



Community-based Fish and Wildlife Work Plan

*for the Tr'ondëk Hwëch'in
Traditional Territory*



Disclaimer

This Community-based Fish and Wildlife Work Plan shall not create any commitments or obligations that are legally binding on the planning participants or create or affect any legal rights of the planning participants. Without limiting the generality of the foregoing, this Community-based Fish and Wildlife Work Plan shall not create, affect, define, interpret, or apply any roles, responsibilities, rights or interests under the *Tr'ondëk Hwëch'in First Nation Final Agreement* or *Self-Government Agreement*.

Cover: Mixed media artwork by Fiona Farr (age 16)



Dawson City and *Chu Kon Dëk* (Yukon River) from the Dome by Jill Johnstone

Acknowledgements

This Community-based Fish and Wildlife Work Plan, herein referred to as ‘the Work Plan’ was developed by the planning team consisting of the Dawson District Renewable Resources Council members and executive secretariat Nick Wozniowski, Karlie Knight, Alice McCulley and Matthew McHugh of Tr’ondëk Hwëchin, Cheyenne Bradley of Fisheries and Oceans Canada, and Kirsten Wilcox of Environment and Climate Change Canada, and Paul Boyce, Bill Hunt, Amélie Roberto-Charron and Patrick Gibeau of Government of Yukon with planning support from Rebecca Rothgeb. Some meetings were facilitated by Ryan van der Marel, a contractor to Tr’ondëk Hwëch’in.

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The work described herein evolves from the foundational hard work of those that walked before us and will contribute to the work of those who walk after us. The planning team would like to acknowledge that this Work Plan does not seek to create parallel processes to existing and/or ongoing projects or plans, rather, it is meant to complement work, and fill in gaps as needed, and to show our collaborative efforts in coming together for our fish and wildlife relations. Relevant projects and plans include, but are not limited to the following:



- Anticipatory Domestic Yukon River Chinook salmon rebuilding strategy
- Anticipatory International Yukon River Chinook salmon rebuilding plan
- Anticipatory Tr'ondëk Hwëch'in tr'ojà' (salmon) stewardship plan
- Anticipatory Dawson regional land use plan

Finally, the planning team would also like to express our deep appreciation for the land and our fish and wildlife relations, whose presence provide harmony and balance in our lives, and we aspire to continually provide space for those who cannot speak – *mähsi cho*.

Sparkling winter day by
Benoit Gervais



Hän Language

Dënezhu → People of this land

Tr'ëhudè → Our way of life

Jëje-in → People

Tr'ondëk Hwëch'in → People of this river;
People of the Klondike
River

Chu → Water

Gù → Plants

Nän → Land

FISH

Łuk → Freshwater fish

Chehlùk → Burbot

*Chehtsqoq** → Slimy sculpin

Dhäts' yät → Longnose sucker

Ëlchän → Northern pike

Łuk cho → Chinook salmon

Łuk dhey → Round whitefish

Łuk tr'ohgqy hã hjäk →
Freshwater fish camp

Srejil → Arctic grayling

*Srejoo gaa tsoll** → Lake chub

Srur → Inconnu

They → Chum salmon

Tr'ojä' → Salmon

Łuk tän tl'a → Coho salmon

* Eagle Hän dialect

FEATHERS

Chuga → Bird

Ch'ëzhän → Eagle

K'äba → Ptarmigan

Kha → Goose

Tätrq' → Raven

FURS

Nun → Animals

Dëbe → Sheep

Dlëk → Squirrel

Gah → Snowshoe hare

Jëjik → Bull moose

Nägät → Fox

Nägät lëk'al → Arctic fox

Nähtrq'/ Nähtrq̄ → Wolverine

Ninju → Canada lynx

Shär → Bear

Shär cho → Grizzly bear

Shär zrqy → Black bear

Trq̄ → River otter

Tsä' → Beaver

Tsäts'ät → Mouse

Ts'è(y) → Porcupine

Tsũk → Marten

Wëdzey → Caribou

Zhur → Wolf

Tthäl → Ground squirrel

Dzän → Muskrat

Tëjur → Mink

Nihbà → Weasel



Night sky by Yukinobu Yamamoto



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A photograph of a vast autumn landscape. In the foreground, a calm lake reflects the sky. The middle ground features rolling hills and mountains covered in dense forests of trees with vibrant orange, yellow, and red foliage. The background shows more distant, hazy mountain ranges under a sky with soft, white clouds. The overall lighting suggests a late afternoon or early morning setting.

Autumn landscape by Yukinobu Yamamoto

Introduction

Now, more than ever, caring for the environment requires the commitment and trust of multiple partners working together toward common goals. Community-based fish and wildlife work plans emerged in the Yukon to bring the community together and create goals and objectives for the stewardship of *łuk* (fish) and *nun* (animals). This is the first community-based fish and wildlife workplan in the Tr'ondëk Hwëch'in Traditional Territory (TH TT). To develop shared goals and objectives that reflect community concerns and needs, a working group was formed with representatives from the Dawson District Renewable Resources Council (DDRRC), Tr'ondëk Hwëch'in (TH), Government of Yukon (YG), and the Government of Canada (GC).

The desire to develop this plan stemmed from the Yukon South Beringia Priority Place Initiative, an Environmental and Climate Change Canada program focused on Species at Risk. The move to a community-based Work Plan supported collaboration at a community level, while broadening the focus to all ecosystems and species of concern and interest in the TH TT. Additionally, it centered Tr'ondëk Hwëch'in rights under the *TH Final Agreement* to manage fish and wildlife in coordination with other partners and to do so at a community level.

In December 2024, the working group met over two days to identify key fish and wildlife concerns in the TH TT, and potential actions to address them. This discussion resulted in over 40 potential actions including *tr'ojâ'* (salmon) research and management, invasive species awareness, and seeking a greater understanding of carnivore behavior and relationships. These ideas were brought to the community in March 2025 with two meetings and through an online survey to invite comments, and ideas, and local insights. Community feedback included over 35 survey responses and 12 participants

at an in-person engagement in Dawson. The topics raised by the community were on the themes of harvest concerns, water protection, *tr'ojà'* (salmon) recovery, carnivore relationships, and the role of *Dënezhu* (people of the land) knowledge in fish and wildlife stewardship.

The working group revised the plan to reflect community feedback and priorities in a draft that was shared in April 2026. Twenty surveys were completed and 43 people participated in the community meeting at *Ālāt Nēhējēl* (TH Community Hall).

Community members reiterated serious concerns about *jëjik* (moose) hunting pressure and regional *jëjik* harvest management. They repeated requests that Government of Yukon release wildlife survey results in a timely manner, that hunter effort data be collected, and that Indigenous Knowledge about *jëjik* should be collated and used, all toward responsive and sustainable harvest. They also spoke about the overarching importance of chu quality, including wetlands, and the need to monitor mining industry impacts on the ecosystem. They requested that freshwater fish monitoring be summarized in the plan. Climate change effects like increasing wildfire, rusting streams and fall water level were mentioned along with an interest in *they* (chum salmon) monitoring, fry monitoring, and local opportunities to improve waters for all salmon.

This plan provides guidance and timelines for the key fish and wildlife projects and actions identified through the collaborative process outlined above. These actions are planned over a five-year timeline (i.e., until 2031), with annual review of action items and renewal in 2031 by all partners.

Work Plan objectives

1. To identify key actions and timelines for the partners that:

- Address fish and wildlife concerns within Tr'ondëk Hwëch'in Traditional Territory (TH TT);
- Reflect community interests on fish and wildlife matters; and,
- Engage youth and the community in the sustainable stewardship of fish, wildlife, and their habitats.

2. To prioritize actions and develop shared workplans for actions that:

- Build trust, respect, and collaboration between the partners;
- Are accessible for the community;
- Are culturally respectful;
- Set specific goals, accountabilities, and timelines for each party; and,
- Are of a scope and scale that can be achieved within a five-year window.



