

August 2017: Brown Hill bushfire risk for residents living in sub division estates northside

Associate Professor Kevin Tolhurst AM — Brown Hill fire risk assessment for residents living in sub division estates northside. Video 4 in the series. Interviewer: Alice, a neighbourhood cluster contact for the Brown Hill FireAware Network.

NOTE: **Currently in 2026 there are around 10 estates between Springs Rd and north of Daylesford Rd, and around 9 estates on the southside of Daylesford Rd to the freeway, which feed into Daylesford Rd.

[Alice — interviewer]

People are increasingly living in subdivisions. The subdivisions north of the freeway are expanding. The area is situated between bushland to the west and the east, and open farmland to the north. At present there are six** defined subdivisions of varying ages of completion. All of this area is designated a bushfire prone area. Springs Road is the only road to the south. Kevin, could you provide us with your evaluation of the bushfire risk to the households living in these new subdivisions north of the freeway, such as Coorabin Estate?

[Kevin Tolhurst]

Yes. These subdivisions have a mixture of characteristics. They're urban in the sense that the **houses are relatively close together**, but the houses are then **situated in a rural setting** — surrounded by a combination of farmland and bushland. A **fire has the potential** to build to quite a **large size and then impact on this subdivision**, which is quite different to somewhere in the centre of Ballarat.

So, what we're dealing with here is that, **under Extreme or Catastrophic weather conditions, a fire could start** out towards Creswick or Clunes and develop to quite a large size. By the time it impacts on the Creswick Regional Park to our west, it will have built up quite an amount of energy. When it runs up the hills and across the divide here, those **hills act as a launch ramp to throw massive numbers of embers forward**.

So somewhere like Coorabin Estate, and other estates in this Brown Hill area, could potentially **just be bombarded with embers leading to spot fires** which will be in people's backyards, in parks, on roadsides — within a few minutes, the **whole area will basically have fire in it**. So, it's not the fire front that moves in here, it is essentially the coalescence of hundreds of small spot fires. That's part of what **people living in an area like this would need to deal with** on that day, and it will add to the confusion as to what you're able to do.

Within the subdivision itself, there would be a lot you could do to **defend your property**, because you'll be **dealing with small fires to start with** — it's not a big fire front. But it's going to go on for hours, so you have to have a **fair amount of stamina**. You're going to have to keep your hydration levels up, and you're going to have to be mentally and physically prepared for that.

One of the things that is likely to happen — and we have the experience of the Canberra fires in 2003 and more recently the Wye River Fire in 2015 — where a lot of the houses were lost from house-to-house ignition. People's gardens were burning, setting fire to the house, and **the house, is the biggest fuel load** of all in the environment, **it's not the bush**. Normally when there is a house fire the fire brigade is able to restrict the fire to the one house to stop it spreading but in a bushfire the fire brigade and all the **fire fighting forces are and scattered** widely across the

landscape because such a big area is involved. So, you have to be **much more self-reliant** — either through design or through your own protective action.

So, you need to be **talking to your neighbours**, to make sure that they understand the risk, and perhaps start doing things like redesigning and maintaining your garden, and thinking about the fences you build and the way in which you have structures out in your backyard.

There needs to be a community effort to make the community as safe as possible. When **houses are closer** than about ten metres to each other, they become **a real threat for their neighbours** — and that's something that's not taken into account in the building standards. Even though some of these houses in these subdivisions have been built to Australian Standard 3959, that standard is for the individual building in isolation. It's not considering a house fire next door to it — it's only considering the bushfire from vegetation. So even though you may think you've built your **house to a high standard, it's not necessarily going to withstand a house-to-house ignition** circumstance.

So, people need to be preparing. They need to be looking at their house. They need to be looking at their neighbours' properties, and **talking to their neighbours to come up with a way of dealing with it.**

The other thing you have in a rural subdivision like this is the access and egress. Your plan may be not to be here when the fire comes through, but the reality is that there are **very few options in terms of the roads you can use to get in and out of here.** If there are fires in the area, you only need one branch to fall off a tree, or one tree to fall across the road, or a powerline to come down, to block that road. Then you're stuck in the area. If you haven't done adequate preparation in your neighbourhood or at least on your property, you haven't got anywhere to go to. So, it's really important to **prepare your house even if your plan is to leave.**

There will also be circumstances where fire is more likely to impact on you — in fact,

So regardless of whether you think you may or may not be subjected to a Catastrophic fire — chances are **you will be subjected to a bushfire of lower intensity, and you need to be prepared for either eventuality.** You're hoping to be able to escape the area in the event of a fire, and you can plan to do that — **but you have to have a back-up plan, which is defending your property.** There may be reasons why you can't actually get out at the time that you really would like to.

[End of transcript]