

A COMMUNITY BASED FISH AND WILDLIFE WORKPLAN FOR THE NA-CHO NYÄK DUN TRADITIONAL TERRITORY 2024-2028

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a community based fish and wildlife workplan for the NA-CHO NYÄK DUN TRADITIONAL TERRITORY 2024-2028 Walking the Talk 3



DRAWING BY CAMARAH BERNHARDT

# Acknowledgements

This Community-Based Fish and Wildlife Work Plan was developed by a working group consisting of members representing the First Nation of Na-Cho Nyäk Dun, Mayo Renewable Resources Council, and the Government of Yukon's Department of Environment. The working group would like to thank the people of Mayo, and community members from afar, for their thoughtful and passionate contributions to this plan.

The original graphic illustrations featured in this plan are by the talented Marjie Cowell at Majestic Solutions and the wildlife drawings are from the grade 4-6 class (2020-21) at J.V. Clark School. Each artist is individually credited within the plan by their work of art, and their art highlights the significance of fish, wildlife, and the land for the First Nation of Na-Cho Nyäk Dun.

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Appendix 1



DRAWING BY AVA YOUNG

# Introduction

A community-based fish and wildlife work plan is a way for a community to come together, share knowledge, and develop a path to work on fish and wildlife issues together. It is one way that the Government of Yukon, the First Nation of Na-Cho Nyäk Dun and the Mayo District Renewable Resources Council decide how – and by whom – these issues and priorities will be tackled.

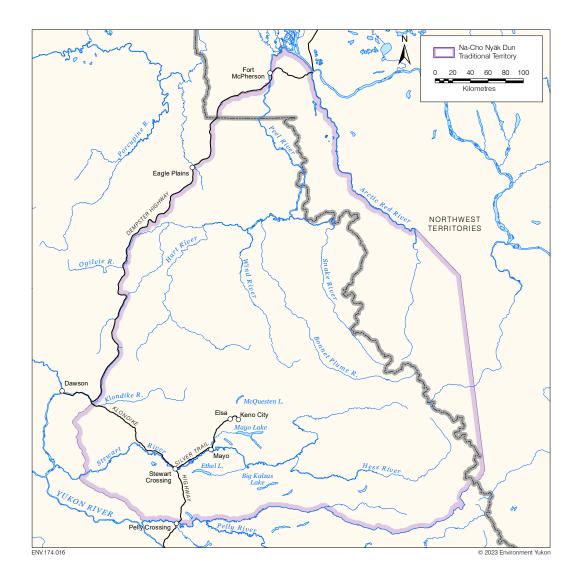
#### <u>Vision</u>

We envision a Traditional Territory where all people live with the natural world with respect and reverence. Our decisions are guided by the responsibility to be wise caretakers, entrusted to us by our Elders and the public for future generations. Together, we use all ways of knowing to give back to the land, water, and animals as they give to us.

### Walking the talk

This plan describes the work we are hoping to complete over a 5-year period and is a commitment to work together for the fish, wildlife, and habitats within the First Nation of Na-Cho Nyäk Dun Traditional Territory. We feel that in order to be stewards of this land, we must Walk the Talk together.

This plan consists of 86 actions that focus on **'walking'** - gathering information, seeing and understanding, and time spent on the land, as well as **'talking'** - developing guidance, communicating out, and having conversations together.





DRAWING BY WINTER SICOTTE

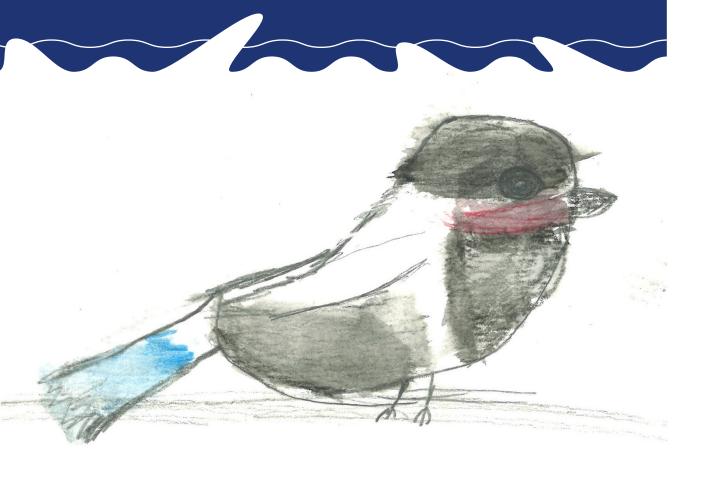
#### What are our priorities?

The community and the Government of Yukon, the First Nation of Na-Cho Nyäk Dun, and the Mayo District Renewable Resources Council identified the following goals as the most important to achieve over the next five years:

- Habitat: A better understanding of ecosystems as habitat for diverse species. Gatherings to set direction for habitat management. Communication to better manage human behaviour for habitat protection.
- Moose: A better understanding of moose populations and their habitat, and of human relationships to moose. Communication to better manage human behaviour toward moose.
- Caribou: A better understanding of caribou populations and their habitat, and of human relationships to caribou. Communication to better manage human behaviour toward caribou.