A landscape preparing for winter
by Patrick Pikalek

***Tr'ëhudè* • Living in a Good Way**

Tr'ëhudè – our way of life – is an integral part of the *Hän* worldview (Tr'ondëk Hwëch'in, 2019, internal). It is not written in books but held in the land, in the stories, and in the relationships between all living things. It is passed down through seasonal rhythms, oral teachings, and shared practices that guide respectful living and harvesting. These laws speak to how people move on the land, how animals are honoured, and how reciprocity is shown between people and with the land and water, and fish and wildlife. Many of these species are featured in traditional stories, indicating that relationships with these relations were established long ago.

At the heart of *Tr'ëhudè* is a deep ancestral responsibility to care for the land and water, and fish and wildlife, for our future generations. It teaches that animals are not resources, they are relatives. Harvest is guided by principles of respect, need, gratitude, and reciprocity. When fish or animals are disrespected, it is not just cultural harm, it is a disruption of natural law.

In this Work Plan, *Tr'ëhudè* is a foundation. It informs how we choose actions, what we protect, and how we define success. These *Hän* values are being shared as both a teaching tool and a planning lens, reminding us that the sharing and application of knowledge is cyclical, local, and lived. Through this Work Plan, we commit to upholding these laws in ways that are practical, powerful, and true to *Tr'ondëk Hwëch'in* ways of knowing and doing (see Figure 1).

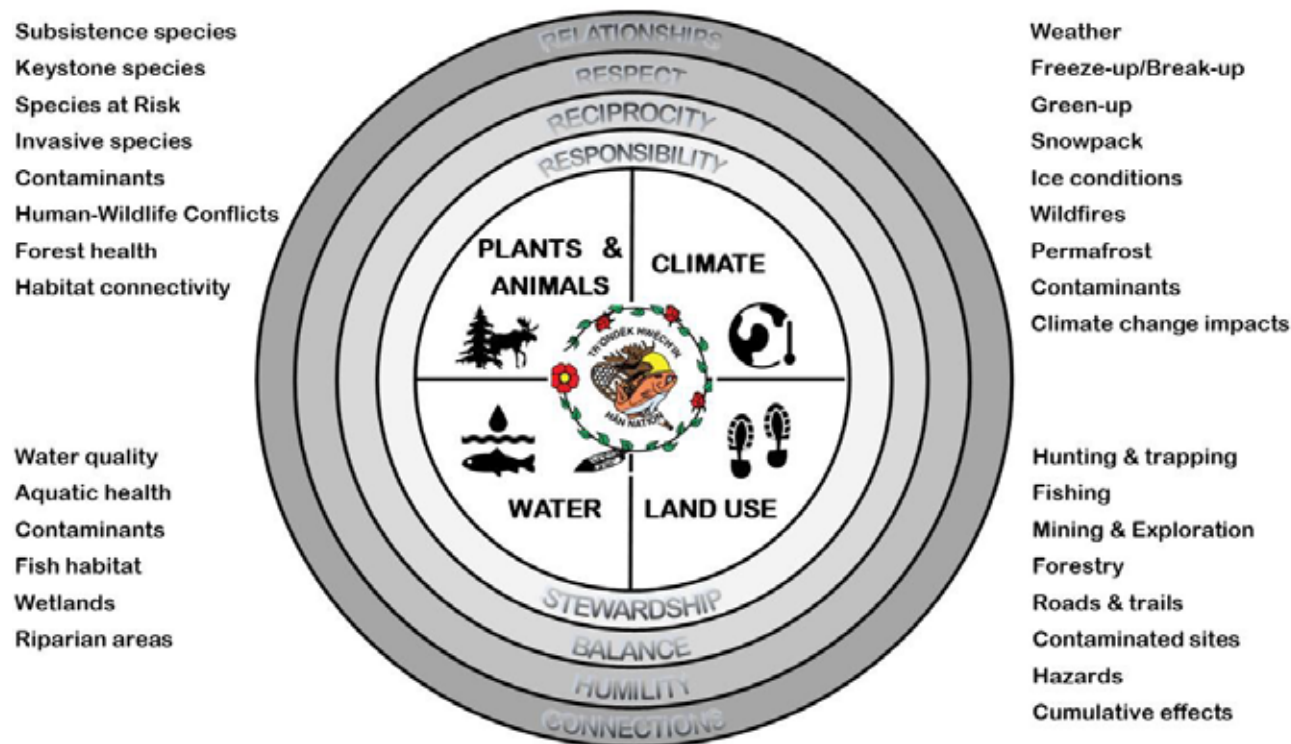


Figure 1. *Tr'ëhudè*. Source: Tr'ondëk Hwëch'in. (2023). *Tr'ondëk Hwëch'in ecological and land use monitoring plan: 2023-2025*. Tr'ondëk Hwëch'in Natural Resources Department.

Navigating Uncertainty and Limitations

Tr'ondëk Hwëch'in expressed concerns around facilitating effective management and collaboration in a way that upholds the *TH Final Agreement and Self-government Agreement*, and sees a need to modernize legislation and policy such as the *Yukon Wildlife Act*, the *Yukon Quartz Mining Act* and the *Yukon Placer Mining Act*, to adopt regulations, monitoring, and reclamation regimes that can effectively steward *łuk* (fish) and *nun* (animals) and their habitat in the TH TT. Cumulative effects (the combined and interactive impact of past, present, and potential future activities and natural processes) frameworks and thresholds are urgently needed. Uncertainty about future management regimes also exists prior to the finalization of the *Dawson Region Land Use Plan* (DRLUP).

TH has also identified a need for new ways of addressing concerns about fish and wildlife, including assertion of TH subsistence rights in the context of modern harvest pressures; management of *jëjik* (moose) harvest in the TH TT to address growing pressures and their impacts on subsistence harvest and enabling TH Land Guardians to carry out TH stewardship principles on the land.

Climate change is driving rapid shifts in the TH TT, adding uncertainty to our efforts to maintain healthy ecosystems. Changing environmental conditions include increasing frequency and magnitude of natural disasters like landslides, flooding, wildfire, changes in species ranges, migration patterns, and timing of key events in life-histories, and in relationships between species.

Given the proximity to the international border with the US, many of our fish and wildlife concerns are jurisdictionally complex. Ensuring sustainable populations of *tr'ojà'* (salmon), migratory *chuga* (birds) and *wëdzey* (caribou) that span international borders is challenging, and we acknowledge the good work and ongoing efforts of co-management boards and committees tackling these issues, such as the Porcupine Caribou Management Board (PCMB), the Yukon River Panel (YRP), the Fortymile Caribou Harvest Coalition, and others.

The complexities include:

- Assessing and understanding the causes of change at different scales, within a context of cumulative effects;
- Impacts of increasing visitation, recreation and hunting affecting local wildlife populations, potentially without familiarity with traditional and local culture; and,
- Capacity and logistical issues of liaising and coordinating with various adjacent First Nations, international and transboundary bodies, municipal, territorial and federal agencies, non-profit, and academic partners.

Workplan Actions

The TH Traditional Territory is 64,000 km² and contains many different ecosystems including boreal forest, alpine and subalpine, wetlands, Beringian steppe, river valleys, and permafrost-influenced ecosystems, each with distinctive species of vegetation, fish, and wildlife. There are also archaeological and paleontological resources of global significance, stemming from the area's rich cultural and ecological history. *Tr'ondëk Hwëch'in* – people of the Klondike River – have watched over this land for generations, and their culture and economy are built on a healthy connection to the land which are reflected by the goals and actions in this Work Plan.

This Work Plan is divided into six themes. Within each section, we outline the context and importance of the species and ecosystems that inform action items developed to address interests and concerns. Where we have recent data related to the species or ecosystems in each section, we share that information to provide an outline of our current shared knowledge. All action items are found in Appendix A.

Braided creek in summer
by Jodie Giesbrecht



Bull moose by Connie Riemer

1. Jëjik · Wëdzey · Dëbe – Moose · Caribou · Sheep

These animals are central to *Dënezhu* (people of this land), and to Yukon culture, diet, and ways of life. TH Citizens rely on many species for subsistence, including *jëjik* (moose), *dëbe* (sheep) and *wëdzey* (caribou). Sustainable harvest practices and *Tr'ëhudè* (our way of life) allow TH Citizens and Yukoners to maintain these connections today. While the Dawson area has experienced a lot of human disturbance, effects on different species are variable.

