# TRANSCRIPT

# LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

# **Inquiry into Ecosystem Decline in Victoria**

Melbourne—Wednesday, 10 March 2021

### **MEMBERS**

Ms Sonja Terpstra—Chair Mr Stuart Grimley
Mr Clifford Hayes—Deputy Chair Mr Andy Meddick
Dr Matthew Bach Mr Cesar Melhem
Ms Melina Bath Dr Samantha Ratnam
Dr Catherine Cumming Ms Nina Taylor

## **PARTICIPATING MEMBERS**

Ms Georgie Crozier Mrs Beverley McArthur

Mr David Davis Mr Tim Quilty

Dr Tien Kieu

#### WITNESSES

Dr Michelle Freeman, Vice-President, and

Ms Jacquie Martin, Chief Executive Officer, Institute of Foresters of Australia and Australian Forest Growers.

**The CHAIR**: I declare open the Legislative Council Environment and Planning Committee 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 the 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 as well.

At this point I will take the opportunity to introduce the committee members to you. I am Sonja Terpstra. I am the Chair of the Environment and Planning Committee. Mr Cliff Hayes, who is the Deputy Chair. Appearing with us via Zoom are Mr Stuart Grimley, Ms Nina Taylor, Andy Meddick and Ms Melina Bath. We may have some more people joining us if they come in a bit later on, but that will be fine.

In regard to the evidence that you will be giving today, all evidence that is 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 the 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. 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.

At this point I will invite you to make your opening statement, and if you could keep it to a maximum of 10 minutes. You do not have to take 10 minutes, but if you would like to, you are more than welcome to, and I will give you a 2-minute warning as you are approaching towards the end. Now, if I could just get you to both state your name for the Hansard record and which organisation you represent before we start.

**Ms MARTIN**: Sure. Jacquie Martin. I am the CEO of the Institute of Foresters and Australian Forest Growers.

The CHAIR: Thank you.

**Dr FREEMAN**: I am Dr Michelle Freeman, Vice-President of the Institute of Foresters of Australia and Australian Forest Growers.

The CHAIR: Great. Thank you very much. All right, just before we get underway, if I could just remind those who are joining us via Zoom just to put your mics on mute. With that we will get underway, so over to you.

**Ms MARTIN**: Thank you, Sonja. I would like to acknowledge the traditional owners of the land on which we are meeting. I pay my respects to their elders past, present and emerging and the Aboriginal elders of other communities who may be here or watching today.

On behalf of our members I would like to thank you for providing us with the opportunity to present our evidence today to the Inquiry into Ecosystem Decline in Victoria. The IFA and AFG made a submission to the inquiry in August last year, and we gave 16 recommendations for the committee's consideration. The Institute of Foresters of Australia and Australian Forest Growers is an independent professional association for forest scientists, managers and growers. Our members operate across all aspects of forest and land management throughout Australia. We have approximately 1000 members and are supported by an office of three part-time staff. Our members include academics, researchers and scientists working in government agencies, conservation, forest fire management, urban forest management and also private forest companies. Our members also include forest consultants and private landowners. Many of our members identify by the term 'forester', which I call forest scientist.

Over 90 per cent of our members have a science qualification, for instance forest science or environmental science. As with many other professional associations, like Engineers Australia and the AMA, we offer a range of benefits and services to our members, including professional development, like conferences, webinars, seminars, those sorts of things; a quarterly peer-reviewed scientific journal titled *Australian Forestry*; a peer-endorsed registration scheme; and we advocate for active and adaptive land management throughout Australia and across all land tenures.

Just to give you a bit more information, the association has a number of volunteer committees, including our Forest Fire Management Committee. This committee includes scientists who have received Australian Fire Service Medals, public service medals and other honours acknowledging their contributions to forest fire management. The group includes a number of retired senior CFA staff, researchers and fire practitioners. This group of experts advises and guides our association by monitoring and reviewing major forest fire events and providing expert advice on forest fire management, practice and policy.

Australia is the sixth most forested country in the world, and we believe we need informed, skilled, experienced scientists and professionals managing our forested ecosystems. So to summarise, we are the professional association for Australia's forest scientists. I would now like to introduce you to Dr Michelle Freeman. Dr Freeman is a forest scientist, or a forester, as she likes to be called, and is our vice president. Thank you, Michelle.

