



## **Understanding rebuilding**

Chair: Malcolm Hackett OAM

Panel members: John Ginivan  
Rosa Zouzoulas & Renae Ahern, Nillumbik Shire Council  
Julie Bowyer, Cardinia Shire Council  
John Ginivan, Strategic Planner  
Mark Holland, CFA  
Kevin Hazell, Bushfire Planning  
Peter Collina, Victorian Building Authority

### **Malcolm Hackett**

Our panel tonight consists of John Ginivan, Strategic Planner; Rosa Zouzoulas and Renae Ahern from Nillumbik Shire Council; Julie Bowyer from Cardinia Shire Council; Kevin Hazell, Bushfire Planner; Peter Collina, Victorian Building Authority; Mark Holland, CFA Planning Advisor

Let's have a look at the poll result from that first poll to see what people believe there. Oh yes, what do you make of that?

### **John Ginivan**

I'd think that's pretty realistic.

### **Malcolm Hackett**

As do I. It took us three years to rebuild our house believing at the start that it would be a year. Just like on grand designs.

### **John Ginivan**

Yes, it's like when you think about the process here after a fire, if it's a significant fire, then there's always a period of time that's taken up with clean up, and all the adjustment to that and what that means. There's the time taken to sort out insurance and what that means. There's the time taken to simply get over the shock and horror of what occurred. So, three years is fairly realistic given that it takes about 12 months to actually build the structure.

### **Malcolm Hackett**

I couldn't agree more. And obviously there's plenty of examples on the television these days of people that are still going after three or four years. Let's introduce some of our other panelists. That hypothetical we have. Julie Bowyer from Cardinia Shire Council, and certainly, Cardinia people are going through this rebuilding at the moment. And we've also got Rosa and Renae Ahern from Nillumbik Shire Council with us. So, perhaps if Julie gives us a response to that hypothetical first.

## **Julie Bowyer**

So, if I had Option 1 of the Roberts Property come before me for an assessment, I would be a little bit concerned and reiterate John's concerns regarding the length of the driveway that makes entry and egress difficult, particularly over a bridge that may also become fire affected in the event. It goes through a Land Care Habitat Corridor, which may also become fire affected. So, that makes a family trying to leave this property difficult. It also makes Emergency Services trying to enter this property difficult.

It also has been discussed that Option 1 would provide better views. But I think sometimes we have to keep in mind when we're rebuilding, that we have to make certain changes. And, we may need to sacrifice some of the emotional attachment to original siting, particularly if it results in a re-siting of a dwelling that is a safer option for a family. Certainly, Option 2 gives us a far better option in terms of safety. Entry and egress is much shorter, we don't have to rely on that bridge over the creek surviving any fire attack, the habitat corridor has changed and therefore we don't have to cross over that to access or egress the property, and we're further away from the vegetation. And this is really important to consider for a couple of different reasons.

First of all, because the risk ultimately will come from the vegetated characteristics of the property. And, also, once we build in a forested area, we're also subject to Vegetation Offset Requirements from the State Government, which can be very very expensive and often not a cost that is factored into rebuild costs. So, that's something to be cognizant of also. So, hypothetically, option number two gives us a far better option in terms of mitigating the risk of bushfire in a secondary event, and ultimately, it's a safer option for a family. And from a planning perspective, where we have to balance mitigating the risk associated with landscape, preserving the value associated with the landscape, in this case the biodiversity value, and also meeting the development needs of the community, Option 2 gives us a far better pathway to follow in terms of rebuilding after a fire event.

## **Malcolm Hackett**

Thanks Julie. And Rosa, are there any things that you would want to add to that?

## **Rosa Zouzoulas**

I guess a lot of the discussion that John and Julie have mentioned already covers off on the key points that you would automatically start to think or put into your mind when you're considering both of the options. For me, in addition to all of those points, you start to look at, I guess, the zone and the overlays that do affect the land. And this is where coming to Council early allows Council Officers to start to run through the zone and the overlays and the requirements that are put in into those provisions, and to break down that language because often, the language in a planning scheme is quite difficult for your typical person that's never encountered or never had to do a Planning Permit application. So, even reading it can be quite difficult to understand, "Well, what is it really that my dwelling design will be assessed against? And how do I actually respond to that provision or that objective in that planning scheme?"

