Yukon River Corridor (LMU 3)
- Only non-SL in the LMU should be designated as SMA
- Access management for the Corridor should consider and accommodate the proposed Northern Access Route.

Dec 2020

- TH proposes the Yukon, Klondike and Stewart rivers as conservation areas, as they play a critical role in many aspects such as natural habitat, the salmon ecosystem, water source for the population, cultural significance to TH, and other aspects such as connectivity, reclamation and ecotourism values, etc.

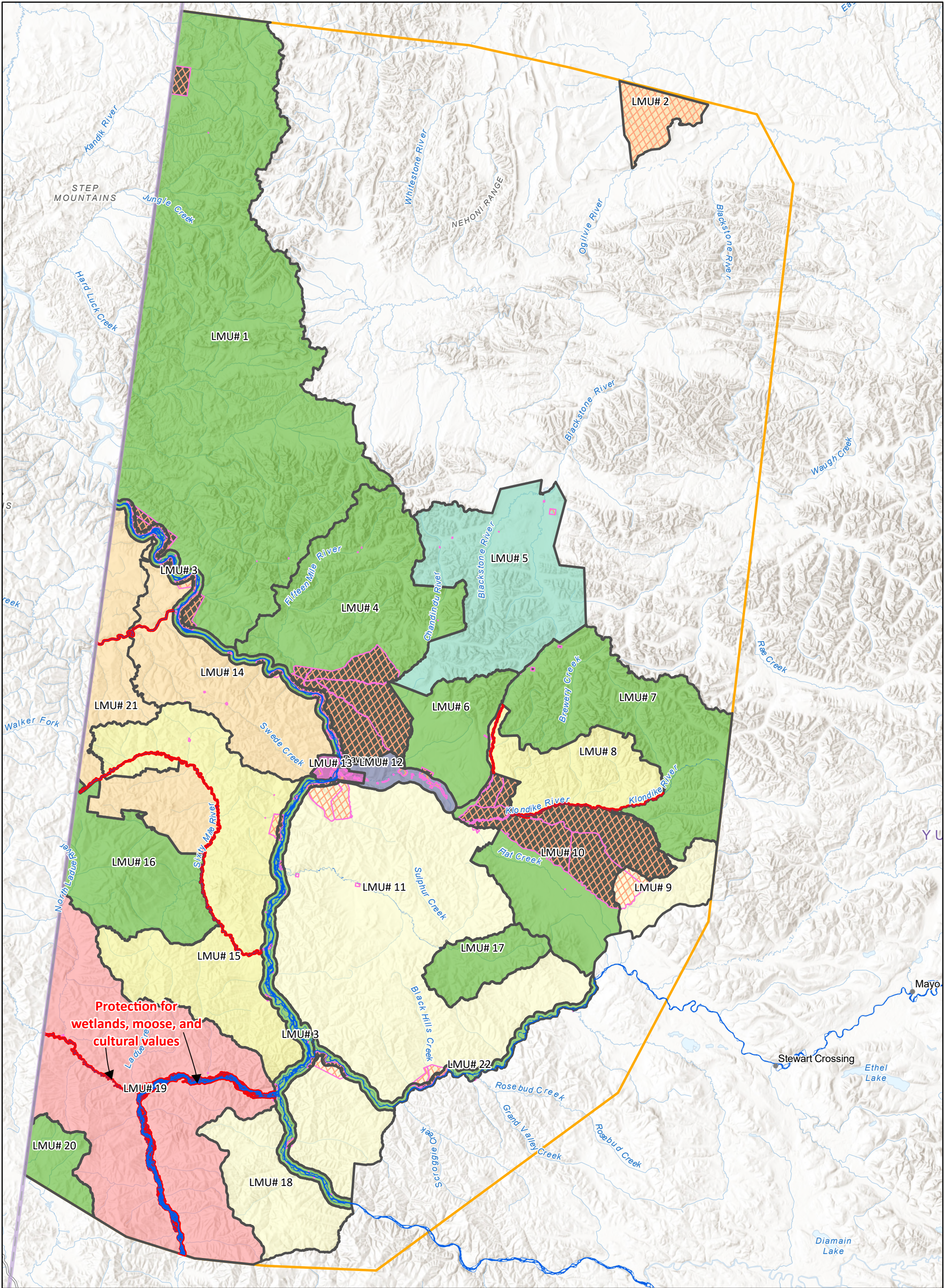
Nov 2021

- Recommended for SMA status
- TH suggested the inclusion of the Stewart River as a special corridor and points out the need of further monitoring to collect baseline data, as well as

- TH wants to protect the Stewart River Corridor
- Protective measures are needed to ensure the ecological and socio-cultural importance of the Stewart River Corridor for both TH and NND
- Managing viewscales along the river corridor by preventing visual anthropogenic activities is essential in maintaining TH's spiritual connection and continued use of the ancestral routes along these waterways.
- TH SL within the corridor should not be included in the SMA designation because TH does not want its authority over SL to be diluted in any way



Appendix 2



Tr'ondëk Hwëch'in Proposed Land Management Units- 2024

Tr'ondëk Hwëch'in Settlement Land	Major River	ISA 2	Sub-Regional Planning Area
Tr'ondëk Hwëch'in Traditional Territory	Tr'ondëk Hwëch'in Proposed Land Management Units (LMU)	ISA 3	Tombstone Territorial Park
LMU Boundary	Community Area	ISA 4	
Major Rivers Corridor - 200 m from high water mark	ISA 1	SMA	

1:1,000,000 (at 11" x 17")
 NAD 1983 Yukon Albers
 0 25 50
 Kilometers

Date: March 14, 2024
 Map Updated on May 15, 2024
 Map Prepared by GIS Coordinator @ Natural Resources, Lands Branch,
 Tr'ondëk Hwëch'in Government
 Data Source: Tr'ondëk Hwëch'in GIS data and GeoYukon

Appendix 3

WE ARE DĚNEZHU. WE LIVE TR'ĚHUDÈ

We are DĚnezhu, the people of this land We are Tr'ondĕk
Hwĕch'in, the people of this river following the ways Tsà'
Wĕzhè traveled and remembering his journey and the living
inheritance he left us – Tr'ĕhudè, our way of life and our
law.

We are DĚnezhu, the people of this land
salmon people and caribou people
weather-watchers and story people.

Ours is a constitution of stories and promises – a promise to
listen to the land a promise to act humbly and show gratitude
for the gifts that sustain us a promise to take care of each other.

The promises Tsà' Wĕzhè made in the long-ago times are the core of our identity
as DĚnezhu 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.

Tsà' Wĕzhè used his wits to make the world safe
for us so we live Tr'ĕhudè to protect the balance
he made still telling the stories that bind us to
this land and keeping our promises so the
animals keep theirs – for all the generations yet
to be born.

That is what we mean when we say we are DĚnezhu, the people of this land
That is what it means to be Tr'ondĕk Hwĕch'in, the people of this river.

Traditional Knowledge and Heritage Perspectives on Defining Reclamation and Restoration

Opening Remarks

In this document, we are sharing a definition of reclamation and restoration that is grounded in our way of life. We are Dënezhu, the people of this land, we are Tr'ondëk Hwëch'in. Our culture mirrors the rhythms of the land, its complexity and balance. Out of the Spirit of the Land come four foundational values: integrity, respect, interconnection and justice and we support the Commission's inclusion of them in the Recommended Plan. These values are integral if we want our land, our culture, and our community to survive. The Dawson Regional Land Use Plan (DRLUP) must be grounded in Dënezhu values, stories, and language, and therefore our definitions of reclamation and restoration are based on perspectives that are often missing from such definitions.

In addition to this document, we have included a reclamation guide created by Tr'ondëk Hwëch'in Government applicable for placer mining in 2017 for reference for the Cumulative Effects Working Group to review. In this way, we acknowledge that the care and stewardship of this land must consider the different worldviews of all that live and work in the region.

The quotes and traditional knowledge shared in this document is not to be shared beyond the DRLUP Cumulative Effects Working Group. These are provided to contextualize Denezhu ways of knowing and it is important that before sharing beyond the group, the owners of this knowledge can consent they're happy to share it.

Tr'ëhudè

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

- TH Elder Peggy Kormendy

Dënezhu way of life is informed by the concept of Tr'ëhudè ("living in a good way"). Tr'ëhudè is how we conduct ourselves and how we are in relationship with one another – those who have come before us, the spirit world, the land, the water, and more-than-human animals. Tr'ëhudè is passed on through Dänojà (long ago) foundation stories, Indigenous Science (Traditional Knowledge), family stories, and individual experiences. Tr'ëhudè is taught by example – our community, ancestors, the land, and all our relations demonstrate to us how to live in a good

way. It is our job to share this knowledge with our children and grandchildren so that our sacred relationships with land, water, and all inhabitants remain intact.

Within this wholistic perspective, we believe that both restoration and reclamation must consider all interconnected activities and spheres, rather than being limited to direct impacts to the land, animals, and water.

Through a Tr'ëhudè lens, land would be considered reclaimed when all aspects of our relationship with the land are in balance and when we are "living in a good way". Our Elders suggest that the concepts of restoration and reclamation need to expand beyond the notion of making severely degraded land fit for human use or cultivation. As a Tr'ondëk Hwëch'in Elder shared:

"When we try and protect our land, it's not just for us or the land alone, it's a lot of other things,"

This refers to the totality of our relationship with the land and all it includes, such as our relationship with the spirit world, our ancestral ties to place, and our responsibility as stewards of this land.

When we work on healing the land, we are not only looking at what needs to be done to reclaim or restore the land itself, we are also taking a close look at ourselves and our actions. While western notions focus reclamation/restoration efforts on land and water quality or species health, we know the only thing we can control is human action. It is important for us to address the root of our problems rather than solely focus on the symptoms, otherwise we will never improve upon our relationship with the land and one another.

As one of our Elders has shared:

"We need to control ourselves, not the land or the animals. Land and animals will take care of themselves,"

The Importance of Water as an Indicator of Land Health

Several of our Elders and Citizens have spoken many times and in different contexts regarding the health and well-being of the land. A resounding similarity from individual testimony is that water is the primary indicator of the land's health. Their voices were loud and clear that:

Water is the most important resource – all other things depend on it.

In other words, if the water is not healthy, there is no possibility that all other aspects of our relationship with the land can be in balance.

Therefore, from our perspective, the preliminary assessment of an area's health following industrial development must focus on water quality. From our perspective, if the water quality in the area is poor, we cannot proceed with further assessment.

Restoration

The quote above, from respected TH Elder Peggy Kormendy, demonstrates the integral TH value of balance – when we take something from the earth, something must be given in return. Thus, a TH concept of restoration would include a gift for the land, an acknowledgment of what was taken, and thanks to the land for continued sustenance.

Through a Tr'ëhudè lens, land would be considered restored when all aspects of our relationship with the land are in balance and, as respected TH Elder Peggy Kormendy says above, when something has been put back to balance out what was taken.

In this way, restoration can be understood as not only a returning of land to its previous state, but an improvement of that land and an exchange for what was taken. In keeping with Tr'ëhudè, when any land use is undertaken, restoration is our ultimate goal.

Reclamation

For Tr'ondëk Hwëch'in, reclamation means a return of lands and waters to their predevelopment state, in a way that will support TH way of life, including all natural resources. Reclamation can be a step in the process of Restoration.

The guiding value of integrity can be used to illustrate our concept of reclamation. Integrity with the land, with all users of the land, and with agreements that govern our use of land. When individuals, corporations, agencies, have had the privilege of using land within TH Traditional Territory for any purpose (harvesting, resource extraction, recreation, spiritual experiences, etc.), that land must be reclaimed in such a way that enables TH citizens to maintain or renew their relationship with that area and all of its inhabitants.

Demonstrating integrity in terms of land use, and integrity in terms of upholding TH agreements with other governments is an essential element of reclamation.

The TH Assessment Process

Tr'ondëk Hwëch'in hope the Recommended Plan embraces a *two-eyed seeing, or walking in two worlds* approach. This means giving equal weight, significance and value to both Indigenous Knowledge and Western Knowledge. The land includes the spirit world, culture and history, and these seemingly intangible aspects must be assessed with the same rigor and weight as is given to chemical analysis of water or soil.

The true test of whether the land has been restored or reclaimed rests with the assessment of TH Elders and Citizens. When TH Citizens return to an area from which they were previously alienated, we know that they feel safe visiting that part of their Traditional Territory. When TH Citizens again begin to harvest from a region, they demonstrate that the land can sustain them, and in their careful assessment of the animals and plants harvested, we learn about the health of the land.

One way for TH to assess the restoration or reclamation of lands would be to form a committee of knowledge holders specifically chosen and tasked to make such assessments. When a disturbed area is undergoing the process of reclamation/restoration, the committee would travel to the site and begin their evaluation. Such an evaluation might include sampling the water to determine if it is fresh and healthy; sampling berries and other vegetation to see if the taste is correct; and surveying the landscape to see if the spiritual realm is in balance. If the Elders recognize that we are in balance with the land, the site would be considered healed (reclaimed or restored, depending upon the definitions used).

Both Indigenous and Western science recognize that restoration or reclamation of disturbed land does not follow a specific or predictable timeframe. The healing process takes as long as is needed for the water to be clean and, subsequently, the land, vegetation, and animals to be healthy. Attempts to impose an artificial schedule or structure would not prove beneficial.

Appendix 4

Tr'ondëk Hwëch'in Placer-Specific Wetland Reclamation Guidelines



October 2017

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Disclaimer

This guide is intended to assist placer operators to plan wetland reclamation that will restore wetland function to the mine site. Use of the approaches outlined herein will not, in any way, constitute a defence in a court of law if an operator were to be investigated and subsequently prosecuted for a violation of the *Placer Mining Act* and *Placer Mining Land Use Regulation* or any other legislation.

About this Guide

The emphasis of this guide is on reclamation principles as applied to placer mining but may be extended beyond that to reclamation and restoration aspects for all Yukon riparian (river channel) wetlands. This guide contains general information about wetlands that placer miners need to know about before mining in and near wetlands. This guide is broken into two parts with attached appendices:

- **Part I:** wetland science and placer mining.
- **Part II:** information to assist miners in developing a mining plan that minimizes wetland loss and addresses progressive wetland reclamation.¹
- **Two Appendices:** wetland class descriptions, and frequently asked questions about reclamation methods and performance indicators.

¹ Because of the fragility and importance of wetland function, progressive reclamation is required.

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Goal of Wetland Reclamation

The goal of placer-specific wetland reclamation is to preserve wetland functions by mimicking the natural site. By mimicking the natural, pre-disturbance site, a self-sustaining wetland will more likely be achieved. A self-sustaining reclaimed wetland will not require regular maintenance and therefore will have a better chance of success over a long term.

Not all wetlands perform all functions, nor do they perform all functions equally well. It is important to acknowledge that it may not always be possible to reclaim wetlands with an identical class of wetland. A change in class of wetland (e.g., from a bog to a shallow open water wetland) may be an acceptable wetland reclamation strategy but may also trigger additional compensatory requirements for increased reclamation area from regulators.

Proponents who are proposing to disturb wetland(s) must justify why the disturbed wetland(s) may need to be reclaimed with a different wetland classification. Regulators must ensure that disturbances to the wetland(s) do not diminish environmental or social factors. In addition, regulators must gauge the amount of proposed wetland disturbance with the watershed before granting mining authorizations.

PART I: Wetland Science and Placer Mining

Wetland values are typically disproportionately high compared with other ecosystems. This is commonly true because they occupy so little area relative to the surrounding uplands, and provide concentrated benefits for so many organisms, including humans. The biodiversity and benefits of wetlands must be understood before changes to wetland ecosystems are contemplated. In addition, impacts to these wetland values have downstream repercussions and risk negatively affecting interrelated environmental and social systems.

As scientists discover and explain the importance of wetlands to the environment and ultimately to human and community health, authorizing the disruption or destruction of wetland function becomes an increasing liability for regulators. Previous leniency in mining practices is no longer acceptable in light of our advancing wetland knowledge. In order to adapt to this changing regime, placer miners need background understanding about wetlands so that their function can be effectively restored after mining.

Types of Wetlands

This guide uses the five common classes of wetlands identified in the Canadian Wetland Classification System; **marshes, bogs, fens, swamps and open shallow water wetlands**. For descriptions and important functions of each, see **Appendix I**.

Wetland Functions

Each class of wetland contributes useful features to the entire landscape such as:

- water sources;
- filtration of muddy floodwaters;
- slowing floodwaters and reducing downstream erosion and flooding;
- food and cover for fish and wildlife;
- winter travel corridors for caribou, wolves, foxes, moose, and others;
- insect production in warm shallow waters;
- fish spawning and rearing habitat for fingerlings;
- nest sites and feeding areas for water birds, and
- plant decomposition areas adding fish/ insect food and nutrients to downstream rivers.

Some species such as moose, caribou, foxes, and many birds can use both wetland and upland habitats; however, many specialist species such as frogs, waterfowl, fish and aquatic insects, are completely dependent on wetlands for feeding, travelling, breeding and survival.

Species reliant on wetlands in the Yukon range from the wood frog, which needs clear shallow water with vegetation for breeding; to the rusty blackbird, which nests in low shrubs within wetlands; to muskrats, which feed on aquatic plants in shallow wetlands.

Wetland Soil Ecology

Wetland soils have unique properties. They are different from upland soils because they are saturated for long periods of time. Wetland soils have distinct chemical environments, specialized microbes capable of existing in low-oxygen flooded environments, and frequently, structured organic matter in root channels. In short, wetland soils are specialized and not easily replaceable. Sodden soils have special chemical properties such as low oxygen, higher solubility of some chemicals, and slow rates of decomposition.

It is important to note that riverside gravel bars are also important features for plants, insects and fish. Well-washed mineral substrates range from gravelly to sandy to silty and regardless of grain size, ground up rocks are their primary ingredient. The proportion of organic accumulation is much lower than in peatlands (discussed below) but still adds a rich, dark, organic component to mineral-based wetland soils, meaning that gravel bars can become productive growing areas.

Wetland soils take a long time to develop. For example, it takes long periods of time to generate organic material contained in structured layers at the surface and in dissolved carbon in the gaps between soil particles. These micro-level conditions progress at the soil-particle level, yet they can occur across broad expanses of wetland territory. These conditions are virtually impossible to create quickly and effectively, thereby, their creation requires natural processes and long-term development.

It takes years, decades or even centuries for the deep layers of plant litter to accumulate, nutrients to infuse and for roots and stems to create dense deposits of plant-based organic matter that is fertile habitat for plants and animals. Water cover decreases the exposure of wetland soils to air, so this organic matter decays more slowly than on land and it accumulates instead of being converted to nitrogen, oxygen and carbon dioxide gasses. Plant accumulations are the origins of bog and fen soils (Appendix I).

Wetlands also have unique plant species that play an important role in the wetland ecosystem. Only specialized wetland plants are able to thrive in the unique, wet soil conditions. Where wetland plants grow, the soil surface is sewn together with living root mats, meaning soils do not wash away easily. Because the roots release oxygen into the surrounding soils, they alter the growing conditions and soil chemistry to provide habitat for insects and other vegetation.

Peatland

Peat is simply the partly decomposed stems, roots, and leaves shed by plants. Two of the specialized wetland classes described in Appendix I, **fens and bogs**, are wetlands that produce peat at their base. Eventually fens and bogs grow on a base of peat; however, the layers of peat act differently depending on depth of burial.

The surface contains green living plants and roots, as well as rough intact dead stems with the consistency of a kitchen sponge. There are large pore spaces in this superficial layer,

enough oxygen for insects to live, and water can flow moderately well through this zone. When droughts occur, these wetlands continue to slowly release large volumes of water that support river flows and fish habitat; this is an extremely important function. The released water is dark-colored like strong tea because it carries valuable dissolved carbon that benefits aquatic plants, insects eating those plants, fish eating those insects, then ultimately, water birds, grizzly bears, ospreys. Humans who eat the fish and/or trap the animals from this food chain also benefit from this wetland function.

Lower down in the peat layers, usually 10-20 cm below the surface, conditions are very different. The peat layers are more decomposed, sometimes looking like **black muck**. There are very few pore spaces below 30 cm depths, so water flow is extremely slow there.

Finally, there is essentially no oxygen in deep peat. This zone is cold and dark, and has no water flow. The peat is as acidic as a pickle jar. Deep peat provides one of the world's largest carbon storage areas.

Wetland Hydrology (Water Movement)

The hydrology of wetlands is intricate and is extremely difficult even to approximate. Water reaches wetlands in a number of complex ways. We can see the rain and snow fall and flow to wetlands, but other water from underground sources flows invisibly into, through or under wetlands. Additionally, wetland types often merge into one another depending on water sources and soil types.

Many Yukon riparian systems support elaborate and complex fen wetland systems along their banks and valley floors. These are important systems where plants, sediments and currents have worked together for thousands of years.

Riparian wetlands often have multiple scales of water movement laterally and longitudinally, with the surface waters of a river linked to the slower sub-surface flows. Indeed, there may be a second “river” flowing through the shallow permeable sands and gravels of the river bottom. The undisturbed beds of almost all Yukon gold-bearing streams have a slow-moving current of water that moves through the sandy soils *underneath* the river's surface flow.

The subsurface flow mixes in and out of the surface water along the length of the river, where sand acts as a very effective filter by trapping silt, nutrients, leaf and organic debris. In addition to this “purification,” water moving between the river and the subsurface supports many sediment-dwelling organisms such as mayflies, stoneflies, caddisflies and midges that contribute to the food source for fish and bird communities.

Wetland Plants

Like wetland soils and hydrology, the plants of wetlands are specialized too. Relatively few plant species can survive in flooded soils. Upland plants simply die when water infiltrates the pore spaces in soil; their roots drown because the exchange of gasses becomes restricted, their leaves wilt and the plant perishes.

Wetland plants have special ways of extracting oxygen from water or by carrying atmospheric gasses up and down their stems, much like an internal air hose, allowing them to survive in saturated soil. Other wetland plant adaptations include seeds that require water (or wind) for transport. Underwater wetland plants are particularly good at absorbing the long light wavelengths that filter through clean water. Finally, the extensive roots that anchor these plants in soft soils also prevent erosion and uprooting during high water.

Many species of the Carex genus, better known as sedges, grow only in wetlands. These grass-like plants provide, for example, habitat for waterfowl and juvenile fish, and food for moose, muskrats and geese. Carex aquatilis, known as the water sedge or leafy tussock sedge, is a common sedge in Yukon wetlands and decomposes to form peat.

Wetland plants do not just *respond* to their environment, they also *affect* it by stabilizing and trapping sediments to build land. This function is particularly important in riparian wetlands because rushing water keeps sediments suspended for long distances. Dense aquatic plant stands create a network of slow or still water patches in the current by increasing the “surface roughness” of the channel. These vegetated sites allow suspended sediments to settle out and lodge, thereby clearing the water column. Like the sand-filtered groundwater flow, slowing the current is a second way wetlands filter flowing water and improve its quality for downstream users.

A third way wetlands trap sediments, nutrients and pollutants is by creating surfaces for attachments. Slippery films of natural microscopic algae, bacteria, and viruses attach themselves to river rocks, plant stems and river bottoms. These slippery aggregates are called “biofilms” and they are usually less than 1 mm thick. Although fishermen know how slippery they are, biofilms ooze a sticky protein-based material that has a fly paper effect in capturing and incorporating fine particles in the water. Biofilms also develop on decomposing leaves, twigs and branches and capture particles flowing against them. In turn, these biofilms become a primary food source for a range of aquatic insects that scrape and consume them.

Challenges to Wetland Reclamation

The interactions of wetland soils and water are likely the most fundamental, complicated and intertwined challenges in wetland reclamation and may explain why wetlands are so

much harder to reclaim than upland sites. Indeed, some classes of wetlands are very difficult or impossible to reclaim. The slow process of organic decomposition over time creates a unique environment, meaning that reclaiming wetlands to anything near their original conditions is a time-consuming and expensive process that sometimes stalls at unproductive levels for long periods.

Re-constructing complex flow-through groundwater supplies to wetlands has rarely proved successful and is another reason why effective reclamation of wetlands is so difficult. Examples of fen wetland reclamation trials have been relatively unsuccessful to date.

For instance, Colorado scientists attempted to reclaim short stretches of mountain fens similar to those that exist in Yukon. Over a 15-year period, they had limited success despite significant investment in this reclamation attempt. In another example, two large Alberta oil companies, Suncor and Syncrude, attempted to create groundwater-dominated fens on mined tailings. The costs were great, estimated by some at over \$1 million per ha. By year 8, the recovery process resulted in marshes, some fen characteristics and intermixed upland vegetation, trees, grasses and a few mosses. While the mossy spots are encouraging, the water flows, water and soil chemistry, lack of organic matter, and encroachment of invasive weedy species show the difficulties in recreating true fen wetlands.

How much Wetland Disturbance is Acceptable?

Given the important functions played by wetlands at a landscape level, and the challenges in reclaiming them due to the complex interactions of biotic and abiotic factors, how much wetland disturbance in a river system is acceptable?

It is up to the regulator to determine the percentage of tolerable infringement on a wetland within a wetland complex. This determination is particularly tricky when it comes to peatland, which cannot be restored by any known method.

When mining is proposed, the regulator must also gauge the percentage of wetland that needs to remain undisturbed to ensure the continuity of wetland function remains on site. Proponents may be required to include intermittent reaches of intact wetland in their mining plans to maintain water quality and connectivity, wetland function and the presence of key indicator species along the river corridor.

