## TRANSCRIPT

# LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

### Inquiry into Ecosystem Decline in Victoria

Melbourne—Wednesday, 24 February 2021

#### **MEMBERS**

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

#### **PARTICIPATING MEMBERS**

Ms Georgie Crozier Mrs Beverley McArthur

Mr David Davis Mr Tim Quilty

Dr Tien Kieu

#### WITNESSES

Ms Fiona Sutton, President,

Ms Yasmin Kelsall, Events Coordinator, and

Dr Melanie Birtchnell, Member, Ecological Consultants Association of Victoria (via videoconference).

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

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

I would like to acknowledge my colleagues participating today in the hearing and to thank those who have provided apologies, and at this juncture I will just go around the room and introduce those who are here. We might have some more people joining us shortly, but at the moment it is me, Sonja Terpstra, the Chair of the Environment and Planning Committee; Clifford Hayes is the Deputy Chair; Dr Samantha Ratnam; Stuart Grimley is joining us via video link; Andy Meddick at the end of the table; and Melina Bath.

Mr MEDDICK: And Chair, Mrs McArthur assures me—I have just seen her—she is not far away.

The CHAIR: Okay, fantastic, and I am sure Dr Bach will be joining us momentarily. If he does, that is fine.

All evidence taken is protected by parliamentary privilege as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders, therefore the information you provide during the hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament. All evidence is being recorded, and you will be provided with a proof version of the transcript, following the hearing. Transcripts will ultimately be made public and posted on the committee's website.

Could I at this juncture get the witness who is appearing remotely just to please state your name and organisation for the record so that we can verify your identity on screen, thanks.

**Dr BIRTCHNELL**: Hi, I am representing the Victorian Ecological Consultants Association, and my name is Melanie Birtchnell.

The CHAIR: Thank you very much. All right, now we have got those formalities out of the way, I welcome both of you and of course our witness on screen as well, and I invite you to make your opening comments. But please keep it to a maximum of 10 minutes because we are on a tight time frame, and that will then allow plenty of time for questions to be asked of all of you in regard to your submission.

Also, to our witness appearing via video link and to Mr Grimley, I just remind you both to keep your microphones on mute when you are not speaking. That will help minimise any interference, and if you do have technical difficulties at any stage, please disconnect and dial back in via teleconference. With that we will get underway, and over to you.

#### Visual presentation.

**Ms SUTTON**: Thank you. I believe there is a PowerPoint presentation that is going to come up. My name is Fiona Sutton. I am the President of the Ecological Consultants Association. I am here with Yasmin Kelsall and also Melanie, who you just met online, and we are representing ECA Vic. Sorry, this is not—

The CHAIR: When everything else fails, the old-fashioned way works the best, doesn't it?

**Ms SUTTON**: No problem. I suppose you can move onto the next slide. I was going to start with just an acknowledgement to the traditional owners across Australia, who are people we as ecological consultants and as an organisation represent, so I would like to acknowledge their elders past, present and emerging. Hopefully that might come up soon. I can continue on with parts of it. You can move on to the next slide now.

We are a not-for-profit organisation. We represent the ecological consultant industry to government and also to the industries that we support through our projects, and we provide our members and others with professional development and training opportunities. We have paid members and subscribers, and our submission for this inquiry was informed by a survey of those people. Next slide.

As ecological consultants we work with both public and private landowners and managers and we do all sorts of work, including ecological monitoring and scientific research. We work on development projects and calculate the ecological impacts associated with them and the offset requirements. We assess the offset sites as well to compensate for those impacts. We prepare environmental management plans for pest plants and animals and a range of threats that influence biodiversity, and we advise our clients on the planning, policy and legislative implications of their projects or their obligations as land managers. This puts us in a really unique position where we bridge this gap between the developers and the policymakers. Next slide.

