

**CORRECTED**

**REPORT ON PROCEEDINGS BEFORE**

**PORTFOLIO COMMITTEE NO. 7 – PLANNING AND  
ENVIRONMENT**

**INQUIRY INTO KOALA POPULATIONS AND HABITAT  
IN NEW SOUTH WALES**

**CORRECTED<sup>1</sup>**

**At Rainbow Room, C.ex Coffs, Coffs Harbour, on Tuesday 4 February 2020**

**The Committee met at 12:30 p.m.**

**PRESENT**

Ms Cate Faehrmann (Chair)  
The Hon. Mark Buttigieg  
The Hon. Catherine Cusack  
The Hon. Ben Franklin  
The Hon. Shayne Mallard  
The Hon. Mark Pearson (Deputy Chair)  
The Hon. Penny Sharpe

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<sup>1</sup> 11.15am, Thursday 2 April 2020

**CORRECTED**

**The CHAIR:** Welcome to the seventh hearing of the Portfolio Committee No. 7 inquiry into koala populations and habitat in New South Wales. The inquiry is examining the current status of koala populations and their habitat and focusing on the impacts and effectiveness of existing policies relating to land management reform, forestry and the environment. Before I commence I would like to acknowledge the Gumbaynggirr people, who are the traditional custodians of this land. I also pay respects to Elders past and present and extend that respect to other Aboriginal people present. Today we will hear from key environmental organisations from the mid North Coast, as well as koala academics and authors of Coffs Harbour Koala Plan of Management. We will also hear from a representative of the Gumbaynggirr nation and representatives from the Coffs Harbour City and Byron Shire councils.

Before we commence I make some brief comments about the procedures for today's hearing. Today's hearing is open to the public. A transcript of today's hearing will be placed on the Committee's website when it becomes available. In accordance with the broadcasting guidelines, while members of the media may film or record Committee members and witnesses, people in the public gallery should not be the primary focus of any filming or photography. I also remind media representatives that they must take responsibility for what they publish about the Committee's proceedings. It is important to remember that parliamentary privilege does not apply to what witnesses may say outside of their evidence at the hearing, so I urge witnesses to be careful about any comments they may make to the media or to others after they complete their evidence, as such comments would not be protected by parliamentary privilege if another person decided to take an action for defamation.

The guidelines for the broadcast of proceedings are available from the secretariat. All witnesses have a right to procedural fairness according to the procedural fairness resolution adopted by the House in 2018. There may be some questions that a witness could only answer if they had more time or with certain documents to hand. In these circumstances, witnesses are advised that they can take a question on notice and provide an answer within 21 days. I remind everyone here today that Committee hearings are not intended to provide a forum for people to make adverse reflections about others under the protection of parliamentary privilege. I therefore request that witnesses focus on the issues raised by the inquiry terms of reference and avoid naming individuals unnecessarily. Witnesses are advised that any messages should be delivered to Committee members through the Committee staff.

To aid the audibility of this hearing I remind both Committee members and witnesses to speak into the microphones. In addition, several seats have been reserved near the loudspeakers for persons in the public gallery who may have hearing difficulties. Audience members should be mindful that noises and interruptions make it difficult for witnesses to communicate with the Committee and I request that audience members refrain from talking for the duration of the hearing. I note that photos and videos may not be taken whilst the hearing is underway except by authorised representatives of the media. If you would like a photograph of today's proceedings please approach the secretariat after the hearing. Finally, could everyone please turn their mobile phones to silent for the duration of the hearing.

**CORRECTED**

**DAN LUNNEY**, co-author of Coffs Harbour Koala Plan of Management, on former oath

**CHRIS MOON**, co-author of Coffs Harbour Koala Plan of Management, affirmed and examined

**JOHN TURBILL**, co-author of Coffs Harbour Koala Plan of Management, affirmed and examined

**The CHAIR:** Thank you very much. Would anyone like to begin by making a short opening statement?

**Dr LUNNEY:** I am happy to do that. First of all I table a submission of the summary of the work I have done in Coffs Harbour. Second, I make the point that research is a crucial part of the entire process. In fact, when we were doing our work in Coffs Harbour, the Coffs Harbour Koala Plan of Management was the result of a research project that took years; it is part of the process. Our repeat surveys in Coffs Harbour of 1990 and then 25 years later, were research projects, as was a historical study of Coffs Harbour. Research is a crucial part of the sequence of research, communication, planning and management, and it is an iterative process. Whilst there is sometimes a temptation to leave research out because it is costly and appears to be slow, we are dependent upon it for effective conservation and management of koalas.

There are many questions about dogs, disease and roadkill, but we need to bear in mind that they are symptoms of the causes of population declines. Although they are important and should be researched in their own right, we should not lose sight of the fact that the underlying causes are habitat loss and fragmentation. Drought and fire can also be looked at as manifestations of a changing climate, which compound the losses of koala populations. The fires also demonstrate the important fact that each population needs its own management approach—its own conservation plan. We might have drought in one area, drought and fire in another, fire without drought—we can have combinations of conditions. Each area has its own sequence of events; one blanket answer is not sufficient. The local stories will really make the difference. Koala care and rehabilitation is an important task. Looking after individual koalas in distress is important; it is crucial and we have to do it because it is a humane thing to do. It is not necessarily a contribution to conserving the populations of animals—that is a separate issue.

I have been dealing with koala carers for a quarter of a century, having written the first guidelines on koala care in 1995. Dealing with fire, dog attack and car attacks is dealing with immediate problems and I consider them, in one sense, a symptom of loss and fragmentation. If we undertake research—as I am doing now—on the value of carers, we will see where that contribution lies. It is worth doing, rather than just thinking that they are there. It is also a researchable subject because there is such a large number of koalas in so many locations and they are such a major media item.

**The CHAIR:** Thank you. Mr Moon, do you have a short opening statement?

**Mr MOON:** I just want to tell the Committee that I was involved in the drafting and development of the koala plan of management. I was also in the wildlife rescue service for 15 years looking at the problems that koalas have in this area. I worked for about 10 years with the then Roads and Traffic Authority [RTA] on upgrades to the Pacific Highway, looking at how we can make them more koala friendly. I was a consultant for about 15 years and that puts me in that space between the rules, what is good for koalas and what landowners really want to do. There are individual solutions, or not, on a case-by-case basis. My view going forward is that the most important single thing we can do for koalas is habitat stability.

**The CHAIR:** Thank you very much. Mr Turbill?

**Mr TURBILL:** I just want to say that I was invited here today as a co-author of the original koala plan. I am appearing in my capacity as a New South Wales government employee. I am happy to answer questions as being a co-author of the original plan, but also to provide information on the current work we have been doing with Coffs Harbour council over the last two years in reviewing that plan and doing a koala habitat study for council.

**The CHAIR:** Thank you very much. You are all obviously extremely experienced in koalas and the threats posed to koala populations in the local area. After your extensive work putting in place koala plans of management—I think, Mr Turbill, you said the original koala plan—how do you think now, coming into 2020, koalas are faring locally? What is your assessment of how they are faring locally? I would also be keen to know what your assessment would be if I would have asked you in November last year, compared to now. I know we have heard that they were not faring very well in November anyway, but I would be very interested to know what you think the impact of the bushfires has been as well.

**CORRECTED**

**Mr MOON:** I can give you my view of that. We have done a follow-up study of the koalas here and I have stayed in touch to some extent with local people. We think that the koala population in Coffs Harbour is reasonably stable.

**The Hon. MARK PEARSON:** When you say follow-up, what do you mean? After what?

**Mr MOON:** There was a separate study which we did and which has been published, which was 20 years after the original study that the plan was based on. That study showed that the distribution and numbers of koalas were holding up reasonably, with a few exceptions.

**The CHAIR:** The original study was done in what year?

**Mr MOON:** It began in 1990.

**The CHAIR:** And 20 years later—you're saying it was done in 2010?

**Mr MOON:** Yes. I think we published in 2011.

**Mr TURBILL:** In 2011.

**The CHAIR:** And you have just undertaken another survey? No.

**Mr TURBILL:** We have, through the department, in association with Coffs council.

**The CHAIR:** You have with the department recently. What is your assessment, Mr Turbill? Mr Moon, you said you think they are reasonably—

**Mr TURBILL:** We have just finished a koala study which was delivered to the council last year. The key findings were pretty similar to what Chris Moon was saying.

**The Hon. MARK PEARSON:** Over what period was that study last year?

**Mr TURBILL:** It took about 12 months for the study to do 176 field sites across the local government area [LGA], surveying on private land across the whole area. The field sites are based on trying to replicate the sites that were done in 1996 and 2011 so we have these historic three different periods now of surveying similar sites so we can compare trends. The field sites are limited by getting access to private land. We need to get private land permission. Sometimes we do, sometimes we don't. Out of the 170 field sites, we did 64 sites using a koala detection dog and we got 57.8 per cent positive results using the koala dog. We did 110 sites using humans and we got 25 positive sites, or 22 per cent. What it showed was that the trend we had seen in the authored papers is about right. There is still a population in the western part of the LGA and in the southern part particularly, because it joins down to larger populations in Bongil Bongil National Park and the northern Bellingen koala population. I think someone from Bellingen council may have spoken to the Committee yesterday about work we have done with them.

But north of town in the coastal areas the population is very, very low or non-existent. And that was about what we found from the late 1990s on, that the population had retracted. There still are threats operating on the population—mainly trying to limit further koala habitat loss and fragmentation. The impacts of dogs and roadkill is reasonably minor but still occurs. Most of the Pacific Highway through the LGA has now been upgraded and fenced with koala tunnels and overpasses. That has taken out a lot of the major threat that was roadkill, where we used to get something like 18 koalas killed a year in and around the Bongil Bongil National Park area where the road went through the forest. So there has been a lot of mitigation by RTA—or Roads and Maritime Services [RMS] now—but there are still threats that remain that council will try and deal with in upgrading their koala plan of management shortly.

**The CHAIR:** That report that you have just talked about, is that available for the Committee?

**Mr TURBILL:** Yes.

**The CHAIR:** And it is a public document?

**Mr TURBILL:** It is a council document and council will be talking later on today about that. I think they are happy for us to provide that to the Committee. It has not gone out to public—

**The CHAIR:** Was that a survey just on private land?

**Mr TURBILL:** Yes, because State Environmental Planning Policy [SEPP] 44 only operates on private land. We basically mapped all the habitat on private land but we looked at the connections between existing other conservation areas as well.

**CORRECTED**

**The Hon. CATHERINE CUSACK:** Roughly what percentage of your access to private land was a positive "Yes, you can come" and "No, you can't"?

**Mr TURBILL:** Initially, we do what we call a generational persistence analysis of all the koala records historically over the area. So we are looking at the last 36 years of records and we determine from that areas where we think the koala is persisting. We have got numbers of records over generations. Those areas become a low priority for survey and other areas where we do not have the data become a higher priority. We then put a systematic grid pattern of survey sites over that area. Where those grids intersect where we think koala habitat is, we get council to write to those landowners. Look, I do not know exactly, and council might know this, but we get a very low, maybe less than 10 per cent, response from people saying, "Yes, you can enter the property." We then go and chase—

**The Hon. CATHERINE CUSACK:** Ninety per cent just do not respond at all?

**Mr TURBILL:** Yes. Then we go out and we phone individual landowners and say, "We sent you a letter. This is what we are intending to do." We try and negotiate a time and date. Then some people do not respond to that and we do doorknocking. But we still get maybe 30 per cent maximum—30 or 40 per cent entry, 60 per cent non-entry.

**The CHAIR:** Dr Lunney, did you also have something to contribute before?

**Dr LUNNEY:** Yes. Just adding context to what John Turbill was saying previously, when we did that work in 2011 and published it a few years ago we actually found almost no change, which surprised us because we thought there would have been change. We looked for the causes and one of them, we think, is the better planning that saved koala habitat. But it also could be koalas moving in and out of the population from Bongil Bongil. One of the things we did note is that if you do repeat surveys you do not know what the cause of the flux of numbers is. You need to do a population study to follow individuals and to follow the breeding females, because you could have a source sink problem where you have got koalas in a particular location, but that is the sink. They are coming from another source. If you do a population study of the dynamics of individuals, you can get hold of that problem.

Also there is a question of methods. All the time you are looking for a method that gives you a good answer and the coarser your methods, the less reliable the comparisons are between times. We had the same people doing the same study in the same locations—exactly the same sites—which was encouraging. We also looked back retrospectively to the 1980s. In our view, it turned out that the big population changes—the losses—were in the 1980s, which we did through forgetting curves, which is an actuarial procedure to say, "When did you remember things?" We then did an historical study to say, "We have the current position with koalas, we think there is a certain distribution here, we think this population here is reasonably stable". We took it back to the beginning of the European settlement at Coffs Harbour, which is actually quite late—the 1870s. It was the beginning of photography so the first forests that were felled, were felled in front of the camera

There has been a relentless loss of forest, initially from logging, then from farming and then from housing development. There has been a long-term change. While we can talk about relative stability, we are talking about relative stability after a long string of losses, rather than where we started from at first European settlement.

**The Hon. PENNY SHARPE:** Thank you, I have quite a few questions. This is probably one for you, Mr Turbill. I am very interested in the success or otherwise of the koala harm mitigation arrangements on the highway—there are the tunnels and the walkovers. Has there been work done on their use by koalas? Would you be able to provide that to the Committee? You can take it on notice.

**Mr TURBILL:** Yes, we have worked with our colleagues in Roads and Maritime Services [RMS], who work as threatened species offices, to advise where fencing and underpasses should go. The RMS has instigated quite a number of surveys monitoring after—

**The Hon. PENNY SHARPE:** So there is follow-up?

**Mr TURBILL:** There is follow-up and we have pictures of koalas going under tunnels and over, basically because the road—you might have noticed when you drove along the highway—the fencing. The fencing directs animals off the road, allows them to climb back off the road if they do get on there and also funnels them to underpasses and overpasses. The major issue over time is the management of the fencing, because a lot of trees and vines grow up and the road gets built. Managing the fence to make it effective and stop koalas being able to climb over the fence or trees falling onto the fence will be an ongoing big issue of maintenance.

**The Hon. PENNY SHARPE:** Mr Moon, do you agree with that?

**CORRECTED**

**Mr MOON:** Yes, I did a lot of work for the then RTA monitoring underpasses and helping to design impact mitigation measures on the highway. I had cameras and sand trays in tunnels from Taree to Coffs Harbour. The answer is good news. The fences, at least for a decade or two, stop roadkill. I worked for 6 years just south of here on Lindsays Cutting. Yesterday I went to have a look at it and I could walk across the fences without taking a step up because trees had fallen across. Maintenance and neglect are big issues with that. We had koalas going through virtually every underpass that I monitored.

**The Hon. PENNY SHARPE:** What about the overpasses? I am very sceptical about the overpasses and I want someone to tell me that they work because we rely upon them so heavily to mitigate.

