

# TRANSCRIPT

## LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

### **Inquiry into Ecosystem Decline in Victoria**

Melbourne—Tuesday, 20 April 2021

#### **MEMBERS**

Ms Sonja Terpstra—Chair

Mr Clifford Hayes—Deputy Chair

Dr Matthew Bach

Ms Melina Bath

Dr Catherine Cumming

Mr Stuart Grimley

Mr Andy Meddick

Mr Cesar Melhem

Dr Samantha Ratnam

Ms Nina Taylor

#### **PARTICIPATING MEMBERS**

Ms Georgie Crozier

Mr David Davis

Dr Tien Kieu

Mrs Beverley McArthur

Mr Tim Quilty

**WITNESSES**

Mr Jonathan La Nauze, Chief Executive Officer,

Dr Nicholas Aberle, Campaigns Manager, and

Mr Tyler Rotche, Healthy Rivers Campaigner, Environment Victoria.

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

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

At this juncture I will take the opportunity to introduce the committee members to you. I am Sonja Terpstra. I am the Chair of the Environment and Planning Committee. This is Mr Clifford Hayes, the Deputy Chair, and Dr Samantha Ratnam. Appearing with us via Zoom are Ms Nina Taylor and Dr Matthew Bach. Back in the room are Mr Andy Meddick, Ms Melina Bath and Mrs Bev McArthur.

All evidence that is taken today 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.

If I could get you all just quickly for the Hansard record to please state your names and the organisation that you are appearing on behalf of.

**Mr La NAUZE:** Jono La Nauze, Environment Victoria.

**Dr ABERLE:** Nicholas Aberle, Environment Victoria.

**Mr ROTCHE:** Tyler Rotche, Environment Victoria.

**The CHAIR:** Great, thank you. With that we would welcome an opening statement from you, and if you could just keep it to a maximum of 5 minutes—there are a lot of us here, and we will all want to ask you questions—that will allow us more time to ask you questions. With that I will hand over to you.

**Mr La NAUZE:** Great, thank you. I too pay my respects, and on behalf of my colleagues, to traditional owners and any First Nations people present.

When I joined my first conservation campaign old-timers and Aboriginal elders would reminisce about rivers in northern Victoria that would run clear for part of the year—clear enough that you could see the Murray cod swimming along the bottom—and I remember marvelling at how this change could have taken place in their lifetime. The rivers that I grew up with just across the border in Albury were only ever clear in the upper reaches, up in the mountains. Down on the flood plain they were generally turbid due to a combination of erosion and carp and other river management challenges.

I more recently spent this Easter hiking in the Bogong High Plains, a favourite outdoor playground of mine from my childhood. I had my young son with me, and I had this moment when I realised he would never see the Australian Alps in the way that I had growing up. In my lifetime—in fact in the latter half of my lifetime—90 per cent of the Victorian distribution of snow gums has burnt. Mature snow gum woodland is now very hard

to find in our state. Fires are returning so frequently that where snow gums do bounce back they do not reach mature or old-growth stage, and in some areas it appears they are not bouncing back at all. In my lifetime human-induced climate change has turned fire into an existential threat for snow gums and indeed many other ecosystems in Victoria.

As the committee has already no doubt heard from many expert witnesses and submissions, some of which I flicked through last night, ecosystem decline in Victoria is driven by multiple factors, many of which are amplified and accelerated by climate change, which is why currently the biggest area of our work at Environment Victoria is the transition to a zero-carbon economy. After 51 years of campaigning to protect Victoria's natural heritage and ensure everyone is able to share in and benefit from a healthy environment, we recognise that climate change is an existential threat to everything that we, our members, have achieved together.

But climate pollution is not our exclusive focus. Victoria can and must address the underlying drivers of ecosystem decline at the same time as it plays a leadership role in decarbonising Australia's economy. Indeed with at least 1.5 degrees of warming more or less locked in already, eliminating these underlying drivers, these other threats, is even more important. The ability of Victoria's ecosystems to survive and adapt to this climate change that is already with us absolutely depends on it. I would also add that, unlike climate change, many of the threats that you have been hearing about and that we are going to talk about today are almost exclusively within the domain of the Victorian government to manage.