One of the key findings that we had with the survey of our members was that biodiversity is no doubt in decline. Our impact assessment projects are demonstrating significant declines. Our management and monitoring programs are projects that are aimed to actually improve biodiversity, so pest plant management, those sorts of projects. They are still largely showing decline, with only 20 per cent of projects showing an actual improvement, and that improvement is generally minor, and 80 per cent showing either no change or declines from either minor to major. This is largely because the management is insufficient to deal with the threats. The threats are many and varied. We got people to rank the threats—land clearing, pest plants and animals, and pathogens being highest up on the list. Climate change was a little bit further down, and that is largely because climate change is sort of a slow burn. Its impacts at present are not as significant, but they will be more significant as the years go by. Next slide.

We also found that the legislation is generally inadequate to reverse the actual decline. The native vegetation regulations lock in loss by offsetting, and offsetting is seen as this accepted next step in the process rather than a last resort. The *Flora and Fauna Guarantee Act* applies only to public land, so it is not very extensive. It is under-utilised, with a lot of the key elements either absent, not developed or barely ever used. The EPBC Act, so the commonwealth *Environment Protection and Biodiversity Conservation Act*, is our strongest regulatory requirement that encourages minimisation of impacts. In comparison the Victorian legislation is much less effective at achieving that, and the *Wildlife Act* does not adequately protect our native wildlife from development and in some cases even protects pest animals such as sambar deer for example. So collectively these acts generally aim at mitigating impacts. There is very little emphasis on promoting good environmental stewardship. They are rarely enforced, with very few rejections of projects and little compliance, and where there are breaches, the penalties are generally very weak. Also they can be subject to political influence, and they are largely seen as a tick-the-box exercise. Next slide.

There are quite a few recommendations in our submission, which I hope that you have all had a chance to read. I am just going to focus on three of the key themes, being investment, improving and using our biodiversity legislation, and accountability. Next slide.

There is a great opportunity for more investment in jobs, and these are not just metropolitan jobs but a lot of regional jobs and also jobs for our First Peoples. They can be land management roles in our various government agencies and the like as well as specialist biodiversity expertise—getting that expertise within our government agencies. We have seen excellent examples. For example, the City of Melbourne and Surf Coast shire have now got an ecologist on their books, and the biodiversity gains of having that expert in house to drive biodiversity improvements through all aspects of council really does pay off. Next slide.

The investment in on-ground works also needs a lot of improvement. The investments need to be long term, so not short term, one or two years. We are talking about threats that have been around for decades and will continue and increase in severity for decades to come, so having long-term funding over decades rather than sort of one or two years is definitely required. Also improving the funding that is available so that contractors that are engaged are actually trained and skilled in natural resource management so that it is not the cheapest contractor that goes out to do weed control. For example, it might be an agricultural weed contractor—they do not understand the details of actually doing proper natural resource management and end up with perverse

outcomes worse than what the actual weed they were controlling could be. There is also a need for investment in our private land conservation organisations, such as Trust for Nature and Bush Heritage—there are quite a few—and stewardship incentives for our conservation works on private land. Next slide.

Improving and using our biodiversity legislation is also a key component. The FFG amendment Act just came into effect last year in June, and a lot of those changes have not been fully introduced or they are being slower to actually be introduced than what was planned. For example, the statuses of all of our threatened species are getting incorporated into the Act now, and that process is taking longer. It is also worth noting that through that process, I believe it was due to funding, all of the species that had a status of 'poorly known but thought to be threatened' and 'data deficient but thought to be threatened' were dropped from the assessment, and so they are no longer going to have a status moving forward. So that obviously has impacts. The ability to nominate those species is very slow, it is very time consuming and it is often done on a volunteer basis by passionate naturalists that end up making the nominations to get additional species listed under the Act. The amended Act is still discretionary, and a lot of the components such as the designated critical habitat maps and the action statements are still yet to be seen—so making sure that they come through. Next slide.