**Mr MOON:** Do you mean the overpasses that are strung across?

**The CHAIR:** The ones with vegetation—the wider ones.

**The Hon. PENNY SHARPE:** Take me through all of them.

**Mr MOON:** I never worked on any of those. There is a 60-metre wide dedicated overpass with trees and shrubbery growing on it for koalas just south of Coffs Harbour. The highway traffic goes through tunnels. I think that is an excellent idea.

**Mr TURBILL:** There are three versions: the rope version, which is primarily for possums and gliders and things like that—

**The Hon. PENNY SHARPE:** There is no expectation that koalas use them?

**Mr TURBILL:** Koalas do not use them. There are poles with T-bars on them—they are for larger gliders to glide across the road, and there are underpasses and overpasses which, as Mr Moon said, have had cameras monitoring them and there are photos—we are not looking for a koala to cross every day, we are looking for the odd animal to be able to get across.

**The Hon. PENNY SHARPE:** I just want reassurance that they use them.

**Mr TURBILL:** They do work and RMS have that information available.

**The Hon. BEN FRANKLIN:** Could I ask a direct follow-up on the previous issue? We have heard quite a lot of evidence that the fencing and these things are effective and good. I am very concerned about the fact that if there is a problem with maintenance—and you said previously, Mr Moon, in terms of being able to walk straight across them. Can any of you identify what you know to be the current maintenance practices and any recommendations you would have for us to incorporate in our report to ensure that that fencing is adequate for its entire life?

**Mr MOON:** I noticed as I drove up that there appears to be a slashing regime along a lot of the inside of fences to keep them clear of vegetation. The one that I worked with at Lindsays Cutting south of here appears to have been neglected and I do not know any regime that has necessarily been set in place. I am unaware of any.

**The Hon. SHAYNE MALLARD:** That is the RMS's responsibility?

**Mr TURBILL:** Yes, it is an RMS responsibility and needs to be answered by it. As I understand it, it has a design, construct and maintain contract for a lot of roads, which maintain everything including the road pavement and fencing. After that, I am not sure what budgets it has to manage the fences.

**The Hon. BEN FRANKLIN:** So reinforcing the maintenance would be an important recommendation?

**Mr TURBILL:** It has a lot of fencing.

**The Hon. PENNY SHARPE:** I was interested in your evidence about using the koala detector dogs versus people are actually looking. You quoted something like a 57 per cent hit rate versus 25 per cent. Is that just about the dogs or is that about where people are looking? We have heard a lot about the models for detecting and we know how difficult koalas are to find—

**Mr TURBILL:** There are a number of peer-reviewed papers now on the use of dogs and their ability to find scats and koalas. Obviously, they are used for finding emus, weeds and rats—they have been used on Lord Howe Island.

**The Hon. MARK PEARSON:** Can they smell the scent of the koala?

**Mr TURBILL:** They are either trained for detecting a koala or collecting a scat. The ability for a human to find a scat in thick bush with a thick understory is quite difficult.

**The Hon. MARK PEARSON:** When you are not looking for them?

**CORRECTED**

**Mr TURBILL:** When you are looking for them. When we are doing surveys and have trained people, it is quite difficult to search through the litter, through thick undergrowth, Gahnia and in swamps. We can cover that area looking under a tree but the dog crosses a lot of country like a vacuum cleaner with its nose. The dog thinks that we know where the scats are—it is a game to the dog and they only get rewarded by a tennis ball when they find a scat. Dogs are very good at finding scats that we often miss because they are just hidden or difficult to find.

**The Hon. PENNY SHARPE:** As a method do you think the use of dogs for detection should be used more widely?

**Mr TURBILL:** You could not put them in every situation because there are issues of using dogs when there is 1080 baiting being carried out, where there is difficult terrain or in very hot conditions, such as out west—there are welfare issues about maintaining and protecting dogs. It has a place but it is also coming online for a lot of survey work, yes.

**The Hon. PENNY SHARPE:** I was interested that you think you get about 30 per cent of landowners willing to let you come onto their land to have look. Do you think that there is a general reluctance from private landowners to the department coming on or council turning up, that if they find koalas they fear that there will be a big impact on the way in which they can use their land?

**Mr TURBILL:** Probably, most likely, yes. Some landowners say that they do not want you there because someone left the gate open last time or that sort of thing. Other landowners just say, "We are not interested. We like our koalas but we do not want anyone on our property."

**The Hon. PENNY SHARPE:** Do you think there is a role there perhaps for educating landowners around what happens when they find a koala on their property? My concern is that some of them think that the minute they find a koala they can no longer do anything again, which is not the case. Is there a gap there in terms of building relationships with landowners could be assisted?

**Mr TURBILL:** In reality, when we finalise the plan and we do the mapping of koala habitat across the Local Government Area [LGA], we base that on a vegetation mapping that we already have, plant community types that have the right number of koala food trees. We identify occupied habitat by the surveys—what we call generational persistence—and analysis of records. We are looking for these areas of vegetation that have the koala food trees that show either recent or historic numbers of records. So whether a landowner lets you on their property or not, the mapping covers the whole LGA.

**The Hon. PENNY SHARPE:** So you are making a guess?

**Mr TURBILL:** We are not making a guess but we are modelling it across based on the best science we have that this is where koalas are occurring.

**The Hon. MARK BUTTIGIEG:** Just a clarification on Ms Cusack's question, that 30 percent that my colleague Penny Sharpe just referred to, was that 30 percent of the response rate which was in itself very low, because you said that there was a ninety percent non response, was it not?

**Mr TURBILL:** Something like that. I do not have the exact figure but it was quite large.

**The Hon. MARK BUTTIGIEG:** So when we are talking 30 percent, we are talking 30 percent of a 10 percent response rate?

**The Hon. CATHERINE CUSACK:** That was the first sweep.

**Mr TURBILL:** No. Council sends out the letters, we get quite a low response rate and we then chase—council, our contractors or ourselves—individually phoned landowners with a site on their property. We get a certain uptake there and then we do doorknocking during the field service and we get an extra percentage there.

**The Hon. MARK BUTTIGIEG:** Okay.

**Mr TURBILL:** That is approximate. I do not have the exact figures.

**The CHAIR:** So just picking up on that. We have heard a fair bit in the last day and a bit about private native forestry, for example, do you think that the incentives just are not there in terms of financial incentives for greater protection of koala habitat on private land? We heard the financial differences between farmers choosing to undertake private native forestry, for example, as opposed to protecting koala habitat. Do any of you have recommendations for the Committee in that respect?

**CORRECTED**

**Mr TURBILL:** During the field surveys we do get landowners asking questions about incentives. We normally refer them to the Biodiversity Conservation Trust [BCT]. The incentives are there and as to whether people let you on the property or not, I am not sure of the exact reasons really.

**Dr LUNNEY:** That is an important question that we are starting to investigate now. I am part of a research group with Professor Jonathan Rhodes from the University of Queensland, looking as to how you supply sufficient incentives for private landowners to conserve koala habitat because it is such a difficult issue and that is now the beginnings of a research project because it is so hard to get hold of. It requires a combination of ecology, economics and sociology to try and make that work. That question cannot be answered but it is recognised as a question that is worth researching.

**The Hon. PENNY SHARPE:** With the mapping and with the new koala plan, I think you have now got the mapping across the LGA. Has there been any work done or do you know if anyone has done it that brings together the current applications for private native forestry? Is that map available?

**Mr TURBILL:** I believe council has that information, yes. We have mapped about 14,500 hectares of land that meets the definition of State Environmental Planning Policy [SEPP] 44 so it is potential koala habitat. Out of that we mapped nearly 6,600 hectares that met the core habitat definition under the SEPP. So that was preferred habitat or potential habitat that had the right trees and could support a population. Out of that about 6,500 that we considered occupied presently by koalas. That does not mean that there are not koalas in the other area. It just means we have lower information and confidence that it is a population.

**The Hon. PENNY SHARPE:** If you then dovetail that with applications before private native forestry, is there any way that can be tracked?

**Mr TURBILL:** I believe council gets that information from Local Land Services [LLS]. When private native forestry is approved it gets given to council.

**The CHAIR:** So just picking up on that, if there was a landholder in the area that had, as you have said, mapped core koala habitat now that wanted to log a couple of hectares on their land that was mapped core koala habitat, what would happen?

**Mr TURBILL:** This was what happened in Bellingen Shire Council. I am not sure how much information was provided yesterday by Bellingen. I think we mapped a few thousand hectares of core habitat in North Bellingen. Council wrote to every landowner, letting them know that under the SEPP and the private native forestry code of practice that if this plan was adopted that land would be excluded from private native forestry. They held a special meeting for the landowners and resolved to adopt a plan and a plan was adopted by the department. So those areas are now excluded from private native forestry [PNF].

**The CHAIR:** And right now if that landholder happened to live in another LGA, say if they were living in Port Macquarie-Hastings instead of what you were just saying is Bellingen, what would the scenario be then?

**Mr TURBILL:** If they do not have an adopted plan under the SEPP which they do not, there would be no restriction, only the proscriptions in the PNF code would apply.

**The CHAIR:** So if it is core koala habitat, the current proscriptions in the PNF code will still allow that to be cleared. Is that correct? Is that your understanding?

**Mr TURBILL:** If it is not an adopted plan under the SEPP and approved by the Department of Planning, yes.

**The CHAIR:** So the koalas are just lucky if they live in the Bellingen LGA as opposed to Port Macquarie?

**Mr TURBILL:** There are only six adopted plans under the SEPP in the State. You might have already heard that evidence. I can give you a brief overview of the work that we have done on the North Coast if we have time?

**The CHAIR:** Members would like to hear that.

**Mr TURBILL:** Over the last 15 years or so we have worked with most of the councils on the North Coast. Overall the department has provided \$570,000 or more in funding to help each council undertake a koala habitat study or move towards a draft Koala Plan of Management. They are quite expensive exercises and in a lot of cases councils do not have the funding or the capacity to undertake their own studies or plan.

**The CHAIR:** Does that include Kempsey as well because we heard from Kempsey yesterday that they did not have the resources?



**CORRECTED**

**Mr TURBILL:** Yes. For example, Byron Shire Council \$40,000 for a study, Tweed \$40,000, Bellingen Shire Council we did \$70,000 worth of vegetation mapping, \$50,000 worth of koala study and we have just supplied \$42,500 for implementing actions. Nambucca Shire Council \$70,000 for a vegetation map, which is a necessary component of mapping habitat and \$50,000 for a study. I have copies of these studies here if they are of help to the Committee?

**The Hon. BEN FRANKLIN:** Could I just interrupt for a moment, Mr Turbill? Do councils need to have come to you to apply for that money or do you proactively advise councils that those resources are available?

**Mr TURBILL:** It happens both ways. If we can get the funding for different sources, we will work with councils. But we will only provide the funding to council, if the council has a resolution at the councillor level to go ahead and do the plan and finalise it. So we are not just talking at an officer level, we are asking councillors to approve the process so that we put up the funding, we put up the process and we seek that councillors approve the process before we provide the funding. So that is over the last 15 years, the funding plus probably more than that in in-kind support from our threatened species staff in helping do the surveys et cetera. So out of those 12 councils, presently only six have gone through to approved plans. The rest have various stages of koala habitat mapping or draft plans waiting to be approved.

**The Hon. PENNY SHARPE:** Waiting to be approved by the Minister?

**Mr TURBILL:** By the planning department, yes, and the Minister.

**The Hon. CATHERINE CUSACK:** So they are not with the Minister yet?

**Mr TURBILL:** Some have been put up.

**The Hon. CATHERINE CUSACK:** Can you just break it down for us specifically where they are at?

**Mr TURBILL:** I have a chart here that I can provide you with later on.

**The CHAIR:** We could potentially get that on notice. Given we have got six more minutes of this session, we will get all of that detail on notice if that is all right?

**The Hon. CATHERINE CUSACK:** Are we going to have an opportunity to ask questions?

**The CHAIR:** Yes. But this is a chance to get that put on notice.

**Mr TURBILL:** We have done a full assessment of all the data across the State, spatial data and where these plans are up to and I can provide that to you.

**The Hon. MARK BUTTIGIEG:** But there is no onus on the Minister to adopt the plans is there?

**Mr TURBILL:** The Department of Planning you mean?

**The Hon. MARK BUTTIGIEG:** Yes.

**Mr TURBILL:** If the plan is approved by council—so it is done in accordance with the guidelines—it is basically signed off by our department as meeting the scientific level of robustness. It is approved by the council. It usually goes on a public exhibition first. Then it is presented to the department for approval. They have to decide whether it meets the guidelines of SEPP 44. There are a number of plans which councils now, under the new SEPP, which is coming into force, I think, on 1 March—a number of councils are thinking of putting up their plans under the transitional parts of the new SEPP, which would be very good.

**The Hon. CATHERINE CUSACK:** I am trying to understand if access to private property is inhibiting the research that needs to be done to do this koala mapping, because the mapping seems to be the critical information everyone needs.

**Mr TURBILL:** In some cases we could not get onto properties.

**The Hon. CATHERINE CUSACK:** Is it possible for you to give us some information about the studies that you have done, the number of landholders involved and what the responses were at the different stages? Is that something that you could perhaps take on notice?

**Mr TURBILL:** Yes. I would have to work with council but we would be able to work that out.

**The Hon. CATHERINE CUSACK:** I would appreciate that information very much. Do you feel that your work was inhibited by it?

**Mr TURBILL:** Not particularly, because if we cannot get on that person's land, we often do surveys on the roadway or a travelling stock route or some Crown land nearby.

**CORRECTED**

**The Hon. CATHERINE CUSACK:** You are modelling whether there is habitat there or not. Is that correct to say?

**Mr TURBILL:** Yes.

**The Hon. CATHERINE CUSACK:** So they can still have land designated as koala habitat even though they have not allowed access?

**Mr TURBILL:** Yes, the map covers the whole local government area [LGA]—all private land in the LGA.

**The Hon. CATHERINE CUSACK:** We heard evidence yesterday that a reason the Coffs Harbour Koala Plan of Management has been delayed for a substantial period began with a private landowner challenging a designation of koala habitat in the mapping.

**Mr TURBILL:** I think that might have been in Port Macquarie.

**The CHAIR:** I think it was Port Macquarie-Hastings.

**The Hon. CATHERINE CUSACK:** I apologise; it was in Port Macquarie. There is obviously some legal process there. Can you explain that to us?

**Mr TURBILL:** In the adoption of the plan, you mean?

**The Hon. CATHERINE CUSACK:** If you map something and this man did not allow you access, I do not know what would happen in that scenario.

**Mr TURBILL:** Basically, there is the vegetation map—what we call plant community type mapping—and then there are the koala surveys and the habitat mapping. Councils then need to put that out on public exhibition so that all landowners have a right to assess what the map says on their property. They can make submissions either directly to the process or directly to the councillors, and so there becomes that process for people to question the mapping. Council has to take note of that and determine whether they need to reassess.

**The Hon. CATHERINE CUSACK:** How do they do that?

**Mr TURBILL:** It is up to each individual council to determine and look at the mapping.

**The Hon. CATHERINE CUSACK:** Please do not tell me it is a vote of a council meeting.

**Mr TURBILL:** It possibly can be. All these things have to go up to the councillors, who then vote to determine if that plan gets adopted or not.

