Natural Resources Canada
Ressources naturelles Canada

Next Generation Tools for British Columbia Forest Inventory

Using 2017 forest fire data from the British Columbia government, the research team developed an accurate pre-fire inventory that can estimate the volume of timber lost to the forest fires and the remaining timber. Comparing their computed estimates with the province's vegetative resource inventory, the team can verify the records.

PROJECT TITLE
Next generation tools for the British Columbia Forest Inventory with a focus on the impact of disturbances on timber supply

ORGANIZATION
University of British Columbia

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1 April 2018

END DATE
31 March 2020

COLLABORATORS
FPInnovations

The team's objective was to assess how useful airborne laser scanning (ALS) data are in filling in missing data for a large-scale inventory of the areas affected by the 2017 fires. The team hoped to compare existing data to ALS data on burnt areas. The hope is to develop a more comprehensive understanding of how much wood was lost to those forest fires and the implications of using these estimates.

The researchers used the pre-fire data to estimate forest loss and were able to quantify the effect the forest fires had on tree volume and aboveground biomass. The results concluded that about 37 million cubic metres of timber volume remained after the fires, emitting about 81 tonnes of carbon dioxide equivalent.

The scope of this project allows the sector to improve its operations and products and its management of forest ecosystems. Forest firms in western Canada, particularly British Columbia, will benefit from the new tools and information this project provides. This project leverages existing investment in ALS and enhanced forest inventory data, adding valuable information to help support and improve decision-making in the Canadian forest sector.

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