Alongside climate change our other main campaign right now is for the protection of freshwater ecosystems both in Victoria and across the Murray-Darling Basin. The core issue here is one of habitat. Fish, waterbirds, wetland plants and aquatic species of all kinds need water in the right place at the right time in order to feed, migrate and breed. Not enough water, water at the wrong time of year, poor-quality water—not only do these problems hinder our native species but in many cases they actually also give a leg-up to invasive species. Carp are the classic example as they can breed in a much wider range of conditions than our native fish. Our Healthy Rivers Campaigner, Tyler Rotche, is here today to answer any questions you might have on that topic. I can also add if needed.

Our submission also touches on shortcomings in Victoria's threatened species legislation. The *Flora and Fauna Guarantee Act*, simply put, just does not do what it says on the packet. In simple terms this comes down to the fact that implementation and enforcement are kind of like optional extras. They should be factory fitted; they should be standard. But it comes down to bucketloads of discretion. Our Campaigns Manager, Nick Aberle, is probably best placed to answer questions on the *Flora and Fauna Guarantee Act* and environmental regulation more broadly. We do believe that further reform to the Act is required, but ahead of that the government can and should take a range of steps to more fully exercise the existing capabilities of the Act to protect Victoria's native flora and fauna, which brings me to the issue of resources.

No species or ecosystem should go extinct simply because of a lack of funding. We are a wealthy country and a prosperous state. Victoria's natural heritage is ours alone to protect, and we must ensure adequate resourcing is there for the government agencies, the community organisations and the many small businesses and large that are trying to do so. If there is one consistent message that I am sure this committee has heard across a whole diversity of stakeholders, it is the need for more funding. Whether it is Trust for Nature's revolving fund, Parks Victoria's budget for invasive species or the need to enhance our remote area firefighting capability, the budget for nature must grow.

Now, at the beginning of my statement I referred to the ecological changes I have seen in my lifetime, and I want to close by referring to another change I have seen in the Victorian bush, this one I think more positive. The number and diversity of people getting out to enjoy nature is growing extraordinarily. Love of the Australian bush transcends political, religious and cultural differences. Every one of you on this committee I will bet was elected by constituents who want to see Victoria's natural heritage passed on to future generations, and that gives me great hope. Thank you.

**The CHAIR:** Thanks very much. Mr Hayes.

**Mr HAYES:** Thank you very much. Thanks for your submission and the presentation. We have heard before about independence of regulation. Could you talk to our need for an independent regulator, if you think that that is one of the major requirements, in evaluating projects and submissions et cetera?

**Dr ABERLE:** Sure. We in Victoria do not really have an independent regulator in the same way that some other states do. For example, our Environment Protection Authority is really focused on pollution and the impacts of pollution, so the EPA in Victoria does not look at biodiversity in the way that, for example, the South Australian and I think New South Wales EPAs operate. So I think there is definitely scope for greater regulatory oversight there, and independent regulatory oversight. More recently in Victoria we have established the office of the chief conservation regulator—have I got that right?—which is starting to play that role. But as you are probably aware—I think the chief regulator has already given evidence to this committee—that is not a statutory role, it is not an independent role that sits within the department, so I think there is definitely scope for the scale and breadth of that type of regulation to be expanded.

**Mr HAYES:** Can I just ask as a follow-up: the government and half of economists have plans to increase population and urbanisation—under what conditions can we do that safely with the scale of environmental destruction that is going on?