**The Hon. CATHERINE CUSACK:** Do the staff at the council talk to you about "This farmer is saying that you've got this 100 per cent wrong"?

**Mr TURBILL:** Yes. Ms Whitelaw from Coffs council, who is on a bit later, could talk about this more. The plan will go on exhibition, hopefully, for the Coffs Harbour work we have done. There will be various submissions. Council will go out to a number of areas and talk to landowners in public hearings. Landowners will put in submissions where they think there are mistakes. That will be sent back to us and we will reaffirm or check and give a submission.

**The Hon. CATHERINE CUSACK:** When is this likely to happen in relation to Coffs Harbour?

**Mr TURBILL:** I think you need to talk to council about that, but hopefully pretty soon.

**The Hon. SHAYNE MALLARD:** It is the usual local government process.

**Mr TURBILL:** It is the local government process.

**The Hon. CATHERINE CUSACK:** Typically, how long does the process itself take?

**Mr TURBILL:** The studies usually take 12 months to a year and a half or so, because primarily we try to do the surveys in the spring breeding seasons.

**The Hon. CATHERINE CUSACK:** How responsive are landowners? Do you get many landowners come back and say, "This is wrong"?

**Mr TURBILL:** Yes, you primarily get the landowners with a much bigger interest in their land and what they were going to do with it than you do rural landowners, because the plan does not affect rural landowners as much because it is only triggered by a development application.

**CORRECTED**

**The Hon. CATHERINE CUSACK:** Investors who were hoping to develop it. So they are watching this process, thinking, "How is this going to affect my development application [DA] that I am planning to do in the future?"

**Mr TURBILL:** Possibly, yes.

**The Hon. CATHERINE CUSACK:** And then is it a legal process? What happens?

**Mr TURBILL:** For the mapping?

**The Hon. CATHERINE CUSACK:** Correct. If they do not agree with the mapping, what happens then?

**Mr TURBILL:** It is a negotiation between them and council, then, because it is a council document. We only can provide advice back to council as to the scientific correctness of the work.

**The Hon. CATHERINE CUSACK:** Does the Government support the council in that negotiation? Given that the Government has provided the mapping, does the Government then assist? This could be a very expensive process; these are people with a lot of money on the line.

**Mr TURBILL:** Yes. We assist where we are asked to, but it is really a matter between council and the landowners.

**The CHAIR:** After it goes on exhibition, you then provide the scientific advice, if you like. After that it is up to elected councillors to negotiate with the people who have objections in relation to what is designed as to what the final outcome is, and then that goes to a council meeting to vote on the final plan. Is that correct?

**Mr TURBILL:** That is how I understand it, yes.

**The CHAIR:** That sounds like there are a lot of vested interests.

**The Hon. SHAYNE MALLARD:** It is the standard local government approach.

**The Hon. CATHERINE CUSACK:** The issue is that the councils can get the scientific advice, but potentially that can be vetoed, in part.

**Mr TURBILL:** I do not want to comment on that.

**The CHAIR:** On that fascinating note, I am afraid we are out of time for this session. Thank you very much, Dr Lunney, Mr Moon and Mr Turbill. There were some questions taken on notice, and there may be more that Committee members may wish to submit. Your responses will be required within 21 days and the secretariat will contact you in relation to those questions on notice. Thank you very much for your work.

**(The witnesses withdrew.)**

**CORRECTED**

**PAULA FLACK**, Member, Great Koala National Park Steering Committee, affirmed and examined

**LYN ORREGO**, Committee member, Nambucca Valley Conservation Association, affirmed and examined

**LEONIE BLAIN**, Honorary Secretary, Clarence Valley Conservation Coalition, affirmed and examined

**The CHAIR:** Would any or all of you like to make a short opening statement?

**Ms FLACK:** Yes, thank you. My statement relates to my submission and primarily to the community support for the Great Koala National Park. The Great Koala National Park would see 175,000 hectares of public native forest added to the existing reserve system to create a 315,000-hectare network of new and existing parks. The proposal involves only public native forest; no plantations or private land is involved. There is a rapidly growing awareness of and support for the Great Koala National Park, particularly after the recent catastrophic bushfires. The world is watching Australia's response to these fires and how we care for koalas and protect them from extinction. There is no better time than now to create the Great Koala National Park.

We want the Great Koala National Park to be a people's park: a well-managed, nature-based tourism mecca where visitors would have the chance of seeing a koala in the wild. We want to open up our public forests for public use while protecting koala habitat and promoting forest recovery from logging and fires. The Great Koala National Park would engage and enrich regional communities and economies by encouraging more national and international visitors. We believe it would create many more jobs than those in the relatively small regional native forest timber industry. A local tourism expert recently has estimated that the park would bring an additional \$300 million to our region annually. Bellingen Shire Council, Coffs Harbour City Council and Destination North Coast have each contributed \$25,000 to fund a \$75,000 comprehensive economic analysis of the Great Koala National Park proposal, which will shed a more accurate light on the costs and benefits.

We have prepared a number of recreational trail concept plans for within the park—including a multi-day, 215-kilometre world-class walking track with spectacular features, a 65-kilometre horseriding trail and an extensive mountain biking network—which I table here today. These plans have been imparted to the community in a series of well-received presentations last year. In Bowraville—a small rural town with only one timber mill left—over 100 locals attended a Great Koala National Park forum, which was hosted by the chamber of commerce. Only one attendee was unresponsive. We know that creating the Great Koala National Park will have an impact on local timber industry jobs. We understand the difficulties such a change would involve. We support a well-funded transition package for affected timber workers as an integral component of the process of creating the park.

Kempsey Shire Council, after our presentation to them about the proposal, expressed disappointment that the park boundary had not extended further south to take in more of their local government area. The Nambucca Shire Council general manager, on a tour of the Nambucca Valley hinterland area of the proposed park, acknowledged the huge tourism potential. He was so moved by what he was seeing that he called his wife from the top of Killiekrankie Mountain to tell her the experience was "pretty impressive". As an ex-councillor of three terms in Nambucca Shire Council, I know that Mr Coulter is not known to be an emotional man, but he really was quite moved by what he saw in his own backyard in the local government area that he has managed for many years.

Bellingen Shire Council has already declared its interest in become the park's biking hub—not unlike the Tasmanian ex-timber town of Derby that reinvented itself with spectacular success and is now a mountain biking mecca. Last year the *Coffs Coast Advocate* released results of its reader poll into what Coffs wants. Readers had a choice of 50 issues. The most voted for item was "Moving for the introduction of the Great Koala National Park". Interestingly, "Sustaining State Forests"—i.e. for logging—"and voting against the Great Koala National Park" received zero votes. In summary, on behalf of the Great Koala National Park Steering Committee, I would respectfully ask the Committee to recommend that all logging activity in public native forests within the area of the proposed Great Koala National Park cease immediately and that the New South Wales Government commence the process of gazetting the Great Koala National Park as a matter of urgency. Thank you.

**The CHAIR:** Thank you, Ms Flack.

**Ms ORREGO:** Speaking to my submission, I wish to make three main points. The New South Wales upper Mid North Coast and hinterland supports koala populations of national importance. The past 20 years of increasingly intensive and near clear-fell logging in State forests had seriously impacted these populations even before the fires of this season, as witnessed by the estimated 50 per cent decline in koala numbers in the north-east over this time. Urgent action to halt the continued intensive logging of koala habitat is needed now more than

**CORRECTED**

ever. We are calling for bipartisan support from the Committee for declaring the proposed Great Koala National Park. Three maps are used to support these comments, and they are all based on State government data.

Map 1 shows that 36 per cent of the proposed Great Koala National Park is high-quality koala habitat; that there are three Areas of Regional Koala Significance that coincide with the proposal; and that there are more than 6,000 hectares of koala hubs, which are known occupied koala habitat—precious spots, indeed—and there are many hundreds of actual koala records. Such is the rich koala heritage inherent to this area. Map 2 shows where logging has taken place over the past 20 years, much of it so intensive as to be virtual clear-fells—45 hectares, 60 hectares, even 110 hectares in size. Ironically, this style of logging is called "single tree selection" and was illegal until just last year, when it was legalised across 140,000 hectares of State forests in north-east New South Wales, including within this proposal.

Koalas evolved with eucalypt forests of mixed age and species; remove the trees and you remove the koalas also. Unfortunately, more than 42,000 hectares—53 per cent of the likely koala habitat—and more than 2,500 hectares or 50 per cent of koala hubs in State forests in the proposed Great Koala National Park have been logged in the past 20 years. It is also shocking to realise that another 13,000 hectares—an extra 16 per cent—of likely koala habitat and another 1,000 hectares or 23 per cent of koala hubs in State forests is currently being logged or is planned to be logged this year. Do we really want to raise the stakes from destroying half the koala values on these public lands in the past 20 years to destroying nearly three-quarters of them by the end of this year? We hope not.

A quick word on the logging rule that requires some koala feed trees to be left in some places: Retained trees are allowed to be as small as 20 centimetres in diameter—smaller than a ruler—but koalas are known to favour larger trees at least 30 centimetres in diameter and over. Renowned koala expert Dr Steve Phillips explains the problem: "the smaller ... trees ... create anti-feedants and so make themselves unpalatable to koalas". In his opinion, he says, "it's a crime against biodiversity which will invariably result in the complete absence of koalas from forests where these rules are applied". Map 2 also shows the extent and location of the 2019 firegrounds; 57 per cent of the proposed Great Koala National Park has burnt, making action to protect and restore koala habitat all the more urgent.

Map 3 shows the location of the unburnt and not logged areas of likely koala habitat, which are shown in green—rare areas; indeed, refugia. We are calling for a moratorium on all the logging operations planned for 2020, both in the unburnt forest and the burnt forest. A detailed list with likely koala habitat and koala hubs in each compartment is tabled today. The koala is of international concern now. Money is pouring into koala hospitals, which is wonderful. But wild koala populations living in their natural habitat—the native forests that they evolved in; the native forests that we have stopped destroying, hopefully very soon—is what is urgently needed now. We urge the Committee to begin by recommending the declaration of the Great Koala National Park.

**The CHAIR:** Yes, Ms Blain, are you tabling documents for the Committee?

**Ms BLAIN:** I have also got some documents.

**Ms ORREGO:** Those are the documents and those are just for the Chair.

**Ms BLAIN:** The Clarence Valley Conservation Coalition has a number of changes it would like to see. We want to see governments moving away from the narrow focus on economic benefits to the detriment of ensuring the maintenance of a healthy natural environment on which we all depend for the services it provides. We want to see genuine efforts to reduce biodiversity loss rather than cosmetic knee-jerk reactions designed to look as if something meaningful is being done. We want government agencies committed to enforcement of environmental protection and, as well, we want appropriate penalties for breaches of the environmental protections rather than just a slap on the wrist. And that means, of course, that there should be proper resourcing of these agencies.

We also want adequate resourcing of local councils so that they can design good koala plans of management. We want the new koala SEP to have a much clearer definition of koala habitat to ensure that habitat is protected. We support the establishment of the great koala national park and we also want logging in native forests to be phased out. I wonder how many of these desires might result from this very timely inquiry which has become even more important as a result of the bushfires: that will be very interesting to see.

**The CHAIR:** I refer to koala hubs. Ms Orrego, you mentioned specifically some of the koala hubs that are being logged right now. Will you briefly explain to the Committee what you mean by "koala hubs is based on OEH research."

**Ms ORREGO:** Yes, the OEH study—and John Turnbull would know about this and would be the person to ask for the detail, and I think his document would be available. Our group got it under a GIPA and has

**CORRECTED**

turned it into a data layer and it is the map where the hubs are. The hubs are basically known occupied koala habitat. It is where there is habitat for them to be utilising and it is known. It does not identify every area that has koalas in it but it is the known ones so far. If we did more surveys we would find more hubs, perhaps.

**The CHAIR:** The Great Koala National Park Steering Committee Submission states that 44 per cent of these koala hubs are located in the great koala national park. Is it correct that is 44 per cent of what the OEH identified as koala hubs?

**Ms FLACK:** Correct.

**The CHAIR:** How much of that 44 per cent of koala hubs therefore do you have been logged or are being logged now? I am just trying to get my head around it.

**Ms ORREGO:** What I read out was my short version but what I have handed out is the long version and attached to it are statistics and how many have been logged.

**The CHAIR:** You have also mentioned that 57 per cent of koala habitat within that area has been burnt recently. Is that correct?

**Ms ORREGO:** No, 50 per cent of the whole area of the park has been burnt.

**The Hon. MARK PEARSON:** Are there some possible problems for koalas if we open up the Great Koala National Park to public activity, particularly mountain bike riding? Has it been indicated that that will be allowed in some parts of the park?

**Ms FLACK:** Obviously if the park were created there would have to be detailed investigations into what would be appropriate. There may be areas that would be inappropriate for certain activities but because we are only volunteers and we have only been able to develop very broad conceptual plans at this stage we acknowledge that there obviously is potential for impact. But it is about balancing that impact with creating support for the proposal. We do not want there to be a perception that those lands would be removed from public recreational use because they are no longer open as State forests. So we are very mindful that there is that potential for the perception that if those forests were not be available for logging that they would be locked up for the koalas. We are very mindful of dispelling that.

**The Hon. MARK PEARSON:** To clarify that, do you say that part of this strategy is garnering as much public support, and you think you would get more public support if there is a certain amount of human activity permitted in the park rather than locking it up and saying this is a national park. The koalas have got it, and that is it, goodbye to us?

**Ms FLACK:** National Parks are open to the public and this one will be open to the public.

**The Hon. MARK PEARSON:** With restricted activities though.

**The Hon. PENNY SHARPE:** Fifty-two million visitors a year.

**Ms FLACK:** Exactly.

**The Hon. CATHERINE CUSACK:** Bike riding.

**Ms FLACK:** As I said, it would involve very careful planning of what can and cannot happen. We are not proposing, in terms of four-wheel driving networks, mountain biking networks, to open up new areas. There are already extensive roads and tracks throughout the proposed park area. They would have to be all looked at very closely. But these are low-impact nature base activities that we are proposing.

**The Hon. MARK PEARSON:** I read a comment in your submission that was highly critical of the new Regional Forest Agreement. How is this agreement likely to impact on koalas living on the mid North Coast? Does it impact?

**Ms ORREGO:** I think you would have to get to the number. With the current order of works which I have a document—and I only have one copy—which lists all the compartments that are currently being logged and are proposed to be logged, and how much exact hectares are in likely koala habitat and koala hubs are on each.

**The Hon. PENNY SHARPE:** That is in your map.

**Ms ORREGO:** That is in the map but it is quantified on this extra document. We know now Gladstone State Forest is being logged and so we can look up how much koala-likely habitat based on maps that it costs the taxpayers millions of dollars to produce. We now know what we are destroying. We can look that up on this table but I just could not make nine copies of it.

