#### **COMMISSIONED RESEARCH**

Key Topics:

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

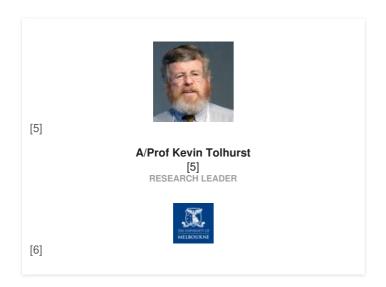
Severe fire behaviour - improving planning responses [4]

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

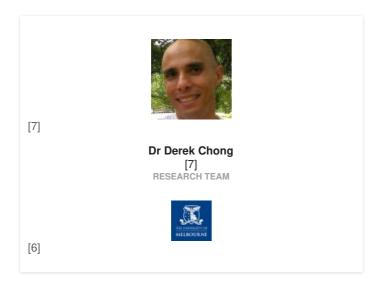
### Project: detail Notabs

#### Research team

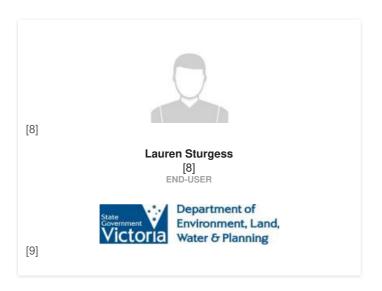
#### Research leader



#### Research team



### End User representatives



### 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

DATE [10]	TITLE [11]	DOWNLOAD	KEY TOPICS
18 Jun 2019	Interactions between climate, v	egetation and fuel [12] 📝 3.16 MB	[12]n(3rb6nMB)ts [14],
4			F

## Linked Projects

## Bushfire climatology in Victoria [17]

**BUSHFIRE PREDICTIVE SERVICES [18]** 

Dr Sarah Harris
Country Fire Authority [19]



[19]



[21]

## Analysis of RapidEye imagery to map fire severity and ground truthing [22]

BUSHFIRE PREDICTIVE SERVICES [18]

Dr Sarah Harris
Country Fire Authority [19]



[19]

## Smoke transportation and emissions modelling [23]

**BUSHFIRE PREDICTIVE SERVICES [18]** 

Dr Martin Cope CSIRO [24]



[24]

## Landscape moisture modelling [25]

BUSHFIRE PREDICTIVE SERVICES [18]

Dr Stuart Matthews
New South Wales Rural Fire Service [26]



[26]

## Probability of fire ignition and escalation [27]

**BUSHFIRE PREDICTIVE SERVICES [18]** 

Prof John Hearne RMIT University [28]



[28]

# Fire transitions across urban boundaries [29]

BUSHFIRE PREDICTIVE SERVICES [18]

Dr Andrew Sullivan CSIRO [24]



### Source URL:https://www.bnhcrc.com.au/node/1755/generate-pdf Links

mitigating-hazards/1759

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