So, when you look at the zones, in this instance it's the Rural Conservation Zone, and its objectives are really to, I guess, protect the vegetation of the area, or protect and enhance the surrounding area. This coupled with an Environmental Significance Overlay and the objective of the Environmental Significance Overlay in this instance is to protect and enhance the sites of faunal and habitat significance, and to protect and enhance the strategic links that may be there on the site, or maybe able to be created on the site, need to be factored into the siting and the design during the concept phase.

And in addition, this site also has the Bushfire Management Overlay relevant to this site, and that has the various application requirements of a bushfire management plan. And it specifies particular requirements in there like a defendable space of 30m around the dwelling, which you need to then factor into the design and siting of the new dwelling or buildings on the land. So, when you start to

piece all of those sorts of provisions of the planning scheme, and you start to consider all the other things that Julie and John have also mentioned, it starts to help you shape and to identify, "Well, what's the most reasonable or the most appropriate location for the dwelling in the buildings to be? Where do I site other features on the land if I'm looking to do anything in the future with the land?"

And I think that last point is another point that sometimes we're so quick to build a house after the fire, that maybe we don't necessarily give the time and the effort to start to think about any future use of the land as well. So, what is it that you're ultimately wanting to do on the land that you may wish to factor in at this time, and may have an implication on where you site your buildings on your land?

But the other takeaway that I wanted to put forward tonight is really to stress that: Council ultimately will provide a number of different approvals. Planning, Nillumbik can provide building permits, health permits, and it's good to engage with Council early on, so, you're not only getting the planning advice from the council's planners, but you're going to get advice from our Environmental Health Planners. And that's especially significant if you're needing a septic tank and the like. And you can also engage with our building team to understand any of the building requirements and start to break down that language, and help you understand the requirements from a building perspective.

So, we try to provide a concierge, I suppose, service to the landowner, and try to give them a one stop shop of all the information that they need to factor in, and start to have these discussions with them. And sometimes it's not even an "Option 1 or Option 2", it's a hybrid option that might come about.

### **Malcolm Hackett**

Thanks Rosa. Perhaps we'll go into the Q&A because one of the first questions that came up was: would Nillumbik's post disaster response include a recovery team visiting affected communities in a case manager approach? And I guess your concierge notion fits closely with that?

### **Rosa Zouzoulas**

Yes definitely. We would like to think that we would be able to provide them, or the landowner, with all the information and start to break down that information into digestible components and allow the landowner to go away, think about those things, come back. So, they're always going to have that discussion with the same person or the same couple of people from council, and they're given a, I suppose, for want of a better word, a tailored approach to help them through the journey.

### **Malcolm Hackett**

John, there is a question here for you and it's what advice and options do the members of the panel advise for rebuild owners who are struggling and feeling they're being held up by poor consultant advice?

### **John Ginivan**

I guess it's always difficult, when you're engaging consultants, to know whether you're going to get a really good service or not. And certainly, that BRV document that I referred to, on the BRV website, has in there a list of all of the places that you would go to find the sorts of consultants that you'd be wanting to engage, and my advice would be always use someone who's reputable. If they're a registered member of the Fire Professionals Association or the Architects Institute or whatever it is, then that's a tick one. And then to the extent that you can, test what experience they've actually had. And so, even though you might get design experience, if you've engaged the building designer who has never actually worked in detail with the National Construction Code for bushfire, then they're likely to take you down the path of an extravagant design solution that doesn't actually respond well to bushfire resilience.

So, talk to them in terms of what's their portfolio look like, what are their case examples, [audio gap] always ring up other consultants if you're unsure and the other solution is talk to local government. It's just [audio gap] with the local government about whether what you've been told is sound.

### **Malcolm Hackett**

And perhaps here's a question for the planners too: would planning departments favor a build that opts for a smaller footprint and a higher energy rating than what previously existed? Could it help to quicken up the process? What do you reckon Rosa? Julie?

### **Rosa Zouzoulas**

I don't know that it will quicken up the process, it really comes down to a large number of different factors. What are the consultants saying? What is the CFA saying? What are the other referral authorities, if there are any referral authorities, saying? What are your expert reports saying? And it's an outcome of balancing all of those different factors that will result in how fast the application moves through the process.

### **Malcolm Hackett**

Julie?

