

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Ecosystem Decline in Victoria

Melbourne—Thursday, 11 March 2021

MEMBERS

Ms Sonja Terpstra—Chair

Mr Clifford Hayes—Deputy Chair

Dr Matthew Bach

Ms Melina Bath

Dr Catherine Cumming

Mr Stuart Grimley

Mr Andy Meddick

Mr Cesar Melhem

Dr Samantha Ratnam

Ms Nina Taylor

PARTICIPATING MEMBERS

Ms Georgie Crozier

Mr David Davis

Dr Tien Kieu

Mrs Beverley McArthur

Mr Tim Quilty

WITNESSES

Mr Daniel Idczak, Vegetation Management Team Leader,

Mr Dale Tonkinson, Biodiversity Advisor (*both in person*), and

Mr Michael Sherwen, Cultural Heritage Advisor, Country Fire Authority (*via videoconference*).

The CHAIR: I declare open the Legislative Council Environment and Planning Committee's public hearing for the Inquiry into Ecosystem Decline in Victoria. Please ensure that mobile phones have been switched to silent and that background noise is minimised.

I would like to begin this hearing by respectfully acknowledging the traditional custodians of the various lands which each of us are gathered on today and pay my respects to their ancestors, elders and families. I particularly welcome any elders or community members who are here today to impart their knowledge of this issue to the committee or who are watching this broadcast of these proceedings.

I would also like to welcome any members of the public who may be watching these proceedings via the live broadcast today.

At this point I will take the opportunity to introduce committee members to you: my name is Sonja Terpstra, I am the Chair of the Environment and Planning Committee; Mr Clifford Hayes is the Deputy Chair; with us is Dr Sam Ratnam; appearing with us via Zoom is Stuart Grimley; in the room is Mrs Bev McArthur, Ms Nina Taylor, Dr Matthew Bach, Ms Melina Bath and Mr Andy Meddick.

In regard to the evidence that you will be giving today, all evidence taken is protected by parliamentary privilege, as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during the hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded, and you will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website. If you could all, just for the record, one at a time of course, please state the name and the organisations you are appearing on behalf of today.

Mr IDCZAK: Daniel Idczak, appearing on behalf of the Country Fire Authority.

Mr TONKINSON: Dale Tonkinson. Likewise, Country Fire Authority.

The CHAIR: And via Zoom?

Mr SHERWEN: Michael Sherwen, Country Fire Authority.

The CHAIR: Great, thank you very much. If I could just remind people on the Zoom, if you could all just mute your mics while you are not speaking, that will just help to keep down the background noise. I will now invite you to make your opening statement. If you could please keep it to 10 minutes only, in maximum. You do not have to take up the full 10, but if you are getting towards the end of the 10, I will give you a 2-minute warning, because I am sure there is a bit to get through. That will allow the committee members more times to ask you questions, which is very valuable to us. I will now hand over to you for your presentation.

Visual presentation.

Mr TONKINSON: And I obviously will be rushing to get through in 10 minutes. So quickly, the Country Fire Authority is a volunteer-based emergency response organisation. We do not have specific responsibility for ecosystem management, we just play in that space. We are an organisation that is based in the community, and therefore the community expectations around environment and ecosystems fall on us and we respond accordingly—sometimes maybe slowly, but in due course we usually do. The importance of healthy country to

First Nations people is something that is important to the CFA, and we have been involved in that space for quite some time.

Relevant CFA programs are the statewide vegetation management team that we both belong to, with two biodiversity advisors across the state, a cultural heritage advisor, a coordinator and a team leader. So Dan is the team leader. We also have 13 regional vegetation management officers, and they support our fuel management activities. This whole program works in the non-emergency space around fuel management, which under the CFA Act we also have responsibilities for. We also have a research and development team that undertakes applied research, particularly in climate change and fire and vegetation relationships.