Biological Indicators and Specialist Species

Any disturbance to a wetland affects the whole river system. Additionally, removing an entire ecosystem from production is problematic for downstream water quality conditions because there are no remaining filtration zones in and along the channel. The ability to evaluate the function of a wetland ecosystem includes determining what effect the removal of various amounts of wetlands will have on the function of the system as a whole.

Scientists therefore often use **biological indicators** to measure the degrees of degradation, and use components such as key species, species diversity and water quality to determine the level of disturbance.

The use of disturbed wetlands by wildlife can sometimes be misleading because some species are actually *attracted* to disturbed sites. Moose, deer and black bears seek out recent forest fire areas, road cuts and young willow stands. Bears and wolves seek out road kill and garbage dumps. Waterfowl such as mallards, northern shovelers, American widgeon and green-winged teal, may even increase, but these are not indicator species. In fact, these ducks are common on sewage lagoons and other low water quality sites. They are generalist species that tolerate numerous types of habitat.

Consequently, the presence or absence of highly-sensitive **specialist species** are a better indicator of ecosystem change or disturbance. In Yukon wetlands, this includes species such as:

- wetland-reliant amphibians,
- herbivorous aquatic insects that need sunlight to penetrate clear water,
- fish-eating birds like ospreys,
- spawning fish like salmon and bull trout that require clean upwelling groundwater springs for egg survival, and
- cavity nesting birds like woodpeckers that require large spruce trees.²

In addition to using indicators to assess the degrees of degradation and level of disturbance, intermittent reaches of intact and extensive wetlands may be essential in mined areas to help offset mining disturbances. These undisturbed areas are necessary to fortify and protect the riparian corridor.

Next Steps

Wetlands are diverse, productive and vital components of healthy ecosystems and landscapes, providing numerous biotic and abiotic functions. As part of the reclamation plan, the proponent is encouraged to apply the following reclamation options in the order below.

- **Avoid disturbing wetlands:** Consider protection and avoidance strategies first before undertaking mining activities, including the building of roads, camps and other infrastructure in wetlands. Avoidance can contribute to savings in time and money during construction, and at the same time protect wetlands. To maintain wetland functions within a project area it may be necessary to leave some wetlands unmined.
- **Minimize disturbance to wetlands:** when mining in wetlands is unavoidable, every attempt by the proponent should be made to minimize the extent of impact to the wetland. This could include adjustments to the mining plan such as work planning,

² These types of biological indicators should be incorporated into the reclamation plan (documented in pre-mining conditions and reference sites) and monitored during reclamation and post-mining periods.

changing mining techniques, and/or using less impactful equipment.

- **Reclaim a wetland with the same class of wetland** (e.g. swamp to swamp): when mining in wetlands is unavoidable, the proponent should reclaim the disturbed wetland area with a suitable design that will replicate the original wetland type over time. The proponent should be cognizant of the fact that some wetland types are virtually impossible to reclaim.
- **Reclaim a wetland with a different class of wetland** (e.g. bog to marsh): While it is important to reclaim a disturbed wetland to the same class of wetland, this may not always be possible. A change in class of wetland may be an acceptable wetland reclamation strategy if permitted by the regulator. The regulator may decide that a larger area of lower wetland class may be required as a replacement ratio.

PART II: Mining Plans that Ensure Retention of Wetland Function

Progressive Reclamation

Reclamation transforms a disturbed environment to a state that is *different but very similar* to its original conditions, as determined by comparisons to the pre-disturbance baseline state. These pre-disturbance reference conditions are crucial for measuring wetland reclamation success.

Progressive wetland reclamation means that wetlands are reclaimed as mining activities progress, allowing reclamation to take place in areas that are no longer required for mining. Undertaking reclamation in this stepwise fashion also allows additional time for methods and techniques to be successful or adjusted (e.g., establishing pioneer and successional species), for monitoring and modification of the reclamation plan as needed, and for cost-effective use of operator time and equipment.

Additionally, one way of guaranteeing that sufficient wetland function remains in each river valley is to undertake progressive reclamation in sufficiently short increments so that wetland function is re-started within the same season. The regulator must determine timelines for progressive reclamation.

Monitoring the success of reclamation techniques during the progression of reclamation provides valuable feedback regarding the effectiveness of reclamation measures on an ongoing basis. Additionally, progressive wetland reclamation can shorten the time interval required for achieving mine closure objectives, and reduce the financial liability of the site by avoiding additional training and mobilization costs of reclamation because equipment and employees are already on the site working.

Activities such as stockpiling materials, grading and re-contouring steep excavated slopes and tailings piles, sloping and adding topographic features such as swales, depressions, ponds and islands, are all examples of activities that should be undertaken progressively after mining activities and before mining moves on to the next area. Recommended construction objectives are listed in Table 3.

Understanding Pre-Mining Conditions and Reference Sites

Equally important to knowing the quantity of minable minerals in an area, is understanding the feasibility of reclamation success in mimicking pre-mine site conditions.

Thus, before drafting a reclamation plan and mining an area containing wetlands, it is necessary to understand and document:

- morphology (land shape);
- geology;
- hydrology;
- biology;

- an estimated extent of each wetland class;
- wetland response to disturbances of flood, fire, grazing, and drought; and
- services and functions provided by the particular wetlands.

Reference Sites

In addition, to create an effective reclamation plan and to measure its ecological success over time, it is necessary to undertake a comparison of the mine site to a similar but undisturbed area. This comparison must involve measurement of the above-listed features of the exact mining site *before* operations starts, and a comparison to the same features on a nearby **reference site** that will remain as undisturbed as possible now and into the future. If the reference site's future is uncertain, establish two reference sites.

In this way, two types of 'measuring sticks' are available to monitor the success of reclamation efforts for the pre-mine conditions, on the mine site itself, and the adjacent reference site, where mining is not taking place.

Reference sites are critically important because without clear descriptions of desirable post-mining conditions, it is impossible to know if reclamation was successful or not. Substantial disturbances and loss of wetland function occur in every mining excavation that takes place in a wetland. These effects are obvious immediately following mining because even with ideal reclamation efforts, it will take time to recreate many of the benefits wetlands provide. The worst-case scenario is an inadequate reclamation plan that will never get the wetland on the path of returning these benefits. Setting measurable reclamation goals against reference wetlands is absolutely necessary.

Writing a Wetland Reclamation Plan

A **wetland reclamation plan** lays out how functioning wetlands will be re-established as part of the landscape, including upland features, wetland areas and open water. This plan explains how the conditions will be created, encouraging recolonization and establishment of native wetland vegetation species and wildlife. Typically, this plan will be written by a scientifically trained employee or consultant.

The wetland reclamation plan is part of the mining plan and needs to be a living document that allows for modifications as approved by regulators, and that adopts best practices. Best practices become better understood as progress unfolds with mining activity and reclamation investments at each unique site.

Contents

The plan should address each of the following:

- A set of proposed reclamation goals and description of the post-mining site conditions that will be achieved (see Table 1);
- Maps and a site description (see Table 1 or *Understanding Pre-mining Conditions* section for details) showing and describing:
 - the project's placer claims,
 - location of wetlands and their classifications on and near these claims,
 - where mining will take place and where reclamation measures will be undertaken,
 - which habitat components will be relocated, and
 - areas where wetland disturbance will be deliberately avoided for conservation;
- A clear description of the classes and extent of wetlands within the mine area and the specific services provided to the surrounding landscape by the wetlands (see Table 1);
- A clear description of an undisturbed reference site (including location and why it was selected) that will be used for comparison of wetland conditions during both progressive reclamation and post-mining periods (see Table 1);
- If applicable, a summary of any protection/avoidance strategies that will be used for intact wetlands (see Table 1);
- A clear description/maps of mining activities (Table 2) and how these will incorporate progressive wetland reclamation, including the methods planned to design and construct reclaimed wetland areas (see In the wetland reclamation plan, the proponent must describe site-specific, ground-based activities that will be undertaken to recreate suitable wetland conditions. Table 3, and the above section, contain information on particular techniques and expected reclamation outcomes to assist the proponent in planning how to reclaim their site. or *Environmental Considerations for Yukon Wetland Reclamation* section for details), and a schedule of progressive reclamation periods;
- If applicable, a description of any landscape characteristics that could potentially limit or affect achieving wetland reclamation objectives (e.g, large or multiple pockets of permafrost, lack of accessible surface water, etc.) and proposed mitigations;
- A clear description of how of progressive and post-mining wetland reclamation success will be monitored (e.g. monitoring schedule for comparison with pre-mining and reference site conditions, and reclamation goals);
- Adaptive management strategies available if reclamation problems are encountered (Table 4).

Table 1. Wetland reclamation planning: describing goals, pre-mine site characterization and reference sites

Pre-mine Site		
Subject	Content	Standards for Content
Goal setting	Statement of reclamation goals for overall site and each class of wetland on site.	Plan's reclamation goals display detailed understanding of the pre-mine site and how to re-establish self-sustaining wetlands.
Maps	Maps of claim areas, include aerial photos, showing pre-existing features, general landforms, proximity to waterways and sensitive areas to avoid (specify protected areas and ensure no ingress or operation within a 30 m buffer). A modern mapping tool should be used to characterize the spatial arrangement of sites including elevations, slope angles, topography, open water bodies and percent of cover of vegetation.	Plan includes thorough, professional maps, detailing the site, including distribution of existing wetland classes.
Geology	Describe bedrock geology, overburden, surficial outcrops, chemistry, density/compaction and weathering status across the full depths of excavation to allow reclamation to similar status and layering.	Plan includes detailed description of geologic conditions.
Surface soil	Collect at least two augured soil and peat cores per hectare to characterize topsoil conditions, permafrost lenses, layer arrangement and organic matter.	Plan includes documented surface soil description.
Hydrology	Examine groundwater (and permafrost lenses) at the same time as soils are cored. Map surface water in lakes, ponds, streams or rivers in both spring and fall (if a particularly wet or dry season, review of series of older aerial photos can help indicate typical surface water conditions).	Plan includes a hydrologic description (or maps), with direction of flows in creeks and drains, and the chemistry, particularly pH, of the groundwater.

Vegetation	Inventory the plant community, including submersed species, in mid-summer in the form of a species list (with notes on rare plants) to define the target for restoration.	Plan includes a species inventory and percent plant cover by area and species is mapped.
Wildlife	Undertake breeding bird survey, and examine site for use by terrestrial mammals, aquatic mammals, fish, amphibians and insect productivity. List biological indicators/specialist species found in and around wetlands.	Plan includes a comprehensive bird and mammal species list with common, rare, and accidental rankings.
Reference sites	Identify reference site conditions by characterization of comparable undisturbed wetlands that are: <ul style="list-style-type: none"> • similar size, stream type/gradient and substrate; • within the same eco-region; • will remain un-disturbed by industrial activities; and • have long term records of environmental conditions. 	Plan includes an established degree of similarity to reference site before mining and goals for return to this similarity after mining.
Proposed mining and reclamation areas	Describe/ map where mine activities (cuts, pits, tailings ponds, etc.) and infrastructure will take place and progress in relation to landforms, particularly wetlands. For example: <ul style="list-style-type: none"> • Cuts – locations, sizes, access, timing, direction of progress. • Stockpiles – locations, footprint, access and approximate volumes of topsoil, peat and overburden to be stored during mining. • Roads – location, borrow sources • Land forms - specify final contours and elevations that mimic original landscape as closely as possible. 	Plan includes logical sequence and placement of activities for best reclamation results, including detailed timing for all activities.

Having characterized the site and understood how the distribution of wetlands functions within the landscape fully surrounding the project, the proponent can then generate a **site-specific description** of where mine activity and infrastructure will occur and interact with wetland locations and function. Table 2 outlines the type of information for this section.

Table 2. Wetland reclamation planning: describing locations of activities on the mine site

Mine Site Layout		
Subject	Content	Standards for Content
Site layout	Describe and map where mine activities and infrastructure (cuts, pits, camp, roads, etc.) will be located and progress in relation to landforms, particularly wetlands. For example: <ul style="list-style-type: none"> • Cuts – locations, sizes, access, timing, direction of progress. • Stockpiles – locations, footprint, access and approximate volumes of topsoil, peat and overburden to be stored during mining. • Roads – location, borrow sources. 	Plan includes logical sequence and placement of activities for best reclamation results, including detailed timing for all activities.
Water management	Concurrently with mine layout, describe and map site water use and management activities. For example: <ul style="list-style-type: none"> • settling ponds; • diversion channels; • intake and outlet channels; and • mitigations for flooding. 	Plan considers local hydrology, such as inflow and outflow of surface waters, sources of groundwater and timing of saturation and flooding.

Note that it may be acceptable and logical to describe actions for progressive reclamation (see Table 3 and the following section for detailed description) in concert with descriptions of the planned mining activities.

Environmental Considerations for Yukon Wetland Reclamation

Reclamation specifics are helpful. **Appendix II** provides on-the-ground considerations and options to assist developing a reclamation plan. In the wetland reclamation plan, the proponent must describe site-specific, ground-based activities that will be undertaken to re-create suitable wetland conditions.

Earthworks and Grading

Slopes: Final slopes should mimic adjacent natural sites and pre-mine conditions. Unstable and actively undercutting banks, abrupt cliffs and high walls, need to be safely decommissioned. The ecological function of a stabilized shoreline is to redirect the water toward the opposite riverbank. It is important to note that when banks cave in or erode, this can cause dynamic shifts in river morphology and will result in alterations to fish habitat.

Major land forms: Replace terraces or benches in their previous locations. Typically, in riverine systems there will be at least three surface elevation zones:

1. **River bed** bottom of flowing water during normal river stages;
2. **Annual floodplain terraces** that regularly experience flooding either as over-surface flows or as active sub-irrigated hyporheic flow. This is a very important filtration system for spring freshet conditions;
3. **Extreme event flood plain** where water levels reach into terrestrial borders causing major channel re-working and transport of cobble and even small boulders. Extreme flooding may occur infrequently at the decade or century frequency, yet, the changes they cause are often substantial.

Reclamation plans must accommodate each of these events without system collapse because the power of moving water can fundamentally change the morphology of unstable streams. Transported sediments can fill important depressions needed by migrating and spawning fish and mining in the streambeds predisposes such sorting and levelling of the river topography.

Attempts to reclaim the hydrologic regime of a river usually failed in Alaska placer streams if the gradients was greater than 1%. Streams tended to become sandy bottomed and braided initially, then resulted in razing and undermining plants which affected reclamation attempts for shoreline stabilization.

Surface stabilization: Plantings, decomposable geotextiles, or spray-on sticking agents may help stabilize slopes and control erosion. While this may help greatly in the early stages of reclamation, if substrates are made of sand and topsoil instead of heavier rock where bends or overflow channels occur, the water is likely to remove the erosion control efforts. Channel erosion effects are three-fold: the channel is cut; the sand and cobble is deposited elsewhere in the stream; and the fines are released into the water column.

Physical erosion control may require multiple attempts to stabilize the material. For example, if a reclaimed terrace is established yet destroyed by the first minor flood, alternative materials and stabilization methods must be used in repair work to prevent that same mistake from reoccurring. It is difficult to predict the direction of energy and bed-carving during major floods, but past experience at similar sites may be useful.

Micro topography: Soil surfaces need not be smoothed; coarse surfaces may trap more precipitation, prevent gulley washing, and provide seed capture sites or microhabitats for native vegetation. Leave reclaimed surfaces in a condition that prevents movement of large sediment loads and erosional gullying or channel-capture.

Soil strata: Wetland soils occur in layers depending on saturation, sediment grain size, and organic content and chemical conditions. The most biologically active zones of wetlands occur at the surface, water permeability is usually greatest at the upper levels, and larger cobble is typical in the deeper zones. Soil replacement sequences must mimic pre-mine conditions. For example, soil strata from the bottom up at a site could consist of cobble, subsoil, sand, mucks, peat, and topsoil. If upstream disturbances mobilize fine sediments, this could result in a sand-filled zone that does not mimic the original soil strata conditions and could result in site conditions that lead to increased challenges for reclamation. Controlling upstream sediment has the added benefit of improving fish habitat, particularly spawning sites.

Soil Management

Wetland surface soils are very valuable and deserve special handling during the excavation phase. Wetland soils usually contain dark organic matter, seeds, insects, plant fragments and abundant nutrients, all of which are difficult to replace. Thus, these soils should be set aside using the following steps:

1. Ideally, soil storage will be on previously excavated sites to minimize the total disturbed footprint.
2. Large rocks, subsoil, sand, mucks and top soils should be rough-sorted during excavation and stored in individual piles.
3. Soil volumes and storage locations require mapping to organize efficient replacement after mining.
4. Each material should be backfilled in sequential order to provide similar drainage and plant-growing conditions during the reclamation period.

Morphology

Wetland morphology refers to the shape, slope, and arrangement of land surface features. If wetlands occurred on steep slopes such as hillslope seeps or abrupt riverside shores, that is what needs to be replaced. If the wetland surfaces were benches or table-flat, that is the appropriate replacement shape. Deep pits, spoil piles and elevated placer tailings offer little natural function after mining and need to be returned to the original wetland elevations and contours.

Water Movement and Controls

The amounts of open water, flow rates, soil compaction, channel widths and quality of water produced at the end of mining should be approximately the same as pre-mine conditions. Some latitude is reasonable here to allow systems to re-establish after reclamation and for wetland health to return after disturbance. It is important to measure the return of species, water fluctuations and the functions related to wetland types listed in Appendix I.

Hydrologic control of surface water is not difficult if elevation, structure and containment are manageable. Prior to alteration or disturbance, a thorough knowledge of the on-site hydrologic regime is a necessary baseline on which to gauge irrigation management. If water berms, culverts, turn gates, coffer dams, channels, or stop-log structures are needed to control flooding or wetting, they must be planned and can be removed when the maturing reclamation system no longer needs them. Wetland processes and stabilization may occur quickly over one or two growing seasons in some cases such as mudflat annual plants; in other settings, decades may be required. For example, swamp forests may take many years to establish and grow.

Revegetation

Successful plant establishment and survival is a primary indicator that soils, aspect, slope, hydrology and disturbance patterns are configured to match pre-mined conditions.

Genetics and origins of the planting stock matter and reclamation plantings can be grouped into three broad categories:

1. **Natural colonizers:** plants growing from seeds and rootstock in topsoil, or colonizing from nearby “parent” plants.
2. **Hand or aerial seeded:** seeds should be collected on and adjacent to the disturbance site in the year before seeding. Take care to collect seeds that are ripe and ready to fall. Seeds should be stored in conditions similar to what they would experience in the field:
 - damp frozen for damp soil plants; and
 - dry and cold for upland plants.Both types of seeds should be kept in light-proof containers away from fluctuating temperatures and seed-eating organisms
3. Hand-planted **bare-root stock:** commercial bare-root plants are rarely available for purchase but may be collected in the region, ideally on same project site during excavation. They may be stored for a season “heeled in” to a trench covering their roots with loose damp soil until they are planted out the next spring or summer by qualified planters. Protection from browsers may require electric fencing or mesh cages to encourage establishment of roots.

It is possible to revegetate a reclamation site with plants that don’t meet the system’s needs, however, these plants may die in the first flood or drought, or may be quickly and permanently removed by fast-flowing water or beavers. Additionally, unsuitable plants will

only survive until the planting fertilizer supply in their root container is depleted or natural competition overtakes them. Plant cover of any sort is sometimes mistaken for successful colonization, however, a dense stand of cattails, a clean stand of non-local willows, or worse yet, weedy, invasive or exotic species can create many years of undesirable conditions.

Ponds in Reclamation

Tailings ponds containing freshly dredged and washed gravels hold enough suspended solids, particularly clays and silica dust, that the water resembles chocolate milk. Settling ponds capture the heavier material and wetland or soil filtration can capture the remainder. If a settling pond rests on impermeable layers of settled clay or bedrock it may be re-filled, however the buried layers of fine, settled-out material produce a waterproof pond bottom or clay pan. If this pond is left as-is on the landscape, the clay pan bottom may change general water flow patterns by forming a barrier to water that should be flowing both over and through valley-bottom soils.

Ponds in the post-mining environment should mimic natural landscape configuration. Note that *deep ponds are rare or absent* in natural river valleys with flowing water and moving sediments. The energy of moving water usually fills depressions, similar to how a hole dug on an ocean beach refills itself: holes become “traps” for water-borne sediments and sand when the site floods.

Large ponds will attract some key wildlife species such as waterfowl, furbearers and large browsers, yet ponds do not provide the same system-wide benefits as the original wetlands they may replace. For example, the functions of carbon capture, soil stability in floods, water purification and water release in droughts are all typically lost.

One of the most important functions that risks being lost when ponds replace wetlands is the alteration of habitat providing a niche for specialist species who rely on specific habitat features found only in specific wetland types. Furthermore, the primary goal of reclamation is not necessarily to produce moose, waterfowl or beaver habitat to a degree greater than the original site, but to restore the ecosystem back to its original function, as comparable as possible.

In the wetland reclamation plan, the proponent must describe site-specific, ground-based activities that will be undertaken to recreate suitable wetland conditions. Table 3, and the above section, contain information on particular techniques and expected reclamation outcomes to assist the proponent in planning how to reclaim their site.

Monitoring and Reporting the Progress of Wetland Reclamation

Monitoring the success of reclamation techniques provides valuable experience on the effectiveness of reclamation measures on an ongoing basis. A strategy to monitor the

successes and shortcomings of wetland reclamation through the life of the project is an essential component of a wetland reclamation plan.

Ongoing monitoring, and maintenance, of progressive reclamation activities during placer mining operations allows for adaptive management of the reclamation program, and ensures the reclamation plan is a living document containing modifications and discoveries uncovered during the progress of mining. Monitoring also allows for the function of reclaimed wetlands to be assessed and ensure reclamation stays in line with the proposed reclamation goals.

If scheduled seasonal monitoring occurs throughout progressive wetland reclamation, the proponent can also make the adjustments required to support natural landscaping and re-vegetation processes, as well as wetland use by wildlife species. Lastly, monitoring progressive wetland reclamation as mining proceeds indicates the effectiveness of the chosen reclamation techniques.

Table 3 outlines some reclamation objectives and shows how monitoring will determine if these are being met.

How to Monitor

At its simplest, monitoring is a site inspection to identify changes since the area was last visited or since actions were taken. Monitoring should include observations of positive (desirable) changes at the site and negative (undesirable) changes that will need rectifying.

It is important to take notes and photographs (preferable date and time stamped) each time a site is visited because memories are not always reliable. It may be useful to have one notebook or binder dedicated to monitoring notes. These notes will be useful for the annual report as well.

Information to record:

- site location (if there are multiple sites, they could be assigned a name or number);
- basic information like the date, current weather, and previous weather events;
- the type of monitoring (routine vs. follow up on an action) and time since last monitoring event or action at the site;
- soil or substrate: changes in compaction, erosion, gullies, depositions from water, etc.;
- water: changes in depth, rate of flow, colour, smell, algae, etc.;
- water quality: in-situ parameters (pH, temperature, conductivity, turbidity, total suspended solids, etc.) if the means to test these are available;
- changes in vegetation: growth, death, new plants, aquatic plants, invasive species, etc.;
- sightings, tracks or signs of any insects, birds and wildlife, particularly in the water; and
- anything else that seems unusual or different.

Recording the absence of an expected phenomenon or observation is also important information.

Monitoring is more accurate if it includes specific quantitative measurements (water 30 cm deep, plants 10 cm high) but these can be time consuming and sometimes difficult to take. Relative “measurements” are also useful (edge of water close to tree and last time it was past tree, plants are 30-cm tall high and last time they averaged 5-cm tall) and can be made very intuitively.

Monitoring Schedule

A repeatable monitoring schedule for the active season (approximately April to October) should be designed with the site conditions in mind. For example, for a simple, flat site with one marsh, monthly or bi-monthly monitoring of the wetland may suffice. A more complex site with multiple surface water inputs, steep adjacent topography, multiple wetland types and a rare plant species present, may require weekly or bi-weekly monitoring during the active season.

Monitoring should always take place following freshets to determine how high water has influenced the previous season’s reclamation activities. Unusually heavy rain events, persistent rain or other weather that is out of the ordinary merits an additional monitoring event. Camera monitors or water level gauges add rigor.

Winter monitoring, where possible, may provide insight on wildlife (via tracks), ice thickness (via augering), snow cover (an input to the site’s water budget) and ice-jam flooding or loss of pit contents due to overtopping.

Taking Action and Follow-up Monitoring

If anything unusual is noted during routine monitoring or an incidental observation, take the appropriate action, record it, and determine a suitable interval for follow-up monitoring depending on the severity of the event. If the problem persists, the prescribed fix will need to be changed. For example, if gullies form repeatedly despite repairs, consider using biodegradable matting and revisit the site after the next rain event to assess the success of this remediation.

Incorporating the Reference Site

Visiting the chosen reference sight at the same time of year as the monitoring events will help determine if changes at the reclaimed wetland are in keeping with natural processes in a similar ecosystem. The reference site may also provide insight on how to solve or work with any problems that occur at the reclaimed site. For example, if replanted vegetation is killed or damaged by ice or high water during freshet, that type of vegetation may not grow near the water at the reference, indicating it is not a suitable species to replant near the ordinary high water mark of the reclaimed site.

It is important to keep in mind the reference site is most likely at a different successional (developmental) stage and will not entirely resemble an early reclaimed site.

