



**LEGISLATIVE ASSEMBLY FOR THE  
AUSTRALIAN CAPITAL TERRITORY**

**STANDING COMMITTEE ON ENVIRONMENT,  
CLIMATE CHANGE AND BIODIVERSITY**

(Reference: [Inquiry into the ACT environment's bushfire preparedness](#))

**Members:**

**DR M PATERSON (Chair)  
MS J CLAY (Deputy Chair)  
MR E COCKS**

**TRANSCRIPT OF EVIDENCE**

**CANBERRA**

**TUESDAY, 27 FEBRUARY 2024**

**Secretary to the committee:  
Mr J Bunce (Ph: 620 50199)**

**By authority of the Legislative Assembly for the Australian Capital Territory**

Submissions, answers to questions on notice and other documents, including requests for clarification of the transcript of evidence, relevant to this inquiry that have been authorised for publication by the committee may be obtained from the Legislative Assembly website.

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## **Privilege statement**

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*Amended 20 May 2013*

**The committee met at 9.01 am.**

**GEMMELL, MR BILL**

**BOURDET, MS MICHELLE**

**THE CHAIR:** Good morning. We welcome everyone to this public hearing of the environment, climate change and biodiversity committee inquiry into the ACT environment's bushfire preparedness. The committee will today hear from Mr Gemmell and Ms Bourdet, Forestry Australia, Mr Cooper, Mr Manson, Dr Troy and Dr Bartlett.

The committee wishes to acknowledge the traditional custodians of the land we are meeting on today, the Ngunnawal people. The committee wishes to acknowledge and respect their continuing culture and the contribution they make to the life of this city and this region. We would also like to acknowledge any Aboriginal and Torres Strait Islander people who are attending today's event or viewing it online.

The proceedings today are being recorded and transcribed by Hansard and will be published. They are also being broadcast and webstreamed live. When taking a question on notice, please clearly use the words, "I will take that as a question on notice." This will help the committee and witnesses to confirm questions that are taken on notice.

We welcome our first witnesses today. I remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement. Could you please confirm that you agree to the statement?

**Ms Bourdet:** I am a Weston Creek resident. I agree to and support the statement.

**Mr Gemmell:** I accept and understand the privilege statement.

**THE CHAIR:** Thank you very much. I will ask the first question. Michelle, thank you very much for your submission to our inquiry. Can you speak to the main issues that you see for Weston Creek in terms of bushfire preparedness?

**Ms Bourdet:** Firstly, thank you for inviting us. We are quite chuffed. We wrote the submission because Weston Creek is a unique area, and it still has residual trauma, and a lot of that still has not been dealt with. I think that these are issues that have not been dealt with, even in a proactive manner.

We have great concerns about preparedness and about the environmental issues that, from our point of view as residents, we feel have been neglected. Also, there has been a lack of awareness and understanding of what to do. With the changing population, we believe there is a very big percentage without any living experience, and they simply do not know what to do. Also, they have nowhere to find the information. We would like to see more leadership in the area to prepare people in a proactive way rather than waiting for a disaster. Those are the main points.

**THE CHAIR:** What preparedness, apart from community information, do you see as necessary for the Weston Creek community?

**Ms Bourdet:** A lack of information is the main one. There is maintenance of the area. There is the issue of understanding even simple things like looking after fire hydrants and not parking on them, preparing a house and looking after your neighbour. Evacuation issues in Weston Creek are really serious. You cannot get out of Weston Creek on a normal working day, let alone if you had to evacuate. There is no understanding, if you are not in the workplace, of where a respite centre or an evacuation point would be—where you would go. There are a lot of vulnerable groups that do not have access to information.

There is the maintenance of parks. There are also proactive things. We talk about the human factor, concerns about the way that planning is leading to sprawl and the right to a healthy environment. There is no data collection that is consistent for Weston Creek. A simple solution would be to have an air monitoring station. It would be so simple to do. I refer also to coordinating volunteers, listening to expertise and getting people on board. What about the mobile fire units? What training is involved in that? Where are they? Who knows how to use them? There are so many layers to that for Weston Creek.

**Mr Gemmell:** The only thing I will add to that is the poles and wires. This morning, on the way over here, I noticed a fellow having a pole replaced in his backyard. A lot of the poles in Weston Creek are marked as condemned—approved for temporary use. We see poles and wires come down when we have storm events. A fire event will also bring poles and wires down. We could have a community without essential services, such as electricity to keep their food cold, potentially all of the other devices that people need in the modern day to live at home, and disability equipment—all would be offline.

It really concerns me that we have no strategy to upgrade the infrastructure. It is just “set and forget”. I am not seeing anything about a coordinated approach, and perhaps taking the poles and wires underground. The newer areas have done it, and they have done it for a reason—reliability, being maintenance-free et cetera. Why haven’t we got it?

Back in September, there was a lightning strike. It wiped out a fair bit of Holder. People are not aware of it. Some trees have been hit and they are progressively dying. They are creating a fire risk. There is no follow-up on this sort of thing—trees, poles and wires. We should see a strategy, and it might be a 50-year strategy. There is no plan around it, and that saddens me. The other thing is the leaves and debris collecting in gutters, and in people’s roofs.

**Ms Bourdet:** And drains.

**Mr Gemmell:** There are people who are not capable of doing this work themselves, and sometimes they cannot even afford it. What do they do? Neighbours do pitch in and help occasionally, if they can, or if they observe it. Fortunately, we have a nice, friendly, warm neighbourhood where we will pitch in if somebody is struggling, but I am sure there are a lot of places where they do not.

With respect to Michelle’s point about new people, there are immigrant groups who

have never experienced a bushfire; they have never experienced that roar of the locomotive coming through. We are setting ourselves up for panic. We look at the traffic jam in the morning. Look what happened to Weston Creek in 2003. We now have 25,000 more people in Molonglo, and we have the same roads. We do not know where to evacuate to.

My biggest bugbear is environmental. We do not know what our air quality is. Our air quality is measured from a station in Monash. Weston Creek is a whole different environment. Even our temperature is different. Our rainfall is different. These are all unknowns. Are they informing a strategy? I do not think so.

**MS CLAY:** A number of people who have submitted have raised concerns about sprawl and the bushfire risks presented by that. It is in your submission as well. It is in quite a lot of them. A lot of people are particularly concerned about the western edge, and development near Bluetts and on block 12. A lot of people have noted that our perimeter is expanding, geographically and numerically, yet our resources are not expanding and our planning has not picked that up. Do you think that urban sprawl and expansion into the western edge, with a lack of bushfire preparedness, is one of the concerns that government should be—

**Ms Bourdet:** It is a major concern. I do not think that the planning review helped at all. I think there were missed opportunities with the district strategies. For instance, Weston Creek—and most of Canberra, I suppose—has been identified in the CSIRO report as an urban heat island, yet we are sprawling out to a point that does not have resources.

A concern of mine, for instance, is the lack of planning. You have this sprawl. People are getting more and more isolated. They might be new to the area or new to Canberra; they do not have that lived experience. On top of that, they are isolated. There are not the evacuation routes or even the transport routes for them.

We have a situation where, with the poor planning, a shared services facility is being built on a buffer zone. People were promised after the bushfires that that land would not be built on, and that it would be a buffer zone. Now we are getting a shared services facility built there. They will have to look at traffic management and take control of the lights, because good luck getting out of there if there is an emergency.

With the western edge, we do not see any reason whatsoever for that to be developed. It is too close to the Murrumbidgee. There is no evacuation point. Coming across from Tumut, they would be sitting ducks. It is just ludicrous and it is not needed. It is not necessary. You are heating the environment. Once again, it is about that proactive, environmental thing. If you are building there and sprawling out, you are raising the temperatures and isolating people. You are going down to the river corridor. I just do not see the point of it being there.

**MS CLAY:** There are a couple of particularly concerning details that you have highlighted there, such as building the shared services facility in a known bushfire buffer zone.

**Ms Bourdet:** In a buffer zone, which was promised to be left alone. We have some

very agitated people in our community that do not understand why that went ahead.

**MS CLAY:** Was that identified in the McLeod report or the coronial? Where was that promise that it would not happen made previously?

**Ms Bourdet:** I have only been told that verbally, but no-one argued against us when we said it. It is in the zoning maps. They had to rezone. It is an amendment; it was a rezoning, and it went to a DA. It was not as if they could do it without an adjustment to the plan and the zoning.

**MS CLAY:** We might follow up on that one.

**Mr Gemmell:** There was an amendment to the National Capital Plan as well.

**Ms Bourdet:** I can't remember what number it was.

**Mr Gemmell:** The people who were in Weston Creek at the time say they were promised by then Minister Corbell that that was a buffer zone for perpetuity. They agree with a shared services centre. It is a shame that it has no police in it! But that is a different issue. They agree with a shared services centre, but not on that site and not the way it was done, because they were promised that it was their buffer zone and, all of a sudden, this appears.