#### What are our priorities? cont.

- Sheep: A better understanding of sheep populations and their habitat, and of human relationships to sheep. Communication to better manage human behaviour toward sheep populations and their habitat.
- Carnivores: A better understanding of carnivore species and their habitat, and of human relationships to carnivores. Communication to better manage human behaviour toward carnivores.
- Fish: A better understanding of fish populations and their habitat, and of human relationships to fish. Gatherings to set direction for fish populations and their habitat. Communication to better manage human behaviour toward fish populations and their habitat.
- Access and development: Communication and gatherings to better manage access and development.
- Land use planning and environmental assessment: A better understanding of ecosystems, human disturbance, and of human relationships to land and water. Gatherings to set direction for land-use planning and environmental assessments. Communication to better prepare for land-use planning and environmental assessments.
- Education and awareness: People of the Traditional Territory and visitors are informed about the natural environment, wild species and their habitats, and are encouraged to be stewards of the land and water. The working group partners collaborate with each other and other groups to deliver high quality services related to fish and wildlife.
- Monitoring and climate change: A better understanding of how climate change is impacting the fish, wildlife and habitat of the Traditional Territory, and what is needed to better anticipate and manage our land using a climate change lens.



DRAWING BY AVA YOUNG

#### How this plan came to be

This community-based work plan is the sixth developed for the First Nation of Na-Cho Nyäk Dun Traditional Territory. It builds on previous work plans, but also includes new issues and ideas brought forward by Mayo community members, Government of Yukon, the First Nation of Na-Cho Nyäk Dun and the Mayo Distract Renewable Resources Council.

In February 2021, the working group met to review the 2014-2019 work plan and agreed to develop a new one. They held a subsequent meeting to conduct an implementation review of the existing plan which helped to identify issues that were still important and should be carried forward.

We circulated a survey and conducted oral interviews to capture concerns and values of community members. Their responses reflected what people were noticing while spending time on the land in the Traditional Territory.

### How this plan came to be ... cont.

Many community members attended the booth we held at five markets during the summer of 2021 in Mayo. Each booth focused on a different theme in the plan and gave an opportunity for the community to share information with the working group via in-person conversations and by completing a survey.

We invited community members to participate in an open house in November 2021. During this, we heard additional comments that helped to shape solutions and ideas for the plan.

The working group met in the summer of 2022 to review all of the community feedback and to draft the plan's vision, objectives, themes, and action items.

In November 2022, the community came together again for a dinner to review the draft action items and to identify what they felt were the most important actions for them.

Information gathered from the plan review, survey, market booths, open house and community dinner shaped the final plan.

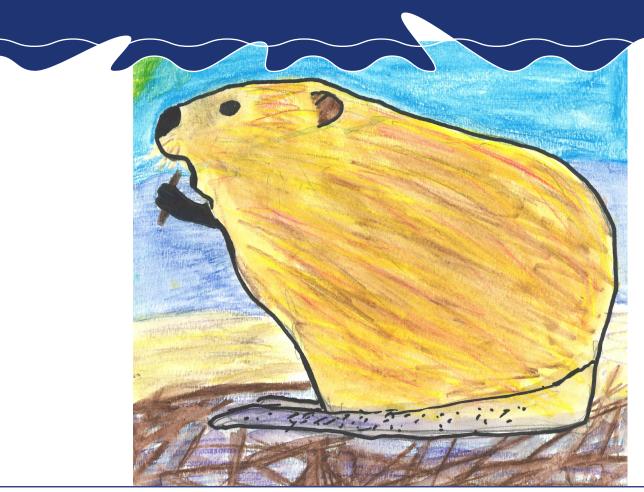
#### Let's celebrate our successes from our last plan!

There have been six fish and wildlife plans for the Na-Cho Nyäk Dun Traditional Territory, spanning more than 25 years. In our experience, working together to develop a shared vision and common goals for fish and wildlife management can result in great successes, both small and large. We are happy to celebrate many successes from the 2014-2019 plan, including:

- Conducting surveys of moose, caribou, and sheep to map important seasonal habitats in areas with high levels of industrial development, with a focus on the upper Stewart River watershed. These data were gathered to address community concerns about the lack of information on wildlife for environmental assessments and land use planning.
- Studying and monitoring of water quality in Cache Creek, a tributary of the South McQuesten River that the community identified as recently contaminated.

## Let's celebrate our successes from our last plan!

- Surveying moose populations in the Mayo, Upper Klondike Highway, and Lower Macmillan River Moose Management Units, and in the Beaver River watershed to address community concerns about high levels of harvest and provide baseline data for environmental assessments. Community meetings were held to develop a regulation change to limit harvest of moose in the Mayo Moose Management Unit.
- Surveying lake trout populations in Minto, Ladue, and Kathleen lakes, and angler harvest surveys in Ethel and Mayo lakes to address community concerns about harvest levels and collect baseline data on population health.
- Continuing with local ground-based monitoring of moose, grayling runs, berries, cones, mushrooms, birds, small mammals, and carnivores, to gather baseline data and monitor changes in the environment associated with climate change. Also continued with annual local knowledge interviews conducted by local students. These programs addressed the community priority of keeping a close eye on local ecosystem health.
- Year-round land guardians hired by the First Nation of Na-Cho Nyäk Dun, which was an action requested by many in the community during the last planning process.



