# LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE

# Inquiry into Wildlife Roadstrike in Victoria

Melbourne – Monday 1 September 2025

### **MEMBERS**

Georgie Purcell – Chair

Richard Welch – Deputy Chair

Tom McIntosh

John Berger

Evan Mulholland

Katherine Copsey

Sonja Terpstra

Moira Deeming

## **PARTICIPATING MEMBERS**

Gaelle Broad Michael Galea
Georgie Crozier Renee Heath
David Davis Sarah Mansfield
David Ettershank Rachel Payne

#### WITNESSES

Rheya Linden, Campaign Director, and

Jo Connellan, Animal Active Australia.

**The CHAIR**: I declare open the Legislative Council Economy and Infrastructure Committee's public hearing for the Inquiry into Wildlife Roadstrike 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 Aboriginal peoples, the traditional custodians of the land we 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 also welcome any other members of the public watching via the live broadcast or in the public gallery.

To kick off, we will just have committee members introduce themselves to you, starting with Ms Copsey.

Katherine COPSEY: Katherine Copsey, Member for Southern Metropolitan Region.

The CHAIR: Georgie Purcell, Member for Northern Victoria.

**Richard WELCH**: Richard Welch, Member for North-East Metro. I am used to waiting longer for it to come down the line.

The CHAIR: Thank you so much for taking the time to appear before us today. All evidence taken is protected by parliamentary privilege as provided by the *Constitution Act* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during this 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 this hearing, and then transcripts will ultimately be made public on the committee's website.

For the Hansard record, could you both please state your full names and the organisation you are appearing on behalf of.

Rheya LINDEN: Rheya Linden, Animal Active Australia.

Jo CONNELLAN: And Jo Connellan, the same organisation.

**The CHAIR**: Wonderful. Thank you. We now welcome your opening comments but ask they are kept to around 15 minutes to ensure plenty of time for discussion and questions. Do not worry too much.

**Rheya LINDEN**: We will try to stay within the 15 minutes.

**The CHAIR**: We have got a reduced committee, so it is fine if you go a bit over.

Rheya LINDEN: We can have the extra time. Okay, so should we begin?

The CHAIR: Yes, please.

#### Visual presentation shown.

Rheya LINDEN: Okay. Thanks very much for the invitation to begin with to present at this really critical and important inquiry. You have probably noticed that our presentation opens with a meme that, as good memes go, expresses very succinctly the core issues to be addressed. The title of our presentation is 'Landlocking and road strike: the deathly effects of uncurbed development that fragments wildlife habitat and destroys safe interconnecting movement corridors'. You can see how the meme kind of highlights that.

Let us begin by considering the significance of landlocking as a major contributor to wildlife road strike by identifying its lethal effects, and I offer a definition we have used in one of our case studies:

Landlocking of kangaroos and other native animals dependent on safe movement pathways across their habitat is an outcome of uncurbed land development that is most evident in Victorian peri-urban areas where housing supply is in high demand.

The wildlife carcasses that dot our state's roads testify that landlocking most tragically impacts kangaroo mobs as native species hardwired to pursue access to formerly safe long-established interconnecting movement corridors, the pressures of development across their natural habitat consigns them to insurmountable survival odds.

Let us begin with slide 1, which I think takes time to load. This section is called 'What landlocking looks like', and I am going to take you through a visual chronology of a disappearing mob at a Torquay development site that we have been engaged with since April 2018 to the present, because the building continues right to the periphery of the estate. The first image was taken on 29 April in 2018. That was less than five months after the developer had his permit plan approved by Surf Coast shire. Within a week the second image was taken, so you can see how it precipitated the introduction of earthmoving equipment and so on. It is at the same site – the kangaroos are standing in front of where the earthmovers are. That really tells the story in those two images, but it does not stop there.

Go to slide 2. We move image by image to the present. Seven years on the developer is still building to the edges of the property. The diminished mob is driven against the flimsy fence line that separates them from high-speed traffic. We will go to Jo in a while when I have done this section, because she is actually going to look at the plan the developer presented to the council, and you will see where the main roads are. But you have to take my word for it for now.