Next. Much of what I am going to say is fire related, for fairly obvious reasons. Fire is an ongoing and long-term force in Victorian ecosystems, and it continues to shape them. Importantly, it is not possible to understand the effects of fire by just calling it fire, nor is it possible to understand any individual fire without the context of what has gone before. And what has gone before is very much related to timing, intensity and how big fires are. Fire is often referred to in a very generic sense that can encompass wildfire but also planned fire. Fuel management is not always fire related; often it is mechanical or in some circumstances chemical. Non-burn fuel treatments pose particular problems for ecosystems because they are pretty much not mimicking any natural process that has gone before. That is important. We are currently working in the space of a *Planning and Environment Act* that gives us lots of exemptions for doing planned burning but not exemptions for doing any of this other vegetation management.

Next. Ecosystem decline: most people would agree that it is happening. The fact that this committee is inquiring into it I think is probably indicative of that, but it is extremely difficult to measure. I am one of the people who probably tries to measure these things, and very few of us agree on (a) how to measure it and (b) what the quantum might be. Ecosystems are rubbery things. There are not hard boundaries around them. Therefore it is very difficult to refer to any given ecosystem and categorically state what decline might be, particularly seeing that many ecosystems are going through cycles—some of them probably in the order of 200, 300, 400 years. It is very difficult to just jump in and know exactly where you are in that cycle. Measuring ecosystem parameters is something that you can do, but interpreting them is much more difficult and much more open to debate amongst scientific circles.

Next. Fire management has been practised in Australia for a very long period of time. Indigenous people accrued a lot of information, and their fire management evolved over time. Some of that was necessary because the environments they were dealing with were also evolving. It is important to note that First Peoples' fuel management, fire management, has been, particularly in recent times, characterised as small, cool season and frequent—not necessarily so. That is very much a European perspective on things, because that is what we have seen, and to some extent that is because that is all we have allowed. In pre-European times larger, higher-intensity fires were probably not common but certainly were part of the broader system. Importantly for us, as a community-based organisation, is that Indigenous fire management was undertaken by local people at local scales. We could probably learn an awful lot from that.

Since settlement, it is important to also note, most settlers, especially English settlers in the early stages, were not familiar with fire in the broader landscape and were often fearful of it. So we have very much for 100 to 150 years gone down the path of suppression, suppression, suppression. In 1939 the very large fires led to a reconsideration of that and to imposing new fire regimes on the system. It was very much focused on protecting assets, and one thing that has come out in more recent years is: what do we define as assets and whose assets are we protecting? Forestry workers in 2003 and 2009 were very critical of people falling back on town protection to protect their houses, and they were saying, 'We have no value for those houses if the forest burns and we have no jobs'. So there are different ways of looking at it.

Recently large fires have become more frequent and also probably much more visible to the public, and the consciousness of that has led to calls and pressure for change to fire management. That change is now happening so frequently we are effectively not given the chance to demonstrate that a new way is or is not working. So we are going through cycles in response to public opinion that probably are not justified in terms of actual fuel management. Modelling is now very much used to understand how fire in the landscape might work. That is tricky, particularly from our perspective working in the Country Area of Victoria away from the broad public land estate. The data to support that just simply is not present.

The CHAIR: You have got 2 minutes, just letting you know.

Mr TONKINSON: Thank you. Measuring decline: I have already alluded to some of this. Determining a baseline is a really problematic area for this. If we try and say something of approximately 150 to 250 years prior to now, we do not have any data, so what is the point in saying that? Equally, is that meaningful to First Nations people, who have been undertaking fire management that has influenced those things for a much longer period? Systems are also now changing much, much more rapidly and probably permanently, and a lot of thresholds, especially with clearance of land over long periods of time, are now starting to be reached. Things that we thought in the past may have been reversible are increasingly becoming obvious that they are not. We need a new way of thinking about things.

The impact of decline: I am sure you have had plenty of this from various people. I think the bottom line from our point of view is that ecosystem decline can influence a wide range of issues for the community, particularly around standard of living and cost of living. There are also psychological impacts, and I think some of those became obvious about 15 months ago with a very, very large set of fires across eastern Australia—and smoke, and that smoke had tremendous psychological as well as physiological impacts on people.