### **Julie Bowyer**

I would not always be committed to rebuilding exactly what you had after a bushfire. And also, think about the needs of your family. What the needs are now and what the needs will be in the future. And also, consider getting advice from the council about what the consequences are of those concept plans that you make now. So, if you may if you would prefer a build that is a smaller footprint than what you've previously had, then there are a lot of benefits as a consequence of that. It's likely to be cheaper for you, it's likely to be cheaper to run for you, but as long as it meets the needs of your family and you're aware of the cost consequences, then I think that's a great option for you.

### **Malcolm Hackett**

Can we move to that next stage, which is the planning and approval phase, and give us a sense, using that Roberts Property, of how that is most likely to proceed? And the involvement of the various approvals that are required. John, do you want to start us? is that a no?

### **John Ginivan**

I was just starting to respond to that next question in terms of compliance costs and so forth. Do you want me to run down that one, Malcolm?

### **Malcolm Hackett**

You could, yes

### **John Ginivan**

There's a question here from the audience which is: around how much does it all cost when we add in permit compliance, costs, access to water tanks, vegetation removal, defensible space, etc. The answer to that question is: it's going to vary from site to site and, in some cases, your concept planning process will show you that Site A is going to cost you a hell of a lot more than Site B. So, if we take that back to the Roberts hypothetical example, on the diagrams it looked, based on the plot of where trees were, that there seemed to be about 50m of broadly cleared space around both

house footprints. So, defensible space isn't a particular cost. Option B, they had a shorter access, so, it took about two-thirds of the road length out. So, if you're building a road, you've saved two-thirds of the cost of the road by doing that. Water tanks, the basic requirement probably would be for a 10,000litre water tank from the CFA. If you're factoring in sprinklers, then you probably need 20,000-30,000litres of water. So, again that's probably triple the cost of water tanks.

So, the question of how much does it cost depends on what bits you put in the recipe before you add it all up. And, that's why the siting of the structure has such a bearing on what the total cost is at the end of the day.

### **Malcolm Hackett**

Say the Roberts family decide that they're leaning towards Option 1, they're going to go and speak with the council about that, Renae do you want to give us a sense of what are the steps and the process that they're going to go through and what will you be asking of them?

### **Renae Ahern**

So, if we were assessing this application at Nillumbik, as soon as residents are ready to meet start meeting with council, we would arrange a joint meeting with the landowner or their representative. Some people might choose to get a Draftsperson or a Planning Consultant to act on their behalf, but they absolutely don't need to. We'd have a coordinated meeting with a representative from the planning team, a rep from the building team, and someone from our environmental health team, so that moving forward, landowners would have a single point of contact from each of the key three teams within council, to help residents rebuild.

In terms of the types of council approval needed, the planning permit is the first step in the process, with the building permit coming after planning, and then the septic approvals can tie into the building permit stage. The septic approval can come at any time, but the building permit can't be issued until the septic permit is also in place. So, if we look at Option 2 with the residents down the hill, in terms of the types of information that we would likely ask for, and the types of planning consideration that we would have for this type of siting, obviously we're closer to the road, so the physical impact and disturbance to the property from the driveway is significantly reduced, which is fantastic. We would need an existing conditions plan, which would likely come in the form of a site feature survey. That would pick up the site levels for us as well as any existing buildings that may have survived the bushfire, as well as natural site features such as the dam, the natural drainage line there, any vegetation that may have survived the fire, as well as the property boundaries.

We'd also need details of the house design, so essentially the house plans, floor plans, the elevation plans, so, what does the house look like from the outside? That would pick up things like levels, natural ground level, proposed ground level, finish floor level, and building heights. That's fairly basic standard information. And that would be needed for any planning permit, as well as any building permit to follow. The site information that may be needed on top of that, where we get into the space of the technical reports.

So, looking at the proximity of the house to the existing dam there, we may need to ask for a land capability assessment. It would also depend on what type of wastewater system was being proposed. Is it a primary treatment system? Or is it a secondary treatment system? The State Government Code of Practice does have requirements for setbacks from waterways. Looking at the plan, it looks like there are still some trees remain. The extent of vegetation on a property can also impact where septic effluent fields are located. Hypothetically, if the existing septic tank was proposed to be reused and repurposed, then it's likely that we would need a plumber's report that would tell us about the age of the existing tank, its capacity, the condition of the tank following the fire, and whether or not it's appropriate to reuse.