Slide 3 – we will just move through these, because you will see the dates are on there, so you can follow the chronology of these images. We will go to this one here. This shows pretty devastatingly a very small mob that is poised – you can see the fence line there. What is beyond the fence line towards us is Messmate Road, which is 80 k per hour and is the main crossing point for these kangaroos to access flower farms over the roads. They are crossing back and forth for fodder and water, essentially; they are really trapped. Slide 3 is the Messmate crossing – no safe exit. As vehicles whizz by the corner in which this small mob endures a precarious existence, we bear witness to the slow annihilation of a native species, because very slowly and inexorably they are being annihilated by the landlocking and by the surrounding roads and their needs for survival in search of food, water and mating options.

At the very start of this development, way back in 2018, we sought a report from a vet, Dr Alistair Brown, who is a wildlife vet. He sounded the alarm very early, actually, in July 2018. Following an inspection on our request at the onset of the site development, he noted that the already landlocked kangaroos endured – quoting Alistair now:

### [QUOTE AWAITING VERIFICATION]

... limited feed, which will only get worse during the warmer months, particularly as the kangaroos will have to compete with the sheep on the property. There is limited water, there is limited tree cover to provide protection from the elements, and there are no refuges where the kangaroos could escape from dogs. It is an open field. In fact most of the trees have since gone; as the build progresses, the trees go. The kangaroos will be under constant stress —

still quoting from the report –

and will likely disperse into the neighbouring areas, where there will be a strong likelihood of causing motor vehicle accidents or becoming subject to dog attack.

Dr Brown predicted the road strike that this inquiry is speaking about very early in July. That is within a couple of months after the development happened.

Sorry, the next image is not very nice, but it needs to be seen. These uncomfortably familiar images were captured between 2 July to 11 September 2024, so they are very recent. It is happening right outside this property constantly. They exemplify a mere fraction of the carnage on surrounding roads since the onset of the Torquay site development. Sorry to leave you with that one. At this point I am going to hand over to Jo, who is going to tell the same story of landlocking in two dimensions, because as an engineer maps are Jo's forte. So over to you, Jo.

Jo CONNELLAN: This map here is the proposal that was approved by the council. And you see those little green lines that run through it; they are what they call the wildlife corridor. You just see they all run onto roads, so they are kind of a bit pointless in a way, and the developer has taken very little notice of them anyway. The area where they are landlocked now is the yellow. That road on the diagonal is Messmate Road, and that square represented by the yellow square is the area effectively where they are now. They have moved out of all the other areas. So you can see they have got nowhere very far to go. They have got almost nowhere to go. Before the development happened, they used to be able to go down south over there to Spring Creek, or they could go across over there to the Karaaf wetlands, where a big mob of them are now. So they have basically been taken away from their particular mob, and the only way to get to either of those places now is across that road, which they are not doing very well, because they tend to get hit before they get far off the property.

**Rheya LINDEN**: Yes, it is 80 k's an hour, Messmate Road, but others like the Surf Coast Highway are 100, which is –

**Jo CONNELLAN**: We talked to the Surf Coast council at least five years ago about speed reductions, even on Messmate Road, because across the road from there is a flower farm, and they can get across. If they get across, they will go in there. But it is hard to get their joeys across, so they tend to not want to leave them behind, so they do not get across the road and then move on and stay there. They need to effectively all go together somehow.

**Rheya LINDEN**: They have to manoeuvre the fences and then get across an 80-k's road that is whizzing with traffic because there is a lot of building going on, so you have got delivery trucks and speeding cars.

**Jo CONNELLAN**: Okay, so you can see this just shows you what the corridors were in 1995, before development down there. It is one of the heavily developed areas of the state. You can see how they went between the three triangles, so there was no issue. They would just go back and forth between the two of them, but over time that started to be more constrained. You can see the green triangle is where they currently are landlocked now. 2015 was not too bad then, but the development really took off after that. The only corridor now for kangaroos to move is that yellow one. The Spring Creek thing has been cut off, and our mob, which are in the green thing, cannot actually get onto that corridor. The whole mob can only get on in part, so in a sense they are self-locking. Some of them could get out, but they are not going to go without all of them, so they tend not to go. But in an ideal world we would like to magic them, to get the lot of them out, to be able to go over to the Karaaf wetlands area.

One of the things here – back in 1995, when it was all paddocks, that was the ideal time to put wildlife corridors into the planning scheme, to plan for it. They would be compulsory, and of course we did not do that. And apparently Surf Coast shire had a grant about 20 years ago to do this, and for some reason they managed to not do it and not spend the grant. But all over the state this should happen. Every municipality should have wildlife corridors in their planning scheme, and it should be compulsory to comply with them. As it currently is, it is optional – it is optional for municipalities to ask for a wildlife corridor for a particular development, and it is optional whether anything happens. There are no penalties. Even if you do put in a wildlife corridor, as our developer has, if you do not do anything about it or it does not work, there is no penalty, so there is no incentive whatsoever. Separately to this inquiry we are trying to talk with the Minister for Planning's office to get the wildlife corridors into the planning scheme, and that would be across the state.