DRAWING BY WINTER SICOTTE

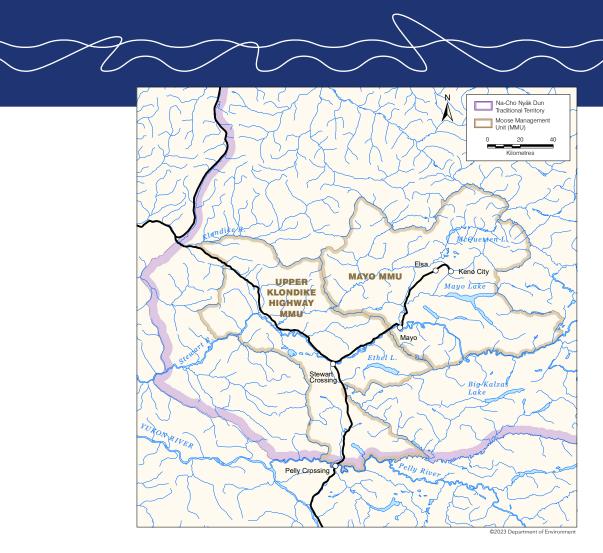
# Habitat

#### What are the issues?

People continue to be concerned about changes to important fish and wildlife habitats in the Traditional Territory and their ability to have informed discussions about the potential impact of existing and new developments. There is a growing concern for the habitat loss and disruption that will occur from new mining exploration, development and access roads, including their cumulative impacts. The community has also noticed an increase in habitat destruction from off-road vehicle use.

This has raised awareness about the need for more baseline information for key wildlife habitats - particularly wetlands and water quality - and to have conversations about where additional protection might be required.

#	Recommended action	By who	Time frame
1	Continue wetlands study in Beaver River and Mayo areas	YG	Ongoing
2	Prioritize and explore options for wetland research with partners, including calculating carbon sequestration in wetlands	NND	Ongoing
3	Continue wetland mapping and ground- truthing (e.g. remaining parts of Mayo and McQuesten River watershed)	YG	Ongoing
4	Evaluate the appropriate scale for wetland mapping for land use planning and environmental assessment	YG, NND	2025
5	Propose an Area of Special Consideration for Roop Lakes with the Department of Fisheries and Oceans	NND, YG	Ongoing
6	Continue to implement Habitat Protection Area management plans in the Traditional Territory	YG, NND	Ongoing
7	Complete development of South McQuesten River water quality objectives and plan.	YG	2026
8	Collect Traditional Knowledge and values on wetlands from Elders and knowledge holders	NND	Ongoing
9	Convene meeting to discuss potential new protected areas	RRC, YG, NND	2024
10	Conduct a review and update of the Devil's Elbow - Big Island Habitat Protection Area management plan	YG	2025
11	Approve the renewal of the Horseshoe Slough Habitat Protection Area management plan	NND	2024
12	Develop and communicate a list of priority wildlife and habitat values to Wildland Fire Management Branch	RRC, YG, NND	2025



# Moose

#### What are the issues?

There continues to be strong concerns about the moose populations in the Traditional Territory and the potential for the overharvest of moose.

It was expressed that mining roads increase the access into the Traditional Territory, leading to lower successes for local moose hunters, and that the development of additional residential lots along the road corridor also affect the rights and abilities to hunt.

More planning, enforcement, and action is needed to ensure moose populations are not impacted by large quotas and developments, and additional baseline information and harvest reporting will assist with informing management decisions.

#	Recommended action	By who	Time frame
13	Complete surveys of Mayo Moose Management Unit (MMU) and Upper Klondike Highway MMU	YG	2027
14	Continue with community ground based moose monitoring	YG	Annually
15	Explore a game guardian hotline and incentive program for harvest monitoring	NND	2024
16	Create a coordinated strategy for deploying game guardians during hunting season	NND	2024
17	Submit regulation change proposal for Upper Klondike Highway MMU	RRC	2024
18	Develop moose recovery plan for Mayo and Upper Klondike Highway MMUs	YG, NND	2026
19	Develop a moose management plan for the Traditional Territory, including need for contamination studies	NND	2028



DRAWING BY COLE PATTERSON

# Talking

#	Recommended action	By who	Time frame
20	Support a community moose hunt with educational opportunities for sharing of traditional hunting knowledge	RRC, NND	Annually
21	Communicate the results of moose contaminant studies	NND	2024
22	Consult on the outfitter quota process	RRC, NND	2024
23	Enhance communication and coordination between the Government of Yukon's Conservation Officer Services Branch and game guardian program (e.g. signage, materials, and media)	YG, NND	2024
24	Continue to share harvest reporting at annual May Gathering	YG, NND	Annually



DRAWING BY RYDER PETER-PROFEIT

# Caribou, sheep and carnivores

### What are the issues?

There are seven woodland caribou herds in the Traditional Territory. There are four distinct local herds including the Ethel Lake, Clear Creek, Hart River, and Bonnet Plume.

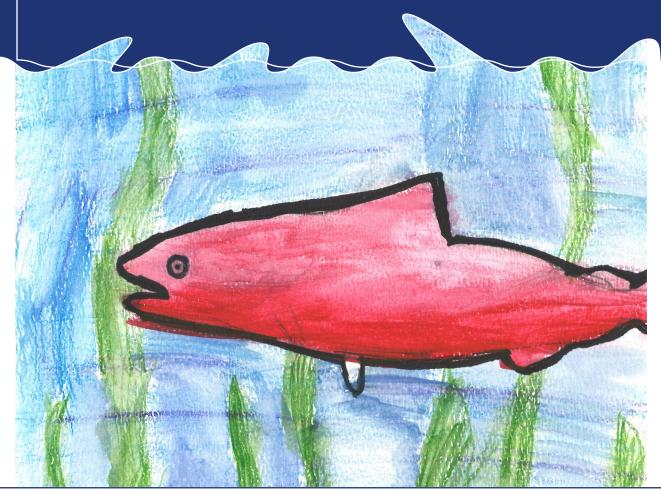
There continue to be questions around the status, health, harvest

and level of knowledge of these local caribou herds. Overall, there is a strong interest in maintaining the current harvest and population monitoring programs of caribou.