I can see both sets of arguments. Both sets of arguments are out there. People are arguing both points of view. Yes, it is needed for the growing community, but why wasn't it planned earlier? That is the counter-argument. How can you reverse a previous decision without fully articulating why? I do not believe that the argument has been fully made, but the planning approval is in at the moment, the DA is in at the moment.

**Ms Bourdet:** It got through, yes.

**Mr Gemmell:** There are two sets of arguments out there, and they have not been reconciled. This is the leadership issue that is alluded to in the submission. Where is the leadership on this issue that explains to the community why this is being done? There is a lot of residual trauma from the 2003 event that is still out there.

We were just talking outside with Dr Bartlett about that very issue. At the Anzac Day event that we held during COVID, we put out a little fire pit—fully contained, with a big buffer zone around it—lit the fire, and a fellow actually got quite anxious because we had a flame. This was 20 years later. I am saying that those issues are still there.

**MS CLAY:** Yes, that is absolutely the case. I was here in 2003 and I was at the anniversary, and it is still pretty raw.

**THE CHAIR:** We will go to Mr Cocks.

**MR COCKS:** I want to thank you for your submission. It is very clear that Weston Creek bore the brunt of those 2003 fires. The issues around the urban interface were really clear. You referred to the multi hazard advisory task force recommendations.

To be clear, is that the advisory council report from last year?

**Mr Gemmell:** Yes.

**Ms Bourdet:** Yes.

**MR COCKS:** Given that was a report that came out last year, have you seen any improvement in the issues that were raised in that report relating to Weston Creek?

**Ms Bourdet:** No. That is the short answer. I think that the environment issues have increased. We have had unusually wet weather and we have had great growth. There are a number of recommendations and eight focus areas. No, I do not see that it has been addressed. If it has, why hasn't it been articulated and advertised out there? If it has, that is a problem in itself.

**MR COCKS:** It goes a bit to the question of fuel loads and accessibility to urban areas where fire concentrates on that western fringe. From an observer's perspective in Weston Creek, I am interested in where you think those issues are. Is it only out in the Murrumbidgee corridor or is it as you approach the urban fringe that there are problems with—

**Ms Bourdet:** I think it is all of it. For Weston Creek, for instance, as you bulldoze sections for Molonglo, there is no greenery and there is no green corridor. That wildlife has to move somewhere. For instance, we have very destructive cockatoos in our area. The leaf litter and pine cone litter are astronomical. That would go up in a flash. It seems to be up to residents to maintain it. Our neighbourhood was sweeping the road this week because it is so bad.

Also, with the increase in temperatures and climate change, there are more dry storms. There are more lightning strikes. A tree outside our place was hit. We have reported it numerous times. It is going to fall down. It is still there, leaning more and more every day. So it is not just on the fringe; it is in the suburbs. It is about the increase in temperatures and the impact that is having on existing trees. It is about the replanting of trees, and looking at whether they are fire retardant. Are they surviving? Are they being watered?

Bill will probably speak to this. There is the maintenance of parks, as well as the treatment of parks by other people. When you see government trucks driving across your local park and parking there to have their lunch, you lose a bit of confidence. It is in the suburbs as well as on the edge. We are all affected by the increasing temperatures. It is not just in the corridors; it is everywhere. The embers will fall anywhere. I think it is a disaster waiting to happen and I think the conditions are probably worse than they were previously.

**THE CHAIR:** We might leave things there. On behalf of the committee, thank you for your evidence, submission and time.

**Mr Gemmell:** Thank you.

**Ms Bourdet:** Thank you very much.



**KANOWSKI, PROFESSOR PETER**, Chair, Forestry Australia, ACT and Region

**THE CHAIR:** We welcome Professor Kanowski, Chair of Forestry Australia. Do you have any comment to make on the capacity in which you appear?

**Prof Kanowski:** I am Professor of Forestry at the Australian National University, but I am here today in my capacity as Chair of Forestry Australia, ACT and Region Committee.

**THE CHAIR:** There is a pink slip of paper on the desk. I remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to that privilege statement. Witnesses must tell the truth. Giving false or misleading evidence will be treated as a serious matter and may be considered a contempt of the Assembly. Can you please confirm that you understand the implications of that statement and that you agree to comply with it?

**Prof Kanowski:** I do.

**THE CHAIR:** Thank you. We will go to questions. Thank you very much for your submission to our inquiry. One of the aspects that you spoke about, and it has come up in other submissions as well, is the use of technology to be able to detect bushfires early on, address them, map them and that type of thing. Could you speak to how we are going in the ACT and where you think we need to be?

**Prof Kanowski:** Firstly, thank you, Chair and committee members, for the opportunity to meet with you. There are some very exciting technological developments, and ACT is partnering with a number of my colleagues at ANU, Professor Marta Yebra and others, who are leading that work, amongst related work in Australia.

It is quite promising in terms of detection. In terms of the next step, of suppression, I think there is still a long way to go. The vision that you might have seen promoted for that technology is that we will remotely detect fires with a range of remote-sensing technologies. A fleet of drones will then drop water on the fires and put them out, to prevent any risk to the environment or to property. The first part is quite feasible; the second part is still a long way off.

The bottom line is that the investment we are making in that sort of technology is very important. It is great that the ACT is partnering strongly in that. We should continue to do so. I think it raises a more general phenomenon that is of concern to Forestry Australia members. I was a member of the national COAG inquiry into bushfires, following the 2003 Canberra fires. We have followed with interest what has happened since. Broadly speaking, as a nation, we are putting more and more emphasis on response and suppression than we are on prevention and risk reduction. That is our greatest concern. We see that manifest in the investment in fire-fighting aircraft and those sorts of technologies. They are very expensive and they have their role, but they are a complement and not a substitute for the front-end work.

**THE CHAIR:** What would you say in terms of risk reduction as a key aspect that we

are currently either not investing in or not investing enough in?

**Prof Kanowski:** The only widespread means of risk reduction in the natural environment is fuel management. We do not have control over the other factors that affect bushfire intensity and severity. Australia has well-developed science in and implementation of fuel-reduction management, mostly through fuel-reduction burning, although there are other techniques that can be used and that are appropriate as well in particular places—thinning out vegetation, for example. That has to be done on a very strategic basis because it has other consequences—consequences for the environment, for example—that we need to manage.

Probably the greatest challenge that we face is that the ongoing implementation of that work in a strategic way demands resources, expertise and capacity. Some of the climate change consequences are not with us in that because they reduce the number of days in a year that you can do safe fuel-reduction management.

In the 2003 and 2004 inquiry, we noted a phenomenon in Australia until that date—a cycle of forgetting after major bushfire events. Understandably, other things happen, but it seems hard to maintain the political, institutional and community commitment to risk minimisation in such a way that it is much more prominent in everybody's mind, as it is immediately following a disaster.

The challenge for us is to think about how to give effect to, in the ACT case, a strategic bushfire management plan which outlines an approach to fuel management in Namadgi and the country to the west of Canberra. We also have particular challenges on the urban interface which often require a different, more intense sort of management, as well as design issues which are also emerging as being problematic. I am sorry; that is a meandering answer to your question.

**MS CLAY:** Thank you for coming in and thank you for sharing your expertise with us. One of the strands of preparation that you have pulled out is cultural management. We have had a few submissions from people who are land managers that talk about cultural management and the different types of fire that can be used, in that they are lower in intensity, they burn in a patchier way and they happen to be less destructive environmentally. In looking retrospectively at the areas where those things have been done, we seem to have less intense bushfires, which makes sense, because that was the way that this land was managed for a long time. Do you think we are properly resourcing our cultural management practices and our use of cultural fire techniques?

**Prof Kanowski:** I think the answer is no. I do not mean that critically, because I think it is a voyage of discovery for non-First Nations Australians, as well as for our First Nations Australians. I spent Friday morning on a campus walk with one of the Ngunnawal elders and my students, talking about these issues, and that was one of the points that he made to them.

In the same first week of classes at ANU last week, I have also been saying to the students that there is a strand of academic work that talks about empowering First Nations Australians to manage their country as being a practical form of reconciliation and a practical form of helping to build sovereignty—those concepts that became so politicised, unfortunately, in the referendum debate. We have an

opportunity, in the way that institutions and non-Indigenous Australians work with our First Nations Australians, to re-empower them to manage country in that way.

Jo, your precis of the benefits of that in fire management terms are broadly correct, from evidence we have. There are also the benefits to First Nations peoples and communities themselves in terms of that empowerment. Looking back to our COAG report 20 years ago, we recognised that, but we really were not attentive enough to it, in hindsight. That should be an area of strong focus for us all in the future.