Rheya LINDEN: As Jo pointed out earlier, on his development plan he quotes a biolink, but there is no biolink. It goes along rusty fences from one end of Messmate Road to the other and meets Surf Coast Highway, so there is a little triangle. It was a pretend corridor, and obviously the council responsible for issuing his permit to build did not actually check. Had they checked and looked where he was saying the biolink was – it was probably more that the sheep used to walk along the fence line and created a little pathway, but it is not what kangaroos need. I was going to say a lot of the rescuers in the area have told us that before this development began there were probably around about 120 kangaroos in this section alone, and they linked up through the existing corridor with the other mobs, so they used to move around together. We now have between 30 and 35 kangaroos, mainly females and young, and at some point – around 2019 – they dropped to around 20 when all the building was sort of clamouring around them, so they have definitely been reduced.

It is my turn again to talk about solutions. As we have seen throughout the inquiry from various presenters, the landscape for kangaroos and other wildlife is impacted by the consequences of irresponsible development. We

are not down on development as such, but when it does not take note of wildlife needs in habitat we are against it. The irresponsible development I am speaking about is the form that fragments habitat. However, there are solutions, which is good. It is only the evident lack of will at both local and state government levels that resists their application. You will note we have got two categories of solutions up on the slide. As suggested by the categories, in contrast to a proactive approach on the right, reactive solutions are responses to harms already inflicted by landlocking – bandaids on wounds, so to speak.

The first one I will look at is speed reduction. On its own it is limited, but it is effective if embellished with clear signage at road-strike hotspots and intensive driver education – we think this is particularly important – so they know why they have to slow down and they see the effects of not slowing down. Road humps in the lead-up to hotspots would be really useful, because they actually enforce a slowdown. You cannot go fast over one of those humps. And two-speed roads, I think, are a really good idea – day and night speeds where the slowdown happens at night. This was suggested by the Victoria Uni research team. Ron Day, I think, was the colleague who suggested this. The people who undertook the three-year trial on Phillip Island suggested this, because most of our wildlife seem to get active at dusk. Even if you wanted to preserve a higher speed during the day while vehicles were using that road – as Messmate is a highly used road – you could slow it down at night and allow drivers to understand why you were doing this. This goes back to the education element that councils could undertake.

The next one I want to look at is translocation, because this is often put forward as another reactive solution when landlocking has occurred and the kangaroos simply have nowhere to go. We have got a few concerns about translocation as a real solution. It is problematic for rescuers and wildlife, especially kangaroos, inducing high stress levels and capture myopathy, which kangaroos are really prone to. Their ability to find their way back from a new site if it is within a 20-k radius of where they are moved from makes it really dangerous, because they are going to be having to cross roads in front of traffic in an unfamiliar place. They are really going to disperse and are not going to go, so road strike is going to increase. There are no guarantees that new habitat will not be subject to development in the future. So you take the kangaroos from point A to save them from landlocking, move them beyond 20 k's where they cannot find their way back and put them on a new site, and what is to say that with the peri-urban rate of development that that site too is not going to be subject to fragmentation in days to come.

There is a lot more I could say about this issue, but I am sure DEECA themselves are not very happy with this as a remedy. Although when DEECA were DELWP – no, it might have even before they were DELWP; they might have been DNRE – they rescued a group of kangaroos on a hill that got flooded. I have forgotten exactly where it was, but they were able to use helicopters and all sorts of resources to lift the kangaroos onto another site away from the floodwaters and actually did save their lives. I suggest if translocation has a place, that is how it has its place, as a highly resourced, professionally led – probably department led or at least monitored – way of saving kangaroos that are actually in dire circumstances. It is not just translocating them from landlocking, we need to talk about something really critical before we use this. It is at best an option that responds to an immediate danger but not a structural solution capable of preventing future landlocking. That is where we find some of the lapses in the reactive approaches.

