

Traditional Knowledge Data- Mobilization Project Update & Porcupine Caribou Conservation Plan Development

Annual Harvest Meeting, Feb 8, 2022



Agenda

- ▶ Traditional Knowledge - Data Mobilization Project- Update
- ▶ Introduction to the Porcupine Caribou Conservation Plan- Update
- ▶ Questions & Discussion



TK - Data Mobilization Project

Background

- ▶ **Documented TK is an important (and currently lacking) piece of information** that should be used in decision-making and management of the Porcupine Herd.
- ▶ This project was launched to focus on **activating and utilizing existing information** related to Porcupine caribou traditional knowledge **already held** by First Nation and Inuvialuit agencies and develop a **coordinated data management and sharing system** that will allow PCMB to **make use of community observations and knowledge** related to the key traditional knowledge areas of interest identified by the Board in developing a conservation plan for the herd covering its entire range.

Traditional Territories within Canadian Range of the Herd

- **Inuvialuit**
 - Contributed data through WMAC(NS)
- **Gwich'in Tribal Council**
 - Contributed their data
- **Vuntut Gwitchin**
 - Contributed their data
- **Tr'ondëk Hwëch'in**
 - TK being organized through a separate project
- **Nacho Ny'ak Dun**
 - Didn't have easily accessible data for integration



What do we want to know?

The key question areas:

- ▶ Changes in habitat and the types of food available for caribou
- ▶ Changes in herd range and movements (including migration patterns)
- ▶ Changes in local herd management



How does it work?

- PCMB partnered with Trailmark Systems Inc.
- Trailmark is a software that can manage **historical and current land use Traditional Knowledge** information
- Can input **multiple types of information**: written, mapped, recorded
- Secure interface
- Permissions can be **controlled through data sharing agreements**



How the information will be used:

- ▶ Incorporated in the Porcupine Caribou Conservation Plan
- ▶ Used in the future to address questions from the PCMB
- ▶ Available to those with data sharing agreements to query and use the data

Note:

- There is potential to add to the database in the future
- This work is building a database, how the database is used is up to the PCMB and those contributing the data

Where we are at:

- ▶ Developed data sharing agreements
- ▶ Ingested available TK information from Parties
- ▶ Completed a preliminary analysis on a test case

Next:

- ▶ Complete analysis of TK data according to the key questions
- ▶ Go back to Parties and TK holders to ensure interpretations and understandings are correct
- ▶ Integrate into the Conservation Plan as appropriate

Estimated timeframe

- ▶ Analysis- Winter/ Spring 2022
 - ▶ A hybrid approach of letting the TK themes emerge as well as looking to answer the key questions
 - ▶ By Party and by theme
- ▶ Go back to Parties and communities to ensure interpretations and understandings are correct - Spring/ Summer 2022
 - ▶ Organize workshops with TK holders and Parties
- ▶ Integrate into the Conservation Plan -2023
 - ▶ Work with verified analysis of TK data, emerging themes and potential additional questions generated

Examples of data outputs from test case:

- ▶ Searchable text
- ▶ Map locations of information
- ▶ Mapped products

In addition to outputs, users have the ability to query the data

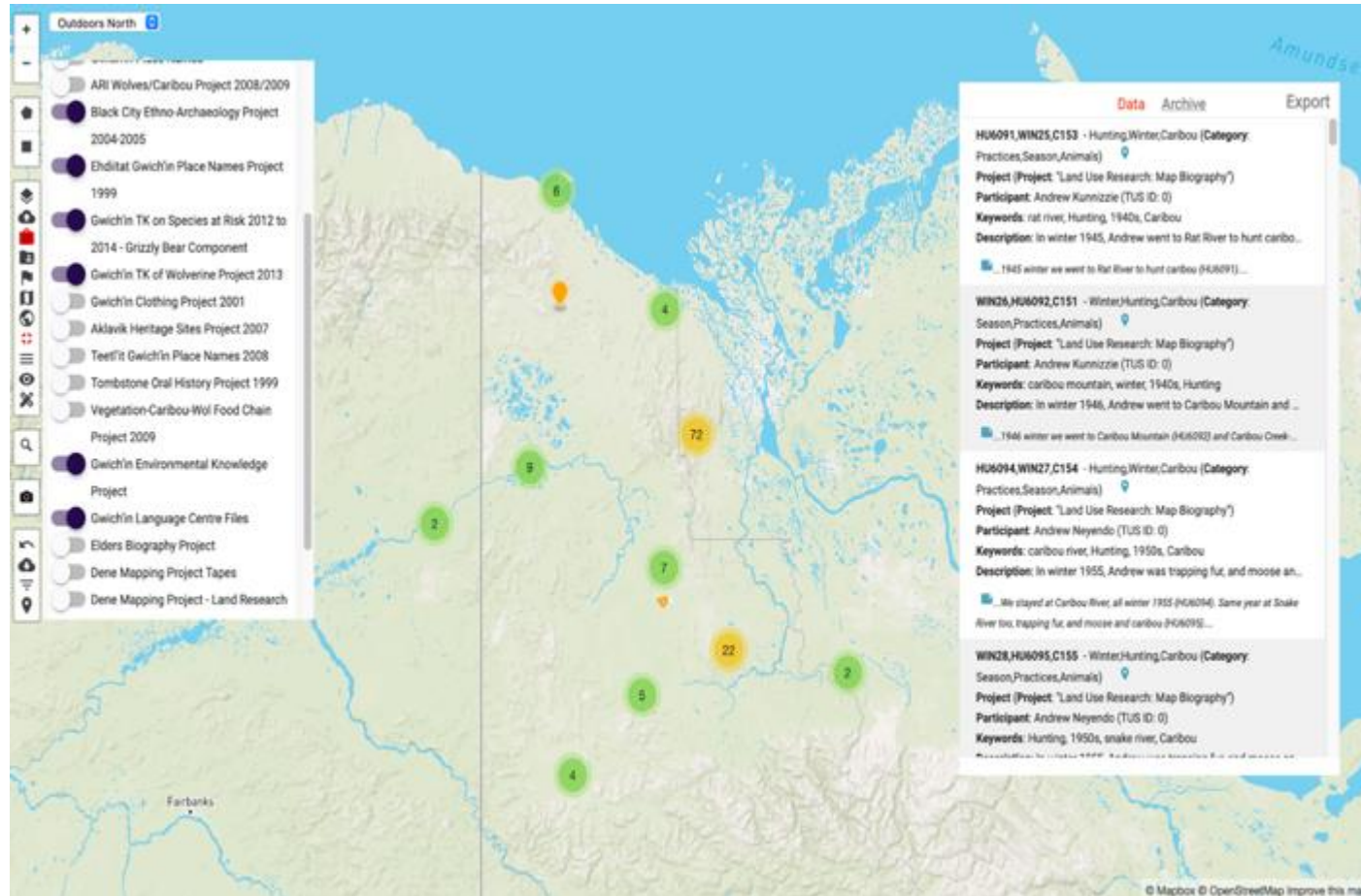


Examples of data outputs:

Text excerpts related to caribou shifting their migration patterns

Project	Text Excerpt	Interpretation of Changes
TK Knowledge holder, GEKP 1995	“Caribou travels all over, and they know their way too. So they get as far as the Yukon, and a couple of years ago people were saying some of our caribou was down in Alaska. Further down, way down in Alaska somewhere, that’s because they were bothered too much I guess.”	Caribou in the early 90s were travelling lower down in Alaska because they were potentially bothered.
TK Knowledge holder, GEKP 1995	“Seems to me the caribou is moving towards Old Crow, that is because they bother them too much this side [Fort McPherson] [...] They [caribou] try again, and sometimes nobody...lots of them pass but then people know there is caribou...all take off with a ski-doo and chase them around and they don’t give them time to sleep or eat or anything like that. Now it seems to me that caribou start going down other side of Old Crow.”	Caribou in the 90s were changing patterns, maybe moving towards Old Crow, Yukon because hunters around Fort McPherson were bothering them too much
TK Knowledge holder., GEKP 1995	“They’ll [caribou] migrate up that way last year [1994] and they pass and they go right up to the head of Peel River through there and sometimes they come this way and there is nothing in Old Crow, so they just migrate.”	In 1994, caribou migrated through Old Crow towards Peel River

Spatial information digitized related to caribou migration from various projects



Example of spatial TK data from various projects

The image shows a web-based spatial data viewer interface. On the left, a sidebar titled "Interview/Map" lists various projects with toggle switches. The main map area displays a dark-themed map of the Arctic region with a complex network of blue lines representing spatial data. On the right, a panel titled "Data" displays detailed metadata for selected data points, including project names, participant names, and descriptions.

