

# Community bushfire safety awareness: a community-led initiative progress report

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## Introduction

Over the last 30 years, approaches to community-based disaster risk management (CBDRM) in Australia have moved from the margins towards the mainstream of policy and practice. CBDRM is now understood to be an important pillar for building resilience to increasing risks. Compared with previous top-down, command-and-control approaches, CBDRM orients disaster management around principles of community participation, ownership and capacity-building.<sup>1</sup> This paper describes a locally led initiative in an outer-eastern Melbourne community that is helping residents recognise their bushfire risks and how to take action to mitigate them.

As bushfires raged in Australia during the summer of 2019–20, a resident in North Warrandyte (a suburb in Melbourne within the Nillumbik Shire) with a long interest in bushfire safety, was surprised to learn that 30% of people affected by bushfire have no relevant insurance and 30% are under insured. North Warrandyte has experienced serious bushfires in the past and community bushfire safety seemed likely to be increasingly important in the face of climate change. Teaming up with a friend who was a local Country Fire Authority (CFA) volunteer, the initial idea was to hold a community meeting to raise awareness of insurance and bushfire risk. However, the spread of COVID-19 made any public meetings impossible in the immediate future. The number of those interested in a local initiative to promote bushfire safety grew, including a local CFA Brigade Captain and an active Fireguard member. All the members of the group had experienced bushfire threats in the past. It became clear that funding

for any meaningful initiative would be needed. The Chairman of Valley Community Services Limited—the community-based company which operates 5 Bendigo Bank Community Bank branches in Nillumbik Shire—was approached for advice and he became an enthusiastic supporter and a key participant.

A not-for-profit incorporated association was established—Bushfire Resilience Incorporated (BRI)—complying with the requirements of Consumer Affairs Victoria. The purpose of the association was to ‘facilitate the provision of information about bushfires to the community’ thus raising residents’ awareness of bushfire risks and how to mitigate these. This was to be achieved by creating 5 free webinars for delivery during October and November of 2020 to address residents’ knowledge gaps. The ongoing financial support of Valley Community Financial Services Limited was integral. A local resident, also a volunteer in a CFA brigade and an employee of CFA District 14 in a community engagement role, provided his expertise and advice through the planning and delivery stages using CFA’s Zoom platform to present and record the 5 webinar sessions.

## The 2020 webinar program

The team created webinars based on best-practice bushfire safety principles for household safety as described in fire service websites (e.g. Country Fire Authority<sup>2</sup>). The webinars were designed to present information that was relevant to the needs of residents, to raise awareness about risks and to be practical enough to motivate people to take action. The topics were chosen based on identified information that emergency services agencies did not cover sufficiently. For each topic, subject-matter experts presented the webinar and they worked with the BRI team to create the format. The features of the 2020 webinar program are summarised in Table 1.

Table 1: The 2020 webinar program details.

Date	Topic	Presenter	Number of views	Viewer satisfaction levels*
27 October	How houses are destroyed by bushfire	Dr Justin Leonard, CSIRO	141	Overall session: <ul style="list-style-type: none"> <li>· Excellent - 85%</li> <li>· Very good - 11%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent - 71%,</li> <li>· Very good - 21%</li> </ul>
5 November	How to harden an existing house	Dr Justin Leonard, CSIRO	123	Overall session: <ul style="list-style-type: none"> <li>· Excellent - 79%</li> <li>· Very good - 18%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent - 80%,</li> <li>· Very good - 18%</li> </ul>
10 November	Getting your insurance right	Denis Nelthorpe, Consumer Lawyer Clare Cordingley, Insurance Council Helda Sidaoui, Suncorp Georgina Dirks, IAG	84	Overall session: <ul style="list-style-type: none"> <li>· Excellent - 68%</li> <li>· Very good - 28%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent - 70%</li> <li>· Very good - 26%</li> </ul>
19 November	Understanding rebuilding	Rosa Zouzoulas and Renae Ahern, Nillumbik Shire Council Julie Bowyer, Cardinia Shire Council John Ginivan, Strategic Planner Mark Holland, Country Fire Authority Kevin Hazell, Bushfire Planning Peter Collina, Victorian Building Authority	93	Overall session: <ul style="list-style-type: none"> <li>· Excellent - 50%</li> <li>· Very good - 31%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent - 59%</li> <li>· Very good - 33%</li> </ul>
26 November	Make better decisions about bushfire risk in our changing climate	Kevin Tolhurst AM, University of Melbourne Michael Vermeulen, Country Fire Authority	80	Overall session: <ul style="list-style-type: none"> <li>· Excellent - 82%</li> <li>· Very good - 17%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent - 82%</li> <li>· Very good - 13%</li> </ul>