Under the native vegetation regulations there is still a reliance on models which are often flawed, and so we would like to see favouring of ground truthing of data for our impact assessments and stronger requirements for avoidance and minimisation to be the main steps rather than offsetting just being seen as the third step in the process to tick the box and get approval. And we would also like to see increased offset requirements so that this 'no net loss' can actually have a chance of being achieved. Next slide.

And finally, accountability—so improving our transparency of the reporting, so the native vegetation regulations. They are reported on on an annual basis. I do not believe we have seen the 2019/20 year's report yet, so they are a bit slow to come out. Also they focus on the permitted clearing, but there needs to be more emphasis and more understanding of the impacts of all of the exempt clearing that happens and all of the non-permitted losses as well. The same goes for offsetting—making sure that there is transparency in the offsetting process to make sure that it is actually implemented as it should be. And then also reporting on the threatened species and the investments that are made and the outcomes of those investments. Next slide.

And then lastly, improving the compliance that we can have—so making sure that our impact mitigation measures that are part of an approval for a project, for example, are actually implemented as they are approved and there is not additional clearing that is just sort of swept under the carpet that nobody finds out about. So making sure that there is compliance on that. And similarly for offsets—so making sure that the offsets are being implemented appropriately, the management is being undertaken appropriately and making sure that there is also funding available for prosecution of any breaches, because there have been many instances where councils or government departments have not been able to pursue non-permitted clearing incidents and take it to court because they do not have funding for it.

Final slide—I will just leave it there and open it up to questions.

**The CHAIR**: Thanks very much for that. Mr Hayes, I might throw to you first. I am sure you would be very interested to have some questions.

**Mr HAYES**: Thanks, Chair. Just a couple of things come to mind about what you are talking about. In regard to the environmental issues around fuel reduction burning methods, is it widely accepted now in government departments that the Indigenous methods are superior methods or is there conflict over which particular Indigenous methods are best to use?

**Ms SUTTON**: I am not sure who wants to answer that one, but I suppose there is definitely good merit in the Indigenous burning methods. How they are implemented across the entire state of Victoria obviously presents a very large challenge. There are a lot of resources required to do that. There are a lot of resources required to burn under the current proposed methods of burning as well. I am not sure, Mel or Yasmin, if you have—

**Ms KELSALL**: I think ultimately it is a little bit outside our specific knowledge, but it certainly is something that a lot of our members are very interested in and participate in and have done studies on as well. To what extent it is currently being taken up by government or could be in the short term is unknown, I think.

Mr HAYES: Okay. Thank you.

**Dr BIRTCHNELL**: Can I just quickly add to that just to say that any method that we use for fuel reduction burning needs to be done in the context of monitoring and evaluation so that we can truly understand what impacts, ecological and otherwise, those efforts are having. Whether they be Indigenous tools or contemporary tools, I think it all needs to be done in that kind of well-researched and well-monitored framework.

**Mr HAYES**: Though you say there is a lot of political disagreement about it, or so the submission seems to be saying.

The other goes to: it seems to be that the feedback from your members talks about long-term management problems with land managers because government and communities do not value the environment highly enough. Would you say that that lack of value in the environment goes to the attitudes of government departments or the political leaders themselves?

**Ms SUTTON**: I would like to say that it starts first with just education of the public, I think—having an educated public that understand the implications of their actions and why we would protect certain things, and then that obviously flows on to the political influence, because if you have a community that has a good understanding and then does support better biodiversity management, for example, then the political movement from that flows on.

**Mr HAYES**: So you think it is an education sort of issue.

**Ms SUTTON**: Well, I suppose at ground level that is where it starts, but there definitely does need to be political will to make sure that it is actually included in education in early childhood, through to high school, through to adulthood as well—but I suppose bringing it onto the agenda of an education process across the board for the public as well as the decision-makers.

Mr HAYES: Okay. Thank you.

**The CHAIR**: I might just ask a question. You were mentioning in your presentation the role of the native vegetation regulations and offsets. You were saying that there is a presumption that offsets—or it does happen—lock in loss rather than that being a last resort. Can you just expand on that a bit more? Is that relating to when a development proposal is put in? Can you just expand on that a bit more?