Reporting

Proponents shall submit to the regulator an annual report of monitoring and maintenance activities, including:

- Observations of succession and growth rates of natural vegetation species. Compare these plant species to those at reference sites. Describe whether any invasive species have occurred and if so, how these were removed.
- Observations of the presence or absence insects, birds, fish and wildlife, including any important indicator species compared to reference sites.
- Description of reclaimed wetlands and how these stayed saturated and/or under water (i.e., existence of ponds, marsh areas, etc.). If additional hydrological maintenance actions were taken to ensure saturation or flow, explain.
- Description of erosion control measures and the stability of edges of reclaimed wetlands. Explain if any areas required repeated maintenance (e.g. if rainfall events caused problems), and how erosion control activities changed or increased.
- Description of erosion control measures for tailing piles and overburden.
- Include any data on quality of water released such as self-testing, testing by Compliance, Monitoring and Inspections, independent testing, etc. If water releases were not acceptable quality, why not? Explain actions taken to rectify problems.

Adaptive Management

If problems are noted during monitoring of progressive reclamation, Table 4 offers some adaptive management strategies that can be employed to resolve them.

Table 3. Wetland reclamation planning: how to monitor reclamation to promote positive outcomes

Post-reclamation Monitoring		
Objectives	Proposed Methods/Approach	General Performance Indicator
Only high quality water released	Test water for suspended solids, mobilized heavy metals, and other pollutants.	No evidence of sediment plumes or fine sediment accumulation in release sites
Reconnect some groundwater flow	Boreholes or piezometers indicate that groundwater is not stagnant.	Boreholes fill at a rate at least half as fast as reference sites. Subsurface water and springs show some flow.
Re-configured land forms	Reduce height of stockpiles and depths of low areas to no more than +/-50 cm of pre-existing topography. Do not leave extensive ponds; use available fill to re-contour them.	Land surface resembles reference area
Appropriate soil placement	Topsoil and organic-rich mucks and subsoils will be stored for re-application across all surfaces that were previously vegetated.	No extensive areas of bare rock, mine waste or subsoil that is unsuitable for revegetation
Natural plant cover	Plantings with native vegetation should be photographically documented at fixed, repeatable locations to show plant spread over time. Claim stakes may help with reference photo sites. Informal walking transects spaced 100 m apart across mine area, inspection every 30 m measuring plant cover.	By year 3, the species composition and distribution will be 75% of the pre-mine condition even if sparse By year 5, 75% plant cover density will be achieved.
Accommodate indicator species of wildlife	Concurrent bird and wildlife surveys to record return of fauna. Tracks, lodges, scat, browsing or tree-felling (by beavers) is confirmation of wildlife species present. June breeding bird surveys in each major habitat will confirm use. Fish may be netted (under permit), angled, or viewed if water quality permits.	By year 3, flowing water species of insects, grayling and salmon survive. By year 5, insect-eating birds nest in shrub and emergent vegetation at densities comparable to reference site. Within 3 years aquatic mammals (beaver, muskrat, otter, and mink) are present.

Table 4. Troubleshooting: potential problems with reclaimed wetlands and adaptive management responses

Problem	Indicators	Adaptive Management Strategies
Water loss (drying)	Exposed soil area Presence of salts	Increase the height of the discharge structure (if present) to prevent water discharge. Convert drier areas from wetland habitat to upland habitat with permission from regulator.
Water gain (flooding)	Higher water level than desired Diminishing aquatic vegetation	Decrease the height of the discharge structure (if present) to allow for more water to discharge. Add more stockpiled soils and organic materials into constructed ponds to reduce water depth.
Infilling with sediments	Increased turbidity Reduced aquatic plant growth	Check for and correct any slope erosion issues. Block off access to silty water. Change height of discharge structure (if present).
Shoreline erosion	Excess sediments eroding around edges Decreased vegetation on shoreline	Cover eroding shoreline with gravel or timber and woody debris. Plant willow cuttings or stakes on shoreline.
Lack of vegetation	Bare areas	Make soil surface rough and loose to reduce compaction and increase micro germination sites. Check for loss of organic soils and replace organic soils as necessary with stockpiled topsoil. Limit soil losses by erosion control measures, including biodegradable matting if necessary. Plant willow cuttings or stakes, or hand-planted bare-root stock. Hand or aerial seed with collected local seeds.
Low aquatic organism diversity	Expected waterfowl not present Expected aquatic mammals not present	Create more shallow littoral and marsh areas at the edges of ponds Increase amount of logs and woody debris in the bottom and on the slopes of the pond or peninsula. Re-introduce aquatic organisms using natural shallow water wetland soil and plants set aside from initial excavation of site.

Appendix I – Classes of Wetlands

This guide uses the five common classes of wetlands identified in the Canadian Wetland Classification System: **marshes, bogs, fens, swamps and open shallow water wetlands.**

- 1. Marshes** (riparian meltwater, stream, floodplain and slope marshes) form on mostly mineral soils and support knee-high to head-high growth of sedges, cattails, and bulrushes. Water levels are variable but marshes usually have standing water for much of the year and are often found in backwaters, around small ponds and oxbows.
Functions of marshes include stabilizing water flow, flood control, maintaining water flow during drought, filtering water, trapping sediment, and providing wildlife food and habitat.
- 2. Swamps** where marshes support alders or willows they are a special form of forested wetland called swamps (riparian floodplain swamps). Swamps are characterized by well-decomposed woody peat and can be either peatlands or non-peatlands. They typically have a fluctuating water table. There are also coniferous treed swamps affected by a shallow water table and a shallow depth to permafrost. These may also be subject to flooding.³
Functions of swamps include stabilizing water flow, flood control, maintaining water flow during drought, storing organic material and carbon, filtering water, trapping sediment, stabilizing soils, wood production and providing habitat.
- 3. Fens** (riparian shore and stream fens). In most Yukon river valleys, fens are the largest continuous wetlands in broad flat areas of river bottom. They are saturated, peat-accumulating sites that support wetland grasses, brown mosses, cotton grass and sometimes larch trees. Their water comes from mineral-rich groundwater that has a neutral to higher pH (more alkaline). The water table is usually at or below the surface and the peat is made of partially decomposed sedges or brown moss.
Functions of fens include stabilizing water flow, maintaining flow during drought, storing organic material and carbon, filtering water, trapping sediment and providing habitat.
- 4. Bogs** (riparian shore bogs and peat mound bogs) are moss-covered, deep peat areas that rarely flood or receive ground water, rather, they get their water exclusively from rain and snow-melt. The soil and water have a low pH (acidic). Bogs sometimes have stunted black spruce and low shrubs growing in them but they always have Sphagnum

³Shoreline zones of riparian wetlands (riparian meltwater channel marsh) are a special zone of a larger wetland class that occurs on wet mineral soil, gravel and sand within the annual high water zone of the flowing water. These are often very narrow zones, just a few meters in width. They may be bare or recently covered with plants. Floods and scouring during ice-out mean these are naturally high-disturbance sites that may be re-colonized each year with durable or expanding plant life. Common plants include horsetails, sedges, mudflat annuals and willows.

mosses present, which increase the acidic growing conditions preventing many other plants from growing there.

Functions of bogs include storing water, organic material and carbon, and providing diverse habitat.

- 5. Open shallow water wetlands**, such as ponds, have standing or flowing water less than 2 m deep in mid-summer. Shallow water wetlands are transitional between seasonally wet (i.e. bog, fen, marsh or swamp) and permanent, deep water bodies. Water levels are seasonally stable, permanently flooded, or have intermittently exposed bottoms during droughts, low flows or intertidal periods. Shallow waters undergo the aquatic processes typical of lake surface waters or shore zones with full light penetration such as nutrient and gaseous exchange, oxidation and decomposition.⁴
Functions of shallow water wetlands include stabilizing water flows, trapping sediment and providing aquatic habitat.

⁴The open shallow water class excludes artificial water bodies (reservoirs, impoundments and dugouts) where water regimes are manipulated. This category excludes active tailings ponds, with controlled inputs and outputs. Abandoned tailings ponds, less than 2 m deep, subject to natural aquatic processes typical of surface waters or shore zones, are included.

Appendix II – Frequently Asked Questions about Wetland Reclamation

The following 16 questions pair with answers and performance indicators to assist in achieving successful wetland reclamation. Questions are hyperlinked to the appropriate answer.

Questions

- [Q1. What is the best management of excavated soil and stockpiles?](#)
- [Q2. How do I design and construct to mimic natural landforms?](#)
- [Q3. What is the best way to restore slopes and surface elevations to pre-mine conditions?](#)
- [Q4. What is the appropriate creek channel hydrology and how can it be re-established?](#)
- [Q5. What is the appropriate range and distribution of wetland sizes to leave?](#)
- [Q6. Is there a place for islands, shorelines and peninsulas in the post-mine configuration?](#)
- [Q7. Are deep excavation pits suitable in the reclaimed site?](#)
- [Q8. What role do marshes have in wetland creation?](#)
- [Q9. What role do shrubby or wooded swamps have in wetland creation?](#)
- [Q10. Explain the desired surface or micro-topography to leave after mining.](#)
- [Q11. Why is it desirable to leave islands of undisturbed vegetation scattered around the mine site?](#)
- [Q12. What are wetland plant zones and how does reclamation encourage their development?](#)
- [Q13. Where should reclamation specialists get their plants and seeds and why is this important?](#)
- [Q14. How can insect life be encouraged?](#)
- [Q15. What reclamation techniques attract and support a diverse wildlife community?](#)
- [Q16. Are chewing mammals such as beavers, muskrats and geese beneficial?](#)

Answers: Suggested Methods and Performance Indicators

A1. Soil and Stockpile Management

Long slopes and steep gradients encourage erosion, so shorter and more gradual are best. Native topsoil is rich in organic material and natural plant seeds and roots, thus, should be retained. The best way to do this is to make the first lift of the surface soil deep enough to capture roots and top soil but not to incorporate subsoil and rubble. This topsoil zone is

visible and may extend downward between 30 cm and 1.5 meters. This valuable topsoil should be stored separately from overburden and where possible, stored by individual surface vegetation type to make it easier to replace by plant growing zone. For example, later cattail soils get replaced into low swales; aspens and willows to upper shores. The sooner topsoil and embedded plant parts can be reinstalled the better to limit erosion, aeration and decomposition and composting effects that can kill seeds and living shoots.

Performance Indicators (A1)

- a. Situate and sort reclamation materials conveniently for subsequent reclamation.
- b. Return excavated materials to the reclaimed sites natural contours promptly after mining.
- c. Site-appropriate plants emerge from re-distributed topsoil to assist natural colonization.

A2. Mimicking Natural Landforms

Benches should be relatively level and runoff pathways should be longer and shallower to increase settling of suspended solids increase time for infiltration into the sediments. A tier of floodplains should occur above the normal high water mark to restrict overflow to true out-of-bank flood periods. Encourage rapid revegetation of banks and floodplains to stabilize surface sediments. Where slopes are steep, erosion-prone from normal precipitation, stabilize them with biodegradable matting (hemp, jute or coco fiber) to prevent down-cutting. Place check-dams or water-breaker cobble in erosion gullies and wherever channel formation down-cuts.

Performance Indicators (A2)

- a. Stable landforms with no obvious erosion
- b. Precipitation and mine waste water infiltrates ground or wetland beds without erosion or slope failures.
- c. Excess runoff is minimal and flows toward, and is captured by, adjacent intact plant stands.
- d. Floodplain benches are only occasionally (and briefly) inundated at peak runoff periods.

A3. Restoring Pre-mine slopes and Elevations

Progressive reclamation requires real-time filling and contouring sites simultaneously with ongoing mining operations. Fill material is replaced in reverse-order of its excavation, typically subsoil and cobble goes on the bottom, followed by gravel, then silt then topsoil. Temporary settling ponds should be re-filled with substrate to +/- 50 cm of grade, recognizing that some settling and subsidence is likely. Swales, low areas, and depressions should occur close to the groundwater table to encourage saturated soils, encourage wetland plant return, and to minimize invasive upland exotic plants. Wetland formation may be encouraged above the water table by the placement of fine tails and settled clays to slow infiltration and hold water for wetland development.

Performance Indicators (A3)

- a. Surface elevations and slopes reclaimed to original wetland status with saturated wetland conditions.
- b. Order of material replacement encourages surface insulation and encourages permafrost development.

A4. Re-establish Creek Channel Hydrology

Reconnect and return local hydrologic inflows and outflows of surface and groundwater to original conditions. If approvals and licences permit, connect wetlands to streams to supplement hydrology and keep wet-areas wet. Where constructed wetlands connect to surface water sources, create the junction at right angles to water flows and armor the junction with boulders or coarse cobble to reduce erosion and outlet closure. Keep constructed wetland sites wet, especially in fall. Release settling pond water only with regulatory approval or via filtration through groundwater.

Performance Indicators (A4)

- a. Stable creek and main-stem channels resemble pre-mining form.
- b. Water and ground surface elevations similar to undisturbed river valley bottoms with river-wet swales (high water overflows) and zones only overtopped by major floods.
- c. Moist soils cool, assist ice-formation and increase penetration of seasonal freezing.

A5. Wetland Sizes on Site

Replace excavated materials back into pits to eliminate elevated piles and deeply excavated depressions. Ponds on reclaimed site should be of similar size, shape, depths, and distribution as existed pre-mining ponds. Understandably, the exact locations may be different.

Performance Indicators (A5)

- a. Topographic relief, remaining ponds and wetland zones are returned to +/- 25% areal extent of pre-mine landscape.

A6. Island, Shoreline and Peninsula Development

Overburden and tailings may be pushed or dumped from shore to create roughed-in islands and peninsulas. The inclusion of ice, snow, and coarse woody debris is permissible to increase groundwater penetration in these low-flow areas.

Performance Indicators (A6)

- a. Elevated mounds and peninsulas do not exceed 50 cm above or below the average high water mark unless pre-mining conditions at that site occurred at higher elevations and contributed excess soil volumes.

A7. Excavation Pit Depths

Build shallow shoreline zones (called littoral zones) by sloping any abrupt or cliff-like walls. Overburden may be pushed or bucketed over edges to create ramp-like gentle slopes for colonization by littoral wetland plants along this gradient. Islands, irregular shorelines and variation in shallow pond bottoms are desirable.

Performance Indicators (A7)

- a. Pond shores and beach edges are gradually tapered to the water.
- b. Wetland plants colonize this shoreline in definable zones according to depth to ground water.

A8. Marshes in Wetland Creation

Marsh plants are the first to arrive in disturbed sites and will be favored by shallow damp slopes and depressions with fluctuating water levels between 0 and 100 cm depth. These mimic river backwaters and channels cut off from river flow. Arranging groundwater flow down the gradient will assist the development of fen vegetation over time.

Performance Indicators (A8)

- a. Marsh plant appearance in open shallow wetlands
- b. Soil and water movement intercepted by gently sloping vegetated zones at water-soil junctions.

A9. Swamp Creation

Swamps are wetlands with shrubby or woody plants such as willows. They tend to develop in areas with moderately high groundwater for root uptake and are not injured by periodic flooding and fluctuating water levels.

Performance Indicators (A9)

- a. Shrub and tree colonization that stabilizes banks, slows over-bank water flows and helps control floodwater speeds.

A10. Micro-topography After Mining

Reclaimed ground surfaces can remain rough and non-compacted to encourage water infiltration, seed capture, and a variety of micro-sites to meet a variety of plant growing conditions. Placement of 6-10 cm of rich organic sediment from natural wetland areas previously mined can enrich colonization by native species. The organic matter often contains an abundance of dormant seeds and the water-holding nature of organic matter reduces desiccation and provides nutrients to seedlings.

Performance Indicators (A10)

- a. Natural vegetation colonizes appropriate micro-sites.

A11. Reservoirs of Undisturbed Vegetation

Whenever possible, leave areas of natural vegetation in, or near, the operating area, along travel corridors and in riparian buffers around water bodies. Their seeds, micro-flora and fauna, and natural spread can aid reclamation toward original conditions.

Performance Indicators (A11)

- a. Existing vegetation acts as a habitat, corridor and parent source for newly colonizing plants.

A12 Wetland Plant Zonation

Cover shorelines and wetland zones with fine soils along gradients to allow natural re-vegetation.

Performance Indicators (A12)

- a. Wetland plants colonize and cover littoral zone in depth-appropriate zones perpendicular to elevational gradients.

A13. Sources of Reclamation Plants

Use stockpiled topsoil, peat, and organic matter to revegetate areas with local flora as soon as possible. Collections of seeds called “seed banks” are resident in such soils and represent a valuable resource of locally adapted and genetically appropriate plants. Distribution of bucket loads of undisturbed natural plants and underlying topsoil can provide islands of natural plants, seeds, soils, and microflora. Request permission to borrow up to 10% of standing vegetation from surrounding undisturbed areas to serve as planting stock. Collect mature seeds from dominant plant species when ripe. Collect the fall prior to planting or from nearby undisturbed areas in the same year as reclamation. Collect and plant bare-root rhizomes and stems in similar sites. Seed and plant reclaimed areas.

Performance Indicators (A13)

- a. Wetland species occurrence and distribution on reclaimed sites are similar to those on natural wetland disturbance sites in the region.
- b. Optimal depth of 20 cm organic rich topsoil ensures root penetration at water depths less than 45 cm.
- c. No invasive plant species occur on the reclaimed site.

A14 Aquatic Insect Occurrence

Aquatic invertebrates (for example insects, crustaceans, worms) form an important component of the food chain. Place logs, root balls and woody material in the soil profile, in wetlands, and on shoreline slopes. Re-introduce aquatic organisms using the shallow water, wetland soil and plants salvaged from initial excavation. Submersed aquatic plants are particularly rich with aquatic life

Performance Indicators (A14)

- a. Habitat is available and occupied by a diversity of aquatic invertebrates.

A15. Supporting Diverse Wildlife Communities

Retain some gravel in ponds, along shorelines rather than burying it all under constructed landforms. Install coarse woody debris. Place a variety of intact logs flat on the ground surface to mimic the natural floodplain log jams that provide much cover, denning habitat and safe sites for medium and small-sized mammals. Retain or install upright snag trees for cavity nesters and predator perches.

Performance Indicators (A15)

- a. Site supports the same suite of resident and transient wildlife that existed prior to mining.

A16. Beavers, Muskrats and Geese

Beavers, muskrats and geese may disturb some planting efforts, however, their overall effects are usually more beneficial than harmful in the long run. Their browsing, chewing and movement of plants add diversity and complexity to sites as well as increase seed distribution. It is an option to leave very occasional ponds (one or two percent of area) up to 2 meters deep to ensure water under the ice for insects, beaver, muskrat and otter overwintering habitat.

Performance Indicators (A16)

- a. Up to one small pond (2 ha) per 100 ha site may be left if beaver colonization is sought.
- b. Anticipate beaver damming to block any flowing channels. This may change the water table locally.

Appendix 5



YUKON RIVER CHINOOK REBUILDING PLAN EFFORTS IN CANADA

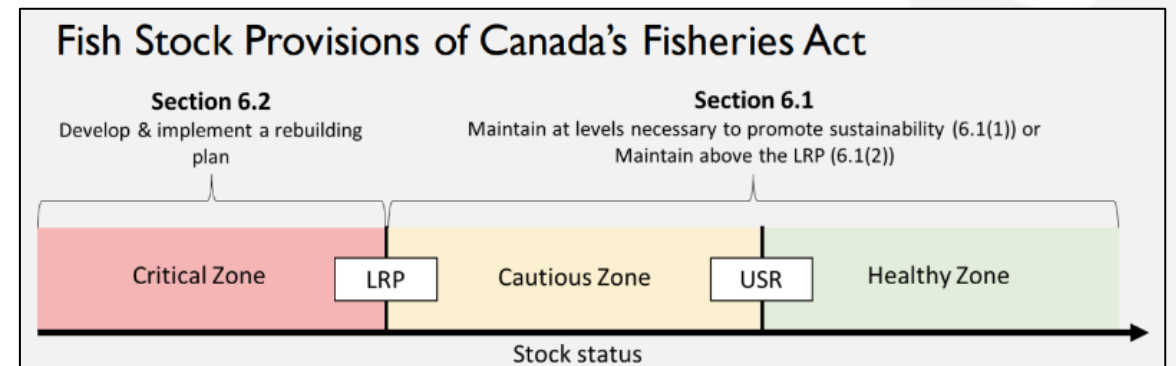
Yukon River Panel Meeting – Closed Session
Anchorage, Alaska
April 9, 2024

Steve Smith
Fisheries and Oceans Canada Yukon
Transboundary Rivers Area



CANADIAN REQUIREMENTS for DEVELOPMENT of a YUKON RIVER CHINOOK REBUILDING PLAN

- Pacific Salmon Strategy (PSSI)
 - Yukon River Chinook; 1 of 4 priority salmon stocks under the PSSI requiring stock rebuilding plans.
 - Yukon River; 1 of 3 watersheds identified for the development of an ecosystem plan.
- Fisheries Act – Fish Stock Provisions
 - Yukon River Chinook are soon expected to be listed as a “Major Stock” under legislation in Canada.
 - Listing requires measures to maintain stocks at sustainable levels.
 - Development of a stock rebuilding plan is required if abundance is below threshold.



PROCESS for DEVELOPING & IMPLEMENTING a STOCK REBUILDING PLAN

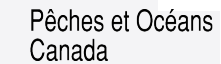


- 1. Set objectives.**
- 2. Inventory and assess population and ecosystem status and trends.**
- 3. Identify (a) problems and (b) all potential actions.**
- 4. Review and select appropriate actions.**
- 5. Prioritize Actions.**
- 6. Design actions and monitor.**
- 7. Implement actions and monitoring.**
- 8. Evaluate (monitoring) data.**
- 9. Adjust goals and/or actions.**

Source: Chrissy Czembor (DFO), RAMS paper (in-prep), adapted from Roni and Beechie (2013) and aligns with the Conservation Measures Partnership's Open Standards for the Practice of Conservation.

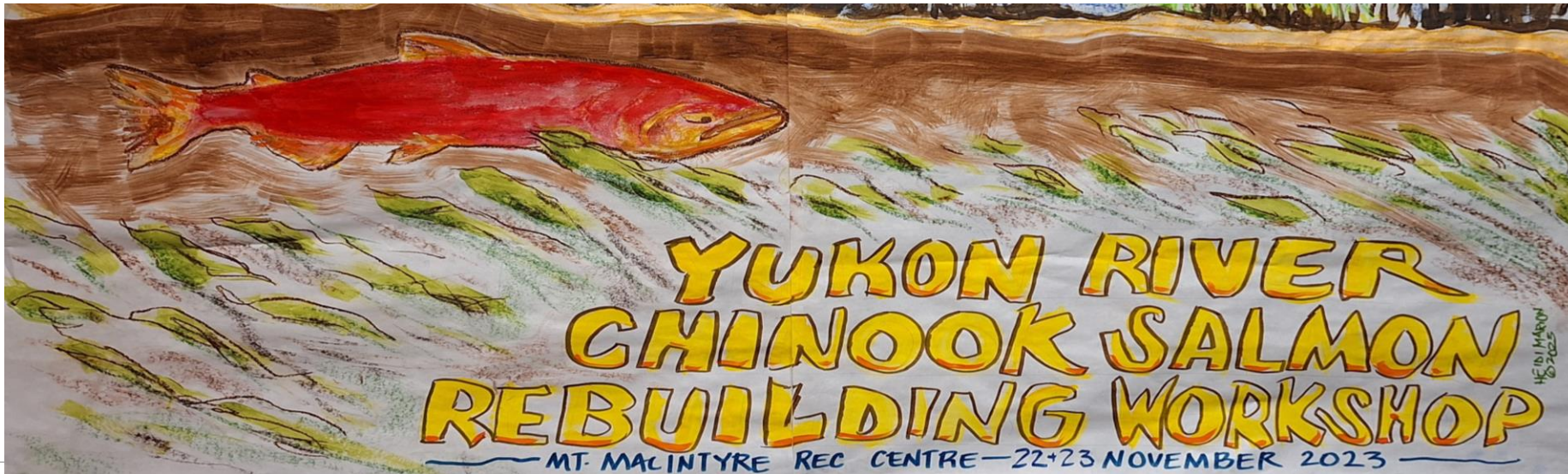
WORKSHOP 1: November 23-24, 2023

- Facilitated by West Coast Aquatic, a non-profit organization from Vancouver Island with no previous history in Yukon but extensive experience working with BC First Nations on salmon stock rebuilding processes.
- Participants included: most Yukon First Nations, Yukon Government, Fisheries and Oceans Canada, Yukon First Nation Salmon Stewardship Alliance, Yukon Salmon Sub-committee and a couple *member emeritus*.



WORKSHOP 1: November 23-24, 2023

- Confirmed with participants the drivers and need for a stock rebuilding plan for Yukon River Chinook.
- Reviewed preliminary status of Yukon River Chinook and Ecosystem.
- Commitment to a collaborative process.
- Identified the need to “Act while planning” and to put salmon first!



WORKSHOP 1: November 23-24, 2023

Set objectives for a stock rebuilding plan.

- Self-sustaining and resilient salmon population.
- More salmon on spawning grounds.
- Ecosystem integrity.
- Relationships with salmon continue.
- Salmon continue to support culture, food and knowledge transfer.



- ➔ 1. Set objectives.
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WORKSHOP 1: November 23-24, 2023

Presentation by Brendan Connors (DFO) on status and trends of Yukon River Chinook.

- Run size declines.
- Declines in productivity.
- Sub-stock dynamics.
- Environmental and ecosystem changes related to productivity (Murdock et al.).
- Parental spawning migration drivers; high water temps/heat stress, poor marine food quality (Howard and Von Biela).
- Declines in escapement quality (Connors et al.).