**MS CLAY:** Do you see any obvious ways the ACT government could better integrate the cultural? Is it just a matter of putting it higher in our strategic management plans? Is it a matter of more money? Is there something else that we should be doing differently?

**Prof Kanowski:** I am not close enough to what is happening at the moment to honestly respond in detail to that, but I think if we look at what is happening generally in other parts of Australia as well, what we see is the need for a lot of investment of time and respectful interaction between agency staff, who are also very busy doing other things—the challenge of cross-cultural dialogue, in a way.

I think, over the decades, fire management agencies—land management agencies responsible for fire—have become more and more risk averse, and we need to allow some level of risk for First Nations peoples to explore the different strategies and consequences, obviously at a level of risk that is not going to lead to catastrophic outcomes. I think there is a sort of dynamic there: risk reduction on the part of institutions yet partnering with First Nations Australians to do things differently to re-empower them, does involve, inherently, a different level of risk than what we have come to accept. It might be, partly, reframing how we are thinking about what we are prepared to accept, but also, probably, investing institutional resources to create the space to allow that exploration to continue. I think that is a common thread that has emerged from different parts of the country.

**MS CLAY:** Thank you.

**MR COCKS:** Could you speak briefly as to what the differences are that we see between a landscape that is actively managed through cultural practices and one that is a bit more hands-off?

**Prof Kanowski:** There are probably a number of answers to that depending on the ecosystems, so that is a big caveat.

**MR COCKS:** Yes.

**Prof Kanowski:** The easiest example, because it is in real time and well documented, is what has been happening in northern Australia with the management by traditional owners in Arnhem Land, and other parts of northern Australia, of fuel loads in the early dry season to reduce the risk of late dry season fires that are more intense and do more damage. We see there much more of a mosaic of lower fuel loads across the landscape. We see, because of that, different diversity in habitats for wildlife that does not exist in a landscape that does not have that intensity of management. And a point,

again, that the Ngunnawal elder made to my students is that that management by First Nations owners of their country is very fine scale; so, I think, as a general rule, what we would see is much more fine scale variation in a landscape than we have become used to seeing since we displaced our First Nations people and managed through our institutional arrangements on a large scale.

It is probably the contrast between, if we think about it in non-Indigenous terms, a farmer who is managing their property very intensively—if I can put it that way—and not necessarily intensively in terms of production but in terms of effort, versus a part of the rural landscape that is not managed intensively in that way. Does that help?

**MR COCKS:** Yes, that is helpful. In your submission you have said:

... key elements of ACT landscapes, of emergency and management access routes, and of progress against strategic and operational goals, should be assessed regularly and reported publicly.

You have said that it is not clear that this remains a priority for the ESA. Could you talk a bit more about where that comes from?

**Prof Kanowski:** Again, I am a little bit removed from the direct sort of day-to-day, but we have had institutional changes. I was a member of the Bushfire Council in the six or seven years after the COAG inquiry. The Bushfire Council has been replaced by a multi hazard council with a wider scope and, necessarily, less focus on any particular issue. I think some of the institutional priorities, perhaps the shift that I mentioned before, focus more on response and less on the risk management in the landscape prior to an event. It just has not seen the same level of attention as I think we felt it needed after the 2003 fires. So, my impression is that the sort of level of visibility and the level of attention that that receives within the administrative apparatus is not as strong as we hoped it would be.

**MR COCKS:** It sounds like both the reporting and, in fact, preventative risk management approach may be not—

**Prof Kanowski:** Yes, that is certainly my impression. And I think there are probably others who you are hearing from who are better placed to talk about some of the specifics of that.

**MR COCKS:** Thank you.

**THE CHAIR:** In terms of your work nationally, do you see other jurisdictions that are perhaps a bit more like the ACT—Victoria, New South Wales, for example—that are doing things better? Or are there things that we could be adopting here that we are not?

**Prof Kanowski:** The Victorians always like to put themselves forward, and my wife is Victorian, so I am therefore privileged there! I think they are probably doing better at some of the public reporting elements—so, that comes back to your question, Ed. I think one of the strengths of federation is that different states do have different institutional arrangements and do approach things differently. And there has been a

strong network of fire managers and fire researchers around the country. It has been facilitated by national arrangements like the former property research centre for bushfires, which became a national hazard centre and is now a different sort of centre. Really what is most important is that we have got fora like that where there is ongoing learning.

Victoria is currently dealing with a major bushfire that there will be lessons from—hopefully there is not too much more damage, but it is a bit worrying. They had the impact of the 2019-20 fires, of course, which were very significant there.

It is probably less about what any individual jurisdiction is doing, in my take on it, but much more about a sort of a mindset and the institutional arrangements that help us learn from what other agencies are doing. The trajectory that I spoke about of an emphasis more on response—on air tankers and other equipment—is a pretty national trend, at least in southern Australia. It is a politically appealing trend, because people see resources coming to their aid; but I, and others from the national inquiry panel, in submissions to subsequent inquiries, have been a bit sceptical about that emphasis. I think that is a national issue that we are all having to respond to.

Answering at the level of principle, I think maintaining the territory's strong engagement with those national fora and processes—a bit like the work that we are doing in the early detection realm—is really the most important thing, because that allows for ongoing learning.

**THE CHAIR:** Excellent. Thank you very much for your time today. On behalf of the committee, thank you for your submission and for appearing. That will be the end of this session.

**Prof Kanowski:** Thank you very much. I really appreciate the opportunity and the fact that you are looking into these issues, which are really important for us.

**Short suspension.**

**COOPER, MR NEIL**, Consultant, CSIRO, National Bushfire Intelligence Capability

**THE CHAIR:** We would like to welcome Mr Cooper to the hearing today. Mr Cooper, for the record, could you please state the capacity in which you appear?

**Mr Cooper:** I am retired and working with the CSIRO on the national fire scene.

**THE CHAIR:** Thank you. I remind you of the protections and obligations afforded by parliamentary privilege and draw your attention to the pink privilege statement on the table there. Witnesses must tell the truth. Giving false or misleading evidence will be treated as a serious matter and may be considered contempt of the Assembly. Can you please confirm for the record that you understand the implications of that statement and that you agree to comply with it?

**Mr Cooper:** Yes, I understand and agree.

**THE CHAIR:** Fantastic.

**MS CLAY:** Thanks for coming in, Mr Cooper. You heard the last witness's testimony, and I will summarise it: prevention is better than cure. You actually had quite a number of different points on the same theme in your submission. The ones that struck me were that EPSDD is mostly focused on planning, so it does not have enough time to manage its PCS duties; and that TCCS, which is not in the same directorate, manage a lot of our land in the ACT—eighty per cent of our land in the ACT—

**Mr Cooper:** No that is—I am sorry.

**MS CLAY:** Also, we are not really spending enough money to maintain our assets: to maintain our roads assets, to make sure we have access, but also, maybe, to maintain our land assets. Have I hit on some of those themes?

**Mr Cooper:** Yes, broadly.

**MS CLAY:** I am wondering, how do we do that better? If fire prevention is better than disaster management, how do we do that better here in the ACT?

**Mr Cooper:** What I meant by fire prevention is preparedness.

**MS CLAY:** Yes.

**Mr Cooper:** As Prof Kanowski mentioned before, there is a lot of money around the country spent on big planes because they are pretty, and ministers—no offence—can stand in front of them and get their photos taken, but, really, they have been shown to be pretty ineffective. Probably the main ways to preparedness—the two we ought to focus on—are track maintenance and large-scale prescribed burning. You cannot do it any other way.

What I meant before was that the Parks and Conservation Service, through their

bushfire operational plan, are responsible for about 70 to 80 per cent of the ACT.

**MS CLAY:** Got you, yes.

**Mr Cooper:** So, it includes land managed by TCCS but more broadly the PCS estate. The PCS fire management unit manage that, and I believe that over the last few years there has been a decreasing capability and capacity in that unit, which is the unit that I used to be responsible for.

I was going to mention this up front: in no way does anything that I say today detract from the absolute skill that the Parks and Conservation Service fire people have. I have fought fires alongside many of those people in quite dangerous situations, and their skill and commitment is to be commended. I just wanted to make that clear.

**MS CLAY:** Yes, absolutely, and I appreciate that you put something similar at the end of your submission. We are in the exercise of making sure people have the resources they need to do their jobs well, and we all understand that people are doing the very best that they can.

On tracks maintenance, I was really interested in some of your comments. One comment that you made was that maintenance should be five per cent of the asset value. I thought that was quite an interesting thing to say. Do you not feel that we have put enough funding, enough staff and contractor funding, into maintaining our trails and access at the moment?