Ms SUTTON: Yes, sure.

Ms KELSALL: Yes, I can start in response.

Ms BATH: You are welcome to take your mask off when you are speaking.

Ms KELSALL: Yes, okay.

Ms BATH: It is a bit easier then.

Ms KELSALL: Yes—probably easier to hear. The way that the native vegetation regulations are set up, they are overall aiming to achieve no net loss, but in reality most of our members would agree that we are observing that potentially they are not achieving no net loss. When a developer or anyone would like to clear some native vegetation, we do some accounting around what the value of that native vegetation is and aim to find an offset site. Normally we find another patch of vegetation which is to be the offset site for the clearing. So essentially we are losing a patch of vegetation or an area of vegetation and we are putting better protections maybe on the offset site, but essentially there are a number of issues with that. We are losing some vegetation on the clearing site; the offset site already existed largely and people are being given what are called gain points for doing things like improving management, like weed management or rabbit management—things like that—and often there is not much follow-up in going and seeing what is actually happening to the offset site. They only have to do that for 10 years, and then ideally it should be at a stage where it can be let go. Ultimately it does not seem to add up to achieving no net loss, really, in real terms.

The CHAIR: So in a perfect world what would be the best approach or best practice in regard to that?

Ms KELSALL: So I think ideally you would want to see some additionality on top of that in one way or another: so the adjustment in the ratio of area that you need to protect—a bigger area—and also to see some add-ons to the actual extent, and real follow-up monitoring that is meaningful would be very reassuring if we were seeing our offsets actually monitored and we could see that they really were improving. I think we are just

not feeling like we are seeing that level of transparency through the authorities that are setting these policies in place—that too. So additionality, maybe an adjustment in the amount of offset required—

The CHAIR: And monitoring—like meaningful—

Ms KELSALL: Yes, that we can really feel reassured by.

The CHAIR: Great. Thank you. Ms Bath.

Ms BATH: Thanks, Chair. Thank you very much for appearing today. I am still getting my head around all the offsets, because I think it is quite a vexing situation with a good idea behind it. I will give you an example. I am in Gippsland. My electorate is Eastern Victoria Region—a fantastic region. There is the Princes Highway between Traralgon and Sale. There is a bit that is being duplicated over a long period of time; there is a last bit. Multiple decades ago there was a parallel piece of land bought from farming land. Not the one that is on the other side of the road that has some—well, some of them are dead trees; there are forests on the south side. On the north side they bought farming land and then kept it for the road to be built. And this is decades ago—it was reserved as land to be used for the road. It is now seen that there are some special grasses growing there, and now they cannot use that, or they have had great concerns around using that because now there are some specialty grasses growing. So you try and plan for the future—our predecessors did. We need the road; it is not safe. You know, we need to have a dual highway; it is not safe. So I am using that as an example. How do we marry the needs of the community and safety with the needs of offsets? Is that a rhetorical question I just asked there?

**Ms KELSALL**: It is a very big question.

**Ms BATH**: I am just exploring it, and I think the EPBC Act comes into that as well.

**Ms KELSALL**: I know that section of road really well, and I know those beautiful red gums, yes. I think there is sort of a detailed answer and there is a bigger answer that could be given—you know, like the specifics of your example.

Ms BATH: Yes, sure.

**Ms KELSALL**: Every example almost provides its own unique conundrum sometimes. In that case, ideally when that land was bought those grasses should have been identified right from the start I think—ideally.

Ms BATH: It may not have been there. You know, it was just farmland.

**Ms KELSALL**: Yes, yes, because the mapping and the ecological survey work should have been adequate for that, I suppose, but there is a big conundrum in balancing ecological outcomes with development requirements and societal requirements. That plays out a lot in the *Planning and Environment Act*, and that is what we deal with a lot. It is almost our role on a daily basis to try and find that balance, because that is where the native vegetation regulations sit—almost in conflict in that same Act with the development requirements that also sit within that Act.