Dark

Interview/Map

- Aklavik Heritage Sites Project 2007
- ARI Wolves/Caribou Project 2008/2009
- Black City Ethno-Archaeology Project 2004-2005
- Dene Mapping Project
- Dene Mapping Project - BGC
- Dene Mapping Project - Land Research Tapes
- Dene Mapping Project Tapes
- Ehdittat Gwich'in Place Names Project 1999
- Elders Biography Project
- Gwich'in Clothing Project 2001
- Gwich'in Environmental Knowledge Project
- Gwich'in Knowledge of Porcupine Caribou
- Gwich'in Language Centre Files
- Gwich'in Place Names

Data Archive Export

BGC1,BIGG1,DOGT1,HU1,SSH1,TFD1,TFE1,TFF1 - 1930s,1940s,1950s, Barrenground Caribou,Big Game,Dog Team,Hunting,Snow Shoe (**Category:** Animals,Practices,TimeFrame,Transportation) **Project (Project:** "Dene Mapping Project - BGC") **Participant:** Abe Bluecoat (TUS ID: 6, Community: Arctic Red River) **Description:** TimeFrame: 1930 to 1955 Seasons: 2 NumPple: 1 Orig...

BGC2,BIGG2,DOGT2,HU2,SSH2,TFD2,TFE2,TFF2 - 1930s,1940s,1950s, Barrenground Caribou,Big Game,Dog Team,Hunting,Snow Shoe (**Category:** Animals,Practices,TimeFrame,Transportation) **Project (Project:** "Dene Mapping Project - BGC") **Participant:** Abe Bluecoat (TUS ID: 6, Community: Arctic Red River) **Description:** TimeFrame: 1930 to 1955 Seasons: 2 NumPple: 1 Orig...

BGC3,BIGG3,DOGT3,HU3,SSH3,TFD3,TFE3,TFF3 - 1930s,1940s,1950s, Barrenground Caribou,Big Game,Dog Team,Hunting,Snow Shoe (**Category:** Animals,Practices,TimeFrame,Transportation) **Project (Project:** "Dene Mapping Project - BGC") **Participant:** Abe Bluecoat (TUS ID: 6, Community: Arctic Red River) **Description:** TimeFrame: 1930 to 1955 Seasons: 2 NumPple: 1 Orig...

BGC4,BIGG4,DOGT4,HU4,SSH4,TFD4,TFE4,TFF4 - 1930s,1940s,1950s, Barrenground Caribou,Big Game,Dog Team,Hunting,Snow Shoe (**Category:** Animals,Practices,TimeFrame,Transportation) **Project (Project:** "Dene Mapping Project - BGC") **Participant:** Abe Bluecoat (TUS ID: 6, Community: Arctic Red River) **Description:** TimeFrame: 1930 to 1955 Seasons: 2 NumPple: 1 Orig...

BGC5,BIGG5,DOGT5,FXC1,FXW1,GB1,HU5,MA1,MO1,SSH5,TRA1,WF4,WLC1 - Barrenground Caribou,Big Game,Coloured Fox,Dog Team,Grizzly Bear,Hunting,Marten,Moose,Snow Shoe,Trapping,White Fox,Wolf,Woodland Caribou (**Category:** Animals,Practices,Transportation) **Project (Project:** "Dene Mapping Project - BGC") **Participant:** Amos Niditchie (TUS ID: 5, Community: Arctic Red River) **Description:** Seasons: 2 NumPple: 1 OrigMap: 9 RecID: 27111302 R...

BGC6,BIGG6,DOGT6,FXC2,FXW2,GB2,HU6,MA2,MO2,SSH6,TRA2,WF5,WLC2 - Barrenground Caribou,Big Game,Coloured Fox,Dog Team,Grizzly Bear,Hunting,Marten,Moose,Snow Shoe,Trapping,White Fox,Wolf,Woodla

Fairbanks

© Mapbox © OpenStreetMap Improve this map

Word associations based on query : Example - Ten most frequent words from 25 text excerpts grouped thematically based on caribou travelling through the NWT/ Yukon border during their fall migration south



Visualizations of the frequency and distribution of terms. In the example below, we can see that “caribou,” “use,” “meat,” “eat,” and “make”.



Porcupine Caribou Conservation Plan Development



Porcupine Caribou
Management Board



Why develop a Conservation Plan?

- ▶ PCMB has developed and utilized management plans and a strategic framework for many years. However, **no range-wide conservation plan has been developed.**
- ▶ **COSEWIC has recommended listing barren-ground caribou as “Threatened” (2016).** Canada is now considering whether it will be listed as such. Canada currently consulting with Nunavut (2021).
- ▶ A national recovery strategy is required if barren-ground caribou are listed under the federal SARA.