Underpasses and overpasses – these are probably our favourite in relation to reactive solutions, simply because they have been done and successfully done right across the world. The above underpass is actually at Spring Creek. It is in need of repair, but it is used by swamp wallabies, echidnas, lizards and other small wildlife to access the Spring Creek area, which is a good space for wildlife, to be able to go under the really busy Duffields Road, which is the road you can see above it. Unfortunately, it is too low for kangaroos, but it could be renovated and lifted. I am not sure how much lifting the road itself would permit, but perhaps they could go down and dig down to allow access for kangaroos. Unfortunately, in any case, the pathway to this escape option for the landlocked mob that we have been addressing has been blocked by the development we have been considering, so they could not make their way. Even though this is not very far away from where they are, they could not make their way to this underpass and get to safe ground.

Image 2 is fantastic. It is a German model, and it is ideally positioned across a major highway. Obviously the planning for this was part and parcel of building the highway. What it does is it connects with habitat on both sides. As you can see, it is like a little addition in the middle between two parts of an already existing biolink. It is just a little small addition that makes all the world of difference to the wildlife, who can cross safely across that grassy pathway to the other side and cross back. In fact this actually regenerates a movement corridor.

Successful examples of this form of wildlife protection proliferate across Europe, Canada, the USA and elsewhere. Even in places in Africa we have seen examples where wildlife has been helped in this way. But I think it still must be contextually relevant. A bridge to another busy road creates an 'out of the frying pan' situation, so where you place a bridge or an overpass is really important to its effectiveness, and that is why the German model is perfect.

Now I am going to go to our last category. It is called passive relocation. We called it that because it is a proposal that we developed, meaning Animal Active, in conjunction with a lot of Surf Coast stakeholders and in discussion with Barwon DELWP, now DEECA, over 2019–20, over incremental concerns that time was running out for the landlocked mob and options for assistance were scarce. There are a lot of details and I am not going to go through them all, but the key features involve the use of fences to gradually encourage the landlocked mob to move safely from the development site, where they are now landlocked – and it was specifically developed for this particular mob – and eventually reach a former safe movement corridor towards the Karaaf wetlands.

The way it was supposed to happen, DELWP was overseeing the proposal and requesting further information, so in the end we ended up with a revised proposal that DELWP felt could be acceptable, because it was very different from translocation and without the dangers of translocation. We, with DELWP oversight, undertook the first stage, involving mounting a camera along busy Messmate Road at the 80-k-per-hour stretch mainly used by the landlocked mob to access an adjacent flower farm – it is sort of up the road, but it continues around towards the Karaaf wetlands. The camera was actually provided by DELWP with advice on where to position it in order to establish the precise crossing points that the kangaroos were using.

We really did obtain very useful data, and in further conversations with DELWP we were advised that our proposed trial would likely be approved, as it avoided the dangerous features of active translocation, with no darting or removal to unfamiliar sites risking attempts of return. It was very gradual; it was estimated to take up to about a year for us to actually achieve it – or maybe more. We did not put a timeline on it; we just wanted to get started. It was very gradual, thus avoiding stress and capture myopathy to which kangaroos are prone et cetera.

The next stage prior to approval was to gain the developer's consent, as sections of his fence would have been affected by the trial process. We needed to create an opening from a section where the kangaroos crossed along his fence line in order to allow them to pass safely through. We tried; he refused. In fact he said he would sue us for trespass if we tried again to do this. He claimed that in his view the mob were not landlocked. His understanding was that they could get onto the roads, so they were not locked in in that sense. So his response spelt the end of our fledgling attempt to trial passive relocation. However, as a proposal we believe it is still promising. A successful trial would provide a precedent for landlocked mobs whose survival chances have otherwise run out – but with the proviso that, like all reactive solutions, success is still contextually dependent. For example, in the case of our proposal, we already noted it was essential that a formally used movement corridor was still available – that is, across the flower farms and then around to Karaaf wetlands; they could go there and they could come back. Council cooperation for traffic slowdown and/or temporary road closure when needed as the mob began to move was also an important factor. Unless you could contextualise the necessary conditions, it would not work. If the Karaaf wetlands were not there and we could not establish a crossing that would provide them the safety they needed, it could not be done.

