

GWICH'IN COUNCIL
INTERNATIONAL (GCI)

ARCTIC FRESHWATER, THE
CLIMATE CRISIS AND
INDIGENOUS PEOPLES



COMMISSION FOR ENVIRONMENTAL
COOPERATION
OAXACA, MEXICO

NOVEMBER 27, 2023

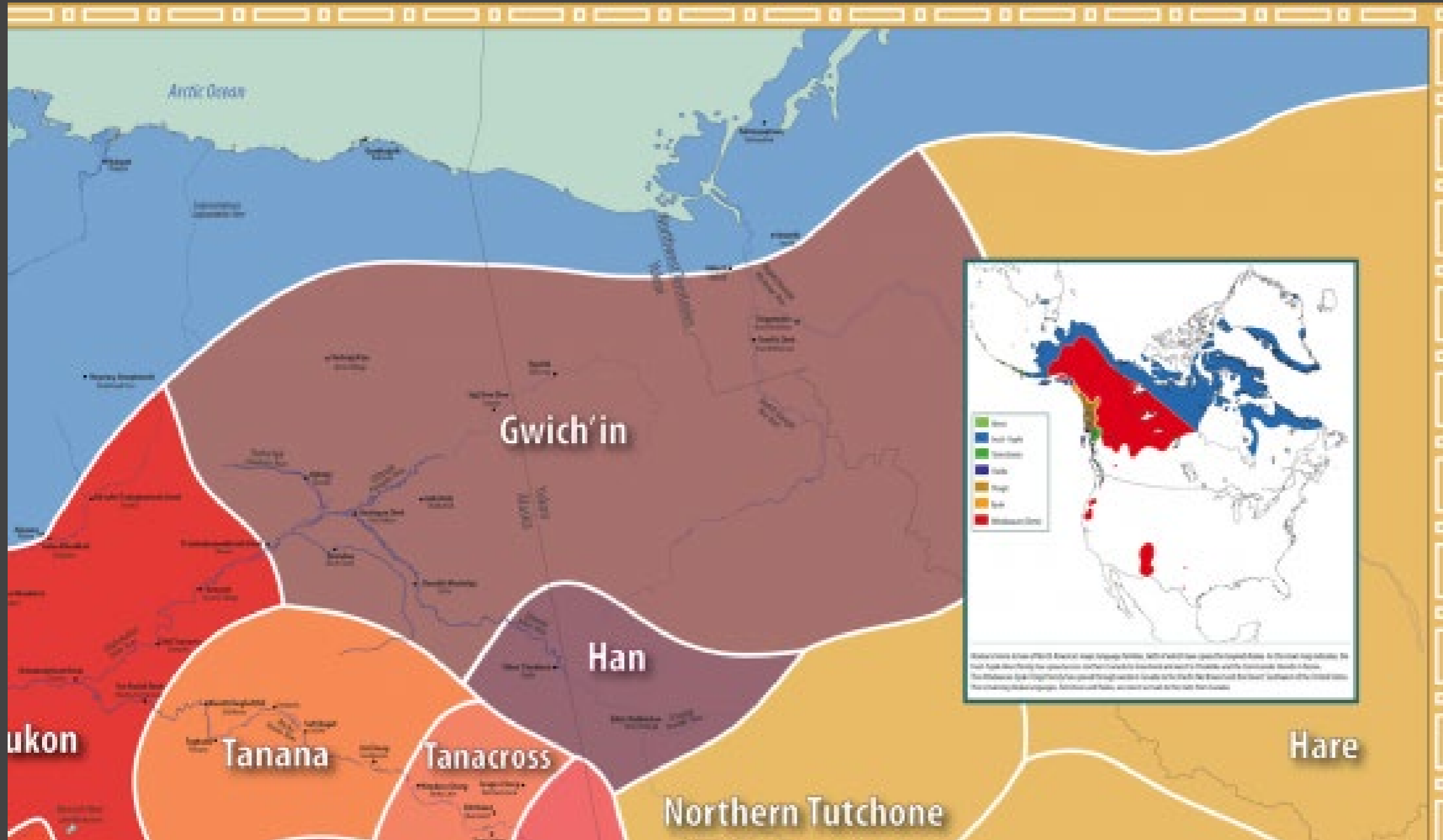


GWICH'IN COUNCIL INTERNATIONAL (GCI)

- ▶ Mission is to amplify the voice of the Gwich'in Nation on sustainable development and the environment at the international level to support resilient and healthy communities.
- ▶ Represent all 10,000 Gwich'in Nation members in Alaska, the Yukon, & the NWT as a Permanent Participant at the Arctic Council.
- ▶ Three membership governments appoint an 8-member Gwich'in Board; staff (1) based in Yellowknife, Canada.



