

COMMISSIONED RESEARCH

Key Topics:

- fire severity [1]
- planning [2]
- response [3]

Severe fire behaviour - improving planning responses [4]
This project was commissioned and funded entirely by the Department of Environment, Land, Water and Planning, Victoria.

Project: detail Notabs

Research team

Research leader

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RESEARCH TEAM



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End User representatives




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END-USER



Department of

Environment, Land,

Water & Planning

[9]

Description

This project was commissioned and funded entirely by the Department of Environment, Land, Water and Planning, Victoria.


The project had two primary aims:

- better describe the characteristics of bushfires that have the greatest impact on house loss and the effect of land use planning responses in reducing bushfire risk; and
- validate the model against documented fire events.

These aims were met by providing:

- quantification of convective strength across the landscape and validate it against documented fire events;
- an algorithm to improve convective updraught strength to calculate maximum local wind strength;
- a better ember launch and transport model;
- a relationship between the modelled ember attack levels on dwelling ignition and spotfire development; and
- an improved PHOENIX RapidFire characterisation and improved understanding of bushfire risk and the assessment of treatment options for improved planning responses through the development of specific planning modules.


Presentations & Resources

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| 18 Jun 2019 | Interactions between climate, vegetation and fuel [12] |  3.16 MB | [13] (3.16 MB) [14], [15] |

Linked Projects

Landscape moisture modelling [17]

BUSHFIRE PREDICTIVE SERVICES [18]

 Dr Stuart Matthews
New South Wales Rural Fire Service[19]



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Probability of fire ignition and escalation [20]

BUSHFIRE PREDICTIVE SERVICES [18]



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Fire transitions across urban boundaries [22]

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Dr Andrew Sullivan
CSIRO [23]



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Bushfire climatology in Victoria [24]

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Dr Sarah Harris
Country Fire Authority [25]



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2009 Black Saturday and other large fire events - moisture content project [26]

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Prof Ross Bradstock
University of Wollongong [27]



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Analysis of RapidEye imagery to map fire severity and ground truthing [28]

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Dr Sarah Harris
Country Fire Authority [25]



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Smoke transportation and emissions modelling [29]

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Dr Martin Cope
CSIRO [23]



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