Community members expressed concern over increased harvest effort, declining harvest success, increasing pressure from predators, and shifts in animal distribution. Other concerns include impacts of human activity and industry on ungulate habitat and distribution, the impacts of increased access into species' habitat from road development, and the impacts of helicopter traffic on ungulate populations, particularly *dëbe* and *wëdzey*. Community members asked for more monitoring of these species, for better data sharing between partners monitoring and researching these animals, and for stronger enforcement and education to support sustainable and respectful harvesting. Community members also asked for thresholds to be identified

in effort to address the impacts of mining and road development, analysis of habitat enhancement projects carried out in other jurisdictions and consideration of applications here in the TH TT, and for the development and use of alternatives to helicopters where possible when monitoring *dëbe* and *wëdzey* populations.

Jëjik · Moose

There are nine *jëjik* management units (MMUs) that overlap within the TH TT. Population estimates are provided for the most recent survey years for MMUs with robust information. Census surveys show *jëjik* densities in the Dawson Goldfields are among the highest in the Yukon. However, land users and TH Citizens report increased harvest effort; travelling farther and for a longer time to meet their subsistence needs.

Table 1. Current information and population summaries for *jëjik* · moose¹

Moose Management Unit	Survey year	Population estimate	Population trend notes
Dawson West ² 100% in TH TT	1989 <i>partial</i> 2017	2017: 1,718	First full survey completed in 2017; densities in line with Yukon average of 100 to 250/1,000km ²
Upper Klondike Highway ³ 34% in TH TT	2002 <i>partial</i> 2017	2017: 837	Density of 99/1,000 km ² at low end of Yukon average; Likely decline since 2002
Dawson Goldfields ⁴ 100% in TH TT	1989, 1997 and 2002 <i>partial</i> 2008 2015, 2023	2008: 1,580 2015: 1,504 2023: <i>pending</i>	Population stable between 1985 and 2015; 2023 results are pending
Lower Stewart White Gold Area ⁵ 49% in TH TT	2012, 2021	2012: 1,147 2021: <i>pending</i>	
Hart River 49% in TH TT	Population of this MMU has not been estimated		
Ogilvie River 100% in TH TT	Population of this MMU has not been estimated		
Dempster Highway 62% in TH TT	MMU has never been surveyed as it is awkwardly positioned around the highway corridor		
Fishing Branch/Eagle Plains 13% in TH TT	Population of this MMU has not been estimated		
White River 28% in TH TT	Population of this MMU has not been estimated		

- 1 Full and summary reports for all available surveys, and information about how *jëjik* are managed can be found at yukon.ca/moose.
- 2 Boyce, P., Sutor, M., Kielzler, M., Czetwertynski, S., Westover, S., McCulley, A. and Potie, J. 2024. **Moose survey: Dawson West moose survey area, early-winter 2017**. Yukon Fish and Wildlife Branch report SR-25-01, Whitehorse, Yukon, Canada.
- 3 Government of Yukon. 2023. **Upper Klondike Highway early winter moose survey 2017 - report summary**.
- 4 Boyce, P., Czetwertynski, S., Sutor, M., Kienzler, M., McCulley, A. and Westover, S. 2024. **Moose survey: Goldfields Moose Management Unit, early-winter 2015**. Yukon Fish and Wildlife Branch Report SR-24-08, Whitehorse, Yukon, Canada.
- 5 O'Donoghue, M., M. Kienzler, and Bellmore, J. 2013. **Moose Survey: Lower Stewart River – White Gold, late-winter 2012**. Yukon Fish and Wildlife Branch Report TR-13-09. Whitehorse, Yukon, Canada.



Caribou in the Tombstones
by Joe Bishop

Wëdzey · Caribou

Wëdzey (caribou) are vital to Tr'ondëk Hwëch'in, holding central cultural significance while supporting subsistence practices and playing a key ecological role throughout the Traditional Territory.

Two types of *wëdzey* exist within the Tr'ondëk Hwëch'in Traditional Territory. The Clear Creek, Hart River, and Klaza herds are non-migratory woodland caribou that make seasonal movements in elevation within their range. The Porcupine (barren ground), Fortymile, and Nelchina herds, are migratory caribou that undertake long-distance migrations, moving across the broader landscape.

The relationship between the Tr'ondëk Hwëch'in and *wëdzey* is deep-rooted and long-standing. The earliest physical evidence of the *Hän* people in the Tr'ondëk Hwëch'in Traditional Territory is an 11,000-year-old *wëdzey* antler punch used to hone stone tools, discovered at *Tr'ochëk* (Dobrowolsky 2001). This artifact underscores the enduring connection between the *jëje-in* (people) and *wëdzey*.

Historically, the movement of *wëdzey* throughout the Traditional Territory in part shaped the seasonal patterns of *Dënezhu*, playing a foundational role in the wellbeing and seasonal life cycles of *Dënezhu*. The annual migration of *wëdzey* was a vital source of food and materials, supplying skins for clothing and dwellings, sinew for sewing, and bone and antler for tools (Dobrowolsky 2003).

Declines in abundance and availability of large migratory *wëdzey* herds have had significant impacts on *Dënezhu*, with community documents noting loss and mourning over changes in *wëdzey* populations. Tr'ondëk Hwëch'in government is actively involved in herd co-management, advocacy and guardianship to support recovery and continued population health.

Table 2. Current information and population summaries for wëdzey · caribou¹

Caribou herd	Survey year and population estimate	Population trend
Porcupine ²	2017: 218,000 2025: 143,000	Significant decline from 2017 population peak of 218,000. However, the current population estimate is still within the 'Green Zone' under the Harvest Management Plan.
Fortymile ³	2017: 84,000 2022: 38,000 2023: 35,000 2024: 29,000	Significant decline from 2017 peak of 84,000. Body condition of adults and calves is improving which may signal a stabilization in the current decline.
Nelchina ⁴	2019: 53,000 2022: 21,000 2023: 9,000 2024: 13,000 2025: <i>pending</i>	Significant decline from peak count in 2019 thought to have been caused by poor winter and spring migration survival. Caribou condition improved in 2024 and numbers increased.
Hart River ⁵	2006: 2,200 2015: 2,662 2025: <i>pending</i>	Herd appears stable. Annual composition surveys completed. Population census survey Sept 2025.
Clear Creek ⁶	2001: 900 2018: 792 2025: <i>pending</i>	Surveyed 16 of 24 years between 1997 and 2021. Stable or very slowly declining.
Klaza ^{7 8}	989: 441 1996: <i>attempted</i> 2000: 700 2012: 1,179 2024: 913	Herd size has declined but appears stable based on the current population estimate and regular composition surveys.