\*Satisfaction level results were obtained via an online survey of viewers after each webinar and totals were collated at the end of the webinar series.

As a result of COVID-19 pandemic restrictions, there was a very short lead time and close spacing of the webinars. This also affected the time available to publicise the program and generate community interest. Understanding this, the CFA contacted local Fireguard groups, Facebook posts were sent to local community groups and special interest groups, posters were displayed in post offices and stores and emails were sent to interested residents via the networks of the organising team. People interested registered to attend the webinars via the BRI website. While this restriction may have limited access, available resources did not allow additional alternative ways to register.

Audience engagement was an aim of the webinar format. Registrants were sent an online, pre-webinar survey to assess their current knowledge of bushfire danger and safety, and what, if any, plans and preparations they had made or intended to make. They could also submit questions before the webinar. A post-webinar survey was sent to collect qualitative information about the topic and viewer's changes in knowledge and motivations to take action. In addition, viewer polls were conducted during each webinar. The evening webinars ran for 90 minutes and comprised either 2 presentations of around 20 minutes or a combination of presentation and/or panel discussions with 30–40 minutes of question-and-answer time.

The average viewing audience across the 5 webinars was 104. Survey response rates from viewers were encouraging:

- 39% responded to the pre-webinar survey
- 55% responded to the post-webinar feedback survey and 48% described what, for them, were the most useful parts of the webinars.

Feedback about the program was very encouraging:

- 89% rated the question-and-answer sessions as ‘Excellent’ or ‘Very good’
- 95% rated the overall sessions as ‘Excellent’ or ‘Very good’
- 96% reported that the information provided was relevant
- 97% indicated that they were ‘Very likely’ or ‘Likely’ to participate in future events.

The second webinar was about ‘hardening’ an existing house against bushfire attack. Viewers were asked whether they would take actions to reduce their risk. Of significance, 92% of viewers responded to the post-webinar survey that they would take action (but were not asked to describe the detail of those intended actions). A total of 156 written suggestions for future webinar topics were provided.

## The 2021 webinar program

A comprehensive review of the 2020 webinar series identified issues and improvements. In response, the website and the webinar registration process were revamped, including:

- uploading webinar recordings within 10 days following the webinar
- establishing a Vimeo account to enable recordings to be viewed from the website without being interrupted by advertisements
- providing a survey platform that enabled a greater variety in the format of questions and a easier and quicker way to analyse results.

A wide-reaching community engagement process was needed. The webinar format was reviewed and the use of panel discussions was preferred. The administration of the webinars was simplified and improved. A BRI logo was created for quick recognition. More sponsors were enlisted to provide funding for the enhanced program. The 5 webinars would be presented fortnightly rather than weekly to allow for greater viewer reflection time and, ideally, family discussion of each topic, and for the BRI team to take action and prepare.

The program was scheduled from July to mid-September to allow viewers to take any mitigation actions before the start of the 2021–22 bushfire season.