**Dr ABERLE:** That is a big one.

**The CHAIR:** Rather large.

**Mr HAYES:** Some idea on what you think of those sort of plans.

**Dr ABERLE:** There is an enormous land use question in that, right? We have finite space and we have finite resources, so the idea of never-ending growth on a finite planet is very challenging. I think in terms of population growth, economic growth, we need to stay within our limits, and from a population perspective urban growth is a challenge. I mean, we see the continued expansion of Melbourne is impacting some very important and sensitive ecosystems. We could avoid those impacts by increasing our density. We are a very low-density city, we are a very low-density country, so I think that seems to be an obvious first step. We have finite space. The space that is out there is hopefully doing something, whether it is a forest that is providing habitat to native animals and providing ecosystem services to land that is providing for agriculture, food and fibre. But it is all about making the smartest, most efficient use of all of that space, and it does not really feel like we are using the best space of our urban areas, and further population growth would be better accommodated by slight increases in density rather than a continued expansion into either food bowls or important ecosystems.

**The CHAIR:** Mr Meddick.

**Mr MEDDICK:** Thank you, Chair, and thank you, all three of you gentlemen. Look, I noted in your submission that you talked about this balancing act that is being done on particularly the Murray-Darling area, but on all rivers really, about environmental flows versus agricultural takeaways and that the Victorian and New South Wales governments have done this thing about water offsets and all this sort of stuff. And it is this balancing act. But let us just imagine a situation for the moment where the Victorian government does what you are saying and takes charge with an aggressive policy in this area and says, 'Right, we're going to do this for Victorians and get a great outcome'. Just how much will that be stymied by this interaction? And there is this continual fight, it seems, between different state governments and the federal government over control of the water because we do have rivers and systems that flow between states and one state may say, 'Well, you can't have that'—and this has been borne out—'You can't have that allocation of water because we're taking the bulk of that for ours', and you are at the mercy of that flow. How do you propose that that would work? I do not think there is anyone in this room that has been able to come up with a solution to that infighting, if you like, between the states and federals on that one, and the fact that the Murray Darling is in the state that it is in is testimony to that.

Secondly, for Dr Aberle, on the *Flora and Fauna Guarantee Act*, can you just give us some suggestions quickly for how we fix it? If it is so wrong, how do we fix it? I know that is a very broad question, but I will leave it at that.

**Mr La NAUZE:** Do you want to take the rivers?

**Mr ROTCHE:** Yes. That is a tough question. Our position with rivers is that it is really just three things: it is buying back more water, restoring natural flows and investing in regional communities. So when it comes to the infighting that happens between states, there is really one thing that needs to happen every year, which is getting that allocation, the bulk entitlement, to South Australia. And that is where a lot of the fighting comes in, because how much does the Darling system deliver when it has really gone offline in recent years? But when it comes to what Victoria can do, there is still water that needs to be recovered in this state, and then from there it just comes to how do we make sure that the people who are giving up water are compensated and how do we ensure that the communities have a strong pathway forward? And that just comes with real genuine consultation, thinking about where can these communities that have an agricultural productive base go next, where do they want to go next, what is the vision for those communities? So it is a long-term process but it is something that we have to do.

**Mr La NAUZE:** I would just add that the commonwealth *Water Act*, if it were fully implemented, does provide a really solid basis for solving that. I mean, it basically says to figure out what is the minimum required to keep ecosystems healthy, not just across the whole basin, but from a bottom-up build of catchment by catchment—use the best available science and that will benefit your own state as well as the federated whole. The challenge has been, of course, that that has not been implemented fully, and that has been well documented by royal commissions in other states. But I do think the idea that we will get there through consensus alone was identified by John Howard as a fatal flaw in the logic, and it does need a strong commonwealth oversight.

**The CHAIR:** Ms Bath.

**Ms BATH:** Good, good. Thank you. This is most interesting. I was in the Barmah forest a week and a half ago and I was with someone who had been in that area, lived in that area, for 50 years plus. We had a walk along and there was a great swathe of dead red gums. I said, ‘What’s happening here?’, and he was lamenting it. He basically spoke about environmental flows, but they were out of season and they had boiled the soil and were killing the trees. I would like your opinion. Environmental flows are important—I will make that statement—but we can get it wrong. So managing that properly—I would like your opinion on that.