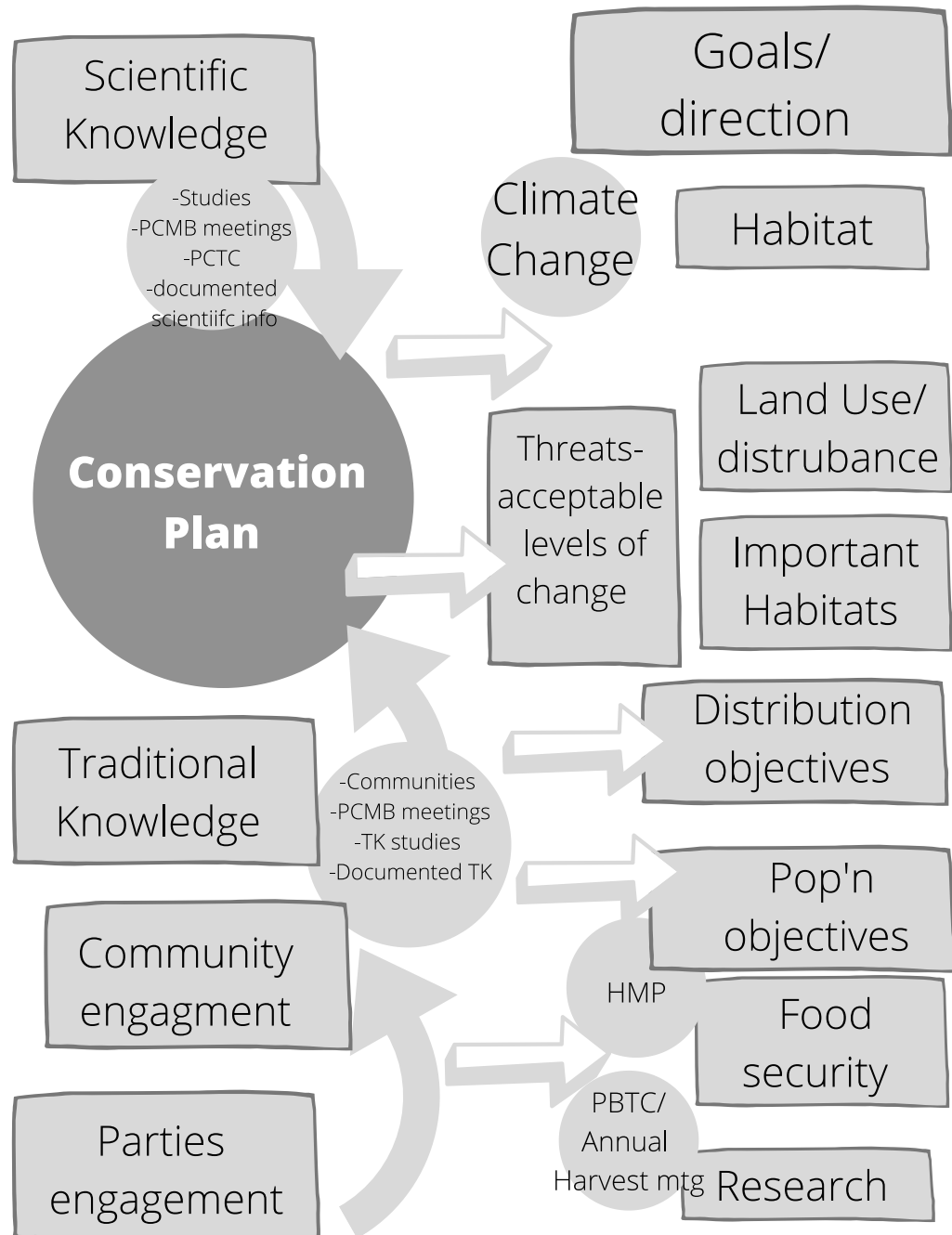
- ▶ We would like to be prepared by first developing a **PCH specific “conservation plan”** that meets our needs for the herd but also the requirements of a federal recovery plan.
- ▶ Since our conservation plan will help inform the national one, we will be able to **emphasize the unique ecological, cultural, and management context** that sets the Porcupine caribou herd apart from other barren-ground herds.



Who will develop the plan and how?

PCMB has agreed to prepare the Conservation Plan on behalf of the Parties:

- Gwich'in Tribal Council
- Nacho Ny'ak Dun
- Vuntut Gwitchin
- Tr'ondëk Hwëch'in
- Inuvialuit Game Council
- Government of NWT
- Government of YT
- Government of Canada



Components of the PCH Conservation Plan

What will the plan do?

- ▶ The plan will provide **guidance to Parties, stakeholders, and communities** about conservation objectives for the herd.
- ▶ The plan will **focus on range-wide aspects of conservation** such as managing the herd's health, habitat, and range.