**CORRECTED**

**The Hon. PENNY SHARPE:** Will you email it to us?

**Ms ORREGO:** Yes.

**The Hon. MARK BUTTIGIEG:** I follow up on the theme of the Hon. Mark Pearson. The idea is to have people use the parks and have an appreciation of the eco system and natural environment and, therefore, it is a virtual cycle obviously. In terms of the analogy with the Tasmanian industry, what type of workers were displaced in Tasmania? Were they timber workers or mill workers or both? I am interested to know what happened down there.

**Ms FLACK:** I have not actually got the details before me but I will table my statement and the link to the media on that particular transition is in my statement. I understand it was a timber and a mining town.

**The Hon. MARK BUTTIGIEG:** The Committee discussed this morning and one of the things we need to grapple with is the immediacy of people's loss of income, job losses that to us may be somewhat separated in time and space because it is not affecting our economic wellbeing directly. There will be timber workers who are affected who naturally will take a different perspective. I think the focus on the transitioning of those people—it is alright for us to say "transitioning" but it actually has to mean something in terms of replacement income or real jobs. It would be interesting to know how those other cases have dealt with those matters. I think that is an important element that sometimes is forgotten in the debate.

**Ms FLACK:** Agreed.

**Ms BLAIN:** Could I say in relation to the term "locking up", I think that is a very unfortunate term that is being used far too often in relation to national parks. It indicates a complete lack of understanding about the purpose of national parks. They are not locked up at all, as someone here mentioned a few minutes ago.

**The CHAIR:** Thank you, Ms Blain. I think you can be assured hopefully about that, this report will not use the term "lock up" when we refer to national parks.

**Ms ORREGO:** Excuse me, Chair, could I take an interest in that question?

**The CHAIR:** Sure.

**Ms ORREGO:** I do not have the figures in front of me either, but I think they are very important figures and I would like to take it as a question on notice, not that I am an expert but that I would be willing to look up some general figures for you about the job effects.

**The Hon. MARK BUTTIGIEG:** Absolutely, thank you. That would be great.

**Ms ORREGO:** I do know that the 175,000 hectares we are proposing to be included in the park represents 10 per cent of the land area of State forests across New South Wales. Because there is about 1.8 million hectares of State forest across New South Wales. We are talking about 10 per cent. When you look at the latest annual report of the Forestry Corporation, I am not an economist but there is a term called "normalised income" and all of the native forests, \$1.1 million this year was the profit. So one-tenth of that would be about \$110,000. In terms of loss of money to the State—these are public lands we are talking about in the first place—you are talking about \$110,000 a year. I have lost my train of thought now—a question on notice and we will try to provide as much as we can.

**Ms FLACK:** Just to add to that, the \$1.1 million in terms of revenue from public native forest logging, that is compared to \$73 million for the profits from plantation logging in New South Wales.

**Ms ORREGO:** Also, it follows 10 years of losses. The timber industry has been subsidised by \$11 million a year over the previous 10 years, except for the last couple of years. That means that our taxpayer money is paying for the logging, as well as we are losing the forest, we are losing the habitat, but we are also losing our money.

**The Hon. MARK BUTTIGIEG:** The net economic benefit case is beyond doubt.

**Ms ORREGO:** If it were decided on economics, we would not be logging these native forests.

**The Hon. MARK BUTTIGIEG:** But even on an economic analysis it makes sense.

**Ms ORREGO:** Yes, correct.

**The CHAIR:** I ask a question in relation to salvage logging. The Committee heard in the hearing in Ballina last year after the awful fires that went through some of those forests that were core koala habitat, there was some concern from some witnesses that forestry was making noises to go in and undertake salvage logging

**CORRECTED**

in some of the burnt areas of forests. We understand that there is potentially still pressure to do that. Do any of you have views as to the logging industry going into burnt areas of forest?

**Ms FLACK:** I would suggest that it would be an inappropriate thing to do before there had been a comprehensive assessment of the impact of those fires on the biodiversity that was dependent on those areas, because those burnt forests would still be providing a degree of shelter for, for example, koalas to escape predators. Once those forests open up and they have lost their understorey, the feral dogs have free access. Those animals are already stressed nutritionally in terms of their hydration, loss of habitat and then to have those remaining potential shelters and refuges for them removed without considering what might actually be trying to survive in there, I think would be entirely inappropriate.

**Ms ORREGO:** Some of these forests are coming back with coppicing. We have to at least give them a chance to recover. Also, I notice a lot of the scientists are following that report about the salvaging and standing up and saying exactly what Ms Flack just said, that what is left needs what is there.

**Ms BLAIN:** I agree completely with what both people have said.

**The CHAIR:** I wonder as well in terms of the other benefits. I know there is a reason why you are doing the economic benefits of the Great Koala National Park, and that is a very important thing. Other benefits were mentioned this morning during our site visit to the Great Koala National Park information centre—thank you very much for your hospitality. Would you care to mention some of the other benefits of the Great Koala National Park other than simply economic, or the benefits for the koala as such?

**Ms FLACK:** I guess one of the very topical subjects, especially with the fires that we have had, is climate change. Our public State forests in our region are being logged at an intensity we have never seen before. We know that forests help to generate rain and affect climate. They are also very important for carbon storage and sequestration. They are important for local communities for downstream water users and for town water supplies. All of those additional values, including the amenity, would be captured as well. It would not just be the koalas that would benefit from a great koala national park, it would be all of the other biodiversity that is dependent on those forests and all of those other values, which I think have a far greater economic, as well as environmental, benefit than just the dependency on it for the small amount of native forest timber that is left in them.

**The Hon. SHAYNE MALLARD:** I want to touch on some of the conversations we had off the record at the visitors centre earlier today and get them on the record for the purposes of the conversation in our report, perhaps comment, perhaps recommendations, that go into your proposal for the Great Koala National Park. I think that is a great objective that you are striving for. We had a conversation about the map which is in your booklet—and I hold that up—which has very handy colour coding of what is existing national park and what is State forest being potentially logged. You propose a park comprising 315,000 hectares, at the moment 140,000 of which is designated national park. I want to explore the issue of, are there no koalas in that 140,000? Is it not suitable for koalas? Do we need to expand it to accommodate more koalas? What is the logic in terms of growing it? Make a case to us.

**Ms ORREGO:** You can also put this question to the next panel, to Mr Evans, who answered it really well, that the coastal areas are richer soil, richer trees, richer leaves, and they are the areas we use the same as koalas. As you go more to the hinterland the koala population gets more scarce, the soils are not quite as rich, et cetera. So koalas are stressed on the coast. Also, national parks traditionally have been on lands that we do not want, or do not use, or do not need; too far away, too steep, too remote, et cetera. There are koalas there, but they are less dense and the places we are logging, they are probably about twice as dense because there is twice as much support there for them. They need both and that is what the basis of the report is, we are looking for the sustainability, the survival of the metapopulations, and the Scotts report—I think Mr Love will table it soon, or has—which he referred to is the scientific basis for that metapopulation concept and why we need it.

**The Hon. SHAYNE MALLARD:** That was my second question. You have some scientific evidence—

**Ms ORREGO:** Yes, and we made sure you got a copy—

**The Hon. SHAYNE MALLARD:** —to back up the argument for the inclusion of these, you are saying, more fertile, more desirable lands for koalas to live on. That is tabled, is it?

**Ms FLACK:** It will be.

**Ms ORREGO:** I think it has already been sent to you, it is the Scotts report, and it is referenced in my submission as well.

**Ms BLAIN:** Could I also say in connection with the expansion, I am sure there would be people up in the Clarence Valley who would like to see an expansion, assuming the Great Koala National Park goes ahead,



**CORRECTED**

that there might be the potential in the future to expand it, because we have some important koala areas in the Clarence Valley that do not come into the plan for the park at the moment.

**The Hon. SHAYNE MALLARD:** Are they in State forests?

**Ms BLAIN:** Some of them are and some of them are on private land. But it would depend upon obviously on a thorough investigation of exactly what is there. It is a bit hard to know what is there now given the bushfires that we have experienced and we had quite serious ones around our area too.

**The CHAIR:** I am just wondering how is your advocacy for the Great Koala National Park going in terms of lobbying local members, the Government? What kind of response have you had? What kind of support have you had? I notice that your partner in terms of the economic report, tourism—

**Ms FLACK:** Destination North Coast?

**The CHAIR:** Destination North Coast. Is that a Government agency?

**Ms FLACK:** No. It is an umbrella tourism body.

**The CHAIR:** How has the response been from official circles? How is that going?

**Ms FLACK:** Our local member is not supportive of the Great Koala National Park. She has put her emphasis on the potential job losses in the timber industry and does not believe that additional national parks will be of benefit to koalas. She has stated that publicly in media releases. But I think what we are finding is that there is such growing support from the ground up that we are getting greater and greater exposure and finding now that local governments, as you heard this morning Bellingen Shire Council has been extremely supportive and hence our now having access to the Great Koala National Park Information and Visitor Centre at Urunga and Coffs council is also contributing money. I think they can see that there is a future in nature-based tourism that will outweigh the declining timber industry and they are looking ahead and they can see this is a sustainable future with job benefits—direct and indirect—for regional economies.

**The Hon. CATHERINE CUSACK:** Can I ask that you provide the Committee with a copy of the media releases you have just referred to? You said the local member believes—

**Ms FLACK:** I will take that on notice.

**The Hon. CATHERINE CUSACK:** Thank you.

**The CHAIR:** Maybe just to get on the record as well for the Committee, this was this morning. Just the timeframe of that economic report that you are commissioning through the three councils. What is the proposed timeline for commissioning and release?

**Ms FLACK:** It will be sometime this year but I am afraid I cannot give you any greater information than that.

**The CHAIR:** Any other questions?

**The Hon. PENNY SHARPE:** I have just had a look at your maps. They are very helpful. Obviously in the footprint of the Great Koala National Park, there is a lot of planned logging and approved logging that is ready to go as well as the impact of fire which this morning I think you said was around 57 percent of the area. It is a difficult question to answer but do you have a sense of what the timeframe is? And the values that are there in the forest, if all of the logging planned to go ahead goes ahead, what does that mean for the ability of the Great Koala National Park to actually exist?

**Ms ORREGO:** We would put it to the Committee that the more it is knocked around, the more it needs our help. If our kids fall down and scrape their knees they do not say, we will write it off. If someone has a serious disease, whatever, you do not write it off. While there is life there is hope. I am not going to sit here and say, it is so wrecked it does not matter anyway because when we first started raising the issue of koalas with State forests around here, the answer was there is no koalas out there. As soon as we started finding koalas it was, there are so many it does not matter. They all matter.

**Ms FLACK:** If I could just add to that. The Great Koala National Park is about providing habitat for koalas to recover. It is not just maintaining the status quo. We heard from Professor Dan Lunney earlier that our status of koalas today is nothing like originally pre-European settlement. They have declined significantly. On the North Coast here they have declined by 50 percent over a 20 year period. So even though the Coffs population might be relatively stable, it is a far cry from a robust, healthy population that may have existed earlier. The Great Koala National Park would provide the opportunity for forest recovery and for those remnant healthy populations to then have their juveniles to disperse because koalas are territorial, they have home ranges, they need areas to

**CORRECTED**

move into—the young juveniles—and without linked, well maintained and managed and protected forests, they are just going to be living in these islands and potentially deteriorating.

**The CHAIR:** To be honest, given what this Committee has heard going around the State and the quite different koala populations around the State, we have heard the population down near Cooma unfortunately, which has just suffered horrendously as a result of the recent fires. We have not heard good stuff in terms of the koalas west of the Great Divide because of drought and climate change. We heard something yesterday in relation to the Port Macquarie local koala population that perhaps up to 85 percent of that koala population had been wiped out by recent fires. We have had some submissions that suggest that some of the North Coast koala populations have also been very badly impacted by the fires up there. In some ways, this area has become much more significant, I would say, in the last two months. Is that how you see it?

**Ms ORREGO:** I think it shows up on the map too, and it is an awful thing to say, but the new fire map shows the extent of the fire ground—the Department of Planning, Industry and Environment [DPIE] map—vast areas to the north, vast areas to the south and, yes, we suffered at the southern bit of the Great Koala National Park and a huge bit at Clouds Creek, very sad and I know a report has been written on its huge impact. And in the wilderness there was the Andersons Creek fire but relatively speaking it is an oasis, but it is not the only oasis. Every oasis—north and south—that is left, needs our help.

**The Hon. MARK BUTTIGIEG:** Just very quickly, we discussed what everyone thinks in principle is an undoubted economic benefit, even if you want to characterise it in economic terms. Has there been any, for want of a better word, professional studies conducted? Has anyone actually been commissioned to do a cost benefit analysis in terms of longer term jobs growth and economic growth as a result of ecotourism and all the rest of it? Or has it just kind of been an as needs hotchpotch approach to it, if you know what I mean? Has that been sort of contemplated? And if not, would that be a beneficial thing?

**Ms FLACK:** To date there has not been a formal analysis of the proposal in economic terms and job growth terms. But we hope that this \$75,000 economic analysis that is just about to start will shed some light on those things.

**The Hon. MARK BUTTIGIEG:** Who is doing that?

**Ms FLACK:** I am not aware of the consultant yet.

**Ms ORREGO:** The two councils plus Destination NSW. Bellingen Shire Council will be driving it. So seek information from them. But also there was a ballpark figure of \$300 million that Paula Flack quoted this morning, done by a Southern Cross person. Ashley Love knows more about that. He has had experience in it but it was just a general estimate.

**The CHAIR:** If you could just take on notice, that \$300 million when you say Southern Cross person, if you just take on notice who it was if you cannot remember the name?

**Ms ORREGO:** Yes. Do you remember his name?

**Ms FLACK:** No. Ashley Love would know.

**The Hon. MARK BUTTIGIEG:** Is there a date for the dual council-commissioned study to be finished?

**Ms ORREGO:** We are hoping by this year.

**The Hon. MARK BUTTIGIEG:** Thanks.

**The CHAIR:** Okay. Thank you very much. That is the end of our time for questions. I believe some of you have taken some questions on notice. They will be required to be back within 21 days and the Secretariat will contact you in relation to those questions on notice that you have taken. Thanks very much for your many years of very hard work for conservation.

**(The witnesses withdrew.)**

**CORRECTED**

**ASHLEY LOVE**, Member, Bellingen Environment Centre, affirmed and examined

**KEVIN EVANS**, President, NSW National Parks Association, Coffs Harbour Branch, affirmed and examined

**JOHN EDWARDS**, Honorary Secretary, Clarence Environment Centre, affirmed and examined

**MICHAL DONOVAN**, Gumbaynggirr Nation representative, affirmed and examined

**The CHAIR:** Would any or all of you like to begin by making a short opening statement, reminding you that we only have 45 minutes so please keep it short?

**Mr LOVE:** Yes, Madam Chair, I would like to make an opening statement. I have actually delivered to the Committee this morning a copy of my opening statement with a table of burnt koala population areas in it, also a map of regional koala populations on the North Coast, and a copy of David Scotts' report, which has been referred to a number of times about the justification for the Great Koala National Park. I will make reference to those items in my opening statement. The Bellingen Environment Centre made a detailed written submission to the inquiry in response to the terms of reference, and I am happy to take questions on that submission. It is obvious though, much has changed since the inquiry was established and submissions closed. I would like to briefly identify a few more recent issues and offer to respond to questions on notice about them.