The legislation we work with in this area I think is generally good and has in both cases been relatively recently reviewed. Its implementation has been inadequate, mostly for resource reasons. The *Planning and Environment Act* is extraordinarily complex. I have worked with that from a local government perspective. It is also problematic for the two tiers of government, because many of the decisions are made at the state level but the implementation is left to local government. Local government understands and the people that elect it believe that local government makes decisions for their communities, and yet there are all these impediments applied by the state. That is very, very difficult to explain.

Compliance with legislation is hugely problematic. It is very poorly resourced, but the political will, especially at local government level, to enforce the *Planning and Environment Act* is often absent.

The CHAIR: How long have you got left?

Mr TONKINSON: I have got about three slides.

The CHAIR: Okay. Keep going.

Mr TONKINSON: The next one. The adequacy and effectiveness of programs: the constant churn of programs from state government in particular is very confusing to the public, and it makes it near impossible to assess adequacy and effectiveness. We have a strong need for sustainable programs that probably evolve rather than change. Cross-sectoral programs that integrate ecosystem management with traditional asset management would be well received, and I think there are significant opportunities for Victoria to build our expertise and probably market it and export it in complex systems.

One of the questions in the terms of reference for this committee is around restoration. I am challenging whether 'restoration' is the appropriate terminology and concept and whether it is even possible. I would strongly argue restoration probably is not possible. We probably need to be starting down the course of repair, and that needs conscious decisions about what things we are letting go and what things we will change. State government and its agencies need to create strategic contexts for that response to occur, for the community to be involved in making those decisions, about how we change and what our objectives are.

Finally, some other issues sit in and around this. Habitat loss I am sure has been raised with you, but if you have fewer building blocks, you have got less options in the future as to how you might go about repair. Invasive species are extraordinarily problematic in terms of our response, and I would very much flag sambar deer as a major issue in that regard. First People's involvement at all levels in objective setting and decision-making but also taking action on ground is important to consider, and we need ongoing research and independent review. An area of this field that I work in a fair bit is data collection and management. We have some fantastic systems in Victoria for that—again, poorly resourced and unable at the moment to be revised. They rely significantly on old data collected for different purposes. We need to constantly look to new data to be collected for more specific reasons.

The CHAIR: Right. Thank you very much. Ms Bath.

Ms BATH: Thank you very much. There is a lot of information there and I have got a tonne of questions, but I am time-limited so I will put some more on notice. You mentioned vegetation management officers, and that they were in the vegetation management program. It has now been morphed through FRV—the change of legislation—into manager community safety, of which I think, Mr Idczak, you are a team leader. There is concern in my region, Eastern Victoria Region, Gippsland, that the very important role that VMOs did, which was working in community, working on preparatory burns, working with community around vegetation management, reducing fire risk to animals and humans, that through this new change VMOs will no longer be from the regions with expertise and skills but indeed will be seconded from FRV and will have diminished knowledge. Now, there are great concerns in relation to that. I need you to guarantee that VMOs are still alive and well and will be left in their capacity—as they are—and that any rearrangement will not diminish their effectiveness or their outcomes for community and environment. That is 10 questions in one because there are so many that I have got. But do you understand the tenor of my question?

Mr IDCZAK: I do understand, and I will have a few comments on that. Within the reform MCSes, the manager community safety, have gone to FRV and are seconded back. The veg management officers are still CFA-employed personnel. There is no secondment model at the moment. There has been talk industrially about it, but there is nothing now. It has all been, I feel through reform, heavily put to bed because field service officers got migrated, vegetation management officers did not. But they are managed by a manager community safety in the region, and that is an FRV secondee. We are a state team, so we do not have direct alignment to them.

I would call myself and the team more of a matrix management out to the veg management officers, in that we provide systems, processes, data capture, things—doctrine, along that line—to guide them, to try to make them all work on a common platform, albeit a lot heavier lately through the *Safer Together* program, where we have developed a new state fuel management system, which is FFM Vic and heavily CFA led. It is one of the systems that we are working towards, and we helped develop it at a state level to guide the veg management officers. So our main function is to give them consistency. But, yes, in regard to veg management officers, as an FRV secondee, no, that is not occurring.