- ¹ Wëdzey herds are surveyed for population estimates periodically. For Porcupine, Fortymile, and Nelchina herds, population estimates, and other work are undertaken collaboratively with the United States Department of Fish and Game.
- ² a) https://pcmb.b-cdn.net/wp-content/uploads/2025/02/PCH-Technical-Report_2025_web.pdf b) 2026. ADF&G completes photocensus for the Porcupine and Central Arctic Caribou Herds in summer 2025
- ³ Alaska Harvest Management Coalition. 2019. Fortymile caribou herd harvest plan 2019-2023. Alaska Department of Fish and Game, Fairbanks, Alaska.
- ⁴ Bentzen, T. 2023. 2022 Fortymile Caribou Photocensus Results. ADF&G internal memo. Bentzen, T. 2023. 2022 Fortymile Caribou Photocensus Results. ADF&G internal memo. Bentzen, T. 2023. 2022 Fortymile Caribou Photocensus Results. ADF&G internal memo.
- ⁵ Hegel, T. 2016. 2015 Population estimate for the Hart River Caribou Herd. Internal memo report, Fish and Wildlife Branch, Department of Environment, Government of Yukon.
- ⁶ Russell, K.L., Beckmann, K., O'Donoghue, M., and Russell, K.J. 2023. Clear Creek Caribou Herd population estimate 2018. SR-23-05 Fish and Wildlife Branch, Department of Environment, Government of Yukon.
- ⁷ Hegel, T. 2013. Klaza caribou herd inventory studies: 2012 activities. Yukon Fish and Wildlife Branch report PR-13-01. Whitehorse, Yukon, Canada. [klazacaribouactivities2012_0.pdf](#)
- ⁸ Russell, K, Bechmann, K., Potié, J. and S. Taylor. 2026. Klaza Caribou Herd Population Estimate 2024. Yukon Fish and Wildlife Branch report SR-26-02. Whitehorse, Yukon, Canada. [env-klaza-caribou-herd-population-estimate-2024-report.pdf](#)



Beadwork *dēbe* on leather
by Jodi Giesbrecht

Dēbe • Sheep

Land users expressed concerns about the impacts of development and helicopter use (industrial and tourism) on *dēbe* (sheep) and about habitat quality and availability. Traditional Knowledge and local knowledge indicate that *dēbe* numbers and recruitment are currently low. Across the range of thinhorn sheep, including in populations within the Yukon, western science data indicates substantial population declines, though data is limited in many areas including the TH TT. Multiple sources list environmental conditions related to climate change, such as temperature and precipitation changes leading to increased snow depth and icing events, as a primary driver of population change (e.g. **Western Association of Fish and Wildlife Agencies Wild Sheep Initiative**, 2025).

Recent *dēbe* surveys within the TH TT have been primarily focused on *Ddhāl Ch'ël Cha Nān* (ragged mountain land or Tombstone Territorial Park). Ground-based surveys have primarily been conducted in *Ddhāl Ch'ël Cha Nān* since 2002 and aerial surveys since 2014. Due to the logistical challenges associated with surveying *dēbe* populations, population size or density estimates are not calculated; instead, minimum counts, demographic data, and birth rate are recorded.

The objective of the ground-based survey is to observe and classify *dēbe* on summer ranges associated with known mineral licks to estimate lamb ratios in the area. This survey is conducted from the Dempster Highway between late June and early July. The aerial survey is conducted largely within the park, at six primary nursery areas. In 2024, six additional areas were added to expand the search coverage. Surveying was not possible in 2025 due to wildfires and logistical constraints; however, monitoring is ongoing.

Historical information includes aerial wildlife inventory surveys in 1978 providing a snapshot of *dēbe* (Larsen, 1978).

2. Chu – Water

TH Elders often remind us that “water is life”; clean, abundant *chu* (water) is a foundation of life in the TH TT. All *chu* is seen to be connected, sustaining all beings and is tied to *tuk* (freshwater fish), *nän* (land), and *nun* (animal) health, and to TH cultural identity. The TH TT falls within the *Chu Kon Dëk* (Yukon River) and the Mackenzie River watersheds which each have their own distinct assemblage of species and aquatic habitats.

Community members spoke clearly about their concerns regarding mining’s impact on *chu*, calling for greater monitoring of waterways and wetland health, for stronger protections from the impacts of mining, and for more community-driven oversight of permitting and monitoring. Also mentioned was that all *chu* is connected, including groundwater, so it is important to understand and protect all areas within the TH TT.

Specific places like the *Tthe T’ak Ndëk* (Chandindu/Twelvemile River), *Therian Dëk* (Coffee Creek), and *Dhänt’al Ndëk* (Indian River) were named as areas of concern. There was also strong interest in greater wetland protections and restoration efforts, and in establishing baseline data to track the cumulative effects of industry on waterways and wetlands across the TT. Climate change effects on waterways were also a concern (e.g. increasing temperatures and thawing permafrost contributing to changing water quality and quantity).

TH actively participates in *chu* quality monitoring across several key waterways within its TT including Hunker Creek, Bonanza Creek, California Creek, *Tr’ondëk* (Klondike River), and Ogilvie River. Monitoring efforts on Hunker, Bonanza, and California Creeks are conducted in partnership with Government of Yukon Compliance, Monitoring, and Inspections to assess the impacts of placer mining in the Klondike and Sixtymile watersheds. These include continuous 24/7 turbidity monitoring and monthly sampling for total suspended solids and field parameters during the summer months. *Tr’ondëk*, Ogilvie, and Eagle Rivers are sampled monthly year-round to ensure changes in water quality on these important rivers are monitored. Of the 22 indexed sites monitored by



Blackstone River near Cache Creek by Ashely Bower-Bramadat

TH and Government of Yukon, two have been of marginal quality (unstable or lower water quality; not suitable for human consumption). Another 15 sites were of fair quality (stable, but requires monitoring to ensure water quality does not degrade into unsafe levels for humans or biodiversity). For more information, see the **Yukon Water Data Catalogue**.

These and other water quality concerns have led TH to develop several *chu* quality monitoring and sampling programs to assist with identifying changes caused by industrial or environmental contamination at locations important to TH for human consumption and/or fish and wildlife including:

- Remote *chu* temperature monitoring at 12 sites, primarily along the Dempster Highway including sites within the *Tr'ondëk* and *Tthe T'ak Ndëk*, part of the *Chu Kon Dëk* (Yukon River) Watershed and sites along the *Ttth'oh Zraq Dëk* (Blackstone River) part of the Mackenzie-Edeh Njik (Peel River) Watershed.
- Groundwater sampling at well sites, monitoring outflows from infrastructure such as sewage lagoons and wastewater treatment plants, flood mapping, hydrometric station data, ice monitoring, and emergency response to environmental disasters.
- In July of 2024, TH also began *chu* quality monitoring in the McQuesten River downstream of the Eagle Mine failure (June 24th, 2024) in the TH TT. This work is in collaboration with researchers, Government of Yukon Water Science and Stewardship Branch, Yukon University, and academic institutions.
- TH also reviews available *chu* quality data to help keep community members informed about the state of local *chu*.

3. *Tr'ojà' · Łuk* – Salmon · Freshwater Fish

Tr'ojà' · Salmon

In the Dawson region, *tr'ojà'* (salmon) populations include *Łuk cho* (Chinook salmon), *they* (chum salmon), and *Łuk tän tl'a* (coho salmon). In recent decades, *Łuk cho* have experienced significant declines. This is due to multiple stressors including warmer water temperatures from climate change, changing ocean conditions, changing water quality, fishing pressures in both the ocean and freshwater, disease and lack of essential nutrients, genotypic and phenotypic effects (fish traits), food competition in the ocean, and growing impacts of industrial development across their range (Murdoch et al. 2023 and von Finster et al. 2025).

There has been less research into *they*, but they are experiencing many of the same stressors. Community members have noticed changes including shifts in *tr'ojà'* run timing, where fish are found, and fewer and smaller fish returning. These observations match scientific monitoring results and are helping to inform adaptive management approaches. This work is being completed through collaborative governance frameworks involving First Nation governments, federal and territorial governments, and international bodies like the Yukon River Panel (YRP).



Grayling in Ttth'oh Zrqy Dëk
(Blackstone River) by Joe Bishop

Traditional and local knowledge about *tr'ojà'* provide a qualitative baseline and a long-term view of how things used to be and helps put current changes into context. Community members shared feelings of grief and frustration about the decline of *tr'ojà'* and the impacts this has on culture and food security. There is a strong call to address cross-border management, ocean bycatch from trawlers, ocean pollution, and habitat degradation closer to home.

At the same time, there is valuable local knowledge about habitats that could support *tr'ojà'* restoration efforts. TH Citizens and local stewards often express a desire to be more involved and better connected to efforts to protect *tr'ojà'*. There is also a clear desire for more local data to understand when, where, and how *tr'ojà'* are using different waterways in the TH TT, how they are affected by contaminants, and where spawning is occurring. The continuation of *tr'ojà'* culture is central to stewardship, including youth mentorship, use of *luk tr'ohgqy hă hjăk* (fish camp) and the protection of spawning areas and other ecologically significant sites.