They include sound planning for the Great Koala National Park. Environment groups have a heady budget of \$3,000 and very good cooperation from the then Office of Environment and Heritage [OEH], who undertake the assessment lead of the Great Koala National Park proposal. I have provided a copy of Scotts' 2013 report, which came out of that process and on which the Great Koala National Park was based. Since our work government departments, including the Environment Protection Authority, the former OEH and Department of Planning and Industry [DPI], have spent in excess of \$1 million on various koala assessments, many released only recently. All the subsequent work has essentially confirmed the results of the work by Scotts we commissioned in 2013 in regard to the importance of the Great Koala National Park area for the conservation of wild koala populations. The \$1 million that the Government has spent has confirmed the results of our \$3,000 job, and we are confident about that. No-one has cut a hole in it yet.

The government department responses to supplementary questions leading out of the first hearing of this inquiry—I would like to refer to two. Inquiry question number 6, you said to Mr Justin Williams from the Forestry Corporation, "In regard to your statement that the Australian Forest Products Association released an economic modelling, including that the proposed Great Koala National Park would cost \$757 million a year to the New South Wales economy and cut almost 2,000 jobs". Your inquiry asked, "Your submission said that implementing the Great Koala National Park would reduce the availability of high quality logs by about 40 per cent." The question to Mr Williams, "Does the Australian Forest Products Association economic modelling relate to this estimate or of a 40 per cent reduction in supply or does it relate to the entire wood supply agreement on the North Coast of New South Wales? If the latter, is the APRA report an accurate appraisal of the impacts of the Great Koala National Park?" Mr Williams responded to your Committee on 16 September saying, "Questions about Australian Forest Products Association modelling should be directed to that organisation."

We can say quite clearly—and I have got a copy of that report here—that if you read page 2 and page 3 you get the very clear understanding that that report, on the instructions of the Australian Forest Products Association, was applied to every timber supply contract between Gosford and the Queensland border, saying the Great Koala National Park would result in their cancellation. It was every timber supply agreement on the whole North Coast. That is the answer to that question, and I suspect you knew it.

**The Hon. MARK BUTTIGIEG:** So the 2,000 jobs, was that as a direct result of that full catchment area?

**Mr LOVE:** That was the consultant's estimate, yes. I can go a little bit further there. The assertion of Mr Williams in his submission that implementing the Great Koala National Park would reduce availability of high-quality logs by about 40 per cent is disputed by the Bellingen Environment Centre as an exaggeration of the likely impact of the proposed Great Koala National Park and overall wood supply. The Great Koala National Park covers about 10 per cent, as was stated earlier, of the State forests of New South Wales, covers 23 per cent of the State forest on the North Coast. Additional timber is available from State and private hardwood plantations and private native forest lands. So, substantial additional timber is available to that that is on State forests. The impact from available timber resources on the North Coast is more likely to be in the order of 10 per cent to 15 per cent, we believe.

**The CHAIR:** Mr Love, how much longer is this going?

**CORRECTED**

**Mr LOVE:** I am about half way through.

**The CHAIR:** Does everybody else have a statement, Mr Edwards, Mr Donovan, Mr Evans?

**Mr EDWARDS:** A short one.

**The CHAIR:** We may need to hurry up because we will not get through all the questions.

**Mr LOVE:** All right, I will go to my quick mode.

**The CHAIR:** You can always table your statement as well for the Committee.

**Mr LOVE:** Yes, I have tabled that. The second question was to the department of environment energy and science asking had they done any assessments of the Great Koala National Park. They replied that, "An assessment is currently underway to calculate the extent to which the proposed Great Koala National Park captures suitable koala habitat." On 16 September the department said it was doing an assessment and we would like to encourage your inquiry to follow up that assessment and if possible release it for us too if you can get the results of that.

**The Hon. PENNY SHARPE:** That is September 2019?

**Mr LOVE:** Yes.

**The Hon. MARK PEARSON:** Would you table that speech, which will become part of evidence? We want to extrapolate questions from people.

**Mr LOVE:** I sent it earlier in the week and I have tabled 12 copies. I have a short section in my introductory on the impact of bushfires and potential resilience.

**The CHAIR:** We can read it. The seven Committee members are very keen to ask questions.

**Mr EVANS:** We hear much in the media and from governments at the State and Federal levels of the need for a whole-of-government response to the koala crisis. I would like to touch on why at all three levels planning and policy is failing koalas and other forest dependent species. Let us just talk about the local government and State government situation first. SEPP 44 has been around for about 20 years. During that time we have only seen around eight councils develop and have endorsed SEPP 44s so that has been a disappointing take up.

We have also seen corresponding to that a declining koala population at every population in New South Wales. More significantly though it is a 50 per cent decline over 20 years in northern New South Wales. So SEPP 44s can hardly be seen as a tool that has enabled the loss of koala populations to end. SEPP 44s are quite a flawed instrument. I can speak on behalf of my property which falls within the Bellingen Shire Great Koala National Park Plan which is an endorsed SEPP by the Minister. It is not a landscape-scale solution for the koalas.

For example, we are in an ex-dairy property so 12 properties carved out of an old large dairy property that has a fragmented mosaic of appropriate koala habitat on its land. But 100 metres away we have a State forest, that is excluded under SEPP 44, but this area has significant conservation benefit for koalas. Just a 100 metres away we have hundreds and hundreds of hectares of a State forest that is excluded so it is completely turned off from any influence by the SEPP 44. It provides significant translocation problems for koalas trying to move through the landscape when State forests are turned off.

Also SEPP 44s will not look at core habitat of one hectare. If you look at the mosaic of lands that is left on the coast many appropriate areas of land would be under one hectare, including some of my neighbours who were not included in the SEPP 44 but do have appropriate habitat. Also under State legislation, especially with the Biodiversity Conservation Trust investment in small properties would not occur under 20 hectares either. So you have a situation where there is multiple small properties that could be providing core habitat benefit for koalas and other species but would not be able to get the level of funding through available sources because their properties are too small. And so you end up with some properties being able to do things on their land outside of the SEPP that other neighbours would be obliged to.

At the State level we find that a number of recent policy decisions, including the repeal of the Native Vegetation Act, has meant that land clearing of koala habitat has increased significantly. Some reports are suggesting an 800 per cent increase in land clearing away from the coast has happened since the repeal of the Native Vegetation Act three years ago. That again is another failure of policy and a contradictory policy arrangement that is not providing conservation at the three levels of government. My final point is that protected areas have gone off the cliff in New South Wales. We have seen a very small take up of protected areas declared in New South Wales corresponding with a significant decline of koalas over the past 20 years. There is provision with the Federal Government to assist on application from a State Government to provide significant funding arrangements for the strategic acquisition of land to go into the reserve system.

**CORRECTED**

Our organisation encourages the New South Wales Government to apply to the Federal Government for significant funding to help with a declaration of the great koala national park so that transition can occur; so that the communities that would be impacted by that decision could be provided with the funding to look at the retraining and job growth, the infrastructure requirements that are needed for recreation, tourism and nature-based experiences that the great koala national park will provide. To summarise, a whole-of-government response needs the complexity of local government, State Government and Federal Government to work more closely together to deliver policies, leadership and funding to ensure that koala conservation can be implemented in New South Wales to stop the decline.

**The CHAIR:** Mr Edwards, do you have a short opening statement?

**Mr EDWARDS:** Yes. The Clarence Environment Centre's submission to this inquiry tried to focus on the fact that while there is a mass of legislative protection for koalas—there are volumes of local and State bans and strategies claiming to provide protection for all native fauna and habitat—widespread destruction of that habitat continues. I table a copy of a deputation I made to the Chair on the Iluka area. That was a development approval that will see 14 hectares of koala habitat and threatened species and endangered communities bulldozed without any offsets offered whatsoever. I point out in that respect that for the past 25 years developments have received approval to destroy habitat and even threatened flora as long as a consultant ecologist selected and paid for by the developer deems that the loss is not of significant impact.

In that respect I want to make one point. There are many hundreds of listed threatened species, all facing extinction if current trends are not reversed. In almost every case habitat loss is identified as the prime reason for their declining numbers. Therefore we strongly assert that the loss of any further habitat must be considered as a significant impact and cannot be claimed to be otherwise. However, the way the current laws are written, even where the impacts are deemed to be significant there are always options available to developers, be it onerous and sometimes costly, to circumvent these hurdles. This is happening on a daily basis right across the country. We need legislation that truly protects threatened species and the political will to enforce it.

**Mr DONOVAN:** Firstly, I would like to say I am not a doctor. I am just here on behalf of my people. I have been elected by our Native Title body to speak up on behalf of the koala. In our In our local Gumbaynggirr language the name for the koala is Dunggiirr. Dunggiirr are very sacred to our people, culture and to the landscape of the Gumbaynggirr Nation itself. The knowledge of Dunggiirr has played a vital role in Gumbaynggirr Creation stories, laws and customs, spirituality, core values and our identity.

Dunggiirr is a very powerful animal, their magic is very strong and the Spirit of Dunggiirr is both feared and respected. Dunggiirr originated here in our Gumbaynggirr homelands on a sacred mountain. From what I was taught by my Elders, the Dunggiirr population grew too many for the mountain to sustain them so they went out to find new territory to inhabit, creating storylines across the Gumbaynggirr Nation and into other tribal territories right across Australia. Dunggiirr are totemic to a quarter of all Gumbaynggirr men. They have survived alongside our people for countless generations through many climate changes, catastrophes, cataclysms and extreme earth transformations.

Despite their population declines due to intensive logging, land clearing and the recent damaging fires. the colony within the Gumbaynggirr Nation are now the most significant. That is why the Gumbaynggirr people fully endorse the great koala national park and we are working together with all relevant parties to ensure their protection and preservation. The establishment of the great koala national park will also help to protect other sacred and significant sites, threatened endangered, rare, endemic and special totemic flora and fauna within our homelands. If they are not protected and they go extinct we, the Gumbaynggirr people, will be strictly forbidden to pass on our dreaming stories and our knowledge of Dunggiirr to our children, our children's children and all future generations of Gumbaynggirr people. This is Gumbaynggirr law.

One of the things we are trying to do too is as a part of the whole process of the great koala national park is to map the storyline of the koala and the cultural heritage to be tangible and intangible which, you know, there is no difference to us. The spiritual and physical elements of our culture. There has not been a cultural heritage report yet but we are trying to look for funding to do that.

**The CHAIR:** Thank you very much.

**The Hon. MARK PEARSON:** Mr Donovan, do you have any brothers or sisters for whom the dunggiirr is their totem?

**Mr DONOVAN:** Yes, about a quarter of my family—so grandfathers, fathers, uncles, cousins, nephews.

**The Hon. MARK PEARSON:** They identify with the dunggiirr as their totem, specifically?

**Mr DONOVAN:** Yes.

**CORRECTED**

**The Hon. MARK PEARSON:** What laws are there surrounding what your brothers and sisters can or cannot do because for one or more of your brothers and sisters the dunggiirr is a totem? Are there restrictions or laws surrounding what other people who do not have the animal as a totem can or cannot do with it?

**Mr DONOVAN:** Yes and no. Obviously, we cannot talk about the sacred elements of all that.

**The Hon. MARK PEARSON:** I understand that with kangaroos, for example, if the kangaroo was your totem and a brother or sister wanted to kill a kangaroo for food, they would need to get permission from you. Are there similar sorts of laws associated with the dunggiirr?

**Mr DONOVAN:** Yes, we cannot kill our totems. Other members of the tribe with different totems can, but if my specific totem was the kangaroo I would not be able to kill it or harm it in any way.

**The Hon. MARK PEARSON:** Would another have to seek permission from you?

**Mr DONOVAN:** Yes.

**The CHAIR:** Mr Donovan, I want to explore your people's role with the Great Koala National Park a little more. Do you see your involvement would be helping manage? Would you have paid positions? What have your discussions been so far with the other committee members of the Great Koala National Park in terms of your people's involvement?

**Mr DONOVAN:** We have discussed at least 50 per cent employment and training for our people. I wanted to table these letters of support from the Wanggaan (Southern) Gumbaynggirr Nation native title body corporate, of which I am the chair person, and also the Gumbaynggirr Nation in general. So 97 per cent of Gumbaynggirr people present at a meeting signed this letter of support.

**The CHAIR:** Excellent, thank you.

**The Hon. PENNY SHARPE:** Mr Evans, you were very critical of SEPP 44. It is, however, one of the few main instruments that is at the disposal of local and State governments in relation to regulating the conservation of koalas on private land. I wanted to ask you your involvement in the current work for the new one that is coming out on 1 March, whether you believe it will fix some of those issues, what your recommendations have been for the new process of SEPP 44 and what you think needs to be delivered to improve that. Alternatively, if you think it is a waste of time, could you tell the Committee?

**Mr EVANS:** It is a waste of time.

**The Hon. PENNY SHARPE:** Do you genuinely think that that planning instrument is of no value?

**Mr EVANS:** No, sorry, I was being flippant. What I would say is that, clearly, it still enables development to occur. The core benefits, for example, of the Bellingen Shire plan of management means that it has extinguished private native forestry from those areas. That clearly is a good thing for koala conservation. However, on application, if someone wanted to do something on their land that would see the removal of or place impact on koalas contrary to the endorsed SEPP, then there are ways around it. It could be planting additional trees, but still it would end up with the loss of core koala habitat. So it does not stop—it enables things to occur still, but conditionally.

**The Hon. PENNY SHARPE:** Do you believe any of those issues will be addressed in the new—

**Mr EVANS:** No; in fact, probably loosened. One of the core benefits is that we have a larger list of core habitat appropriate species. What it does not do is it does not recognise landscape scale—there is no differentiation, really, as the scientists see it, at least. If it is habitat for koalas, it is habitat for koalas. So core habitat or potential habitat—they are just too complicated. It is either habitat or it is not, and the habitat should be protected for koalas. That is one of the things that I would say is quite an important definition. However, the biggest flaw is that SEPPs are ignored by government. For example, when the NSW Chief Scientist & Engineer provided a report that really identified the crisis that we are in, there were a series of recommendations in that report. One of them was identifying that there needed to be a whole-of-government response to the situation, and that was generally taken up by most people, including the Government.

However, the response to that was releasing the icon part of the Saving our Species [SoS] strategy for koalas, which was launched with pretty tokenistic funding for koalas and no significant reservation for koalas. The SEPP 44s were often completely ignored. For Bellingen Shire Council, for example, it took five years of consultation and development of a statutory document that the community is pretty proud of. It went through all that argy-bargy at council level and the negotiations at the local level with the communities affected. So you would expect, quite clearly, that once all the hard yards had been done by that community and the council and it is endorsed by the Minister, that the Saving our Species strategy would preferentially allocate significant resources

**CORRECTED**

for that SEPP 44 in Bellingen Shire. What did we receive as a result of it? Zero. So we have one document which is sitting on the shelf, largely. I sit on the implementation working group for Bellingen Shire Council; however, it is not able to be implemented because funding is not being made available. Small councils cannot afford to implement.

