

BOREAL FIRE QUICK FACTS

permafrost.woodwellclimate.org/boreal-fire-facts

2/3

of all forest carbon is stored by boreal forests.

20%

of yedoma, ice- and carbon-rich permafrost that's vulnerable to thaw, is found in Alaska.

7x

increase in extreme boreal fires between 2003 and 2023.

~21 THOUSAND

estimated excess deaths each year (2001-2020) can be attributed to smoke from Arctic-boreal wildfires.

UP TO
10%

of the remaining carbon budget needed to meet the Paris Climate Agreement could be claimed by emissions from wildfire and post-fire permafrost thaw.

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4x

more carbon was released in the 2023 Canadian wildfires than all other sectors in Canada combined.

~13

dollars is the cost of avoided emissions per ton CO₂ through boreal fire management in Alaska, comparable to other climate mitigation strategies.

1/2

of the average annual U.S. fire CO₂ emissions are from Alaska-based wildfires, yet <4% of the 3 billion dollars in federal fire suppression funding is directed to Alaska.

400

to 900 billion dollars are the annual economic costs and damages associated with wildfires in the U.S., equivalent to 2-4% of the U.S. GDP.

1.6 MILLION

acres of permafrost-rich lands in the Yukon Flats National Wildlife Refuge (8.6 million acres total) will now receive heightened protection from wildfires.