**Mr La NAUZE:** Sure. So without knowing the precise site, I cannot comment on that specifically.

**Ms BATH:** Yes.

**Mr La NAUZE:** But the challenge that the Barmah forest is experiencing at the moment is often mistakenly put at the foot of environmental flows, whereas actually what is happening is that inappropriate flooding at the wrong time of year, which none of us want, is actually being driven by the need to provide consumptive water downstream. So the Barmah forest is the narrowest natural part of the river, with the lowest channel capacity, and because of particularly a growth in water trade downstream—I have to commend Victoria’s water minister for actually putting a sort of moratorium on that issue—because of the growth in demand you have seen an increasing need to push water not just through Barmah in summer but also down the lower Goulburn, which is one of our best native fish nursery areas, and that is starting to really cause a problem. So, yes, theoretically, of course people can make mistakes. Environmental flows could theoretically cause damage if they are done at the wrong time of year, but that is not to my understanding what is actually causing the problem, which is a genuine problem, that you are referring to.

**Ms BATH:** And my second question is: in that same forest there were loads of weeds, and my lamenter, who has 60 years of experience in the region, walked around talking about, ‘Look at Paterson’s curse. It’s everywhere’; thistles; there are other trees that—

**Mrs McARTHUR:** Blackberries.

**Ms BATH:** Blackberries, yes. A whole range of other ones escape me just at the minute—mistletoe et cetera. He is lamenting—I think it is something that we have heard, and this is not about bashing up Parks Victoria—that it is flourishing. They are not meeting the need to reduce those pests and weeds, particularly weeds. So what is your magic wand? What would you like to see done?

**Mr La NAUZE:** I think, as I said at the start, there is a dearth of resources across all public land and arguably private land as well. I think private landholders, where they are performing a public service, deserve

some assistance in managing pests and weeds. But I certainly do not think there is any evidence that that is confined to the Parks estate as opposed to the broader public land estate.

**Ms BATH:** But this example was quite marked, I guess.

**Mrs McARTHUR:** On every roadside.

**Mr La NAUZE:** Sure. Invasive species are a problem, I think there is universal agreement, that we need to tackle, and it cannot be done without resources.

**The CHAIR:** Great. Thank you. Dr Bach.

**Dr BACH:** Thanks very much, Chair, and thank you, all, for your presentation and being with us today. I have been interested to note some new legislation here in Victoria regarding camping on Crown land, and I would not mind asking you about your views on that legislation. It will allow for greater access to river frontages and 28-day camping with dogs and camp fires and all the rest of it. Now, licence-holders have expressed some concerns about the environmental impacts and in particular the impacts on water. I would be interested in your views.

**Mr ROTCHE:** Yes. One of our main positions, I guess, is that, looking at the legislation, first it broadens the definition of where that camping can take place. Our understanding was that the election commitment was for rivers, but it seems like it might be even more broad to include as far down as ephemeral streams. There is another piece as well, on which our position is very much in line with that of the Victorian National Parks Association, which is that there should be a survey and an assessment of these frontages before camping is permitted. There might be sites where there is valuable vegetation, where riparian licences could be encouraged, and considering the different distances at which some of the things take place, like the use of soap, it would be useful for a survey of the sites to look at the boundaries—because, as we know, the rivers move so the crown frontages might have changed in nature—so that there could be some idea of which sites are suitable for camping, what might take place at those sites and what might the relevant risks be and then to open up sites on a site-by-site basis. Our understanding is that camping has been taking place for a long time informally and that there are favourite spots used by fishermen, so this could be a way to sort of manage that conflict happening now: look at the sites where camping is happening, where it will be likely to continue; are there valuable resources there; is it a valuable ecological corridor; and then go from there to permit camping.

**Dr BACH:** Thank you.

**The CHAIR:** Dr Ratnam.

**Dr RATNAM:** Thank you very much for your submission, the work that you do and your presentation today. I agree with you in terms of additional resourcing being a key solution that we need to consider. The other one we have been talking about is regulation and laws and their enforcement as well. In the second part of your submission you discuss Victoria's *Flora and Fauna Guarantee Act* and make some specific recommendations for amendments to the Act and additional resourcing to implement the Act. Would you mind explaining for the committee why you see these amendments and additional resourcing as necessary?