1. Set objectives.

➔ 2. Inventory and assess population and ecosystem status and trends.

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WORKSHOP 2 March 26 & 27, 2024

Preparations:

- Draft document produced, “Issues Facing Salmon”; authored by Al von Finster and Alyssa Murdoch.
- Document being reviewed by Brendan Connors (DFO) and Kate Howard (ADFG).
- Issues analyzed using “Risk Assessment Methodology for Salmon” (RAMS)... (more)



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POTENTIAL TOOLS for ACTIONS

The actions available to influence salmon productivity are generally related to:

- Fishery management actions: modify the quantity and quality of fish allowed to pass through the fishery.
- Hatchery inputs: based on hatchery objectives – increase production, support restoration or conservation of stocks, and support scientific understanding (tracking marked fish through the population).
- Habitat restoration: actions to restore habitat types when lack of habitat is limiting production. Habitat maintenance: ensuring availability and quality of habitat when production returns.



Fishery
Management



Hatchery &
Enhancement



Habitat
Restoration

SOME TOOLS FOR IDENTIFYING ISSUES AND SELECTING APPROPRIATE ACTION



Qualitative/
semi-quantitative

Risk Assessment Methodology for Salmon, RAMS

Quantitative-
deterministic

All-H-Analyzer, AHA

DFO hatchery dynamics model

samSim

Quantitative-
stochastic

Age-specific Chinook
exploitation rate model (ECVI)

salmonMSE

WORKSHOP 2 March 26 & 27, 2024

We used RAMS process to identify issues.

- Allows for inclusion of other knowledge, including Traditional Knowledge.
- Works in both data “rich” and data “poor” situations.
- Assess 105 known limiting factors through all stages of the salmon life cycle.
- Considers likelihood and magnitude of impact (risk to salmon).
- Actions to mitigate impacts can include the full spectrum of potential “levers”.
- Allows for repeat analysis: changes in threats or risks, improved data, and effectiveness of actions.

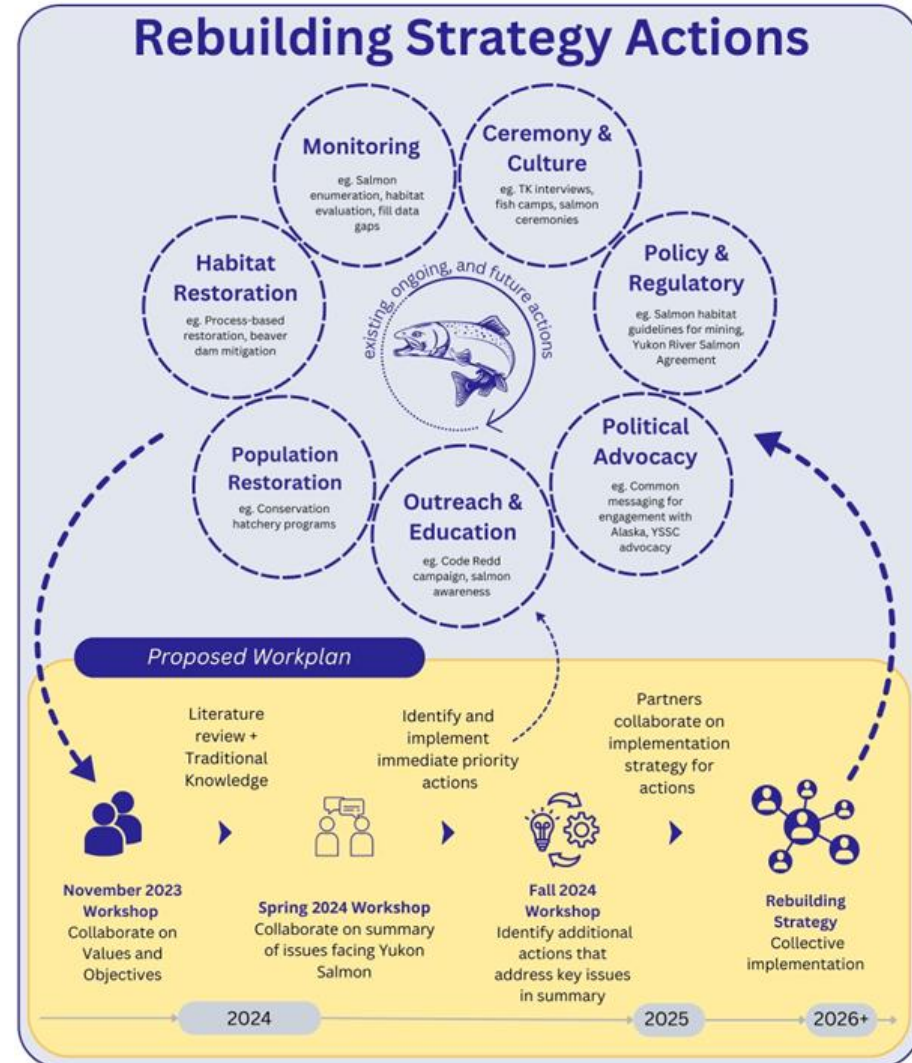


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CANADIAN YUKON RIVER CHINOOK PROCESS

Actions for Canadian Yukon River Chinook include:

- Ceremony & Culture
- Monitoring
- Habitat Restoration
- Population Restoration
- Outreach & Education
- Political Advocacy
- Policy & Regulation



OTHER PROCESSES USING “RAMS”

Risk Assessment Methodology for Salmon has also been used in the following salmon stock rebuilding planning processes in Canada:

- West Coast Vancouver Island Chinook salmon
 - Status: in progress, confirming threat risk status.
- Nanaimo Chinook salmon
 - RAMS component complete.
- Okanagan Chinook salmon
 - Complete, rebuilding plan pending final approval.



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- Reviewed “Issues Facing Salmon” outcomes.
- Used as the foundation for discussion and development of potential actions.

Issue Category	Freshwater		Ocean				Freshwater
	Egg / Alevin	Fry and Smolt	Smolt (Ocean)	Juvenile	Immature	Maturing Adult	Returning Spawner
Fishing (bycatch and targeted harvest)	N/A	N/A	N/A	N/A	Very Low / Data Gap	Very Low / Data Gap	Very Low
Warming Temperatures	Low-Moderate	Low-Moderate	Moderate	Moderate	Data Gap	High	High
Competition	Very Low	Very Low	Data Gap	Data Gap	High	High	Very Low
Ichthyophonus	Very Low	Very Low	N/A	N/A	Data Gap	Data Gap	High
Predation	Very Low	Low-Moderate	High	High	Moderate	Moderate	Low
Habitat Degradation or Loss	Low-Moderate	Low-Moderate	Data Gap	Data Gap	Data Gap	Data Gap	Low
Water Quality (not including temperature)	Very Low-Low	Very Low-Low	N/A	N/A	N/A	N/A	Very Low
Hydrology	Low-Moderate	Very Low	N/A	N/A	N/A	N/A	Low-Moderate
Hydroelectric Dam Impacts (localized)	N/A	Very High	N/A	N/A	N/A	N/A	Very High
Demographic / Escapement Quality	N/A	N/A	N/A	N/A	N/A	N/A	High
Genetic Issues	Data Gap	Data Gap	Data Gap	Data Gap	Data Gap	Data Gap	Data Gap



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- Presentation on creating space for Traditional Knowledge
 - Indigenous indicators of success
 - Relationship with salmon
 - Youth in fish camp with elders, cultural and traditional practices
 - Ceremony (needed to call them back)
 - Salmon on the spawning grounds
 - Developing relationships and trust between western scientists and Traditional Knowledge holders
 - Giving equal resourcing as western science



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Action Development:

- High Temperatures (Adult Migration)
 - Collaboratively develop a standardized temperature monitoring program.
 - Store data on Pacific Salmon Foundation's "Datastream".
 - Take advantage of the many existing assessment and monitoring projects.
 - Consider it from the fish. What is the appropriate metric (daily maximum temperature, daily average, or some combination of duration and temperature).



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Action Development:

- Overwintering Habitat Data Gap
 - First step in understanding threats to overwintering habitat is to quantify the extent of habitat.
 - Work collaboratively to design a study for confirming the extent of juvenile Chinook salmon overwintering habitat.
 - Explore the use of eDNA as first presence/absence indicator. Pilot trial study for 2024-25.
 - Valuable for future protection.
 - Need to identify habitat parameters as presence/absence may be limited during low abundance.



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Action Development:

- Ocean Hatchery Impacts
 - Strong correlation between number of pink salmon in North Pacific and low return of Yukon River Chinook salmon.
 - 15% of pink salmon are hatchery origin.
 - 4.5 Billion hatchery salmon in North Pacific annually; 40% of salmon are hatchery origin.
 - Group identified to understand North Pacific fishery governance and measures in place to protect wild Yukon River Chinook.
 - Advocate for the protection of Yukon River Chinook salmon.



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Action Development:

- Increased Public Profile of Salmon
 - During times of low abundance and lack of direct interaction with salmon through harvest and traditions, staying connected to salmon is critical.
 - People need to care about salmon and value their place on the landscape.
 - A number of people/organizations identified to foster stewardship, develop activities and celebrations.
 - Includes, but goes beyond First Nation culture and traditions to broader public participation.



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6. Design actions and monitor.
7. Implement actions and monitoring.
8. Evaluate (monitoring) data.
9. Adjust goals and/or actions.

WORKSHOP 2 March 26 & 27, 2024

Action Development:

- Improved Regulatory Regime
 - Requirement for adequate baseline data prior to development.
 - Protection of riparian habitat important to Chinook salmon
 - Industrial development & Yukon Placer Authorization overhaul.
 - Protection of habitat upslope from rivers & streams.
 - Industrial development and effective reclamation.
 - More stringent reclamation standards.
- Stringent conditions for hydro dams.
 - Requirements for effective fish passage upstream and downstream.



1. Set objectives.
2. Inventory and assess population and ecosystem status and trends.
- ➔ 3. Identify (a) problems and (b) all potential actions.
- ➔ 4. Review and select appropriate actions.
5. Prioritize Actions.
6. Design actions and monitor.
7. Implement actions and monitoring.
8. Evaluate (monitoring) data.
9. Adjust goals and/or actions.

WORKSHOP 2 March 26 & 27, 2024

Next Steps:

- Group identified to review threats document.
- Space for Traditional Knowledge.
- Steering/Organizing Committee confirmed.
- Fall workshop:
 - Review and finalize threats.
 - Develop appropriate actions.
 - Explore prioritization process for actions.
 - Explore framework for “plan” or “strategy” document.



1. Set objectives.
2. Inventory and assess population and ecosystem status and trends.
- ➡ 3. Identify (a) problems and (b) all potential actions.
- ➡ 4. Review and select appropriate actions.
- ➡ 5. Prioritize Actions.
6. Design actions and monitor.
7. Implement actions and monitoring.
8. Evaluate (monitoring) data.
9. Adjust goals and/or actions.



Questions

Appendix 6



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Agreement of April 1, 2024 regarding Canadian-origin Yukon River Chinook Salmon for 2024 through 2030

The following agreement between Fisheries and Oceans Canada and the Alaska Department of Fish and Game (hereafter referred to as “the Parties”) concerning Canadian-origin Yukon River Chinook salmon shall apply to the period from April 2024 through 2030.

Recognizing the persistent decline of Chinook salmon has resulted in an inability to meet conservation objectives and provide benefits to the fisheries of both countries, the Parties agree to:

1. Implement a suspension of directed Chinook commercial, sport, domestic, and personal use fisheries in the mainstem Yukon River and Canadian tributaries for one full life cycle (seven years). This suspension will remain in effect regardless of run abundance.
2. Implement over the duration of this seven-year period a Rebuilding Target of 71,000 Canadian-origin Chinook salmon (international border passage). After 2030, unless the Parties choose to continue to use this Rebuilding Target, adopt a biologically-based escapement goal or implement a different goal, the Parties shall use the Interim Management Escapement Goal of 42,500 – 55,000 Canadian-origin Chinook salmon.
3. Over this seven-year period directed subsistence fishing for Chinook salmon in the mainstem Yukon River and Canadian tributaries will be closed except when the bilateral inseason estimate of Canadian-origin international border passage, accounting for enroute mortality, is projected to exceed 71,000 based on Pilot Station sonar. In this circumstance, the Parties may consider providing limited subsistence fishing opportunity.
4. Recognizing the importance of Chinook salmon for ceremonial use and the transmission of cultural knowledge, the Parties may, at their discretion, provide limited harvest opportunity for these purposes.
5. Alaska shall continue to minimize incidental harvest of Chinook salmon in all other mainstem Yukon River fisheries over this seven-year period.
6. The Parties place a priority on stock assessment and on scientific research on the health of Yukon River Chinook salmon to better understand the causes of low run abundances and identify possible solutions. Such stock assessment and scientific research programs shall be discussed jointly by the Parties at Yukon River Panel and Joint Technical Committee meetings. Over this seven-year period, the take of Chinook for scientific research purposes shall be minimized and non-lethal sampling methods shall be used where possible.
7. The Parties place a priority on traditional and local ecological knowledge research on the health of Yukon River Chinook salmon to better understand the causes of low run abundances and to identify possible solutions. Such traditional and local ecological knowledge research shall be discussed jointly by the Parties at the Yukon River Panel and Traditional Knowledge Committee meetings.



Fisheries and Oceans
Canada

Pêches et Océans
Canada

8. In accordance with Pacific Salmon Treaty Chapter 8 provisions, during this seven-year period the Yukon River Panel shall develop a rebuilding plan for Yukon River mainstem Chinook salmon.
9. In accordance with Pacific Salmon Treaty Chapter 8, section 12, Alaska will maintain efforts to increase the in-river run of Yukon River origin Chinook salmon by reducing marine catches and bycatches of Yukon River origin salmon to the extent practicable.
10. In the absence of fisheries, the status of Chinook salmon has continued to be depressed and reflects the long-term cumulative effects of other factors, particularly habitat degradation resulting from resource and hydroelectric development, competition from hatchery production, cyclic natural phenomena, and large scale environmental variability affecting both marine and freshwater habitats. The Parties shall work collaboratively on habitat and stock restoration activities and support research to better understand the declines of Chinook salmon.
 - Alaska will pursue an increase in Yukon River Salmon Agreement base funds from the U.S. Congress and pursue other available funding opportunities to be directed toward Yukon River habitat and stock restoration activities.
 - Canada will seek to increase federal funding to be directed towards Yukon River habitat and stock restoration activities.

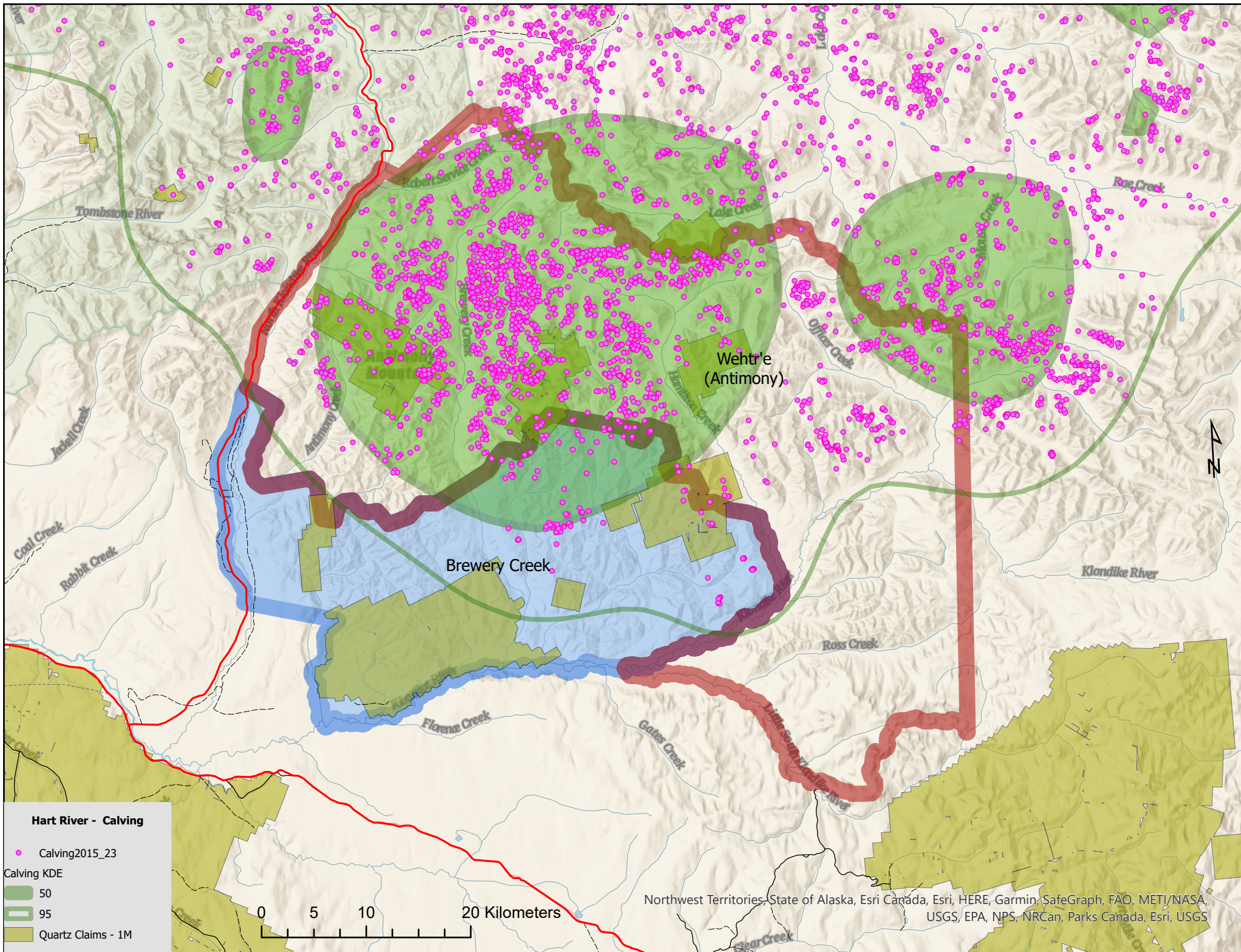
A handwritten signature in black ink, appearing to read "D. Lang".

Doug Vincent-Lang
Commissioner
Alaska Department of Fish and Game

A handwritten signature in black ink, appearing to read "Steve Gotch".

Steve Gotch
Senior Director, Pacific Region
Fisheries and Oceans Canada

Appendix 7



Appendix 8

Appendix 8 to the TH April 30, 2024, Submission to the Dawson Planning Commission **Consideration of Climate Change in the Recommended Dawson Regional Land Use Plan**

The Dawson Regional Land Use Plan (the Plan) is the first opportunity the people of the Yukon have had to fully address climate change as part of a regional planning process. Neither the Peel nor North Yukon Regional Land Use Plans identify climate change as an important factor affecting Yukon lands and waters. We are happy the Plan acknowledges climate change as an issue that should be addressed, but we do not believe the Plan goes far enough in recommending measures to combat it. The Dawson Planning process is an excellent opportunity to promote meaningful and effective action on climate change. The implementation of the Dawson Regional Land Use Plan may be the earliest opportunity to implement the Yukon Government's *Our Clean Future (OCF)* - the Yukon's strategy for climate change, energy, and a green economy - through regional planning. Part of the *OCF Vision* (p.9) is:

We will recognize the inherent value and importance of our natural environment and prioritize solutions that protect, conserve and harness natural capital and ecosystem services.

The strategy outlines objectives for people and the environment (OCF, p.50):

- *Respond to the impacts of climate change on wild species and their habitats.*
- *Maintain our ability to practice traditional and cultural activities on the land.*
- *Protect and enhance human health and wellbeing in a changing climate.*

The strategy also aims to meet objectives through land use planning, among other means, in recognition of "how broadly climate change can affect our lives" (OCF, p.23).

OCF Action C6 (p.55) requires the Yukon Government to "Continue to make recommendations to consider the impacts of climate change in regional land use and local area planning processes," while *Action P5* (OCF, p.51) states the Yukon Government will "Continue to incorporate climate change into the design of protected and managed areas using landscape conservation science in order to allow native species to move, adapt and survive in the face of climate change."

TH is of the opinion that a major shortfall of *OCF* is the failure to take in account the enormous volumes of carbon dioxide and methane that will be immediately released through climate-related permafrost degradation, and ground and vegetation disturbance. These can be considerable but are currently not included when emissions and targets are being assessed by the territory. Regional land use planning may be the best, and perhaps only, mechanism by which these can be calculated and addressed.

The magnitude of climate change impacts on virtually all aspects of the planning region and, in particular, Tr'ondëk Hwëch'in rights, titles, and interests, require climate change to be central to the Plan. The Recommended Plan (p.99) states its recommendations are "guided by the reality of the climate change emergency that currently exists in the Yukon." Yet there remain unfulfilled opportunities within the Plan to reflect that reality. In our view the Plan can better emphasize the disproportionate effects of climate change in the north and properly reflect the fundamental impacts it imposes on Tr'ondëk

Hwëch'in. We are in a climate crisis, not an industry crisis or an economic one, yet the promotion of industrial development, and business as usual, applies to most of the planning region.

Addressing climate change requires fundamental, and often difficult, shifts in philosophy, priorities, and practices. While the Dawson Regional Land Use Plan cannot be the only means to tackle the climate crisis, it remains a critical part of the solution.

1.2 VISION

The inclusion of Tr'ëhudè as a key principle is a positive step. Better acknowledgement and consideration of how climate change is interwoven into all aspects of land uses and practices in the region - and tackling its impacts in a holistic manner that reflects and focuses on Tr'ondëk Hwëch'in stewardship and natural solutions - can help the Plan more fully achieve Final Agreement Chapter 11 Objectives. Business as usual will continue to undermine our ability to adequately address and adapt to climate change.

1.3 PLANNING VALUES, ISSUES AND GOALS

1.3.1 Resource Values and Issues and 1.3.2 Plan Goals

The Yukon First Nations' Climate Change Emergency Declaration, of February 2020, stated *“there is no greater threat today to our culture and way of life and the wellness of our citizens and communities than the impacts of climate change.”* The Tr'ondëk Hwëch'in Climate Change Declaration states *“The land, water, wildlife, fish, trees, and plants of these ecosystems are critical to our survival and identity. It is a priority for Tr'ondëk Hwëch'in to do what we can to ensure our ecosystems and culture are preserved and not lost because of climate change.”*

Climate change is listed as one of the Ecological Integrity, Conservation and Stewardship issues (Table 1-1; p.10). Three climate change-related objectives are incorporated into the Plan's Ecological Goals (p.11):

1. Preserve ecologically representative areas and important ecosystem services within the context of climate driven shifts to maintain the natural integrity of those areas.
2. Connectivity between areas of key habitat, while considering climate-driven shifts in habitat.
3. Awareness, mitigation, and adaptation to the effects of climate change on the landscape, fish and wildlife populations, and the people of the region.

TH believes #3 should have greater significance than an “Ecological Goal” and should be fundamental to the Plan's direction and outcomes. Including it as an essential part of the Plan's Vision can help to address the fast-paced and widespread transformations wrought by climate change and enhance the Plan's effectiveness and influence.

Climate change is, and will continue to be, the biggest threat to “Culture and heritage” and can be incorporated as a planning issue within that Value. Strengthening connections to the land and sustaining traditional harvesting rights and practices cannot be successful if the land is irrevocably changed and

access hindered through climate changes. Equally, acknowledging and addressing its impacts on our traditional and “sustainable” economies merits mention as a socio-economic goal.

If establishing “access infrastructure” (Recommended DRLUP, p.11) is to be a key consideration, it should acknowledge its adverse effects of exacerbating climate changes; particularly ground disturbance and thawing, increasing emissions, and habitat degradation and severance.

TH strongly believes that focusing on climate change is fundamental to sustaining an environment where people and nature thrive; and that recommendations and mechanisms are placed throughout the Plan to ensure climate change considerations are acknowledged and addressed. If the Plan reflects this, it can provide robust and enforceable guidance that will have a meaningful impact on climate changes in our region.

1.8 INDIGENOUS PLANNING AND RECONCILIATION

1.8.3 United Nations Declaration on the Rights of Indigenous Peoples

It is widely acknowledged that climate change and Indigenous Peoples’ rights are inextricably linked. The United Nations confirms the connection between Indigenous rights and sustainable development – and supports the realization that the impacts of climate change directly restrict First Nations’ ability to enjoy and use traditional lands and infringe upon Indigenous rights. Highlighting the crucial link between Indigenous rights and climate change should be an integral part of the Plan. Moreover, supporting the spirit and intent of the Final Agreements and UNDRIP and unequivocally acknowledging a co-governance (not simply co-management) approach to climate change will certainly improve the Plan’s ability to “strengthen Tr’ondëk Hwëch’in’s ability to determine and develop priorities for their Traditional Territory” (Recommended DRLUP, p.22).

The Federal and Territorial governments promote Indigenous climate leadership as a cornerstone of climate action and “efforts must uphold the rights of First Nations...in accordance with the minimum standards set out in the United Nations Declaration on the Rights of Indigenous Peoples” (Canada’s National Adaptation Strategy, 2020, p.17). The Plan is an opportune vehicle to recommend the concept of free, prior, and informed consent as the pathway for Yukon First Nations to address climate change in the territory.

1.9 GUIDING PRINCIPLES

We propose that addressing climate change be specifically incorporated as a guiding principle for the Plan, with recommendations and mechanisms throughout to ensure climate change considerations are acknowledged and addressed. This is fundamental to the success of the Plan. The principle could be stated thus:

Climate Change: Addressing the causes and impacts of climate change is fundamentally necessary to create an environment where people and nature thrive. This is central to the Plan and essential to the continued health and well-being of the region.