**Dr FREEMAN**: Thanks, Jacquie. So as Jacquie said, many of us do identify as foresters, but more recently I think the general understanding about what a forester actually is and represents has been lost. So by way of clarification, foresters are scientists with specialist expertise in forest and fire management. We take a whole-of-landscape view when thinking about forest systems, and we care deeply and passionately about trees and forests, including their conservation through active and adaptive management.

I am a forester, and I have a double degree in forest science and science majoring in botany. I completed my PhD in 2018, which looked at the effects of different managed fire regimes on tree growth and recruitment in northern Australia. I spent four months full-time firefighting during the Black Summer bushfires in New South Wales, both on the ground and in operational planning roles, and myself and many of my forester colleagues are still dealing with the emotional consequences of that major event. I am also a current board member of FSC Australia, and I have dedicated my career to forest management, working in operational, planning and policy roles in Victoria and New South Wales.

I do all of this because I love forests. I am proud to be a forester and to be part of a community of forest stewards who care deeply and passionately about the health and sustainability of forest ecosystems. So to begin, the greatest most pervasive threats to our forest ecosystems are invasive species and the increased frequency and intensity of bushfires, which are being exacerbated by climate change. This is occurring in addition to the long-term legacy effects of forest clearing and land-use changes that have destroyed or substantially modified forest habitats.

The IFA/AFG contends that to be effective, any response to the challenge of restoring and maintaining forest ecosystem health and resilience requires active, integrated management of all forests across all land tenures, and this must be informed by science and practical experience. A commonly heard narrative is that creating more national parks is needed to protect our forests, but invasive species, fire and other climate change impacts do not honour tenure boundaries. Our national park estate has increased by over 500 per cent since 1970, yet we are still seeing declines. There are numerous failings in forest management policy across the board, and our challenges will not be solved by simply creating more reserves.

The challenges facing forests in Victoria need to be addressed through active management as reflected in traditional Indigenous land management practices, in contrast to passive conservation that seeks to separate humans from nature. Society has modified our environment to such an extent that we cannot now expect that our forests will simply recover from the effects of key threats. Although forests are inherently resilient, these natural capacities are being impacted by broader environmental change, so we need to understand and harness aspects of forest resilience to enhance recovery outcomes. Year-round management actions such as promoting and supporting forest health and diversity, more strategic fuel management interventions, maintaining roads for access and protection, as well as intervention to manage pests and diseases, are all critical aspects in need of attention and will be required across tenures. We also need to recognise that the disproportionate focus on bushfire response and investment in aerial firefighting capacity, rather than effectively resourcing preventions to mitigate fire and rather than focusing on rapid first-attack responses, are putting ecosystem processes, flora

and fauna at risk. Silviculture, including forest thinning and types of selective harvesting, provides some really exciting opportunities. For example, different approaches can act to reduce drought stress, increase water yields, reduce fuel loads, promote forest vigour, increase carbon sequestration, increase structural diversity, accelerate hollow and habitat development and improve resilience to disease impacts, and they are just a few of the examples of how we can harness those tools available to us.

In particular I would like to draw your attention to a major ecosystem decline that requires an active silvicultural response: the large areas of immature ash forest that have resulted from too frequent bushfires over the last 20 years. The details are in the memo that we submitted to you that was produced by Forest Solutions for us. Within the extent of the Black Summer bushfires in Victoria approximately 21 000 hectares of ash forest is at the stage of population collapse, and if left untreated is expected to change vegetation community, with a major loss of forest cover. This is called type change, and due to the effects of earlier bushfires the extent of type change outside the Black Summer fire extent is actually predicted to be even larger. Forest Solutions have been working with agencies to address this problem and actively sow ash seed onto these areas; however, not all areas needing treatment have received it due to the state holding insufficient seed in store. This is an example where active and adaptive management is now required.