**Dr ABERLE:** Sure. Thanks very much, and I did not get the opportunity to answer a similar question from Mr Meddick earlier. The *Flora and Fauna Guarantee Act* has been around for several decades now. The Victorian Auditor-General's Office did an audit of it over 10 years ago I think, and it effectively found that the Act itself had not really been implemented. The Act, as Jono said earlier, provides a guarantee but it is not really doing what it says on the packet, and the reason for that is that there is an enormous amount of discretion in how the legislation gets implemented. Following the amendments to the Act that occurred, I think, in 2017, that discretion remains, so there is kind of this sequence of tools that are available. The first step is to actually get something listed as a threatened species, and there is a process around that. Once something is listed, the Act says it is mandatory for there to be an action statement, and the action statement should set out, 'Well, here's what needs to be done for that particular species or that ecological community'. But after that there is nothing that needs to happen, so we could have this plan for all 600 or so species that are listed as threatened in Victoria, but this Act that is supposed to give a guarantee for these species does not actually require anything to happen beyond the production of a piece of paper.

There are some really powerful tools in the legislation. There are habitat conservation orders and critical habitat declarations, and each of these could provide more protection for species—well, the critical habitat provides better protection, but the habitat conservation orders also say, ‘Okay, here are the things that we’re actually going to do. This will happen to support the survival of this species’. But unfortunately the critical habitat declarations and the habitat conservation orders are still discretionary. The Act sets out circumstances that must be met before a habitat conservation order must be made, so you cannot have a habitat conservation order unless certain things are satisfied. So there are hurdles to jump over, but there is nothing in the Act that says, ‘You must issue a habitat conservation order if—’.

What we would like to see is something in the Act that says, ‘If certain criteria are met, the minister must provide a critical habitat declaration or must issue a habitat conservation order’, because for something to have some kind of guarantee there needs to be a hard backstop that says, ‘Okay, if we get to this point, if a species becomes critically endangered, what are we going to do?’. It provides too much discretion to the minister of the day or the department of the day to say, ‘Well, we could do something, but we’re choosing not to for whatever reason’, and over the life of the Act that discretion has led to it just not being implemented. My data might be a little bit off, but my understanding is that no critical habitat determinations have been made and no habitat conservation orders have been issued under the Act—there might have been one or two but certainly not many—and that just sort of speaks to how ineffective the really powerful tools in the Act have been, especially when you compare that with what our state of the environment reports have been telling us in terms of the trajectory of our biodiversity and ecosystems.

**Dr RATNAM:** Can I ask a quick follow-up, which you can take on notice if you are not able to answer today. Just in terms of stepping out, which I think you have done really well, what the Act could achieve and some of the steps it has developed within it but then how it is essentially a kind of failure of its strength in terms of actually being able to step through what could be something that helps protect some of our critically endangered species, are there examples that you can speak to the committee about or take on notice and provide some information on where a species has been listed, an action plan has been developed and then we have had this set of requirements before the next steps, which the minister may use, which they obviously have not used, based on the fact that none those orders that have been made? Are there any examples you can share with the committee about what has got stuck at that middle process?

**Dr ABERLE:** It is a great question, and I do not really have an answer to that—

**Dr RATNAM:** On notice is fine.

**Dr ABERLE:** primarily because all that stuff happens behind closed doors within the department for the most part, so it is a bit tricky to get a line of sight into where those processes are up to. There is some requirement around public disclosure of the preparation of action statements, but then whether anything happens beyond that—there are no disclosure requirements.

**Dr RATNAM:** You talked about that middle step of an action plan is developed and then for the next step of either a restoration order or a habitat declaration there have to be some regulations, like there might be essentially a checklist of the minister saying, ‘You have to meet these tipping points before we’ll act on those other things’. Is that set of requirements publicly available for each of those threatened species?

**Dr ABERLE:** My recollection is that those requirements, for want of a better phrase, can be issued under ministerial guidelines, and I do not know whether updated guidelines have been issued under the new Act—I am just not sure.