Over to the right – and I am going to go to you again, Jo, but I will just quickly introduce proactive. It is pretty obvious – it is up there, what we mean – but you will notice that we only have one proactive solution, as we believe it holds the promise of ending landlocking altogether through planning scheme reform. It entails strict wildlife protective measures to be mandated as conditions for approval of development plans, and these include – and they are listed there, so I do not have to go through them again. Permit applications impacting wildlife habitat should begin with the engagement of an ecologist. When a developer approaches a council for a planning permit, the ecologist needs to take that first step of providing a survey, an independent survey of what wildlife species actually reside on the land that is due to be developed and what their survival needs will be going into the future. That needs to be provided by an independent professional, and that needs to go into the council that is going to provide approval with the permit application itself. So before any land is touched or turned over by earthmoving equipment, this needs to be done. In the case of kangaroos, this includes the preservation of existing interconnecting movement corridors – 'interconnecting' is the key word there; they need to touch each other so the kangaroos can move – or in some cases, if possible, the creation of safe new

corridors within the familiar landscape, away from main roads and other hazards such as off-leash dogs. And ultimately it is the retention of sufficient habitat, whichever wildlife species we are speaking about – tree cover and existing sources of food and water to ensure long-term survival. They are the conditions we believe need to be built into the planning schemes.

I am going to ask Jo – do you mind? – to follow up with the way overlays in planning schemes can provide the solutions.

The CHAIR: We might just need to keep it relatively brief, just to have time for questions.

Jo CONNELLAN: It will be brief.

The CHAIR: Wonderful. Thank you so much.

Jo CONNELLAN: So just really repeating that if every planning scheme in Victoria, all 79 of them, had to have wildlife corridors in them, every municipality had to identify where the movements are and it was added like an open space thing – it could be a zone, it could be an overlay or it could be just an extension of the open space – if everyone had to do that, it would not be a subdivision-by-subdivision proposal, which it currently is. Now there is your municipality, you put your subdivision in and you might have to put a little bit of a wildlife corridor in there or you might not. Even if you do, it does not matter whether you do or do not, because no-one takes any notice whether it works or not. That is the sort of nonsense that is going on now. If every municipality had to have it all mapped out beforehand, then when you apply, there it is: you are applying to divide land which has got a corridor, and you have to do the work to show how you are going to maintain that corridor through your land. I think that is the future. It would go a long way to resolving the issue, and particularly that is the case for kangaroos in the future.

The CHAIR: Great.

Rheya LINDEN: You will be happy to know we are summarising now. We are done – almost. To summarise, in proposing a proactive response to the wildlife crisis this inquiry has addressed, namely road strike, we are looking for structural change that will prevent landlocking altogether. Unless you can go forward, not landlocking wildlife, you have lost the battle, essentially. We have profiled one vanishing mob of Torquay kangaroos trapped beyond survival as houses squeeze them into ever-diminishing space, bordered on every side by high-speed roads. Our case study actually illustrates both the what and the why of unrestricted development, presenting a template for similar outcomes across the state as witnesses reported on or anticipated by wildlife rescuers to pick up their broken bodies.

Current landlocking hotspots include Greater Geelong, Armstrong Creek, Mount Duneed, Bells Beach, Anglesea, Bundoora, Plenty Gorge Park, Mernda, Watsonia North, Greensborough, Whittlesea, Melton, Hume, Yarra Ranges, and the list goes on. I mean, we have not plotted every single hotspot, but they are all there. The underlying cause in every case is precipitated development in the absence of responsible guidelines and enforced planning procedures to ensure wildlife welfare.

Okay, so on a positive note, let us end with a reminder of who our clients are in fighting to end road strike and landlocking. It is not the obscenely high numbers of wildlife carcasses that are spread across our nation's roads. We have already lost that battle. Our clients are the living ones whose future, through robust protection of their survival needs, is still in our hands. And our brief is to create the planning tools for moving forward with the provision of urgent housing for people and, in tandem, equally urgent safeguards for wildlife habitat and safe movement across the traditional landscapes.

I would like to end by thanking Jody Oliver, who is a Torquay wildlife rescuer of 30-plus years experience and whose images of the landlocked Torquay kangaroos, including this one, have been used throughout our presentation. Her photos are captured in daily monitoring. She is there early in the morning just to see if any have been knocked down at night and so on, just checking their health. Her photos tell the stories of the forgotten ones, lifting them from the anonymity of mere faces in the mob to a recognition of individual lives, families and communities. Thank you.

**The CHAIR**: Great. Thank you so much for that presentation. It was really thorough. We now have time for questions. Members, we might need to keep it to one or two each, just to keep it to time. I am happy to kick off.

You obviously distinguish between reactive solutions to wildlife road strike and proactive solutions. Obviously both play a part, but which one do you think should be our priority as we move through this process?

