

Economic Assessment of the Impacts of the 2023 Wildfires in Québec

A Historic Fire Season



713 Wildfires



4,3 Million hectares burned



27 000 Citizens evacuated



26 Municipalities and Indigenous communities evacuated



A collective bill for Québec estimated at more than

\$8 B

Conditions conducive to wildfires are expected to worsen in Québec and Canada.

No previous study had provided a multidisciplinary assessment of the economic impacts of the 2023 wildfires in Québec.

Objective

> Quantify the direct and indirect economic impacts of the 2023 wildfires in Québec

The analysis also sought to document the realities behind the numbers and the experiences of evacuated communities.

3 main data sources for cost estimations

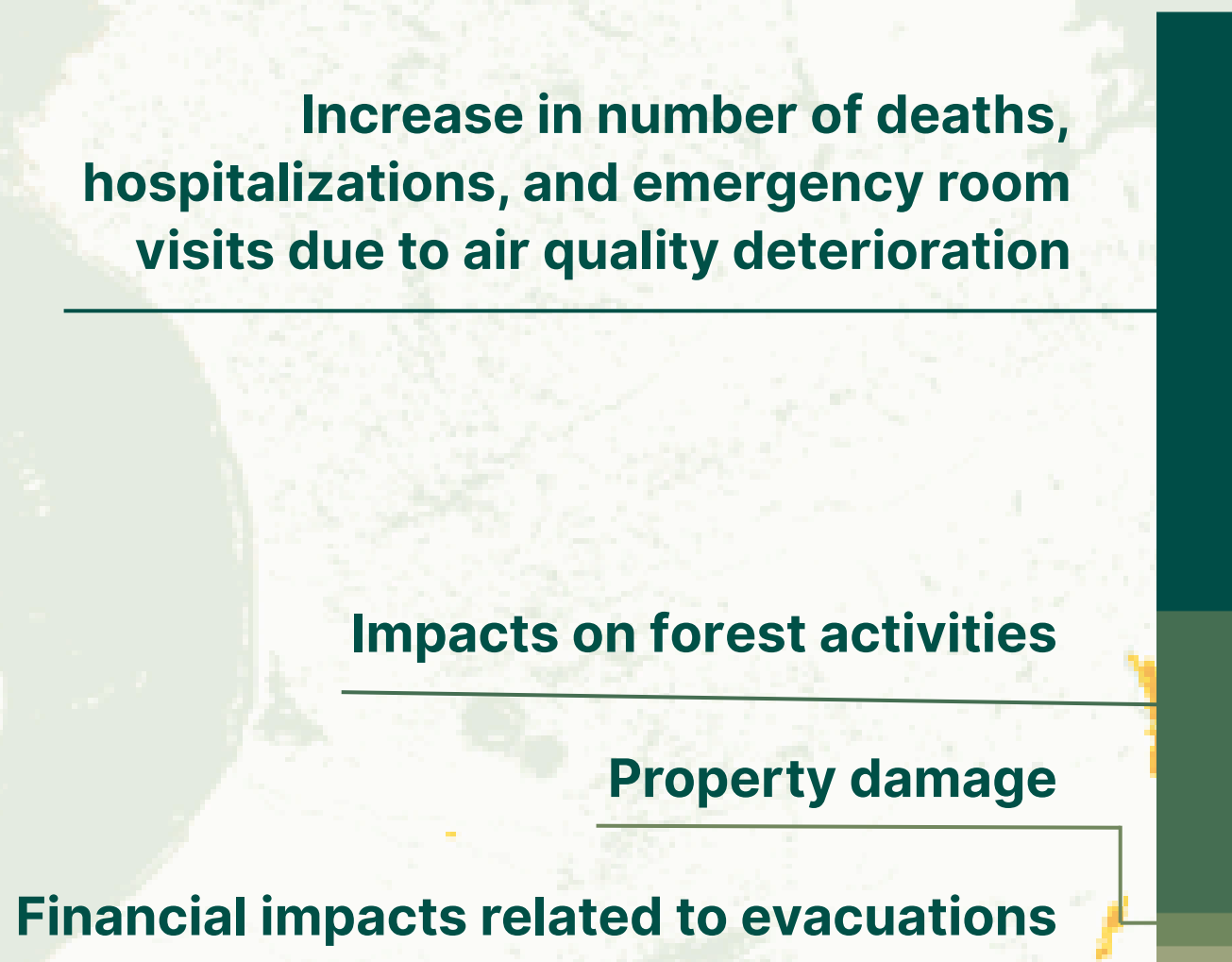
- 1 Literature review** (scientific articles, press articles, government reports)
- 2 Interviews and several sets of data provided** (26 businesses, industry representatives, ministries, and agencies)
- 3 Field data collection in communities that were evacuated in 2023** (177 households and 35 businesses)