**Ms BATH**: Thank you for exploring it, because there is a tension there that needs to be resolved. Maybe if you have any additional comments later, you might like to pop them down.

Ms KELSALL: Yes.

**Dr BIRTCHNELL**: I probably would just quickly add to that to say that ecologists seem to be able to work with the social dynamics of a situation. So when any of us are on site and we are working with a developer, and we might be working with a designer and the CFA and compliance and enforcement from council and the planning officer from council, we are often in situation where we have got a range of professionals around us who each are coming from different perspectives with regard to that particular development. In very many cases it is the ecologist who has to be the one to step forward, bring all of those together and find the sweet spot between them all so that the development can proceed.

For example, when you might want to build a bridge, you would go and get an engineer and the engineer would design the bridge, you would take their specifications and you would build the bridge to exactly those requirements. But regrettably in ecology and the environment—and this is where the ecosystem decline picture comes in—for some reason we are not able to work in that kind of framework that some other professions have,

and partly that is because we are always balancing the safety aspects or other aspects against the environment, whereas engineers, for example, look at that and say, 'If you want your bridge to be an effective bridge, you must build it this way, and the safety benefits will flow on'; we do not question that. With the environment we have forgotten that there is a safety element here too—that if ecosystems continue to decline we will have impacts on human safety, human health and the health of all of the organisms we share the planet with. So this is the bigger picture that Yasmin was speaking of.

The CHAIR: Mr Meddick.

**Mr MEDDICK**: Thank you, Chair. And thank you all for your submission and your presentations here today. I want to focus on a couple of key points here, but first of all I just wanted to, if I may, speak about one of the sentences in your submission, which is:

The Wildlife Act seems to allow more for the controlled culling of indigenous species than for their protection and decisions often are based on false data and understanding.

I agree wholeheartedly with that particular statement, but I will also say to you—and I am not sure if you are aware—that the *Wildlife Act 1975* is under review. That will be open next month, and I strongly encourage you all to make submissions to that as well.

I wanted to just briefly touch on what you were talking about there, about the critical habitat map. I think that is a piece of work that needs to be completed and gotten out there as quickly as possible. I wanted to explore: if it is produced, should it be used as a primary resource in consideration of new developments and elevated in its weighting consideration? So rather than it being something where we look at, say, a housing development that wants to go ahead in a particular area where there is habitat of particular animals and we say, 'Okay, we'll put that consideration down the bottom, down here, because we can always offset it'—that seems to be the thing, 'We can offset that'—or they might not even be aware that it exists until they actually start the development because of, as you say, local knowledge and people on the ground, should it be given as a matter of priority for the Victorian government to produce that map so that it can be used as a primary source in development? And so that I do not run out of time, would you say that offsets—because this is a criticism I receive all the time rarely translate into like-for-like habitat and that often it takes many, many years beyond the financial realisation of a development, so the cost benefits flowing to the developer, for the offset to have a positive impact? And often, as you say, they do not really come back and do the work that they need to do in those areas. And it does not take into account the inability to translocate species, so an offset for a development in one area can be in a completely different area of the state and does not take into account that the species that exist in that original area cannot be moved and do not even exist in that area of the state that they are going to.

Ms KELSALL: Yes, that is a big one. I have just taken a few notes, because there are a few points there that you have raised and it seems to cover a few different pieces of legislation. Just starting with the critical habitat maps that are sort of foreshadowed by the FFG Act—yet to be declared—within the native vegetation regulations there are currently provisions when you reach a certain threshold of clearing which start to trigger what are called species—oh, gosh—

**Ms SUTTON**: Species units, based on the species habitat importance map.

Ms KELSALL: Yes. DELWP have created modelled maps based on these complicated models for habitats for threatened species, so that kind of mapping product does already exist. We did raise it in our presentation as the modelled mapping that the state now seems to have moved towards over the years more and more. We would theoretically like to see it wound back a bit and for more on-ground information to be taken into account in the assessment processes. That type of mapping product may be something that DELWP may look towards to use as the basis of creating their critical habitat mapping for the FFG Act even though it is currently being used in the native veg regulations at the moment.