Jo CONNELLAN: Can't we do both?

The CHAIR: I would love that, but as a committee we need to make a number of recommendations.

**Jo CONNELLAN**: One of the recommendations about the reactive solutions could be, for example, establishing a 10-year fund of X million dollars that local government can apply to to get grants to do underpasses and overpasses and all those other things to solve existing problems. That would be a good way forward, because local government will not do it by themselves, and they are a bit strapped for money at the moment thanks to rate capping, essential services rates and all the other stuff. But something like that, a 10-year rolling fund for a grants program for local government, would be good. That would be a way of addressing some of the –

Rheya LINDEN: Similarly with speed reductions, that obviously has to stay on the agenda.

**Jo CONNELLAN**: They would apply for the grants for that too.

**Rheya LINDEN**: Yes, that is what I mean in relation to grants. That is still costly for local councils to deal with, with signage and driver education and all the things that we have suggested need to be boosted. A simple traffic speed reduction is not going to do it, but if you embellish it with the other things we have suggested, it will be costly but it will be robust. I think that needs to stay. Obviously we want to stop landlocking altogether. We want the kind of consideration for native wildlife survival that the proactive option offers. That is really our end game.

The CHAIR: Great. Thank you. You spoke a little bit earlier about translocation and how it is used as a reactive fix, and obviously in an ideal world we would not need to use translocation at all. There have been a few examples of where translocation has been undertaken by the department after a very long and lengthy approval process, only for it to fail. There are many views in certain examples across the wildlife community that they were set up to fail based on numerous aspects of the plan. Do you have any examples that have been successful in Victoria with land-locked populations or other populations of kangaroos?

Rheya LINDEN: Look, they are very small numbers. If you have a property and next door is a mob of half a dozen kangaroos that could easily be moved to safer ground, theoretically if you gathered a team of seasoned wildlife rescuers, vet support and dart experts, you could do it, especially if it was within proximity where you could keep an eye on the kangaroos. Under DEECA provisions they have to be watched for at least two years after they have been translocated, because kangaroos, as I said, are hardwired to like their usual interconnecting movement corridors. They do not do well in unfamiliar territory. It could fragment the mob and diminish their size and their capacity to move together. There are a lot of problems with translocation. But as I said, there was a successful one that DNRE undertook, which was very successful. As far as I know, all the rescues survived. I am not sure of all the details, but it would have been extremely well resourced, and I think that is where it is successful.

The CHAIR: Great. Thank you. We will go to Mr Welch.

**Richard WELCH**: Thank you, Chair. Thank you both for your presentation. Just a quick question on the landlocking itself: where is the battle lost? Is it lost when the PSP comes out, or is it lost at the point of subdivision?

**Rheya LINDEN**: It is at the point of where the development actually starts. This site that we have profiled today was in the family for, I think the developer said, up to about 100 years. It has been in their family; it has been passed on. No-one bothered to develop it in all that time, and then he came back from travels and decided he was going to do it.

**Richard WELCH**: Was it under a PSP already? Did the PSP make the landlocking inevitable, or was it the subdivision that made the –

Rheya LINDEN: I think it was a subdivision.

**Jo CONNELLAN**: Think of a kangaroo's movements. He has got this little bit of land. Even with the best intentions you might not be aware that your little bit of land, if you cut it off, is going to put a stop in the thing. He was not to know that he happened to be in the middle of the thing.

Richard WELCH: Right. Okay. But it was at the point of subdivision that it became irreversible.

Jo CONNELLAN: That is right. It became obvious that was going to happen.

**Richard WELCH**: What is the minimum space required for a corridor?

**Rheya LINDEN**: Well, they need to move. They need to have movement corridors.

Richard WELCH: Can you quantify it in any way?

**Rheya LINDEN**: It does not matter. As long as they are safe, away from main roads and they can access food, water and mating options, their survival needs are met.

Richard WELCH: But you described a little track.

**Jo CONNELLAN**: You are looking for something like a bike path, aren't you? You put in the 3 metres or whatever –

**Richard WELCH**: No, no. I am just asking what would be required. If we were to say to landowners, 'You can't use this bit of land,' we need to at least give them an understanding of how much they need to give up.