To move forward with this issue and to address concerns about ecosystem decline more broadly, regardless of land tenure, our forest management vision and objectives must be clear, including defining a baseline ecosystem benchmark and establishing an accountability framework through which we can meaningfully assess decline and reversal as management actions are implemented. Regardless of tenure, we need to employ and engage traditional owners, respect their knowledge and experience as well as participate in two-way capacity building so that their land management philosophies can be reintroduced. Regardless of land tenure, we need to actively apply an adaptive management approach, including employing restoration silviculture to shape particular forest outcomes. Regardless of tenure, we need proactive management of fire risk, including strategic use of prescribed burning, maintaining forest access including strategic firebreaks, and mechanical interventions such as thinning where that is appropriate. And regardless of tenure, we need to shift our conservation strategy away from simply creating more protective areas to a broader strategy of targeted management actions designed to specifically address major threats to our forests, flora and fauna.

Foresters have a critical and ongoing role to play, because as scientists with extensive practical experience we have a unique and special expertise in these areas. Traditional owners must also be involved to jointly develop a new way of managing forests. Whilst many aspects of ecosystems have changed since European arrival, the philosophies and principles of traditional owners remain relevant and it is time to listen to them and integrate their lived experience into forest and landscape management. Our recommendations call for a more holistic, broader cross-tenure approach to strengthen systems already in place, develop new symptoms and arrest further ecosystem decline. This will require vision, creativity, collaboration and persistence, supported by sufficient resources. Thank you, and I look forward to taking some questions.

The CHAIR: Great. Thank you very much for that. Mr Meddick, I might start with you.

Mr MEDDICK: Thank you for your presentation and your submission. It is often said of lawyers and I think it could be translated across to scientists: you put two scientists in a room and you get six different opinions. I just want to return to what you were talking about before: some very specific things on First Nations fire management. I have had a number of discussions with Wathaurong people down my way in western Victoria, and they talk about fire management in terms of very, very small areas and a very contained burn at a time, and then it is left to recover and they move on to a different area. That is versus the European style of 'Let's create these great big firebreaks' that often get out of control and then cause unmitigated damage. Is that how you see what we should be doing in fire management: a return to a strictly First Nations-style of fire management in these areas, first of all? The same people that I have spoken to also say that timber harvesting does cause massive habitat loss for species that are also totem to them. How do you balance that against the objectives of what you are terming an 'integrated management system'?

**Dr FREEMAN**: Yes, sure. Thank you for your question. I think they are really important things to explore. As I mentioned in my presentation, the situation across our landscapes has changed a lot since European arrival. So it is not going to be appropriate to only employ traditional burning practices. That needs to be looked at as part of a broader suite of tools that are used in an integrated way, and we do believe that there should be more traditional-style burning. Some of that will be more cultural burning, which is more about the spiritual, community aspects of bringing people back onto land. Some of that is about returning to more patchy, landscape-scale, low-level disturbances across the landscape, and those sorts of tools will be really important

for increasing diversity across our forested landscapes. But there are still going to be times when a more targeted, prescribed burning approach is required in order to manage broader scale fuel loads across the landscape. Part of that is because, compared to before European arrival, we have removed human influence from across the landscape, so the fuel loads and accumulation that we are seeing now is not the same as that which existed across the landscape prior to European arrival. In short, there is no simple answer. It is going to be requiring an integrated set of looking at all the different management tools available—including prescribed burning as we do it now, including potentially mechanical fuel reduction and including more traditional and cultural burning practices. Where those apply really requires a strategic landscape view and a sense, as I mentioned, about what our vision and objectives are for certain parts of the landscape and where assets are placed in the landscape et cetera. So I hope that answers that part of it for you.

#### Mr MEDDICK: Yes.

**Dr FREEMAN**: In relation to the timber harvesting, I think your question was that timber harvesting removes habitat, and how does that fit in with a broader active management approach? I guess my first comment would be that timber harvesting modifies habitat, but it does not destroy it. If we look across the landscape, there is no one type of forest, no one type of ecosystem that is best suited to all species. There is a suite of species that actually has been shown through various scientific papers to prefer, for example, the post-timber-harvesting landscape. Some of those include the white-footed dunnart; we have seen the Leadbeater's possum using forests that have been regenerated after timber harvesting; and the long-footed potoroo is another one that likes young regrowth forest. So we need to be careful about assuming that just because an area has been harvested that it is now suddenly some sort of ecological wasteland. That is not the case. It is just a different type of forest as compared to one that has not been disturbed. So that would be the first point on that. I guess that really speaks to the active and adaptive management approach. If we are going to try to arrest ecosystem decline, we need to recognise that there is no one size fits all. Some species will prefer some types of environment and other species will prefer other types. So again, similar to the fire management question, we need to look at the full suite of tools that are available to us and objectively look at what our vision is and what is needed in different parts of the landscape and apply that.