**Mr MEDDICK**: I guess I was more leaning towards a planning perspective, which is usually Mr Hayes's area of expertise, so I am talking about a housing development, for instance—in other words, before a housing development can even be looked at that that map is taken into consideration and given equal weight on the rest of it.

Ms KELSALL: Maybe Mel would—

**Dr BIRTCHNELL**: Yes. I have a really strong background in biodiversity planning through local government and also now work in threatened species conservation. The question really bridges both of those,

doesn't it? Probably we could have a whole hearing on that particular question, I think. It is so diverse. Again, like the example that was given of East Gippsland, each of these developments that comes across a planner's desk has its own individual nuance.

I must apologise; there is a little bit of background noise. I am actually in the field today looking for some threatened species habitat, and I am sitting in a farmer's kitchen, so I just have to be a little bit polite as well. So I apologise for any interference you are picking up through my mic.

Each development is going to have its own particular nuances and its own particular motivations and so on. The issue really comes down to the fact that each time we say yes to habitat being lost we are contracting the potential for that species to survive. That is really the nuts and bolts of it. And in terms of the like for like, you could remove habitat for one species and offset it with the habitat of a completely different species; that actually does not improve the outcome for the species which has just had its habitat removed. So on the dynamics behind habitat in their own right for threatened species, by the time a species is that threatened we really need to have a great handle on what the habitat requirements of that species are. So we need to be investing in understanding and researching the habitat requirements for threatened species so then we are able to translate that into policy decisions at the local council level, where the approvals are given.

An ordinary planner—not an ordinary planner; there is no such thing as an ordinary planner of course—or a town planner is not going to have the expertise to be able to recognise habitat for a threatened species, to recognise when habitat is dwindling across a fuller range, across a bioregion, across the state. They are not going to have that view, even, let alone the expertise to be able to make an informed decision. So the presence of maps that are grounded in truth and informed by research into threatened species ecology and biology is really the only way we can, aside from the funding element, start translating this into better decisions and better outcomes.

Mr MEDDICK: Thank you.

The CHAIR: Dr Ratnam.

**Dr RATNAM**: Thank you very much for your presentation today and your submission as well. It has been really interesting, because I think you offer a really unique perspective to this inquiry. The way I kind of see it, so far we have heard from kind of the overall strategic people who set the strategy—the government department—we have heard a lot from people who are on the ground and doing the work, and I think you will offer a really important, critical perspective, which is that analysis midway between those two and across both public and private projects. I was interested in that part of your submission and your presentation where you talked about this figure from your survey that three-quarters of respondents noted that more than half of their biodiversity management projects resulted in biodiversity decline. So these are projects aimed at increasing biodiversity that resulted in actual decline. Firstly just to understand that stat, this is from your survey of respondents who are people working across both private and public projects, is that right? And so from their vantage point more than half their projects actually result in decline despite the best intention.

I have got two questions related to that. What is going wrong? We have got the best of intention, we have got these projects designed to increase biodiversity and it is going the other way, so what is going wrong? And the second question, which I think is going to be connected to it, is: we have this overarching strategy, *Biodiversity* 2037, set by the department and the Victorian government; what is your assessment on the adequacy of both the strategy and the funding behind it to realise its outcomes?

**Ms SUTTON**: I think from, I suppose, what is going wrong those sorts of projects are very varied in what sorts of projects they are. They might be an offset site management plan or a national parks pest, plant and animal strategy or a private property that wants to improve the quality of vegetation on their block, through to threatened species populations and monitoring what they are doing if they are declining and if their habitat is okay or if it is improving or declining—whatever it is. So they are the types of projects that that relates to, and from the feedback that we got and from our own experience, it is largely coming down to management. The management is not adequate to deal with all of the different and complex threats that are coming, because it is not just one pest animal that you need to deal with, it is also all of the weeds and the erosion and the potential for off-target damage from the actual contractors. There are just so many different threats associated with biodiversity management.