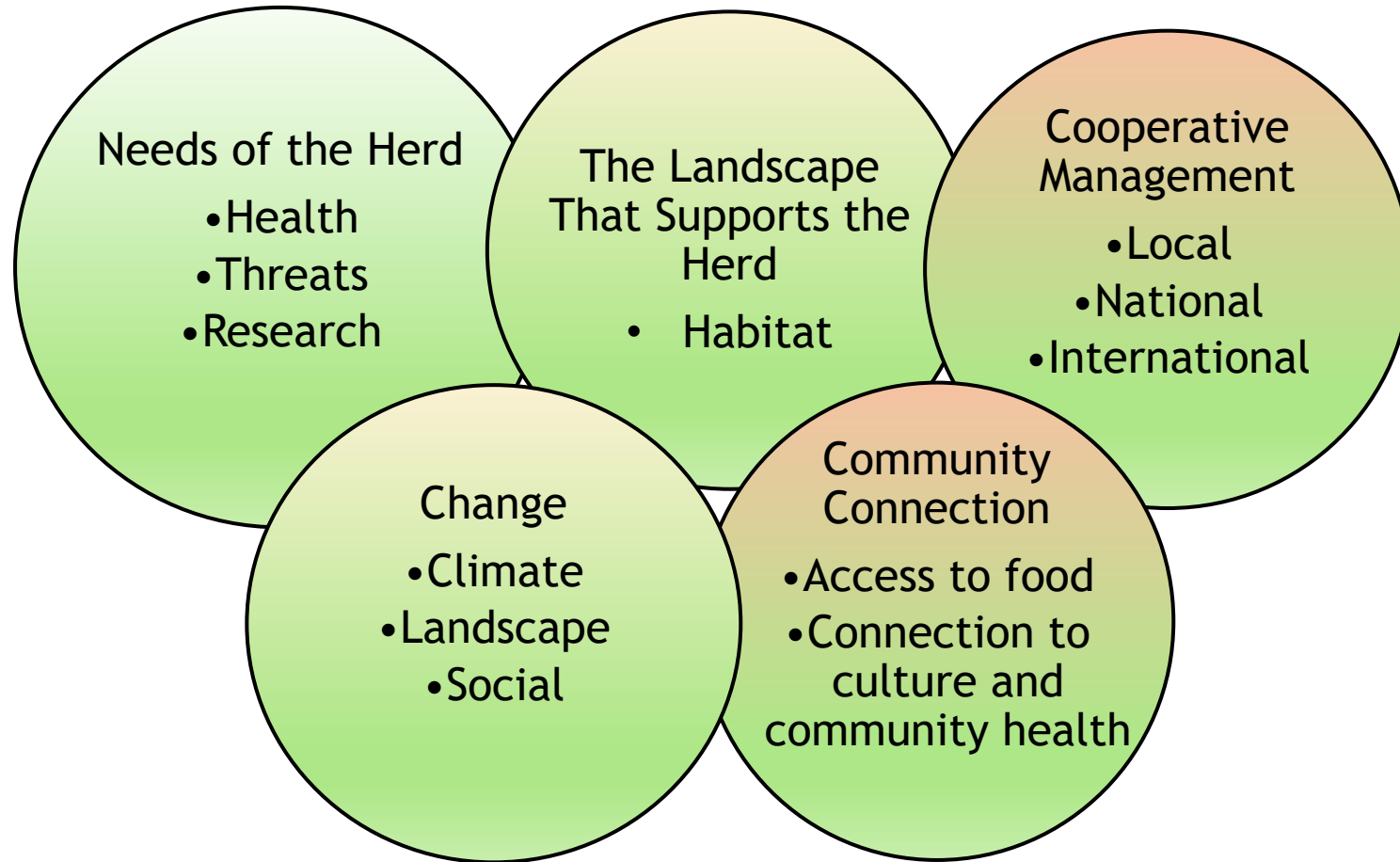


What will be in the Plan ?