**Dr RATNAM:** Right. That is fine. Thank you.

**The CHAIR:** Thanks. Ms Taylor.

**Ms TAYLOR:** Thank you for your submissions today—very interesting. So just following up on that invasive species aspect, which I think is a very real concern, the thing that plagues me is, on the one hand, I get that it must be soul-destroying to have things like Paterson’s curse and you are like, ‘Gotta get rid of this’, but, on the other hand, do we pour gallons and gallons of poison and then have rain and then have that get into rivers and streams? Is there any other way to manage this thing? Is that the best we have? It worries me because we know that stuff stays in the soil for decades, so what is your answer to that?

**Mr La NAUZE:** I mean, at a simple level I would say prevention is obviously the best cure, so we need to stop the expansion of invasive species. We have plenty of evidence about, whether it is plants or animals, what steps we can take to contain existing populations. I think we do, though, need to be pragmatic about the solutions that we then put in place to eliminate threatened species. I mean, this is on our watch. These species are here because of the civilisation, the society that exists here today, and it is on us to make the difficult decisions about how we manage them. There is never going to be a neat, clean, problem-free solution. In some cases you do have to weigh up the potential downsides of action.

As an example, it is yet to receive final clearance, but I was, at the federal level, on a stakeholder committee around the introduction of the herpesvirus for carp. That was something that was seen as potentially risky, but across the board, everybody—and it is not very often that Barnaby Joyce and I will stand side by side and agree on things—did think that it was actually worthwhile investigating through a thorough scientific process, because in the end the damage that carp are doing is too extraordinary. That scientific process, I am hoping, is coming to a conclusion and should in this case actually reveal that the risks are quite manageable. But we do have to take risks. That is the simple fact of life, and we have seen that through coronavirus as well. There are sometimes side effects of necessary measures to protect public health, but they need to be taken as well.

**Ms TAYLOR:** Okay.

**The CHAIR:** All right. I will just have a question if I can. Thank you very much for your presentation and your submission in this regard. You are probably aware that the Victorian government has released its *Biodiversity 2037* plan, and that is aimed at stopping the decline of our native plants and animals and improving our natural environment. What do you say about that plan? Are you aware of it, and what are your views about it? How does it help address some of the things we have been talking about today?

**Mr La NAUZE:** I do not have a detailed view on it. I do not know if Nick wants to add anything in particular or if he wanted—

**Dr ABERLE:** Not particularly. It has been a few years. I was involved in some of the initial consultation around it. I have not looked at it in detail.

**The CHAIR:** Okay. Right. Fantastic. And also in your submission you talk about the decline of several river ecosystems. So how does this decline impact surrounding communities, including traditional owners, and how do you advocate—or do you advocate—for greater involvement of our traditional owners in playing a role in the declining health of our waterways, for example?

**Mr ROTCHE:** Yes, absolutely. There was a cultural flows study, and I think that is one of the key ways to address it, thinking about: is it a transfer of entitlements and water ownership or is it more involvement in the process for figuring out how water is used? And I think both of those are solutions that depend on the traditional owner group. But there are a number of rivers where management as well, particularly of the flow regime—and the Barmah narrows was mentioned earlier—is out of line with the ability to maintain cultural priorities and cultural heritage. So consultation needs to happen, and genuine engagement, on all of those levels.

**The CHAIR:** Great. Thanks.

**Mr La NAUZE:** Can I just add: I mean, for example, in the north of the state, Victoria has a longstanding cooperative management agreement with the Yorta Yorta people. It was actually signed under Attorney-General Rob Hulls a long time ago, and through those agreements on a nation-by-nation basis this is where solutions can be found.

**The CHAIR:** Thanks. Mrs McArthur.

**Mrs McARTHUR:** Thank you, Chair. A question on notice: could you please list the 40 organisations that are involved, plus your funding. I presume you have charity status. You can do it on notice.

**Mr La NAUZE:** Can I just clarify: I am not going to provide the details of every single one of the around about 10 000 donors who contribute to us.