GWICH'IN COUNCIL INTERNATIONAL (GCI)



WHAT ARE SOME FRESHWATER RESOURCES GWICH'IN ENJOY?

- ▶ Gwich'in country is on three largest watersheds in the north, the Yukon River, the Porcupine River (Ch'oahnjik), and the MacKenzie
- ▶ Millions of freshwater lakes that are critical for cultural purposes and life-ways.
- ▶ Snow and ice for much of the year offers travel opportunities and freshwater access.
- ▶ Our directional system is based on water.

THE ARCTIC COUNCIL



- ▶ Eight Arctic States: The US, Canada, Russia, Iceland, Sweden, Norway, The Kingdom of Denmark, Finland
- ▶ Six Permanent Participants: Gwich'in Council International, the ICC, Sami Council, RAIPON, Arctic Athabaskan Council, Aleut International.



WHY IS THE ARCTIC IMPORTANT TO US ALL?

- ▶ The Boreal forest is the largest forest on planet Earth.
- ▶ It contains as much Greenhouse Gases (Carbon, Methane, etc.) as the global atmosphere combined.
- ▶ Beneath the boreal lies much of the northern hemisphere's supply of permafrost, which contains twice the amount of greenhouse gases as is currently in the atmosphere of the entire planet.
- ▶ The degradation of boreal Yedoma is a particular threat; the global supply of 500GT (1/4 of all gg in permafrost) of which is concentrated in a small area in the Yukon Territory, Alaska and Russia.

WHAT IS “YEDOMA” AND WHY SHOULD I CARE?

- ▶ Yedoma is an ancient, carbon and greenhouse gas rich, frozen freshwater deposit. Its akin to permafrost.
- ▶ It is very fragile and can rapidly collapse.
- ▶ The amount of gases released from these areas could be a significant driver of emissions as the Arctic rapidly melts, and burns.
- ▶ Again, 500 GT, is a world changing amount of GG...

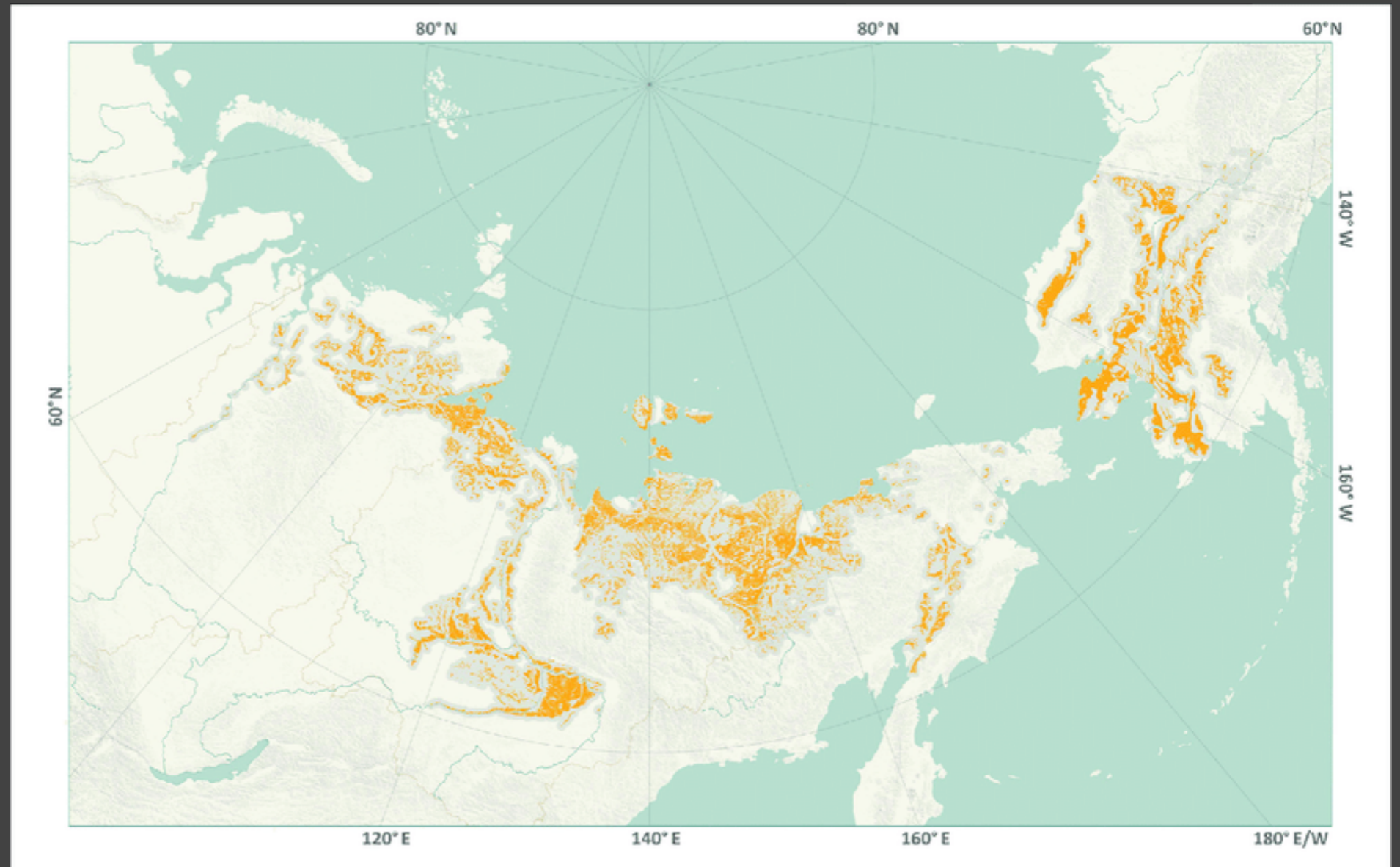
WHAT IS “YEDOMA” AND WHY SHOULD I CARE?