And I think just finally on that question, what we have seen in terms of ongoing declines is that passive conservation approaches have not been effective. We need to actually actively put some interventions and management practices in place.

**Mr MEDDICK**: If I may, Chair, just one very quick question specifically about the white-footed dunnart: how do you think a housing estate, for instance, going into habitat would affect their population in that given area?

**Dr FREEMAN**: Well, yes, look, as I think we all recognise, land clearing and permanent deforestation and land use change are big issues for species and ecosystem decline. And so when we are looking at forest or land clearing that might occur, then that is definitely a serious contributor to potential species habitat declines.

Mr MEDDICK: Great. Thanks for that. Thank you, Chair.

The CHAIR: Great. Thank you. Mr Grimley.

**Mr GRIMLEY**: Thank you, Chair, and thanks for the presentation and submission today. You mentioned you have got around 1000 members employed in native forest and plantation management. I was just curious to know of the Indigenous component within those memberships. Are you able to elaborate on that at all?

Ms MARTIN: I do not have the exact statistics of our Indigenous membership, but we certainly are working and growing and seeking to improve our connection with traditional owners. Certainly the Forestry Corporation New South Wales has an excellent group of traditional owners involved and working there, and we listen to them and talk to them a lot and engage with them. Also Victor Steffensen from the Firesticks Alliance is the keynote speaker at our conference in October. We are not there yet, but we have a strong commitment to building our connections and understanding. We are hosting a virtual seminar next month on traditional owners' fire and forest management, and the speakers are traditional owners. So we really are keen to grow into that space more and learn more and collaborate more.

Mr GRIMLEY: Just on that, part (e) of the terms of reference for this inquiry speaks about increasing and diversifying employment opportunities in Victoria for First Peoples. Are you able to supply to the committee

any ideas, proposed strategies or processes that the government could perhaps undertake as a priority to ensure that diversification of employment opportunities occurs with First Peoples?

Ms MARTIN: Stuart, do you mind if we—do you want to answer that, or will we take that on notice?

**Dr FREEMAN**: Oh, well, I might just make a brief—

The CHAIR: You can take it on notice if you want, but yes.

**Dr FREEMAN**: Yes, well, we can possibly provide more, but as a general comment to that I think this is not something for us to determine ourselves. We need to speak to those communities to find out what will work for them. That would be my first comment. And the second is that there are some really interesting joint management arrangements that have occurred overseas, and the Great Bear Rainforest in Canada is one example of that, where more Western science forest managers have actually come up with some joint management arrangements with the traditional owners of that land in a really new and novel way of working together to manage that forest. So yes, two points: we need to ask our traditional owners, and then we can also look to some of the structural and process arrangements internationally to help us look at pathways forward.

Mr GRIMLEY: Wonderful. Thank you.

The CHAIR: Thanks. Ms Taylor.

**Ms TAYLOR**: I understand that you are proposing a vulnerable flora seed bank—and I am sure there are many people who would be proposing that, and I am not taking anything away from your proposal. What is driving that other than what I think is the obvious? Why are you advocating for that?

**Dr FREEMAN**: As was presented to you in the memo from Forest Solutions, there are vast areas of forest that are now at risk of forest type change and what we might deem to be called ecosystem collapse because they have been burnt too frequently such that there is not sufficient seed in the natural environment for those forests to recover themselves naturally. These bring up some really big questions about: well, what do we want to do with this? We know that climate change is going to increase the frequency and intensity of fires across the landscape. The Forest Solutions proposal suggests we need a seed store of about 20 tonnes worth of seed if we want to actually continue to actively intervene to resow these forests back to something like they were prior to being burnt too frequently.