Ms BATH: Okay. I would like your assurance that it will not occur. The value in that is that they are so well valued by brigades, by community. Why should we be changing or potentially changing a system that has worked for the last 11 years?

Mr IDCZAK: I do agree with that. I do not know how powers to be play because I am not in the industrial arena. I get heavily influenced by it, unfortunately sometimes. Hand on the heart, 95 per cent to 99 per cent, I am confident to say it would not occur. But I do not know what is happening in our industrial arena with new EAs being negotiated. FRV are going through theirs. There will be the CFA EA happening too, shortly, which there has been a bit of conversation around. But from my understanding, like I said, 95 to 99 per cent, veg management is CFA's core function. It is within our strategic plans, as veg management is one of our top four objectives, so it is in CFA.

Ms BATH: Well, a recommendation for us would be?

The CHAIR: In terms of the terms of reference.

Mr IDCZAK: I am not clear on that one, sorry.

Ms BATH: What I meant was do you still validate the need for VMOs to be CFA based and locally based?

Mr IDCZAK: 100 per cent. And through *Safer*—

The CHAIR: Well, that is related to the terms of reference.

Ms BATH: Yes, and the terms of reference. This is about sustainable programs for fire mitigation.

Mr IDCZAK: I do 100 per cent. If any influence comes from this, we have *Safer Together*, which has functional employment of some veg management support officers to the veg management officers' and risk landscape coordinators within CFA. There is another business case that is being put forward for next financial year. I believe the conversation is a four-year term limit—I would prefer it to become business as usual, core

business and continue—where there are more functions for veg management officers within Victoria to help assist. Because capacity is limited; knowledge is there but the ability to get everything requested from brigades actioned is challenging at times. The prioritisation underneath—what is the best bang for buck of a risk to address versus what is a community-identified risk versus a risk model, residual risk profile—is challenging. So if we can get that up and running, we will have more veg management officers within the business, more veg management support officers within the business, veg management coordinators within the business, risk landscape coordinators—a suite of people—to be able to better service our community. So that is what I say there.

Ms BATH: Thank you.

The CHAIR: I am interested in your comments around vegetation management and also about what you are seeing out on the ground, because like you were saying, you are locally based, you are actually out there in the field, so just in your experience over the years that you have been doing this what sort of things are you seeing like that? Are you seeing more invasive weeds, for example? Is there more proliferation in particular areas? What is your experience with that in terms of the landscape and how that is impacting fire and that sort of thing?

Mr TONKINSON: Weeds absolutely are an ongoing issue. It has been very evident for the 40-plus years that I have been in this business. Invasive species from an animal perspective, and that influence on fire, is a far more recent phenomenon. Sambar in particular are something that influence vegetation structure. In the first instance you would imagine that is going to actually reduce fire risk, however the longer term changes to that vegetation are not necessarily all reducing fire risk. So things like rainforests that are relatively non-flammable in most circumstances, once sambar have been through often change their structure and more flammable plants become part of it.

The CHAIR: In terms of invasive weeds, do you think—I am just thinking; I was reading some more of these submissions last night and it is clear some people are even calling for a review of prohibiting some plants or things actually being brought into the country because some of them, you might plant something in your garden and once it gets out and escapes it is uncontrollable. Have you got any views on those sorts of issues, as to whether there should be a call for perhaps banning some plants or species or doing more to contain them, if that makes sense? Would that be possible, because we do also know that birds and things feed on things and then fly off and drop seeds, so in a realistic sense what could we do there?

Mr TONKINSON: The realistic sense is that we probably need our risk assessment profiles—and this is more of a federal issue anyway—to be conscious of ecosystem-related threats from plants. They are mostly agricultural-related threats at the moment that take precedence. The reality is the vast majority of plants are probably already in the country in gardens. The horse has bolted in that regard. We need to be much more conscious and we need to work with our communities so that they are much more conscious of those issues. Dumping of garden rubbish is a huge source of weed invasion, and that is something where education is the only way we can deal with that.