#	Recommended action	By who	Time frame
25	Continue to monitor movements and distribution of caribou in the upper Stewart River and Beaver River watersheds to determine gaps in knowledge and herd status	YG	Ongoing
26	Continue annual surveys of Ethel Lake caribou herd	YG	Annually
27	Continue monitoring Hart River caribou along the Dempster Highway	YG	Annually
28	Apply the management and monitoring recommendations from the Clear Creek caribou herd range assessment, including collar monitoring	YG	Ongoing
29	Develop and utilize a cumulative effects assessment tool for woodland caribou	YG	2025
30	Survey populations of sheep in the Ogilvie and Wernecke mountains (Game Management Zone-2) to assess population sizes, distribution, and movement patterns	YG	2024
31	Continue monitoring recruitment of sheep in and around Ddhaw Ghro	YG	Annually
32	Continue to review and recommend sheep monitoring programs for mining and mining exploration projects	YG	Ongoing
33	Explore approaches to minimize human-wildlife conflicts and improve community safety	RRC, YG, NND	Ongoing
34	Consider expanding studies on the effectiveness of bear translocation in mitigating human-bears conflicts	YG - COSB and F&W	2025
35	Assess the need for conducting baseline bear censuses in the context of proposed new all-season roads	YG	Ongoing
36	Integrate a community trapper program with a moose recovery plan	RRC, YG, NND	2026

# Talking

#	Recommended action	By who	Time frame
37	Support a community caribou hunt with educational opportunities for sharing of traditional hunting knowledge	RRC, NND	Annually
38	Hold conversation at May Gathering to consider the need and desirability of voluntary no-hunting of Ethel Lake caribou	RRC, NND	Annually
39	Collect and document traditional and local knowledge on sheep movement patterns and connectivity with targeted knowledge holders	NND	2028



DRAWING BY AVA YOUNG

# Fish

### What are the issues?

The health and status of local freshwater fish populations continues to be a priority issue in the region. Individuals have expressed that they are experiencing lower angling success in certain lakes and rivers due to the changing climate and overfishing.

Proposed developments are causing growing concern – especially for contamination runoff that will impact quality of water.

While there are a number of fish surveys currently occurring in the Traditional Territory, these surveys should continue, and locals would like to see additional surveys conducted that will help improve the baseline knowledge of different areas.

The need for more education and communication with the community is highly desired, especially around fish population survey results, the impacts of catch and release, and fishing closures and restrictions.

#	Recommended action	By who	Time frame
40	Continue to study the effects of placer mining on grayling in Granite Creek and the Roop Lakes system	YG	Ongoing
41	Expand grayling monitoring on the South McQuesten River to include contaminants	NND, YG	2024
42	Put in a sonar station to count salmon on the Stewart River	NND	2024
43	Conduct survey of trout and whitefish in Mayo Lake	YG	2027
44	Develop a large lake lingcod and pike monitoring program in the Traditional Territory	YG	2028
45	Partner with the Department of Fisheries and Oceans to do a community based salmon plan	NND	2028
46	Ensure that concerns about lake and stream levels and impacts to fish spawning and beavers/otters are reflected in the water re-licensing process for the Mayo Lake dam	RRC, YG, NND	Ongoing

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# Talking

#	Recommended action	By who	Time frame
47	Target knowledge holders to share knowledge about lingcod and pike fisheries on Ethel, Hanson, McQuesten lakes and the Stewart River	RRC	2024
48	Host discussion on reducing pressure on fisheries, stocked lakes, access, and diversifying fishery species	RRC, YG, NND	2024
49	Continue to monitor contaminants of concern in South McQuesten River Arctic Grayling and Northern Pike	RRC, YG	2024
50	Host discussion on outcomes of Ethel Lake survey, consider regulation proposals	RRC, YG, NND	2024
51	Produce outreach material on live release and ethical handling practices	RRC, YG	2024



DRAWING BY WINTER SICOTTE

# **Access and development**

## What are the issues?

The Traditional Territory has a history of mining projects, but there are growing concerns around potential increased access that would be created by larger mining activities that are proposed in the near future.

More monitoring, enforcement and management of access is needed to limit the disturbance caused by new developments and increased access.

#	Recommended action	By who	Time frame
52	Explore a game guardian hotline and incentives program for reporting access concerns	NND	2024
53	Evaluate the need for off-road vehicle management areas in the Traditional Territory	RRC, YG, NND	2024
54	Approach aviation companies and outfitters about providing hunting/fishing access to community members to remote parts of the Traditional Territory	RRC, NND	2024
55	Contribute community-prioritized areas and waterways for monitoring to Na-Cho Nyäk Dun	RRC	Annually

# Talking

#	Recommended action	By who	Time frame
56	Explore avenues to promote responsible off-road vehicle use, including signage and educational materials	RRC	Ongoing
57	Develop an informative video to complement new guiding documents about mining in the Traditional Territory	RRC, NND	2028
58	Discuss and develop a program to monitor trail access and use	RRC, YG, NND	2025



DRAWING BY RYDER PETER-PROFEIT

# Land use planning and environmental assessment

#### What are the issues?

The community is interested in completing regional land use planning (pursuant to Chapter 11 of the Final Agreement) and local area planning, particularly to address management of industrial development and to implement protection measures for key habitats.

Being as prepared as possible for upcoming land use planning will allow the community and the working group partners to go into these planning discussions. It will be important to compile the information that is available for the traditional territory, to have discussions with the community about the areas most in need of protection, and to inform the community about opportunities available to them to participate in these planning processes.