**Dr RATNAM**: Can you expand on what that management looks like? What would good management look like?

Ms SUTTON: Well, it depends.

**Dr RATNAM**: Is it the people, is it the qualifications of people, is it the resources—what is happening there with that?

**Ms SUTTON**: Yes, it is resources as well as good skilled and trained contractors on the ground. It is really unfortunate to see, and I have seen it many times, in our national parks, for example, where Parks Vic have engaged a contractor, that contractor has been spraying a particular weed and there are large areas of off-target damage as a result of their spraying because they are not trained natural resource management contractors; they do not understand the complexity of it. And it has largely come down to funding, because Parks Vic have had so many funding cuts that they cannot afford to pay for the good contractors. They have to pay for the cheapest contractors, for example. And it is not just limited to Parks Victoria as well. So there is definitely a funding issue, which then transpires into the quality of work that is undertaken.

It is also not just the contractors, but it is also the monitoring of those species so that you can have adaptive management to say 'This has actually worked really well' or 'Hang on, there's another threat that's now come in, and so we need to focus on that now as well'. So it is not just 'Keep going on the same path of the management plan that was written 10 years ago'; you need to actually have ecologists going back and assessing what is going on on the site to make sure that, 'Yes, this is still our highest priority. These are the priorities that we need to manage', and not having to deal with additional things that have come in since. A new weed, for example, might come in, or a new pest animal. There might be deer that are new to the area—whatever it is.

**Dr BIRTCHNELL**: Yes. It is monitoring, it is adaptive management and it is funding. They are really the three pillars of where things fall over.

**Dr RATNAM**: And the second question is about the *Biodiversity 2037* strategy: how do you think that stacks up in terms of the task at hand and the resources and strategic objectives that it has got?

Ms KELSALL: Yes, *Biodiversity 2037*—I think basically *Biodiversity 2037* has some good aims, and some of its goals and objectives are some of the best that we have seen for a long time, but I think the level of funding that goes along with them is very lacking. I mean, the kind of funding that I think we are really talking about is just the kind of funding that we have not seen—maybe we have never seen; I am not sure. It really will take some serious investment to start to turn things around, and it will just start to turn things around.

**Dr RATNAM**: Thank you very much.

**Dr BIRTCHNELL**: Sorry, it is also worth noting, on the implementation of that biodiversity strategy, a lot of the implementation part of it has been pushed out of state government and down into, for example, local government without funding associated with it to support local government to effectively implement it. So I think that is definitely a nexus as well to consider.

Dr RATNAM: Thank you.

The CHAIR: Thanks. Dr Bach.

**Dr BACH**: I will pass the ball, Chair, to Mrs McArthur if I may.

Mrs McARTHUR: Thank you, Dr Bach, and thank you, Chair. Thank you for your submission. And if you have made one case today, it is as a very good union that we go out and employ more ecologists. Well done on that, and I note you have got about 500 members and you conducted a survey. I am interested to know if all 500 of your members participated. One of your respondents in your survey referred to the fact that:

The environment needs to be measured like—

GDP—

... and funded at a similar scale.

Considering GDP is a measure of economic output and not something that is funded, 'What does this mean?' is my first question.

Ms SUTTON: Mel, are you nodding because you want to answer that?