Total costs:
\$8 B

Costs for the four target groups

Citizens \$935 M



The 2023 wildfires disrupted the relationship that many communities have with their land. Hunting camps were destroyed, making it impossible to hunt, fish, and engage in other recreational activities. Evacuations, although costly, were only part of the consequences of this crisis. Beyond the health impacts of smoke, anxiety and post-traumatic stress persist, especially among children.

Governments \$1 112 M



While firefighters battled the blazes, teams were mobilized to manage the human aspect of this historic fire season.

Municipal officials often had to be creative to provide relief to their fellow citizens. Ultimately, public finances were affected in many ways, and the financial burden will continue to be felt in the coming years as efforts are made to restore production in commercial forest and protect communities against future wildfires.

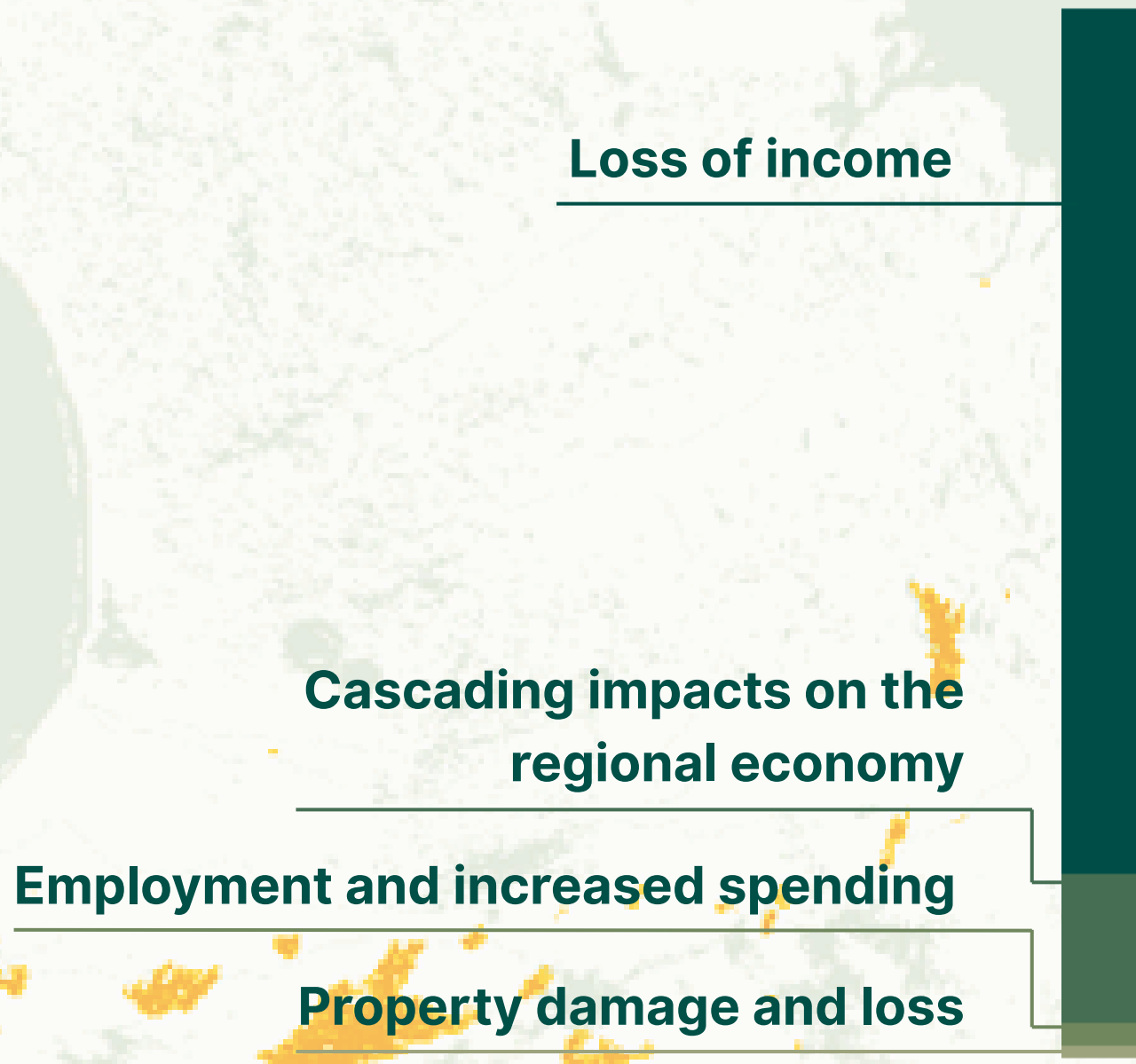
■ Areas burned in 2023



Total costs:
\$8 B

Costs for the four target groups

Businesses \$3 712 M



Several forest-dependent businesses were forced to shut down during the 2023 wildfires, exposing them to revenue losses, increased expenses, and, to a lesser extent, property damage. For the forestry industry, the subsequent decline in forestry opportunities has longer-term impacts that are difficult to anticipate. The consequences observed on key industries in the affected regions are diverse and disrupt their entire economic ecosystem.

Ecosystems \$3 132 M

- **Carbon release** into the atmosphere and acceleration of climate change
- **Habitat disruption**
- **Altered landscapes** and **contaminated water bodies**