**Mrs McARTHUR:** No, no, the 40—just basically your funding, where it comes from.



So let us go back to the camping on private land where there are Crown leases, of which there are 10 000 and 16 000 kilometres of waterfrontage. Soap, you have raised, might be an issue. There is actual defecation—an issue. There will not be enough portaloos, I am sure, provided by every farmer, let alone the government, to overcome this—maybe a comment on that. And right here, right now in Victoria there are two major, I would have thought, environmental issues maybe you have been involved in: one, the dumping of PFAS-contaminated soil into a quarry in Maddingley, which could leach into the Parwan Creek, which flows into the Werribee River. What are the consequences of that to the marine life but also to that river flow? And secondly, the western Victorian transmission line is potentially going through a biolink in an area where landholders gave the land to government to create this biolink, to create a conservation connection, and trees were planted. That will be basically devastated. Do you have comments on those two particular projects and how they will impact the environment?

**Mr La NAUZE:** I will not specifically—I will go to the others—but just to summarise it: there is the PFAS and the transmission line but also the camping. Do you want to take the camping first?

**Mr ROTCHE:** On the Crown land, these are Crown waterfrontages that have grazing licences, and I think that speaks exactly to the point: there is going to be a blanket rule to allow camping, and our view and the view of other environmental organisations is that camping should be an exception rather than the rule. Considering the width of these strips of land and the distance that someone might have to use the facilities, we believe the land should be looked at first to make sure it is of suitable size for camping.

**Mrs McARTHUR:** Have you put a submission in? The submissions closed on Monday.

**Mr ROTCHE:** We put a submission in—that is right.

**Mr La NAUZE:** We will leave it to the submission.

**Dr ABERLE:** Just on the other two issues, the PFAS-contaminated soil is something we are broadly aware of, not something we have looked at in any particular detail. We have many individual donors but not enough donors to enable us to work on all the environment issues, unfortunately, so it is not something I can offer a particularly educated view on.

**Mrs McARTHUR:** It is a pretty significant environmental issue, I would have thought, if you are interested in rivers, waterways.

**Dr ABERLE:** We are constrained in the number of issues we can work on and we have chosen our focus areas of the rivers of the Murray-Darling—

**Mrs McARTHUR:** Climate change, for instance.

**Dr ABERLE:** and climate change and the energy sector. Your second question around the transmission line in western Victoria: we have not looked at it super closely. I have not seen where the company is currently proposing their final path.

**Mrs McARTHUR:** There is no final path.

**Dr ABERLE:** Yes. I mean, certainly we would be encouraging them to choose the least ecologically impactful path. I mean, Jono mentioned earlier about some of the risks and trade-offs that we need to take. Certainly these big transmission lines are going to have environmental impacts and that is not ideal, but the truth is the only way we can shift to a zero carbon electricity system is by building new transmission lines and the electricity grid to the places where wind and solar farms can generate clean electricity. That unfortunately is not the Latrobe Valley, where the vast majority of our transmission infrastructure currently exists, so we will need to be building new transmission infrastructure into new parts of the state. As I said, we would be very concerned if a biolink had a giant transmission line going through it. I have seen some examples in the US where sections of transmission line have gone underground. My understanding is it is quite cost prohibitive to put transmission lines underground, but whether it could be considered for a short stretch of it I am not entirely sure.

**Mrs McARTHUR:** It also impacts the Lerderderg forest, the Merrimu Reservoir and that conservation zone. Are you aware of that?

**Dr ABERLE:** I am aware of the general direction that the transmission line—

**Mrs McARTHUR:** And the issues impacting the environment and the species there?

**Dr ABERLE:** Yes. I mean, it sort of comes back to the points that Jono was raising in his opening statement, which is that one of the biggest threats that our eco-systems face is from climate change, and—

**Mrs McARTHUR:** And so we would trade off wrecking the environment and the forest areas and those conservation zones for climate change?

**Mr La NAUZE:** If I can, I think you are making an excellent case for independent planning and independent regulation. I do not think we are going to get to the bottom today of where the best route for any particular development—

**Mrs McArthur** interjected.

**The CHAIR:** Thank you, Mrs McArthur. I think the question has been answered. We have got a few minutes. Dr Ratnam, I will throw to you.