The topics of the webinars were influenced by viewer suggestions from the 2020 series and by the experience of BRI team members. Topics were reviewed and discussed with subject-matter experts. Topics identified as important but not covered in fire agency material were given additional consideration. A promotion campaign was assisted by BRI's Nillumbik Community Directory that listed 300 community groups. Facebook and email were used extensively. Each organising team member used their personal

email list and contacts were made with people representing local community groups. Personalised emails were sent to all councils in Victoria likely to face future bushfire threats, and to all elected members in Victoria of the Australian and Victorian parliaments. Face-to-face meetings were held with local government councillors and some local members of the state government. Posters were printed, however, wide distribution was affected by pandemic restrictions. The use of a pre-webinar survey (with a stronger emphasis on viewers to submit questions) to stimulate audience participation as well as the use of subject matter experts as presenters were retained. Table 2 provides a summary of the major features of the 2021 webinar program.

For the 2021 webinar program, registrations tripled to 1,300 and viewing audience numbers doubled to an average of 206 viewers per session. As at mid-June 2022, there have been 2,600 views of the webinar recordings on either the BRI Vimeo platform or YouTube.

Responses in the post-webinar surveys were very encouraging. More people responded to the pre-webinar survey than participated in the webinar (106%, up from 39% in 2020):

- 60% responded to the post-webinar survey (up from 55% in 2020)
- 72% responded with details of their most informative parts of the webinars (up from 48% in 2020)
- 78% responded by providing details of the actions they intended to take (not measured in 2020).

Respondents liked what was delivered:

- 91% rated the overall sessions as Excellent or Very good (94% in 2020)
- 90% rated the relevance of the overall sessions as Excellent or Very good (94% in 2020)
- 99% said they were Very likely or Likely to participate in future events (97% in 2020)
- 99% said they were Very likely or Likely to recommend the webinars to others (not measured in 2020)
- 269 comments were received on the webinar topics and suggestions for future webinar topics
- 95% who indicated in their 2020 post-program survey that they were spurred to take action, reported that they had taken action.

The age profile of survey respondents was:

- 8% were aged 20–49
- 17% were aged 50–59
- 29% were aged 60–69
- 24% were aged 70–79
- 3% were aged over 80.

The relatively small percentage of viewers aged under 50 years was noted. Anecdotal indications are that people within this demographic can be time poor. To increase the appeal to people in this age demographic, future program promotion will emphasise viewing the webinar recordings and associated videos at times of choice.

Table 2: The 2021 webinar program details.

Date	Topic – All format is webinar	Presenters	Number of viewers	Viewer satisfaction levels
21 July	Reduce your house and property risk	Dr Justin Leonard, CSIRO	277	Overall session: <ul style="list-style-type: none"> <li>· Excellent 43%</li> <li>· Very good 50%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent 66%</li> <li>· Very good 24%</li> </ul>
4 August	Get water ready: tanks, pumps and sprinklers	Dr Justin Leonard, CSIRO	216	Overall session: <ul style="list-style-type: none"> <li>· Excellent 57%,</li> <li>· Very good 37%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent 66%</li> <li>· Very good 22%</li> </ul>
19 August	Your physical and emotional preparation	Dr Danielle Clode, Flinders University Dr Rob Gordon OAM, Clinical Psychologist Dr Jim McLennan, La Trobe University	184	Overall session: <ul style="list-style-type: none"> <li>· Excellent 61%</li> <li>· Very good 30%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent 64%</li> <li>· Very good 25%</li> </ul>
1 September	Triggers to take action	Dr Kevin Tolhurst AM, University of Melbourne Dr Katharine Haynes, University of Wollongong Dr Danille Clode, resident Smiths Gully Black Saturday 2009 and Adelaide Hills 2021 Dr Raphaelae Blanchi, CSIRO	181	Overall session: <ul style="list-style-type: none"> <li>· Excellent 44%</li> <li>· Very good 48%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent 59%</li> <li>· Very good 32%</li> </ul>
15 September	Your sheltering options	Dr Raphaelae Blanchi, CSIRO Dr Katharine Haynes, University of Wollongong Dr Chloe Begg, Country Fire Authority	172	Overall session: <ul style="list-style-type: none"> <li>· Excellent 23%</li> <li>· Very good 62%</li> </ul> Information relevance: <ul style="list-style-type: none"> <li>· Excellent 47%</li> <li>· Very good 44%</li> </ul>

