



Chair: Malcolm Hackett OAM

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Justin Leonard

If we go there and have a look, for example at the area of Nillumbik. On the left we see that the vast majority of Nillumbik is actually declared bushfire-prone, so it's within the BPA. And a smaller subset, but well over 60% of Nillumbik is actually within the BMO. And you'll see from these two maps how the BMO is simply a subset or sub-area of the larger Bushfire Prone Area designation.

What's interesting is if we zoom into quite a small region. So, let's go down and have a look at Diamond Creek. Let's look at how the Urban Interface shows up when we zoom right into these maps. So, here's Diamond Creek up close, and this is actually what the page will look like when you go into actually the VicPlan Maps. And you'll see on the left there's a really informative set of click-boxes where you can turn various layers on and off for things around bushfire, but also many other useful overlays and interesting landscape-related mapping features.

If we actually flipped to a different type of view, which is also available in this website, we look at the streetscape and the land parcels. So, we can basically see how we've got a heavily urbanized area through Diamond Creek, with a couple of creek lines and forested areas within the environment, and then a broader outer landscape of treed and un-treed rule. So, you can see how that sits. Now, let's see how the BPA layer designates. So, it designates all of that treed area and the grass therapy in the mix. And it also extends quite a distance into the urban interface. And that's because the actions of bushfire can reach over houses and deep within urban interfaces and affect houses many rows in. And those distances and that reach has been carefully considered when they consider the extents of these maps.

Now it doesn't rule out the likelihood that you could have bushfires and ember-drop and ignitions well beyond the BPA. It simply says that at this extent it's more or less a nominal threshold, where the risk is dropping low enough that it doesn't warrant specific building controls. So, I encourage anyone that's trying to get out of a Bushfire Prone Area into a safer place to be well within the non-designated BPA areas to assume you've got to a place of relative safety.

If we look at where the BMO maps in relation, it covers most of that BPA area and if you're out into these areas where you've got an exceptionally high risk. So, you're embedded deep within a high fuel-load area, where there's slope and other contexts. So, fire behavior in this area is definitely higher than the BPA only region.

Justin Leonard

I'm here to present about the topic of how houses are destroyed by bushfire, and I want to start with the broader landscape topic, and as we move through this evening, we'll get closer and closer to the structure and then finally work through the structure itself. So, let's start in the broader context of the broader landscape.

In a bushfire sense we can simplify things and say, "Look, we're a house in a broader landscape. " There's the house in question. The large unmanaged bushland that presents the hazard and carries the event to the local proximity. We have the urban context, or the design and the layer, involving many complexities, some that certainly support and help the house in shielding it, but

others which provide additional fuel loads and threats to the house itself, including neighbouring properties and fences and whatnot.

Quite importantly, the environmental conditions that precede these fire events and occur during these fire events, both drive the fires and prime the bush to carry those fires to our assets. But, quite importantly, also act on our urban environment and drive them out, and make them more vulnerable and prepped to be ignited by fires at the same time. So, it's very important to not think about our structures and our environment how they are right now, but how they would respond and behave when they're in a dried out, desiccated state which coincides with when the fires are most aggressive and virulent in the landscape.

I want to take you through an important terminology that our regulations use within the broader context of defining our broader environment. One is the term BPA, which means Bushfire Prone Area, and the other one is called a BMO, which is a Bushfire Management Overlay. They're two areas that we can map, or have been mapped, and they play two important roles.

The BPA itself forms a trigger for you requiring to build in a particular way. So, it's a building control. This is where you might be required or asked to build a specific way to a certain BAL level using a standard such as AS 3959 or the Nash building code.

It's an area where it's considered that fires are frequent enough that it warrants a specific approach to build in response to that risk of fire arrival. And within that BPA region, you get this opportunity also to consider certain types of vegetation management, and that vegetation management can follow something called a 10/30 rule.

Justin Leonard

Now, BMO is an area within the BPA, a sub-area of a BPA that's of particularly high risk. So, the fires within a BMO are particularly severe and therefore warrant additional requirements which are called Planning Controls where specific setbacks and extra measures are required if you plan to build and therefore need a Planning Permit in that area.

If you already have a house or you've bought a house that's already built, the BMO is actually a really useful indicator of whether you're in an exceptionally bad location in the landscape as far as bushfires control are concerned.

The Vegetation Management options you have within this BMO area is called a 10/50 rule, which is quite similar to the 10/30 rule, you can just do a little bit more, and I'll explain that.

You can access maps where you can type in your own street address and zoom into these locations and actually see where these layers exist and where you sit in the landscape in relation to them, and the webpage at the bottom of the screen there is the link that takes you to those publicly available maps (<https://mapshare.vic.gov.au/vicplan>).