

House Committee on Environment and Energy 1.9.24

Climate Resilience and Wildfire: A Look North

Naomi Heindel, Executive Director







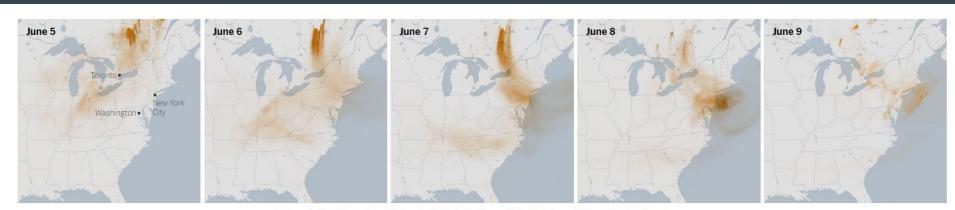










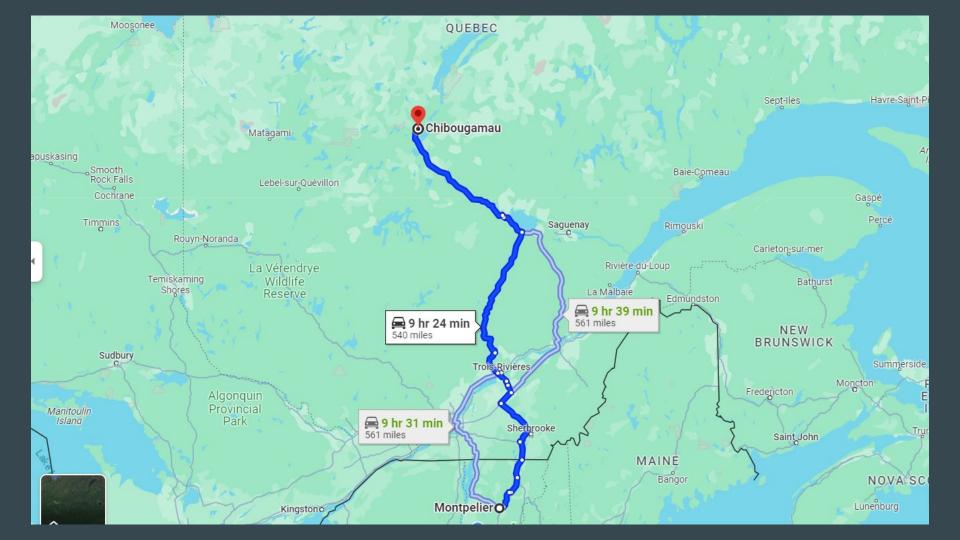


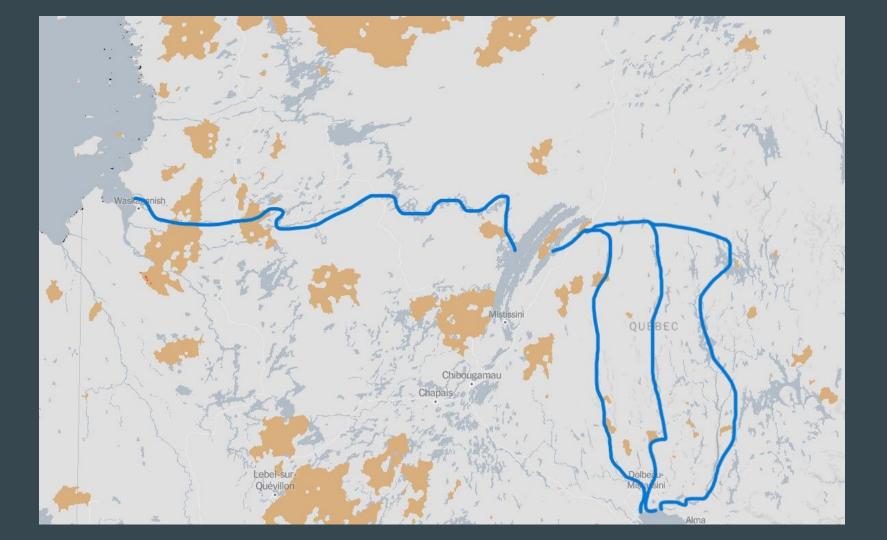
Source: National Oceanic and Atmospheric Administration - Note: Data is as of 12 p.m. Eastern time on June 10 and is based on hourly modeled forecasts of smoke dispersion derived from fire and weather conditions.

















