**Mr Cooper:** I think the focus on track maintenance has gone downhill, and I have witnessed that firsthand. We took Minister Vassarotti out to a particular trail probably six months ago, and I notified the agency that that trail was in exceptionally poor condition—the main access to the northern part of Namadgi. As recently as last week that trail was officially closed for safety reasons by the Parks and Conservation Service because it is too dangerous. It is a main access trail that is overgrown.

In 2003 I was involved in the fires, and the biggest impediment we had then, in the face of a quite angry fire, was trying to drag prescribed burning through on tracks and trails that you could not access. We had to wait for dozers and graders, when we were trying to do suppression, to do operations that should have been done in preparedness—clearing tracks and trails.

There are a number of others in my submission. I have mentioned two other trails that are currently closed. They are really main strategic trails that we spent a lot of time and effort in opening up; you cannot get through them. What I refer back to is that the PCS manage about 2,500 kilometres of rural roads and to maintain those in the condition that is required requires a good expenditure of budget. As far as I am aware, the budget that the fire unit receives today is almost exactly the same as the budget that we used to get when I was there three, four and five years ago. There has been no incremental advance in budget.

**MS CLAY:** That is interesting. I have also been on a tour and had a lot of problems pointed out to me by PCS on the track maintenance, and it does look pretty stark. There is a government submission to this inquiry, which said some of the issues in

tracks and trail maintenance have been related to access, where there are concerns as well. Do you see it more primarily as a lack of resources and that we have not actually put enough resources into the problem?

**Mr Cooper:** I think it is threefold. One is a lack of skilled people who know about forest fire-trail maintenance. You cannot grab a contractor doing the Northbourne flats and say, “Go up and fix a road in Namadgi.” It is quite a different set of skills. There is a high level of skill needed in managing those contracts and in identifying the priorities of where they should go and what they should do.

There is also, I think, a real impediment within EPSDD and Parks around the bureaucratic processes that one needs to go through to undertake what is, essentially, road maintenance on an existing trail. You have to go through ESOs—Environmental Significance Opinions—to, effectively, upgrade a road that has been there forever. It defies logic to me, and that is a real impediment to getting things done.

One of the other things is that fire is so dependent on the weather. It is very easy within a fire management unit, which possibly does not have the skills or the experience or the sense of urgency to make the decisions, to say, “Oh, it’s too wet,” “It’s too dry,” “It’s too windy,” “It’s too hot,” and “I can’t burn today.” What we used to do every day was to consider it a possible burning day or a workday. We would sit down and work out why it could not be done, rather than say it could not be done and move on. I cannot stress enough about the urgency. Every day we do not do something is another day that we are getting increased fuel, decreased access and we are just not going to catch up.

Like I said in my submission, I worry about the impact that a large fire will have on the ecological environment in the ACT, especially if it reburns through areas that have burned previously. I am also worried about the safety of our firefighters out on those tracks and trails, and in that country that has got now exceptionally high fuel loads, broadly.

The last two weeks were the perfect time for burning. I did not see any smoke in the air. There might have been a little bit yesterday, which coincides with this inquiry, possibly, but it was only a small grass burn. We have got thousands of hectares that need treating out there and ideal weather going into autumn—perfect. It is not up to me to ask. It is probably up to EPSDD to question PCS, “Why isn’t this happening?” But I do not think that has happened.

**MR COCKS:** We are getting into the two areas I am interested in, which are track maintenance and the fuel loads and the approach to managing through prescribed burns, and others have talked about cultural burns as well. I am very interested in what you have seen change in the way prescribed burns, in particular, are undertaken. Is it just a matter of scheduling, or where do you see the barriers? You have said we are getting to a point of extreme fuel loads: what do we need to overcome to be able to bring that back?

**Mr Cooper:** Personally, I think there is a lack of capability and capacity, which I have already mentioned—a lack of numbers and a lack of experience in the current team. There has been recent recruitment to key fire positions where the person does



not even have basic firefighter training. It defies logic to me that you would employ someone in a fire role who does not understand fire and who has not had that experience and knowledge.

What I did want to mention with prescribed burning, and you touched on it before with cultural burning, is that prescribed burning done correctly is a mosaic: low intensity and patchy across the landscape. People get a little bit confused and say, “You should be doing cultural burning.” In effect, we are. We have copied. We have taken notice. We have learnt from the traditional custodians, and that is what we do. I am involved in fire management on Minjerribah (North Stradbroke Island), which I mentioned in the submission, and that is about reintroducing cultural burning right across the island.

The challenge with that is they are faced with areas that have 30 years of fuel. How can you possibly put a low intensity cultural burn into 30 years’ worth of fuel? It is like trying to have a low intensity bonfire. You cannot do it. So we have to be really careful about not setting people up for failure. It is working with them. If we do get a fire that goes through there, the years that follow are a perfect opportunity to then introduce cultural burning.

We had a large fire at which I was the incident controller of at Orroral in 2019-20. That needs burning again now. It is four years old, yes, but it still needs some light burning, and there is not that much fuel there. It is a great time to go in and start that cycle and reintroduce that in the landscape.

I think one of the issues with prescribed burning in the ACT, as I mentioned, is that we are probably lacking the skills. At the moment, fires are graduated at level 1, 2 and 3, where level 3 is the highest and most complex. I was a level 3 incident controller. Dr Tony Bartlett, who will be speaking later, is a level 3 incident controller. Parks do not have any. The Parks and Conservation Service do not have a level 3 incident controller. They do not have a level 3 operations officer. If a large fire starts in the ACT, it is going to be in the park area in Namadgi. That is just by virtue of where we are. You need people in those positions that are land managers and understand forest fire.

For urban fires they are fantastic, and they are great in building structures that do not move. Again, when I was incident controller in 2019-20 for the Orroral fire, I had a number of fire and rescue people assisting, but a common comment was, “Oh, we didn’t know about rates of dozer progression on a fire line. We didn’t realise that had some ecological impacts—that putting dozer in might jeopardise. We didn’t realise putting retardant across that particular patch is probably worse than letting the fire go through.”

To answer your question, I think the agency is really lacking that high level. Once you have that high-level fire person in there, they have that knowledge and experience. They are always looking to say, “What should we be burning today? What should we be doing today?” And if they get the answer, “It is too wet,” they say, “Okay, what is it doing next week? Are we ready? Do we have plans in place? Isn’t there somewhere we can burn today?”

What we used to do, if it was too wet in the broad landscape, was put in edge burns. So, on a large block, we would go out and put in the edge. It takes a little bit of fire, but when it comes to burning that block in autumn or spring, you have already got a safe edge, and it is so much easier to put in. There is always something you can do, and I just do not see that push at the moment with getting things done and the urgency of it.

**THE CHAIR:** I was interested in your submission highlighting the right to a healthy environment and how that may come in conflict with prescribed burning. I am wondering if you could speak more on that and what you see the issues are.

**Mr Cooper:** I guess the ACT is good in some ways, and in other ways sometimes I do not know if enough thought has gone into introducing new legislation and looking at the consequences—and no offence to anyone. The new legislation I see could well be a challenge when there is a right to a healthy environment. Anyone, from recollection, can make a complaint if they feel they do not have a healthy environment, so smoke comes into that. If we do prescribed burning, there is going to be smoke in the air.

One of the things I was going to say before is that it is really hard to do prescribed burning. Those really well-trained, talented people who I would die for out there, and who do the work, have been screwed from below. People in their own agency in PCS say, “Oh no, we shouldn’t be doing it. We don’t want to do that.” They are not getting assistance from above—the government. There is no political license—what we really need for these people to do these jobs. Because it is very easy to say, “Why should I worry about it? I will go off and spray a few weeds today—no hassle. I can go home, and I’m not being hassled.” If you want people to deliver these quite sensitive and challenging programs, you cannot put more bureaucracy in the road. Unless there are some adaptations made to this new legislation to exempt bushfire smoke, I see in it another real impediment to doing burning.

On political license—my son is also in fire in Western Australia, and they are sort of suffering the same thing. These people are going out and doing their best to suppress fires and put fires into the landscape to manage the vegetation and fuel, and yet they are not supported. Never once in my 40-odd years in fire here in the ACT did I hear a minister come out proactively and say, “Hey, Parks are going to be burning in the next few days. There is going to be smoke in the air—suck it up.” Probably not in those words, being a minister! But that sort of support goes miles for the people on the ground. They can see that what they are doing is valued by the people of the day.

I never once saw EPSDD at the higher level in my 30 or 40 years involved in fire come out and say, “Geez, you’re doing a good job. We’re going to put something out about that. That is great. Well done!” It is just not on their radar. It is not seen as core business of the land management agency, and it has to be.