The fires of 2023 occurred in a context where climate change and human activities within forests are increasingly altering natural dynamics. Wildfires in Québec have released enormous amounts of carbon, potentially exacerbating climate change. They have also disrupted and fragmented habitats, including those of the caribou population. Some ecosystems have been profoundly transformed, with effects that are still difficult to predict, particularly in terms of their long-term resilience.

■ Areas burned in 2023

An exceptional fire season that highlights the multiple values of the forest and forces us to rethink our relationship with it.



The 2023 wildfire season will certainly have generated significant costs for Québec society, but it will also have generated a collective awareness of the importance of the boreal forest in our identity and our economy.

The exceptional nature of these events is matched only by the opportunity they provide to collectively reflect on how to preserve the valuable connection we have with the forest.

Next steps

This report is published as part of the first phase of the project **Economic Analyses of Wildfire Adaptation Measures in Québec**.

The next phases of the project will aim to

- Estimate the costs of wildfires for the coming decades in the context of climate change
- Analyze the cost effectiveness of wildfire adaptation measures in Québec

This analysis was led by Nada Conseils and conducted with a multidisciplinary research team (public health, forest ecology, economics, fire modelling).

Thanks to our partner organizations: SOPFEU, Fonds de Solidarité FTQ, Manitoba Hydro, Rio Tinto Aluminium, the Ministry of Tourism, the Ministry of Public Safety, the Cree Nation Government, Hydro-Québec, the Ministry of the Environment, Climate Change, Wildlife and Parks, and the Ministry of Natural Resources and Forestry.

About Nada Conseils



Nada is a consulting firm specializing in climate change management, as well as diversity and inclusion management.

Our mission is to help build a society where people and nature are at the heart of prosperity and common well-being.