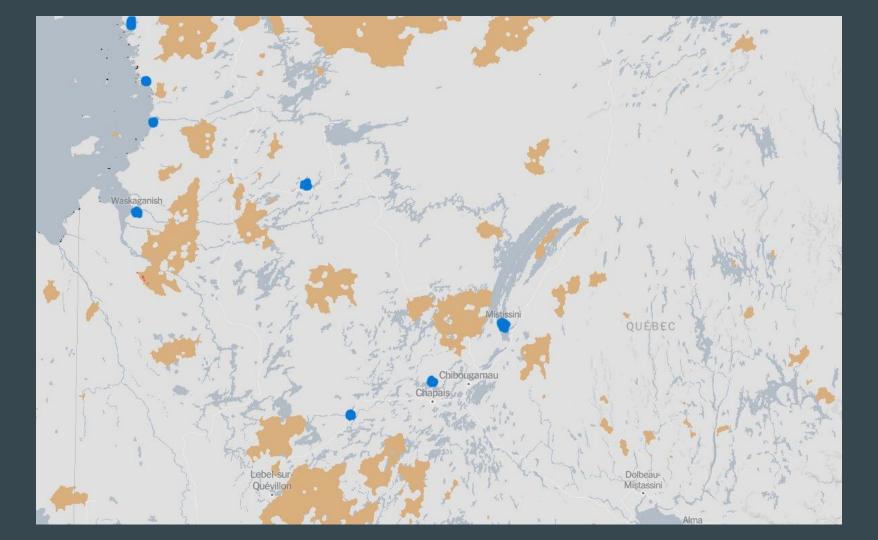






To keep every cog and wheel is the first precaution of intelligent tinkering.

Aldo Leopold, 1949













Lebel-sur-Quevillon



Chibougamau



Radisson



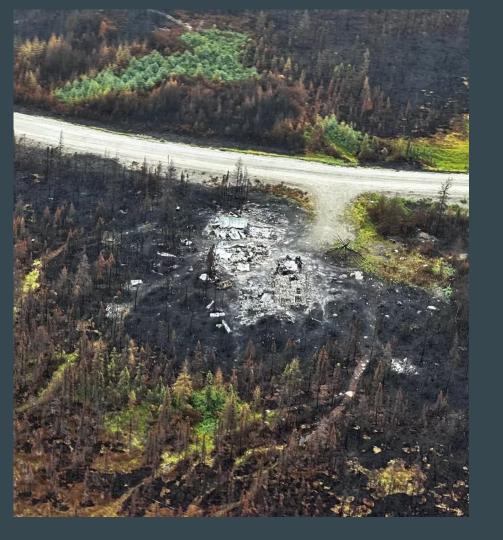
Route du Nord







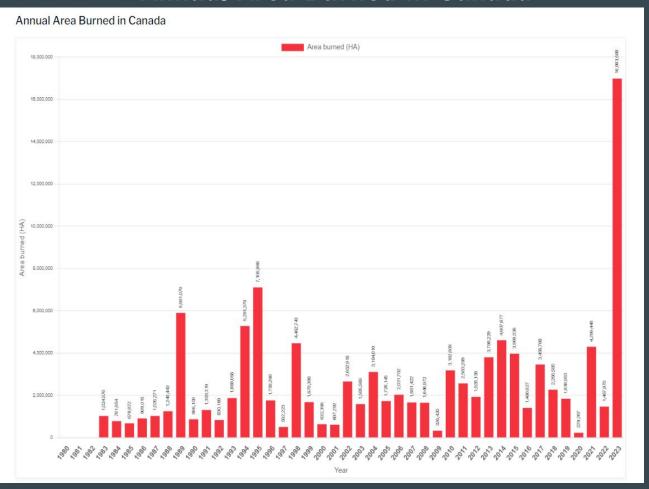






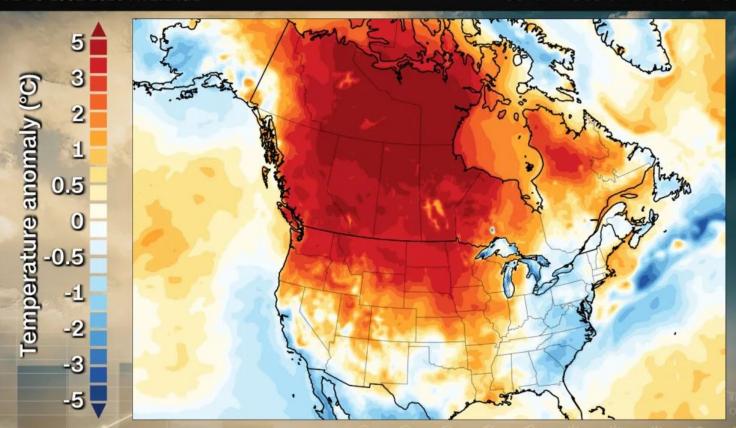


Annual Area Burned in Canada



RELATIVE TO 1991-2020 AVERAGE

COPERNICUS CLIMATE CHANGE SERVICE



Other factors too - - logging, large-scale clearcuts, and abandoning Indigenous stewardship and management techniques.