**The Hon. PENNY SHARPE:** Do you have any sense of what it would cost Bellingen Shire Council to implement the plan?

**Mr EVANS:** We have discussed recently that \$2 million immediately to ensure that we can invest in the corridor work necessary to connect koala populations from Bongil Bongil National Park right through to the Coffs hinterland would be the first stage in ensuring that that SEPP 44 was meaningful and was going to deliver good conservation outcomes for koalas. We only have eight SEPP 44s approved by the Minister in the entire State over 20 years. The fact that those are not preferentially funded is ridiculous.

**The Hon. PENNY SHARPE:** I have a question for Mr Love. I am very interested in the issue of the proposed remapping of State forests in relation to giving—you know, The Integrated Forestry Operations Approvals [IFOA] has already changed the rules that were previously there and then there is this proposed remapping. Could you put on the record through the Committee where you understand the process is up to and what it will mean for koala habitat in this area?

**Mr LOVE:** The process was recommended by the Natural Resource Commission under the previous government because of a perceived shortfall in timber supply, which was concocted by the Natural Resource Commission because they refused to consider sawlog supply from hardwood plantations on the North Coast. The Forestry Corporation NSW included this in its estimates and had no shortfall of timber, so there was a fudged shortfall in which the Natural Resource Commission [NRC] came up with this idea of remapping and reassessing both old-growth forest and rainforest, which were both part of the informal reserves. On the far North Coast the old-growth was part of the national estate. Some of the criteria for mapping that it proposed were quite inconsistent with science, an inconsistency that had been applied under the first regional forest assessment. There were not any compliments in that for the Natural Resource Commission. Since the fires, we have had very heavy impact on old-growth forests and the old-growth values of about half of our old-growth forest estate have effectively been destroyed. The target achievement of most of our forests is inconsistent with them being crashed.

**The Hon. PENNY SHARPE:** Just to be clear for the Committee, because you are very across the detail, but I am trying to understand what the status is of the remapping at the moment. Is it happening, is it close to being finalised—which then means that there will be decisions about whether logging occurs in those areas? As you understand it, where is it up to?

**Mr LOVE:** My understanding is a long way from the centre of power.

**The Hon. PENNY SHARPE:** But you pay more attention than most.

**Mr LOVE:** There was to be a field trip with regard to old-growth mapping on the North Coast about two months ago that was cancelled and the explanation was that the old-growth mapping process was under review. That was before the major fires. Now that the major fires have come through I think they will have struck a wall—that is my assessment.

**The CHAIR:** In relation to the fires, could I get a general sense from all of you about what you think that has done for the fate of koalas in this area and how much you think the Great Koala National Park proposal—is that significant in terms of koala recovery in this area and statewide? We have heard from the Government that it is still undertaking assessments and we recognise that. Mr Love, you just tabled a map of burnt areas, would you like to talk to that?

**Mr LOVE:** Yes, we have done a review in accordance with the regional koala populations and sub-populations occurring within the proposed Great Koala National Park, as identified in the Scotts report. Whilst three out of four of the regional populations—they are mainly the ones away from the coast—were either fully burnt or partly burnt, there were 14 sub-populations within the Great Koala Park and nine of them have escaped fire. They are mostly coastal oriented sub-populations. The biggest and the most important one in eastern Australia is the Bonville Pine Creek one. Some of the other coastal sub-populations of that nine are quite small. We believe we have a core and a source population to recolonise the mortally burnt areas inland. We are highly confident of that. In my statement I also made some comments as to why I think the Great Koala National Park was not hit as hard by the recent wildfires as some other parts of the North Coast. I have given four or five reasons in my written statement, which I can elaborate on, if you wish?

**The CHAIR:** Just briefly, if that is okay?

**CORRECTED**

**Mr LOVE:** First is the elevation range and dissected topography where we have very abrupt sea level to the dividing range here. That rugged topography contributes to breaking up fire fronts. Subsequently, the substantial patches and corridors of rainforest that occur within the Great Koala Park and adjacent areas—although some rainforest burnt, the major extent of the fire perimeters were pulled up by rainforest and/or creeks, without human assistance. Those substantial rainforest patches still pulled up the fires, even though a lot got burnt. The Great Koala National Park does not have any major rain shadow valleys of predominantly dry eucalypts, which, where they occurred, burnt extremely hot. For example, areas that burnt outstandingly were across the Nymboida valley, Willawarrin, west of Kempsey and the Wyaliba areas. A lot more could have been done in applying rapid responses and remote firefighting techniques. For example, rapid aerial response to lightning strikes and tying fires off at moist gullies before extreme conditions hit them. That sort of approach has been run down of resources and was just abandoned, and lightning strikes were allowed to burn on till they became large-scale fires.

**The Hon. BEN FRANKLIN:** I have a couple of questions. Throughout the inquiry we have heard about a range of impacts on koala habitat, one of which is what is happening with the Roads and Maritime Services [RMS], particularly with the Pacific Highway and what it has done in terms of fencing, feed trees, signage and so forth. My question to any of you who would like to answer it is, do you have comments on the work that has been done? Have there been good aspects, bad aspects—what can be improved? When we are looking at that specific part of the protection of the koala, what recommendations can we make in terms of what RMS can actually proactively do better on the ground to protect the species?

**Mr LOVE:** If I could make an initial response: This morning when we went out to look at Mailmans Track as a proposed business centre in the Great Koala National Park, we were hunted out by mozzies pretty quickly, but we could have shown you two areas where the maintenance of the fence has fallen down. The gate was open and is permanently open—it should be closed but it is open, allowing animals to transfer. There are climbs where animals can climb up over and get off the road, but they are earth-filled ramps and the ramp on the southern side of where we walked is not filled with earth anymore. Those are two examples at one stop. It is just maintenance of the original design prescriptions of the fence from Queensland to wherever.

**The Hon. BEN FRANKLIN:** That is the impression that I seem to be getting—that people were pretty happy with the original designs but that the maintenance needs to be followed-up. Is that fair?

**Mr EVANS:** Yes. I also add to what Mr Love was saying, that, if well designed, some of those overpasses for nature can be extremely beneficial for wildlife. But again, as Mr Love said, without the ongoing budget allocation to ensure the maintenance is addressed, they will fall down and that will have significant impacts. If you look at the Bongil Bongil National Park, for example, the highway goes right through the Bongil Bongil. There is a significant koala population there. The NSW Wildlife Information, Rescue and Education Service is frequently being called to koalas that have been run over trying to cross that, so it is vitally important wherever there is core koala habitat that they are able to travel through the landscape as easily and as safely as possible to find food, to find mates, to ensure that those metapopulations will continue to be healthy and not genetically inbred. That is where we have the risk of chlamydia and other wildlife diseases impacting on stressed populations that cannot move through the landscape. Yes, there is a cost, but it is a cost that needs to be identified at the beginning of any of these capital works programs to ensure that through the life of the program investment it is being maintained and looked after.

**The Hon. BEN FRANKLIN:** Thank you. I have one final question for Mr Donovan. You spoke of the need for, and the importance to you of developing, a cultural heritage report—the sort of work that you were speaking of in your opening statement. Can you speak a little more to that?

**Mr DONOVAN:** Yes, the koala storyline, which I spoke about—there has been no cultural heritage report. We, the Gumbaynggir people, feel that that is important. You talk about the habitats and koala hubs and all that—they are on those storylines. It is important for us to map that for future generations as well.

**The Hon. BEN FRANKLIN:** Have you spoken to local council about them supporting you to create such a report?

**Mr DONOVAN:** No, not yet. As the native title body, we have looked into some funding, which we have not applied for yet, but there is not much in terms of that. It will take at least 18 months to 24 months to do, which involves getting in senior archaeologists and even ecologists to help with that.

**The Hon. BEN FRANKLIN:** Thanks, Mr Donovan.

**The Hon. PENNY SHARPE:** I have a question for Mr Edwards. Mr Edwards, I am looking at your submission. You talk about the issue of fire management plans in national parks. I assume you mean State forests and other places. You basically make a pretty serious allegation that koalas are being killed in hazard reduction fires. Do you want to speak to the Committee about that?



**CORRECTED**

**Mr EDWARDS:** I do not recall saying that but anyway—

**The Hon. PENNY SHARPE:** It is suggested solution number 4 in your submission.

**Mr EDWARDS:** The policy now with the RFS—and I have served with the RFS for a few years as deputy captain, firefighting and all the rest of it. The policy now is to back-burn to stop a fire where it is safe. A typical one is possibly the one at Woombah, near Iluka, where there was a fire coming from the west. So what happens is we back-burn from Woombah village back towards the fire. We back-burned straight north and that fire burnt for days. What you effectively got, you are surrounded by—

**The Hon. PENNY SHARPE:** What was the timing of when that happened? I am just trying to be clear because, obviously, a hazard reduction burn is a different thing to back-burning, which is happening in active fire situations.

**Mr EDWARDS:** This was not hazard reduction, this particular one. This was a one-off fire.

**The Hon. PENNY SHARPE:** That is what I am trying to clarify. This was during the recent fire?

**Mr EDWARDS:** Yes.

**The Hon. PENNY SHARPE:** Then there was a decision near Iluka to do back-burning to stop the fire—

**Mr EDWARDS:** To protect the village.

**The Hon. PENNY SHARPE:** To protect the village, yes. I just wanted to be clear.

**Mr EDWARDS:** So anything in-between gets incinerated. That is why we have no coastal emus left in that area now. That is the reason why we have not seen any koalas in there for ages now. I do not say that people are lighting it up to deliberately kill koalas. That is the reality of what is happening.

**The Hon. PENNY SHARPE:** Just to be clear, it is my understanding that when the NSW National Parks and Wildlife Service is doing hazard reduction burns, the decision about the type of burn and when it happens takes into account the flora and fauna that are there at the time. The idea that it is just letting it go, which is what you are suggesting in your submission—

**Mr EDWARDS:** Do you honestly believe they consider that?

**The Hon. PENNY SHARPE:** I am asking you what you understand to be the case.

**Mr EDWARDS:** Obviously they have a quota to fulfil and they just go out and burn it, and it generally means by burning around the outside. That is the way they work.

**The Hon. PENNY SHARPE:** National Parks?

**Mr EDWARDS:** I was not involved in National Parks but I can quote one particular incident at Fortis Creek where it got out of control I believe, and that is what they did. Then they brought in a bulldozer and knocked down all the standing trees—old-growth trees I should say—within 30 metres of the road so that they did not fall over and crash into private property. That was a hazard reduction burn.

**Mr EVANS:** In my experience through the National Parks and Wildlife Service and the many briefings I have heard from the National Parks and Wildlife Service's handling of strategic asset protection and cool-season burning is that there is considerable effort made by the National Parks and Wildlife Service to protect nature—

**The Hon. PENNY SHARPE:** That is my understanding too.

**Mr EVANS:** And that every effort is made to ensure that what they are doing is having minimal impact on wildlife. I would say that from my discussions with local RFS volunteers—I know a couple of the captains—that there is definitely a difference between tenure, and so sometimes operations that are happening on other land outside of the reserve system are treated differently. So, therefore, the conservation values and the wildlife impacts of that fire are not given the same kind of consideration.

**The Hon. PENNY SHARPE:** I am asking you these questions because, obviously, we are about to have a very large inquiry into all of these matters. It seems to me to be an important opportunity to get a lot of those things lined up.

**Mr EDWARDS:** Madam Chair, I would like to make a comment on the fires.

**The CHAIR:** We are almost out of time. Please make a brief comment, Mr Edwards.

**CORRECTED**

**Mr EDWARDS:** I think governments of all levels have got to really take this fire issue seriously. The situation is going to worsen, and if we do not have a serious plan in place to deal with the fires of the future, we will not have any koala national park, we will not have any biodiversity or any of that.

**The CHAIR:** You made a statement earlier about the coastal emu. Are you suggesting the coastal emu is being wiped out by the recent fires or was it before that?

**Mr EDWARDS:** At Woombah or Bundjalung, that would be historical.

**The CHAIR:** Okay, thank you.

**Mr EDWARDS:** Not the recent ones, although it might have had an impact at Shark Creek on the lower side, in these last fires. Time will tell.

**The CHAIR:** Very quickly, Mr Evans.

**Mr EVANS:** There is a perception that these inquiries—hearing from the community and hearing from the public—are not taken on board by the Government. There may be a good reason why two of the government MPs have not sat through this session but I would like it noted how disappointed I am. It is a big deal for me to come to this and speak and they are not here to either quiz me or listen to my evidence. I am disappointed by that.

**The Hon. BEN FRANKLIN:** In response, I do believe that, for one of them at least, a health issue is being dealt with, which is quite serious. I understand your point but I would be mindful that you do not necessarily know the situation, and they have been here all day.

**The CHAIR:** Thank you very much for attending today's hearing. Thank you very much for the work you have done over an extensive period of time, caring for country and caring for our environment. No questions were taken on notice during the session. We will now break for afternoon tea. We will reconvene at 3.00 p.m. for the last session, which will conclude at 3.45 p.m.

**(The witnesses withdrew.)**

**(Short adjournment)**

**CORRECTED**

**SALLY WHITELAW**, Team Leader Biodiversity, Coastal and Flooding, Local Planning, Coffs Harbour City Council, affirmed and examined

**KAREN LOVE**, Research Officer, Byron Shire Council, affirmed and examined

**BEN GRANT**, Planner, Byron Shire Council, affirmed and examined

**The Hon. SHAYNE MALLARD:** Madam Chair, if I may indulge the Committee. I just want to apologise for my absence from the last session of the Committee. I believe it was noted by a witness. I was called away to attend a medical emergency in Sydney, which has been resolved. I will read the *Hansard* and take note of the evidence.

**The CHAIR:** Thank you. I will now welcome our next witnesses. Would any of you like to make a short opening statement?

**Ms WHITELAW:** Coffs Harbour City Council was the first council in New South Wales to prepare a comprehensive Koala Plan of Management under State Environmental Planning Policy [SEPP] 44. Council believes that while not everything in the plan has been achieved that the plan has resulted in significant areas of habitat being conserved, particularly outside rural areas. Council notes the commencement of the new Koala Habitat Protection SEPP on 1 March 2020. Council was pleased to see the expansion of the koala feed trees in Schedule 2 of the SEPP and while council believes that the new SEPP is an improvement, much of the detail is unknown as the guidelines are still to be released.

Council's submission raises the issue of monitoring and mapping, and while council is supportive of the new mapping approach in the new SEPP, it was disappointed that it does not appear as though local scale data was used where available. Council's submission also raises the issue of private native forestry [PNF]. Council notes that the 2016 Independent Review into the Decline of Koala Populations refers to the private native forestry code of practice several times throughout the report as being the appropriate regulatory tool for governing PNF in koala habitat. It has been the experience of council that the code fails to protect koala habitat as its interpretation is too limited and there are limited resources for compliance.

Council has substantially progressed a new Koala Plan of Management and has updated the mapping of core koala habitat of which koala presence was a requirement. The New South Wales code of practice requires that PNF is not permitted within known koala habitat and that where evidence of koala activity has been established, that an established number of koala feed trees must be retained. However, based on the updated draft koala habitat map in Coffs Harbour, there are 124 properties with core koala habitat, under the revised mapping, that already have a private native forestry approval. Given that a PNF approval lasts for 15 years, the impact and legacy of these approvals cannot be underestimated.