**Rheya LINDEN**: Can I just make a point there? We are not telling landowners they cannot use their land. We are telling landowners they can do anything they like on their land as long as there are conditions in place, through our proactive approach, so that if there is a wildlife corridor that crosses their land, they need to preserve it and they need to have expert advice on how to do that. I think there has been a bit of confusion here. This site was laying there bare; it actually provided part of the corridor. But when the development started, the fences went up, the machinery came in and it severed the corridor. It was completely severed.

Richard WELCH: So if you are going to leave that corridor open, how wide does it need to be?

Rheya LINDEN: There is a grass tree reserve nearby. He could have –

Jo CONNELLAN: That is probably hard.

**Rheya LINDEN**: Yes, it is hard – hidden. There are ways in which he could have kept that corridor open. It is too late now because all the buildings have gone up.

**Jo CONNELLAN**: But when you are developing planning schemes – for example, if you are doing open space, they generally go down creeks, so they will go 'creeks plus 20 metres'. It is considered that the creek cannot just be the water, it has got to be X. I do not know a number which you would say is a movement corridor, but it would be similar – it would not be 20 metres.

**Richard WELCH**: I think that would just be helpful because the way some people will look at this is they will look, like you did with your map, top down, and they will need to be able to say, 'Okay, that's inadequate, but that's adequate.' We need to know what the difference is.

**Jo CONNELLAN**: What we need to do is get municipalities to agree they are going to map out the wildlife corridors. They will map them out, and then we will get to see where they are now and –

**Richard WELCH**: And that is sort of my other question.

**Jo CONNELLAN**: They would be squeezed a bit too, but they would still work – what is then the minimum you can do. But because we have never had to do that, we do not know.

**Richard WELCH**: That mapping information is not readily available. Is that right?

**Jo CONNELLAN**: No. People have not done that.

Rheya LINDEN: I think it is an important question that you are asking, because the mapping information should be available. But again I think it is contextually relevant; it depends on how many kangaroos are there and where their survival needs are being met. If they do not have to travel too far to meet those needs, they probably do not need to – they can get water, food and so on. Someone pointed out on a map of a Diamond Creek or Whittlesea area where – I do not know which council was involved here; it was across quite a big landscape – you could actually see the wildlife corridor. It had been put on the map, which just goes to your question. I think it is very important.

Richard WELCH: Yes, it does.

**Rheya LINDEN**: But in terms of the length of a corridor, I do not think that is as significant, because how you are going to assess that is in terms of how it can meet the needs of the mob.

**Jo CONNELLAN**: But it is about getting the data in each different space. If you are up in the Mallee, they do not need much space I can tell you.

**Richard WELCH**: It is hard for the developer to plan against it if they do not have the information.

**Jo CONNELLAN**: Which is why doing it beforehand, when they are greenfield sites – like you go down there to Torquay now; that was all just farmland. It did not matter where they were when it was farmland, it only matters when the property value goes up a hundred times because it has just been subdivided and it has been rezoned. That is when it matters. Before it rezones, you need to work that stuff out. But if every municipality had to do that, had to map out their wildlife corridors, we would be getting somewhere towards being able to put it onto – and it may simply be the open space zoning, the planning scheme, and it just is extended to go over these different –

Richard WELCH: Who should do that mapping, do you think?

Jo CONNELLAN: Councils should do it. They would do that.

**Richard WELCH: Not DEECA?** 

Jo CONNELLAN: It would be great if DEECA would do it.

**Richard WELCH**: You do not have a particular view on it?

**Jo CONNELLAN**: No. But whoever does it needs to be talking to wildlife rescuers in the area, because it is not an academic exercise; there are actually people who know where kangaroos and wildlife move around. You need to have real people helping map it out, so it would not matter who did it, really.

**Rheya LINDEN**: Not only where they rest but also where they move around.

Jo CONNELLAN: That is right.

Richard WELCH: Thank you. Thank you, Chair.

The CHAIR: Thanks, Mr Welch. Ms Copsey.

**Katherine COPSEY:** Thank you so much for your presentation today. I think it has really brought to light something that has come through a bunch of the witnesses that we have had today, which is that if this is put down to the level of land managers to manage, which is, I think, where a lot of the responsibility lies, particularly with kangaroo management at the moment, it is going to fail because the land manager, through no fault of their own, only has authority over their parcel —

Jo CONNELLAN: That is right.

**Katherine COPSEY**: and they do not understand the broader context. So hearing from DEECA before that it is up to the land manager – I think your presentation exposes the folly of that approach really.

**Jo CONNELLAN**: The planning scheme should be for not just humans, it should be for everyone that is using it really, every creature. But we do not. We have planning schemes for people. We just kind of forget everyone else.