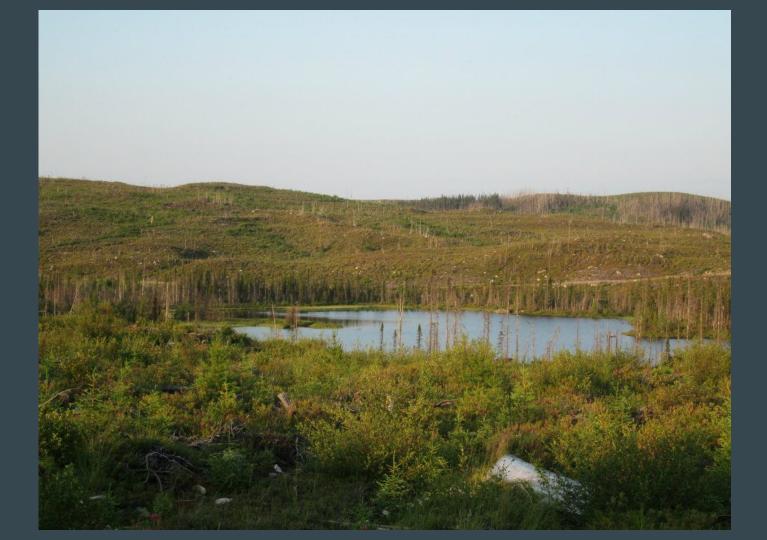
































Vermont's Climate Resilience

- 1. Air quality preparedness.
- 2. Natural resources.
- 3. Fire management plans.
- 4. Stewardship of landscapes and communities.





Works Cited

Austen, Ian and Vjosa Isai. "Canada's Logging Industry Devours Forests Crucial to Fighting Climate Change." New York Times, January 4, 2024. https://www.nytimes.com/2024/01/04/world/canada/canada-boreal-forest-logging.html

Bell, Susan et al. "Lost in Flames." CBC News, July 14, 2023. https://www.cbc.ca/newsinteractives/features/lost-in-flames#&gid=1&pid=1

Dong, Madison et al. "Maps: Tracking Air Quality and Smoke From Wildfires." The New York Times, September, 2023. https://www.nytimes.com/interactive/2023/us/smoke-maps-canada-fires.html

Gokee, Amanda. "Is Vermont's use of HydroQuebec power 'greenwashing'?" VT Digger, February 17, 2021. https://vtdigger.org/2021/02/17/is-vermonts-use-of-hydroquebec-power-greenwashing/

Heindel, Naomi. "Land Use Change in Northern Quebec: A Remote Sensing Analysis of Logging in James Bay." Dartmouth College Earth Science Senior Honors Thesis. May, 2007.

Works Cited Continued

Heindel, Naomi. "A Changing Balance: Logging, Stewardship, and Participation in James Bay, Quebec." Yale School of Forestry and Environmental Science Master of Environmental Science Thesis. May, 2013.

Heindel, Naomi. "The Cree and the Crown: Management Stories from North America's Northern, Northern Woodlands." Northern Woodlands, Winter 2021: January 3, 2013.

Krupp, Lexi et al. "Out-of control wildfires still burn in Quebec." Vermont Edition, Vermont Public. August 8, 2023. https://www.vermontpublic.org/show/vermont-edition/2023-08-08/out-of-control-wildfires-still-burn-in-quebec

Leopold, Aldo. "A Sand County Almanac: And Sketches Here and There." Oxford University Press, 1949.

Mackey, Brandan et al. "Assessing the Cumulative Impacts of Forest Management on Forest Age Structure Development and Woodland Caribou Habitat in Boreal Landscapes: A Case Study from Two Canadian Provinces." Land, Volume 13, Issue 1: December 19, 2023. https://www.mdpi.com/2073-445X/13/1/6

Works Cited Continued

Paddison, Laura. "Weather that drove eastern Canada's devastating wildfires made twice as likely by climate change." CNN, August 22, 2023. https://www.cnn.com/2023/08/22/americas/canada-wildfires-climate-change-quebec/index.html

Ramirez, Rachel. "Canada's wildfire season is off to an 'unprecedented' start. Here's what it could mean for the US." CNN, June 10, 2023. https://www.cnn.com/2023/06/10/us/canada-wildfire-season-us-impact-climate/index.html

Saganash, Allan. Personal communication. 2013 - 2023.

"In Photos: Quebec wildfire season 2023." https://montreal.ctvnews.ca/in-photos-quebec-wildfire-season-2023-1.6515317

"Protected Areas Process." Eeyou Conservation. https://www.eeyouconservation.com/protected-areas-process/

"Smoke and Wildfires in Quebec," NASA Earth Observatory, July 4, 2023. https://earthobservatory.nasa.gov/images/81613/smoke-and-wildfires-in-quebec

Works Cited Continued

"Wildfire Graphs." Canadian Interagency Forest Fire Center. https://ciffc.net/statistics

"Wildfire smoke photos in NYC show 'apocalyptic' sepia landscape." June 8, 2023. https://www.nbcnewyork.com/local/wildfire-smoke-photos-in-nyc-show-apocalyptic-sepia-landscape/4405485/

"Wildfires: Quebec lifts ban on forest access." CTV News, August 24, 2023. https://montreal.ctvnews.ca/wildfires-quebec-lifts-ban-on-forest-access-1.6532685