**Dr RATNAM:** Certainly. I have a couple of questions, and I am happy for them to be taken on notice given we are running short of time. One was in relation to river ecosystems. Your submission discusses supply measures or offset projects, which are projects that essentially try and provide equivalent amounts of environment benefit with less water through engineering solutions. Your submission raised some concerns with this approach, so I wanted to ask if you could explain in relatively simple terms for us to try and get our heads around it what your concern is with these offset measures.

Another question that I had, and again I am happy for either or both to be taken on notice for the sake of time, is that we have certainly heard through this inquiry so far—we are about halfway through—that the threats to species and biodiversity loss are climate change, habitat loss and the impact of invasive species. Understanding the climate work that you are doing, I was going to ask: in thinking about the deliberations of the committee and making recommendations about what we do in those three substantive areas, particularly on climate change, what would your top priority actions in terms of climate change be that you would like the committee to consider?

**The CHAIR:** You can take those on notice—fantastic. We do have a few more minutes, so, Ms Taylor, I might throw to you if you have got another question.

**Ms TAYLOR:** So I thought, Nick, it was really interesting—actually it is all interesting. What is not interesting today? It is all really good. Earlier you were talking about that tension between the continual spread of the urban sprawl versus being more innovative in the way we house people in cities, basically, or the urban areas. So playing devil's advocate, because having been a councillor and now a Member of Parliament, I know how difficult this issue can be—and it is across the world; it is not just an Australian issue—what would be your best argument to community and to those who might feel a bit scared about those kinds of changes? I think that would be just helpful to hear from you.

**Dr ABERLE:** About what kind of changes?

**Ms TAYLOR:** To sort of be able to accept, rather than more and more urban sprawl and smashing down more forest, actually being more innovative in our urban spaces—noting that our Victorian government is doing a lot of work in that space. Because, you know, when you are thinking about community, people can be a bit scared about these kinds of changes—and I understand why; I am not putting down those fears. What would be your best way of taking community on that journey?

**Mr HAYES:** To double the population, I suppose.

**The CHAIR:** No, no. It is a question about density.

**Mr HAYES:** Yes, right. How much density is required?

**The CHAIR:** The question is: when people are concerned about developments and the density increasing because they are not in a community—perhaps they might have house blocks where you have got houses set out. So the question is: if people are concerned about their changing environment and their changing communities, how would you take them on that journey? That is the question.

**Mr HAYES:** And loss of backyards, I suppose, and environment in that way.

**Dr ABERLE:** Yes. I mean, this is starting to stretch a little bit outside my field of expertise—

**Ms TAYLOR:** Right, okay.

**The CHAIR:** You can take it on notice if you feel it is.

**Dr ABERLE:** Maybe just a very quick comment is, you know, increasing urban density does not mean taking away everyone's backyards. You can focus increased density around specific population centres where infrastructure already exists. So, for example, in suburban Melbourne we could be building medium-rise apartment buildings with mixed-size apartments and all sorts of things around suburban train stations, for example. You know, the rest of the suburb can remain virtually untouched but along the main roads—like, say, you go out High Street Road through Glen Waverley or around Whitehorse in Box Hill. Those are examples where you can have increasing density.

And I think the truth is that a lot of people do enjoy being able to walk to amenity. We saw through lockdown just how important it was to be able to have something you can just pop out of the house and wander down to. I think there are a lot of benefits to be gained from that. You know, not everyone wants a quarter-acre block with a backyard. Those will be available to the people who really want them, but for all the other people we need to be offering more diverse housing and putting that in places where it can work for people's lifestyles.

**The CHAIR:** Okay great. Well, with that we are out of time. Do you want to do a question on notice?

**Ms BATH:** I do, totally. You referenced the camping submission for the VFA. Could you please provide that to the committee?

**The CHAIR:** You can take it on notice if you like. All right, we are out of time, so thank you all very much for coming in today.

**Witnesses withdrew.**