#	Recommended action	By who	Time frame
59	Collect and organize existing resources, data, and documentation that may support land use planning	RRC, YG, NND	Ongoing
60	Integrate work already done on combining Traditional Knowledge and Western science to equal and complement each other in regional land use planning and environmental assessments	NND	2024
61	Update surface disturbance data for land use planning and assessment of cumulative effects	YG	2024
62	Review and update the Wildlife Key Areas database	YG	2025
63	Raise and explore specifics for adaptive management, holistic approaches, reciprocity, etc. with intent to explicitly include them in land use planning	RRC, YG, NND	Ongoing

# Talking

#	Recommended action	By who	Time frame
64	Host community workshops to choose indicators for evaluating cumulative effects, including exploring how to include Traditional Knowledge	RRC, YG, NND	2024
65	Host community engagement to inform the public in an accessible way about land use planning, including opportunities for input and coordination with First Nations	RRC, NND	2024



DRAWING BY COLE PATTERSON

# **Education and awareness**

## What are the issues?

Education and communication are tools that the community feels are incredibly valuable for both local individuals and people who are visiting the Traditional Territory.

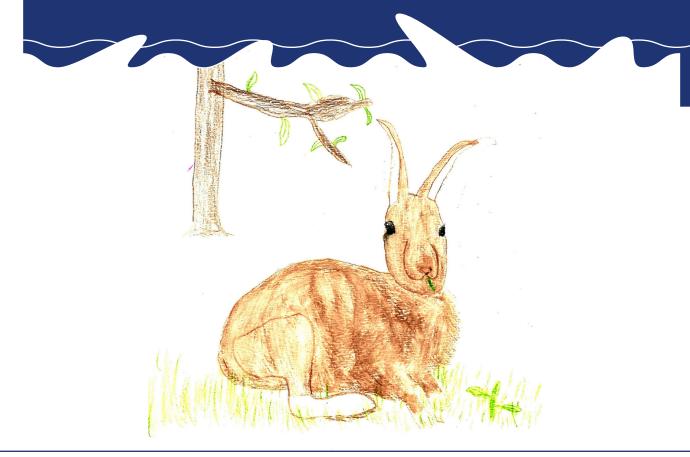
Expanding wildlife viewing materials can help people learn about the land they are on and the importance of being stewards of it. Updating signage can help communicate important restrictions and sensitivities of an area.

The community wants to be informed about what is happening on the land through more knowledge sharing of population surveys, opportunities to engage in planning and management processes, and through an improved online presence.

#	Recommended action	By who	Time frame
66	Develop visual education tools for use on signs and outreach materials	RRC	Ongoing
67	Replace faded and missing "no cow hunting" signs	YG	2024
68	Update and replace signage at Devil's Elbow - Big Island	YG	2025
69	Ensure coordination between the Wildlife Viewing program and other signage/brochure materials in the Mayo area	RRC, YG	Ongoing

# Talking

#	Recommended action	By who	Time frame
70	Continue to develop, coordinate, and support opportunities to empower youth (e.g. culture camps)	RRC, NND	Ongoing
71	Explore options for an online presence to communicate with community members	RRC	2024
72	Host a Hunter Education and Ethics Development workshop in Mayo	RRC, YG	2025
73	Host a trapper education program	RRC	2027
74	Host a RRC day with a focus on community education and local presenters and consider integration with the school	RRC	Annually
75	Increase collaboration and coordination with Conservation Officer Services Branch	RRC, NND	Ongoing
76	Update the RRC on progress of the Peel Watershed Regional Land Use Plan implementation process in order to better communicate with the community	NND	Ongoing
77	Host meetings to review and discuss respective mandates and current files, roles and responsibilities (e.g. Land claim agreements, Porcupine Caribou Management Board)	RRC, YG, NND	Every five years



DRAWING BY KEENAN MORGAN

# Monitoring and climate change

## What are the issues?

Keeping an eye on the overall ecosystem health and monitoring are ongoing interests of the community. People have concerns about climate change, forest fire risks, invasive species, changes in local wildlife populations, and water quality and would like to see additional monitoring of these areas. The community also prioritizes promoting ongoing respect for the land and fish and wildlife, and finding more ways to get "eyes on the land", such as game guardians and connecting people to their traditional lifestyles.

Continuing existing long-term monitoring programs, such as the Community Ecological Monitoring Program and local knowledge interviews, is valuable to understand changes on the land and areas where changes are happening the fastest. Climate change education and understanding the impacts the climate is having are important to the community.

#	Recommended action	By who	Time frame
78	Continue the Community Ecological Monitoring Program including both local and technical knowledge	YG	Ongoing
79	Complete water strategy with long-term water monitoring programs	NND	2028
80	Develop curriculum and deliver climate change education in the schools	YG	Annually
81	Continue Cache Creek water quality monitoring	YG	Ongoing
82	Continue camera-trapping studies to investigate cumulative effects of development in Beaver River, Clear Creek, Coffee Creek, and Mayo areas	YG	2024

# Talking

#	Recommended action	By who	Time frame
83	Collect and document changes to habitat with targeted land users	NND	Ongoing
84	Continue Traditional Knowledge study for Stewart River, including story map, habitat suitability mapping, and community knowledge holder interviews	NND	Ongoing
85	Complete surveys and local knowledge interviews to identify important wildlife habitats	YG	Ongoing
86	Continue with annual local knowledge interviews and produce and share annual diaries with the community	RRC, YG, NND	Annually



DRAWING BY CAMARAH BERNHARDT

# What is next?

This plan is intended to be a record of fish and wildlife issues within the Na-Cho Nyäk Dun Traditional Territory and a description of the proposed cooperative approaches to address these concerns.