Coffs Harbour was lucky to not be as widely affected by fires as other areas in Australia. However since the fires, it has seen increased inquiries by loggers seeking to harvest PNF approvals as some timber sources in other areas are no longer available. Combined with the drought, this is putting increased pressure on koalas and their habitat. Council is on track to submit a revised Koala Plan of Management under the new Koala Habitat Protection SEPP in the coming months. Council commends the New South Wales Chief Scientist and Engineer's report regarding the Independent Review into the Decline of Koala Populations and this inquiry into koala population and looks forward to working with the State Government to implement the new Coffs Harbour Koala Plan of Management.

**The CHAIR:** Thank you very much. Ms Love, do you have a statement as well?

**Ms LOVE:** Just a short statement. Thank you for the opportunity to provide some evidence in this inquiry. Having read the transcript for the Ballina hearing on 18 October 2019, I state my support and agreement with the statements therein of Dr David Milledge and Dr Stephen Phillips, who are both wildlife ecologists with significant experience in our Local Government Area [LGA], as well as the statements by Sue Higginson, the environmental lawyer who provided specific examples on how the legislation is failing to protect koalas and their habitat. Council also supports the statements of Scott Hetherington, from Tweed Shire, Virginia Seymour from Lismore Shire and Matthew Wood, from Ballina Shire, who face similar constraints and frustrations regarding the protection of koala trees and habitat on the far North Coast.

Given the timing of this hearing and the evidence that has gone before me, I am not going to reiterate all of things people said have already. I would like to comment on two things. The new Koala Habitat Protections SEPP and the post-fire recovery. As we know on 1 March, the new koala SEPP will be enacted and under the new SEPP associated mapping will apply. There has been no public consultation on this new SEPP and while both the SEPP and mapping are available, the guidelines surrounding how we apply it are not. These guidelines also outline

**CORRECTED**

the identification of koala habitat that will trigger the SEPP. Without the guidelines, it is impossible to determine if the aims of the SEPP can be achieved or if the impacts of development are addressed, such as dogs, bushfire, cars et cetera.

Similarly, the mapping that underpins the SEPP is based on modelling and it is inaccurate. Again there was no public or local input. It is difficult to have any confidence in this mapping when it does not reflect koala habitat already identified in studied areas such as the Tweed-Byron coast. We have been advised that council mapping will only be inputted into the Native Vegetation Regulatory Map and the Biodiversity Values Map. This is information provided by the department. This means it will not go into the koala SEPP mapping which is what the SEPP rests on. Where there is no approved Koala Plan of Management, the provisions under the SEPP do not apply on land of less than one hectare even if the land is known to support koalas or koala habitat.

This is a carryover from the previous SEPP and it is not good enough particularly when we have semi-urban and urban koalas within the Shire such as Bangalow, Ewingsdale and Myocum. We have known populations but they are in an urban area so with the one hectare trigger, we are never going to be able to apply. The mapping that goes into the Native Vegetation Regulatory Map will become sensitive regulated land but that land can still be cleared under the Local Land Services Act. There will be no assessment or control under Schedule 5A in rural zones. So what is the point?

Post fire, we know that more than one billion animals have perished in New South Wales and Victoria since September 2019 and that is a conservative estimate which does not include platypus, flying foxes, frogs or fish.

We have seen firsthand and also note previous statements by Dr Milledge, Dr Phillips and Higginson that offsets for koala habitat do not work because we are not doing them correctly. It is as simple as that. Post-fire recovery will therefore need to be directed by an independent body of experts, using current and explicit data sets that we have. We have those data sets. They should be used and any post-fire recovery should be managed by ecological restoration experts. Simply planting trees will not benefit koalas. Before any trees are planted, three things must happen. Pest species must be controlled, both weeds and feral species. There must be erosion control and nest boxes for fauna. Post-fire, eucalypt forests must also be given a chance to recover. Koala habitat is naturally adapted to fire. On the way down here we saw evidence of eucalypt forest regenerating, so we need to give it time. That is all I have to say. Thank you.

**The CHAIR:** Thank you very much. Mr Grant?

**Mr GRANT:** I have nothing further to add to Karen Love's statement. Thank you.

**The CHAIR:** Thank you very much for your submissions and for the work that you do. I just wanted to explore particularly private native forestry and how significant the impact is in your different local government areas in terms of the koala populations. How significant is the koala population on private land? Are you aware of that?

**Ms WHITELAW:** We know that about 12 to 16 PNF approvals are approved in Coffs Harbour every year. Local Land Services gives council the property address where the PNF occurs—the lot and DP—but they tell us they are unable to give us the hectares or the map or the habitat that is affected that is under the PNF approval. So we cannot get an estimate of the area that is impacted by the PNF and how that directly relates to koala habitat.

**The CHAIR:** Coffs council is not able to get that information from who?

**Ms WHITELAW:** From Local Land Services, who regulate private native forestry.

**The CHAIR:** So it is not available publicly at all?

**Ms WHITELAW:** Correct. They give us the information so that it can go on the planning certificates but for privacy reasons, apparently, they are not able to give us the map of exactly where the PNF applies to the property that they tell us it does. So it is difficult to get an exact sense of how many hectares are impacted because we do not have that data. We can know how many properties affected by PNF or that have a PNF approval also have koala habitat. Most of the time, obviously, koala habitat is the vegetated area, so that is going to be the area that the PNF applies to. But you cannot make exact or finite comparisons.

**The CHAIR:** Because in your opening statement, you had a figure of how many properties still had PNF approvals that were almost sleeper approvals, I suppose. It was 140—

**Ms WHITELAW:** So 124 was what I mentioned in my opening statement.

**The CHAIR:** But you actually therefore do not know what those approvals contain in any way.

**CORRECTED**

**Ms WHITELAW:** Correct, yes. When I did the analysis back in September last year, we had 190 PNF approvals in Coffs Harbour local government area. Of those 190, when we redid the koala habitat as John Turbill was talking about this morning—we have had the 1999 koala plan, which was good data at the time. We have now updated that mapping. Of the 190 PNF approvals, 124 of those properties have core koala habitat.

**The CHAIR:** As a parliamentary Committee looking at making recommendations to Government about hopefully protecting koala habitat, what would you suggest would be some ways in which the Government can address this? Is it a matter of looking at buying up these licenses and somehow compensating these landholders? What is the solution here?

**Ms WHITELAW:** Look, I do not think there is any silver bullet to it. I know that, particularly from what I understand, PNF can be quite profitable and they do last for 15 years. As I understand, once they are given, even if a new koala plan comes into place, those PNF approvals are done. In my opinion, appropriate compensation in terms of—if it is through the Biodiversity Conservation Trust or other programs, that would be very well received.

**The CHAIR:** The Biodiversity Conversation Trust—we have heard from previous witnesses around the very strong imbalance between what a landholder would get for the PNF trees and then what they would get if they were to conserve that land under a BCT order. Is that an issue as well, that basically the economics do not stack up?

**Ms WHITELAW:** Look, I do not know too much about the dollars so I probably cannot speak to it, I'm afraid.

**The Hon. CATHERINE CUSACK:** Just in relation to the koala management plan you are referring to, you do not have a plan that has been approved at this point?

**Ms WHITELAW:** We do. Coffs Harbour was the first plan to be approved. It was approved in 1999, so it has been 20 years now that it has been operational for.

**The Hon. CATHERINE CUSACK:** Okay. But in terms of the koala management strategy, the legislative process of which you have got to draft one with mapping—

**Ms WHITELAW:** Yes. We have got the existing plan which has been in place since 1999 and we are currently revising that to bring out a new koala plan. Our new draft mapping is only draft because we are still just finalising the plan and obviously, in the middle of that, the new SEPP has come into being as well. So we are just making sure—

**The Hon. CATHERINE CUSACK:** So it is the draft plan that has been delayed. Is that correct?

**Ms WHITELAW:** I would not say it has really been delayed.

**The Hon. CATHERINE CUSACK:** By the SEPP, I am talking about.

**Ms WHITELAW:** Well, I mean, maybe by a couple of months. We are just looking at the new SEPP and seeing what it is going to do and trying to get a handle on it, but it has been difficult because the guidelines have not been released.

**The Hon. CATHERINE CUSACK:** That often happens in terms of planning legislation and all sorts of legislation we deal with. In relation to the mapping, is that mapping that has been done by or funded by the Department of Environment and Heritage? Is that the mapping you were talking about?

**Ms WHITELAW:** Yes. That was the mapping that John Turbill talked about earlier today. That has been a joint project between the former OEH and council.

**The Hon. CATHERINE CUSACK:** Okay. I am not sure if you were here but I was quite interested to know about cooperation from private landholders in terms of access. Do you have any light to shed on that?

**Ms WHITELAW:** Look, I would probably agree with what John Turbill said this morning—about 30 per cent. I understand that John took that question on notice and we can look back at the records. I definitely do not feel as though it was an impediment to the mapping. I would agree with him with that as well. We have very good fine-scale vegetation mapping in Coffs Harbour. So that, combined with looking at koala presence, was the main thing that—the looking for the landholders. Generally, if you are not able to get onto the landholder, as he said, you can look on Crown land next to it or road reserve or travelling stock routes. There are ways to still get a very good indication of koala presence throughout the landscape.

**The Hon. CATHERINE CUSACK:** Right. Do you have a time frame in mind for when that mapping will go on exhibition?

**CORRECTED**

**Ms WHITELAW:** We are hoping in the first—before June this year.

**The Hon. CATHERINE CUSACK:** Thank you. Ms Love, I am so sorry. I only have you here as a research officer. I just wondered what your role is at Byron Shire Council.

**Ms LOVE:** I have had a couple of different projects that I have worked on. My first would be some DA approvals. I have helped with the ecological assessments of DAs.

**The Hon. CATHERINE CUSACK:** Is that as an employee or as a consultant? I am just trying to understand.

**Ms LOVE:** As an employee, yes.

**The Hon. CATHERINE CUSACK:** You made the statement that the modelling is inaccurate and I wondered what modelling—

**Ms LOVE:** The mapping. The mapping is inaccurate because it is based on modelling.

**The Hon. CATHERINE CUSACK:** Are you saying all the mapping is inaccurate?

**Ms LOVE:** I can only speak to the Byron shire and compare it to our mapping that we have in the shire.

**The Hon. CATHERINE CUSACK:** How are you resolving that with the Government?

**Ms LOVE:** I have discussed it with them only last week because, I do not know whether you know, our draft is still in draft, which has mapping associated with it.

**The Hon. CATHERINE CUSACK:** Here in Coffs Harbour you can see OEH has done the mapping. It has been expensive and it has gone on over a period of time. They have done the same in Byron shire. But what is your mapping that you have got? What is the difference?

**Ms LOVE:** It is the mapping I am talking about that sits with the draft koala plan of management [KPOM].

**The Hon. CATHERINE CUSACK:** But the mapping that is different to the department of—

**Ms LOVE:** Yes. It is the draft KPOM mapping.

**The Hon. CATHERINE CUSACK:** Where does that mapping come from?

**Ms LOVE:** The methodology—that is what you are after?

**The Hon. CATHERINE CUSACK:** Who produced it?

**Ms LOVE:** Dr Stephen Phillips started it and then it was ground truthed by other consultants, as well as—

**The Hon. CATHERINE CUSACK:** Sorry. Did you say "ground truthed"?

**Ms LOVE:** Ground truthed. That is when you go on ground and you look for koala evidence. It sits with our draft KPOM.

**The Hon. CATHERINE CUSACK:** So the council is in discussions with the New South Wales Government about the differences in the mapping? I am just interested in what the process is to resolve this.

**Ms LOVE:** My understanding is after 1 March our draft KPOM can be fast-tracked under the provisions of the new SEPP.

**The Hon. CATHERINE CUSACK:** Yes.

**Ms LOVE:** When that happens and it is adopted the mapping becomes adopted.

**The Hon. CATHERINE CUSACK:** Right. So the dispute concerns which mapping gets adopted. Is that what you are saying?

**Ms LOVE:** No. My concern is our adopted—hopefully, when it is adopted—our mapping is different from what is on the koala SEPP mapping that is available online. It is not as accurate as our mapping is.

**The Hon. CATHERINE CUSACK:** Okay. In the koala management plan, is there a draft koala management plan for Byron shire?

**Ms LOVE:** Yes, there is.

**The Hon. CATHERINE CUSACK:** The mapping will be attached to that plan, yes?

**CORRECTED**

**Ms LOVE:** That is correct, yes.

**The Hon. CATHERINE CUSACK:** Are you aware that that will become part of the legal process in terms of allowable uses of land that has just been discussed in relation to what is happening in Coffs Harbour and Bellingen council being to protect koala habitat on private land as part of its koala management plan?

**Ms LOVE:** I understand that if we have an accepted plan of management.

**The Hon. CATHERINE CUSACK:** Yes.

**Ms LOVE:** And that mapping that is associated with the koala plan of management will become applicable under the SEPP, yes.

**The Hon. CATHERINE CUSACK:** It is just that you said that it is of no use and that there is no point in doing it. You seemed to indicate that you felt that the whole thing was pointless and that it only applied under—

**Ms LOVE:** It will not go into the actual SEPP mapping. It will stay as part of our koala plan of management mapping. We cannot import it into the SEPP mapping.

**The Hon. CATHERINE CUSACK:** But do you understand that it will still have a protective effect on the use of that land?

**Ms LOVE:** Yes, I do.

**The Hon. CATHERINE CUSACK:** Thank you.

**The Hon. PENNY SHARPE:** I have a direct follow-up question to that. What is the justification that the department has given you in relation to why the very careful work that you have done on the ground is not actually able to go into the SEPP to be used in a useful way? What is the justification? Have they given you any?

**Ms LOVE:** Not at this point.

**The Hon. PENNY SHARPE:** Have they committed to giving you some?

**Ms LOVE:** I understand it is a new piece of legislation.

**The Hon. PENNY SHARPE:** But there has been no public consultation in relation to this SEPP.

**Ms LOVE:** No, there has not.

**The Hon. PENNY SHARPE:** It is pretty extraordinary.

**The Hon. CATHERINE CUSACK:** But the disagreement, as I understand it, is over the mapping at this point.

**Ms LOVE:** The SEPP sits on the mapping. That is why it is crucial.

**The Hon. CATHERINE CUSACK:** What are the differences in the mapping?

**Ms LOVE:** Well, our comprehensive plan of management is only for the coast. All of our hinterland is not mapped. It is only going to sit on the SEPP mapping, which is inaccurate.

**The CHAIR:** Can I just check on this SEPP issue because we are trying to get clear for various different modelling systems for the report. Why is it inaccurate? Where is your criticism coming from? No. Perhaps the first question is: What is the modelling that underpins SEPP 44?

**Ms LOVE:** My understanding is the modelling is based on the SEED portal, which is another and new source of information. It is modelled on likelihood of koalas and likelihood of trees. It is very broad. It is a landscape scale.