The Plan promotes the principles of sustainable development and community stewardship as part of creating a sustainable plan; and *hopes "this Plan will in turn encourage all people to act as stewards of the Region"* (Recommended DRLUP, p.22). The intent of the Plan in this regard could be strengthened by:

- Acknowledging the legacy of historic and contemporary unsustainable development in the Territory as a component of the ongoing, and worsening, effects of climate change.
- Approaching the issues through legislated means and not aspirations.

1.9.1 Sustainable Development and 1.9.2 Stewardship

The Plan notes that economic activities that degrade the land and that the land cannot recover from are not considered sustainable. From the TH perspective, development cannot be considered sustainable if it contributes to climate change or worsens its effects; and this includes emissions from disturbing land. Adherence to this principle should be one of the priorities for achieving environmental sustainability.

1.9.3 Precautionary Principle

We fully support the adoption of the Precautionary Principle. Including emissions and other contributions to climate change, and activities that may exacerbate climate-change induced effects, can result in harm to the environment. Equally, activities that lead to habitat destruction and fragmentation should also be considered from a climate change perspective and proven not to adversely impact the abilities of species to relocate or adapt to the changing environment.

1.9.4 Adaptive Management

Adaptive management can be adopted for all aspects and impacts of climate change; irrespective whether sources or causes are outside of the geographical boundaries of the Plan and even if there are no immediate or effective mitigations. Incorporating recommendations for wider action to consider and reduce the Yukon's and Canada's greenhouse-gas emissions will help our regional land use planning process to meet its governance, cultural and sustainability responsibilities as required by the Final Agreements.

2 DESCRIPTION OF THE PLANNING REGION

2.3 ENVIRONMENT

Climate change, which has led to substantial environmental changes and impacts in the region, should be referenced in this summary.

2.5 ECONOMY

This section would be better served by highlighting the potential impacts climate change may have on future development for each sector – as it has done for Transportation. For example, placer mining and agriculture may benefit from increasing temperatures while forestry could be restricted due to wildfires. Access to the land and to traditional renewable resources may become limited as the

environment changes. Equally, industrial development contributes to the causes of climate change through emissions (direct and ground-released) and a reduction in sequestration.

2.7 CLIMATE CHANGE

We appreciate the expanded consideration climate change is given in the Recommended Plan, as opposed to the Draft Plan. The increased attention, while welcome, is focused on climate projections with only a short paragraph on impacts. Climate change consideration as a guiding principle is the best means to adequately address the extent of climate change impacts on virtually all aspects of the planning region.

3 PLAN CONCEPTS

3.1 LANDSCAPE MANAGEMENT UNITS

Nature plays a critical role by providing two key climate change solutions; sequestering and storing carbon and allowing nature to adapt to the changing climate. Protecting and restoring habitats could provide over one-third of the national emission reductions needed and help the Federal Government's commitment to protect at least 50% of wilderness by 2050. Equally, this can play an enormous role in preserving biodiversity and adaptation. We reiterate: Protecting more of the region from development and disturbance will enhance the potential for climate-change solutions within the region.

In addition, 'nature-based solutions' or 'natural climate solutions' are becoming increasingly supported and implemented to remove carbon dioxide from the atmosphere. Spanning a wide range of practices, these fall into three categories relevant to our region: forestry practices, wetland-related practices, and restorative agriculture. Forestry practices include preservation, allowing forests to regrow naturally where they have been cut down, and improved forest management. Wetland-related practices focus on conserving and restoring peatlands and wetlands. Restorative agriculture ranges from practices that build soil carbon, such as no-till agriculture and cover crop rotation, to agroforestry and improved livestock management.

Natural conservation is important in helping wildlife and people adapt to some of the changes that we are already experiencing because of climate change. Wetlands, forests, and grasslands provide a buffer or refuge from extreme weather events, such as floods and droughts. Intact, connected natural habitats will also help some species shift their ranges in response to climate change. Land Management Units should be based on the preservation of key values like water, caribou or salmon and not altered to suit the artificial existence of mining claims or industry dispositions.

3.2 LAND USE DESIGNATION SYSTEM

Management intent for the designation system needs to include the potential to address the causes and impacts of climate change. If our climate and landscapes change to the degrees predicted, the role of our environment in climate-change resilience will become ever more important. While some LMUs refer to conservation and habitat protection, they need to also take account of the importance of natural and stable environments in carbon sequestration and storage, and of the emissions released when land is disturbed.

3.2.1 Integrated Stewardship Areas

Just as the most at-risk members of society need the highest level of care, the most damaged and vulnerable natural environments need the highest levels of protection, and equally, restoration to the highest standards. As we look to nature and our natural environment to help reduce and mitigate the effects of climate change, we should consider and give priority to those areas that have surpassed designated or identified cumulative thresholds. It is a key responsibility of this Plan to introduce specific requirements for 'Integrated Stewardship Areas' that will help minimize industry's contributions to climate change, investigate methods to increase sequestration and help preserve critical habitat.

3.2.2 Special Management Areas

Priority should be given to retain, preserve and re-establish our natural landscape. Otherwise, the incalculable benefits it provides in addressing climate change will be lost and we will continue to suffer the consequences of unsustainable development. In this respect the provision for Special Management Areas is critical from a climate change perspective. Increasing the quantum of Special Management Areas and moderating the pace and intensity of industry will increase our abilities to minimize climate change and help adapt to its impacts. It supports the premise that "Retaining the natural landscape is a way to maintain ecosystem resilience in the region" (Recommended DRLUP, p43)

The Recommended Plan promotes further work (e.g., to monitor changes, forecast future conditions, etc.) to understand how climate change is affecting our lands and help inform conservation approaches. Mandating the precautionary principle until this work is complete will remove uncertainties about how land will be impacted; and allow us to be surer of the effects of development, and of climate changes. A moratorium on industrial activities within SMAs would assist governments, regulators, or proponents to learn how activities will contribute to, or exacerbate, climate changes.

3.2.3 Sub-Regional Planning Areas

The three areas identified for future planning are locations where climate change-induced effects could have the biggest impact on our abilities to function as a community. TH supports sub-regional planning for the Klondike Valley and Dempster Corridor but believes the Yukon River Corridor in the Dawson Planning Region should be a Special Management Area. TH appreciates the Commission's future vision of developing a coordinated Plan for the entirety of the Yukon River Corridor in Yukon. Creation of sub-regional and Yukon River plans should be subsequent to a comprehensive analysis from a climate change vulnerability perspective.

3.2.4 Overlay Areas

3.2.4.1 Caribou Stewardship Area

It is well understood that climate refuges and supporting the abilities of species to find alternate habitats are crucial to species adaptations when confronted by climate changes. The intent of Caribou Stewardship Areas, to protect the caribou population and habitat, can be improved from a climate-impacts perspective by aligning overlay areas with caribou habitat (as opposed to LMU boundaries), increasing areas slated for preservation, and limiting support for existing dispositions and access.

The effect of existing mining operations on the proposed corridors also needs to be taken into account. It is unacceptable that mining claims continue to be given preference over a species so important to Tr'ondëk Hwëch'in and so vulnerable to climate change.

If we are uncertain about the effects climate change has, and will have, on caribou behaviour and breeding and migration, then we should adopt the precautionary principle and preserve as much of their current and expected-future habitat as we can. This will require continued observation and sampling, and predictive modelling.

3.2.4.2 Wetland Stewardship Area

Wetland integrity is vital to climate resilience. The abilities of wetlands to sequester and store carbon are at risk through industrial development of wetlands and their supporting watersheds. In addition, the enormous volumes of carbon released when wetlands are disturbed may have significant impacts on the territory's emissions. From a climate change perspective, all wetland types should be permanently protected.

3.3 GENERAL MANAGEMENT DIRECTION and 3.4 SPECIAL MANAGEMENT DIRECTION

Much of the Plan seems based on accommodating development and then trying to reduce subsequent conflicts. This approach does not support the climate-change benefits of preserving the environment or accounting for the contributions activities make to climate change. Climate change considerations should be included as a specific management direction:

- Elimination or minimizing of activities that contribute to the causes and adverse impacts of climate change

A definition of the "best use of land" (Recommended DRLUP, p.48) would be useful for clarity and should incorporate the value of retaining the natural state of the environment as a solution to climate changes. It should also allow for land to be preserved in its natural state for the public good as a provider of cultural, social, physical, spiritual, and direct and indirect economic benefits. In the light of climate change stresses these attributes are becoming increasingly important.

3.6 CUMULATIVE EFFECTS MANAGEMENT

3.6.1 Overview and 3.6.2 Background

The Plan's definition of cumulative effects focuses on net changes to the environment, or a society, which result from land-use activities in specific Land Management Units. This definition limits consideration to local or regional land uses, and thus omits many climate change implications. Climate Change has been described as "*the mother of all cumulative effects*" (FNND, Written Submission to the Commission, Dec 21, 2021, p.9) and these wider climatic, physical, and biological implications need to be assessed as a cumulative effect in and of itself. It should also be part of environmental impact and cumulative effect assessments. It is vital for our regional and wider well-being that climate changes and their widespread impacts are a focus of cumulative effects assessment. Failure to do so can lead to

uninformed management decisions that leave us, and our environment, bearing the brunt of severe climate change consequences.

In summary, potential effects of climate change should be considered as a component of cumulative impact assessments during evaluations for land-use plans. Until these changes are better understood in a cumulative context and incorporated into the Plan, it will be difficult to predict the environmental, social, and cultural outcomes of particular land-management designations and allowable activities. This can be achieved by:

- Adding climate change to the primary list of cumulative effects indicators.
- Incorporating and setting measurable thresholds for climate change-induced effects.
- Considering the direct consequences that climate change may have on other indicators and activities.
- Addressing how allowable land uses and activities may exacerbate the causes and impacts of climate change.

These would enable specific and measurable thresholds to be developed that consider direct climate change consequences, and the degree of influence of climate change within Land Management Units.

3.6.2 Background

The Plan definition of Cumulative Effects (CE) is effects “that result from a land use activity in combination with other past, present, and future activities” (Recommended DRLUP, p. 52). It would be advantageous, and more accurate, to take account of climate changes from a CE perspective, and particularly those experienced in the planning region from causes that are created outside of the territory.

3.6.3 Recommended Plan Indicators

The Plan’s primary Cumulative Effects Indicators are Surface Disturbance and Linear Density; chosen as they indirectly relate to a range of regional values and issues. Climate change shares these characteristics, and indeed surpasses their spheres and range of influence. Thus, climate change should be defined, incorporated, and evaluated in the same manner. Equally, climate change should be a key component of the Cumulative Effects Framework and properly tracked utilizing appropriate and adequate baseline measurements.

Consideration of climate change takes one of two forms: contributing to the causes of climate changes; or assessing its direct and indirect impacts.

Contributions to climate change: Certain land-management designations and allowable activities may contribute to the causes of climate change. While the Yukon’s overall ‘carbon footprint’ is small at the national level, the territory has one of the highest rates of fuel and resource consumption in the country on a per capita basis; transportation and mining being the main contributors. Industry and the levels of development supported within Land Management Units directly determine emissions, while the removal of wetlands and other carbon-

sequestration ecosystems weakens the environment's ability to absorb CO₂. Both the federal and territorial governments have established medium and long-term emission reduction and carbon-capture targets which could translate to thresholds for cumulative assessment of contributory components.

Direct impacts: Cumulative effects assessment should consider how the changing climate affects assessment parameters, and in particular CE indicators. For example, the cumulative threshold for wetland removal or disturbance should not be limited to that directly caused by the activity but include losses contributed by climate changes. A wetland may reach its disturbance threshold purely through climate change-induced permafrost degradation or may be expected to surpass its threshold when this is combined with human disturbance. Quantifying the expectations of climate-induced cumulative impacts will require research, modelling, and monitoring; and can comfortably be applied to other cumulative effects' indicators (which could be expanded to include permafrost) and other plan parameters.

Indirect impacts: Support for development in some LMUs can exacerbate impacts experienced due to climate change or provide new avenues for climate-induced alterations. Mining disturbance or the construction of roads and trails is known to adversely affect permafrost. The cumulative extent of this cannot be considered solely from a development 'footprint' perspective. Surface disturbance and linear density alone are insufficient to determine the total extent of the impacted permafrost. Modelling and monitoring have major roles to play.

There are three key challenges when considering climate change within cumulative impacts assessments:

1. We have no records for climate changes as rapid as the rate we are currently experiencing.
2. The high degree of uncertainty and the difficulties of modelling and predictions leave us open to potentially significant errors.
3. Combinations of climate change effects can serve to intensify and widen its impacts beyond those expected for individual components.

The consequences of this current episode of climate change will differ markedly from those of previous events, in part because of the extent of cumulative environmental impacts and interactions, which impair some systems' mechanisms for resilience and increases their sensitivity to change. Ecosystems now are highly fragmented by land-use activities and previous spatial shifts (like migration) that could provide an outlet may no longer be available or possible. Thus, assumptions for expected behaviour, and indeed available options, must be tempered with expectations of high variability and uncertainty. The Plan does address ecological integrity and interconnection in its recommendation on Special Management Areas from a climate change perspective. However, forecasted alterations to ecosystems, unexpected changes to species migration and distribution and a host of other climate change related factors will require predictive modelling to ensure potential future habitats remain available and connected.

Several approaches to land management have been developed in the face of high climate change uncertainty. The most common approach, and one incorporated in the Plan, is the "precautionary principle": if the outcome of an activity is uncertain and harmful effects are possible, be conservative until outcomes are better understood. This is essential from a climate-change perspective if potentially catastrophic errors are to be minimized. It requires detection and documentation of the climate-mediated changes that are occurring, beyond those currently listed as cumulative effects indicators. More importantly, it requires a robust recognition of potential "threshold" behaviours, beyond which a system begins to respond in a new (and potentially unforeseen) way once conditions change beyond a particular point. A second approach is "adaptive management," which is also referenced as a Guiding Principle in the Plan and specifically recommended for climate change consideration. Appropriate forecasting and monitoring can evaluate the efficacy of an action or actions and allow redesign to improve future applications of the technique. Such an approach will be particularly useful as the climatic context for land-management decisions and activities changes. While the Draft Plan suggested refining the application of cumulative effects indicators and thresholds, the Recommended Plan does not provide much in the way of climate change-specific actions or requirements. TH strongly believes the Final Recommended Plan should provide strong, comprehensive, and effective actions related to climate change.

Assessments of climate hazards often study the effects of each exposure individually. Focusing on only a single or small number of climate change impacts may ignore the combined threat they present in conjunction with other impacts, resulting in incomplete assessments of the consequences of climate change on valued components. Projections should anticipate a future beyond individual hazards such as heatwaves or droughts, and plan for one in which we will experience the impacts of multiple types of concurrent climate hazards. Cumulative effects assessment with regard to climate change is complicated. The accumulated impacts of one component must be considered concurrently with others to fully comprehend the extent of impacts. Cases where one impact aggravates the effects of another (run-off on a hillside after heavy rainfall events will differ considerably after a wildfire, for example) require careful consideration. This is further complicated when a "collision" of multiple cumulative climate change impacts may be involved.

There should be potential in the Plan to cease development activities if they are *projected* to move to critical levels of CE, even if they currently fall short of indicator limits. Interim (even in the long term) pauses could be introduced in these cases to reduce the likelihood of reaching critical levels, and to ensure more accurate assessments and mitigations.

In addition to the other cumulative effects indicators identified in section 3.6.3, the Recommended Plan proposes that other indicators will be evaluated and implemented later. While supporting this principle, it is imperative these are introduced, monitored, and assessed as part of the current plan development. Delaying assessments will limit the effectiveness of adaptation strategies relating to climate change if factors such as wildfires, permafrost degradation, and extreme weather events are not considered in the Plan. Equally, the cumulative impacts of climate change on community, mental and physical wellness should be addressed in the Final Plan. And perhaps most importantly, the cumulative effects of climate

changes on First Nation Citizen rights, titles and interests should be a fundamental component of the cumulative effects strategy.

A decision by the BC Supreme Court found the BC government infringed the Blueberry River First Nation's treaty rights by allowing decades of industrial development in their traditional territory¹. The First Nation argued cumulative impacts of activities constituted a breach of treaty rights, a claim that the court upheld. One example presented of the cumulative impacts was declining caribou populations. Justice Burke accepted expert witness testimony that "anthropogenic disturbance, including industrial disturbance, has largely caused or contributed to that decline" (*Yahey v British Columbia*, 2021 BCSC).

In the ruling, the Judge noted that the Crown may justifiably infringe treaty rights through the "taking up" of lands for development deemed to be in the public good. But there is, or should be, a limit: "I find that the province's conduct over a period of many years – by allowing industrial development in Blueberry's territory at an extensive scale without assessing the cumulative impacts of this development and ensuring that Blueberry would be able to continue meaningfully exercising its treaty rights in its territory – has breached the Treaty" (*Yahey v British Columbia*, 2021 BCSC). Supporting the First Nations request for a halt on all further development, the decision noted "The province may not continue to authorize activities that breach the promises included in the Treaty, including the province's honourable and fiduciary obligations associated with the Treaty, or that unjustifiably infringe Blueberry's exercise of its treaty rights" (*Yahey v British Columbia*, 2021 BCSC).

Given the far-reaching implications of the decision it would be prudent for the Plan to recognize the potential for cumulative effects to surpass acceptable levels when impacting the rights of Tr'ondëk Hwëch'in. It may be a complicated process to identify and set thresholds and monitoring regimes, but it would serve to enhance the Plan's cumulative effects assessment regime. It may also be pertinent to consider if climate changed-induced cumulative impacts could be held responsible for infringing on Indigenous rights – either in conjunction with development activities or solely.

Surface Disturbance

The Plan notes that disturbance footprints represent a decrease in habitat. Many of the physical environmental disturbances will be initiated and/or exacerbated by climate change; and it is recommended to incorporate these impacts within calculations of cumulative effects. Equally, advocating further research before taking action is contrary to the precautionary principle.

The primary limitation apparent in the Plan is the assessment of what is considered the 'footprint' of activities. Thus, the cumulative assessment of a disturbance will be restricted purely to the percentage of land that will be disrupted in a given LMU. It takes no apparent account that while placer mining, for example, may account for only a small percentage of an area within the context of an LMU, it may disturb 100% of an important or sensitive riparian valley; or it may affect an area susceptible to climate change, such as wetlands. Other activities will similarly affect large percentages of key, rare, sensitive, or

¹ *Yahey v British Columbia*, 2021 BCSC

climate-susceptible habitat while remaining within prescribed thresholds for that LMU. It is uncertain that the implied 'values-based' approach will be sufficient to rectify this issue – particularly if 'climate change' is not considered a value. This approach may result in the loss of vital habitat and areas of cultural significance.

Some activities have a greater impact than others - a seasonal activity may have minimal impact on the surface compared to a more permanent one, for example. Seasonal impacts, both in terms of when activities take place and how seasonal conditions affect their impacts, can vary considerably – particularly when climate changes are taken into account. The Plan should ensure that CE assessments adequately differentiate levels of impact.

Surface Disturbance and Reclamation

It may be reasonable to subtract "reclaimed" or "restored" areas from the disturbed index, but these should be defined with acknowledgements that carbon sequestration levels should be proven to have returned to previous levels before an area can be considered adequately restored. It should be noted that reclaiming disturbed land may require a considerable amount of time before it is once again available for development. This will require moderating the pace and intensity of mining but is the only way to minimize climate changes and keep temperature increases to an adequate level.

Linear Feature Density

The plan currently weighs all linear density features equally, with the acknowledgement that assessment regimes will alter and be improved as data becomes available. If the precautionary principle is indeed a key principle within the Plan, restrictions will have to be placed on new access until the cumulative impacts can be adequately measured. Projected impacts of climate change are an important component of the "*adequate baseline data required prior to any development activities*". Impacts of access on the underlying ground and vegetation from a climate change perspective should be considered. Access routes can contribute to permafrost thaw or disrupt hydrological cycles and flows – thus exacerbating the impacts brought on by climate change. These impacts should be accounted for in cumulative assessments.

The Plan's current approach to linear disturbance takes little account of the length, location and dispersion of access routes. An isolated 10km long route can be expected to have a greater impact on caribou than an equivalent combined length of access routes running parallel to each other or in a grid system. The longer route has a much greater sphere of influence in this case than the more contained alternative. For some wildlife species habitat fragmentation is the greater threat, while for others access density (grid exploration trails for example) has more of an adverse impact. Linear density needs to be redesigned and reviewed from this perspective. Equally, some access routes have more impact than others. A winter road does not have the same effects as a permanent or all-season one – yet they are classed the same. Using aerial photographs makes it hard to differentiate. This needs to be rectified before meaningful CE analysis and thresholds can be set.

Access or transport routes should not be considered 'reclaimed' until vegetation has fully recovered to the level of the land immediately adjacent, it has re-established its carbon sequestration potential, or travel is no less restricted than on other land in the vicinity.

Please note that TH supports the recommended linear density and surface disturbance thresholds in the Recommended Plan as initial CE framework indicators but believes the climate change related limitations of these indicators need to be more fully expressed in the Final Plan, along with a more nuanced discussion about additional considerations assessors/approving bodies/regulators should contemplate when assessing a project.

4 CUMULATIVE EFFECTS FRAMEWORK

4.2 CUMULATIVE EFFECTS FRAMEWORK: FOUNDATION

4.2.1 Values

Consideration of climate change is fundamentally necessary to create a comprehensive and effective cumulative effects framework. A framework which does not reflect this cannot provide robust and enforceable guidance that will have a meaningful impact on climate changes in our region.

4.2.2 Indicators

It is in the best interests of planning in the region to identify the most appropriate indicators and plan to monitor and measure these in advance of planning decisions - Relevant baseline information is fundamental to planning, and the Plan should acknowledge and support this, particularly with the uncertainties of climate change. Decision-making and activities should not proceed until this information is obtained and assessed. The lack of available data should not be used as rationale to authorize activity with potential negative effects.

The sample list of potential indicators should include climate change; particularly as it affects every indicator on that list. It is noted some climate change indicators may be referenced to priority values, but this remains an inadequate approach. The example of **4.2.4 Recovery from extreme events** is a partial illustration of how climate change as an Indicator needs to be properly incorporated in this section.

4.3.1 Current Conditions

There are concerns that the CE standards are being set at levels based on our understanding of the effects of disturbance at this time. This may underestimate climate change impacts, many of which are not fully realized or understood in our region. In addition, there are areas within proposed LMUs that have already surpassed CE thresholds (and not simply from a climate change perspective), strategies for which should be considered within the Plan. The Plan should recommend that CE thresholds be periodically reviewed and updated to reflect our growing understanding of the effects of Climate Change. This should be a joint exercise among TH and YG.

4.3.2 Future Scenarios

Future scenarios need to incorporate climate change and ecological values in order for the Plan to remain relevant and effective. The key principle in planning is to determine the best way to shape the future, and not simply find ways to try to mitigate the cumulative impacts of development.

4.4 CUMULATIVE EFFECTS FRAMEWORK: MANAGEMENT

Cumulative effects are often difficult to identify and assess. Neither YESAB nor the regulators currently have the resources to adequately consider the issue, especially from a climate change perspective. The Plan's Recommendations are welcomed, particularly monitoring to ensure those responsibilities are sufficiently resourced, undertaken to an acceptable standard and effective.

4.5.1 Cumulative Effects Framework: Recommendations to the Parties

Limiting environmental cumulative effects assessments to surface and linear disturbance equally limits the potential for climate change and environmental Policy Recommendations. TH would like to see other cumulative effects indicators incorporated in the Plan to better assess the impacts of climate change. These might include wetland quantum, populations of salmon, caribou, and moose, and other environmental, socio-cultural, and socio-economic factors - sometimes referred to as VESECs or Valued Environmental and Socio-Economic Components. The Plan alludes to identifying other environmental cumulative effects indicators, but these are not clear in the Plan. In our view, climate change and climate change-induced/exacerbated effects should be added to proposed Indicator Recommendations. TH proposes including a Policy Recommendation that the *"Parties should continue to develop values-based indicators for ECOLOGICAL and CULTURAL values listed in the Plan."* The Commission should identify appropriate values-based indicators that could be included as part of a values-based Cumulative Effects framework – beyond consideration of surface and linear disturbance.

The proposed recommendation to incorporate the impacts of projected climate change should be expanded to include the contributions to the causes of climate change – assessing emissions, loss of sequestration, carbon release from disturbed environments etc.

5 GENERAL MANAGEMENT DIRECTIONS

5.1 OVERVIEW

Managing climate change risks and the necessary mitigation and adaptation will likely consume a significant proportion of management resources in the region in the coming decades. Thus, much of Climate Change 5.2.6 should be incorporated into this section. Climate change should be given greater profile throughout the Plan. In comparison to the Draft Plan, reference to climate change has improved but the recommendations remain insufficient, often limited to monitoring potential impacts and not recommending practical mitigations or adaptations. References to climate change in relation to the Sustainable Economy are mostly restricted to the impacts that climate change is having on land uses and not the impacts many industrial activities have as causes of climate change, or how they intensify impacts.

5.2 ECOLOGICAL INTEGRITY AND CONSERVATION

Perhaps the greatest threat to ecological integrity and conservation is climate change, and it certainly merits mention in the introduction to the section. At present, the levels of protection in the Plan are not as effective as they should be to address climate change or protect vital ecosystems.