In my mind these are big philosophical questions as well about how our management decisions will shape what these forest ecosystems look like into the future. Is it going to be viable ongoing to collect that volume of seed? I think Forest Solutions presented this to you in their memo, but the current resource allocation and funding allocation to that seed collection program is not even going to be enough to get half of the seed that is required for that one forest type. We can choose to do nothing—we have got to recognise that is also a management decision—and I think we need to really try to understand then, 'Well, what are the flow-on implications of that?'. And part of, I think, answering this question is that we need to increase our monitoring across the landscape to track how forest and ecosystem recovery is happening. We need to make sure that monitoring occurs broadly and consistently across all landscape tenures, because this is something that is across tenure—national parks are equally as impacted as state forests are. This problem is not going to go away, as we are expecting climate change impacts to increase into the future. There are some big philosophical questions that we need to answer for ourselves about what we do with these ecosystems, and do we accept that some of those might change if we do not actively intervene sowing seed? I do not have an answer, but these are things that we need to think about.

Ms TAYLOR: And a second question was just, when we are looking at reserving—I want a better word; you said, 'Lock and leave' or whatever—I think it is a little bit binary the way that is coming across, because to preserve areas for future generations, I think there is a presumption that that land still has to be managed for weed growth, pest control et cetera. I guess where I am coming from is that part of what is driving that, apart from the fact we need to preserve our forests for oxygen et cetera, is that there is such a dreadful record nationally with habitat destruction. I am not having a go necessarily at industry here—this is also private landowners; this is across the board. I think with the last speaker they thought I was having a go at industry, but that is not actually it. I think there are a lot of sins, and they are across Australia. I think the driver is that, apart from needing the lungs of the earth, so to speak, there is just a dreadful record and it is hard for people to have faith that, unless we do properly reserve areas of land, it will be honoured.

**Dr FREEMAN**: Yes, I completely agree with you that we need to do better. I hope I did not use the term 'Lock and leave' because I do not like that sort of sensationalist language. The Institute of Foresters and Australian Forest Growers very strongly support the maintenance of a solid reserve system, and you are right—I think you mentioned it yourself—that reserving it in and of itself is not enough. We actually need to manage that and to provide the resources to manage that, and that may actually require a bit of a changed management approach to how we have traditionally gone about our reserves. For example, in relation to the ash forest issue, there are actually limitations at the moment on how and where you can collect seed from national parks—if at all. To meet the need to potentially resow these forests, if we want them to recover, we might need to reconsider what we are allowing forest managers to do in national parks in order, from a broader landscape perspective, to actively and adaptively manage these forests based on science and practical experience.

The CHAIR: Yes. Okay. Thank you. Mrs McArthur.

Mrs McARTHUR: Thank you, Chair, and thank you very much, Michelle and Jacquie. Now, one of your recommendations is to halt the phasing out of native logging in Victoria. Considering that native logging only occurs in 0.04 per cent of state forests each year, are you concerned that the government's policy is one based on ideology and not scientific fact in terms of conserving ecosystems? That is my first question.

**Dr FREEMAN**: Thank you. Well, look, yes, we are concerned with a decision that may be based on more a political environment rather than on sound science and practical experience. As I think we all acknowledge, invasive species, climate change and the broader impacts of increased intensity fire are the biggest impacts, so we would strongly contend that stopping native forest timber harvesting is not going to help us overcome ecosystem and species decline. There are also potentially a number of negative flow-on effects that we need to consider, and that includes that the people who work in the native forest timber industry are out in the bush and in the forest every day. They are highly skilled. They are there and available on ground in the bush if and when fires break out, so they can quickly respond. They have got the machine capacity to actively respond to bush fires and help us to implement active and adaptive management strategies such as the silvicultural types of interventions that we might need to consider to restore ecosystem function and health into the future. We also need to acknowledge that using wood and supplying our own domestic supply requirements is one way that we can actually help to combat climate change. It is a bit one step removed, but we need to I guess acknowledge that all of this is integrated in terms of an overall response. So we would argue that merely stopping timber harvesting is a relatively simple response to a very complex problem and it will not work to halt ecosystem or species decline.

**Mrs McARTHUR**: Yes, well, as Mr Meddick said, you put two scientists in a room, you will get two different opinions. Put five politicians in a room, you will get five different opinions probably. Have you had a chance to review the Lindenmayer work?