Other types of information that we would need. If you're rebuilding in Nillumbik, it's highly likely that you're rebuilding in a Bushfire Management Overlay, so there are mandatory application

requirements under the Bushfire Management Overlay. Primarily that being the Bushfire Management Statement as well as the hazard and the site assessments. That document or that report does need to be prepared by a consultant.

In terms of other information, we may or may not ask for an Arborist report. It would depend on whether trees were proposed to be removed, or if there are site works proposed in proximity to trees. Following the fire, it would be dependent on the condition of the trees, as to whether council would need that information or not. If other native vegetation needed to be removed, then a written response to the State Government Native Vegetation Provisions clause 52.17 would need to be provided. Native vegetation offsets may or may not be a requirement of the application as well. Julie did you want to add anything in terms of application requirements on what you would be looking for assessing this application?

**Julie Bowyer**

I think you've covered it, Renae. That's the basic stuff that we would be asking for as well. Obviously, when we get all of that information, it's part of the process that we assess all of that information and, of course, if you get a Bushfire Management Statement that suggests there are other places or other ways to mitigate the risk, then we would be inclined to take that advice. So, it's often good to go into the planning process with a bit of a flexible perspective. Because sometimes things change, because better options to mitigate the risk are presented in the process. But, in terms of the reports and the different assessments that we would require, that would be pretty consistent with what we would be asking for too.

**Malcolm Hackett**

Perhaps I could ask Mark and Kevin to chime in here, because I know the CFA requirements, they come early in that planning phase. So, there's issues there that people need to meet. Mark, do you want to say something about the reports that you require?

**Mark: Holland**

Yes, thanks Malcolm. Most of the requirements that we would be looking at have been mentioned already. John went through them just before and Renae as well, but I guess at the end of the day, CFA's role is a referral authority in the process. So, what that really means on the ground is once your application goes to council, it then gets referred to CFA, and CFA looks at your application, your bushfire management statement, and the requirements in the planning scheme, and then really what we're doing is going back to council to say whether it complies with those requirements or not. So, at the highest level, I guess that's our role. We also play a pretty big role in providing that informal advice. So, you just mentioned, Kevin, before, as a consultant providing that advice to Kevin as he's preparing the application, land owners themselves and the council offices, around what's likely to comply and meet those objectives in the planning scheme.

As John stepped out, that's really the building design, and a big part of that's the BAL. Water supply. So on most sites, as John said, we'd be looking for a 10,000litre water supply, and then the fire brigade needs to get within 4m of the outlet on the tank in most instances. Access on and off the property, and then the big one's defendable space, which as people have already mentioned, can vary depending on the site, depending on the slopes around the site, and the type of vegetation that's on and around the site.

## Malcolm Hackett

Kevin, do you want to add anything to that?

## Kevin Hazell

I'll make a couple of reflections. I think, firstly, the approach to securing approvals has now been in place since 2011 and consistent with what the Royal Commission asked us to do. So, this isn't a new system. We've done it for nearly 10 years, so most people are relatively familiar with how it should operate, and that's really good, that the State has moved on from where we were pre Black Saturday.

I think when we're talking about typical costs, we're looking at somewhere between \$1,000 and \$4,000, with the final cost based basically on the quality of your consultant, and complexity. I think there was a question earlier about poor quality consultant advice. I agree with that. I get many people calling me up after they've already got some advice, and unfortunately once you start with the dud consultant, unfortunately, you're probably stuck with them, because of the sunk cost. But that is what it is.

We know that our consultant system in Victoria, for doing this stuff, isn't as good as it needs to be. And unfortunately, many citizens do bear the cost of that. But I just reinforce: do the basics, get three quotes, ask questions. It's your money, don't proceed if you're not comfortable with your consultant.

In terms of prep time, six weeks is a relatively standard turnaround time. But it can be quicker or slower based on complexity. Certainly, I would always encourage, in these types of proposals, pre-application discussions with the CFA, and I think quite unique amongst referral authorities, the CFA runs an excellent pre-application service. So, if your consultant isn't using it, they're not doing their job properly.