Over the next five years, the parties will focus their efforts on trying to address as many of these actions as they can in their existing budgets, and within available resources and capacity.

However, changes can occur and new priorities can emerge. Recognizing this, the parties will review plan implementation in 2026 and identify any changes or new developments. The parties will complete a final plan review in 2028 and begin work towards a new work plan.

OBJECTIVES	WHO?	ACTIVITIES FROM 2014 TO 2019	OUTCOMES
Habitat Gather baseline habitat information	YG/NND	Continue gathering baseline habitat information for Upper Stewart River, Rackla, Peel watershed, Keno, Clear Creek caribou range and other areas with high development activity.	Mayo MMU late winter habitat survey in 2014. Upper Stewart River sheep winter habitat surveys in 2014 and 2016, and lambing surveys in 2014, 2016, 2017, and 2018. Upper Stewart River caribou rutting habitat surveys from 2018-2022*. Boreal caribou late winter distribution survey in 2019. Radio-collars monitored on caribou in Hart River Herd (2014-Ongoing), Tay River herd (2016-2018; 2020-Present*), Clear Creek herd (2017- 2019; 2023 - Ongoing*), Rackla area (2018-2019), Upper Stewart River (2020-2021*), and boreal herd (2020-2021*).
	YG/NND/RRC	Continue to identify wildlife key areas.	Results from wildlife surveys above used to map WKAs. Conducted local knowledge interviews with outfitters to map Upper Stewart River sheep WKAs. Ongoing work with internal YG group to map caribou WKAs from satellite telemetry data for Clear Creek, Hart River, Tay River, Moose Lake, and boreal caribou herds.
	YG/NND	Continue to work with the Yukon government fisheries program to determine appropriate approach for gathering baseline information on fish habitats in the Peel area.	Corresponded with researcher working on whitefish habitats in upper Peel River. Conducted fish distribution habitat study in the Beaver River watershed, including tributaries in passes to Peel watershed. Discovery of Dolly Varden in Beaver River watershed. Habitat suitability mapping for Dolly Varden.
	YG/NND	Continue with water quality monitoring in the traditional territory and expand monitoring in Upper Stewart River if development increases.	Collection of baseline water quality information continued as a part of monitoring at placer and active hard rock mines. Water quality study at Cache Creek. Ongoing water quality monitoring in McQuesten River watershed. Summary report produced and water quality objectives developed in 2022*.
	YG	Explore the option of developing habitat suitability maps to help inform environmental assessments and land use planning.	Not completed.
Promote wildlife values in land	NND/RRC/YG	Continue to provide input on wildlife values to environmental assessments under YESAA.	Ongoing high-priority activity for all parties as a part of YESAB assessments.
use planning and management	NND/RRC	Identify and map traditional use areas for inclusion in environmental assessments under YESAA.	Data on traditional use areas mapped by NND digitized and used by the First Nation in environmental assessments.
	YG/RRC/NND	Identify a draft boundary and a summary of the issues for consideration in a local area plan for the Mayo area. Meet with the Land Planning Branch at the Department of Energy, Mines and Resources to review.	Not completed.
	YG/RRC/NND	Participate in the public engagement to develop regulations under the Territorial (Yukon) Lands Act that will address the impact of off-road vehicles in environmentally sensitive areas.	All parties participated in meetings to develop off-road vehicle regulations.
	NND/RRC	Work together to identify local areas where there are priority concerns about potential impacts caused by off-road vehicles.	Not completed.
	NND/RRC	RRC to request updates from NND on industry briefings.	NND Lands staff regularly attended RRC meetings and updated the RRC on issues including industry briefings.

OBJECTIVES	WHO?	ACTIVITIES FROM 2014 TO 2019	OUTCOMES
Habitat			
Address the contaminated area at Cache Creek	YG	Identify source of contamination and recommend mitigations for Cache Creek.	Regular water quality monitoring by NND and YG continuing. Summer fly-over identified a likely source area.
Moose			
Address high moose harvest pressure	RRC/NND/YG	Review harvest management in the Mayo moose management unit and explore options to address the sustainable harvest of moose.	Regulation change proposal submitted in 2019; accepted by YG in 2021*, implemented in 2022*.
	RRC/NND/YG	ND/YG Develop a communication plan to educate and inform all harvesters about moose harvest concerns.	No formal plan developed.
			MDRRC newsletters on moose harvest issues sent to all mailboxes. NND citizens' meeeting to discuss moose harvest issue. Discussed at May Gatherings.
	NND/YG	Continue to collect moose harvest data.	NND and YG continuing with harvest data collection.
	NND/YG	Review harvest reporting models used in other areas to determine their utility.	No formal review of other models. YG has modified harvest reporting to develop online options. NND has modified their data collection methods.
	NND	Work with elders to identify potential moose harvesting areas that are close to the community and accessible.	Not formally done.
	RRC/NND/YG	Explore options for using wolf harvest to increase moose numbers in the Mayo/ Upper Klondike moose management units. This work would be guided by the Yukon Wolf Conservation and Management Plan (2012), and all partners would collaborate to determine program design, implementation and evaluation.	Not completed. Plan partners participated in a Wolf Plan review and this was discussed.
	T V (i		No discussion yet of a local project.
Understand moose population changes as	YG	Consider repeating censuses of Mayo and Upper Klondike Highway moose management units.	Early-winter census of Mayo and Upper Klondike Highway MMUs completed in 2017.
a result of predation, seasonal mortality	YG/RRC/NND	Continue community monitoring of moose in the Mayo area.	Annual ground-based moose monitoring continued, including collection of recruitment information.
Freshwater Fi	ish		
Address potential declines in fish	YG/NND	Carry out a lake trout population assessment on Minto and Ladue lakes.	Minto Lake, Ladue Lake, Kathleen Lake, Ethel Lake surveyed in 2014, 2017, 2019, 2022* respectively.
populations as a result of harvesting or changes to	YG/RRC/NND	Review fish management objectives and regulations on Mayo and Ethel Lakes.	Angler harvest surveys conducted at Ethel Lake in 2018 and Mayo Lake in 2019. These will be used to support a review of fishing regulations on these lakes.
habitat	YG/RRC/NND	Explore options for educating anglers to help raise awareness of local fishery concerns.	Not completed. Issues about catch-and-release fishing presented in the annual regulations summary.
	YG	Continue annual monitoring of grayling fishing	Grayling monitored annually on South McQuesten.
		with a focus on the South McQuesten River, Talbot Creek, and Moose Creek.	Ongoing research on placer mining effect on grayling on Granite Creek
	YG/RRC	In light of a potential decrease of pike in McQuesten Lake, consider fisheries management approaches.	Not completed.
	YG/RRC/NND	Consider what may be a potential decrease in grayling numbers and explore options for monitoring grayling harvest on Mayo River.	Not completed.