**Dr FREEMAN**: I am familiar with it, and I have read a lot of his papers. Professor Lindenmayer is certainly a very prolific contributor to the ecological forests space. In terms of a formal review, no, but I am familiar with his work.

Mrs McARTHUR: And what would you like to comment about it, on your assessment so far?

Dr FREEMAN: He has made a really solid contribution over a number of decades now to this space. What I think we need to also consider though is that his research is at times often narrow and based on individual case studies, so we cannot always extrapolate that across the landscape. He has also been actively involved with campaigns against native forest timber harvesting, and we can see in media and through the outcomes of his papers that that bias actually does shine through in his focus and interpretations of the research. That is not to say that we should not take heed of that research and look at what the science and data behind that research is telling us, but we also need to be aware that there is a biased overlay to this and there is a much broader range of scientific literature out there that does provide a few different perspectives on what is actually going on in our forests. So in order to really inform properly our policy decisions and our active and adaptive management approaches, we need to look broadly across all literature and we need to take an unbiased and independent view of what all the science is telling us.

Mrs McARTHUR: Thank you.

The CHAIR: Thank you. Mr Hayes.

Mr HAYES: Thank you. Thanks, Michelle and Jacquie. Very interesting. I just want to ask a couple of questions about active fire management and the employment of Indigenous techniques. Much has been observed about the change in forests—I suppose changed silvicultural management—since European settlement, and you were talking about different types of fire regime being required. But isn't it so that high-temperature fires have really changed the mix of species in the forest, which makes the forest even more likely to burn in subsequent fires? Wouldn't it be better to employ Indigenous methods on a wide scale through the forests, with low-temperature burns and other sorts of management of weed species and fuel load?

**Dr FREEMAN**: Yes. Look, I think we would support the broader use of traditional burning practices. I think that high-intensity fire is certainly a major issue causing major forest changes and compositional changes. There is also a range of other interacting factors that are leading to that including, as you mentioned, invasive species and just broader climate change, which is changing the ecological niche of where certain species are able to occupy, and that is going to be changing into the future as well. But certainly the broader use of traditional burning practices would be welcome. Part of that is also just returning our human connection to nature back into the forest and into ecosystems because we need to have that connection with nature in order to effectively take ownership of and combat the ecosystem and species declines that we are seeing, which are a result of human activities in recent decades.

**Mr HAYES**: Okay. Just one other question, once again on active forest management. I suppose logging does have some influence on species in the forests, but if logging was not allowed, what would you suggest the best management practices would be—more of the same, of what you are recommending anyway, in combination with logging? Or would you approach forest management in a different way?

**Dr FREEMAN**: I think a tool that we have not utilised to its full extent now is restoration silviculture, which is the harvesting of trees in different patterns and formations to re-establish different structural elements of the forests. For example, thinning practices can actually help to make trees grow bigger quicker, and that can also help with the quicker formation of hollow development. A big problem is that there are increasingly less old-growth forest elements in our forests. We can actually actively intervene through selective harvesting or thinning approaches to encourage the sort of formation of old-growth-type elements back into the forest in a quicker amount of time than the 100 to 200 years that that would take to naturally develop. So there are some things like that. If you look at, say, the box-ironbark forests of western Victoria, those have been heavily degraded by goldmining and past land-use practices there. We can again use some selective silvicultural approaches to increase forest health by removing some of the sick stems; they can help to combat invasive pests and diseases. Up on the Murray actually in the red gum forests a lot of those areas were subject to some really thick forest regeneration, and thinning has been effectively used there to actually release those trees from basically being locked up. When you have got a forest that has been disturbed and has kind of prolifically regenerated, it can often get to a point of stagnation where it is not able to grow or move anywhere because it has reached its limit of site resources. We can actively intervene there to actually release these forests back to a more natural ecosystem functioning-

Ms MARTIN: A bit like being pot bound, really.

**Dr FREEMAN**: Yes, that's right. Even if we are not doing timber harvesting as we currently do it, we should not ignore the felling of trees—and I am not talking about a commercial element, I am talking about restoration and ecology silviculture—so we cannot limit our toolkit in relation to those ideas.

Mr HAYES: No, I understand. It all requires a much larger investment in our forests.