The **Ecological goals** should emphasize preserving and enhancing natural landscapes as a solution to climate change. Consideration of ecologically representative areas and ecosystem services is critical when considering climate change, as almost our entire environment will change. Thus, ecological goals should include:

- Preserve, enhance, and increase the natural features and landscapes that help mitigate climate changes.
- Develop adaptations to the effects of climate change on the landscape, fish and wildlife populations, and the people of the Region.

5.2.3 Water

The Plan notes that “interconnectedness of water” and its ever-changing state “necessitates a holistic approach” (Recommended DRLUP, p.91), yet the apparent focus is on minimizing impacts from its use as a resource, as opposed to a value to be protected in its own right. We propose:

- Greater recognition of TH rights related to water.
- Greater emphasis should be given to modelling to predict and mitigate alterations due to climate change.
- Researching baseline hydrological cycles should be encouraged. There are recognized gaps in our knowledge of the hydrological cycle within the region, especially the groundwater regime, which are being aggravated by climate change.

Climate change should be specifically addressed as part of the discussion of the following issues:

Habitat. Section 5.2.1.3 discusses salmon habitat but only mentions climate change to say that there is uncertainty of its impacts on habitat. Climate change is having enormous direct and indirect impacts on salmon and other fish and aquatic species and their habitats. Warming waters, changing melt and flood cycles, habitat alteration and disruptions and invasive species can all be attributed to our changing climate. These considerations, and subsequent research, should be the backbone of recommendations made in relation to aquatic habitats.

Rivers and watercourses. In order to ensure the ecological, economic, and cultural integrity of rivers remains intact, the impacts of climate changes should be specifically considered and incorporated into recommendations. Permafrost degradation, slumping and landslides, uncertain flow levels, flooding, increasing water temperature, and release of heavy metals is impacting all our rivers and streams. Climate change impacts are referenced as a **Key Planning Issue** but deserve more focus in management practices and recommendations. Aside from incorporating special management direction for individual LMUs, the Plan needs an overarching acknowledgement of the impacts of climate change on rivers and streams and recommendations to reduce and respond to its effects.

Yukon River Corridor Special Management Directions. The Yukon River is the main artery of life in the Dawson Planning Region. It is vital that the Plan identifies and considers climate changes on the river and within its watershed to help ensure the river's ability to retain its present and future value.

Community. Water for community consumption should be considered in the context of climate change and potential impacts to supply and demand. A fuller consideration of water-related climate change impacts and issues can be found in the review of section **6.3.5.1 Community Water** within this submission.

Flooding represents one of the greatest natural disturbances in the region. Flooding is most commonly caused by ice jams that form during spring break-up. Flooding can also occur during the spring freshet and during heavy rain fall events. In addition, the potential for landslides due to slumping and permafrost melt can increase flood risks for the community.

Economy. Water resource systems are already under stress from many of the economic activities in the Region. Projected changes in the timing, intensity, and variability of temperature and precipitation associated with climate change are anticipated to affect many aspects of water resource systems. Collectively, these impacts are likely to significantly alter future water supply conditions in the region. In addition, climate change is anticipated to influence, and possibly amplify, trends in the demand for water resources as the community and industry attempt to adapt to more variable physical environments.

Climate change will affect both water supply and demand, and likely have a considerable impact on economic activities and local businesses. TH proposes the Plan recommend research into the impacts of climate change on our water-dependent economy, and include a review of water supply, demand, use and disposal. Monitoring alone, even in conjunction with the proposed mitigations to minimize direct disturbance from activities, will not be enough. There will be considerable economic costs associated with climate change impacts. A clearer picture of its effects in our region would be invaluable.

5.2.4 Rivers and Watercourses

Climate change impacts should be expanded to incorporate those related to human activity, including water contamination, sedimentation, and changes to water regimes and fish habitat. Policy Recommendation 39 should be expanded to support the Parties allocating resources to develop capacity for ***modelling***, monitoring, and guardianship. The suggested Recommended Management Practices could be expanded to add "Use an integrated approach considering climate-change and other cumulative effects" (Recommended DRLUP, p.95).

5.2.5 Wetlands

The Recommended Plan has placed increased importance on wetlands from a climate change perspective – but there remains a need to include some additional considerations. The "Objective" should be to "Retain wetland ecosystems to support ecological and socio-cultural values." The word 'functioning' implies changes can be made to wetlands and these altered or replaced systems will retain

the same ecological and cultural values – which is certainly not the case. The following should be added to the list of “key planning issues”:

- Wetlands are vital components to minimizing the impacts of climate change, and disturbance can contribute vast quantities of stored GHG emissions into the atmosphere.
- Wetlands are complex and are impacted by changes at a watershed level.

Recommended Management Practices

The success of development and implementation of the Yukon wetlands policy is uncertain, requiring new regulations and perhaps new mining legislation. This places particular importance on the recommendations in the Plan.

A Ramsar Convention Wetlands resolution in 2018 acknowledged the significant contributions made by First Nations to wetland conservation and wise use through their traditional knowledge, innovations, and practices (including mitigating and adapting to climate change). The Convention:

- Noted the need to review and revise the *Guidelines for Rapid Cultural Inventories in Wetlands* with a view to ensuring that these guidelines are effective in evaluating the cultural ecosystem services of wetlands, including in relation to climate change mitigation and adaptation
- Encouraged governments to continue to seek to integrate wetland cultural services into all relevant national and regional policies, particularly where such wetland services may change over time and due to climate change
- Called upon support to implement the resolution through supporting capacity-building for governments, and encouraging climate-related investment programmes that integrate the traditional knowledge, innovations, and practices of First Nations in order to support the development of context-appropriate and cost-effective local solutions

The Plan should better support the integration of traditional knowledge and culture into its wetlands strategy.

Mitigation Hierarchy

The proposal for offsetting to compensate for loss of wetlands or wetland function is extremely worrisome for several reasons:

- It presupposes that the effects of industrial development can simply be offset elsewhere. This supports business as usual and does not address the key issues.
 - To our knowledge there is no way to restore the wetland "functions" of peat wetlands and fens once they are disturbed.
- Offsetting cannot be effective within the timeline of required climate change action.
- It is incredibly difficult, if not impossible, to determine how much a differing ecosystem will offset the loss of a wetland, especially when carbon release, and sequestration rates are calculated.

Tr'ondëk Hwëch'in does not support offsetting because it does not address the root causes of climate change.

Wetland Thresholds

The importance of wetlands and their precarious positions within the Planning Region is reflected in the Plan's objective to identify and protect key wetland areas. Even partial development is inextricably and unavoidably linked to ecosystem loss, the immediate emissions of considerable quantities of GHGs, and subsequent removal of carbon sequestration benefits. In addition, as mentioned earlier, 'offsetting' (if it is possible) takes many, many decades and is therefore not effective within the timeline of required climate change action. Thus, thresholds and trade-offs should not be considered a strategy for wetland preservation.

Tr'ondëk Hwëch'in wants substantially increased protection for all wetlands within the Planning Region.

Climate Change and Wetlands

The Recommended Plan acknowledges the role that wetlands play in the mitigation and adaptation of the effects of climate change; and is "guided by the reality of the climate change emergency that currently exists in the Yukon" (Recommended DRLUP, p.99). This can be better borne out by more stringent recommendations which avoid destruction of all wetlands in the region and subsequent and irreversible loss of wetlands and the functions they serve. Addressing our climate crisis should be the focus of this section.

Recommendations for the Parties should simply state that no development is to be permitted in wetlands throughout the planning region. This should apply to all new permits, including those on existing mining claims. If we are to be serious in protecting wetlands, particularly in light of their importance in climate change impact reduction and rarity within the planning region, we should acknowledge their value as a true ecosystem resource over any destructive uses, regardless of economic prosperity derived from their destruction.

The research recommendations are welcomed and will certainly assist in facilitating urgently needed studies and in key areas too. Public awareness could be expanded to specifically include the mining industry and representative bodies. Raising awareness and highlighting the importance of wetlands may help mitigate some of the industry's objections when restrictions are introduced.

5.2.6 Climate Change

Consideration of climate change and its impacts would best be served at the forefront of the Final Recommended Plan - and explicitly referenced in the introduction and throughout subsequent sections in a manner similar to the Plan's requirement to reflect the intent of the Final Agreements.

While a 20-year scope and longer-term approach is laudable, the Plan should consider and promote more immediate action and timescales for climate change mitigations and adaptations.

Planning Strategy Objectives

The objectives for Climate Change in the Recommended Dawson Regional Land Use Plan are consistent with the Yukon Government's *Our Clean Future*. However, OCF has serious omissions and shortcomings which include:

- Omitting some emissions from calculations including stored carbon release
- Allowing mining to have intensity-based targets
- Promoting trade offs:
 - Net-zero emissions targets are increasingly coming under scrutiny
- Lack of certainty in definitions of 'renewable' energy
- Variation in what constitutes 'green' in environmental and economic terms

Additionally, the Plan's four listed objectives are limited. The objectives should be expanded to include:

- Promoting opportunities to respond to climate change in ways that go beyond resilience and support a more sustainable region.
- Addressing the way climate change is affecting Indigenous rights and regional governance and capacity.
- Recommend measures to mitigate all causes of climate change and monitor and address its impacts.
- Support the development of self-sufficiency initiatives, food security and truly sustainable renewable energy development.

These are fundamental to the development and implementation of the Plan.

It is hoped the Final Plan will go farther to incorporate definitive and effective recommendations and management practices that better reflect realities and First Nations aspirations.

Key Planning Issues and Interests Related to Climate Change

The list incorporates many key issues and concerns. TH proposes adding the following:

Cumulative effects: Climate change effects can exacerbate natural and human changes to the environment, while its specific impacts may surpass threshold limits even without direct human intervention.

Community capacity: Existing issues relating to isolation and capacity are being exacerbated by the disproportionate impacts of a changing climate in the North. The difficulties of governing are multiplied by these new pressures.

Extreme weather: Unpredictable and severe weather events will become more common. This will equally affect communities and traditional land users. While an extreme weather event may be short in duration, impacts could be potentially dangerous, long-lasting, and overwhelming.

Potential new developments: A transition to a 'green' economy and renewable energies may bring new requests for land use, additional infrastructure, access, and exploration potential for minerals associated with new technologies and increased battery storage.

Recommended Management Practices

The four recommended practices are limited and relate solely to development proposals. Planning Strategies should recognize and address the causes and impacts of climate change as a priority and incorporate recommendations that address the multifaceted adaptations that are required for a coordinated and adequate response. The Plan should incorporate strategies to:

- Minimize contributions to climate change and its impacts.
- Identify and assess *all* impacts of climate change on the planning region.
- Seek and present potential solutions for effective adaptations and to improve resiliency.

These strategies, and other climate related actions, should be incorporated into every other facet/section of the plan, as applicable. Following a strategy of referencing and addressing climate change in all applicable sections of the Plan is the best way to practically and effectively incorporate climate change considerations. We support the recommendation to “*Consider potential climate change threats and take pro-active measures to improve resilience and mitigate the impacts*” (Recommended DRLUP, p.106) but would like to go beyond that and see several recommendations that are specifically tailored to climate change.

Recommendations to the Parties

Many of the recommendations for policy or action can have a positive impact on addressing climate change. In our view, this highlights opportunities to strengthen the remainder of the Plan. Recommendations to “*consider climate driven shifts in habitat*” (Recommended DRLUP, p.105) should not be limited to caribou but should apply to all flora and fauna. The necessity for “*Self-sufficiency*” should not be limited to food production but be a mandate for other aspects of the plan, such as renewable power (that does not adversely affect salmon as would be the case with re-commissioning the North Fork hydro project). Developing “*alternatives*” is not just about renewable energy but should be applied to transportation and the consumption and supply of goods, to technology, and our economy. Building capacity is not required only for flood forecasting, but for governance, communications, monitoring and modelling, and implementation.

Addressing climate change requires fundamental and often difficult shifts in philosophy, priorities, and practices. It requires practical solutions. Having a five-page climate change section within a regional plan, albeit with some limited references elsewhere in the Plan, does not address the climate crisis we now face.

5.3 CULTURE, HERITAGE RESOURCES AND COMMUNITY

We are pleased to note that management practices and recommendations for the conservation of heritage and cultural values are not to be “read in isolation” and “these values are addressed throughout the Plan’s General Management Directions as they are closely tied to the land, and as such, tied to the activities that occur on the land, and the habitat that the land provides” (Recommended DRLUP, p.108). We would like climate change considerations to be similarly broad and interconnected.

The potential threat of climate change to First Nations' culture and heritage makes climate change an issue of fundamental human rights. The need to maintain access to the land and to cultural resources and harvesting in the face of climate-change induced changes should be a **Socio-cultural Goal**.

5.3.1 Heritage Resources and Sites

The Recommended Plan acknowledges the potential of climate change to significantly impact the cultural resources and values in the Dawson Planning region. This is a good start. However, we would like to see more emphasis on the urgency of addressing climate change through improving our management practices and more specific recommendations.

5.3.5 Community Growth

The Plan makes reference to sustainable community development. However, our community has no plans in place to determine the rate of population growth or to decide on the optimum size of the community. Even though the core of the Dawson community area is outside the scope of the Plan, the Plan does address the Klondike Valley, whose residents utilize the City of Dawson as their community hub. TH recommends this issue be addressed within this Plan, especially given the added pressures on community infrastructure from climate changes, and the risks to access and communication infrastructure. The Plan may not be applicable to Dawson City itself but should recommend that the standards for environmental and cultural protection within the City of Dawson should be at least as high as the standards outside municipal boundaries. This is especially true when it comes to climate change, since so much of the energy within the greater planning region is consumed within the municipal area.

5.3.5.1 Community Water

The Plan tries to ensure the continued availability of potable water in the Dawson Region, both within the municipal area and surroundings – and acknowledges risks from climate change-related impacts. Implementing a climate change assessment specifically for municipal potable water sources (existing and proposed) within the Planning Region should be a **Recommended Management Practice** – incorporating assessment of flooding, slumping and landslides, heavy metal release from melting permafrost, increased sedimentation, damage to water infrastructure and emergency response.

Health and Wellbeing

In addition to the growing burden of climate-related impacts, health systems in the region are also faced with physical risks to health infrastructure. The growing risk of weather-related disasters from climate change is not only a threat to the health of people in the Dawson region, but a threat to local health infrastructure. Floods, wildfires, and extreme weather events can directly impact health service infrastructure and provision. Equally, climate changes may restrict emergency highway or air access due to expected increases in adverse weather conditions and physical disruption to access routes due to slumping, landslides, and flooding. The Climate Change section does recommend infrastructure projects consider climate change - but this should be made explicit for health and emergency planning as well.

Again, this highlights the need for consistency between the Dawson Regional Land Use Plan and the Plan that applies within the City of Dawson.

As a minimum the Plan should direct the Parties to incorporate climate change considerations into all levels of emergency response as a matter of urgency.

5.3.6 Recreation

Similar to accessing the land for traditional harvesting, climate changes may adversely impact potential for outdoor recreation. Consideration of climate change impacts to trails should be expanded to cover all outdoor recreation, and again should extend to the lands both within and outside the City of Dawson.

5.4 SUSTAINABLE ECONOMY

The economic value of land

The Recommended Plan could better recognize the true economic value of wilderness and ‘undeveloped’ areas. In some cases, the economic value of retaining wilderness can exceed the financial benefits of developing those areas. Wilderness provides many valuable “services,” including flood and fire control by wetlands. This value will only increase and become more important as we face climate-changed impacts to our environments and safety. Natural areas also provide direct employment, development of and access to renewable resources, local access and recreation, tourism, scientific research, and access to clean water and renewable energies. We are happy that the ‘economic value’ of undeveloped land, flora and fauna, forests, rivers, and waterbodies is starting to be recognized and the spiritual and aesthetic values of wilderness considered in economic terms. In addition, research has indicated natural amenities/resources become an important part of a region's economic base, and locations with a greater extent of wilderness exhibit higher measures of local economic vitality and diversity. Public and protected lands can also play a role in attracting new businesses to an area, luring knowledge-based, technology-driven firms to communities. These economic aspects should be considered if an economic assessment is to be accurate and leads to a truly sustainable economy.

5.4.1 Mineral Exploration and Development

Mineral exploration and development account for a significant portion of Yukon emissions – well beyond the figures presented in *OCF*, when related transportation is considered - in addition to the loss of carbon sequestration caused by the destruction of natural features like wetlands. The Recommended Plan acknowledges that *“the need to prioritize some areas for conservation over other interests, including mineral staking, exploration, and potential mining, is key to achieving balance and sustainable development in the planning region”* (Recommended DRLUP, p.125). The Plan advocates for a “balanced” approach. Yet this “balance” seems in favour of mining, with only a small percentage of the planning region fully protected from development when grandfathered mining claims in proposed SMAs are considered. The benefits of conservation include retention and reinstating of natural landscapes as a component of nature-based solutions to climate change, in addition to its other benefits. Expanding the mining sector under the current mining regime will only contribute to climate change and should not be promoted.

There is nothing in the Plan regarding our responsibility as human beings in the wider context to move on from resource extraction and to reduce our resource use. Extractive industries are responsible for a

large portion of our region and the world’s carbon emissions and biodiversity loss. There are no recommendations for the mining industry to comply with government emissions reductions – beyond ineffective intensity targets.

Recommendation to the Parties

The Plan suggests that recommendations from the Yukon Mineral Development Strategy to support efforts to improve the process by which mineral exploration and development projects should be implemented. It would be prudent to include an acknowledgement of mining’s direct and indirect impacts on climate change and make recommendations that these are considered and minimized.

5.4.3 Transportation and Access

Transportation is vital to the planning region. It is also one of our biggest contributors to greenhouse gas emissions. Aside from addressing the environmental and wildlife impacts of access, priority should be given to reducing emissions, minimizing the need to travel, and energy efficiencies and self-sufficiency – all of which have considerable economic importance. Equally, climate changes have an enormous impact on the integrity of transport corridors. While a subsequent **Research Recommendation** later in the Plan references permafrost – the potential economic impacts of permafrost degradation on transportation should be specifically referenced in this section.

The **Overall Objectives** for this section should include:

- Minimizing the need to travel in order to reduce emissions, bring energy efficiencies, and help sustain self-sufficiency.
- Addressing climate change consequences and impacts for transport and access throughout the region.

5.4.3.4 Air Access

Aviation worldwide contributes more than the emissions of most countries. Air access to and within our territory and region similarly contributes to our emissions, although this is not recognized in *OCF* nor in government emissions calculations or targets. While it may be beyond the remit of this Plan, some recommendations to help address emissions from aircraft of all types would be beneficial as part of a climate change strategy.

At the regional and local level, changing and potentially worsening weather conditions and extremes may affect aircraft safety.

5.4.3.5 Water Access

Access to and use of waterways, throughout the year, will invariably be affected by climate change and should be considered in this section of the Plan. Impacts and potential hazards should be referenced and incorporated as part of the Planning Strategy. Equally, recommendations should include raising awareness of the issues, monitoring conditions (including on ice) and providing advice on access and travelling.

5.4.4 Agriculture

Worldwide, agriculture contributes a significant share of the greenhouse gas emissions that are causing climate change. To help counteract agriculture's contribution to climate change, alternative farming techniques can be introduced. The planting of "cover crops," prevents soil depletion when other crops are out of rotation. Shifting to no-till agriculture protects the soil by leaving it undisturbed during cultivation and harvesting; healthier soil can serve as a "carbon sink. The Plan could include research into alternative farming techniques as a **Key planning issue** – with an **Objective** to "Minimize the climate change impacts of agriculture." If the Plan is to truly support increased agriculture, it similarly needs to investigate and recommend the introduction of climate change-friendly farming methods.

In addition, the potential impacts on agriculture practices and production from climate changes should be better identified – with appropriate mitigations and adaptations.

5.4.5 Tourism

The tourism sector is highly vulnerable to climate change and at the same time contributes to the emission of greenhouse gases. Addressing climate action in tourism is therefore important for the future and resilience of the sector. According to the UN World Tourism Organization, carbon dioxide emissions from tourism were forecast to increase at least by 25% from pre-Covid levels by 2030. Therefore, the need to implement climate action in tourism remains pressing. The Plan should acknowledge climate change impacts as a **Key planning issue**, with an **Objective** to "Minimize the climate change impacts of tourism." The Plan can support low carbon tourism development through recommendations to:

- Research the measurement and disclosure of CO₂ emissions in tourism.
- Investigate and implement emissions reductions in tourism operations.
- Engage the tourism sector in carbon removal.

5.4.7 Forestry

Research Recommendation 126 encourages the Parties to continue to explore the feasibility of advancing the use of biomass energy in the Dawson planning region. The burning of biomass fuels is likely not the only solution to climate change as outlined in the OCF or the *Yukon Biomass Energy Strategy*. It has benefits as a locally available and potentially renewable fuel source – and energy security and self-sufficiency may be equally as important as emissions reductions – but fails to address issues relating to greenhouse gas emissions.

Other issues arise from biomass fuels and will need further research or clarification:

- Is there enough 'waste' wood to satisfy demand, especially if biomass is being promoted? If demand outstrips supply, then trees will need to be harvested solely for the purpose. This may impact the supply of fuel for domestic wood stoves, lead to price increases as demand grows, and present land-use conflicts.
- Black and brown carbon particles associated with biomass burning increases atmospheric warming in by deflecting and absorbing sunlight within clouds to heat the atmosphere and, as

heating dissipates clouds, more sunlight is transferred to the ground ultimately resulting in warmer ground and air temperatures.

- Additional demand in the region would likely increase wood harvesting, with impacts to local wildlife and flora.
- Exposure to biomass burning particles is strongly associated with cardiovascular disease, respiratory illness, lung cancer, asthma, and low birth weights.

The **Research Recommendation** to continue to explore the feasibility of advancing biomass energy should be rewritten to assess the position of biomass in the context of climate change in the region.

5.4.9 Traditional Economy

The Plan notes the traditional economy contributes to cultural and social wellbeing, and much of it is based on the harvest of natural resources. Potential restrictions to access to the land and changes to natural resources are key components of climate change impacts. We are just beginning to comprehend the magnitude of the effect of climate change on the harvesting of fish and wildlife. We already know that the effects of warming water in the Yukon River and North Pacific Ocean is having a devastating effect on Yukon River salmon. While the direct impacts of climate change on the harvest of other subsistence species is less well known, they are sufficient to warrant that climate change-induced restrictions to access be noted as a **Key planning issue** and incorporated as a **Research Recommendation**: “The parties should support research into how climate change induced impacts affects access to traditional harvesting and natural resources and the traditional economy.”

Appendix 9 - omitted

Appendix 10



January 11, 2024

Premier Ranj Pillai
Yukon Legislative Assembly
Box 2703
Whitehorse, Yukon
Y1A 2C6
Ranj.Pillai@yukon.ca

Minister John Streicker
Yukon Legislative Assembly
Box 2703
Whitehorse, Yukon
Y1A 2C6
John.Streicker@yukon.ca

Minister Nils Clarke
Yukon Legislative Assembly
Box 2703
Whitehorse, Yukon
Y1A 2C6
Nils.clarke@yukon.ca

Dear Premier Pillai and Ministers Streicker and Clarke,

Re: Acknowledgement and Proposed Timeline Extension for Dawson Regional Land Use Plan

Thank you to Minister Streicker and staff for travelling to Dawson to meet with TH Council on December 12 to advance our efforts to reach consensus on the Recommended Dawson Regional Land Use Plan. And thanks to Premier Pillai and Minister Clarke and jëje-in for joining virtually. We appreciate your time and effort.

We hope you have a better understanding of the TH vision and desired outcomes for the Dawson Planning process. While we did not press you for verbal responses, we do look forward to receiving a timely written response to the questions we posed during the meeting, as set out in the attached speaking notes, including on a priority basis a response to the three most important questions highlighted at the end of this correspondence. The questions asked are the significant ones that will affect the shape and substance of the Dawson Regional Land Use Plan. We were encouraged by your letter to Chief Johnston dated November 14, 2023, confirming the Government of Yukon's view that you wish to move away from the status quo model of mineral disposition, and to create new minerals legislation that is consistent with Aboriginal and treaty rights, and balances mining with other land uses. We hope that the Government of Yukon's response to our questions is consistent with those views.

During our meeting, I supported your request to extend our projected timelines. I suggest we extend those timelines by one month and provide our written THFA 11.6.2 and 11.6.3 responses to the Planning Commission by the end of April 2024. This should provide you with additional time without unduly delaying a land use process that is a fundamental part of our Final Agreement yet long overdue.

On a related note, we were happy to hear that Premier Pillai always emphasizes the requirement to address the needs of affected Yukon First Nations whenever he talks to industry about mining in Yukon. We would like to work with you to fashion a joint Yukon Territory message to be delivered at the coming Cordilleran AME Roundup in Vancouver.

Thanks again for meeting with us.

Sincerely,



Darren Taylor
Hähkè, Tr'ondëk Hwëch'in

cc. Brenda Butterworth-Carr, Executive Director, Tr'ondëk Hwëch'in
Tr'ondëk Hwëch'in & YG SLC Representatives

Excerpts from Speaking Notes - Most Important Questions for YG

15. We hope that the Yukon Government shares our desire to achieve these outcomes and look forward to hearing your views on these matters. Please tell us which of these outcomes (described in 4 - 14) you support and which you do not support - and why.

21. Is YG willing to moderate the pace and intensity of mining in the Dawson Planning Region?

27. Please provide us with a clear picture of how you envision mining proceeding in the Dawson planning region.

Note: Question 21 is especially important because it has huge implications for all the questions.

We look forward to your responses.