## Reflections for the 2022 webinar program

Five free webinars will be offered in 2022. The topics include how to assess risk, involving children in preparing family bushfire plans, vegetation, caring for horses and last-resort options. Short video clips of interviews with residents who have personal experiences caring for horses during a bushfire will be included.

The webinars presented have encouraged people to take responsibility for preparing their properties using best available scientific knowledge about managing bushfire risk. Webinars also emphasise that working with neighbours and joining neighbourhood or local bushfire safety interest groups builds

confidence and capacity to reduce bushfire risk to residents. The webinars encourage people to know the broad risks associated with living in a bushfire-risk locality, which, in Victoria, is a Bushfire Management Overlay or Bushfire Prone Area. This information helps people understand their immediate vulnerabilities and the risks posed by their home's location, design and state of maintenance.

Information presented by eminent researchers in the sector emphasises the gravity of decisions that must be made prior to a bushfire threat and the risks associated with the absence of a household bushfire survival plan. The presentations by experts provided essential information and the question-and-answer sessions explored many of the topics people are interested in.



Dr Danielle Clode practising starting her fire pump at her property.  
Image: supplied by Dr Danielle Clode

Feedback from viewers indicates that the webinars are a valuable tool for addressing bushfire preparedness. Recordings of previous webinars and other website content provide a valuable online resource into the future. Additional website content sourced from previous webinars is called ‘Bitesize BRI’ and features:

- a searchable database for users to locate their topic of interest
- 26 topic-specific videos with accompanying transcript files available for downloading
- the presentation and/or panel discussions for each webinar available as a video and accompanying transcript files as well as the question-and-answer session transcript
- the feedback provided by viewers for each webinar about the most informative parts and the proposed actions they will take as examples of how comments by a household can assist other households.

It is expected that locally relevant information, presented in an accessible form and easily found from a topic search, will provide benefit for all householders living with bushfire risk. The webinar recordings and additional website content can be used as a resource by fire agencies and community groups.

This is timely, given that the increasing intensification of fire conditions is set to collide with an expanding urban fringe population exposed to bushfire risk, as evidenced by the fact that ‘...the number of people residing in bushfire prone areas increasing by 111,000 in Victoria alone in the decade leading up to 2018’.<sup>3,4</sup>



The webinars and further resources are housed on the BRI website.  
Image: Bushfire Resilience Inc.

More information about BRI and its webinar program and resources is available at [www.bushfireresilience.org.au](http://www.bushfireresilience.org.au).

### Acknowledgments

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### Endnotes

1. McLennan BJ 2020, *Conditions for effective coproduction in community-led disaster risk management*. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, vol. 31, no. 2, pp.316–332. <https://doi.org/10.1007/s11266-018-9957-2>.
2. Country Fire Authority Prepare & Plan. At: [www.cfa.vic.gov.au/plan-prepare](http://www.cfa.vic.gov.au/plan-prepare).
3. Gross S & Cadman E 2020, *Bushfire-Ravaged Australians Face Choice in Era of Climate Change: Rebuild or Leave?*, *Insurance Journal* 23 Jan 2020. At: [www.insurancejournal.com/news/international/2020/01/23/556124.htm](http://www.insurancejournal.com/news/international/2020/01/23/556124.htm).
4. Australian Government Centre for Population 2021, *Migration between cities and regions: A quick guide to COVID-19 impacts*. At: <https://population.gov.au/sites/population.gov.au/files/2021-09/the-impacts-of-covid-on-migration-between-cities-and-regions.pdf>.