The CHAIR: That is important to kind of do more around that and educate the community about how damaging that can be.

Mr TONKINSON: And from our perspective, community engagement around fuel management activities—you can pick those things up and work with the community. People who might not ever become engaged with something because of ecosystem management, fire management is something that a broader range of people are probably going to be interested in and we can probably flag those issues through that process.

The CHAIR: Thank you. Dr Bach.

Dr BACH: Thank you, Chair, and thank you for coming along today and for your presentation. You made some comments about resource management that I would be keen to ask you to unpack a little bit more. Due to, I dare say, the constraints of time, you made some brief remarks about what exactly that looked like in your view, but I would not mind asking you for a little bit more detail, and in particular what is lacking, in your view, when it comes to resource management and then what the state government should be doing differently.

Mr TONKINSON: In terms of resource management are you referring to resourcing of programs?

Dr BACH: That is correct. I think the exact wording you used was that you felt there was inadequate resource management. You did go into some detail in your presentation about how things might be done differently, but I would like to give you an opportunity to talk to that at a little bit greater length.

Mr TONKINSON: Okay, so there are probably two elements to that immediately. One is resourcing for the implementation of legislation, which I would clearly point to and I think that has been inadequate. Expanding on that, many programs are very bureaucratically oriented in terms of response to legislation. A single form is there and nobody ever talks to anybody—you just put your information in a form, whereas you might be actually doing something that is towards the broader objectives of what the legislation is, but it has never been conceived in that context. That is really difficult to deal with through some of our legislation. The EPBC Act probably has some interesting precedents that it sets there in terms of—it is really the proponent's responsibility to decide if it is a significant impact. Obviously the penalties for getting it wrong are very high, and therefore people will have to seriously think through the process of what they are proposing, what impacts there might be and whether they refer that to the commonwealth for review. I think there is a lot of merit in that. It seems to have worked very well. If somebody does decide to play the system and go, 'Nobody's ever prosecuted for that before', the system does need the capacity and the will to prosecute heavily in those regards. The EPBC Act has been prosecuted quite significantly, and that has reinforced the need for those responses in terms of risk to be taken into account by proponents.

The CHAIR: Can I just remind the committee at this stage that we have got about 15 minutes left for this session. I want all of you to get a go, but if we run out of time, again, we will submit questions on notice to you. Have you got any more?

Dr BACH: No, that is fine.

Mr TONKINSON: Can I just answer the other half of that question?

The CHAIR: Yes, of course.

Mr TONKINSON: And that is in terms of programs and their resourcing. Often programs are quite well resourced, but for very short periods. As I pointed out, I do not think in many cases those programs have had enough time or enough resources put into them in that short period of time to actually make a difference, to be detected and to determine if they were adequate or effective in the first place.

Dr BACH: Given the time, Chair, I am more than happy to move on. I might ask on notice perhaps—

The CHAIR: Yes, absolutely.

Dr BACH: for just a couple of specifics from you, gentlemen, about the types of programs that you have talked about.

Mr IDCZAK: And just on the resourcing of programs et cetera and going back to invasive species, we have these short stints to manage them and then it falls, and then you can return to premanagement levels within five years.

The CHAIR: They grow back.

Mr IDCZAK: They do in a bit.

The CHAIR: So on the responsiveness, you need a dynamic responsive approach.

Mr TONKINSON: Yes. And in the full text I have provided an example around weed invasion, where often landholders and land managers are provided support to tackle an original infestation but support three years down the track when there is a mass germination event is totally absent.

Dr BACH: Thank you.

The CHAIR: Mr Meddick.