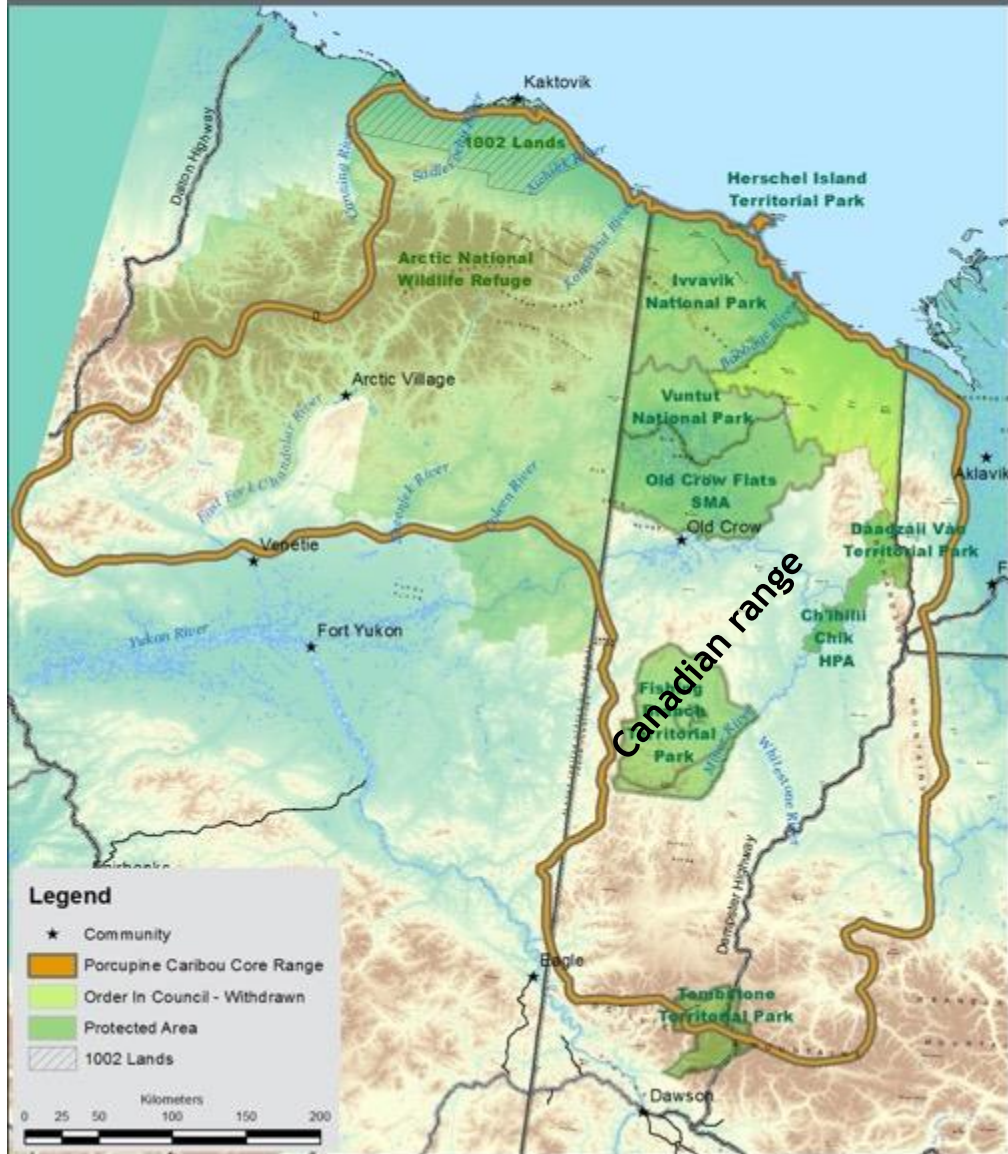
- Species information
- Identification of threats and community concerns
- Population and distribution objectives
- Identification of critical habitat
- strategies and approaches to achieve the objectives
- Traditional knowledge should be integrated throughout

Draft topics for the Plan

- based on preliminary feedback



Porcupine Caribou Core Range and Protected Areas

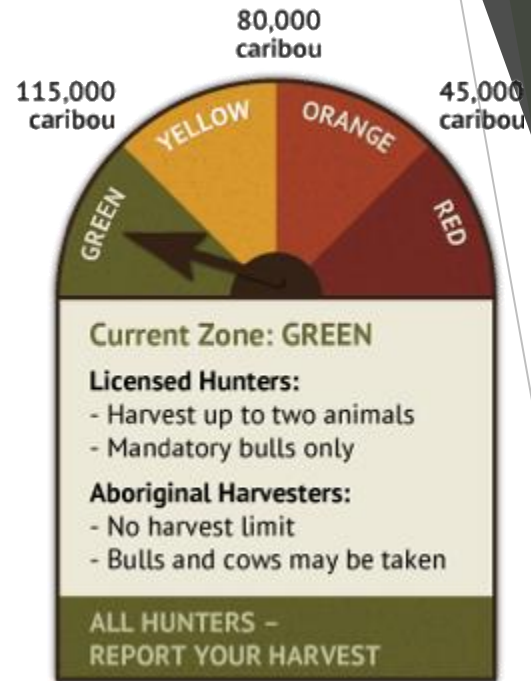


Scoping and Context:

- ▶ There are many land-based plans and protected areas in the Canadian range of the herd including:
 - ▶ Regional Land Use Plans: North Yukon, Peel, Dawson
 - ▶ Territorial Parks: Qikiqtaruk, Ni'iinlii Njik, Tombstone
 - ▶ National Parks: Ivvavik, Vuntut
 - ▶ Habitat Protection Areas and Special Management Areas: Daadzaii Van, Ch'ihilii Chik, Van Tat K'atr'anahtii
 - ▶ Dempster Highway Area Development Ordinance
 - ▶ Yukon North Slope Wildlife Conservation and Management Plan
- ▶ Alaskan Plans
 - ▶ Arctic National Wildlife Refuge Comprehensive Conservation Plan
 - ▶ others

What we already have:

- ▶ Harvest Management Plan, Implementation Plan, Annual Harvest Meetings, Strategic plans,
- ▶ Ongoing and long-term research, footprint maps, sensitive habitat reports, etc
- ▶ Community involvement, management structures, including the PCTC, international agreement.