**THE CHAIR:** You were saying before that every day you used to make a decision: “Is today a burning day or not?” Do you think there is a lack of a plan and a strategy overall that would provide that framework for the people on the ground to actually say, “We need to be burning today.”

**Mr Cooper:** I think the strategy is there. There is a bushfire strategy and the regional fire management plan and the bushfire operational plan. There is not the awareness, knowledge and skill of the people there to say, “Okay, great, we need to implement this thing. It might be wet today, but it is dry somewhere.”

I was at a fire meeting in Victoria yesterday, and we were talking about exactly the same thing. Victoria is bigger than the ACT, sure, but there is somewhere where there is a place that you would be able to implement some form of prescribed burning. As I said, every day, probably twice a day, I would discuss it with my operations officer, my fire behaviour analyst, my planning officer and business manager: “What can we do? What are we doing? Why aren’t we out there? What are the crews doing? What resources do we need? What plans have we already got approved? What do you need to get approved? What do you want me to do to try and push through some of the red tape at the top?” That was every day, at least twice a day, and that is not an exaggeration. It was in the office, around the tea and coffee urn—wherever. That is needed, because a fire program is a hard thing to deliver.

Pre-2003, when there were separate parks and forest agencies, I clearly recall that the “best” decision that the parks agency made at that time was, “No, we are not going to burn that this year. We will do it next year.” Hopeless! We were all ready. We could have burned a certain area up in Namadgi, but they seemed really happy when they made a decision to put it off until the next year. And I sort of see some of that coming back in a little bit. There is no urgency: we have had four wet years of quite significant growth.

One of the current excuses that I heard was that it is too wet to do a certain road up in Namadgi. I put it in my submission. I went through the rainfall records and there were three or four periods of about 30 days where you could have got machinery in there. Unless you really plan and are ready to go and there are people knocking on your door saying, “Mary, why aren’t you up there doing that?” it does not happen.

**THE CHAIR:** Thank you very much Mr Cooper for your submission and for your attendance today at the hearing.

**Mr Cooper:** Thank you for giving me the opportunity to come in. I appreciate it.

**THE CHAIR:** It was a pleasure. The committee will now suspend.

**Hearing suspended from 9.59 am to 10.26 am.**

**MANSON, MR GREGOR**

**THE CHAIR:** We welcome Mr Manson and for the Hansard record, can you please state your name and capacity within which you appear today?

**Mr Manson:** Yes, my name is Gregor Manson. I live in Canberra and I am here as an individual citizen. I have prepared a report for this inquiry.

**THE CHAIR:** Thank you very much. I remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement that you would have been sent by the secretariat. Witnesses must tell the truth. Giving false or misleading evidence will be treated as a serious matter and may be considered contempt of the Assembly. Sir, can we please confirm for the record that you understand the implications of the statement and that you agree to comply?

**Mr Manson:** Yes, I have read the statement. I have one in front of me and I agree.

**THE CHAIR:** Fantastic. We will go to questions now. We will go through the committee asking you one at a time. A lot of your recommendations in your submission relate to the commissioner's role, so I was wondering if you could speak to some of those recommendations that you think are most important or what you see the issues are relating to the commissioner's role?

**Mr Manson:** Yes, having been in these positions myself, I think the key thing is that the commissioner really needs to define the risk and make that very public through reporting systems: to the all-hazards committee; to the director-general; to the government at large; and to the public. By defining the risks very clearly, then you can provide an outcome, strategy and actions.

What I notice in the current regime over the last three to five years in New South Wales and the ACT is that there is an overt lack of defining the risk, the outcome, strategy and actions in a publicly professional standard of public service delivery of outcomes. That is my main concern. I feel that directors-general are not requesting or insisting that the commissioner and then down the chain—that the professional standards of governance are simply not being met and in particular, what I feel is most missing at the moment is the public consultation. Almost all documents and procedures, even of the all-hazards committee, seem to be secret. They are not up on the public website. It is very difficult for an individual to see where they sit on the risk ladder and then to be self-resilient or make a decision about what they need to do to prepare for disasters of any sort.

**MS CLAY:** Mr Manson, I am not sure whether you would rather talk more about the public consultation aspect that you have just raised, because that interests me, or if you would like to tell me a bit more about what you meant by—in your submission, you said by the year 2000 landscape level bushfire management was underpinned by extensive knowledge and you do not think it is now. Can you talk to one of those two, which ever you think is more important, because we have limited time?

**Mr Manson:** Look I will talk about—the public consultation is an off shoot really. It should just happen. What I am saying is that there is a vast amount of knowledge and experience out there. It is still there, and it is applied in a majority of cases very well. But what we saw in 2003 and 2019-20 is that where there were gaps in the capability to apply that vast knowledge and experience, we saw things get out of hand very quickly. There is no question in the current climate of extended bushfire periods—fire weather used to be critical for three or four days, now it can be two weeks.

So we need to jump on fires and get them out immediately on those critical weather days. I fail to see that we are actually in a position to—basically what I used to do in the Blue Mountains and here in Canberra was to fly around those storms on the bad days with a helicopter crew in the air to waterbomb lightning ignitions, for example, and put them out straight away. That is not happening any more for a variety of, what is sometimes called, new occupational health and safety reasons and not having the appropriate aircraft.

The knowledge is certainly there. It is not lost. My concern is that it is the application of that, and it has to come down from the director-general level to ensure the commissioner and the chiefs of the various services have in place very serious business plans, risk reductions plans and to be implementing those. I think Mr Cooper advised the plans are there, the knowledge is there, however, we are not actually implementing that knowledge and experience. That is my concern.

**MS CLAY:** We have seen in some of the submissions that in some places we have new technology that assists. So for instance, we have drones that can help spot fires. I understand, and I am certain you know more about this topic than me, we have drones that spot fires. We do not yet have technology that can entirely remotely deal with the fire once it has been spotted. But do you think we are using new technology in better ways to perhaps undertake some of those tasks, like pro-active helicopter monitoring?

**Mr Manson:** Well going back to the old days, we use to fly a Cessna around on those bad weather days. Now there are much more sophisticated technologies, and we should be using those to the best of our advantage. However, the reality is that you cannot avoid getting up there, whether it is a drone or someone in a Cessna, and then you need the aircraft with the water bombing or a crew, a remote area fire crew, there within minutes. They have to be in the air on those critical periods, when that storm comes through, and we are not doing that.

There was a major failure of that in New South Wales in the Blue Mountains in particular, where the weather and the conditions were very suitable for a remote air attack and that simply did not occur because they did not detect fires sometimes for days, despite all our new technology. So it not about technology. It is about—on those critical weather days, and there are only a few of them each year, you need to be in the air, and you need to be fully ready to go with that rapid attack. If you get a fire out, then it is not a fire. Once it gets away from you then that is a whole new story about managing that fire and the landscape and protecting life and property.

**MR COCKS:** Thank you for your submission. I am very interested in the landscape level discussion that you have in there, and it might start to tie things together somewhat from what you have already been saying. It sounds like you are advocating

an approach that is looking at prevention, in terms of ensuring we are stopping the build-up of fuel loads and actively managing the landscape. But then, between that level and managing a fire emergency—and forgive me, I was a health bureaucrat previously—you moved from prevention to early intervention to be able to attack things very early rather than letting them get bad. Would that be a fair summation?

**Mr Manson:** Yes. On a broad landscape level, when the weather is on your side, you can manage fires, you can let them run to meet your ecology and sustainability, so that you are basically doing hazard reduction and ecology management at a broad landscape level. You need your farmers and the edge of the community around the city to have their hazard reduction and prevention methods right up to standard, particularly at the end of drought seasons.

So there is the landscape level protecting your assets; very good individual rural property protections, edge of city protections. Then at a landscape level there are those critical days where a fire, when it escapes, will not be easy to control. So you need to actually manage it in the landscape, which means experienced people airdropping ignitions and managing the fire to keep it in the best control. So it is a mixture of both. But as I said, because we have less natural landscapes and our parks and things are very valuable for water and cultural reasons and to maintain the forests, we need to, at a landscape level, attack those critical days that the fires are being managed by us rather than just running wild.

**MR COCKS:** You talk about letting fires run, essentially as a fuel-controlled measure. Does that change depending on whether there are already high fuel loads in our parks and more remote areas?

**Mr Manson:** Yes. What I mean by the landscape level management is that in front of the park manager you have a map with your bottle fires, your ecology and you know which areas you will allow a fire to burn or to move across the landscape and there are areas that you need to protect from fires because they may have burnt only recently. So it is actually a mosaic, a juggling of—from a knowledgeable person who looks at the map and the landscape and says, “I will let that fire run there for three or four thousand hectares.” It is good for the ecology, and it provides a hazard reduction mosaic across the broader landscape. So that is what I call experience, where you are juggling those things from the knowledge base of the land manager.