\*indicates actions that were implemented after the duration of the 2014-2019 plan

OBJECTIVES	WHO?	ACTIVITIES FROM 2014 TO 2019	OUTCOMES
Freshwater Fi	ish		
Reduce the potential effects of industrial development on fish populations	YG/RRC/NND	Monitor the Yukon Energy Corporation Mayo Lake drawdown proposal and actively communicate with Yukon Energy Corporation to ensure continued involvement in the proposal review and evaluation of studies, monitoring and adaptive management programs.	The Yukon Energy Corporation drawdown proposal has been withdrawn and has not been resubmitted.
	YG	Conduct fish distribution surveys in Upper Stewart River/Rackla area to improve fisheries information in areas of high potential development.	Fish distribution survey in Beaver and Rackla River watersheds in 2014. Habitat suitability mapping for Dolly Varden in 2019.
Caribou			
Continue to collect harvest information for local caribou herds	YG/NND	Continue annual harvest monitoring for all caribou herds in the traditional territory.	Monitoring of caribou harvest carried out annually.
Carefully manage the Ethel Lake	YG/NND	Continue voluntary no-harvest program for the Ethel Lake caribou herd.	Voluntary no harvest maintained since 2002. Discussed each year at May Gathering.
caribou herd	YG	Continue Ethel Lake caribou rut counts to monitor effect of fire and other factors on herd health.	Rut counts of Ethel Lake caribou herd conducted annually.
Monitor the Clear Creek caribou herd to identify potential issues related to access and harvest on the Clear Creek Road	YG	Monitor population status of Clear Creek caribou herd by continuing rut counts (2 in next 5 years) and conducting a census of the Clear Creek herd.	Census conducted in 2018. Rut counts conducted in 2014, 2017, 2019-2021*.
Reduce the accidental harvest of Hart River caribou by	YG	Maintain collared animals and continue to conduct annual monitoring of Hart River caribou during the hunting season to manage harvest of this herd.	~30 collars maintained on Hart River caribou herd.
Porcupine caribou hunters	RRC/NND	Stay informed and involved with the management of the Porcupine Caribou herd through regular communication with the First Nation of Na-Cho Nyäk Dun Porcupine Caribou Management Board member.	RRC updated as needed by the NND representative on the Porcupine Caribou Management Board.
As required, participate in Fortymile	NND/RRC/YG	Communicate recovery objectives and harvest management planning with First Nation of Na-Cho Nyäk Dun citizens.	Not completed. Harvest management plan has been finalized for this herd, and hunting of the herd by TH citizens and licenced hunters occurred. Herd has since crashed.
caribou harvest management	NND/RRC/YG	If Fortymile caribou return to the Na-Cho Nyäk Dun traditional territory regularly, determine options for engagement in the harvest management planning for this herd.	Harvest management plan developed by YTG and TH. Herd crashed before harvest management was discussed.
As required, collect baseline information and monitor of important habitats the Bonnet Plume	YG/NND	If there is increased development in the Bonnet Plume caribou herd range and gathering data on important habitats of this herd becomes a higher priority, use local knowledge or technical studies to establish baseline information to better delineate herd range and seasonal use.	No increasing development in the Bonnet Plume caribou herd range; mostly protected under Peel Land Use Plan.
caribou herd	YG/NND	If there is a significant increase in development in Bonnet Plume caribou herd range, consider conducting a census of the herd to establish a population estimate.	No increasing development in the Bonnet Plume caribou herd range; mostly protected under Peel Land Use Plan.