Through the plan process

- ▶ We are focused on Traditional Knowledge mobilization, in in order to be able to access a range-wide body of Traditional Knowledge for management.

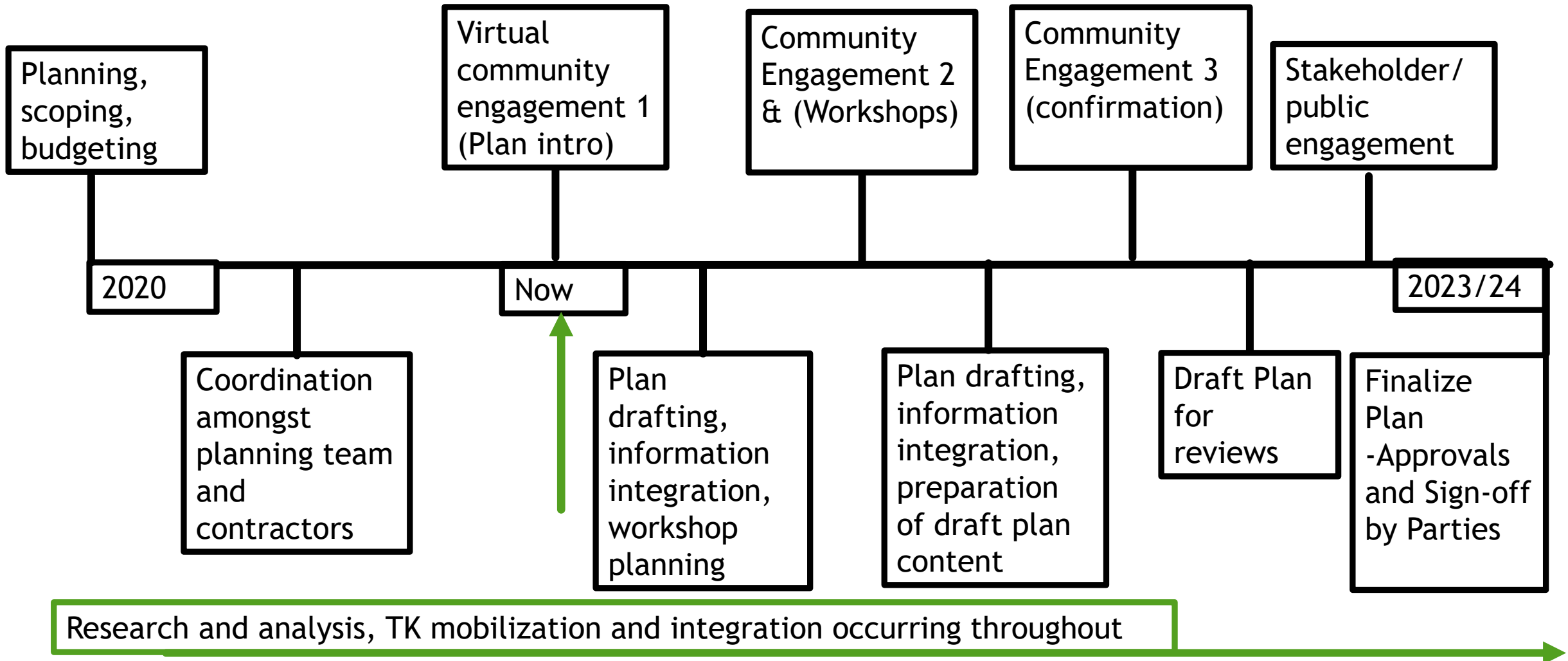


What we need...

- To consolidate existing information
- Focus on updating information as needed
- Community, stakeholder, and party priorities and feedback
- Traditional knowledge to be incorporated



How long will it take and how can you be involved..



What's Next?