**Dr FREEMAN**: Yes, that is right.

The CHAIR: We are running out of time. There are still a few of us who have questions, and I do too, so what we might have to do is ask the questions on notice and then get you to respond to us. We literally have 5 or 6 minutes left. If I can just ask mine first and we will get it on the record, and if you could respond later of course.

Your submission notes that you do not support the *Victorian Forestry Plan*. I would like you to be more specific about that in terms of the detail about why you do not support it, what you do not support and why. Also in regard to the *Victorian Forestry Plan*, its investment of \$110 million in the Gippsland plantations investment program, which is aimed at incentivising plantation investors to undertake industrial-scale planting to add 30 million trees to the plantation timber supply over the next decade, is one aspect that I would

particularly like you to comment on. Also in regard to that, what is needed to transition to solely plantation-supplied timber? That is my question on notice. Dr Ratnam, if you could ask yours?

**Dr RATNAM**: Yes. Thank you, Dr Freeman and Ms Martin, for your presentation today. I am sorry I was late, but I was watching and following online the whole time, so I did not miss any of your contribution.

Ms MARTIN: Thank you.

Dr RATNAM: I have a few questions I would like to put on notice—I would have ideally liked to ask you today—for the sake of time. Just in response to Mrs McArthur's line of questioning you made some pretty strong claims about an academic scientist, who we are going to hear from very shortly—this afternoon, actually—about a perception of bias in basically their research outcomes and findings, given their activism in this space. That is a whole big topic to unpack, but you made those pretty strong claims. I wanted to ask you: given that you, it seems, represent an industry, an industry that requires these wood products for profitability, and therefore as an industry association I would presume you have an interest in representing the ongoing viability and continuation of that industry, are there any conflicts of interest or biases that you yourselves bring to the table in presenting your evidence here today? I would have loved a response today, but I think we have to do that—

Ms MARTIN: Can I just quickly?

Dr RATNAM: Well, you have—

The CHAIR: We do not have time.

Ms MARTIN: Okay.

The CHAIR: Because I think the answers you gave are very fulsome.

Ms MARTIN: I just say that we are not a forest industry body. That is the only comment I want to make.

The CHAIR: Yes, that is fine.

**Dr RATNAM**: The question still stands about any perceptions of bias that you potentially bring to your contribution today given the claims you have made about other witnesses.

My other questions are: your submission—both yours and other industry groups we have heard from—suggests that Parks Victoria does not adequately manage fire and invasive species in our national parks and protected forests. Do you support additional funding for Parks Victoria to undertake these activities? My last question is: Victoria has a plantation industry. Can you tell us about this industry and how we might keep plantation logs here instead of exporting them so Victoria can benefit from the jobs and economic activity that would come with secondary processing of plantation logs into timber, paper and other products?

**Dr FREEMAN**: Just on the plantations question, that is actually a better question for industry. We are not industry, so if I could just say that we are probably not the best people to be answering the question for you.

Ms MARTIN: And do we support more Parks Victoria funding? Yes.

The CHAIR: Ms Bath?

**Ms BATH**: Thank you, Dr Freeman and Ms Martin. You raised the issue around ash forests being in need of some TLC in a big way, but you also said that there is not sufficient collection; that is how I heard it. If you had the purse strings of the state, what sort of funding is needed—and where and how—to facilitate ash seed collection? Where are the gaps in our current practices? That is my first question.

You raised frequency and intensity of fires, but then you spoke about the Indigenous cool firestick burns and mosaic burns. I am not verballing you; I am just checking. My question is: it is not necessarily the frequency of burns, it is the intensity and the widespread footprint that they make, so you can respond to that if I have got that correct. But also there has been a document produced by a number of scientists, Professor Lindenmayer being one of them, that speaks about logging of forests having a profound effect on fires'—and I am assuming he is meaning bushfires—severity and frequency. I have got this document. So you might like to respond to what the IFA's position is on that document. I would appreciate if you had some comments in relation to that.

The CHAIR: Thank you. You can answer those questions on notice as well.

Dr FREEMAN: Sure.

Ms MARTIN: Great.

The CHAIR: Right, well thank you very much for your presentation today.

**Dr FREEMAN**: Thank you.

The CHAIR: It was very interesting.

Witnesses withdrew.