**THE CHAIR:** Thank you very much, Mr Manson. We will close this part of the hearing now. Thank you very much for your submission to the inquiry and for your evidence today.

**Mr Manson:** Yes. Thank you for letting me come in on the phone. I had a power outage and could not do it by video. So apologies.

**THE CHAIR:** No worries. Thank you very much.

**Short suspension.**

**TROY, DR SALLY**, Chair, ACT Multi Hazard Advisory Council

**THE CHAIR:** We welcome Dr Troy, Chair of the Multi Hazard Advisory Council. I remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement—that pink statement there on the table. Witnesses must tell the truth. Giving false or misleading evidence will be treated as a serious matter and may be considered contempt of the Assembly. Can I please confirm for the record that you understand the implications of this statement and that you agree to comply with it?

**Dr Troy:** I understand the implications and I agree to comply.

**MR COCKS:** The report that was published in January last year was a very helpful resource, I thought, to inform consideration of this entire inquiry. I am interested in what has happened over not just the last year but the last period of time. One of the big concerns we hear about is clearly fuel loads and hazards in that respect, as well as access to our national parks and areas where there has been a fuel load build-up. Have you seen any changes in that over the past year to five years?

**Dr Troy:** I think I am not the right person to ask about the operations of fire management at that level. I am happy to talk about the reception of the report and the sorts of things that we can see are or are not happening at a more strategic level, but I think you would be better off asking the agencies or maybe Dr Bartlett about what you can see at that more technical level.

**MR COCKS:** Maybe it is better to couch it in terms of what sort of progress have you seen following on from the report?

**Dr Troy:** The report made 23 recommendations, and I have to say the council was a little disappointed in the government response to the report. Four of the recommendations that we made were agreed, one was accepted in principle, and then the other 18 were noted. So the council is working to get those recommendations considered in the development of the next Strategic Bushfire Management Plan version 5, which is being developed now and should be prepared by the end of this year, for adoption next year.

As you would know from reading the report, it was quite wide-ranging but attempted to be quite strategic in nature, while also specific enough to give guidance to the areas that we felt were lacking. So that went across eight key themes ranging from some strategic planning capability—not at the level per se of the Strategic Bushfire Management Plan but, immediately sitting under that, the more concrete spatial planning around what needs to be done, what are the risks, what are the fuel loads and what activities need to be taken to mitigate those risks—right through to thinking about preparedness in the community and what we think needs to be done there.

I have to say community preparedness is the area that I thought I would be most helpful to you on. I think you have access in Dr Bartlett, Mr Cooper and Mr Manson to people who are much more able to talk very specifically about agency fire risk mitigation and about the government activity to mitigate the risks and then conduct

fire suppression when bushfire occurs.

**MR COCKS:** You did mention geospatial mapping. We have heard some evidence today around the mosaic approach to managing bushfire risk in the landscape. The mapping you are talking about—would that support that approach, or would it be more related to how the community can respond?

**Dr Troy:** When I mean “mapping”, it is geospatial, but the strategic nature of it that I want to get is a clarity around, “What are our objectives for different areas?” and a clarity around plans for addressing fire in those areas. Fire management requires a balance of a whole lot of competing objectives, of which you would be aware. So not just human life and not just physical, but also water, biodiversity and ecosystem function. Some of the mitigation measures will compromise one objective while meeting another. Trade-offs are absolutely a part of the system, and it is really important that we work through what those trade-offs are and what good fire management looks like to us—before we are in the situation of having one.

That is what I mean when I say there is not that kind of cross-tenure—so landscape scale, not just within the parks system but across the rural lands as well—where we can clearly see what our priorities are. That goes through from that high level setting and then cascades down priorities into, “Well, what then are our risk mitigation plans, and what will we do in the event of fire in those different areas?”

**MR COCKS:** It sounds like that is cutting across the government, really; not just focused on an ESA-type response, but there are impacts right across government.

**Dr Troy:** It absolutely needs to be cross-tenure, and we need to actively consider those kinds of trade-offs. Otherwise, those decisions are getting made in the incident control room and issues the community may think should have deserved more or less protection have not been part of the conversation. It is a very difficult job for incident controllers to work through without having that done beforehand. That is why, I think you heard from Mr Cooper earlier about the importance of having highly experienced incident controllers, because in the absence of those formal plans and that formal articulation about “What are our priorities?” then you really need people who are well used to working through all those trade-offs in the moment.

**THE CHAIR:** We heard from a couple of concerned Weston Creek residents this morning around community-level awareness and communities that are on bushfire prone areas, like Weston Creek and Molonglo Valley. One of your recommendations in the report talks about increasing the number of community fire units to ensure that all suburbs in bushfire prone areas have that capability, and priority be given to the new suburbs on the western and northern edges of Canberra. Can you speak to the importance of that, and do you think things have stalled in that area? Do you think that communities along Weston Creek, Molonglo and the north of Canberra have adequate preparedness for a bushfire?

**Dr Troy:** So if I move back from the specific question about community fire units and talk to the question around do I think communities are adequately prepared, I would have to say I do not think that ACT communities are adequately prepared. In its simplest form, preparedness is having the right information and the right resources.



I think we have extremely diverse communities in the ACT. You would be well aware of the different ways in which you can look at diversity, but we also have a highly transient population, both by virtue of people being young who have not experienced bushfire, and through people who have migrated to the ACT from elsewhere in Australia or from overseas and do not have that experience. We cannot assume that people who had the experience in the major bushfires 20 years ago are still the dominant members of the community. That memory and knowledge fades very quickly and needs to be constantly refreshed. We need to think very clearly about how do we make sure that information gets through to all sectors of the community, not just the English as a first language, physically able, well-educated, well socially connected people. I do not think we are doing that systematically.

I think that ESA does its very best with its community engagement—taking fire trucks to schools and fetes and shopping centres—but we do not have a systematic program of supporting the community to do its own planning, to support individuals, institutions and sectors to think through what their risk actually is. Are they in a fire-prone area? How long will they have to react? What do they need to do? What resources do they need to have to hand? Who will they call on for help? Where can they get help from? Will they go and, if so, where? So we are not really addressing those sorts of things at the right scale, I think, to make sure that all of our potentially vulnerable at-risk parts of the community are clear about what to do.

I think another part of that is having really clear expectations so that the community members are clear about what the expectation is of them and also the community is clear about what the expectation is of government. So what can we expect from government and what might be there but we are not quite sure about, and what can we not expect from government? So some of the things we should be able to expect is accurate and timely information, good regulation, good planning, good suppression activities and good risk mitigation activities. But can you expect a pumper in your driveway? Can you expect accommodation and an evacuation centre? Those things are not clear.

We really need to make sure of what the expectation is of the citizen to be prepared and to take care of themselves—what is the expectation in terms of contribution into your community so that you are clear about who your neighbours are and who might need assistance, clear about what mechanisms there are for you to obtain help and clear about what your government will and will not do. I think in the ACT we are affluent, we are well educated in the main, and we make good decisions when we have good information. The level of vaccination that we achieved was a real testament to the willingness of the ACT community to act on good advice, but I think there are issues to do with the passivity of the community.

When I look at the Black Summer and the number of ACT residents that went to holiday on the New South Wales coast, despite there being multiple large scale fires in the Great Dividing Range that were quite clear—unless we had some extraordinary weather event—were going to burn to the beaches, and in fact did—the number of people that went to have a summer holiday there anyway, tells you something about our worrying willingness to wait for government direction rather than to have some kind of proactive risk mitigation sensibility. So I think there is a lot we can do to build

that self-reliance and ask people to think proactively about bushfire risk rather than wait until it is a problem and then wonder what they need to do.

**MS CLAY:** On that, you noted there are things we can and should expect government to do and there are things that we are not sure if it is government's job or community's job. We did not quite get to the third category which is, what are the things that community should do—and I take your point of not going on holidays when the information says do not go on holidays to a fire zone. What are the other things we probably need a conversation about of what we expect our communities to do individually and collectively, and how do we make that happen?

**Dr Troy:** Great question. One of my particular concerns is the falling level of volunteerism, both in terms of the highly formal, highly structured volunteering—so that would obviously be the RFS and voluntary interstate environment groups, et cetera—and also the less formal volunteering, which is really important as part of community cohesion. So I think we need to have a conversation around civic responsibility. We are in a time-poor society where people no longer prioritise contributing outside of their household. I think that needs redress because in times of crisis we need each other and we know that the most resilient communities are the communities that know each other.

I think there is a lot that government can do to foster a better conversation around the expectation of citizens to contribute to their community. I am not intending to blame the community for being vulnerable. People are our best resource. Knowing who your neighbours are, knowing who needs a hand, knowing how you are going to get somewhere and knowing what is available are all things that you grow through being more connected to your community.