The historical number of Canadian-origin *luk cho Chu Kon Dëk* (Yukon River Chinook salmon) and their border passage into Canada has declined to some of the lowest ever recorded (Figure 2). The same trend is being seen for Canadian-origin *they*, which are also at record lows (Figure 3). Each year, fish are identified genetically in the lower *Chu Kon Dëk* as either Alaskan-origin or Canadian-origin, based on which spawning populations they originated from.

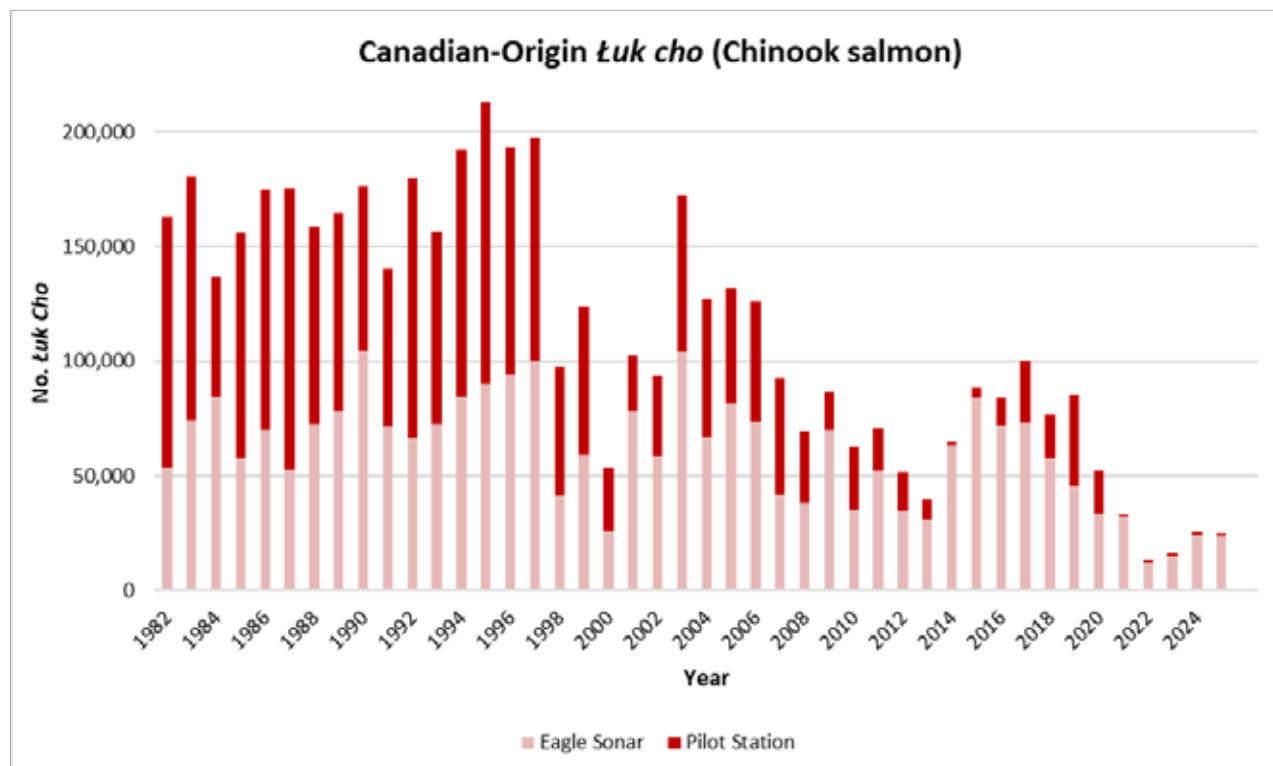


Figure 2. Canadian-origin Łuk cho (Chinook salmon) passage at Eagle station (Can-USA border) and Pilot station (lower Yukon R. in USA). Source: **Yukon River Joint Technical Committee Reports | Yukon River Panel**

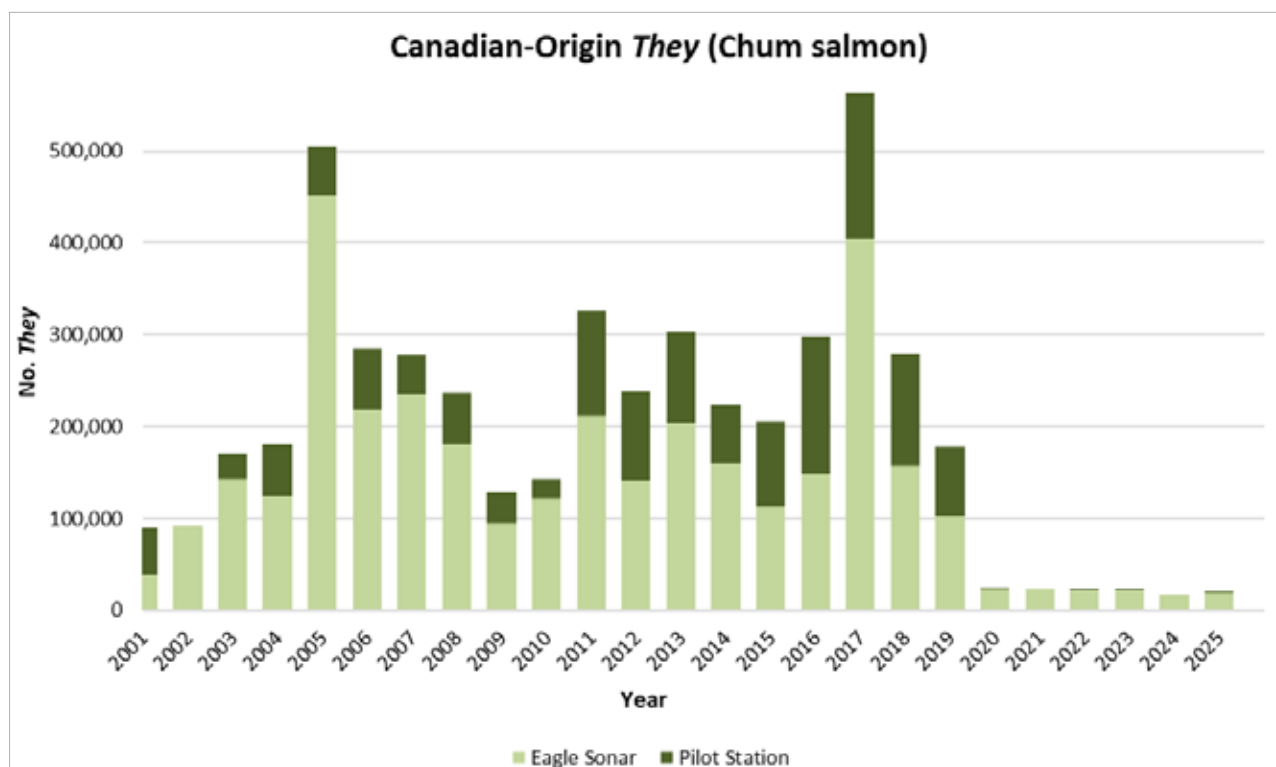


Figure 3. Canadian-origin they (chum salmon) passage at Eagle station (Can-USA border) and Pilot station (lower Yukon R. in USA). Source: **Yukon River Joint Technical Committee Reports | Yukon River Panel**

The *Łuk cho* spawning population in the *Tr'ondëk* (Klondike River) is estimated annually through a sonar program operated by TH. This population has been monitored from 2009 to 2012 and from 2020 to present (Figure 4).