Mr MEDDICK: Thank you, Chair, and thank you, everyone, for your presentation today. I want to address this one if I can to Michael, because we have not heard from Michael. The point that I want to make here is the fact that there is a very, very large discussion around Indigenous types of burning, and as the Cultural Heritage Adviser I think you are probably best placed to talk about this with the rest of us. A lot of First Nations people that I speak to talk about the fact that our landscape has fundamentally changed now, even in forested areas, from what it used to be when Indigenous burning was practised. The landscape has changed completely, and that is due to European anthropogenic influences—in other words, land clearing, logging et cetera—so the regrowth of those forests is not what it was when these fire practices were taking place. I think there is a confusion in the community that some people feel that we have to just return to that type of burning, and that is going to solve all of the problems. Or do we go the other way and continue to do the larger European scale? You know, ‘We’re scared of fire, so we’re just going to burn everything out as much as we can to stop it getting to our houses’. Is there a combined solution? Is that really where it lies? And I am asking this from the perspective that I do not know, and I need someone to tell me what the solution is here.

Mr SHERWEN: Thanks for the question. I think Dale Tonkinson in his presentation referenced the integration of colonisation and fire regimes. I think the questions now are: how do we manage that fire risk and how do we work together in this space? I am employed through the *Safer Together* program, so I am on a yearly basis. The Country Fire Authority has got the appetite to work with the Indigenous communities, but as was alluded to before by my two colleagues, it is about resourcing and allocation. There is a lot that we can do from a traditional fire context, but we also need to look at it more broadly than a state-based approach. Cultural continuum with the Indigenous communities is still alive and well in other parts of states and territories with our elders and knowledge holders. We have got to enable those practices as a continuum and acknowledge messages from the heart such as the makarrata.

When we come to working in with fire management, we have also got to look at the dramatic changes in the environment. As was mentioned about the forestry industry, sustainable forestry was occurring. What has occurred is when the first lot of logging has come through, it has taken away those massive old-growth trees. So you are affecting those microclimates, and then you are delineating areas that will burn and will not burn. Now we have come to a point in time across the Crown land where the environment has been severely altered and changed. I think the solution is that we have got to still have some of those industries participating in the management of those environments, because when you take out a major cause of maintaining and managing the forest, you are then left with a void, and it is a different way of implementing and managing that environment.

From an Indigenous perspective, we did not have access to machinery and other sources of equipment to manage, so fire was a vital tool, not only for protecting around Indigenous camps and communities but also for creating pathways through the high country and river flood plains, for food and hunting resources. But also when lightning strikes came through in the summertime—although there are six seasonal periods that Indigenous people look at—you would have to protect your vital resources. It is about different ways of implementing fire. I think what we need to do—and I would like to see it—is acknowledge the continuum and the knowledge holders from right across the continent and let us continue with our knowledge but also work together with Victorian communities.

The message of walking together and celebrating all of our heritage is vitally important. In my role as Cultural Heritage Advisor, I also do the historical heritage—so I do all of heritage—and the important thing to sell and the reality of this great state is protecting everything and indicators in the landscape from good, bad or otherwise and from past, present and what we want to see into the future. It is about putting together the heritage, cultural knowledge and adaptive ways in a meaningful, collective way. And in working with the Victorian Indigenous communities—the traditional owners or those like myself that have been born here and not recognised—I think we need to take a new approach in how we work together in addressing different ways of implementing fire but also complementing what our fire agencies and departments deliver today.

Mr MEDDICK: Great. Thanks so much for that. Cheers.

Mr TONKINSON: Can I just add a little comment to that—probably reinforcing something Mick was trying to say—that is, abrupt change in this field is always problematic. Changing forestry or fire management practices just like “that” is open to all sorts of issues.

The CHAIR: Great. Thank you. Ms Taylor.

Ms TAYLOR: I was just thinking that, with the changing climate, my concern is actually that it is people at the front line that will get impacted probably the hardest in a way. I should be careful with that comment, because many people are impacted. How do you see our rapidly changing climate impacting fire seasons into the future and the level of risk for firefighters?

Mr TONKINSON: Dan, do you want to comment?

Mr IDCZAK: Not being on the fire operation line heavily—we are more in the planning function space—it might be a bit, not challenging to answer, but I do not want to step on toes and have someone tell me that I am incorrect—

Mrs McARTHUR: You never want to do that.