So it is encouraging people to know their neighbours and to participate in a local community organisation; it is clarifying the myriad ways that you can be connected. You do not have to be the person who holds a hose, although those people are vital. You can also be the person who organises a gathering for your street, you can be the person who posts stuff on social media or you can be the person who runs your kid's soccer team et cetera. All of those things build knowledge, cohesion and resourcefulness, and they are things that I am seeing is declining in this much more fraught, much time-poorer age.

**MS CLAY:** There was another thread that leapt out. You laid out the eight issues and one of those eight issues was about protecting our growing urban edge and increasing our resources as the urban edge increases. You specifically spoke about western and northern edges' net resources. There is quite a lot of content in the submission about how we have not really factored in our increasing rural urban perimeter; it is getting bigger and we have not resourced that:

As a result, the resources being provided are spread thinner and thinner resulting in an ever-decreasing standard of protection being provided.

You have talked about the Western Edge Investigation project. Can you tell me your concerns about that issue?

**Dr Troy:** Our concern is that, because the planning system does not have disaster risk mitigation as one of the objects of the Planning Act or the Territory Plan, it is a secondary consideration. So it comes in later in the process. In our observation, what seems to happen is that areas get developed and there is a strong and coherent attempt to make sure the planning accommodates and takes into account issues to do with bushfire risk mitigation, but it is often a secondary concern. The issues then get moved on to government to manage rather than required of developers to manage upfront.

So the creation of, say, fire access trails and their maintenance become a burden for the government rather than something that is invested in by the developer beforehand. As the edge of Canberra and the western edges there that are slated for further development are also the areas that are most at-risk in a bushfire given the prevailing winds, it stands to reason that as we have new suburbs and new areas, we really need to make sure we are taking into account the latest science and making sure it is incorporated in a way that is not creating more of a burden on the ESA and the Parks and Conservation Service to respond to. Does that—

**MS CLAY:** It does, and it sounds as if the sprawl that we are running at the moment is not tapping into the cost, the resources and the knowledge of ESA to make sure that we are doing it in a responsible way.

**Dr Troy:** We have not done the analysis to actually look at the edge and the length of the edge and the change in resourcing to ESA and Parks and Conservation Service, but I would suggest that it is unlikely to have kept pace. I think that probably speaks for itself. I think ESA has worked very hard to improve the planning system through the improvement of the bushfire management standards that get considered in development but, as I said, I think it gets triggered as a secondary consideration. So in the planning system, biodiversity, amenity et cetera are all up there as principles but disaster risk reduction is not one of those primary principles.

**THE CHAIR:** Thank you very much, Dr Troy, for your submission and for your attendance at the hearing today.

**Dr Troy:** Thank you.

**Short suspension.**

## **BARTLETT, DR TONY**

**THE CHAIR:** Dr Bartlett, thank you very much for your attendance at our hearing today. For the Hansard record, could you please state your name and the capacity in which you appear.

**Dr Bartlett:** Yes, I am Dr Tony Bartlett. I am a Canberra resident but one who has a lot of long-term experience in bushfire management, both from Victoria, where I first started work, and then in the lead-up to and post the 2003 fires here in Canberra.

**THE CHAIR:** I remind witnesses of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement. Witnesses must tell the truth. Giving false or misleading evidence will be treated as a serious matter and may be considered contempt of the Assembly. May I please confirm that you understand the implications of the statement and agree to comply with those.

**Dr Bartlett:** Yes. I understand it and I agree to it.

**THE CHAIR:** Fantastic.

**MR COCKS:** Thank you, Dr Bartlett. I was quite impressed with your submission. One of the things that really stuck out to me was table 2 on page 8, which outlines the difference in prescribed burning totals for the five years from 2011-12 to 2015-16 and the years from 2016-17 to 2020-21. In that second period the annual average was under half of the preceding period. I note there is a bit of this in your submission as well, but could you talk to how prescribed burning changes the nature of a fire and the outcomes after bushfires.

**Dr Bartlett:** Yes, okay. That is a good question and a big topic. I will just pick up on a couple of points. Actually, what I would like to do is start by giving you an example, and this cuts across some of the other questions that were asked to other speakers.

I have done quite a lot of work with Aboriginal people since the 2019-20 fires. Just recently I was up in Northern New South Wales near the Queensland border and went out with some Aboriginal people there. We were looking at an area that was badly burnt in 2020, and this Aboriginal elder said, "This forest is now so dense that emus cannot even run through it." He said that in the past, after a bushfire, the following summer they would go back into that area and start burning the grasses that were regenerating. As part of that, some of the regenerating eucalypts and acacias would be taken out.

Now there are environmental rules that say once an area is burnt for ecological reasons you cannot put another fire back in there for seven or 14 years, depending on the forest type. It is a disconnect. Like other people were saying, they would be regularly burning little bits. As Neil Cooper said, we know how to do that, and we have the technologies to help us do that.

The old fuel reduction system when I started out in this was that you would burn 1,000 hectares, and the goal was to try to burn the whole lot. We do not do that

anymore. It is more selective. But the Aboriginal people came into the same area many, many times over and over. Sometimes—it might be on quite a hot day in summer—they would only burn a patch as big as the middle of this table.

By doing that, you are changing the structure of the forest and the fuel type. If you go on Red Hill—you can see the photos there, which were taken near my house—in the 20 years since I have lived here, it has completely changed from being an open woodland to a very dense forest.

Neil Cooper was talking about the minister, and we also took her up there. I asked her the question: “Do you realise how many trees are here?” There are over 5,000 trees per hectare. In a pine plantation, which everyone thinks of as dense, it is about a thousand per hectare. It is a changing structure before your eyes, and, when you have this dense layer of undergrowth and regenerating trees, if you get a fire back in there it will carry the fire up into the crowns of the trees, so you get more intense fire. Fuels are about fuels on the ground and also the fuels in that whole vegetation structure.

**MR COCKS:** And that shift you talk about—with Red Hill as an example—is to really high-density fuel and a high density of trees. Does that seem to be a repercussion of a hands-off approach to regeneration and making sure an area is just completely left alone to regenerate over a longer period of time?

**Dr Bartlett:** That is one school of thought, and I am aware that there are a lot of people who believe you should leave the forest alone. The point I have come to realise more and more in my career is that, actually, our Western science is not ideal for the environment, particularly in a changing climate, and we need to try to get back more to the approach that the Aboriginal people used.

I also agree—as a lot of the people that I have spoken to have said, using some fairly strong language!—that we have stuffed the forest, basically. Now you want to give it to them to fix. We need a joining up of Western people and Indigenous people, if you do it strategically. Then you work out where we can start to put fire back into the landscape. Do we need to go in and thin some of the areas? After the last big fire, the 2003 fire, there was a lot of regeneration from pine wildlings in natural areas out to the west—not in the plantation area but outside that. The government spent a lot of money getting rid of those trees, effectively thinning it all out, mulching it all up and so on. There are ways you can deal with that, both with fire and with mechanical tools.

**MR COCKS:** Excellent. It sounds like it is not just about cultural burns specifically but culturally-informed approaches to managing the risk in the landscape.

**Dr Bartlett:** Absolutely, yes.

**THE CHAIR:** I have a supplementary question, and I think it speaks to what Mr Cooper said as well. In your submission, you describe it as a passive management strategy. Can you add to that.

**Dr Bartlett:** In my mind, we are drifting back into that more passive approach. Part of that comes to different mindsets, skills and previous experience, like Neil Cooper was talking about. But there is also this philosophy which says that if you leave the forest

alone it will be all okay, which I do not personally believe. I think that is not true.

The forests were managed way before Europeans came to this country, and it has taken us a long time to realise that these people did manage them very carefully. It was not the same way we manage them, but it was active management. Some of them call it forest gardening. They have all these different types of words to describe it, but their systems coped well with small amounts of disturbance and then periodic bigger bits of disturbance. If you just leave it and do nothing it is like lining up all these cans of kerosene and saying, “It will be right.” Boom! When it finally goes, it is much worse than if you have done some active management along the way.

**THE CHAIR:** Your submission talks about the roads and the fire access networks being either currently unfit for purpose or in a compromised condition. The ACT government’s submission also says that much of their work is going into preparing these access roads. Can you speak to what level of investment you think is needed and what sort of focus on this issue is needed.

**Dr Bartlett:** I spend a lot of time in my spare time riding a mountain bike all around the place, and I have seen first-hand how bad the roads are, whether they are in the forests around the urban area or out in Namadgi. But, as Neil Cooper was saying, if you have a big asset—2½ thousand kilometres—there should be some part of it where every year you are putting a road grader on to reform the crown so the water drains off it and so on, and clearing back the vegetation that starts to grow over the road. These are techniques that people who have been trained in land management well understand. You need to do that.