SPEAKING NOTES for Hähke Darren Taylor and Tr'ondëk Hwëch'in Council
DRLUP Meeting of the Principals December 12, 2023

1. On behalf of the Tr'ondëk Hwëch'in I want to welcome you to Dawson and our Traditional Territory. Thanks for coming. And thanks to those who were unable to come but are joining virtually.
2. We hope we can close the gap between us during this consultation and emerge with some consensus on the Dawson Regional Land Use Plan.
3. I want to start by confirming the outcomes Tr'ondëk Hwëch'in wants to achieve through the Dawson Regional Land Use Planning process. We have described these in our submissions to the Commission and to YG SLC representatives. Today we want to paint a clear picture, so Yukon elected Leaders know exactly where we are coming from.
4. At the highest level we want to protect the health and productive capacity of the lands and waters within our traditional territory in a way that preserves our cultural and spiritual connection to the land. This includes protecting and making meaningful our rights to practise our culture and traditions, our subsistence harvesting rights, our rights to clean water, and our rights to participate in the management of public resources.
5. We want healthy aquatic and terrestrial eco-systems. This means maintaining and where necessary restoring abundant populations of caribou, moose, bear, and salmon - so that our people can eat the food that has nourished us for millennia.
6. This means maintaining the health of the forests, flowers, berries, moss, and other vegetation.
7. This means maintaining the quality and quantity of water in our streams and rivers, which maintain the lifeblood of our culture.
8. This means minimizing disturbance and protecting the Yukon River Corridor, the Stewart River Corridor, the White River, the Dempster region, wetlands, and other areas our people have traditionally relied upon for physical and spiritual sustenance.
9. This means paced mining development that does not overtax the productive capacity of the land and gives it time to recover after disturbance; in accordance with the Chapter 11 definition of Sustainable Development.
10. This means preventing mining in sensitive areas.
11. This means adhering to the highest standards when mining and adhering to the principle of full reclamation after mining.
12. We want to embrace high environmentally and culturally sound Cumulative Effects Thresholds for linear and surficial disturbance.
 - a. When there is question, we want to err on the side of caution.
13. We want to make solid commitments to add additional Cumulative Effects indicators to the Plan, such as water quality, abundance of species like caribou and moose, and potentially others.
14. We want to take concrete steps to reverse the effects of climate change, which includes reducing carbon emissions and protecting natural features like peat wetlands that sequester carbon.
15. We hope that the Yukon Government shares our desire to achieve these outcomes and look forward to hearing your views on these matters. Please tell us which of these outcomes you support and which you do not support - and why.
16. The central issue in Dawson Planning is the way mining will continue in the Dawson Planning region.
 - a. TH supports responsible mining. We recognize the contributions that mining makes to our economy. Many of our Citizens benefit economically from mining.
 - b. But monetary economic benefits are not the driving force behind our vision for land use in our traditional territory.
 - c. Our driving force is Tr'ëhudè, which seeks to find balance and preserve our traditional relationship with the land.

- d. We want our land to continue to support our needs - traditionally and culturally - for thousands of years to come.
- 17. We believe that mining can continue in a way that respects our culture and our values. But that means the current system must change.
- 18. Our discussions with the Government of Yukon have become polarized. In our view both Parties need to move toward the middle and find solutions we can both support.
- 19. For example, TH does not believe that SMA designation need be the only way to achieve a degree of protection for the land. We should be able to agree to measures that allow development at a controlled pace - such that it does not undermine important natural and cultural values.
- 20. TH wants to protect the most important culturally and environmentally important parts of our homeland - such as major river corridors - caribou birthing grounds, salmon spawning and rearing areas, etc. But in the rest of our traditional territory we envision a working landscape, where industrial and natural values co-exist in a way that affords reasonable protection to both.

We want to reach some consensus coming out of this meeting. So, we ask:

- 21. Is YG willing to moderate the pace and intensity of mining in the Dawson Planning Region?
- 22. Is YG willing to use all the tools in your current toolbox to protect culturally or environmentally areas in the planning region, such as:
 - a. Special Operating Area provisions of the Placer and Quartz Mining Acts:
 - b. Land Management Zones under the *Territorial Lands (Yukon) Act*:
 - c. Withdrawals, where necessary alongside other tools, to achieve the objectives of the Plan for an LMU, even if the LMU is an ISA.
- 23. Is YG willing to make commitments to develop new tools if those are necessary to achieve Sustainable Development and meet other desired outcomes of the Plan?
- 24. In terms of our Consultation process, we hope that the Government of Yukon gives TH views full and fair consideration and makes reasonable attempts to accommodate our views in your positions and decisions.
- 25. We believe that Regional Land Use Planning is a treaty right intended, among other things, to ensure our rights to meaningful participate in the management of resources on both Settlement and Non-Settlement Land.
 - a. Please clarify your stance on this issue.
- 26. We support much of the federal Critical Minerals Strategy. We see critical minerals as a means to combat climate change and bolster Yukon's economy. But under no circumstances can the mining of critical or other mining damage important values like salmon and caribou. All mining must take place within agreed thresholds, with strict requirements for reclamation.
 - a. YG must be clear on your support for critical minerals. Does YG support the federal Critical Mineral Strategy, including the portions of the Strategy related to reconciliation and UNDRIP? What does YG want to see when it comes to critical minerals?
- 27. Please provide us a clear picture of how you envision mining proceeding in the Dawson planning region

Some Issues where our Technical Representatives identified Options:

Yukon River Corridor (LMU 3)

- 28. The Yukon River Corridor is the lifeblood of TH culture and well-being.
- 29. TH's preference is to see the whole Corridor within the Planning Region be designated a Special Management Area.

- a. TH supports the Commission's recommendation that the Management Plan for the TH portion of the Corridor be integrated with a Management Plan for the whole of the Yukon River Corridor in Yukon.
30. We may be, however, prepared to consider the option identified by our Technical Representatives (PTR) with the proviso that we adopt the Commission's recommended Cumulative Effects thresholds and identify "specific tools" to maintain the integrity of the southern portion of the Corridor.

LMU 7 (Antimony) & 8 (Brewery Creek)

- 31. TH wants to manage LMU 7 and 8 in a way that protects the Hart River caribou herd and TH's cultural use and value of this area
- 32. Hart River caribou calving grounds are located where YG wants to expand LMU 8 north as an ISA 3. TH believes that the disturbance levels of an ISA3 are incompatible with protecting the calving grounds.
- 33. Hart River caribou are a threatened species under the *Species at Risk Act*.
- 34. Although an SMA for LMU 7 (Antimony) is a good thing, it does not address the impact of expanding LMU 8 north and increasing CE thresholds for the region.

Wetlands

- 35. Wetlands hold important cultural and environmental values to TH. They protect water quality and rate of flow, are the home of traditional medicines and host a diversity of animals. They are prime hunting and harvesting grounds for our people.
- 36. TH wants to protect wetlands in the planning region, including upper Indian River wetlands. YG has shown no appetite to protect Indian River Wetlands but has agreed to protect some other wetlands through a Wetlands of Special Importance (WSI) designation pursuant to the Yukon Wetlands Policy. However, YG needs to develop new tools to implement the Policy.
- 37. It is not clear what legal tool YG would use for the WSI designation, and whether it would be effective to protect wetlands.
- 38. It appears the Wetland Policy does not address existing tenure (claims) and approvals. which makes us ask how can this tool protect wetland values in areas that are already staked?
- 39. It is not clear whether YG will commit to designating wetlands in the upper Indian River as WSI.
- 40. It is not clear whether YG is willing to use withdrawals to protect the Ladue wetlands and other wetlands in LMU 19.

Cumulative Effects (CE) Thresholds

- 41. Cumulative Effects thresholds must be set at levels that protect the environment and maintain its ability to support the TH way of life. This means that mining development must be consciously paced and managed.
- 42. TH supports the CE thresholds in the Recommended Plan for linear and surficial disturbance (which are considerably more indulgent than the thresholds in the Peel Plan.)
- 43. Over time, TH wants to add Cumulative Effects thresholds related to water quality and disturbance to cultural and environmental values, such as caribou.
- 44. YG wants to revert to the critical surface disturbance CE thresholds recommended in the Draft Plan, which allow current mining to continue at current levels and new mines to be developed with little constraint.

Appendix 11



Tr'ondëk Hwëch'in
Recommended Plan for the Dawson Region
Citizen Consultation Report

December 20, 2022

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Introduction

The following report includes verbatim comments provided by various Tr'ondëk Hwëch'in citizens on the Recommended Plan for the Dawson Region (Recommended Plan). Collecting this feedback was facilitated by Tr'ondëk Hwëch'in Implementation staff Katie Fraser and Donna Michon, who strived to ensure citizen voices were accurately and respectfully captured in the broader public engagement phase of this process.

As per the objectives under Chapter 11 of the Tr'ondëk Hwëch'in Final Agreement, it is imperative that the development of a regional land use plan uses the knowledge and traditional experience of Yukon First Nations, as well as promotes our overall well-being. Specifically, for Tr'ondëk Hwëch'in, this process must recognize and protect Tr'ondëk Hwëch'in's distinct way of life that is based on an economic and spiritual relationship between us and the land.

Between September 7th and December 20th, Tr'ondëk Hwëch'in staff conducted several in person consultation events with citizens, including:

- Consultation Lunch: September 20, 12 pm – 2 pm
- Consultation Lunch: October 18, 2022 12 pm – 2 pm
- Consultation Lunch: October 25, 2022, 12 pm – 2 pm
- Consultation Dinner: November 10 2022, 5 pm – 8 pm

In between in person events, staff met with citizens one on one to talk about the Recommended Plan and seek feedback. In total, roughly 30 citizens have lent their voice and have contributed to the feedback included in this report, however many other citizens have also directly contributed in other ways. The format of each meeting or one on one interview was different depending on the interest of the group or individual. Generally, staff sought responses related to the questions listed in this report, however the questions often varied and for the purposes of this report, they have been simplified. All consultation activities were recorded and transcribed such that the words contained in this report remain true and unaltered.

Citizen feedback has come from a broad demographic (Elders to youth) as well as from a broad range of perspectives on land use. We have not attributed names to each comment in this report, but many have also filled out the online survey or have provided additional letters of support.

Please note that the contents of this package are the words of Tr'ondëk Hwëch'in citizens as shared with staff during the consultation events. While citizen's words have not been altered or interpreted by staff, spelling mistakes or incomplete sentences have been fixed when necessary. In these rare instances, parenthesis [] have been added to the words for clarity.

In closing, it is important to remember that Tr'ondëk Hwëch'in citizens are the original and longstanding caretakers of this land. The words of this report are from the voices of those who have lived in, and cared for, this region on a permanent and fulltime basis. Without proper and heightened consideration of this feedback, the regional land use plan will not meet the objectives of Chapter 11 of the Tr'ondëk Hwëch'in Final Agreement.

Summary

While this report is broken down into discrete themes, it is important to acknowledge that several overarching common sentiments have emerged from the feedback. To support the interpretation of the data and analysis, we have provided several cross-cutting observations below.

1. The vast majority of Tr'ondëk Hwëch'in citizens who participated in this consultation support the identification of additional protected areas in the Dawson planning region. Many identified specific areas that require further protection and preservation, including those LMUs along the Dempster (6, 7, and 8), all portions of key caribou habitat, including the Fortymile Caribou Corridor [LMU 21], and major river systems.

“More protection, more land. There needs to be more caribou herd migration areas. Waterways should be protected. People and animals should not have to change their ways for industry (mining activity).”

2. Wetlands hold strong intrinsic value and are necessary habitats for wildlife. Many citizens spoke to the value of wetlands throughout the region and how we must protect all types of wetlands given their overall importance on the landscape.

“Wetlands, from way back, left for thousands of years for ducks, beaver, muskrats, that kind of wildlife. We left it for them, we didn't mine it. The land is for the beaver, birds and muskrats, the land is going for them, it's gone for them. Whatever wetlands we have left, we should leave for them.”

3. It is critical that we protect our water resources and our waterways. Many citizens expressed concern for drinking water sources along the Klondike and Yukon rivers, and urged greater protections of these important river systems. Water is life and our collective survival depends on it.

“Water is very important to everybody. We need water to survive.”

“I think it's important to have rivers protected.”

4. Whether or not the salmon return depends on the habitats they have waiting for them. Many citizens expressed distress over the state of salmon stocks and the impact this has on our culture. They indicate strong connections and parallels between clean water, protecting salmon habitat, and preserving their culture for future generations.

“And I'm thinking back a few years ago when the young ones were down at first fish. They see how the salmon are caught, how to pull the nets, what to do with them, how to filet, how to smoke, how to dry, then they take the fry, the little fries and they take them up Moosehide Creek and they let them go. So they think they'll come back in seven years and same with the children from daycare taking the fry's and putting them in the Klondike River by the farm. Hoping they come back in seven years. That's why we have to protect our water. If we don't have water, we don't have life.”

5. The land has changed dramatically, and it is continuing to change. Many citizens talked about places where we no longer hunt or harvest, or places that we no longer visit as it is too upsetting to do so. Some spoke about the impact a changing landscape has had on our culture, and the inability to transfer skills to our children, such as with the Fortymile caribou herd.

*Growing up and not seeing the 40 Mile herd and now being able to see the full herd
and for my son to be able to see that now, we need to protect it.*

6. Tr'ondëk Hwëch'in citizens are key caretakers of this land and must be treated as equal decision makers for this region. Many citizens spoke about the need for more guardianship programs and opportunities for citizens to directly participate in the management of resources. Similarly, citizens spoke about the need for Tr'ondëk Hwëch'in Government to see the value in all resources, including minerals, and the need to take a balanced approach to planning for the future of Tr'ondëk Hwëch'in economic opportunities.

*TH needs more of a say in the land use, to protect it for future generations to hunt,
harvest, do other traditional uses and recreational activities on the land. TH should be
partnering with YG on all the lands to govern.*

It is clear from the feedback that Tr'ondëk Hwëch'in citizens see themselves as ultimately responsible for caring for the land in a way that respects other animals, like caribou, moose, and salmon. Many shared views that reflected a different way to viewing the world, one in which humans are part of the environment rather than separate from it.

Protection and Preservation

Do you support the SMAs identified in the Recommended Plan?

- 34% [SMA] is not enough.
- We need more [protection]. At least 75%.
- At least 75% to be protected, at least. We've given up enough. Give us something back. We gave you something, now give us something. Maybe our animals and fish might come back?
- More protection, more land. There needs to be more caribou herd migration areas. Waterways should be protected. People and animals should not have to change their ways for industry (mining activity).
- We need more land for traditional uses to see and use without industry, to also protect the animals and waters. We need to protect the boreal forests because with mining, spruce trees don't get a chance to grow because the other trees take over quickly. The mining is disturbing the lands to grow naturally.
- We need to protect more of our land.
- Protecting our ecological values and making sure we are all on the same page. Our land, our animals. It's all the same.
- What about the other land that is not protected? How much will we let go - when there is no more land to protect?
- We need laws in place to protect these lands, and [Plans] that cannot be changed easily, for fish and wildlife. These districts need to stay forever. If we get rid of everything, we'll be in a sorry mess.
- This land was here before any of this. We need to make sure that the percentage 34% is [actually] protected and [we need to add] wetlands and areas impacted by climate change. We have to be stewards and protect it more.
- Water needs to be majorly protected. Invasive species, more needs to be done on the invasive species, they're going up the Dempster. We have to get it right away. It's coming into my mom's backyard.

Are there other areas that should be designated as SMAs?

- 60 Mile, Indian River, 40 Mile, Yukon River: all need more protection.
- Temporary withdrawal areas [LMUs 7, 3, 21, 17] should be fully protected.
- Don't touch the Dempster and 40 Mile, they can have the goldfields.
- The current map should be more protected, it should include the 40 Mile Caribou corridor [LMU 21], Matson Creek – uplands undisturbed, 60 Mile and Indian River [LMU 17].
- LMU 21 [Fortymile Caribou Corridor]- Why is it not protected? It should be green.
- I noticed you had protected areas, and this white area of the goldfields [LMU 11]. Well, the Forty-mile herd comes all the way across, this is a big area, they consume, so why is there no protection in the goldfields? That's real important for the Forty-mile herd. You have to redesign the map, because it doesn't make sense to me. You know you have thousands of animals coming over and crossing the Yukon and they head back in February but there is no protection in there.
- Horseshoe [LMU 2]. That should be protected.

- On the map, number 21 where it says Fortymile Caribou Corridor; why is that not protected by the green as well if that's where the caribou are going? I think that should be green.
- We want to protect those caribou areas [LMU 15, 21, 19]. It's very important. They need to be connected together.
- Historical trails through unprotect areas, we had trails that went from Moosehide, to Dawson to Tetlin and Northway. If there is a route overgrown, have them protected as historical values for Tr'ondëk Hwëch'in people.

Protection in the Dempster Region [LMUs: 2, 5, 6, 7, 8, and 10]

- I know that Cache Creek there, east of Cache Creek that there is a mine exploration project going on right now. It's not very far from Cache Creek too. And from my understanding it's a five-year exploration program. And if that develops into a mine project there, they're going to want to do a proposed road right to the Dempster Highway. Which is slightly north of Cache Creek. And once you allow the mining project to happen like that, people are going to move up the highway. And its also going to move way up into the Ogilvie River area, north of the Tombstone. So, if that Silver47 goes ahead, wide open country. And there's not much can happen, not much we can say to halt that exploration program. My concern is they want to build an eighteen-kilometre access road to the Dempster and cross the Klondike River. Now are they going to have a bridge there or? And how will they get their fuel into the camp, will they fly it in or a winter road that brings fuel in. I don't think it should be recommended if it's carrying fuel in. At least there is some protection for the park.
- I think strongly that this Dawson Planning Commission should really work at saying let's keep fifty kilometres on either side of Dempster Highway clear of mining, mining of any sort, mineral development of any sort. Is the horseshoe [LMU 2] TH lands? That should be green and protected. Because north of there is there's that oil and gas rig up there, they're going to fire up this winter for seismic. And I'm pretty sure they're going to get close to that number, number two there. The horseshoe parcel there.
- Ogilvie is another one too, the Ogilvie headwaters and below that Cache Creek area should be protected too.
- They should extend the protection from the Peel to the east and all the way down to the park boundary. Lots of good country there.
- If they choose more development to occur in these areas [the Dempster region], the animals will be pushed in different directions and there will be different migrating. It's untouched, it's their natural land.
- East of Dempster, from what I saw on the on that YESAB website, was there was exploration there too [referring to Antimony Cr. claim block] [LMU 7]. I don't know if that's still going on or not. See, now you got two potential projects [Silver47 and Antimony] and that might develop into a mining project. Now they want roads that come in there and that area is pretty rugged. That area, well, I don't see why they don't stay in number eleven goldfields. Why go up north? Just spoil our country.
- Right from the top of the Dempster highway should be protected and all the way down.
- Most of that [the Dempster region] should be green and protected. Especially by the waterways.

- The Dempster Highway is homeland to Gwich'in people, Tr'ondëk Hwëch'in and other First Nations. They hunted and traveled there long before miners came, long before. So those land should be protected 50 km or more on each side of the Dempster highway.
- For the caribou and the animals that live up the Dempster - One gallon of gas is equal to twenty-two pounds of pollution. So, just imagine all the traffic that is going on the Dempster Highway alone, the amount of traffic back and forth and the amount of pollution, that's keeping the caribou away for one thing. I remember one of our old chiefs saying that if that highway comes through, we're not going to see the caribou anymore. And it's true. There is caribou there, but we don't see it in the thousands and thousands of caribou like we used to.
- [The land use plan for LMUs 6, 7, and 8] makes me really, really angry. How much land did we give up in land claims? And now they want to take away more? How much more do they want? You know that makes me really mad. Enough is enough. How much more do you want? They want more and more and more. They want to destroy more and more and more. Enough is enough. Start listening to us.
- So, protect as much land as possible, going way up the Dempster and all the way down into the map, whatever can be protected. Enough is enough.
- We used to spend a lot of time on the Dempster, going back and forth, when my mother was still here. Quite a few years now, we don't travel as much, not because we don't like it but because of winter storms. That's the only thing. We don't mind the long drive; it doesn't bother us. I can say where did that mountain come up from or where did that lake appear from. We can go up and back a million times. Different landscape, I never get tired of it.
- There is no protection North from Dempster corner. Should be absolutely no mining!
- None for areas North of Tombstone Park should be developed. There should be a recommended 50 km protective corridor either side of the highway – no mining, no oil/gas.
- Antimony: there is economic value in mining there, not against miners (there are good and bad miners) but they need to do the reclamation work and we may need to make compromises.
- I don't want the Dempster touched, needs to be protected.
- I know many tourists have said keep the Dempster Highway as is. Do not let any development happen. These lands are one of the most pristine we have seen in the world. Many of these tourists come back year after year to enjoy the clean air, water and land and to enjoy the beauty and quiet. I agree with the tourists.
- Horseshoe [LMU 2] should be conservation zone for the caribou in winter. Two hundred caribou winter here, and it goes down to fifty by April. Mountain tops is where they feed. Trucks on the highway scare the caribou down into the deep snow, so the caribou are not getting enough sustenance. Should be a conservation area for the caribou. Also, limit the caribou hunt.

Economic Development

What are your thoughts on mining and other economic interests in the region?

- I think all resources are good water, caribou, moose, fish, wildlife, mining. Everything in moderation – I think our role of TH Government needs to be fair and balanced as well, instead of one sided.
- It seems like The Commission is valuing the claims over all the rest. Whether I go out or not on the lands, my rights are the same.

- To protect all these areas is good but we all have to co-exist together. We need to find how many resources are we giving up. Our government [TH] needs to take care of our resources. In these designated protected areas – how much are we losing? These resources need to last forever, if we are shelving all the resources now and they can't be touched in the future, what will we do? These resources need to support our government infrastructure.
- We need to look after the land and have proper stewardship and guidelines, we can take care of it all. Subject to review, how much are we willing to give away, we need the resources.
- We have to be careful of [locking up] important resources. We need them. We don't want to sacrifice future generation's needs; we have to co-exist together.
- People have to jump through hoops to get through YESAB, and it doesn't get approved anyway or it takes the government forever to approve anything. If YESAB is doing its job, then everything should be covered for protections. I think everyone should be satisfied with the process as it's pretty tight already.
- [Miners] got to start thinking: thinking about mining. Everything was put here by Mother Earth. Everything was made by Mother Earth. Plants, you name it, water, you name it. Whatever we have here, what we supposed to do with it, look at it, how nice it grows, nice flowers, nice berries, nice moose, nice animals. Now, it's not the same no more.
- While I don't know the exact numbers of active mining in the Yukon, I would say mining activities are also contributing to pollution and the number of mines is growing. I wish I could be given certainty that mines would be environmentally friendly and keep the lands clean including water and air but the certainty will never be there as some things are just out of our control and sometimes mistakes are made that do not adhere to safety or danger, in this case to the land as has been seen in BC some years ago. There was huge destruction to the lands and water of BC First Nations.
- On another note, we should protect [land]. I worked in a mine last year and I went for walks, and I can't believe the resources, it was so beautiful out there. I'm looking at the natural plants out there and a person could actually live out here, just on what's there as it is. I thought it was amazing, what we have, in the Yukon. I wouldn't have known that if I was never out there.

Do you have any comments on the Integrated Stewardship Areas (ISAs)?

- The green [SMAs] are protected but what about the other ones [ISAs]? We need to know more about the other sections and how much each are different. [We need] more conversations on protected areas, but also more conversations on the [ISAs]. Don't forget those areas.
- There should be clarity of how much is high and low [in the ISAs]. How much land is disturbed and how many roads are allowed?

The Importance of Reclamation

- Everything that has been mined, has to be able to grow again.
- Can we grow food in the [mine] reclamation areas? Test out rice, get cattle - we need to be able to feed people. We rely so heavily on the highway. We must think about it in the future. There is going to be instant conflict over our food resources.
- We need more protection. If there's a way that...you know they move from one area to the next. While they're opening a new area can they use, because you know they have to take off

the overburden right, can they backtrack it and then start their reclamation behind themselves? So, there is something for them to move through. Can it be something like that?

- Mining, some miners are very bad, I have nothing against mining but there are some bad miner's who leave junk behind. Too much action in one section, they need to cleanup after themselves.

Water

What are your thoughts on water in the region?

- We don't get any salmon anymore. How much mining activity do we have in the Yukon? This is destroying the water. The water is just murky and muddy, we used to drink out of the river. We never distilled it, nor did we boil it, and I'm still sitting here talking to you. It didn't kill me then when I drank out of the water, out of the river. So now, I wouldn't even wash my clothes in the river. And why is the river all muddy and dirty? I'm thinking it's from all the mining that's going on in the Yukon. All the sediments and all the oil and gas going into the river.
- Water is very important to everybody. We need water to survive.
- What's going on right now [with our water]? What kind of water are we drinking? Where is our water intake, below or above the dump. All that stuff is leaching into our water. What about our grayling? That's why wetlands are important. There's a little bit of wetlands they pass through to get to the river but the tailing piles, it just sieves right through. There are not enough wetlands to filter it before it gets to the river. Do they test it? How often do they test it?
- We don't drink that tap water. People get water from Wolf Creek, it's good water but I wonder what's in the back of it, you know what I mean, it could be mining. Someone should take a plane or helicopter and see if anything in that creek. It draws from different area. Moosehide the same thing, look at Moosehide Creek, people could mine it but our membership could mine with shovel, they can't take big machine in there. That's for protection of the watershed, but you have how many little draw come in. You have to look at the draw, what I mean is, okay maybe another area come in with water, where does it come from? That spring water, where does it come from? Head waters, or out of the rock or the ground, that's what they call spring water. And it's really important now today.
- I think it's important to have rivers protected.
- We are losing our waterways - everything is going [to be] different now. We need to have a sit around the campfire, we need to hear from everybody what's happening with their lifestyle. A big circle table and feast to talk about everything. That's how we are going to understand each other. Just hearing people talk, that helps.