**The Hon. PENNY SHARPE:** Just to clarify: Is this the change in mapping that the Office of Environment and Heritage [OEH] has made? It seemed quite a controversial change in the way that it is part of the koala plan.

**Ms LOVE:** Yes.

**The Hon. PENNY SHARPE:** That is where all of this comes from. I just want to be sure we are talking about the right thing.

**Ms LOVE:** Yes.

**The CHAIR:** SEED portal is the name of the mapping that is now underpinning. Is that right?

**Ms LOVE:** It is part of the SEED portal.

**CORRECTED**

**The CHAIR:** It is landscape scale.

**Ms LOVE:** Yes. In the SEED portal you put in different values.

**The Hon. MARK BUTTIGIEG:** Do you say that this is a circumstantially based analysis?

**Ms LOVE:** No, no. Not at all. Not at all.

**The Hon. MARK BUTTIGIEG:** Okay. When you said it depends on the landscape, is there a projected likelihood of frequency of koalas based on topography, the quality and types of trees and all that sort of thing?

**Ms LOVE:** Yes.

**The Hon. MARK BUTTIGIEG:** In that sense it is circumstantial whereas you are saying your stuff is ground truth because you have actually been out there and had a look. Right?

**Ms LOVE:** Yes. That is correct. That is the difference.

**The Hon. MARK BUTTIGIEG:** That where the essential conflict is.

**Ms LOVE:** Yes.

**The Hon. MARK BUTTIGIEG:** Okay. Thanks.

**Ms LOVE:** And to answer your question, when I say it is broad, it is done on raster data, if you know what GRS looks like?

**The CHAIR:** Yes.

**Ms LOVE:** It is those big squares. It is not explicit to the vegetation that is on the ground.

**The CHAIR:** I think we can get some more briefing on that from the department.

**The Hon. CATHERINE CUSACK:** My understanding is that the definition of habitat will include vegetation where a koala has been sighted in the last 20 years.

**Ms WHITELAW:** Eighteen years, yes.

**The Hon. CATHERINE CUSACK:** Just in terms of ground truth-ing is it not going to be more comprehensive to include that definition where koala has not been seen for 18 years but was seen 18 years ago and can still be counted versus if you go in there and you cannot see a koala?

**Ms WHITELAW:** I guess the difficulty is that we are yet to see the guidelines. The new SEPP, the koala habitat protection SEPP which replaces SEPP 44, does have a definition of core koala habitat. There are other types of habitat that could be equally as important and we do not know definition of that habitat, if there is going to be a definition, how to map it, what it is going to be called, how we include that in our plans because those guidelines are yet to be released.

**The Hon. CATHERINE CUSACK:** Yes. We are aware of that—that they are yet to be released—but it is just a suggestion that somehow the definition of koala habitat is too narrow. That is my understanding of your evidence.

**Ms WHITELAW:** I do not think—

**Ms LOVE:** Which definition is too narrow, I am sorry?

**The Hon. CATHERINE CUSACK:** Koala habitat was too narrow.

**Ms LOVE:** Within the SEPP?

**The Hon. CATHERINE CUSACK:** That was my understanding of your evidence when you gave your opening statement—that you were critical of the State Government's definition of koala habitat.

**Ms LOVE:** I do not think I mentioned that in my statement.

**The Hon. CATHERINE CUSACK:** If I have misunderstood that, then I apologise.

**Ms LOVE:** No, I did not mention definition.

**The CHAIR:** Can I just jump to some other members and come back to you, Ms Cusack?

**The Hon. CATHERINE CUSACK:** Sure.



**CORRECTED**

**The Hon. MARK BUTTIGIEG:** Ms Whitelaw, I think in your opening statement you alluded to the fact that notwithstanding the problems we have heard about the new SEPP there were some potential positives. Could you elaborate on those?

**Ms WHITELAW:** Yes. The previous SEPP 44 really the department would only endorse parts of the habitat that were defined as core koala habitat. The department has told us now that a new koala plan under the new SEPP can actually include more types of habitat. It can include linkages, buffers, secondary or however these other definitions are going to be termed. I think that is a good outcome because previously the department would only endorse the section of your document that only related to core habitat. So I believe that that is a good outcome. Again, without the guidelines being released, it is difficult to say, but I think it is good.

**The Hon. MARK BUTTIGIEG:** Is that advantageous for koala habitat in the sense that if that OEH mapping is more what I termed circumstantial, meaning the types of trees and the topography, then you could have a correlation between that mapping fostering increased habitat because it is based on the types of trees there available; therefore, there is a broader definition; therefore, more koala habitat. Is that a fair enough inference?

**Ms WHITELAW:** Yes, I think so and it was my understanding that one of the broad ways the new SEPP works is you have the site investigation area map, and that is an area where councils can look to do a koala plan of management, and you have got the development application map. Previously what was happening in areas where there was not a comprehensive plan of management is that you might have koalas there but the koalas might have been using a tree, a eucalypt, that was not on schedule 2 of the SEPP. So you had the perverse situation in terms of like everyone can see that it is koala habitat, but it does not actually trigger the SEPP. Expanding out the tree list is a very good thing. Also I think that it has got some issues. My colleague here was talking about the DA map and its accuracy, but at least it is actually triggering that requirement underneath the DA process. In my opinion, it is an improvement but we are all still waiting to see the guidelines.

**The Hon. MARK BUTTIGIEG:** Okay. Thanks.

**The CHAIR:** My question is in relation to the koala plan of management that you have had in place since 1999, the first council. How significant has that plan of management been in stopping development in koala habitat? Give me some examples of when it has actually worked. I am also keen to know your views on offsetting, but maybe respond to the first question first.

**Ms WHITELAW:** In 2006 Coffs Harbour City Council did a review or, I guess, a look at how the koala plan was working. They found that, particularly in urban areas, it was working quite well and it is conserving habitat. The way that it mainly does that is there has always been a requirement to do replanting and sometimes it is just a more cost-effective, easier, streamlined process for a developer to avoid those areas of koala habitat. There have been definite areas throughout the local government area [LGA] where the koala plan has conserved habitat. I would say that the plan has been less effective in the rural areas that have been cleared underneath the previous Native Vegetation Act or the Local Land Services Act because, really, the Koala Plan of Management was a system through the development application process. Another finding of that 2006 review was that the plan's compensatory requirements to do replanting were not really working that well, and that is because if someone was required to replant trees usually there is not a lot of compliance and follow-up, just because of resources, by council. Maybe those trees were planted but not maintained, not watered or not replaced. So a lot of the time those trees did not actually provide meaningful habitat.

**The CHAIR:** Since 1999, how much koala habitat in the Coffs Coast local government area do you think has been lost under the Koala Plan of Management?

**Ms WHITELAW:** We are unable to figure those records out. Again, the 2006 review does some GIS geographical information system [GIS] analysis, but we are unable to tell.

**The CHAIR:** One of the issues that the Committee is exploring with biodiversity offsets is that over time there is what seems to be a gradual, incremental loss of habitat. We have heard that it is being offset out of the local government area or like for like cannot be found, and you are saying that sometimes replanting does not work. Overall, even though it is a Koala Plan of Management and you are trying to do all this, you are not succeeding in increasing koala habitat. There has been a loss.

**Ms WHITELAW:** Yes, I think it has definitely resulted in areas avoiding being impacted. There have been a number of development applications, to my mind, that I know without that Koala Plan of Management that habitat would not have avoided being cleared in the first place. I think that is its real benefit. That is also the focus we are having with our new koala plan about avoiding areas. I think that is one of the great things underneath the new Koala Habitat Protection SEPP and also under SEPP 44 is that core koala habitat gets rolled into the Biodiversity Values Map, which then triggers the requirement underneath the Biodiversity Conservation Act. Also, there is talk about turning off private native forestry and becoming sensitive regulated land under the Local

**CORRECTED**

Land Services Act. The new plan, as we are currently drafting it, has a focus on avoidance and, if need be, conservation of existing habitat, rather than replanting, because we feel as though that is going to get better outcomes.

**The Hon. CATHERINE CUSACK:** We have had some great evidence here that the koala population appears to be stable, particularly in the southern part of the shire. You have had a koala management plan for some time, so it is tempting to put the two together—that the koala management plan has been having some success. Is it in terms of blocking development versus adapting development? Are both those scenarios dealt with under your plan? In a lot of the fires we have had recently, we hear that many koalas were saved because they were on urban fringes and part of the protection of people and property. Many of the koalas that did survive were in urbanised areas. That is my question: Is it possible to do that well?

**Ms WHITELAW:** Is it possible to have koalas in urban areas well?

**The Hon. CATHERINE CUSACK:** Yes, and maintain it in an urban area.

**Ms WHITELAW:** Koalas in urban areas, as I am sure you have probably heard, are at risk of predation by cars and dogs and all that sort of stuff.

**The Hon. CATHERINE CUSACK:** Not as good as non-urban areas. I am not suggesting that for a minute.

**Ms WHITELAW:** Yes, that is right. I think, too, a lot of the time we know about koalas in urban areas because there are people there to see them. It is one of those biases. It is definitely my view that as much as we possibly can from a planning sense, we should be excluding koalas from travelling through urban areas, preferably with good, wide protected corridors so they can move into larger areas of established habitat.

**The Hon. CATHERINE CUSACK:** But you do have a lot of koalas living in this town of Coffs Harbour.

**Ms WHITELAW:** Yes, we have a lot of koalas moving through, and particularly in Coffs Creek. They move through from the botanic gardens through to Coffs Creek and up into the hinterland. Definitely, they move through and we do what we can to try and protect them with fencing off urban areas and culverts and the like.

**The Hon. CATHERINE CUSACK:** And underpasses for roads and things like that?

**Ms WHITELAW:** Yes, sorry, culverts.

**The Hon. CATHERINE CUSACK:** Is that all part of your koala management plan?

**Ms WHITELAW:** Yes. The Koala Plan of Management has actions related to the planning side of things and also has management actions as well.

**The Hon. BEN FRANKLIN:** Just to pick up on some discussion that the Chair had previously, I want to raise an issue that you talked about, Ms Love, which was that offsets are not being done correctly. Could you explain that a little more? How should they be done and what is actually the problem with the current system?

**Ms LOVE:** Offsets specifically for koala?

**The Hon. BEN FRANKLIN:** Yes.

**Ms LOVE:** As Ms Whitelaw has already pointed out, often plantings that are an offset for development, say, tend to be tokenistic in the way that a plan of management is written, they go in the ground and there is no follow-up or compliance as to whether or not those trees have succeeded or not. So when we say the offsets are not being done correctly, offsetting a single tallowwood tree or a group of tallowwoods, for example, with a plantation that is sometimes offsite or not in the correct area and where koalas are means you have lost that habitat forever.

**The Hon. BEN FRANKLIN:** So the monitoring is an issue once habitat has been planted to make sure that it takes hold?

**Ms LOVE:** Yes.

**The Hon. BEN FRANKLIN:** I will throw this to all panellists: Have you got any evidence where that has not happened?

**Ms LOVE:** We could probably research that.

**The Hon. BEN FRANKLIN:** Would you mind taking that on notice, if there is? That would be helpful.

**Ms LOVE:** Sure.

**CORRECTED**

**The Hon. BEN FRANKLIN:** But then, of course, habitat needs to be planted in the right area because there is no point planting it somewhere where there are no koalas.

**Ms LOVE:** That is right. Otherwise it is tokenistic.

**The Hon. BEN FRANKLIN:** Indeed. Again, if you have evidence of that happening, that would be very helpful.

**Ms LOVE:** I can combine the two.

**The Hon. BEN FRANKLIN:** What we are trying to do here is to look at practical ways that we can ensure that we get the best outcome.

**The CHAIR:** I just want to check with Mr Grant, who is in a different area of the council planning. Do you have anything to add to Mr Franklin's questions?

**Mr GRANT:** No, I agree. I would add that the concept of offsetting is beset with problems, particularly due to the time that it might take to replace large trees and to offset habitat, and the fact that many councils I know, including Byron, have great difficulty with ongoing monitoring and auditing of these things. If you have got multiple development applications that have been approved with various levels of offsetting through different conditions of consent or through a formal means—BioBanking or whatever—it can be difficult to monitor everything to make sure that we get the outcomes that we want.

**The Hon. MARK PEARSON:** Mr Grant and Ms Love, would you say that the whole concept and program of offsetting is an utter failure?

**Mr GRANT:** My opinion on the Biodiversity Conservation Act reforms is that even though "avoid and minimise" is written into that Act, it is not clear how it should be applied. There is a focus on offsetting, which should be a measure of last resort.

**Ms LOVE:** We need a proper definition of what "avoid and minimise" actually means in a legislative context and how can we apply that before we offset that, because there seems to be this ideology that we will just offset it. We will just offset what we are going to do.

**The Hon. MARK PEARSON:** The word speaks for itself: setting off, offsetting, out of responsibility.

**Ms LOVE:** That is right.

**The Hon. PENNY SHARPE:** I have a question for Ms Whitelaw on a completely separate issue, but it is in your submission, which I know is now quite old because you did your submission in July last year. Could you give the Committee an update on the Coffs Harbour Bypass decision? In your submission you talked very strongly about the impact that it will have on koalas—the cutting versus tunnels. I know that there were a variety of commitments made during the State election campaign. Where is that up to? Are the issues around koalas being dealt with?

**Ms WHITELAW:** Yes. I think it is a matter of public record that the approach at the moment is going forward with tunnels, as far as I understand it. Council is being consulted about those tunnels. Council is pleased to see the tunnels, particularly about the impact to koalas. Also, the RMS has been talking with council about a number of different other fauna under and overpass options, which is fantastic. The tunnel, which is probably the most important to koalas, is the tunnel at Roberts Hill. I am concerned just with where the tunnel is being put. I understand from an engineering point of view it is really not going—they are clearing an area of core koala habitat just south of there. Where the actual tunnel is, there is no habitat. That is going to mean that extensive rehabilitation creation of a corridor is going to need to occur over the top of that tunnel for it to be a meaningful connection. That is something which we are having discussions with the department about.

**The Hon. PENNY SHARPE:** But this is basically being included in the planning at this stage.

**Ms WHITELAW:** Well, we have put in our—

**The Hon. PENNY SHARPE:** You have raised it?

**Ms WHITELAW:** Yes. We have raised it as an issue that the tunnel is good, but it is not a corridor unless there is habitat on top of it.

**The Hon. PENNY SHARPE:** And that has not yet been agreed to?

**Ms WHITELAW:** Not yet.

**The Hon. MARK PEARSON:** How long is this tunnel going to be? Do we know?

**CORRECTED**

**Ms WHITELAW:** I can take that on notice. It is a little bit outside of my area of expertise.

**The Hon. MARK PEARSON:** Sorry, I thought you might have known off the top of your head.

**Ms WHITELAW:** No, sorry. I do not.

**The Hon. CATHERINE CUSACK:** It is a big tunnel.

**The CHAIR:** Thank you for appearing before today's Committee.

**(The witnesses withdrew.)**

**The Committee adjourned at 15:42.**