



## Wildfire Science in Canada: 2019 to 2029 The Blueprint for Wildland Fire Science in Canada

Brian Wiens<sup>1\*</sup>, Stacey Sankey<sup>1</sup>, Michael Norton<sup>1</sup>

**ABSTRACT** – Canada is experiencing increasingly severe impact from wildfire. This is due to a combination of climate change, historical ecosystem management practises, and the increasing size of the wildland-urban interface (WUI). Canada is fortunate to have escaped the loss of life seen elsewhere. The 2016 Horse River Fire in northeastern Alberta was the most costly natural disaster in Canadian history with \$2.8 Billion (USD) in insured losses and at least the same in indirect costs. The province of British Columbia broke records in 2017 and again in 2018 for total burned area of over a million hectares each year. It is currently estimated that by year 2100 the average annual national burned area could double the current 2.4 million hectares. Experts worry it is only a matter of time before Canada also loses lives to wildfire. Historically Canada was a world leader in wildfire science and systems, but over the past couple decades research investments have not kept pace with the evolving complexity of wildfire and the contributing risks. In 2016 the Canadian Council of Forest Ministers endorsed a renewal of the 2005 Canadian Wildland Fire Strategy, which emphasizes the original goals: to develop resilient communities, ensure healthy forest ecosystems, and modernize business practises. The recent endorsement highlighted the need for multi-agency collaboration and the urgency to develop new approaches to these emerging challenges. The Canadian Forest Service led the development of *The Blueprint for Wildland Fire Science in Canada* to support a coordinated, multi-agency approach and build a clear business case for investment. A series of consultations collected input from over 100 individuals and organizations across the country. The broad cross sectional participation provides confidence the Blueprint is a representative summary of wildfire in Canada. The Blueprint defines six themes and 15 key recommendations intended to guide a 10 year research strategy in Canada to address the identified knowledge gaps. The results of this work will be applicable in both Canadian and international contexts and support inter-jurisdictional collaborations. This talk will present the themes and recommendations in detail.

**Keywords:** Strategic planning; research priorities; research strategy; Canada Wildland Fire

---

<sup>1</sup>Canadian Forest Service; Natural Resources Canada. Edmonton Alberta.

\*Corresponding author: [brian.wiens@canada.ca](mailto:brian.wiens@canada.ca)