I think it's fair to say that, where applications don't resolve the issues satisfactorily, there will be delays. There's simply no point investing in a poor quality set of information, because it doesn't save you time or money in the medium to longer term. So, I think just keep that in mind. The investment is worth it.

I think the reality is that, whilst Victorian government makes some efforts to streamline decision making, at the end of the day it hasn't streamlined matters relating to vegetation protection, and it hasn't streamlined matters relating to life safety, and prioritizing life safety. And that's effectively where the rubber hits the road. That's where the complexity is, and there's no streamlining of those things. There's nothing but bulk standard hard work to resolve the issues on a site by site basis. And that's the job of councils. They tend to do it really well, but it's not an easy job.

I think I very much agree with the comment Julie made earlier about letting go of the existing siting. Most regulators are keen to get you rebuilt across the line, but enhancing safety through siting within the site is absolutely necessary. Certainly, my advice to clients is I don't care where your previous house was, I only care that your new house is in the safest possible place. And I'm quite sure the regulators might share that view. I think if I was to be honest, all non bushfire issues are frankly secondary. Energy, bespoke design, any of that stuff, it's about bushfire. There's broad standard bushfire considerations, they've been in place for nearly a decade, and in the end they will prevail over all else. And you either satisfy them and can convince the regulators that you have, or you won't get a permit. And that's the system operating as intended.

My reflection is most public sector workers are working in very good faith to help people, they're parts of these communities they're not separate to them, they're part of them and they're very keen to help people get their regulatory approvals. But we know that a destroyed dwelling indicates, in absolutely no uncertain terms, that there is a risk, that that risk was realized, and that it can be

realized again. And so, they're quite right to be cautious and making sure that we cover off on this bushfire stuff as part of any approvals.

**Malcolm Hackett**

Thanks Kevin. We've covered off pretty well on the planning and approval phase. Does anyone want to add anything else into that? Julie? Renae? Everyone comfortable with that?

**Julie Bowyer**

Given that all the science says that we're going to be having more bushfires, and they're going to be coming harder and faster, and we as a community have to start thinking about the way the best way forward. So, where councils are, as Kevin said, we're part of the community and our objective is to make safer, better communities, and if a lot of our communities live in bushfire affected areas, then we have to, as a community, decide what level of risk we're willing to live with now and into the future. So, it may mean and result in harder decisions being made in the future, and so from applicants' perspectives, it's always preferred to result in the very very best, most resilient application that you can possibly make. Because it has to last not only for the bushfire risk as it is now, but into the future where we know that it's going to get more extreme.

**Malcolm Hackett**

Thanks Julie. Let's just move on now then to that to the house design and the construction phase. I guess John and Peter and Mark, this could be an area where you all contribute. We've achieved our approvals and we're going to head into, at least, the initial of the planning stuff. In terms of the house design and the construction phase, John's touched on lots of those already, but what are the issues that you see?

**Kevin Hazell**

I think, from a CFA perspective and a planning permit perspective, on those trickier sides, the ones where the risk is higher, we would be wanting to see a level of house design at the planning permit stage. So, one thing that's important for us on those more difficult sites is to envision how that house is going to sit on the site. Just how exposed it might be to run a fire towards it. So, if you envisage a tall two-story house is up in the flame, or a low house that's been managed to bench in and protect it with the lie of the land around it, some of those decisions become quite important in the final approval process. So, that first stage at least, the initial house design or the higher level house design, can be quite important at the planning stage. Probably the first point that I would make there.

And the other thing is not retrofitting your bushfire requirements once you've designed the house. So, starting the process, understanding firstly what your BAL is, but probably more importantly those really good design type approaches to really put a really resilient building together, can be really important and save you a lot of money at the end of the process. So, if you've set your heart on a house that's going to be timber clad, but then you've got to go to a bushfire resistant timber that costs 10 times as much to cover the building, the costs can blow out really quickly. But, if you've designed with a noncombustible façade, and I suspect that's some of the things that Justin Leonard would have ticked off in the first one of these sessions, it can not only really lead to a much better outcome, but also a much cheaper one at the end of the process.

**Malcolm Hackett**

Thanks Mark. That really reinforces the importance of John's concept phase and trying to get those things nailed down before you even start the rest of the process. John, do you want to add anything there?