Mr IDCZAK: but understanding that climate change is a thing that is happening. As we said, we do have a climate research team led by Dr Sarah Harris—we do have it written in our paper—and we are acknowledging that climate change is happening. What is going to be happening through that is there are going to be changes in the environment, like the succession of vegetation change, because what would be an alpine area now does not become an alpine area. Just as a basic concept, through those, what could be generational, changes of life cycle for flora, you will make areas that probably were not as prone to fire, in my eyes, more prone to fire, not in the frequency they may occur—fires occur in summer—but the area they can cover will probably be greater because of that change. And being larger fires, more intense fires, without correct fuel management—be it through traditional owners' management blended with some of what we would call our traditional management, through us now as agencies—will mean more people need to be on the fire line. There is probably an implied higher risk because they are more exposed to fire. I had it this year, I had it last year. Coming out of a crazy fire season—I work in a state control centre in that function—and coming straight out and you do not get a rest because you are straight into a planned burn season and then you are straight into COVID, and you are just like—

Ms TAYLOR: Nuts.

Mr IDCZAK: The exposure to danger is fraught—a tree falls on you; fire could burn you—and will be greater, but the implied mental fatigue and everything that is occurring is definitely going to be greater. If you have longer seasons, and even coming out of a longer season, say, in East Gippsland or somewhere, in another part of the state, and you have got to start burning to start reducing risk, your resourcing is always going to be tight. That is just one of my thoughts.

Mr TONKINSON: Can I add to that to bring it back to the ecosystem perspective: fire is a key feature that resets ecosystems, and under climate change resetting that ecosystem more frequently is going to mean things are a lot less predictable, and that will have flow-on effects to dangers in terms of vegetation. If you cannot predict now—because the vegetation changed in the last 10 or 15 years—our ability to predict fire behaviour immediately makes for greater danger.

Ms TAYLOR: Thank you very much.

The CHAIR: Good point. Yes. Mr Hayes.

Mr HAYES: Thanks, Chair. Thanks very much, Daniel. Just on the issue of modifying bushfire fuel management techniques, what from your direct experience would you like to comment on regarding the type of management techniques—in relation to, say, intensity, temperature, scale and the use of Indigenous techniques? What sort of balance in those things do you think gets the best results in managing the ecosystem to prevent fire.

Mr TONKINSON: I do not think there is an easy answer—

Mr HAYES: Yes, it does not seem like it.

Mr TONKINSON: or a straight answer to that one. One of the points I have strongly made is: nuanced responses at local scales in conjunction with local people is really where it is at. We simply do not know what the balance will be. With a changing context of climate change, what might at least appear to have worked in one period is unlikely within 20 to 30 years to be the most appropriate balance as well.

Mr HAYES: So you think local fire management and the techniques employed are extremely important?

Mr TONKINSON: I think a lot of work needs to be done at the local level. We obviously need coordination, because our resources are always going to be limited. We need to supplement resources from other areas to allow local people to undertake some of those activities at least. Therefore we need a strategic context at which things operate. But we need local people also to be heavily involved in that, rather than being cut out of that process.

Mr HAYES: Which brings me into an area which I often comment about in Parliament—the conflict between local and state planning authorities, which you also touched on, and the importance of getting some policies made at the local level.

Mr TONKINSON: I think it is not necessarily that all policies need to be done at local levels. We need to explain the process, and if local government is going to be the implementation agency for state government policies then that needs to be explained to the populace.

Mrs McARTHUR: And maybe consulted.

Mr TONKINSON: There is always that, yes, most definitely. Local government is considered the best way of consulting, but then that does not get fed back through to those state policies. They are often implemented from above, and local government is just left holding the can.

The CHAIR: Look, we have run out of time.

Dr RATNAM: Can I place my question on notice, please?

The CHAIR: Let me finish. We will have questions on notice from other members who did not get a go. As always, we run out of time because we have all got a million questions for everyone, so there will be some members who will provide some questions on notice. So thank you very much for your submission today.

Witnesses withdrew.