- ▶ University of Alaska Fairbanks, Water and Environmental Research Center.
- ▶ Photo: M. Kanevskiy



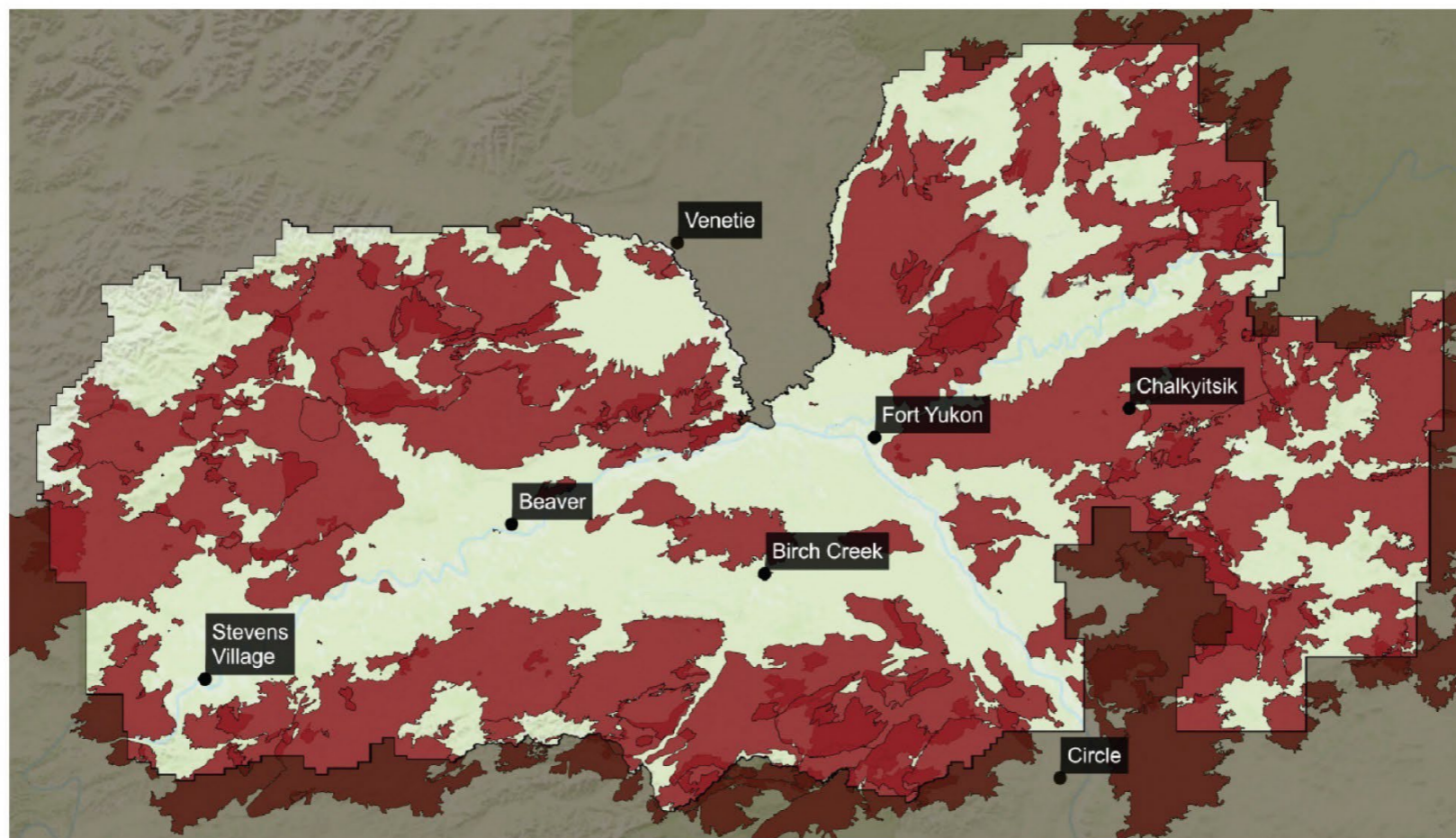
▶ THE IMMINENT THREAT OF YEDOMA:

- ▶ Rapid destabilization
- ▶ Release of massive quantities of greenhouse gases including methane.



WILDLAND FIRES ARE RAPIDLY CHANGING THE NORTH

Wildfire has touched 64% of Yukon Flats NWR from 1960-2020



Credit: Grabinski, Z. (2021). Fire perimeters. *Yukon Flats Changing Environment*, H. R. McFarland, editor. uaf-iarc.org/yukon-flats-changes.

Data source: Alaska Interagency Coordination Center



GWICH'IN ARE ACTIVE IN PROTECTING OUR RESOURCES & RESPONDING TO WILDLAND FIRE

- ▶ Cultural burning and significance
- ▶ Gwich'in Chiefs move to protect Yedomá.
- ▶ Biodiversity promotion
- ▶ Wildland fire crews
- ▶ Land and resource management
- ▶ Survival & Sovereignty

DION ALEXANDER



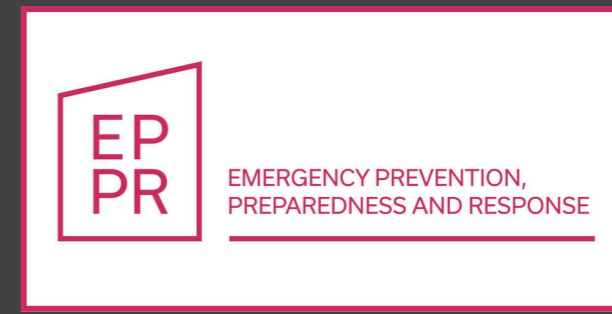
DONALD CARROLL



ACCELERATION OF WILDLAND FIRES IN THE ARCTIC NECESSITATES ACTION, FOR FOOD SECURITY, FRESHWATER, AND OUR WAY OF LIFE

- ▶ Wildland fires don't respect territorial integrity, or our climate.
- ▶ Current plans aren't inclusive of Indigenous knowledge
- ▶ Impacts on, freshwater quality, food security/harvesting traditional foods, transportation, health, migratory species, and more.
- ▶ Coordination of response exercises and training is needed for wildland fire management

➔ TWO PROJECTS AT THE ARCTIC COUNCIL



TWO ACTIVE PROJECTS

▶ Arctic Fire at CAFF

- ▶ Understand extent and impact of wildland fires
- ▶ Understand good practices for fire management (to achieve social, ecological, cultural goals) from Western science & IK perspectives
- ▶ Share practices and ongoing work and learnings

▶ Circumpolar Fire at EPPR

- ▶ Document & understand good practices for international cooperation agreements targeting operational activities
- ▶ Improve coordinated response by Arctic States and Permanent Participants, and promote international cooperation
- ▶ Create template for discussion of MOU for Arctic fire collaboration (response, training)

IMPORTANCE OF INTERNATIONAL COOPERATION & COLLABORATION

- ▶ Accessing and contributing knowledge & expertise, funding
- ▶ Directing research and opportunities
- ▶ Establishing a carbon offset market for Yedomia.
- ▶ International cooperation and diplomacy
- ▶ Educating regional, national, and international partners
- ▶ Advancing sovereignty

DISCUSSION

- ▶ How do you protect freshwater and Arctic yedoma, and engage with wildland fire in the Arctic?
- ▶ The need for more research, the need for inclusion of Indigenous Knowledge and cultural burns are current.
- ▶ This is a shared global responsibility.

MAHSI' AND QUESTIONS?



Photo: Dion Alexander



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DONALD CARRALL



CATG CREW IN STEVENS VILLAGE, JUNE 2020

ARCTIC COUNCIL CHAIRSHIP INITIATIVE ON WILDLAND FIRE