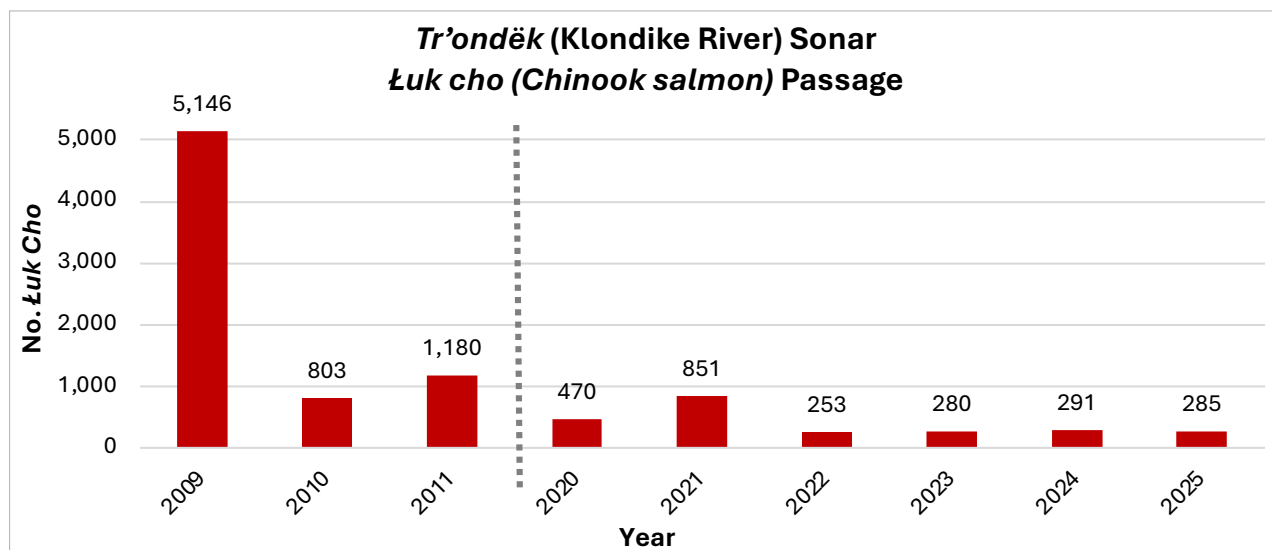


Figure 4. *Łuk cho* *Tr'ondëk* (Klondike River Chinook salmon) passage at mouth of *Tr'ondëk* (Klondike R.)
Source: *Tr'ondëk Hwëch'in*.

Łuk • Freshwater Fish

Łuk (freshwater fish) have traditionally and culturally been connected to *Tr'ondëk Hwëch'in* from time immemorial and to the Dawson community since settlers first came to Yukon in the late 1800's. Today, *Łuk* (freshwater fish) are increasingly viewed as an important local food source, especially since the drastic declines of *tr'ojà'* (salmon), in recent decades.

A wide variety of *Łuk* can be found throughout the TH TT. Of those, *srejl* (Arctic grayling), *srur* (inconnu), *chehlùk* (burbot/lingcod), *Łuk dhey* (round whitefish), and Dolly Varden/char are most desired, with *srejl* being the most harvested.

Community concerns heard and recorded regarding *Łuk* during engagement sessions included water quality, contaminants, rusty-coloured streams, jet boat disturbance on *Łuk* spawning habitat in the *Tr'ondëk* (Klondike River) and promoting freshwater fishing activities to contribute and maintain cultural practices while *tr'ojà'* are struggling.



Grizzly bear
by Jill Johnstone



Fly agaric by
Connie Riemer

4. Carnivore-Human Relations

Tr'ëhudè (our way of life) teaches respect for all our relations – including *zhur* (wolves), *shär cho* (grizzly bear), *shär zrqy* (black bear), and other carnivores. Carnivores are key components of healthy ecosystems impacting everything from the health of prey populations to ecosystem biodiversity. *Zhur*, for example, are recognized as ‘doctors’ and ‘teachers’ of their prey species, helping to keep populations healthy and preventing the land from being overgrazed (TH Knowledge Holder). To foster peaceful relationships with other carnivores, we need to navigate with care, knowledge, and humility to respect their space and survival needs.

Community members shared concerns about potential carnivore impacts on *jëjik* (moose), *dëbe* (sheep) and *wëdzey* (caribou), and about carnivore safety issues near cabins and camps. Some called for more community-based trapping initiatives to encourage more trapping of *zhur*, and others called for greater education and awareness for carnivores and potential conflict, particularly *shär* (bear); others emphasized that carnivores are not commodities and called for thoughtful, respectful approaches rooted in cultural teachings.

5. Ecosystem Health and Protection

Ecosystem health and protection is about upholding the sacred balance of *Tr'ëhudè* (our way of life), and ensuring clean air, *chu* (water), and healthy and whole habitats for future generations. Changes in ecosystem function can result from both human activities, climate change, and natural causes. This theme relates to concepts of maintaining intact ecosystems, supporting species’ ability to adapt to change, and limiting other disturbances, such as invasive species which pose a significant threat to biodiversity. This is often one of the areas where community-based monitoring can be most helpful, as knowledgeable people on the land can help identify species at risk, changes from year to year or from season to season, and new invasive or harmful species.

Community members shared concerns about the cumulative impacts on ecosystems in TH TT. Specific concerns included mining, heli-tourism and other disturbances, and off-road vehicle use, especially in sensitive areas like calving grounds and wetlands, and their combined effects on the ecosystem. Community members voiced desires for stronger enforcement, for better monitoring, and for decision-making processes around industrial development to be better grounded in Indigenous values and informed by ecological data.

Seasonal Round

Traditionally, *Hän* people were nomadic, living in close relationship with the land and moving with the seasons. These movements followed the cycles of *nun* (animals), *luk* (freshwater fish), and *gü* (plants) on an annual basis. Families moved to specific places at different times of the year to harvest *gü* and *nun* when they were abundant. If an area or species was not doing well, it was left to rest and recover. Respect for the *nän* (land) meant harvesting only what was needed and using everything that was taken; allowing for long-term health and abundance of the *nän*.

Hän people followed the land's signals to guide their seasonal movement. For example, when the fireweed began to bloom, soapberries ripened, and thunderstorms rolled through, it signaled the arrival of *luk cho* (Chinook salmon) in *Tr'ondëk* (Klondike River). This intimate knowledge of the *nän* is woven in *Hän* culture, language, storytelling, and relationships. "[Traditional] Knowledge is not just "knowledge" (a noun) but a way of life, something that must be lived (a verb) in order to be understood" (McGregor, 2005). Seasonal round refers to the annual cycle and how the *nän*, *nun*, *luk*, and *gü* guide movement and reciprocal relationships through natural cycles and abundance.

Species at Risk

The TH TT supports many rare and at-risk plants and wildlife, some of which are listed under the federal *Species at Risk Act*. These at-risk plants and wildlife rely on healthy, intact ecosystems to survive. Understanding how these plants and wildlife are doing provides a better understanding of the vulnerability of the whole ecosystem to threats such as climate change or land development.

For example, spiked saxifrage (*Micranthes spicata*) is an at-risk plant with 4 of the 24 known Canadian locations within TH TT. It's a Species of Special Concern, listed under the *Species at Risk Act* in 2019, found growing along shady, cold creeks. Mining activity along waterways and changing temperature and water-levels associated with climate change are some of the biggest threats facing this plant. Monitoring spiked saxifrage provides insights into the pressures facing the remaining eastern Beringian ecosystem (ice-free habitat in Yukon and Alaska during the last ice age) (ECCC 2023).

6. Community Collaboration

Collaboration and communication is a core principle of *Tr'ëhudè* (our way of life). Protecting *luk* (fish) and *nun* (animals) is everyone's responsibility, and meaningful partnerships are necessary to build trust, share resources and capacity, and achieve long-term stewardship goals. This Work Plan is built on this type of partnership and ensures that activities within the TH TT benefit the community and the environment that sustains us. The *TH Final Agreement* sets a foundation for co-management and there is a long history of partnerships working in a good way toward this goal. We strive to continue this legacy of good work and continue to improve our collaborations.

Community members emphasized the need for more open data and a dedicated focus on researchers returning results and information back to the community when working in the TH TT. Community members also called for greater collaboration between all governments and partners working in TH TT and increasing local capacity to address concerns about local *luk* and *nun*. We also heard a desire for continued and increased collaboration with other Yukon First Nations and Alaskan Native Tribes – specifically for *tr'ojä'* (salmon) and *wëdzey* (caribou) and to continue support for growing Land Guardian programs and improving communications with TH Citizens.