The Yukon, Klondike, and Stewart River Corridors (LMU 3, 14, 11, 6)

- We are losing water. Water levels are going down in some areas. [Elders] say that some lakes are drying up. Around the Yukon and more around Old Crow. So, why not save the Yukon River before it dries up, before there is nothing left to save? It might happen in our lifetime if we continue to do what we are doing today, [like] mining and what not. We may some day lose it.
- Yukon River needs more protection, water and creek overflow is getting bad. In the springtime there will be land changes.
- [The Yukon River] is important too. In the olden days they used to throw everything on the ice, everything. And when they had that old dump down there in the corner (north end), down

there. The hospital supply, everything, needles, everything from that hospital they dump it in that old dump site. Where does it go? In the river. The Chief told us in Moosehide, “don’t drink that Yukon water, you drink that Moosehide Creek water”. That was long time ago, I was only 13, 14 year old.

- Fortymile River, that’s where people fish for white fish, and grayling. But they don’t go all the way up cause vicious water, strong water, your boat could tip over, you have to go up river. Us, we just go a little ways and just get one or two.
- Klondike water used to be clean and drinkable. Water is very important; we need it to survive.
- They should protect [the water] from day one. Look at the Klondike. How many houses do we have from Henderson Corner to Rock Creek to C4 land and in between. In the summertime if you come down that Klondike River, you’re going to see little tent here, little tent there where people camp, you don’t even know they are there. That’s in the summer and then you get these tourist people come down the river in rubber raft and they float down in our drinking water. And then there is septic tanks, how many of them got that. That’s why I hardly drink the town water, especially in the springtime. You get all the water off the ground, different pond area, the dump. That dump, the seepage it goes down, what’s going to protect us, all it’s got is ground gravel and rocks. The Klondike used to run [before dredges] on the other side, not this side.

Salmon

What does salmon mean to you?

- We used to get a lot of salmon way back when I was a little kid across [the river] over at Tr’ochëk, we used to stay there. A lot of salmon, my dad made a fish wheel, and we got a lot of salmon. As we grew older, we went down there and cut the fish open and gut ‘em out and all that. We learned all that stuff, we learned it all, we could still do it, some things but we were learning 5 or 6 years old, and then they take us away. Our language and all that stuff, So, yeah, I seen all of it happen, when you’re a little kid you watch first and you start learning. Then they tell you do not do that stuff, yeah, but I still got it in my head. I guess a person can always relearn stuff, it’s up to the person.

How can this Land Use Plan better serve our salmon?

- The Yukon River needs protection. Give it protection.
- Spawning grounds for the fish - that’s an area you really have to protect, the Klondike, because those fish come all the way from Beaufort Sea and have to fight their way up just to lay their eggs. I’ve brought it up before, something really needs to be done such as putting signs up in the area. Any area, there is a lot of changes. Klondike, we need to keep the boats off there when the fish are spawning.
- The fish started coming back at Haines Junction way or Klukshu River last year, and they were not sure how it happened, or why it’s happening. It’ takes years for them to grow and go out to sea. What happened to them out there? Is it the big trawlers or disease?
- I have a concern about the Yukon River, Klondike River, and Stewart River corridors, and I believe they need to be protected from large ocean-going vehicles such as the Yukon Queen, which ran a successful business that was American owned, and they ran on our river system, and they didn’t have to abide by the inland water act or the rules or the regulations. And we lost a lot of salmon, we’d see them all washed up on the beach and 8 ft tidal wave every time that

boat came by or went down the river, who knows how fast they would be going. Because they didn't have to abide by our laws, and it took us a long time to shut that down. I feel that when you really want to talk about protecting the rivers that should be taken into consideration that no large boats, tour operations should not be able to operate in such a fashion where it causes corrosion on our riverbanks and death to our small salmon.

- On water protection on Fifteen Mile, Twelve Mile, Forty Mile, Klondike, Indian, those rivers are salmon bearing rivers and we made an effort to see if we could put a stop to the jetboats from going up the Klondike when salmon spawning is happening but apparently, through the waters act and fisheries and federal government say nothing can be done about that. I don't believe that. Once this plan goes through, we have jurisdiction over how we navigate certain rivers that are salmon bearing so maybe we have to investigate or put a little pressure on the feds to have this plan within reason that during spawning on these rivers to have no jet boat on the Klondike, or 15-mile, 12 mile 40 mile. Jet boats cruise on very low water and disturb the eggs, they run over them, and the eggs get washed away. That's something to think about. That's one of my concerns.
- Salmon needs to be protected, still see fishing down river, it's sad. Fish are important to our family, grew up on the river, and fished lots and made dry salmon.
- One of the things we have the biggest problem with the salmon on the Yukon River is at the delta where it meets the ocean and forever and ever the American's have just been overfishing this area and just having their way with the salmon and it doesn't seem like anything we do in Washington and lobbying against it has any means to us. They don't hear our voice. I don't think they ever will hear our voice and if they do they won't ever act on what we ask for because today we've suffered such astronomical numbers of lost salmon and about 80% of that is from the Americans and we need a stronger voice in Washington.

Wetlands

What do wetlands mean to you?

- Wetlands, from way back, left for thousands of years for ducks, beaver, muskrats, that kind of wildlife. We left it for them, we didn't mine it. The land is for the beaver, birds and muskrats, the land is going for them, it's gone for them. Whatever wetlands we have left, we should leave for them.
- The wetlands are becoming filthy. When you drive along and see some of those wetlands look oily and dirty looking wetlands. I feel sorry for the ducks and cranes landing there. What are they eating?
- Wetlands are there for the animals.
- Wetlands are there for the animals, food for the caribou, moose, beaver, muskrat. There is a reason the wetlands are there.
- What's going on right now? What kind of water are we drinking? Where is our water intake, below or above the dump. All that stuff is leaching into our water. What about our grayling? That's why wetlands are important. There's a little bit of wetlands they pass through to get to the river but the tailing piles, it just sieves right through. There are not enough wetlands to filter it before it gets to the river. Do they test it? How often do they test it?

- Some year back there was a plan from the Alaskans that wanted to build a railway [through LMUs 18 and 19]. It was right through wetlands. This area North Ladue is full of undisturbed wetlands.
- Up the Dempster there used to be wetland, it dry out in certain spots. You can tell when they dry out, the wetland. You can tell when it dried out. It's really important right now, I don't care what the miners say, if you go over to Sixtymile. These old timers used to use shovel, not loader not grader. They had good life. They don't damage the earth. Now you go over there, it's not the same. Big piles of rock looks like a mountain. You go up those different draws.
- [Wetlands] are really important for any animal. They come they drink that water. Bird, they come drink that water. Beaver, the most important animal.
- I used to trap on the Indian River with my husband. Beautiful, beautiful country. Used to hunt for beaver. Now I go back, I get lost. Where's the road? So many roads this way, that way, they go around in a circle. They just damage the ground; all they do is look for that yellow thing. Sometimes I get mad when I go over there.

How can this Land Use Plan better serve wetlands?

- All wetlands should be protected in the region. There is a lot of animals in there that are affected by activity. The animals are in the wetlands all the time and birds always flying in. I don't know much about it, but I know it's good.
- There should be no mining in wetlands.
- The Indian River should be protected.
- I want to see waterways + wetlands protected - We need to protect our water. I want to protect 100% of fens! Fens matter. We should have had our heritage areas in Indian River protected. Don't break up the wetlands into bogs and swamps. It's all wetlands.
- Protect the wetlands. Water is life. It gives life to the animals, the plants, to our citizens, everybody. I want to make sure the all the wetlands are protected. The rivers, Yukon, Klondike, gives us fish, our food sources is there. I want to make sure it's protected for future generations.

Wildlife

- Once you deplete the area of all your wildlife, it's just like if you over trap and area. If you trap and area for 2 to 3 years straight and take 400 or 500 animals of course that areas going to be dead for a while. Sometimes, you know when things get hard we depend on those animals to be there. So, we have to take that into consideration and curbing the hunting aspect of our animals in our traditional territory.
- There are a bunch of butterfly species in the Tombstone Park. We have guest speakers that come all the time and one speaker talked about all the butterflies in that area. Butterflies will only go to certain flowers and those flowers have to be there for the butterflies to be there. So, they have ecological value.
- Beaver, the most important animal. It's really important, you don't shoot them all. You try not to shoot the female. You take one out of each pond, like miner's close by around here, maybe Bonanza or Hunker.
- Angelcomb Mountain, Sheep Mount [in Tombstone Park], there is sheep there that are protected, [but] there are other user groups that take groups up there [during] certain times of the year when the sheep have babies. [This] puts the herd at risk. If the sheep get scared and

run and the babies get scared, they could fall. I wanted to do something about it and I basically had three supervisors and if I wanted to do something, I would ask one and there always seemed to be a barrier from the YG. Elders went up there to block access [to protect the sheep].

- We should make sure salt licks are protected for the animals.

How can this Land Use Plan better serve caribou?

- We want to protect those caribou areas [LMU 15, 21, 19]. It's very important. They need to be connected together.
- We should find out where the herds migrate and what roads they cross and how many are in the herds. How many times they go through the area. This is what we need to know in order to protect caribou.
- Mining will disturb the caribou herds. Too much mining and ruining the land.
- The Dempster herds need more protection. People killing off the [caribou] bulls. Leaders killed and hunted, and they need to let the bulls pass and teach the future bull to migrate further north.
- If ground is moved, mining or anything, grazing areas of caribou is affected by mining, they will move on and not stay. They'll move on to Alaska.
- Animals should be where they are supposed to be. All caribou land should be protected with corridors. Migration of animals can change direction and interaction of other animals when human activity such as mining and exploration changes the lands and the water ways.
- Human activity effects migration patterns of animals and caribou. These areas need to protect the wildlife and herds in these areas for future generations.
- LMU 21 [Fortymile Caribou Corridor] - Why is not protected? It should be green.
- I noticed you had protected areas, and this white area of the goldfields. Well, the Forty-mile herd comes all the way across, this is a big area, they consume, so why is there no protected in the goldfields. That's real important for the Forty-mile herd. You have to redesign the map, because it doesn't make sense to me. You know you have thousands of animals coming over and crossing the Yukon and they head back in February but there is no protection in there.
- On the map, number 21 where it says Fortymile Caribou Corridor; why is that not protected by the green as well if that's where the caribou are going? I think that should be green.
- I notice in the last few years and I'm talking 20 years, I've hunted on the top of mountains of the 60 Mile area, the borders, and all through the Clinton Creek area. Once YG opened up the [40 Mile] caribou hunt, there's a lot of people from Alberta, and Alaska, and we're going to have to put a curb on that somehow.
- In 2017 went to Fairbanks and it really opened my eyes. When it was time for the migration towards this area and the caribou going towards Eagle, Alaska. It was eye opening with the Feds telling them how to hunt. When they are coming towards the border, within 2 km, the caribou are getting slaughtered just like when you see it up the Dempster, so many people come up from different areas. Where are our traditional lands and who's allowed to hunt in our traditional territories? I just didn't like the way they slaughtered them, and I mentioned it with the Feds in Fairbank. These trigger-happy people and they got to cross the Taylor Highway to make their way and they try to tell people to not shoot them.

Knowledge Transmission and Cultural Continuity

- We don't get any salmon anymore. How much mining activity do we have in the Yukon? This is destroying the water. The water is just murky and muddy, we used to drink out of the river. We never distilled it, nor did we boil it, and I'm still sitting here talking to you. It didn't kill me then when I drank out of the water, out of the river. So now, I wouldn't even wash my clothes in the river. And why is the river all muddy and dirty? I'm thinking it's from all the mining that's going on in the Yukon. All the sediments and all the oil and gas going into the river.
- Somewhere in the [Plan] I read something about trails, "Protect our language and the trails". That's really important, I was really happy to see that. [There are] trails from Eagle, Alaska, through the Dempster and goes up to Old Crow and Fort McPherson. [Elders] talk about trails, how they walk, they didn't have ATV's, 4 wheelers, skidoos and trucks. They walked on foot and later they traveled by dog team. Big, big country. So those trails are really really important. We should be bringing those trails and roads back to surface and making all that land green rather than destroying with mining.
- I would rather see [the Region] for use by Non-Tr'ondëk Hwëch'in and Tr'ondëk Hwëch'in citizens for their own healing ways, cultural camps, harvesting, programming, research, education, archeology/anthropology digs and finds and so on.
- [We need] more opportunity for culture camps.
- I think all Tr'ondëk Hwëch'in lands is important to preserve for the benefit of everyone which includes Non-Tr'ondëk Hwëch'in citizens. We have been known to share and to help one another. By sharing our First Nations culture from yesterday, today and tomorrow, we are saying how important these lands mean to our way of life in surviving before settlers came and how it still provides for us.
- I just wanted to make a comment again about the water, like I said water is life. And I'm thinking back a few years ago when the young ones were down at first fish. They see how the salmon are caught, how to pull the nets, what to do with them, how to filet, how to smoke, how to dry, then they take the fry, the little frys and they take them up Moosehide Creek and they let them go. So they think they'll come back in seven years and same with the children from daycare taking the fry's and putting them in the Klondike River by the farm. Hoping they come back in seven years. That's why we have to protect our water. If we don't have water, we don't have life.
- We need to teach the children how to survive, to collect and harvest food to survive. Those with skills to teach.
- Where's all our berry patches and where do we hunt the caribou and moose? We don't talk about our berry patches. If we do, then people will go to our berry patches. If we use the land those kinds of things show that if our families and our ancestors used that land, then it shows we belong to the land and land belongs to us.
- Growing up and not seeing the 40 Mile herd and now being able to see the full herd and for my son to be able to see that now, we need to protect it. It shows that there was good conservation done and we need proper stewardship.
- Many traditional areas of hunter are overhunted by out of towners and the locals get no harvest. Plus, we must travel through lots of developed areas to hunt in places with minimal impact and have to go farther and farther out.

- I lived on the land with my parents before taken away to residential school. The foods from the land were very tasty and in abundance. Now today because of pollution, these foods do not taste the same anymore. Foods are almost tasteless. You will only know this if you lived on the land when the land and air and waters were clean, free of contaminants. As some elders in Environmental meetings some years ago in Whitehorse, lakes and rivers are drying up
- We want to protect some land. Not only for animals but for our own enjoyment too. We may not go out hunting but still that is our well-being. Land is our health. Like my mother said the land is my grocery store and Percy Henry said that the land is my university, that's where he learns. That's where we heal. What in those statements do they not understand? I'm sure they heard them before.
- Tr'ochëk is important for our family. We grew up there and fished there. We collected berries and grew gardens. Then we were moved off the land and into a small house for our big family.

What changes have you seen on the Landscape?

- We get a lot of snow here, so we get a lot of chemicals and pollutants falling down. Which goes into the ground and comes up from the ground in the springtime and we eat, the animals eat, and we eat the animals and now today the caribou, moose, berries taste different for me. It does not taste the same as when I was a kid growing up on the land. Back then foods were delicious and now there is no taste to it. Thanks to economy and greed our food is no longer the same. Berries taste way different.
- Too many changes to the landscape, drought, no wildlife.
- I never see any animals lately, except the odd squirrel.
- [Have seen] harvesting changes on the Indian River and Chandindu – no fishing – no salmon (12 Mile).
- Used to hunt in the goldfields but now no animals out there or if they are, the miners get them.
- Moving roads for miners is a big thing. I've seen miner roads moved and this effects animal activity. The human activity is scaring away wildlife. The Yukon River has changed a lot over my short life, and I've seen years when it dried way too much and years when there is too much water. This is due to climate change, but we are huge contributors to climate change. Mining also effects water ways, disturbing creeks and moving them and this effects the ecological systems.
- When you fly out of Dawson, and you look at the creeks where they mine and it looks like a city. That's how it's starting to look over by the Sixty Mile. Reclamation is very important after mining.
- You used to be able to use the goldfields for traditional uses and hunting and now there is so much activity and land disturbance that the animals are sparse and the berries with gone or over picked.
- About three years ago, I went up to California Creek with my brother. Up the creek they put a road in. They started a mining company, and they were up the creek from us. This was Discovery Day weekend, so they shut that camp down on the Friday and the creek where we are, where our camp is, that creek was muddy, it was silty and this creek where we fish for grayling. It was muddy and silty, it was thick. And then by Sunday when we were ready to go that creek was almost clear, but they were coming back to start up their mining activities again.

- I notice in the last few years and I'm talking 20 years, I've hunted on the top of mountains of the 60 Mile area, the borders, and all through the Clinton Creek area. Once YG opened up the [40 Mile] caribou hunt, there's a lot of people from Alberta, and Alaska, and we're going to have to put a curb on that somehow. If you get four or five hunters at one time. Animals can't sustain that you know. We won't have any animals left. Once you shoot out an area, say hypothetically you shoot 400 moose, it takes years and years for that ground to recover, for the moose to recover.
- Up the Dempster, I've seen a lot of change working up the Dempster with Highways.
- Born and raised in Dawson City, I've seen the climate changed, the weather has changed in the past two years, 2020-2022. The weather has changed. Now we have landslides, water changes, the river, people having to cross the river. The mining. I'd say more the animals. Migrating animals from the north flying over. I feel sorry for them because the weather blows them off patterns. So used to flying home and now they get confused. Everything has change. Moose populations have gone down. People take the bulls. Dempster there is a lot of change.
- Where people used to hunt, last year, for two years now I count how many boat with moose, last summer there was 14. I got people different places, I have people on the Sixty Mile, Indian River, up the Dempster, Fortymile, not too much around Dawson or Moosehide. I have friends that look out. You could see the horns in the boat and truck back up, they throw moose in and away they go. This year another one, that's fourteen. We got to do something about that too.
- I liked the [trapping] life. Get everything ready and go early the next morning and come back about 3 or 4. Bring everything in, thaw it out, next day we flesh it all out. It makes lots of work but that's kind of life you like. At that time fur was a good price but now, they want ten dollar for marten! All that work you have to do, take that paws out and everything. You gotta make sure you do it the right way. And they want ten dollars for it? It's too cheap, for the gas and oil, you name it, for skidoo.
- Sometimes you see moose, sometime you don't, lately, down [river towards Fortymile]. Before they used to cross back and forth at Twelvemile or Fifteenmile.
- [Speaking about travelling on the river] What a change, what a change though through my lifetime to now. How people do different things, how they talk.
- Mining is getting so bad out [in the Goldfields, LMU 11]. There are hardly any animals out there. Well, the odd moose may travel through there but will get caught by miners.
- If you get four or five hunters at one time. Animals can't sustain that you know. We won't have any animals left. Once you shoot out an area, say hypothetically you shoot 400 moose, it takes years and years for that ground to recover, for the moose to recover.
- I used to trap on the Indian River with my husband. Beautiful, beautiful country. Used to hunt for beaver. Now I go back, I get lost. Where's the road? So many roads this way, that way, they go around in a circle. They just damage the ground; all they do is look for that yellow thing. Sometimes I get mad when I go over there.

Stewardship and Education

- There's a lot happening in the world today. A lot of famine, different changes and I strongly believe it's because of us. We're not looking after the land; the land is dirty. Not only us, but around the world, it's because of greed and economy.

- I know it's not talking about Land Use but it is talking about Land Use, how we used the land, how we enjoy it.
- We consider all our land [to be] everything: the land, water, air, it's all part of us.
- We need to plant more trees in the goldfields.
- We all need to work together. Not just governments but communities. We need education and more interaction from the Elder's and youth.
- We need to look after the land and have proper stewardship and guidelines, we can take care of it all. Subject to review, how much are we willing to give away, we need the resources.
- Once you deplete the area of all your wildlife, it's just like if you over trap and area. If you trap and area for 2 to 3 years straight and take 400 or 500 animals of course that areas going to be dead for a while. Sometimes, you know when things get hard we depend on those animals to be there. So, we have to take that into consideration and curbing the hunting aspect of our animals in our traditional territory.
- There is so much struggle between governments on lands, water and resources. Rather than fighting on how much lands go to who, I think all governments should start thinking of ways of keeping the lands, water, air clean and doing your part in combatting climate change and making huge changes on how mines will operate to seriously mitigate damages. I am not interested in hearing "Yes, we will keep your lands clean" and "Yes, we will hire First Nations". Many times this has not happened. How will we know if they will keep the lands clean if we allow mining especially in sensitive areas where there are still some habitats and animals.
- What I've always asked for it and talked about, is that we need more stewardship on the land. We have hands on the ground, boots on the ground so to speak right now but for the amount of area, amount of work, and scope of projects that you can get involved in, it takes a lot of personnel. It takes a pretty big department which would mean you'd have to a bigger budget. Maybe this is the reason why we don't have lots of stewardship or maybe, I know it's not a lack of people interested in being land stewards. There's a lot of people that are interested in it. I think it just that we don't have funding or we haven't tried to pursue it anymore or looked at it but that's one of the things we need most of out on the land, is more feet on the ground paying attention to what's happening, walking around with their ticket book and handing out infractions. Don't be scared of giving somebody a ticket, right them up, or give them a warning. But right now, there is a lot of wild west actions going on out there that we don't see, so I think we need more people involved.

Climate Change

- Climate change is playing a big part in [salmon impacts] too. We traveled up the Dempster and I was looking around and there was a lot of ground water coming up. A lot more than I've ever seen. There is going to be a lot of ground slumping, so if they do any mining up there, it doesn't matter where - There is going to be more damage. There's already a lot of land slumping out there.
- Climate change has changed animal behaviour and they don't go where they used to.
- Not much we can do about climate change, but we must be able to survive and learn things to survive and teach our children. We need to take the people out on the land, so see what is out there, what they can eat, where to find water, where to find what we need.

- Berry picking, the season was late. Berry pick is affected by climate change, not ready when they are supposed to be.
- [I use the land for cultural uses and harvesting], like picking berries and other cultural uses. I have seen changes from Top of the World to up the Dempster. Climate change means land changes and changes to animal habitat.
- Everything needs to be included - Things are changing. Not the same as the Gold Rush.
- The land will show you that change is going to come.
- Economy and climate change is playing a big role in our landscape changes, almost 100% negative changes endangering animals, plants, fish, medicine, water, air. There is almost nothing we could do about climate change unless the big companies of the world stop pumping pollution made up of chemicals into the air.

Plan Implementation

What Should TH's role be in managing this region?

- Obligations under the Final Agreements' - Look in there; It's all in there already. We should be following it! 'Our past leaders negotiated our Final Agreement in order to ensure that the health of the land and waters. Our Final Agreement is legally binding under the Canadian Constitution. We expect that to be honoured.' - All our wise old elders, all that they did for us.
- Need F.N. to assist in managing [the region].
- TH should have full ownership of the land, water, and air. We should be saying what can and cannot be done.
- Like the Haida Gwaii, we should have full control from the bottom to the top.
- The orange areas [ISAs], the Government has the say? Will TH still have to be consulted?
- TH should have the right to have a say in what happens on the land.
- TH needs more of a say in the land use, to protect it for future generations to hunt, harvest, do other traditional uses and recreational activities on the land. TH should be partnering with YG on all the lands to govern.
- More protection and more say from TH in Implementation and governing. We need land guardians.
- Maybe this is how "Environmental Monitors" get permanent jobs too, working [in the region]. Because the Conservation Officers have their own areas and if they need that back up because Conservation Officers have the law on their side to give tickets and stuff like that. We'd be the back up for Conservation Officer. We'd be meter maids of the land. Then we'd have the back up of the Conservation Officers to get the real stuff done you know. I could see something like that.
- [TH] has to actually do the studies on the flora and fauna. You take a one metre by one metre area. It's awesome too because you're on the land. I love it, being on the land. There were some tough days when you're climbing up mountain sides.
- For implementation, citizen consultation or citizen committee sessions, ask environmental monitors, ask the lands officers, people who work out there. Don't make it too technical.
- Our government [TH] needs to take care of our resources.

- I think all resources are good water, caribou, moose, fish, wildlife, mining. Everything in moderation – I think our role of TH Government needs to be fair and balanced as well, instead of one sided.
- I do think Tr'ondëk Hwëch'in needs to be fair and balanced. Everybody, some of us are miner's, some of us are truckers, we all co-exist, we cannot work without each other.
- [we have to] curb the hunting practices. YG don't give a damn. We have to step in there and say 'hey, that's enough, no more tickets, otherwise, we are not sharing or working together as one. If they're going to make all kinds of money off of wildlife like their doing, it's just coming to no good. We all have to learn to do things, we have to get after them. That's what our government has to do.
- I worked the Lands Department for x amount of years and I come across a lot of situations in our traditional territory and on our settlement lands where there's infractions happening all the time. And it's a big area to go through and three people can't do it all, and that's a sad thing. So, as elder REDACTED mention we might have to increase the budget somehow and finds funds to get a couple more land stewards. You know whether you see whose willing go to school and take a little bit of knowledge when they go out to the land.
- We need guardians. Management is there but we need guardians to protect the land and make sure that what is asked for is followed. The rules are enforced by the guardians of our land. They are there to protect land, water, everything. We need to work together with miners.
- We should have more say in [managing] all of the areas. We should have a say and use more to protect the other areas for all of us and future generations.