## **John Ginivan**

Look, it's absolutely right. The point I made was that all sites are different and the landscape is different, and so the ability to assess how our structure is likely to perform within the particular landscape, and where the wind's likely to come from, is so important. Mark's spot on. There's huge costs where you take a bog standard suburban design or otherwise and then try and retrofit it. That is probably the worst possible pathway you could go down because it's much cheaper to design it properly from the ground up to be resilient. And if you do, you'll end up with a structure that's warm to live in, that's got low energy costs to run it, and all those other benefits as well. So, bushfire design doesn't mean "nasty looking house" and doesn't mean "not nice to live in". It can mean a very nice house to live in that looks fantastic. So, the design process is important, and having good people around you helping you do that, given that post bushfire there's a lot of emotion and stress and anger and everything else involved as well, having the right people around you to help you just step through that in a calm and rational way is really important, because it gives you the best value outcome for what you ultimately do.

## **Malcolm Hackett**

Peter, what's your perspective on that construction and design stage?

## **Peter Collina**

I think from the building perspective I'm going to assume that all those things that have been discussed by John and Mark and the various planners have been resolved. The siting has been determined, the BAL has been determined under the planning permit process. So, once all that has been determined, then it's a matter of going through the building permit process, and John has already mentioned a number of the things that are involved in that, I might just reinforce some of those things because I think it's important. And that is that the owner can go to either the council for a building permit, or a private building surveyor.

Some councils, a very minor number of councils, don't provide a building permit issuing service, and therefore you would be forced to go to a private building surveyor. But, in either case, the building surveyor that's appointed it has a statutory role, and they are responsible for ensuring that the design and the construction meets the requirements of the National Construction Code, and the various codes under that including the Bushfire Construction Standard AS 3959, 2018 version. I should say that people should take advantage of the fact that that standard is now available free of charge from the SIA global website. Normally, those standards cost quite a bit of money, over a hundred dollars, so if you wish to get a copy of that to download, you can go on that SIA global website and get a free copy.

In applying for a building permit, normally you'd engage a registered builder. Hopefully one that's got experience in building in Bushfire Prone Areas. And it's important to get the right builder, because even if you're not in a Bushfire Prone Area, I've seen such a lot of examples of defective building work and disputes between owners and builders. So, it's important to select the right builder. Don't necessarily go for the cheapest price. Check the builder out and just make yourself comfortable and confident that the builder will do the right thing. Because you don't want the construction to go wrong.

The other thing that I'd mention is that when choosing your designer and the builder, especially when you're constructing a building in a Bushfire Prone Area, one of the problems that can arise, and we've seen that after Black Saturday bushfires, the buildings that were reconstructed especially in the high BAL locations because of the energy rating requirements and the bushfire construction requirements, which essentially require the house to be totally sealed to prevent ember entry, and also loss of energy, a consequence of that can be that you have condensation problems once the building is completed and occupied.

And I've actually seen roof spaces that all the timbers have turned green. There's mold, there's dripping water due to condensation problems. That can be very difficult and expensive to fix afterwards. So, that needs to be given thought at the design stage and the construction stage. So, I'd suggest you raise that with your building designer and builder early on in order to avoid that because it's a very serious problem otherwise.

The last thing I'd mention, which I don't think has been discussed so far, and that is the option of a bushfire bunker. Or it's referred to in the Building Regulations a "private bushfire shelter". So, that is, I suppose, an additional consideration if you want to provide added protection in case of a bushfire. I mean, the recommendation is always to leave early, but there is that option of putting in a bushfire shelter on your property. The thing that you need to appreciate is that in Victoria, a bushfire shelter must be accredited. Accredited by the Victorian Building Authority, the Building Regulation Advisory Council, which is like an authority or a board within the VBA, and they accredit building products and systems. So, there's three bushfire shelters from three different companies that have been accredited in Victoria. I believe that one of them is not actually producing bushfire shelters at the moment. So, that leaves two. And you need a building permit to install a bushfire shelter.

If you don't use or construct an accredited bushfire shelter, they could end up being a death trap because there are very stringent requirements to satisfy in order to get the Certificate Of Accreditation. So, I've covered a few things and in the interest of time I think I might leave it there.

**Malcolm: Hackett**

Thank you Peter. That's particularly interesting, the bushfire shelters. I know lots of people are thinking about those these days. And yeah, so important that they're accredited because so many people did come to grief in ones that were homemade.