Appendix A: Actions, Roles, and Timelines

Action	Details (starting year and notes)	Lead (initiates and shepherds)
Jëjik · Dëbe · Wëdzey – Moose · Sheep · Caribou		
1.1 Discuss and develop hunter effort surveys for <i>jëjik</i> , <i>dëbe</i> and <i>wëdzey</i> that capture licensed hunter effort and where hunters travel from to hunt in the TH TT	• Timeline: 2026	YG
1.2 YG, TH, and DDRRC to share and compare data annually to build a better understanding of harvest pressure on <i>jëjik</i> , <i>dëbe</i> and <i>wëdzey</i>	• Timeline: 2026	YG
1.3 Improve community understanding of <i>jëjik</i> management tools, including the regulatory tools	• Timeline: 2026 and ongoing	DDRRC
1.4 Investigate a collaborative TH-YG Voluntary Hunter Check Station at Dempster/ North Klondike Highway junction	• Timeline: 2026 and ongoing	TH
1.5 Support efforts to reduce <i>jëjik</i> -vehicle collisions by working with YG Highways and Public Works to implement mitigations	• e.g. at the S-curve between Hunker Creek Road and Fisherville • Continue communication with the YG-HPW wildlife collisions working group	YG
1.6 Publish population surveys for Hart River and Clear Creek <i>wëdzey</i> herds and discuss the need for range and risk assessment reporting for the Hart River <i>wëdzey</i> herd	• Timeline: Started in 2025 and ongoing	YG
1.7 Develop collaborative <i>dëbe</i> monitoring approaches, exploring the possible use of drones, camera traps and public reporting	• Focus on alternate methods of monitoring i.e. more ground-based/less-invasive monitoring that facilitates collaboration amongst partners • Timeline: 2027	YG
1.8 Publish <i>dëbe</i> and <i>jëjik</i> survey/observation data relevant at the TH TT scale, in a timely manner. (i.e. mineral lick surveys in Tombstone)	• Timeline: 2026 and ongoing	YG

Action	Details (starting year and notes)	Lead (initiates and shepherds)
1.9 Conduct <i>jějik</i> population surveys in the Dawson West, Hart River and Ogilvie River MMUs and report on the results in a timely manner	• Complete 1 survey in 3 years	YG
1.10 Improve hunting signage using <i>Tr'ėhudè</i> to educate about respectful harvest practices	• Timeline: 2026-27	TH
1.11 Consider adding a <i>děbe</i> population survey within the TH TT	• Timeline: by 2029	YG
Chu – Water		
2.1 Obtain new <i>chu</i> quality data about <i>chu</i> safety for consumption and to establish quantitative baseline characteristics	• e.g. Chandindu and the 2 streams along the Dempster where TH Citizens collect their drinking water • Obtain guidance from YG Water Science and Stewardship Branch and Water Survey of Canada for logger deployment and water sampling • Timeline: 2026-2031	TH
2.2 Continue support for the annual TH Water Summit	• Explore specific topics of snowpack, groundwater, and flooding with potential for working group partnerships • Timeline: Ongoing annually	TH
Tr'ojà' · Łuk – Salmon · Fish		
3.1 Explore development of an Enforcement Protocol Agreement between DFO and TH	• To formalize an approach that supports cultural harvest practices • Timeline: 2026 and ongoing	DFO
3.2 Map juvenile and overwintering habitat of <i>tr'oja</i>	• Timeline: 2026 and ongoing	TH leads DFO assists
3.3 Expand the Chinook Salmon Restoration Project led by DDRRC	• Seek long-term funding • Enhance and vary mentorship opportunities for youth participants • Timeline: 2026-2031	DDRRC

Action	Details (starting year and notes)	Lead (initiates and shepherds)
3.4 To maintain fish camps and cultural continuation while <i>tr'ojà'</i> cannot be harvested, determine health and sustainability of potential freshwater fisheries	• Look at Dolly Varden and Arctic Grayling in Blackstone River • Timeline: 2026 - 2031	TH leads YG supports
3.5 Update the <i>tr'ojà'</i> indicators of the Placer Stream Classification Model (PSCM) as new information becomes available	• As new data gets collected, ensure that it is integration into the PSCM to improve that tool	YG and TH via Intergovernmental Management Group
Carnivore - Human Relationships		
4.1 Develop a Community Plan to manage <i>shār</i> attractants and potential conflicts. Include specific objectives for joint outreach and education, <i>shār</i> awareness training	• Request to start “Community-based solutions to human-bear conflict” process with YG conservation officers/ specialists • Timeline: 2027 and ongoing	TH leads YG supports
4.2 Evaluate existing trapper incentives and sample submission programs	• Evaluate practicality and effectiveness • Timeline: <i>zhur</i> trapping incentive program additions in 2026	YG leads DDRRC supports
4.3 Explore joint training between TH and YG Conservation Officer Services Branch to facilitate greater collaboration in human-wildlife coexistence	• E.g. guardians in support roles • Timeline: 2026 - 2027	YG leads TH supports
Ecosystem Health and Protection		
5.1 Increase community training and awareness of invasive species, at risk, rare species, and culturally important species, as well as abnormal and changing patterns and encourage tracking in iNaturalist during other field activities	• Timeline: 2028	YG leads for rare ecosystems and species ECCC leads for terrestrial at-risk and invasive species DFO leads for aquatic invasive species, YG supports TH and DDRRC support for culturally important species

Action	Details (starting year and notes)	Lead (initiates and shepherds)
5.2 Increase public outreach towards stopping invasive species	• Best practices for OHVs, boats, soil, other vehicles e.g. Fish Education and Ethics Development, Clean. Check, Dry • Impacts of introduced lady beetles and honeybees and plants • Timeline: 2027	YG leads for best practices the Check, Drain Dry program. ECCC leads for introduced terrestrial species DFO leads for species at risk
5.3 Develop and deploy signage on the Klondike and Yukon Rivers for boat speed and timing to protect <i>tr'ojâ'</i> spawning	• Timeline: 2026-27	DDRRC lead TH support
5.4 Funding support conservation projects related to species at risk in TH TT guided by TH values, community priorities, and conservation measures in recovery documents	• Timeline: 2026-2031	ECCC funding for terrestrial species at risk DFO funding for aquatic species at risk
Community Partnership Building		
6.1 Increase opportunities for joint training	• Focus on training that builds capacity to collaborate on field projects • Increase the proportion of training completed in the TH TT (fewer held in Whitehorse / South) • Timeline: 2026 and ongoing	YG leads TH supports
6.2 Work Collaboratively with TH and YG Environment to improve and increase local trapper and fur crafting workshops	• DDRRC expansion from school trapping workshops to providing varied training with a focus on fur crafting • Timeline: 2026 and ongoing	DDRRC
6.3 Develop collaborative and standardized messaging between TH and YG Environment communications groups for different scenarios (wildlife awareness, harvest management etc.)	• Speed up approvals for time-sensitive messaging • Timeline: 2026 and ongoing	YG to initiate TH to collaborate
6.4 Ensure research is shared with the community by including such conditions in research permits. Also by leveraging open-data policies. Where applicable, ensure funding criteria reflect the requirement for sharing with the community	• Also, suggest including conditions in research and operational permits • Timeline: 2027 then ongoing	TH leads for TH permits, YG leads for YG permits ECCC leads for ECCC-funded projects

Action	Details (starting year and notes)	Lead (initiates and shepherds)
6.5 Continued support for the Land Research Confluence and use the opportunity to identify projects/issues that are best suited for academic partners	• Timeline: Bi-annually	TH
6.6 Hold thematic species events annually on an as needed basis	• E.g. <i>Drin Zhur</i> that explain wolves' role in the ecosystem including predator-prey relationships, human harvest, etc. • Timeline: 2026 and ongoing	DDRRC leads TH and YG support



Community Engagement at
Ālūt Nēhējēl in April 2026 by
Rebecca Rothgeb

Appendix B: Future Research ideas

There were many ideas and concerns discussed during the production of this plan. The ideas listed below are those which are outside the scope of the 5-year timeline for this plan, and/or are beyond the capacity for the partners to complete within their current work planning. These are nonetheless important, and we think they are best tackled through new and ongoing partnerships with academic researchers. These research ideas will be discussed and refined collaboratively between the partners of this plan and presented as potential research aims during a Land Research Confluence (action item 6.5; Appendix A).