Then you need to also have money to upgrade areas where there is not an existing adequate track for putting in a fire suppression line. Within Namadgi, one of things that I have said to people is that in 2003 most of the damage was done by a fire that was burning under a north-westerly wind going that way. In 2020, it was going the other way; it was coming from the easterly wind, pushing the fire in different ways.

After 2003, we identified a couple of important new strategic roads: the Mt Franklin Road and the Stockyard Spur. We could not get a road all the way down to the dam; that was not going to be an option. So we put in a sort of walking track and made that a fire control line. In my mind, there needs to be a strategic look at that, so you have a combination of some annual maintenance work that is being done on a proportion of the road—but a much greater proportion than is currently happening. You then have a strategic component, and then you have a backup bit. If there is a big rain event that washes out things, you need to be able to repair major damage. At the moment, all of those things are mixed up together, and, overall, there is totally inadequate money to do everything.

The point that Neil Cooper made was that the budget has basically stayed the same. Hiring a bulldozer, a road grader or whatever to do this costs more money. So each year they are doing a little bit less, a little bit less and a little bit less. The roads on Red Hill near my place have not had a grader there for six or eight years—not one of them! The photos I put in there were all taken in that general area. Water cannot get off the road, so it runs down and gradually builds deeper and deeper channels.

**MS CLAY:** I might supplement very briefly on that. In your submission—I have taken an extract of it—you noticed that some of the areas of budget have actually dropped as well. I think you noted a cut to the PCS fire management budget of 13 per cent. Have I got that right?

**Dr Bartlett:** Yes, that was taken from a previous bushfire council report, which I was also involved in preparing. That was the last time we had some data. Since the year that is quoted from we do not know, because there is no independent monitoring.

My perspective—not as a council member, but as a citizen of Canberra—is that the council mechanisms were put in place after 2003 to make sure that, as well as all the bureaucratic procedures and the monitoring that goes on and the annual presentations to the Assembly and so on, there is this other independent lookout so that things cannot get out of control to the point that all of a sudden the next big bushfire happens and people say, “Oh, did that not happen in 2003? How did we let that get there?”

To do that, the people who are the independent monitors need access to good data—how much money is there, what activities are planned each year, what has been achieved—and they need to look at it across a rolling period of years. Because one year you might have a wet year and you cannot do any burning, so you move money from one bit into other activities that need to be done. But this independent monitoring, in my view as a citizen, is very important.

**MS CLAY:** Thank you. That was extremely clear. I wanted to tease out another thread from your submission that has come up in a few submissions: our increasing exposure with our western edge development. You put in some fairly strong views there: ‘New suburbs should be built to the right standards.’ This makes eminent sense to me. You talked about the difficulty of bushfire protection at Denman Prospect, with block 12 and Bluetts. Can you tell me your concerns with our increasing development in that area.

**Dr Bartlett:** Well, I am not against some development to the west there. I understand why that is needed. My view is that it should be built to the standards that will be okay by 2050—to withstand a major bushfire coming up from the Murrumbidgee River, whether it has come out of the bush or whether it is a grass fire.

I do not see that happening. The standard of the asset protection zone—the width of it—is lower than the zone along Eucumbene Drive was in 2003. To me that says: how can that be good enough?

But we are also—with this progressive, bit-by-bit way the development is done without a complete overall plan—getting closer and closer to a block of red stringy bark forest. That is the most fire prone—for want of a better word, and it is not exactly the right word—forest type that we have in the ACT, and there is no attempt to manage the fuels in that area.

I put photos in there after 2003 when Stromlo was burnt and all those pine trees were taken away—a careful decision about what the future forest should look like. Then, just 500 metres away and actually closer to the houses, we are allowing this area that has a huge amount of fuel in it. All of which came from the 2003 fire, by the way,

because before that fire—and I was the manager of that land then—it was much more open than what it is. It has all regenerated, like what I was describing on Red Hill, and nothing has been done with it.

The development approval said, “Yes, we will have development and we will thin that forest.” No thinning has happened. Then, gradually, there are now all these debates about the asset protection zone and where the red stringy bark forest comes into it. “Can we just leave that bit and have an asset protection zone outside of where that is?” This is not thinking about the whole thing strategically.

I also mentioned the western edge. You asked about that. That bushfire risk assessment was atrocious. It made false assumptions left, right and centre. For instance, it said that the major risk would be from a fire burning downhill towards the Murrumbidgee. In 2003, anyone who was here in that year knows that the major risk was a fire coming from the west and then burning angrily uphill. It said Mount Stromlo was low bushfire risk. Well, we saw what happened on Mount Stromlo. It was prepared by people who do not understand bushfire risks.

I have said to the Western Creek council people that in my opinion if a fire does start down near the Murrumbidgee there is no clear identification of where we are going to stop it before it hits the western edge—no matter where that edge is. There is not a plan that shows where the control line is going to be.

**MS CLAY:** We heard from a couple of Western Creek residents this morning.

**Dr Bartlett:** Yes, I was here.

**MS CLAY:** Yes, you are familiar with them, I think. They gave some similar evidence, I have got to say, from a more residential perspective. But amongst their concerns was the fact that we were now building a community services facility in what was identified as the buffer zone. That sounds a little bit similar to what you are describing about not having real clarity about our asset protection zones.

**Dr Bartlett:** Yes, I must admit that was news to me as well. I would be interested to have a look at it, but I think it might be around where the old Stromlo settlement was, where the ACT Forests office was. The community did, in the processes post 2003, argue very strongly that that area through there should remain a green zone, so I suspect that’s where it might be.

But, regardless of where it is, the key point really is that all of this should be part of an ongoing strategic plan, so that planning fits with fire protection and other values—the recreational facilities or whatever—to make liveable cities. But, by doing the fire protection in a piecemeal way, you are just inviting a disaster in the future.

**MR COCKS:** I am just trying to pull together a couple of threads, because one thing that we are hearing a lot about today is the need for cross-government expertise of some sort in terms of bushfire—in terms of planning, in terms of environmental management and in terms of the interaction with our residential area emergency services. You want to see more independent monitoring. Do those sorts of monitoring functions—and these really important cross-cutting functions—need to be



independent from government, or do they need to be an independent function?

**Dr Bartlett:** It is not an either/or in my mind, because to have an effective independent mechanism they need access to a lot of data, but they also need some people to put the legwork in to sit down, understand it, and write the report or whatever. The best model, in my mind, is where the government has a clear process for monitoring and then, periodically, there is a review by some sort of independent body who are also able to ask questions and get more data if they feel that not enough information about something that might be important has been provided.

I am not accusing anybody of not doing something, but that is the way an independent process works. Also, you have the Auditor-General. It is a similar sort of process, but the Auditor-General has to look at a whole lot of things. Given that bushfire risk is still the number one extreme risk in the Territory Wide Risk Assessment plan, there is a strong argument in a changing climate where we expect more frequent and more intense fires that, if we don't keep some form of independent monitoring—whether it is through the council or through some other mechanism—there is a danger that gradually we drift back to pre-2003. Bit by bit and year by year, it just gets a little bit worse.

In my mind, some sort of independent monitoring could blow the whistle. I think that the government now really needs to take this more seriously. We need to up the amount of resources to do something about it, or resolve the issues about development planning, fire planning and balancing the environment. I am not against the environmental issues. You see in my submission that I am also very concerned about what is happening to the fire sensitive communities in our national parks, about which there is just no public discussion and no program to do anything about it. It's just: "Too bad. If it happens, it happens."

**MR COCKS:** One of the risks I can see around the—

**THE CHAIR:** We are past time, sorry.

**MR COCKS:** How do we make sure we are getting people with the right skills to do these jobs, and not people who have not experienced bushfires?

**Dr Bartlett:** It is a competitive environment right around Australia, because every jurisdiction is in the same position. We need to recruit people and make it attractive for them to come. I came from Victoria because Canberra is quite an attractive place to live, with good schools and universities for your children and so on.

But you need to pay them equivalent salaries to what someone else in New South Wales or Victoria or Western Australia or wherever is paying the same sort of people. I do not believe there has been that proper analysis done here. I could be wrong, but I do not believe it has. I think that is one of the issues: it is difficult to attract them.

**THE CHAIR:** We will finish the hearing there. Thank you very much for your detailed submission and for your time today. The committee is very grateful.

**Dr Bartlett:** My pleasure.

**THE CHAIR:** On behalf of the committee, I would like to thank our witnesses, who have assisted the committee through their experience and knowledge, and I also thank broadcasting and Hansard for their support. If you wish to ask any further questions, you can upload them on the portal no later than five business days from the hearing.

**The committee adjourned at 11.21 am.**