OBJECTIVES	WHO?	ACTIVITIES FROM 2014 TO 2019	OUTCOMES
Caribou		·	•
Continue to gather information to understand the Mayo/Elsa caribou population and range	YG/NND/RRC	Continue to gather information on these caribou through other surveys and local interviews.	<ul> <li>NND conducted local knowledge interviews as part of the Beaver River planning process.</li> <li>YG cumulative effects monitoring in Mayo-Elsa area and Beaver River watershed ongoing, including camera traps to gather information about caribou distibution.</li> <li>Data on caribou distribution also gathered during moose surveys in the area.</li> </ul>
Better understand the range and herd status of the Rackla- area caribou population	YG	Explore options to better understand Rackla caribou range and herd status in this area.	Three Rackla caribou radio-collared in 2018. Incidental observations of caribou distribution collected during Beaver River moose survey in 2019.
Reduce caribou meat wastage	RRC	Discuss options for addressing concerns related to the potential waste of meat from the harvest of large bull caribou during the rut.	Not completed.
Monitoring a	nd Stewards	ship	
Monitor for ecosystem health	YG/NND	Continue programs for monitoring ecosystem change on long-term sites.	Program conducted annually as part of the Community Ecological Monitoring Project.
and change	YG/NND/RRC	Continue annual community local knowledge interviews.	Local students and community members continue to conduct annual local knowledge interviews. Annual diaries produced.
	YG/NND	Include questions about invasive species in the local knowledge interviews to help monitor for their presence and abundance.	Questions on invasive species not specifically added to local knowledge interviews but participants were asked about "unusual" species observed and any noticeable changes in plants.
	RRC	Request a presentation and information on rare species from the Yukon Conservation Data Centre to improve knowledge about rare species of plants and animals in the traditional territory.	Not completed.
	YG/NND/RRC	Explore trapping reporting options and methods for getting trapping information back to the community (e.g. Spring Gathering for trappers).	Not completed.
	YG/NND	Monitor for contaminants in waterfowl by working with YG Animal Health Unit to collect and test samples of locally harvested ducks and report back to the community.	Not completed; YG is in early stages of devoloping wildlife health monitoring program.
	YG/RRC/NND	Explore how to access, work with and share mining company wildlife monitoring logs.	Submission and sharing of mining company wildlife logs has improved, but still some room for improvement.
	YG/NND/RRC	Continue to monitor sheep during Ethel Lake caribou rut counts.	Ddhaw Ghro sheep monitored each year during Ethel Lake caribou rut counts.
	YG/NND/RRC	Continue to ask harvesters to avoid harvesting Ethel Lake sheep.	Not completed.
	YG/NND/RRC	Conduct a sheep census in Ddhaw Ghro.	Not completed. Annual rut counts.
Minimize human- wildlife conflicts	YG/RRC/NND	Work with the community to minimize bear-human interactions through reducing attractants.	RRC has supported WildWise programs at the school and at RRC Day. WildWise Yukon provided a presentation to the community in 2019. Community wildlife conflict meeting led by COSB February 2023*. Report pending.

OBJECTIVES	WHO?	ACTIVITIES FROM 2014 TO 2019	OUTCOMES
Monitoring a	nd Stewards	ship	•
Minimize human- wildlife conflicts	RRC	Explore ways to educate the public on bear harvest and use.	Not completed.
Have more "eyes on the land"	NND	Explore options for re-establishing the First Nation of Na-Cho Nyäk Dun game guardian program.	NND hired permanent land guardians.
Create wildlife viewing opportunities	RRC/YG/NND	Approach Yukon Youth Conservation Corps about potential environmental education and enhancement activities within the traditional territory including removal of brush at the Devil's Elbow interpretive site.	Devil's Elbow site regularly brushed out by Wildlife Viewing program and Y2C2 crew.
	RRC/YG/NND	Approach the appropriate Yukon government departments about sharing responsibility for maintenance of waste at highway sites.	Devil's Elbow site maintained by Environment, Minto Bridge site by Historic Sites.
	RRC/YG/NND	Invite Yukon government's Wildlife Viewing program to meet and discuss options for new sites and programs.	New Minto Bridge site developed in 2014; repair in 2021* after powerline work. Major renovation of Alpine Interpretative Centre in Keno in 2016. New signs and kiosk put up on Keno Hill trails in 2017. Replacement of Haldane Mountain trail signage due in 2021*. Annual wildlife viewing programs and hikes in Mayo area. Wildlife viewing pamphlets produced.
Increase trapping activities	NND/RRC	Explore options for creating incentive programs to support local youth and others to use traplines.	In progress.
	NND/RRC	Explore options to support local youth and others to obtain traplines.	In progress.
Encourage respectful hunting practices	RRC/NND	Explore methods for educating community and all harvesters (including guides) about respectful hunting, including use of parts (e.g. hides) and handling (butchering, tanning).	NND collaborated with Yukon University to hold workshops on tanning moose hides.
	RRC/NND/YG	Work with outfitters to review meat distribution program and system for accounting for meat coming into the community	RRC and NND have worked with outfitters to better the meat distribution system in the community.
Improve information sharing	RRC/YG	Formally invite experts (e.g. Yukon government biologists) or agencies to RRC meetings to discuss issues of concern.	Regularly done by RRC for issues of concern.
	RRC	Hold annual event such as "RRC Day" or the "Jimmy Johnny Ball" to increase communication with the community.	RRC Days held in Mayo in 2015 and 2019.

 $^{\star}$  indicates actions that were implemented after the duration of the 2014-2019 plan





PLAN ILLUSTRATION CREDITS: BALD EAGLE: CAMARAH BERNHARDT BEAVER, FOX AND GRIZZLY BEAR: WINTER SICOTTE BLACK BEAR AND RAVEN: COLE PATTERSON CARIBOU AND WOLF: RYDER PETER-PROFEIT CHICKADEE AND WEASEL: AVA YOUNG EAGLE: KEENAN MORGAN MARJIE COWELL (MAJESTIC SOLUTIONS)





A COMMUNITY BASED FISH AND WILDLIFE WORKPLAN FOR THE NA-CHO NYÄK DUN TRADITIONAL TERRITORY 2024-2028