**Rheya LINDEN**: And the reality is that it is cheaper to shoot them. The land manager can easily get a permit to kill rather than provide for their requirements. I mean, no developer, if they are in it for the money, is going to go too much out of their way unless they are particularly wildlife savvy and friendly to do anything different. As our developer has told us, they are not landlocked; they can get over the fences and onto the roads.

**Katherine COPSEY**: Yes. There is not a common understanding of what that term even means.

Jo CONNELLAN: Yes.

**Rheya LINDEN**: That is a really good point you are raising there.

**Katherine COPSEY**: I think it has also illustrated that even where kangaroo management plans exist as part of a permit at the moment, the enforcement of those is really challenging for councils. It is quite onerous in terms of resources.

**Jo CONNELLAN**: Well, there is no stick, so it does not matter. If you do not comply with your permit, there is nothing that councils can do really. They might have asked you to put a wildlife corridor in there or put something in, but there are no penalties if you do not do anything about it, so it is useless.

Katherine COPSEY: Yes. And just one last question from me today: we have had at least one local government representative in today from Hume, who was responding to community desire to see a better solution to this and asking for a more collaborative approach across a number of LGAs but also asking state government for support to make kangaroo management work better in terms of their planning. I am just interested in your reflections also on the community's willingness to help be part of this solution. Do you think, based on your experience with people in Torquay who know their individual mobs of kangaroos down to probably, I would say, the individual animal level, there is enough passion in community that if there was resourcing provided to help preserve and even enhance wildlife corridors that is something that community members would be interested in?

**Jo CONNELLAN**: It needs to be properly resourced. I mean, all the rescue sector is exhausted. There are so few people doing such a big job. They are all a bit mad and a bit exhausted. No wonder they are a bit, you know –

**Rheya LINDEN**: They were definitely engaged with it, because this is their daily reality – picking up carcasses and looking for babies in pouches. I mean, this is incredible work that they do, and it must be terribly, terribly –

**Jo CONNELLAN**: The idea of annual grants is like – get a business model that is ongoing. How can you run a business when maybe you will or maybe you will not get a grant next year? Or do I need to get a second job next year because I am not going to get the grant and I am going to have to keep my shelter going? I am full of admiration for how they do it. I do not know how they do it, because it must be so stressful.

**Katherine COPSEY:** I was thinking the broader community, not just the people who are actively engaged in rescue now – that it is really, really hard work. We have heard directly from rescuers today about just how difficult that is. But they also spoke about how there seems to be a general interest by the public to do some of the higher up work, away from the crisis point. So I am wondering if there would be interest in protecting and enhancing wildlife corridors. That would be something that the general public could get more involved with, even if they could not do that really hardcore rescue work.

**Rheya LINDEN**: At the moment we are engaging at a lot of levels. I mean, we are a networking organisation rather than a member-based organisation. What we do when we are campaigning for particular groups of animals is we link up, network with everyone who is working in that field and work together. So we are the advocates, but they are the people with the daily experience. It works really well – actually, it is a very flexible approach to campaigning. We are also talking to the ministers, the Minister for Planning and the Minister for Environment, at the moment through their offices. But we are also beginning, from tomorrow, a

tour of councils. We are seeing the City of Greater Geelong tomorrow because they have a terrible development-based situation at Armstrong Creek and surrounds. Their planning department seems really positive about finding solutions, so we are really looking forward to this. We have got quite a few councils that are doing good work. We are going to tour them all, but we are also going to present them as paradigm cases when we go and see the ones that are not doing anything. I hope that is a strategy that is going to bring about some change to point out that it is doable and that these councils are actually starting the process and others should be thinking about it.

**Jo CONNELLAN**: If we can convince half a dozen councils or more to request the Minister for Planning to amend the planning scheme to introduce this, we have got a good chance of it happening. You usually need more than one to do it. There might be six; it might be 12.

**Rheya LINDEN**: I think we have got about five or six at the moment, good ones or semi-good ones, and then we will tackle the baddies.

Katherine COPSEY: Good luck with that work.

Rheya LINDEN: Thank you.

The CHAIR: Thanks, Ms Copsey. That is right on time. Thank you so much for making the time to present to us today. We really, really appreciate it. That concludes the public hearing, and all Hansard and broadcast equipment can be turned off. That concludes all of our public hearings.

Committee adjourned.