**Dr BIRTCHNELL**: No, I was nodding because it is a great question. I think it really goes to the heart of where ecologists have had to land on their thinking about how to resolve some of these issues. If we look to the genesis of the native veg clearing regulations, we can see the old native vegetation framework that some people in the hearing might remember. Really the origins of the native veg framework, as we used to call it, were purely an economic argument. So essentially to make sense in an economic framework of developers and so on, it was the first time the environment was essentially given a dollar value—so the higher the quality, the more extensive the patch, the higher the dollar value that would be then passed on to the developer. So if there is any kind of economic association with the environment, it is because we are having to try and express the environment—a complex, complex thing that is our life support system—to people who work essentially around 'How much is this going to cost me?'. So that would be my very short answer to that great question. That is why I was nodding.

Mrs McARTHUR: My second question is relating to the western grasslands project, which has been seen as quite a disaster, and your submission states that plenty of money was contributed to the scheme but there were no ecological outcomes. How much money do we need to throw at these schemes, and how many ecologists do we need to solve this problem?

Ms KELSALL: I think you are referring to the Melbourne strategic assessment process that aims to create the western grasslands reserve as well as a number of other conservation reserves around Melbourne. That process from the start made a lot of decisions many years ago, even as far back as 2010, based on very limited data, modelled data in a lot of the cases, and did not involve consultation with ecologists until more recent years. They made estimates on how much the whole thing would cost. And it is not just the grassland reserve; it includes growling grass frog corridors, wetlands, all kinds of bits and pieces—and they are not just little bits and pieces; they are big bits and pieces, really significant stuff. Decisions were made to clear very important areas of grassland on the basis that these grassland reserves could offset, so this was again making assumptions about what we use to offset. And there were not on-the-ground surveys of these places, so it was not until later on, after the costs had been set and the process set in motion, that they actually started to catch up and do some of the real accounting and find out how much it would cost. So they made the decisions 10 years before, back in 2010, and we are just catching up now, and we find that it is very, very inadequate.

**Mrs McARTHUR**: So how many more ecologists do we need in Victoria and how much more money do the taxpayers need to throw at this problem?

Ms KELSALL: Well, just for the MSA, I think—

**Mrs McARTHUR**: You are a very good union. You are doing a good job at promoting the idea that every council needs an ecologist and every—

The CHAIR: Mrs McArthur, we do have Mr Grimley, who has a question, so if you are finished?

Dr BIRTCHNELL: Can I respond to that super fast? My response to that would be that when I did my PhD I did it with multiple people and I am the only one from my cohort that is actually employed as an ecologist. And if I look to my undergrad, it would be startling how few people end up getting a job in this industry. I would just say that on any project there is so limited ecological input from a professional ecologist and very often when a development comes across a biodiversity planner's desk pretty much everything is already set in stone and the ecologist is tweaking the edges. Now, if an ecologist was brought in at the beginning of any project—as they would be with engineering or traffic designers and so on—or any of those kinds of projects, if there was an ecologist there at the very beginning to help shape the project, we probably would not be having such a significant conversation about the rate of ecosystem decline. It is actually that the point at which the ecologists are brought in is customarily very late.

Mrs McARTHUR: So one for every project?

The CHAIR: Mr Grimley, a question?

**Mr GRIMLEY**: Thanks, Chair. I have actually got a few questions here. I think I will just state them for the record and they can be taken on notice in the interests of time, because we are well overdue. I am not too sure if the question was answered from Mrs McArthur as to how many members actually responded to the survey; that is the first one. The second one is in relation to one of the observations from the survey in relation to the poorly

implemented management plans on the basis of lack of experience as a response to the biodiversity decline. I am just wondering if that can be elaborated upon and how the ECA believes that this can be effectively addressed moving forward. My third question is in relation to the recommendations that you spoke of in your submission, which I thank you for. You spoke of the on-ground works, in particular the stewardship incentives for conservation works on private land. I am just wondering if the ECA or anybody can supply some information on examples of what types of incentives that you are speaking of in particular. Thank you, Chair.

The CHAIR: If you could take those questions on notice and provide some answers for us afterwards, that would be fantastic.

Ms SUTTON: Sure.

The CHAIR: Thank you all very much for attending today.

Witnesses withdrew.