- ▶ Virtual engagements- being planned with stakeholders and communities
- ▶ Kiosk stations- to be deployed in local RRC's/ HTC's
- ▶ School project
- ▶ Newsletter
- ▶ In person meetings when it is safe to do so



Engagements to date and planned:

- ▶ Community meetings:
 - ▶ Old Crow- March 3rd
 - ▶ Virtual sessions with RRCs/HTCs in PCH communities over the winter.
- ▶ Stakeholder/ Party updates:
 - ▶ Gwich'in Tribal Council- Sept 22nd
 - ▶ WMAC(NS)- Oct 28th
 - ▶ RRC AGM- Oct 5th
 - ▶ YFWMB- Oct 20th
 - ▶ IGC- Dec 2021
 - ▶ TH meeting- Feb 7th
 - ▶ GRRB- Feb 17th
 - ▶ Virtual sessions as requested

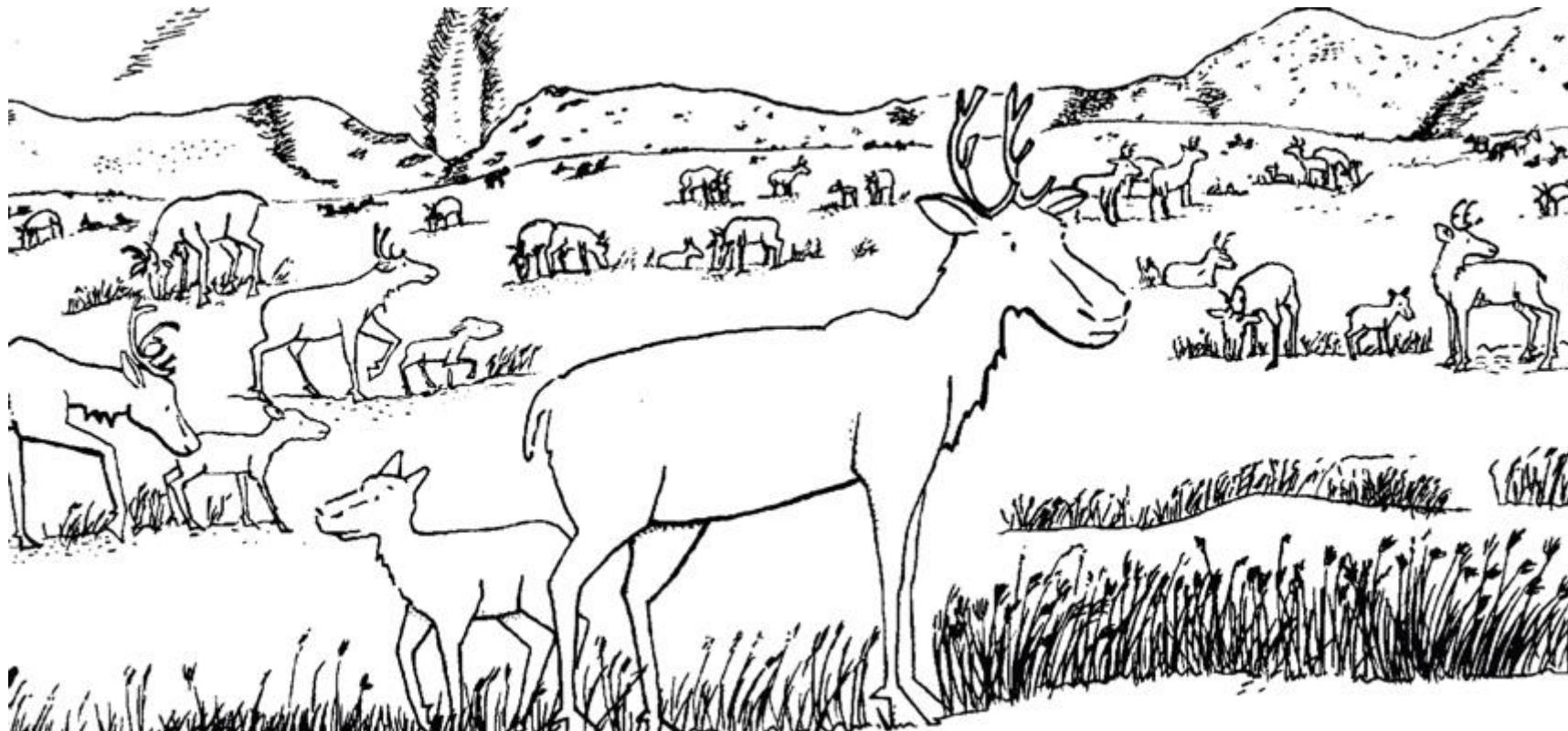
Kiosk Stations



- To be deployed in local HTC's /RRC's
- To provide feedback from broader community during covid times
- There will be draws and prizes for feedback
- Newsletter will accompany

School Project

- Create an art book that tells the story from each of the communities perspective
- Ask participants to draw/ write about caribou values to build the book as well as to inform the Conservation Plan



Questions?



Photos by Peter Mather

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