Research Interest	Context
Mapping ecological trajectories of placer mine reclamation	Understanding how and over what timeline ecosystems recover following disturbance and reclamation activities from placer mining.
Developing standards and best practices for placer mine reclamation	Following from an improved understanding of how ecosystems recover following disturbance, work to develop standards and best practices for effective reclamation that supports key values identified in TH TT (e.g., within the DRLUP, in the Tr'ondëk Hwëch'in Ecological and Land Use Monitoring Plan, etc.).
Improve our understanding of <i>shär cho</i> abundance, diet, and movement ecology in the Goldfields	Build on DNA and camera trap work completed in the Klondike Plateau and Oglivie Mountains that investigated <i>shär cho</i> (grizzly bear) and <i>shär zrçy</i> (black bear) density. Investigate ways to combine diet information and movement ecology into our understanding of potential impacts from habitat loss and fragmentation on <i>shär</i> populations.
<i>Nàhtrq̃'</i> (wolverine) population dynamics and ecology studies	Continue support for establishing robust abundance estimates of <i>nàhtrq̃'</i> in the TH TT. This includes improving our understanding of how wolverines respond to disturbance and the impacts of climate change.
Impacts of permafrost melt to stream water quality (e.g. rusty streams, wetlands)	Continue to develop research investigating the impacts of permafrost melt on aquatic ecosystems.

Research Interest	Context
<i>Zhur</i> (wolf) population dynamics (including DNA/ family group demographics)	Improve our understanding of <i>zhur</i> populations in the TH TT. We have little information regarding wolves in TH TT yet concerns and potential issues are commonly raised: for ungulate population health; for human safety; and for greater respect and consideration of their critical role in ecosystems.
Quantify the effects of helicopter use on <i>dēbe</i> (sheep) and other mammals	Develop research to investigate the impact of aerial traffic on ungulates, in particular <i>dēbe</i> . Where effects and concerns are identified, work with TH and local managers to test less-invasive methodologies.
Long-term monitoring of climate change impacts	The results of climate change are becoming increasingly apparent in TH TT - hill sloughing, permafrost thaw and forest changes due to warmer summers, changing distributions and behaviours of flora and fauna, to name a few. These are all parts of a bigger picture of a warming climate and understanding and it is critical to project what these changes will mean for Citizens, fish and wildlife, and wider ecosystems in the TH TT.
Habitat enhancement projects as a tool to improve ungulate populations	Develop research to investigate if habitat enhancement projects could be utilized as an effective tool to improve ungulate populations within the TH TT (i.e. prescribed burning to help <i>dēbe</i> populations when they are low).
Use eDNA to investigate <i>tr'ojà'</i> presence within TH TT	Better understanding of <i>tr'ojà'</i> distribution, habitat refugia, and juvenile rearing habitat.

Resources & References

Tr'ondëk Hwëch'in Ecological and Land Use Monitoring Plan

- https://trondek.b-cdn.net/wp-content/uploads/2024/05/TH_Ecological_and_Land_Use_Monitoring_Plan_FINAL.pdf

Jëjik · Dëbe · Wëdzey – Moose · Sheep · Caribou

- Jëjik:
<https://yukon.ca/moose>
- Porcupine Caribou Knowledge Hub:
<https://braidingknowledgescanada.ca/en/porcupine-caribou-knowledge-hub/>
- Fortymile wëdzey resources:
<https://yukon.ca/en/fortymile-caribou-harvest-management-plan>
- Dëbe:
<https://yukon.ca/dalls-sheep>
- Dëbe aerial surveys:
Larsen, D.G. 1978. Wildlife inventories in GMZ 2 Yukon Territory with an evaluation of Dalls' sheep populations and harvest 1978. 25pp. Retrieved from EMR library.
- Dëbe status summary 2025:
<https://wafwa.org/initiatives/wsi/>
- Wëdzey:
Dobrowolsky, H., Hammer, T. J., Yukon Territory, & Tr'ondëk Hwëch'in Hän Nation. (2001). Tr'ochëk: The archaeology and history of a Hän fish camp.
- Tr'ondëk Hwëch'in. (2003). A history of the Tr'ondëk Hwëch'in (H. Dobrowolsky, Author).

Chu (Water) Quality and Quantity and Wetlands

- Hydrometric data in searchable map of Canada:
https://wateroffice.ec.gc.ca/map/index_e.html?type=real_time&default_marker=data_availability
- Yukon Water Data Catalogue:
<https://yukon.maps.arcgis.com/apps/webappviewer/index.html?id=2365a4c0b8744f34be7f1451a38493d2>
- Alaska open-source platform:
<https://aktemp.uaa.alaska.edu/viz/>

Tr'ojà' (Salmon) and Łuk (Freshwater Fish)

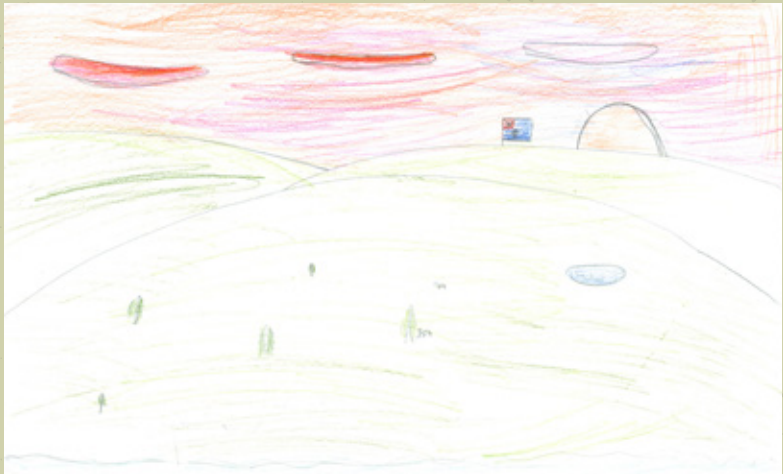
- Tr'ojà':
Murdoch, B.M. Connors, N.W.R. Lapointe, J. Mills Flemming, S.J. Cooke, and C. Mantyka-Pringle. 2024. Multiple environmental drivers across life stages influence Yukon River Chinook salmon productivity. *Canadian Journal of Fisheries and Aquatic Sciences*. 81(1): 97-114. <https://doi.org/10.1139/cjfas-2022-0254>
- von Finster, A., Murdoch, A., Gill, J.A., Hawkins, T., Hodgson, J., and Knight, K. 2025. Summary of issues facing Canadian-Origin Yukon River Chinook salmon: A review of limiting ecosystem and habitat factors. *Can. Tech. Rep. Fish. Aquat. Sci.* 3717: vi + 116 p. <https://doi.org/10.60825/h1pj-h896>
- Yukon River Joint Technical Committee. 2026. Yukon River Salmon Season Summary and 2026 Outlook. 45pp. Source: [YUKON-JTC-26-01-2025-Season-Review-2026-Outlook.pdf](#)
- Łuk:
<https://yukon.ca/en/yukon-freshwater-fishes>

Ecosystem Health and Protection

- iNaturalist:
<https://www.inaturalist.org/>
- Spiked saxifrage: Environment and Climate Change Canada. (2023). *Management plan for the Spiked Saxifrage (Micranthes spicata) in Canada*. Species at Risk Act management plan series. Environment and Climate Change Canada, Ottawa. iv + 17 pp. Retrieved from <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/management-plans/spiked-saxifrage-2023.html>
- McGregor, D. (2005). Traditional ecological knowledge: An Anishnabe woman's perspective. *Atlantis: Critical Studies in Gender, Culture & Social Justice*, 29(2), 103–109. <https://atlantisjournal.ca/index.php/atlas/article/view/1057>
- Other Species at Risk recovery documents:
<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>



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